

**2008-2012 Transportation Development Plan  
for the  
Chatham Area Transit Authority (CAT)**



**EXECUTIVE SUMMARY**

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## EXECUTIVE SUMMARY

### Study Overview

This Transportation Development Plan (TDP) for the Chatham Area Transit Authority (CAT) provides a comprehensive review of CAT's operations and the demographics and attitudes of its users to analyze system strengths and opportunities for improvement in the next five years. For this plan, CAT has engaged a study team led by the Urbitran Group, in association with Abrams-Cherwony & Associates, Anne Roise, and Schaller Consulting. The plan synthesizes data and public and stakeholder input on all facets of CAT's services to provide a sound approach to short and medium term improvements based on operating efficiencies, public interest, and market patterns.

### Public Outreach

This plan relies on an extensive public outreach program designed to solicit input from members of the general public, current users of the system, community leaders, key policy decision-makers and other transportation stakeholders in the Savannah and Chatham County area. This program included an extensive on-board customer survey, focus groups, individual stakeholder interviews, and public drop-in sessions to solicit feedback from users and non-users alike at CAT's busiest destinations, including the Downtown Loop and Oglethorpe Mall.

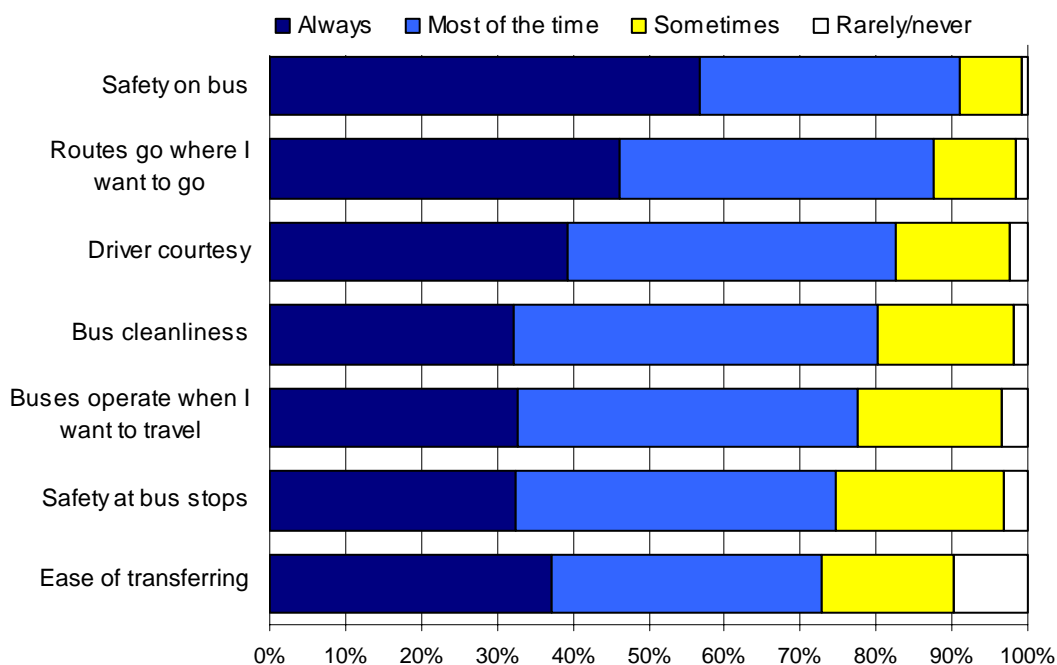
All of this input was used to complement operating data collected and guide the planning process throughout the study. A number of key themes emerged through the public participation process:

- CAT's core route network serves downtown Savannah effectively
- The system service area, as defined by the Transit District, does not fully serve Chatham County and the seven independent municipalities and thus prevents CAT from becoming a true county-wide provider
- CAT customers are frequent users of the system, typically riding at least five days a week
- Roughly one-half of CAT customers transfer between buses each day they ride
- CAT riders overwhelmingly pay cash fares rather than use discounted unlimited ride passes
- The lack of a transfer fare represents an economic hardship for many CAT customers
- Demand is growing for transit service to reach early and late shift jobs throughout Savannah and Chatham County
- Employers acknowledge a need for public transportation but tend to support or encourage transit use for employees only when private automobile parking becomes scarce or employees do not have their own transportation



Chatham Area Transit riders were surveyed on-board buses during data collection for on/off counts in the spring of 2006. The survey included a total of 56 questions concerning ridership patterns, satisfaction with CAT service, desired service improvements, purchase of passes and tickets, use of the customer information center and demographic characteristics. The questionnaire was in both English and Spanish. A total of 1,182 completed surveys were returned and usable.

