Central Midlands Council of Government Human Services Transportation Coordination Plan

Prepared by

URS

for the

South Carolina Department of Transportation

and the

Central Midlands Council of Governments

September 2007

Table of Contents

List of Tables

List of Figures

**Central Midlands Regional
Human Services Transportation Coordination Plan**

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 Central Midlands region in its continuing efforts to develop an efficient and effective transit service network.

1.1   Background[1]

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).

SCDOT
South Carolina Department of Transportation

**Central Midlands Regional
Human Services Transportation Coordination Plan**

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 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 Central Midlands COG 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
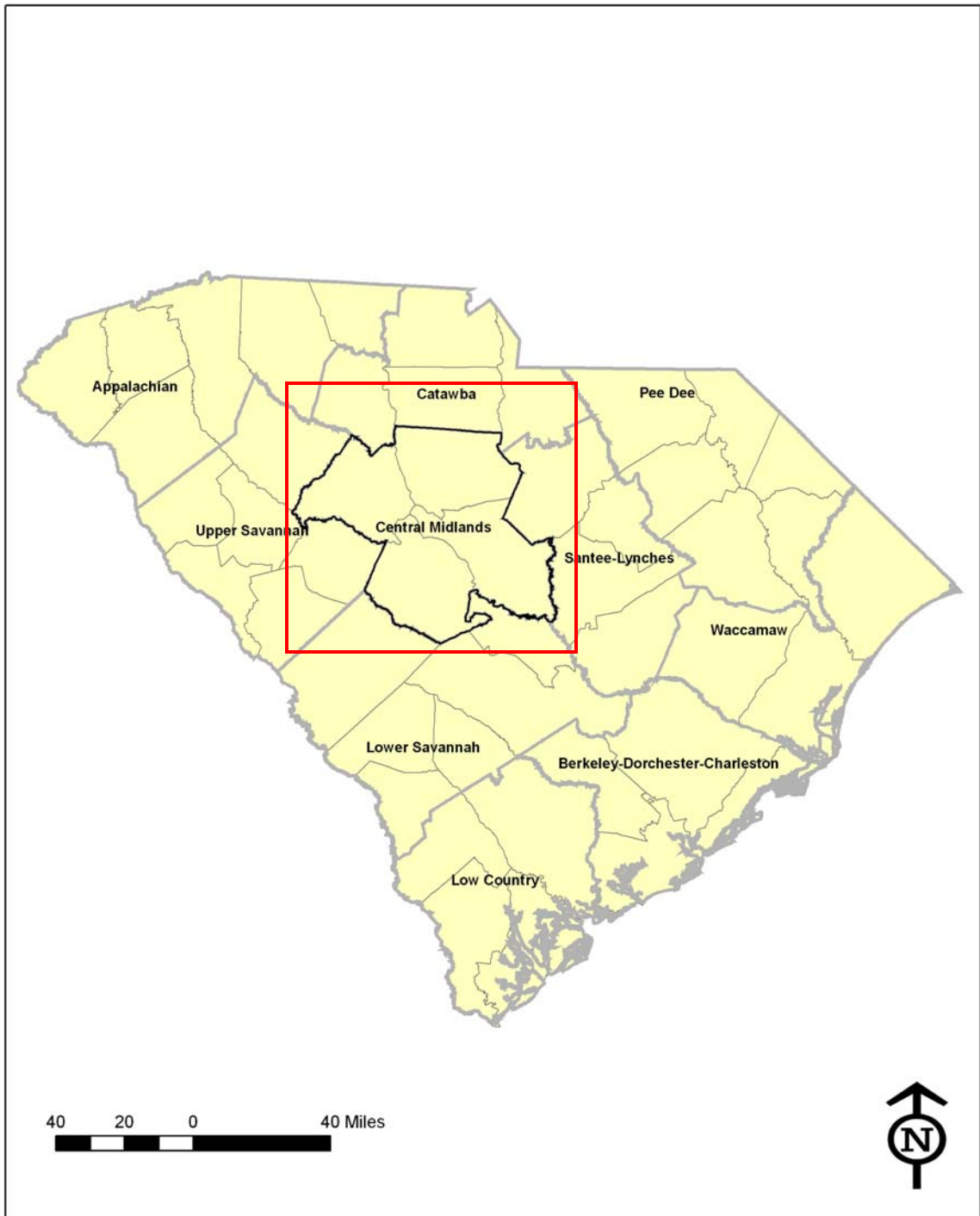
Source: South Carolina Department of Transportation.

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 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. As will be seen, these programs do not restrict coordination through regulations. However, there are practical issues that make coordination challenging but not insurmountable.

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 FTA (refer to Figure 2).

Figure 2: Sources of Federal Transportation Funds
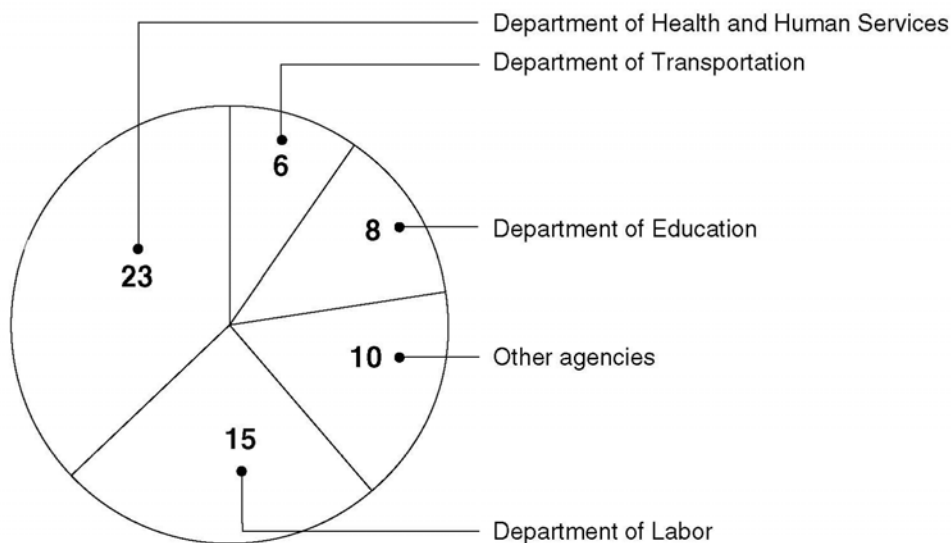
Source: Transportation-Disadvantaged Populations, Figure 1, page 9, USGAO, June 2003.

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. Nonurbanized 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 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

---

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

5

SCDOT South Carolina Department of Transportation **Central Midlands Regional Human Services Transportation Coordination Plan**

general public. Those programs that are intended for specific populations must only serve those populations.

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)		
Nonurbanized 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, 2nd and 3rd shift needs, need to take children to day care	No specific regulations dealing with transportation

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 major portion of revenue from State General Funds)	Medicaid 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	Various	Seniors	Transportation to congregate meals some medical		
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.		

