

CHAPTER 6: TRANSIT

6.1 Introduction

Perhaps one of the most underutilized and least appreciated modes of travel is public transit. Public transit is an important facet of the Central Midlands transportation network. It serves a variety of population groups, who utilize this service to access jobs, medical care, professional services, and other aspects of daily life. While few people doubt that private automobiles will still be the predominant mode of transportation in the Central Midlands thirty years from now, public mass transit will fulfill some important functions, including:

- Providing a mobility alternative for persons unable to rely on private automobiles due to age, disability or income.
- Efficiently moving people within densely populated areas and congested corridors.
- Connecting workers with employment centers
- Connecting the Central Midlands to other population centers, such as Charlotte, through the Southeastern High Speed Rail Corridor.
- Responding to the growing desire of many Americans to live in urban settings and communities less dependant on the automobile
- Responding to the rapid growth of the elderly population
- Offering a more environmentally friendly alternative to the automobile

This section addresses these goals:

- Consultation
- Mobility
- Accessibility
- Safety
- Security
- Economic vitality
- Environment
- Finance

The overall enhancement of the area's transportation network into a multimodal system will better enable transit to respond to the needs of a growing transit-dependent and/or aging population. The Public Transit Element of the 2035 LRTP seeks to review existing transit conditions and identify strategies that would encourage mobility options for all residents of the region, which may or may not rely on public transportation as their only means of travel.

6.2 Transit in the Central Midlands Region

Public transportation services in the Midlands are traditionally synonymous with bus service. For over fifty years, transit service has been provided exclusively by bus, primarily operating within the

boundaries of the City of Columbia. Interregional bus service has also been available and is operated by Greyhound Bus Lines (one of the largest intercity transportation providers in the country). Greyhound operates from a terminal in Downtown Columbia, with services from Columbia to other South Carolina communities as well as to other states.

There are however other transit providers. Taxi service, an important source of demand-response transportation, is available primarily in Columbia and Lexington, providing mobility for persons who may not have other means of transportation available. Rural public transportation is federally subsidized for eligible local transportation providers in rural areas and communities with population less than 50,000 and is available for some communities in the region. For more information about other transportation and transit service providers, refer to the Appendix.

Within the COATS boundary, the primary bus and paratransit services are operated by the Central Midlands Regional Transit Authority (CMRTA). The bulk of these routes are situated throughout the Columbia, West Columbia and Cayce municipalities. In addition, CMRTA sponsors, in partnership with SCDOT and the Santee Wateree RTA, the SmartRide Commuter-Focused Transit Program, a service for conscientious commuters who want a viable alternative to the traditional single-occupant vehicle commute. SmartRide currently has two main routes: service from Camden-Lugoff to downtown Columbia and Newberry to downtown Columbia.

Much of the content of this chapter was excerpted or adapted from work done for the CMRTA's Transit Development Plan (TDP), developed in 2005. The purpose of the TDP was to define the future role of transit across the region, particularly in light of CMRTA's newly revised bus transit system, and outline a series of steps for achieving financial sustainability over the next twenty years. A portion of the TDP's vision is encapsulated below in Figure 6.1. This chapter on the Public Transit Element of the 2035 LRTP incorporates by reference the CMRTA Transit Development Plan.

**Figure 6.1
Long Range Vision
Statement: Transit in
2030**

In the year 2030, the mass transit systems of the Central Midlands of South Carolina will provide a high degree of mobility for a diverse group of travelers. Excellent services will be available to traditional transit user groups, including those too young or old to drive, low income citizens, the disabled and those without access to an automobile. As a result of improvements in the quality, extent and efficiency of transit services, transit will also become the travel mode of choice for a broader constituency, including college students, suburban commuters, and families or individuals who choose a less automobile dependent lifestyle...

Central Midlands Regional Transit Authority

The CMRTA was formed in 2002, with its central office in Columbia. Before CMRTA gained responsibility for transit services in the region, fixed-route bus and paratransit services were operated by the SCANA Corporation, which is the parent company of South Carolina Electric and Gas (SCE&G), a local electric and gas utility. SCANA was required to operate transit service under a century-old State law, but an agreement was reached between SCANA, the City of Columbia, and the newly-created CMRTA to transfer ownership of the system to the public sector. As part of this agreement, SCANA was to contribute a significant monetary contribution toward transit operations, which is expected to help subsidize the system through 2008. Given the time limitations of this money (the “SCANA Trust Fund”), CMRTA has made efforts over recent years to secure additional funding. However, the current solutions utilized are only temporary fixes; while officials seek more permanent solutions.