**Customer Satisfaction on Service Attributes**

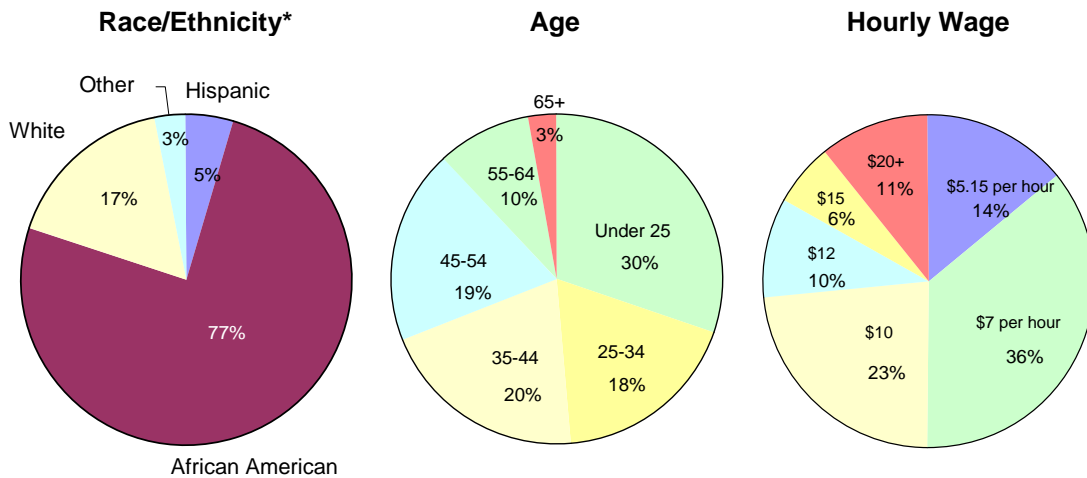


Demographic characteristics of CAT riders are typical of riders in mid-size cities: low-income, minority, female and not owning a car. CAT riders are highly likely to be either employed or attending school. Somewhat less typically, CAT riders are predominantly long-time riders, with a large proportion having taken the bus regularly for 5, 10 or even 20 years. Not surprisingly, given their veteran-rider status, CAT riders span the age spectrum from the youngest group (under age 25) to age 54, but there are relatively few riders over age 54.

Most CAT riders use the bus more often than other forms of transportation. Some rely almost exclusively on buses to travel around the area while others mix in trips using their own car or riding with friends or relatives. There is also a significant segment of riders – about one-third of all riders – who take the bus occasionally, but rely on automobiles for most of their work/school trips, personal trips or both.