Central Midlands Regional Human Services Transportation Coordination Plan

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 Central Midlands 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 Central Midlands Region

The Central Midlands region consists of four counties in the center of South Carolina: Fairfield, Lexington, Newberry, and Richland (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 Region[6]

The Central Midlands region is comprised of four counties in center of South Carolina: Fairfield, Lexington, Newberry, and Richland.

Overall Population

According to U.S. Census Bureau estimates, in 2006, the combined population of the Central Midlands region was nearly 650,000 people. Richland and Lexington Counties' combined population exceeded 588,000 persons. Richland County also was the second largest county in the state, after Greenville County, with over 348,000 persons. Between 2000 and 2006, the Central Midlands region's growth, nine percent, exceeded the statewide trend of 7.7 percent. Lexington County grew at the fastest rate, 11.2 percent, followed by Richland County at 8.6 percent. Newberry and Fairfield Counties' growth rate was less than the statewide trend at 4.6 percent and 1.5 percent, respectively.

Elderly Population

In 2004, 12.4 percent of the South Carolina's population was 65 years and over. Newberry and Fairfield Counties had a higher proportion of elderly people than found statewide at 14.3 percent and 13.3 percent, respectively. In contrast, Lexington and Richland Counties have relatively younger populations. The proportion of persons age 65 and over in Lexington County was 10.9 percent and in Richland County was 9.7 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. Overall, the Central Midlands region has a smaller proportion of persons identified with a disability than is found statewide at 19.6 percent (104,914 persons). Newberry County had the greatest proportion of persons with a disability in the region at 26.1 percent (8,738 persons), followed by Fairfield County at 24.8 percent (5,351 persons), Richland County at 19.2 percent (54,193 persons) and Lexington County at 18.4 percent (36,632 persons).

---

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

Central Midlands Regional Human Services Transportation Coordination Plan

Persons Below the Poverty Level

In 2003, 13.8 percent of South Carolina's population was living in poverty. In the Central Midlands region, Fairfield, Newberry, and Richland Counties had higher proportions of persons living in poverty than was found statewide, at 15.9, 14.6, and 13.9 percent, respectively. In contrast, Lexington County had the lowest proportion of persons living in poverty in South Carolina at 10.5 percent.

Median Household Income

In 2003, the median household income in South Carolina was $38,003. Lexington and Richland Counties had higher median household incomes than was found statewide. Lexington County had the highest median household income in the region at $45,677, the second highest income level in the state, behind Beaufort County. Richland County had a median income of $39,737. The remaining two counties had lower median household incomes than is found statewide, Newberry County at $33,137 and Fairfield County at $30,857.

Change in Daytime Population

Richland County experiences the greatest daytime population increase in South Carolina, due to the job center in Columbia. Commuters living in adjacent counties lead to an increase of daytime population of 13.1 percent. The other counties in the Central Midlands region lose population each day. Lexington County had the largest daytime population decrease in the region at 9.9 percent, many of whose residents commute to Richland County for work.

Demographic Summary

Columbia and its surrounding suburban areas dominate this region in terms of population, with Richland and Lexington Counties having much higher populations than Fairfield and Newberry Counties. Lexington and Richland Counties have a lower percentage of elderly population than the other counties, although the total number of elderly residents is higher in these two counties due to the higher overall population. Lexington County has a relatively high median household income and has been hesitant to embrace transit beyond the services provided by human service agencies. Residents from throughout the region (and from outside the region as well) travel to Richland County for job opportunities, and there has been growing support for increased commuter-based transit.

2.2   Services[7]

The Central Midlands region is served by the Central Midlands Regional Transit Authority (CMRTA), the Fairfield County Transit System (FCTS) and the Newberry County Council on Aging (NCCOA), which provide general public transit service and/or complementary ADA paratransit as well as provide direct transportation services to

---

[7] From the *Statewide Transportation Plan*, 2007.

Central Midlands Regional
Human Services Transportation Coordination Plan

human service agencies. Human service transportation is predominantly provided in each respective county.

- Central Midlands Regional Transit Authority (CMRTA) provides fixed route and complementary paratransit service in the Columbia urbanized area, including portions of Richland and Lexington Counties.
- Fairfield County Transit System (FCTS) offers deviated fixed route service and demand response service to residents of Fairfield County.
- Newberry County Council on Aging (NCCOA) recently began offering general public demand response transit services to residents of Newberry County on a space-available basis.

Some level of general public transit service is available in each of the region's four counties, although the vast majority of service is based in Richland County. The Santee-Wateree Regional Transit Authority (SWRTA) also provides service in lower Richland County (in the eastern part of the county adjacent to Sumter County).

Regional Overview

The three public transit providers in the Central Midlands region (NCCOA only recently began operations and is not included in the data presented) collectively had 70 vehicles providing service in FY 2005, with over 2.6 million passenger trips conducted. Although services operated by SWRTA in lower Richland County have been reduced, CMRTA and FCTS have had stable operations during the time period analyzed for this report (FY 2002 – FY 2005). More recently, CMRTA has made targeted service cuts in Lexington County in response to local funding constraints.

Table 2 shows the trends in the number of active vehicles providing service. As shown in the table, the overall number of vehicles in service has been steady in recent years for all types of services. No data is shown for FY 2002 because the dataset is incomplete for that year.

Table 2: Region Composite Vehicles in Maximum Service (FY 2003 to FY 2005)

	Fiscal Year		
Area	2003	2004	2005
Fixed Route	36	37	37
Demand Response	25	27	29
Other	5	5	4
Totals	66	69	70

Source: Data by SCDOT

Estimated annual operating costs of the public transit regions totaled over seven million dollars in FY 2005, with the majority of the costs associated with CMRTA's operations. CMRTA, as the largest system in the region by far, has had a higher budget in more recent years due to some service expansion and rising costs in fuel. The data set for expenses in FY 2002 and FY 2003 were incomplete, but Figure 3 illustrates regional operating costs in FY 2004 and FY 2005.