CMRTA Services

CMRTA provides fixed-route bus and paratransit services in the metropolitan Columbia area. Services are provided in municipalities throughout the area, including Columbia, Cayce, West Columbia, Forest Acres, Arcadia Lakes, Springdale, and in unincorporated areas of Richland and Lexington Counties. CMRTA offers service using a fleet of 43 transit buses (new in 2002), 17 paratransit vehicles, and 6 rubber-tired vintage trolleys. Daily operations are contracted to Veola Transportation. Overall management and administration duties are performed by a staff of three full-time permanent employees and one full-time temporary employee.

CMRTA Fixed-Route Network

The fixed-route bus network provides mobility connections for thousands of residents in the Central Midlands region. There are a total of 30 fixed routes, operating in a hub-and-spoke system centered on downtown Columbia. All 30 of these routes operate on weekdays, 24 routes operate on Saturdays, and 14 routes operate on Sundays. Service is provided 365 days per year, excluding holidays. All routes except two (Route 7 and Route 36) terminate at the downtown Columbia transfer center located at the intersection of Laurel Street and Sumter Street. The span of service for each route is shown in Map 6.1. Meanwhile, Table 6.2 shows the performance of CMRTA fixed routes in recent years.

Map 6.1: Existing Public Transit System

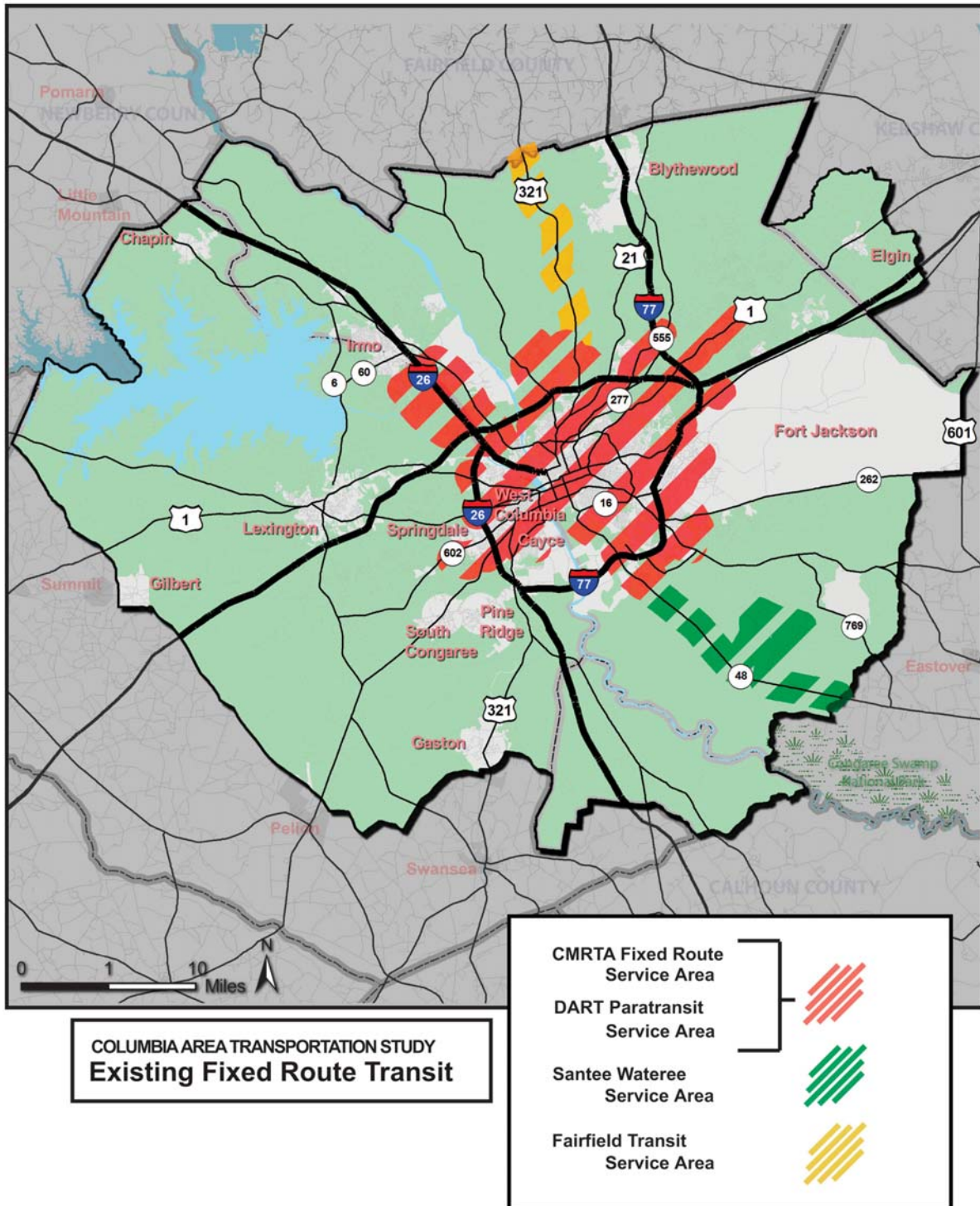
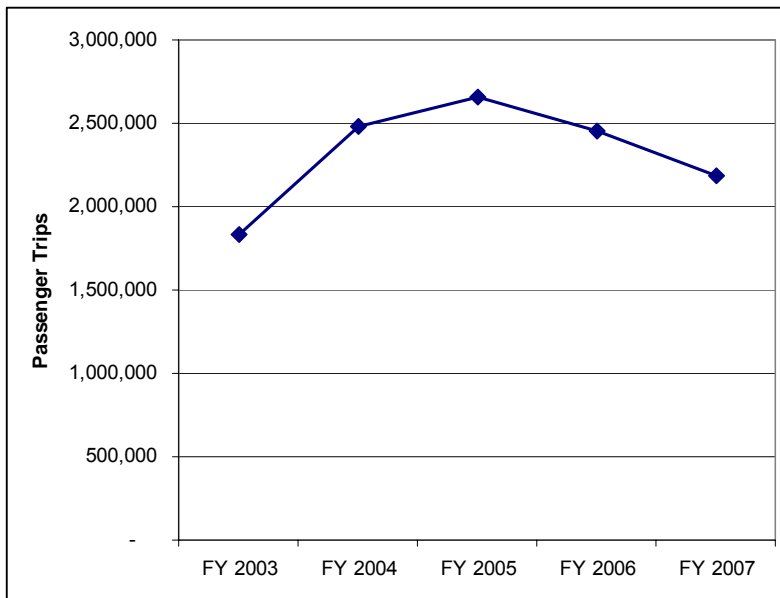


Table 6.1: Fixed Routes Over Past 5 Years

Fixed Route Service		
Year	#Passengers	% Difference
FY 2003	1,834,976	
FY 2004	2,485,942	35.50%
FY 2005	2,659,401	7.00%
FY 2006	2,456,659	-7.60%
FY 2007	2,188,609	-10.90%

Ridership: Table 6.1 also illustrates critical impact the funding issue has and will have on the current system. The steady decline in ridership can be attributed primarily to CMRTA’s impending budget crisis. This trend is expected to continue on a downward slope in the near future, considering in 2007, further service was reduced by eliminating most of the service in Lexington County.

Figure 6.2 Fixed Ridership Trends



Service Coverage: Fixed-route services cover much of the metropolitan Columbia area, as illustrated in Map 6.1. A service coverage analysis was conducted to determine how well existing fixed routes serve areas in the Central Midlands with significant household and employment densities. This analysis compares the total “transit-supportive area” (areas meeting minimum household and employment

densities as defined below) to the amount of area “served” by fixed-route service (areas within ¼ mile of a fixed route, which is the standard guideline for the maximum distance customers will walk to a bus stop). Table 6.2 highlights the RTA’s most popular routes.

Table 6.2: Top 5 Most Popular Routes

Route #	Description
Route 1	College Place
Route 12	Ft. Jackson
Route 16	Dentsville
Route 34	St. Andrews
Route 5	Ft. Jackson Special

CMRTA Paratransit Service

Dial-A-Ride Transit (DART) is CMRTA’s paratransit (demand-response transportation) service that is provided to individuals with disabilities who can not use the fixed-route and trolley network. This service is provided to meet the requirements of the Americans with Disabilities Act (ADA).

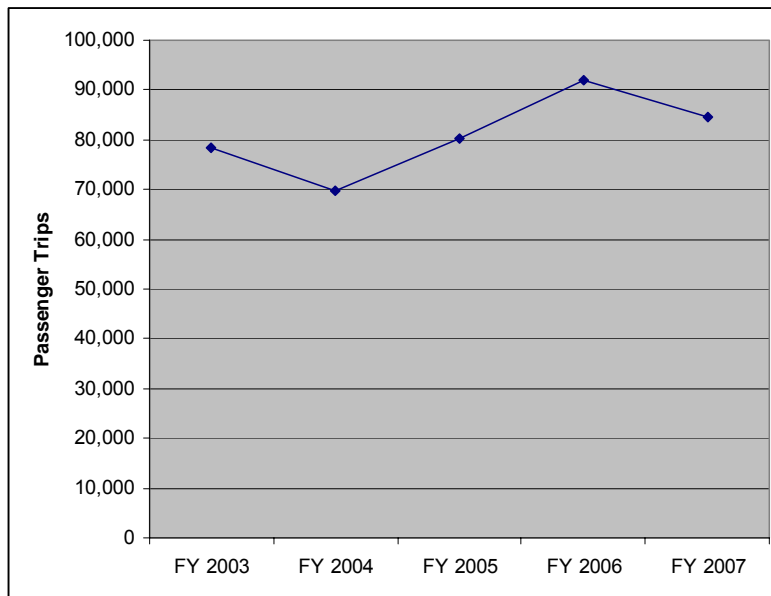
DART provides curb-to-curb, advance reservation, shared ride transportation service. This service is available to individuals who are certified as having a disability that prevents them from using traditional fixed-route services. DART serves customers located within ¾ of a fixed route, and is available during the same operating hours as the fixed-route service. There are no restrictions on the purpose or frequency of trips for DART customers. Table 6.3 illustrates the performance of DART service over the past five years.

Table 6.3: DART Service

Dart Service		
Year	#Trips	% Difference
FY 2003	78,483	
FY 2004	69,820	-11.00%
FY 2005	80,359	15.10%
FY 2006	92,110	14.60%
FY 2007	84,514	-8.20%

Ridership: As illustrated in Figure 6.3, between 2004 and 2006, a 32% increase in ridership occurred. This increase is due to several contributing factors, including expanded service area (the DART service area increases as the fixed-route service area increases) and improved quality of service with fewer trip denials (encouraging more usage of the system). However, like the Fixed Route Service, due to funding matters, which led to the reduction in service in Lexington County, this trend in less ridership will continue spreading in the near future.

Figure 6.3: DART Ridership Trends



6.3 Funding Sources

CMRTA utilizes a variety of funding sources to meet its operating, administrative, and capital needs. Major funding sources (defined in more detail below) include the SCANA Trust Fund, Federal and State grants, and passenger fares.

SCANA Trust Fund: The SCANA Trust Fund is a \$15 million account established as part of the transition agreement between SCANA and CMRTA. These monies are designated to help subsidize transit operations for a period of time, until the fund is exhausted. These funds are used as local matching monies required to obtain Federal funds, and are also used to support operational costs that are not eligible for Federal assistance.

Before these funds have been exhausted, another significant source of local funds must be in place, or the system will not be able to operate at the level of service necessary to serve local residents. Because of the limitations on uses of Federal funds (described below), local monies must be available to support transit operations.

Based on the current expenditures of CMRTA, a baseline projection was established to determine the length of time before the Trust Fund is depleted. This baseline projection assumes a continuation of the current level of service. If services are expanded in the interim, these funds will be available for a shorter period of time; likewise, if services are reduced, these funds will last longer than shown in the baseline projection.