**Central Midlands Regional
Human Services Transportation Coordination Plan**

Figure 3: Annual Operating Expenses (Region Totals FY 2004 to FY 2005)
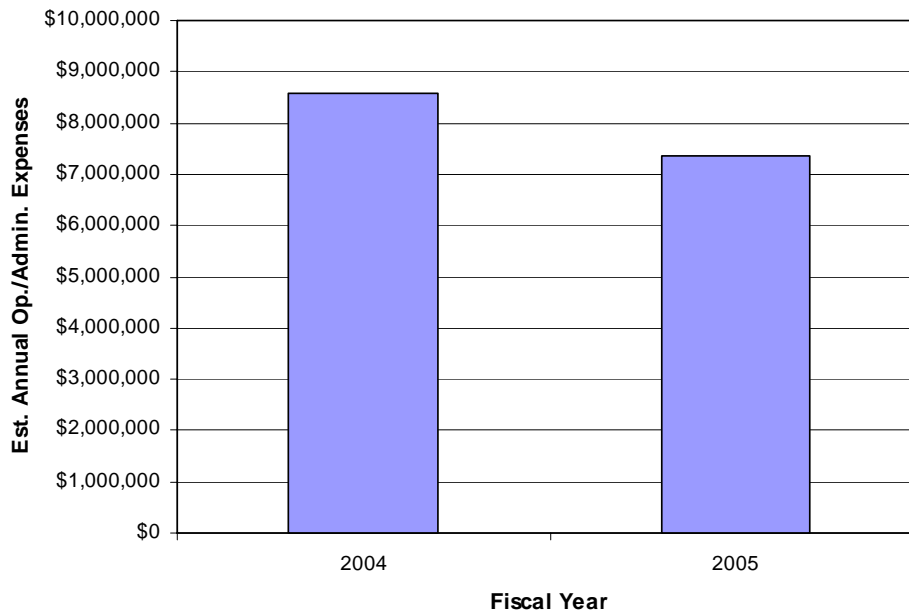
Source: Data by SCDOT

Trends in Ridership and Amount of Service Provided

Transit is expanding in the Region, fueled largely by the growth of the CMRTA, since the agency's assumption of responsibility for transit operations in 2002. Tables 3 through 5 present 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 grown in all types of services, in both rural and urban areas. The fixed route service offered by CMRTA is by far the largest source of ridership.

Table 3: Central Midlands Region Composite Passengers by Service Type and Geographic Area (FY 2003 to FY 2005)

	Fiscal Year		
Service Type	2003	2004	2005
Fixed Route	2,076,267	2,387,145	2,476,622
Demand Response	75,416	118,108	123,595
Other	18,012	55,158	36,198
Totals	2,169,695	2,560,411	2,636,415

	Fiscal Year		
Area	2003	2004	2005
Urban	2,132,109	2,508,007	2,587,954
Rural	37,586	52,404	48,461
Totals	2,169,695	2,560,411	2,636,415

Source: Data by SCDOT

**Central Midlands Regional
Human Services Transportation Coordination Plan**

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 fixed route ridership has enjoyed notable increases, while maintaining a stable level of service (indicating that existing services are being better utilized). Most of the growth in the volume of service has been in the demand response and other service sectors in both urban and rural areas.

Table 4: Central Midlands Region Composite Vehicle Miles (FY 2003 to FY 2005)

	Fiscal Year		
Area	2003	2004	2005
Fixed Route	1,734,924	1,724,055	1,766,203
Demand Response	609,214	1,051,640	1,131,122
Other	44,005	182,691	189,457
Totals	2,388,143	2,958,386	3,086,782

	Fiscal Year		
Area	2003	2004	2005
Urban	2,149,805	2,603,274	2,731,213
Rural	238,338	355,112	355,569
Totals	2,388,143	2,958,386	3,086,782

Source: Data by SCDOT

Table 5: Central Midlands Region Composite Vehicle Hours (FY 2003 to FY 2005)

	Fiscal Year		
Area	2003	2004	2005
Fixed Route	127,668	132,647	131,291
Demand Response	31,318	55,121	51,698
Other	4,310	15,337	16,098
Totals	163,296	203,105	199,087

	Fiscal Year		
Area	2003	2004	2005
Urban	154,282	188,906	185,622
Rural	9,014	14,199	13,465
Totals	163,296	203,105	199,087

Source: Data by SCDOT

Trends in Efficiency and Effectiveness

Figures 4 through 6 present regional 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, ridership per mile on fixed route services has increased with the maturation of CMRTA's services. Demand response figures have remained stable.

Figure 4: Ridership per Vehicle Mile (FY 2003 to FY 2005)
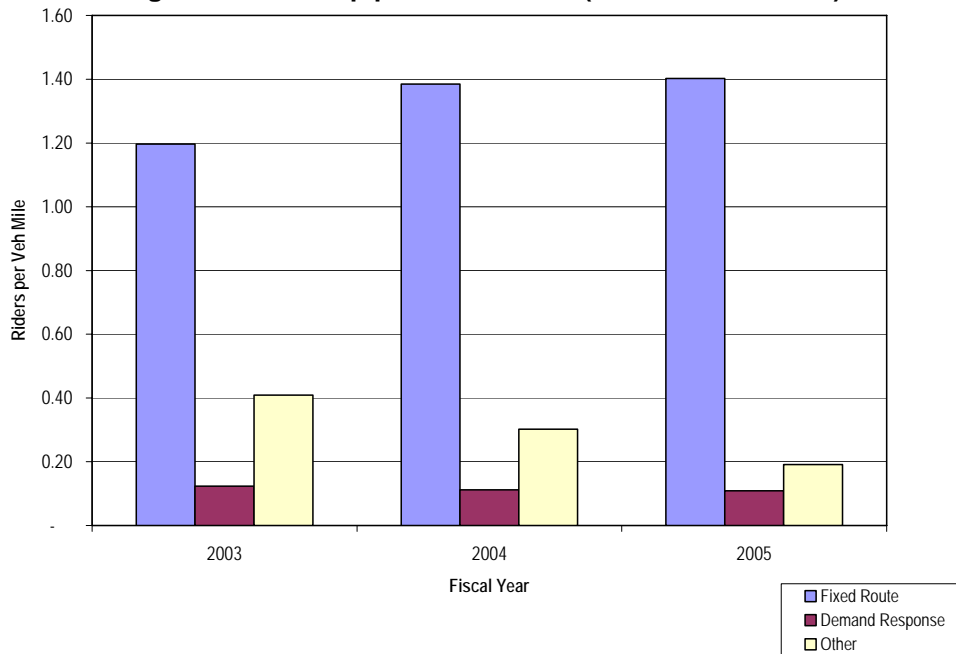
Source: Data by SCDOT

Showing similar trends as the ridership per mile data, the fixed route service ridership per hour climbed each year while the demand response figures remained stable. The effectiveness of other services decreased somewhat.

The operating cost data is incomplete for the period of analysis, but operating cost efficiency statistics are shown for FY 2004 and FY 2005. A notable decrease in cost per vehicle hour occurred as ridership increased.