As specific short-term recommendations for CMRTA are developed, this projection will be revisited to determine the impact of the recommendations on the length of time before the Trust Fund is expended. Figure 6.4 shows the baseline Trust Fund projection, using conservative assumptions regarding the system's revenues and expenditures over the coming years, and assuming a continuation of the current level of service. The large capital project that appears in FY 2006 is the construction of a new CMRTA Headquarters facility. However, because separate local funding sources are available for this project, construction of the Headquarters facility does not have a major impact on the Trust Fund.

Based on these assumptions (using FY 2004 figures and FY 2005 budgeted figures), the SCANA Trust Fund is projected to be exhausted during the early part of FY 2007, or slightly more than four years from the transition to public ownership that occurred in October 2002.

Annual SCANA Transit Subsidy: In addition to monies provided by SCANA for the Trust Fund, SCANA also committed to providing an annual transit subsidy of \$2.47 million for seven years beginning in FY 2004, as negotiated through the transition agreement.

Federal Transit Administration (FTA) Section 5307 Grant: This grant is provided to urbanized areas throughout the country on a formula basis, and is used primarily for capital and planning projects. These funds are used to reimburse 80% of eligible costs, with a local match requirement of 20%. However, FTA's definition of "capital" includes maintenance costs; thus, all maintenance costs are eligible expenses for reimbursement under this program.

Because maintenance activities are included under the CMRTA “Operating / Administrative” budget, this funding source is actually used to meet capital, operating, and planning needs. All capital expenses are eligible for Section 5307 assistance, as are technical assistance (planning) project costs.

FTA Section 5309 Grant: These grants are provided to fund capital projects, including fleet replacements and construction of new facilities. Operating assistance is not an eligible use of these grants. For larger systems, Section 5309 funds are available to fund large-scale capital investments such as light rail, commuter rail, and bus rapid transit. These grants are provided to specific systems for specific projects through Congressional “earmarks”. Assistance for bus-related projects is typically provided with a 20% local match requirement, but due to intense project competition, major investments (i.e. “New Starts”) require a larger local match to be favorably considered for funding.

State Mass Transit Fund (SMTF): These monies are administered by the South Carolina Department of Transportation (SCDOT) and are distributed to transit agencies across the state based on grant applications. These funds are provided by a set-aside of $\frac{1}{4}$ of 1 cent per gallon from the State’s fuel tax receipts. This grant is intended primarily to serve as matching money for other (i.e. Federal) grants.

City of Columbia Subsidy: As part of the transition agreement, the City of Columbia provides a subsidy of \$1 million per year (starting in FY 2004) to support overall operations, in addition to \$90,000 per year (started in FY 2003) to sustain trolley service.

Farebox Revenue: Passenger fares and receipts from pass sales are an important part of the overall revenue stream, but like all other transit systems in the country, fares alone can not pay for the total costs of operating the CMRTA system. Currently, CMRTA recovers approximately 19% of its operating costs through passenger fares and pass sales, which is in line with the peer systems reviewed.

Other Sources: In addition to the funding programs described above, several other funding sources provide limited support for operations. Although the funds received from these sources are limited, every dollar is important.

- **Charter Revenue:** The CMRTA trolleys are routinely chartered for special events, through a partnership between CMRTA and two local private businesses. The funds received from these charters can be used to support operations.
- **Tax Refunds:** As a Regional Transportation Authority, CMRTA is not responsible for paying most state and federal fuel or sales taxes, and is thus eligible for a refund of taxes that are charged at the time of purchase.
- **Interest Income:** Interest is accrued from the CMRTA bank balance, and can be used to support operations. However, the amount of revenue received from this source will decrease as the Trust Fund is expended.
- **Advertising Revenue:** Although no revenue is currently received from advertising, this subject is being explored by CMRTA, particularly with regard to advertising on the trolleys.

6.4 Human Services Coordination

As a result of requirements of SAFETEA-LU, a locally-developed, coordinated public transit/human service planning process and an initial plan is being 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 are being 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 2008.

SCDOT in partnership with CMCOG, CMRTA and other interested stakeholders, has developed a regional coordinated plan that meets 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.