**Central Midlands Regional
Human Services Transportation Coordination Plan**

Figure 5: Ridership per Vehicle Hour (FY 2003 to FY 2005)
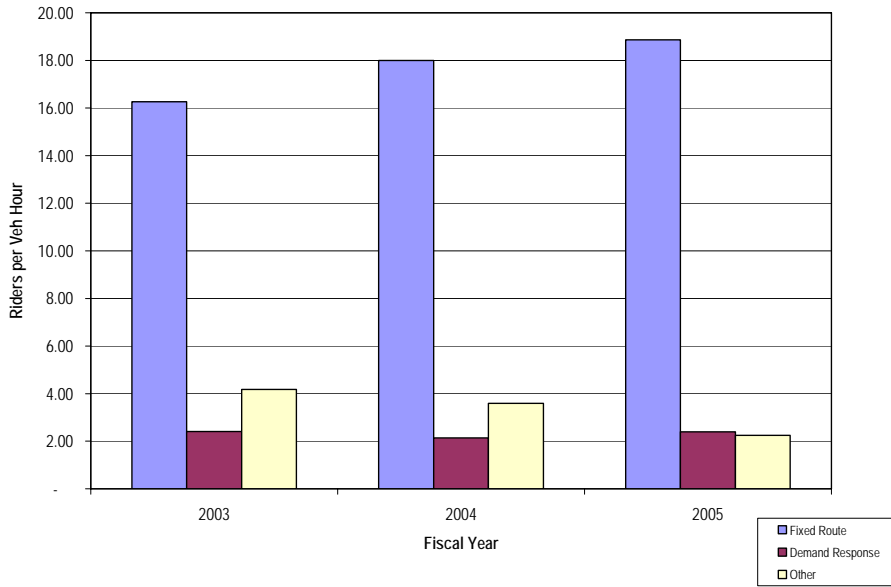
Source: Data by SCDOT

Figure 6: Operating Cost per Passenger, per Vehicle Mile, and per Vehicle Hour (FY 2004 to FY 2005)

Source: Data by SCDOT

**Central Midlands Regional
Human Services Transportation Coordination Plan**
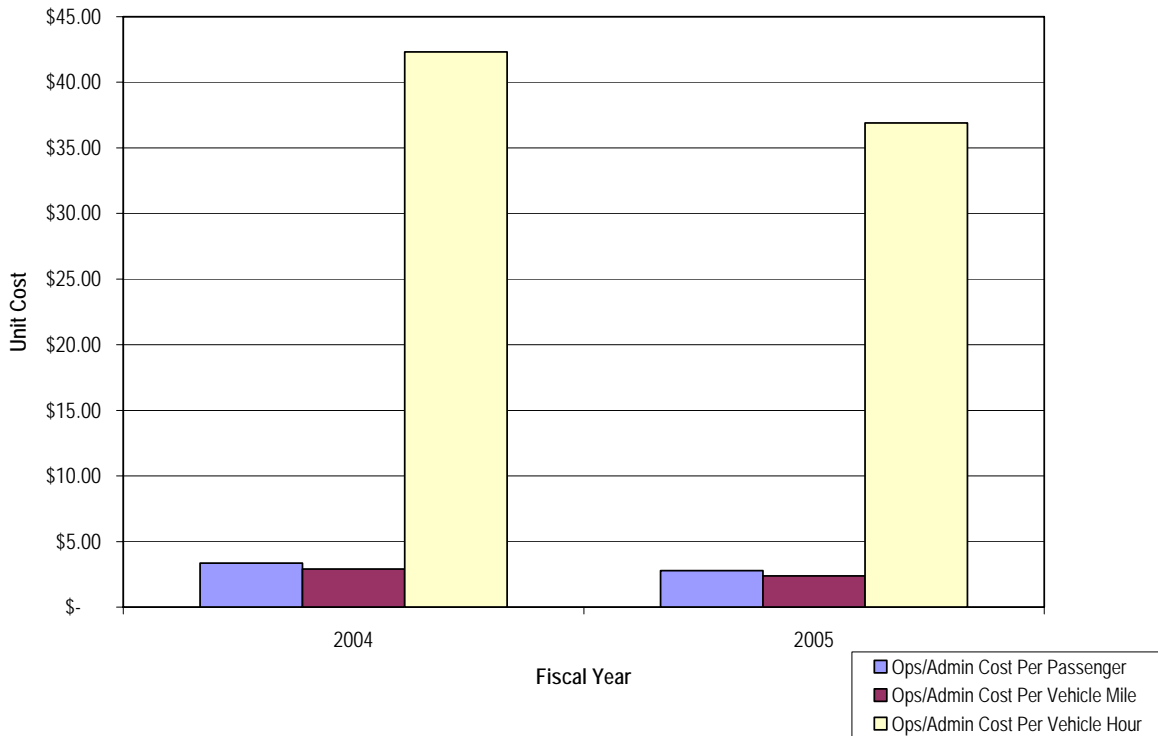
Other Transportation Services

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):

- Flex-Ride LLC is a small private operator currently under contract to provide non-emergency Medicaid transportation and some adult daycare transportation. They are in the process of becoming a not-for-profit enterprise.

- Lexington County Mental Health Department operates 20 vehicles a day for its adult day treatment centers.

- CNC Commute is a private for-profit operator in Newberry County. They operate seven vehicles and provide transportation for DSS clients, worker's compensation claim individuals, and some public service by reservation.

- Senior Resources, Inc. operates 42 vehicles for seven adult daycare centers, Medicaid non-emergency transportation, and private pay transportation within Richland County.

- The Wheels Project is a recent initiative by the Regency Hospice utilizing volunteer drivers to provide transportation services in areas with high concentrations of transportation disadvantaged individuals. They are currently operating a pilot program at the Harbison Center in Columbia.

- GLEAMNS Human Resources Commission operates services from the Upper Savannah Region into the Central Midlands.

- The Lexington County Recreation and Aging Commission operates 11 vehicles to and from their congregate meal sites and for a Meals on Wheels Program.

- Irmo-Chapin Recreation Commission provides transportation to congregate meal sites and a Meals on Wheels Program.

2.3   Identified Transportation Gaps and Needs

Two key sources of information describe Central Midlands' 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 Central Midlands' human services agencies and other stakeholders conducted on December 6, 2006; February 7, 2007; and April 4, 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 summarizes that survey.

In late 2006, about 40 surveys were distributed to Central Midlands region service providers. The survey was approved and tabulated by SCDOT and distributed by CMCOG. Ten 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 counties with very different population bases and character. The region has both urban and rural areas that have varying transportation needs.
- Many operators have similar peak operating hours.
- Several survey respondents expressed interest in coordination activities that would help them provide more efficient service, reduce costs and encourage more ridership. Some human service agencies were looking for opportunities to contract out their transportation services.

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

2.3.2 Central Midlands COG Sponsored Meetings

During the course of the project, CMCOG has sponsored three meetings attended by representatives of human service agencies and transportation providers. The meetings were held to facilitate discussion about transportation issues and potential strategies to address these issues. All three meetings advanced the development of the coordination plan through the identification of transportation gaps, discussion regarding the barriers to and opportunities for coordination. Brief 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 August 7, 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 Central Midlands 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

Central Midlands Regional
Human Services Transportation Coordination Plan

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.

**Central Midlands Regional
Human Services Transportation Coordination Plan**

**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 check. 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 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

SCDOT
South Carolina Department of Transportation
**Central Midlands Regional
Human Services Transportation Coordination Plan**

Section 3: State of Coordination in the Region

This section reviews issues associated with coordination in the Central Midlands region and describes the efforts already undertaken to coordinate as well as stated barriers to and opportunities for coordination.