In December 2006, the CMCOG staff began hosting a series of meetings to develop a Regional Human Service Coordination Plan. Over 70 human service agencies and operators were invited to each meeting to discuss a range of issues that included the completion of a survey that describes the types of services each agency provides and where the current gaps in service existed. Each meeting was well attended and included the participation of at least 20 agencies. For more information about the CMCOG’s *Human Services Transportation Coordination Plan*, please refer to the Appendix.

6.5 Commuter Rail in the Midlands

Another aspect of achieving regional mobility in the future will come by making a priority investment in some type of high capacity transit system (i.e. commuter rail). As the Central Midlands region continues to grow in both population and employment, the likelihood of more traffic congestion will continue to rise. Providing transportation options, like transit (and commuter rail in the long run), will help maintain quality of life and lessen the need for investment in roadways.

In 2006, CMCOG adopted the Commuter Rail Feasibility Study (aka Commuter Rail Plan) for purposes of fostering the establishment of regional land use policies that would play a major role in the future viability of rail transit in the Central Midlands region. The CMCOG Commuter Rail Plan examines three corridors in the region that exhibit characteristics most suitable for some type of commuter rail investment. These corridors are: Batesburg-Leesville to Columbia,

Camden to Columbia, and Newberry to Columbia. The Commuter Rail Plan envisions and encourages the establishment of transit-supportive developments and facilities, in order to reduce the dependence on the use of automobiles and improve air quality; and outlines a series of action steps that can be taken now to build toward high-capacity transit service in the future. This Commuter Rail Element of the 2035 LRTP incorporates by reference the CMCOG Commuter Rail Feasibility Study.

A description of the proposed corridors as well as a look into possible high speed rail service are next, followed by a set of recommended action steps for CMCOG and stakeholder municipalities to consider in preparation for future high-capacity transit.

6.5.1 Description of Potential Corridors

As mentioned earlier, three specific commuter rail corridors were considered in this feasibility assessment: Batesburg-Leesville to Columbia, Camden to Columbia, and Newberry to Columbia. These three corridors are illustrated in Map 6.2. The Commuter Rail Plan evaluated each of these routes as well as provided a description of which modes of transit can be appropriate in various settings. For instance, heavy rail and light rail were determined to be appropriate in densely urban cities that have the population and employment to support these high-capacity modes. While the Central Midlands region is experiencing significant growth, the region will not have the population and employment densities necessary to support light or heavy rail for some time. The region's population density, however, may support other types of high-capacity transit, such as express bus, bus rapid transit (BRT), and commuter rail. The length of the corridors and population density of the service area are the key characteristics that lend support to these specific modes.