3.1 Efforts to Coordinate

In December 2006 and February 2007, CMCOG sponsored meetings of area human service providers to discuss transportation coordination. The discussion revealed that there are numerous agencies providing human service transportation throughout the region, although most of the providers concentrate their services in one county. As is common in urban regions, many agencies take advantage of the fixed route services of the regional transit authority whenever possible. However, CMRTA has been experiencing funding issues and potential service reductions and has not focused much of their attention on human service-related transportation issues.

The evolution of human service transportation in the Central Midlands has resulted in a number of agencies providing services with in-house resources or contracting with private providers. Many of these agencies have not been compelled to coordinate services simply because they have a critical mass of trips within their own parameters, which affords them the economies of scale necessary to operate efficient service. During the course of this coordination plan development, there have been several agency representatives expressing a willingness to explore coordination opportunities in order to contract out their transportation services. By virtue of bringing the committee together and continuing to do so will create the communication among agencies required to forge new relationships and coordination projects.

3.2 Regional Transportation Gaps/Barriers to Coordination

As a result of the facilitated meetings and survey findings, there are nearly a dozen identified gaps in human service transportation within the Central Midlands region. The list of gaps is not intended to be inclusive of all gaps, but gaps identified are considered by meeting 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 Central Midlands region stem from the potential cuts in service at the CMRTA and the need for off-peak and reverse commute transportation. Agencies like Vocational Rehabilitation and the DSN Boards have issues with getting their clients to 2nd and 3rd shift jobs, many of which have moved to suburban areas.

The group identified several rural areas that need more services in lower Richland, lower Lexington, and Fairfield Counties. Lexington County was cited as a high priority, given that is where many of the reductions of service will occur if CMRTA is forced to cut service.

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. 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. This has been a target population of the Wheels Program, which may be slow to grow given that much of their funding comes from private donations.

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

- Reduction in public transit system adds pressure to human service transportation system.
- Need for more wheelchair access.
- Need for vehicle replacements is a large capital issue.
- Lack of local funding support is currently a popular topic among municipalities.
- Late afternoon and return trips are difficult to serve and experience reliability issues.
- Communication issues with non-English speaking persons.
- Difficult to identify "qualified" third party providers. The region has several private providers, but they are perceived or considered to have issues with giving their drivers the same level of training (especially passenger assistance techniques), insurance deficiencies and difficulty accommodating wheelchair clients.

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.
- Regional vehicle maintenance to share that expense.
- Cooperate in driver training.
- Establish a fare structure for non-program riders.
- Develop common standards for driver training and qualifications as well as for maintenance and insurance coverage.
- 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 CMCOG.

Draft coordination strategies and actions were developed at a meeting of human service providers on April 4, 2007, hosted by CMCOG. 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)
- Access to jobs and reverse commute a major issue
- Region should expand use of private operators
- Insurance consistency among providers and coverage in general
- Explore mobility manager concept
- Address cost allocation among operators (major barrier to coordination)

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 the April 4th meeting)

Gaps	Administrative	Information Sharing/Capacity Management	Future Operations Planning
	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 need more service - Lower Lexington, Lower Richland, Fairfield Co. - elderly needs	Marketing Programs - Public Awareness is an issue - agreements among providers to fill gaps	Mobility Manager - one stop call center - needs informed person answering	Use of technology - AVL, Scheduling, dispatch.
Reductions in Public Transit System adds pressure to Human Service Transportation System	---	---	Increase local support for RTA services esp. DART
Low Income (but above Medicaid threshold) need transportation to medical services - including elderly	Travel training/itinerary development/Bilingual	---	Utilize Volunteers - liability issue/training - support additional good Samaritan act language
Access to suburban jobs/2nd-3rd shift jobs	Voucher Program other fare subsidies	---	---
Lack of local support of funding; currently being discussed in municipalities in area	Pool purchasing programs, training, fuel, insurance, maintenance, drug test, other.	---	---
Vehicle replacement is big capital issue for any provider agency	Address issues of Jacob's Law	---	---
Late Afternoon/Return Trips are difficult to serve and experience reliability issues	---	Real - time scheduling/ barrier cost allocation	---
Identifying third party providers	ID Providers - Set up contract for third party providers	---	---
Issues for non-English Speaking individuals/trips to work/basic needs	Bi-lingual dispatch	---	Service in Saluda, Newberry County and Lexington County

4.2.1 Administrative Actions

There are four primary action items under the Administrative Strategies for consideration.

1. Raise public awareness of service through marketing programs. This would include improved information services for non-English speakers and disabled persons. The implementation of a travel training program may improve service utilization by these populations.

2. Voucher programs and other fare subsidies to accommodate clients during difficult times of day to provide reliable service. Some regions need to focus this strategy on the user side of the issue. New programs designed to reduce the expense to the user such as voucher programs and distance-based fares (some are already in place) should be explored. However, the action item maybe more useful to the region by developing projects that essentially make private providers more affordable to both the client and agency. These types of projects can take on many forms but could be a direct subsidy to the user in the form of a voucher, allowing private providers to access training programs or other cost savings methods so they can reduce their prices, etc.

3. Any efforts to pool expenses among agencies will take advantage of economies of scale for items such as fuel, insurance, vehicle maintenance, driver training, drug and alcohol testing and employee benefit programs.

4. Identify third party providers and offer assistance to enhance their qualifications.

4.2.2 Information Sharing/Capacity Management Actions

There are three Information Sharing/Capacity Management action items:

1. Establishing a 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 utilize other providers when appropriate. Since Columbia is a major destination among providers in each county and services from other regions, there are a significant number of vehicles in the urban core during the course of the day. The region should take advantage of this through the development of a cost allocation formula that will cover the expenses for other agencies that may be available to provide a trip.

2. 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.

3. Launch a vehicle sharing program among organizations.

4.2.3 Future Operations Planning Actions

Several of the gaps identified in the Central Midlands region require the expansion of services, fleets and/or driver pools. Actions under this category require additional

resources for implementation. Actions include: a regionally coordinated application for capital funds, potentially under FTA Section 5309; the introduction of general public demand response services into new areas on a limited basis until ridership warrants increased levels of service; improving wages for drivers to improve retention; and for the region to continue to take advantage of state contract and leasing programs for vehicles.

A major issue for the Central Midlands region is the overall local funding support for transit. Even though human service transportation may not be directly impacted by funding shortfalls, a reduction of service by CMRTA will undoubtedly place more pressure on human service agencies to provide trips for which they currently depend on CMRTA.

**Central Midlands Regional
Human Services Transportation Coordination Plan**

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. Form a working group for the specific area.
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 Form a Working Group

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. A working group, facilitated by Central Midlands COG to tackle a given action, would be an important step in forming and executing implementation projects.

The working group might be formed based on the scope of activity to be undertaken. In the Central Midlands region, the CMRTA, FCTS, NCCOA, and SWRTA have already provided service to many of the human service agencies in Fairfield, Lexington, Newberry, and Richland Counties.

The working group should be composed of stakeholder agencies and persons who are committed to finding common ground and can be counted on to attend meetings as well as to carry out assignments outside regular meetings. As with any group working together, meetings should be documented with summaries distributed to all participants as soon after the meeting as possible.

5.1.2 Describe the End Result

This step clearly defines the goal or objective of the working group. 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 working group 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, "establish common driver qualifications" would likely not 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 "driver qualifications" as an example, the following steps might be considered:

1. Define driver qualifications in use at each participating agency.
2. Determine the rationale for each qualification. For example, is a given qualification due to some special circumstance related to the type of riders carried?
3. Determine qualifications common to each agency. Which qualification areas are at odds? Does one agency require drivers to be 25 years of age while another 21 years?
4. Focus on areas of disagreement. For example, perhaps each agency has different age requirements, driver training regimens, or drivers have ancillary duties besides driving.
5. Of the areas of disagreement, select the areas that are easiest to address.
6. Take each area in turn.

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. As resources tend to be limited, only so much can be done. 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, addressing 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:
  - o 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).
  - o Presentations given at conferences of the above organizations as well as at State transit associations.
  - o 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 Central Midland region, the following criteria should be considered when selecting projects.

1. Many coordination efforts involve a perceived risk on the part of one or more agencies. For instance, the simple act of contracting out for transportation service requires an agency to relinquish control of customer service to a certain extent. Projects that essentially provide seed money for the first year of a new relationship between two agencies should be favorably considered. This type of arrangement at least removes the issue of using agency funds for what may be perceived as a risky endeavor. The project would give the contractor one year to exhibit its service capabilities and warrant use of agency funds for the arrangement in subsequent years.

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. Capital versus Operational Assistance – a central theme among the gaps and strategies for coordinated transportation in Waccamaw 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.

4. Projects that target new service in rural areas like Fairfield County, lower Richland County and Newberry County should receive favorable ratings in the evaluation process. New service or support for existing service in Lexington

County should also receive some measure of priority, assuming that there is local financial support for the project. It would be unfair to other parts of the region to support transit improvements in Lexington County if there is no local funding.

5. Programs that either subsidize users or indirectly reduce the cost for agencies to use private operators to support the human service transportation system should be regarded favorably.

6. Projects that establish marketing programs or information dissemination to potential clients to encourage ridership should receive priority.

SCDOT
South Carolina Department of Transportation
Central Midlands Regional
Human Services Transportation Coordination Plan

Appendix A: 2006 SCDOT Survey

Central Midlands 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?

Day of Week	Times of Service	Peak Service Times
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.

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

   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.

Type of Driver	Number	Percent time driving
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

Central Midlands Regional Human Services Transportation Coordination Plan

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 a placed in money bags or money box

    ☐   Fares are deposit 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?

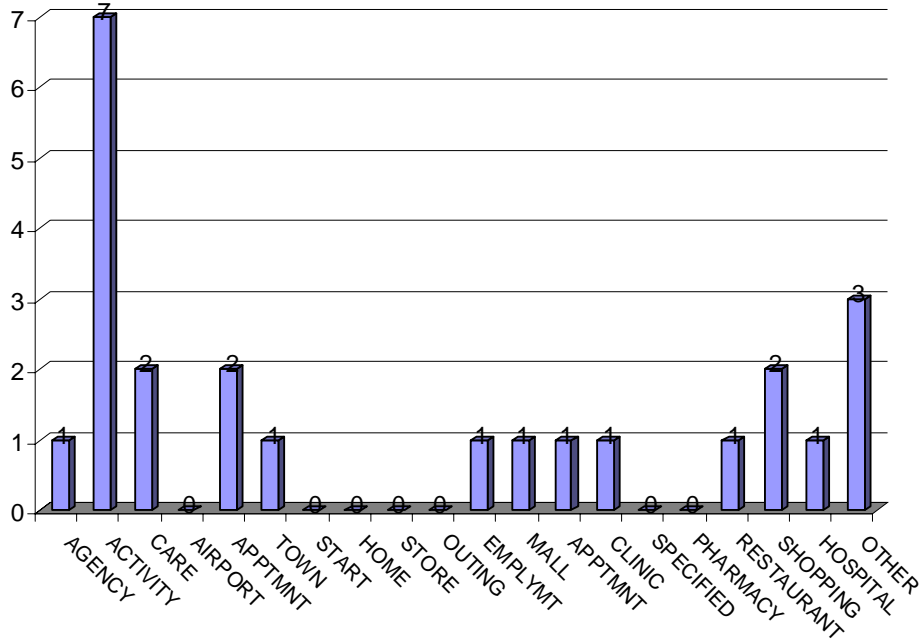Benefit Least (or not at all):

Why?

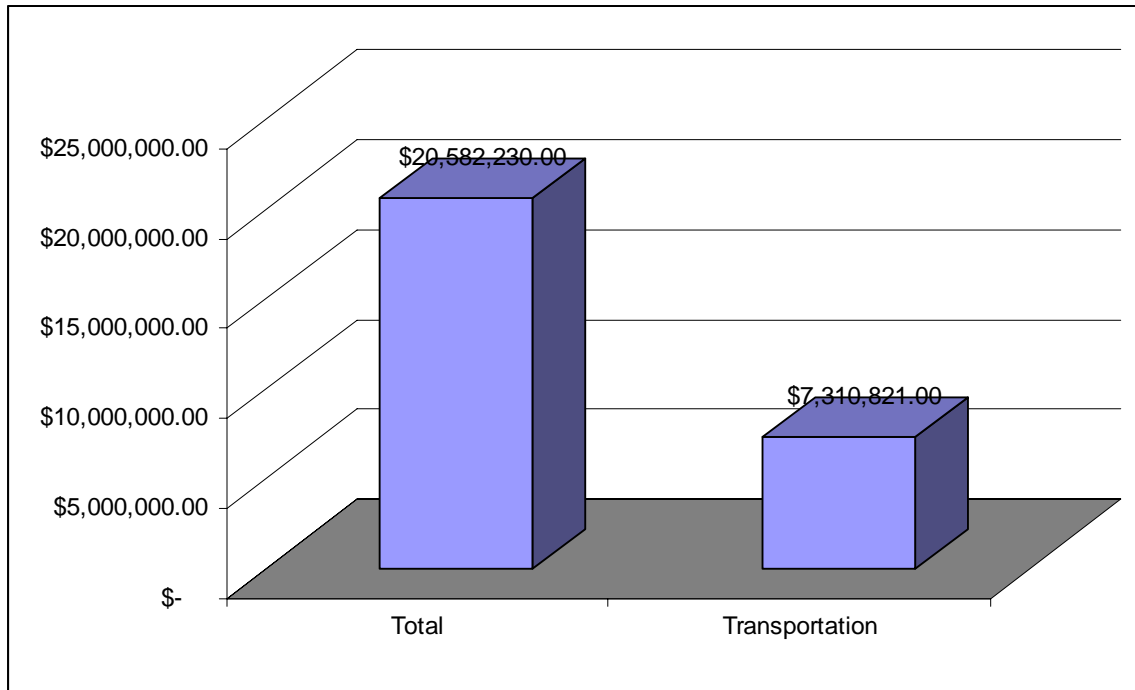The pages that follow present responses to selected questions.