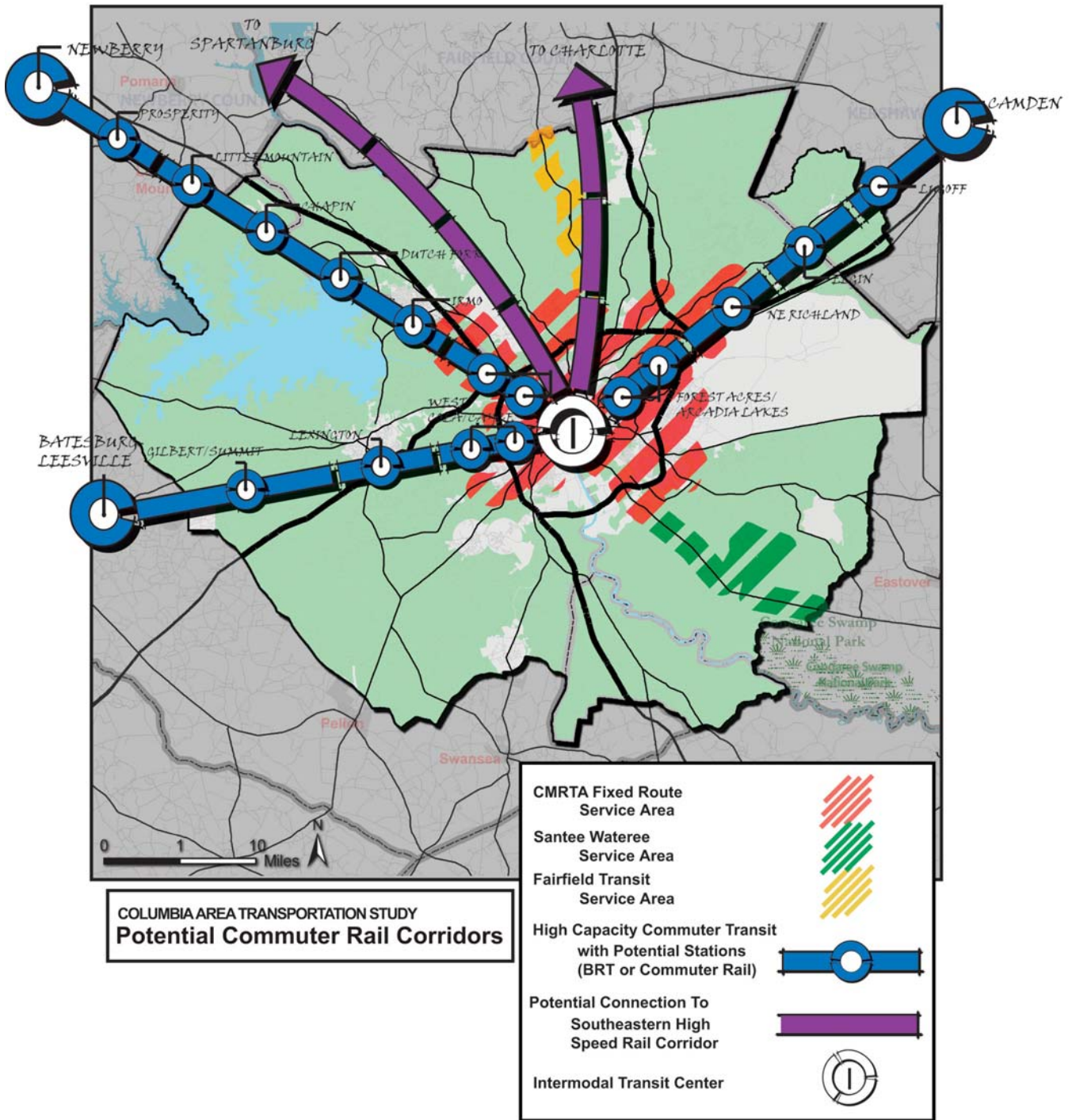
Express bus currently operates in two of the three corridors and serves as a base from which further transit enhancements can be developed. As transit ridership grows, more intense levels of express bus can be implemented. Eventually, further enhancements such as BRT services and even commuter rail may become warranted. While all three corridors may warrant high capacity transit sometime in the future, they will all reach that point at different times. Therefore, phased implementation of a menu of transit strategies can be tailored to each specific corridor. Below is a brief description of each corridor along with the most appropriate mode of transit.

6.5.2 Comparison to Peer Systems

The order-of-magnitude cost and ridership estimates that were produced for the Central Midlands effort were used as a basis for comparison to similar settings in which commuter rail service is actively being planned. Specifically, the ridership and cost projections for the three Central Midlands corridors were compared to that of planned commuter rail lines in Albuquerque, Charlotte, and Nashville.

It should be noted that the related figures for Nashville and Charlotte vary significantly, based on the scope of each project. Nashville is taking a “bare bones” implementation approach, using basic stations and used rail cars, whereas Charlotte is providing more track improvements, new vehicles, and amenities. The current estimates for Nashville project 1,500 daily passenger boardings, with an implementation cost of approximately \$40 million. Plans for Charlotte currently estimate an implementation cost of \$275 million - \$290 million, with 2,500 to 5,000 daily riders. Albuquerque’s projected cost is between that of Nashville and Charlotte, but its corridor is significantly longer than that of Nashville or Charlotte.

Map 6.2: Potential Commuter Rail Corridors



A comparison of projected ridership and cost between the Central Midlands corridors and the three peer corridors is given in Table 6.4. As illustrated in the table, the estimated ridership of the Camden corridor compares favorably with the projected Nashville ridership, and the Newberry corridor approaches Nashville's estimated ridership. The estimated patronage for the Batesburg-Leesville line falls far below that of the peer systems.