Q1.: Counties Served
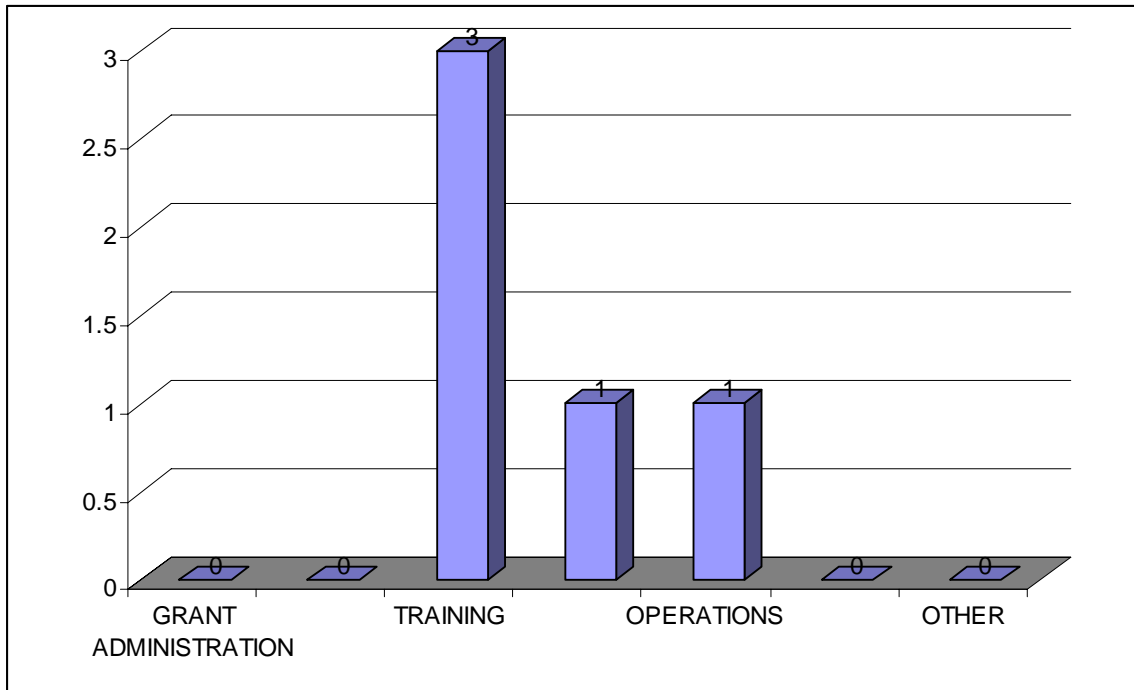Richland, Lexington, Newberry and Fairfield Counties

Q2.: Top Four Destinations Served

Q13.: Transportation Budget

Q16.: Areas of Coordination Interest

Appendix B: Regional Meeting Summaries

REGIONAL TRANSIT COORDINATION PLAN
CMCOG REGIONAL MEETING
MEETING: WEDNESDAY, DECEMBER 6, 2006
10:00 AM TO 11:30 AM at CENTRAL MIDLANDS COUNCIL OF GOVERNMENTS

Staff Present: Brian Piascik, URS Corp.
                  Reginald Simmons, CMCOG
                  Roland Bart, CMCOG
                  Doug Frate, SCDOT
                  Aaron Bell, CMCOG

Attendees: Roy Hewitt, SC Vocational Rehabilitation
                  Drew Beckham, SC Vocational Rehabilitation
                  Michelle Ransom, CMRTA
                  Mattie Haynes, FLX-Ride LLC
                  Austin Blackmon, Lexington County Mental Health Center
                  Teresa Fletcher, CNC Commute
                  Ann August, SWRTA
                  Sharon Seago, Area Agency on Aging, CMCOG
                  Janet Ballentine, Newberry COA
                  Rep., Fairfield COA
                  Rep., Richland COA
                  Anne McLean, SC Department of DSN
                  Larry Jordan, Capital Senior Center
                  Roger Cranford, Wheels Program, Capital Senior Center
                  Joseph Ritchey, AAA, CMCOG

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:

Roy Hewitt-Drew Beckham - Vocational Rehab
- Focus of the agency is training for individuals w/ disabilities - 8:30 -5:30 services hours weekdays
- Teaches individuals basic survival skills/punctuality
- Agency funds initial rides—100/50 per training center
- Use the CMRTA bus system whenever possible
- Cited the need for rural service

Michelle Ransom-CMRTA
- CMRTA operates 43 buses and 22 paratransit vehicles
- Biggest issues are financial – RTA is reducing 80% of service in Lexington because of lack of local funding.
- Richland County is providing a stop gap to maintain service.
- Fare is $1/ride

Maddie Haynes-Flex-Ride LLC
- For profit agency providing paratransit service.
- Not currently on State DSS list of providers
- Medicaid provider
- Non-profit status pending
- -8 vehicles-23 pass/bus capacity
- Users of the service must be eligible for agency transportation
- Also have small contracts w/ adult day care services.
- Pricing on a per mile basis

Austin Blackmon-Mental Health
- Agency provides adult day treatment
- 20 vehicles in Lexington County/150 people per day
- Service hours 9:30- 2:30 pm
- Provide Medicaid and non-Medicaid trips.
- -Funded by SC Dept. Mental Health
- Primary unmet transportation need is service for children

Teresa Fletcher-CNC Commute
- For profit transportation provider in Newberry
- Contracts for DSS clients to work/school/daycare
- -7 vehicles/sedans
- Provides transportation for workers comp. claims
- Pricing on a per mile basis
- Provides some public transportation by reservation

**Central Midlands Regional
Human Services Transportation Coordination Plan**

Ann August - Santee-Wateree RTA
- Provides public and human service transportation in areas of 3 COGs including Orangeburg, Calhoun, Clarendon, Kershaw, Lee and Sumter Counties/
- Also, stops in Lower Richland County on the way into Columbia – service began in 1995 as the Eastover Transit System – funded by the State
- SWRTA has a reciprocal transfer agreement with CMRTA.
- Lower Richland service provided with 2 45-pax buses and 2 ADA vehicles -25 to 40 pax per day at $1.50/trip.

Agencies on Aging for Newberry, Fairfield and Richland Counties
- Title 3B - Older Americans Act primary source of funding.
- Provide congregate and home delivered meals and other services at Senior Centers
- Newberry COA does Medicaid transportation for Newberry County- psgr mile basis with 16 vehicles
- Began a coordination effort in July of 2005
    o Public system
    o Sr Center transportation-
    o Shopping trips
    o Operate adult day care
    o Saluda County to Greenwood/Laurens Co.
    o Some medical trips
- Public service requires $2.00 fare
- Provide some services to Newberyy MHC and the Dialysis Center
- Fairfield County COA operates 3-vehicles-(no lifts) and provides demand response and some medical trips. 12 passengers per day to congregate meal site.
- Senior Resources, Inc. has 42 vehicles, mostly cut-aways, and provides 600/trips day to 7 adult daycare centers, some private-pay, and Medicaid trips for Richland County.

Anne McLean-SC Department of Disabilities and Special Needs
- Provide services for persons with mental retardation, autism, and head and spinal cord injuries via a network of contracted providers.
- All providers maintain vans to transport people who live in residential programs, work in workshops, enclaves, and the like.

Larry Jordan –Capital Senior Center
- Wheels project sets up volunteer based transportation programs through faith/civic/business based organizations in areas with sufficient density of elderly and/or disabled individuals.
- Harbison Program is one area that has been launched in the Columbia Area.
- Trips provided for any purpose with volunteer drivers.

- Program utilizes federal funding for 80% of capital costs while the community raises 20%
- Service does not charge a fare but donations accepted.
- Program has identified the 5-Points area as the next target.
- Areas identified based on age and income census information.

The group then set the date for the next meeting on February 7, 2007 and adjourned.

SCDOT
South Carolina Department of Transportation
Central Midlands Regional
Human Services Transportation Coordination Plan

REGIONAL TRANSIT COORDINATION PLAN
CMCOG REGIONAL MEETING
MEETING: WEDNESDAY, FEBRUARY 7, 2007
2PM TO 4M at CENTRAL MIDLANDS COUNCIL OF GOVERNMENTS

Staff Present: Brian Piascik, URS Corp.
                 Frank Curti, URS Corp.
                 Reginald Simmons, CMCOG
                 Roland Bart, CMCOG
                 Doug Frate, SCDOT
                 Aaron Bell, CMCOG

Attendees: Kimberly Ball, Checker/Yellow Cab
                 Peyton Greene, Checker/Yellow Cab
                 Barbara Dotson, Blue Ribbon
                 Steve English, Blue Ribbon
                 Sheila Arnold, CAMHC
                 Roy Hewitt, SC Vocational Rehabilitation
                 Austin Blackmon, Lexington County Mental Health Center
                 Joshua Stroman, CMRTA
                 Sam Martin, Burton Center DDSN
                 Sharon Seago, Area Agency on Aging, CMCOG
                 Kim Bowers, Irmo-Chapin Rec. Commission
                 Michelle Ransom, CMRTA
                 Susan Wrigley, Respite House, Inc.
                 April Platts-Izlar, FLX-Ride, LLC
                 Mattie Haynes, FLX-Ride LLC
                 Roger Cranford, Wheels Prog. Capital Sr. Ctr.
                 Joseph Ritchey, AAA, CMCOG

Brian Piascik (URS) opened the meeting with a review of the purpose of the coordination plans and some background from the kick-off meeting held in December.

From that point Brian Piascik (URS) facilitated a discussion to identify major gaps in human service transportation in the Central Midlands Region. Highlights include:

The group felt that were a number of rural areas that continue to be underserved - Lower Lexington, Lower Richland, Fairfield Co. – primarily for seniors getting to basic needs and medical appointments and low income individuals to jobs.

Also identified as a potential gap were the reductions in Public Transit System which adds pressure to Human Service Transportation System because many individuals could get to jobs via CMRTA currently but that may be reduced, especially in Lexington County. Lack of local support of funding is crrently being discussed in municipalities in area.

**Central Midlands Regional
Human Services Transportation Coordination Plan**

Other gaps include:
- Low Income (but above Medicaid threshold) individuals need transportation to medical services.
- Need greater access to suburban jobs/2nd-3rd shift jobs
- Need vehicle replacements/more wheelchair access - vehicle replacement is big capital issue for any provider agency.
- Late Afternoon/Return Trips are difficult to serve and experience reliability issues.

Brian Piascik then talked about the upcoming meeting being focused on identifying strategies to alleviate these gaps.

The group then set the date for the next meeting for April 4, 2007 and adjourned.

SCDOT
South Carolina Department of Transportation
Central Midlands Regional
Human Services Transportation Coordination Plan

REGIONAL TRANSIT COORDINATION PLAN
CMCOG REGIONAL MEETING
MEETING: WEDNESDAY, APRIL 4, 2007
2PM TO 4M at CENTRAL MIDLANDS COUNCIL OF GOVERNMENTS

Staff Present: Brian Piascik, URS Corp.
                 Frank Curti, URS Corp.
                 Reginald Simmons, CMCOG
                 Roland Bart, CMCOG
                 Doug Frate, SCDOT
                 Jim Frierson, SCDOT
                 Aaron Bell, CMCOG

Attendees: Janet Ballentine, Newberry COA
                 Susan Wrigley, Respite House, Inc.
                 Roger Cranford, Wheels Prog. Capital Sr. Ctr.
                 Bernie Gaudi, SC Silver Haired Legislature
                 Dorothy Goodwin, Babcock Center
                 Peyton Greene, Checker/Yellow Cab
                 Todd Blake, SC Voc. Rehab.
                 Roy Hewitt, SC Vocational Rehabilitation
                 Marsha Stepp, SC Lt. Governor's Office on Aging
                 Michelle Ransom, CMRTA
                 Brittany Doten, CMRTA
                 Ann August, SWRTA
                 Sandy Jenkins, SWRTA
                 Kim Bowers, Irmo-Chapin Rec. Commission
                 Jim Love, AARP-SC
                 Joseph Ritchey, AAA, CMCOG
                 Allyson Concha-Posey, AAA, CMCOG
                 Sarah Williams, Newberry Co. DSS

The primary focus of this meeting was to develop strategies for coordination that address gaps identified in the previous meeting. The result of the discussion facilitated by Brian Piascik appears in Table 8 on page 24.

Appendix C: Technology Resources

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 cellular telephones,

---

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

**Central Midlands Regional
Human Services Transportation Coordination Plan**

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). AVL can benefit coordination of services by supporting more efficient trip planning. AVL

---

[7] *TCRP Report 84,* page 14.

Central Midlands Regional
Human Services Transportation Coordination Plan

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

---

[8] Ibid.
[9] *TCRP Report 84,* page 16.

SCDOT
South Carolina Department of Transportation
**Central Midlands Regional
Human Services Transportation Coordination Plan**

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*.

C-4

SCDOT
South Carolina Department of Transportation
**Central Midlands Regional
Human Services Transportation Coordination Plan**