In terms of cost per mile, the Nashville corridor (32 miles in length) is estimated to cost approximately \$40 million, resulting in a unit cost of \$1.25 million per mile. On the other end of the spectrum, Charlotte's North Corridor is envisioned as a full service line, costing \$290 million for a 30-mile corridor, or \$9.7 million per mile. Compared to these corridors, the Camden line's costs are competitive - \$80 million for 33.3 miles of service, or \$2.4 million per mile. The Newberry and Batesburg-Leesville lines also have reasonable unit costs, at approximately \$2.8 million per mile.

6.5.3 Connections to Regional High Speed Rail

Another aspect of the Commuter Rail Plan was to examine the feasibility for a regional high speed rail corridor that would pass through the Upstate of South Carolina. This connection would serve as a passenger link between the Columbia area and a terminal point in either Charlotte or Spartanburg, both of which lie along the primary corridor for the Southeast High Speed Rail service.

In determining the best connection to high speed rail, a comparative cost analysis was performed with regard to the major categories of infrastructure improvements. The projected cost associated with instituting service on the Columbia to Charlotte corridor is less than the cost of establishing service in the Columbia to Spartanburg corridor. However, if commuter rail service were already in place to Newberry, the additional cost of extending service to Spartanburg would be less than the cost of the Columbia to Charlotte corridor.

Based on the projected infrastructure costs in each corridor, it appears that the Columbia to Charlotte corridor offers a more effective opportunity for connecting to the potential Southeast High Speed Rail line. The caveat to this statement is that if improvements were to already be made to the Spartanburg corridor enabling commuter rail service to Newberry, the additional costs of extending service to Spartanburg would be less than the costs of establishing new service to Charlotte. Furthermore, there may be additional business ties between

Columbia and Charlotte that could be strengthened with a rail connection.

6.5.4 Rail in the Future

The Commuter Rail Plan indicates that each of the corridors analyzed exhibit characteristics supporting the implementation of high capacity transit and that the Camden corridor should receive priority consideration. Corridor population densities, the strength of downtown Columbia as a regional destination and employment center, and the proximity of activity centers to the existing freight rail lines create a positive environment for potential rail services. Projected population and employment in each of the three corridors (Camden, Batesburg-Leesville, and Newbury) show that these characteristics will only improve over time and the investment in transit will become more and more cost effective. As a result, these findings present an opportunity for the region to address mobility concerns before they reach critical mass. The Objectives & Strategies section below summarizes a series of recommended actions that will aid in facilitating the planning process and position the region strategically to facilitate better transit and implement commuter rail service (and any other form of high capacity transit service) in the future.

6.6 Objectives and Strategies

1. Work with CMRTA and other partners and stakeholders in promoting regional bus transit.

- Seek a “champion” to advocate for transit interests.
- Initiate a marketing program to highlight successes of CMRTA and build community support.
- Coordinate on a continual basis with freight rail operators.
- Establish a regional educational program on the benefits of transit.
- Partner with SCDOT and CMRTA in promoting Transportation Demand Management strategies (e.g. carpool / vanpool, transit incentives).
- Participate in community meetings and other local events to build support for the system at the grassroots level.

2. Encourage land development and travel patterns that support higher utilization of mass transit.

- Promote “transit-friendly” development in potential transit corridors.
- Explore the potential for neighborhood circulator service.
- Study the establishment of neighborhood transit centers.
- Investigate the feasibility of high-capacity transit modes.
- Improve frequency of service on high-demand routes.
- Continue to develop express routes in major corridors.
- Expand transit options in unserved or underserved areas.

3. Provide a high quality transit services, within the system’s financial constraints.

- Implement new bus stop signage program.
- Provide ADA-compliant electronic signage at Transfer Center.
- Install video cameras on buses and procure Automated Vehicle Location (AVL) / Mobile Data Terminal (MDT) equipment for DART vehicles.
- Explore partnerships with advertising companies to provide bus shelters.

4. Facilitate Regional Commuter Rail Service

- Support regional transit and secure stable local funding for transit.
- Adopt land use ordinances and policies encouraging transit-supportive development.
- Develop interim transit service in corridors.
- Establish a regional educational program on the benefits of transit.
- Identify and preserve potential station sites
- Coordinate on a continual basis with freight rail operators