### CAT Riders Demographics



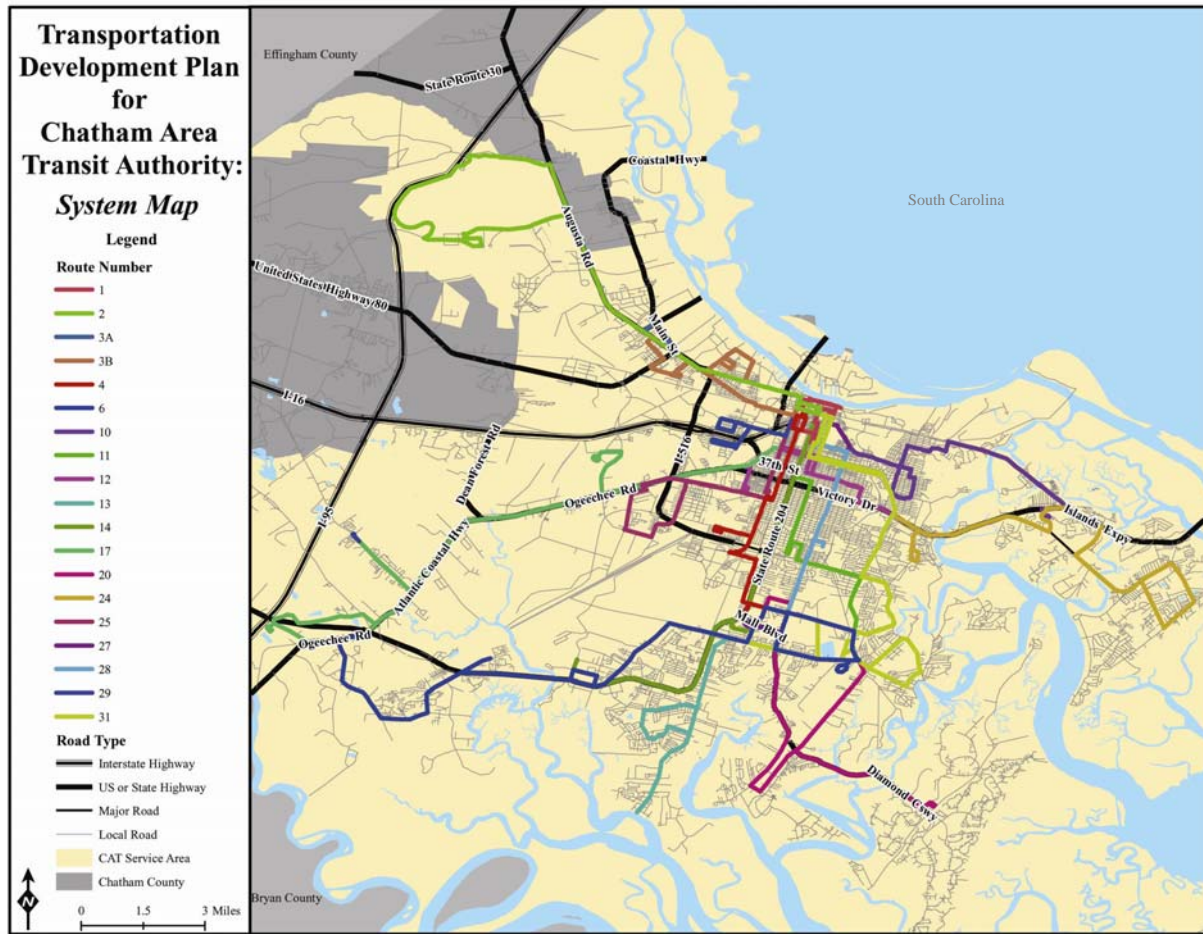
\* Responses total more than 100% due to multiple responses

### Service Analysis and Recommendations

A thorough review of a transit system’s existing conditions serves as the foundation for eventual operating recommendations in a TDP. This study details the current operations at CAT, financial and operating data and trends, capital assets, and staffing and organization. The study team also reviewed demographics throughout Chatham County, the current route network’s geographic coverage, proximity to major trip origins and destinations, and relationship to overall transit needs in the county. Seven independent municipalities currently do not participate in the Transit District: Bloomingdale, a portion of Garden City, Pooler, Port Wentworth, Thunderbolt, Tybee Island, and Vernonburg.

Chatham Area Transit provides service within the special Transit District with 20 bus routes, including the fare-free CAT Shuttle and the fare-free Liberty Parking Shuttle. CAT also operates a ferry service across the Savannah River to Hutchinson Island. On weekdays and Saturdays bus service runs from 5:40 AM until almost 12:00 AM. On Sundays service operates from 7:10 AM until almost 9:00 PM. Americans with Disabilities Act (ADA) paratransit service is provided through a CAT service called Teleride, which offers door-to-door service throughout all of Chatham County.

**Current CAT Route Network**



The strong productivity of many routes and of the CAT system as a whole provides a solid foundation for route recommendations aimed at future transit development in Savannah and Chatham County. By reducing bus route duplication or clearly unproductive services, enhancing crosstown connections, and increasing service on the most productive routes, CAT will benefit from the cost-effectiveness of a more streamlined system. Modest enhancements of CAT’s most productive services, as well as improved service to important employment and commercial destinations, will lead to greater system-wide success in the coming years. Route coverage in the system’s core service area, downtown Savannah, will remain largely unchanged.

**CAT FY 2005 Operating Statistics**

	<b>Weekday</b>	<b>Saturday</b>	<b>Sunday</b>
Average Daily Ridership	11,482	10,033	3,468
Cost per Mile	\$5.76	\$5.68	\$5.76
Passengers per Mile	1.44	1.46	1.18
Farebox Recovery	20%	20%	16%

### Average Daily Ridership by Route

Route	Weekday	Saturday	Sunday
1 – CAT Shuttle	313	286	159
1A – Liberty Parking Shuttle	137	No Service	No Service
2 – West Chatham/Airport Area	420	357	No Service
3A/3B – Augusta Ave/Garden City/Hudson Hill	1,069	1,110	251
4 – Barnard	678	691	314
6 – Crosstown	411	381	102
10 – East Savannah	732	424	198
11 – Candler	360	277	41
12 – Henry	723	421	154
13/20 – Coffee Bluff/ Montgomery/Skidaway Island	81	48	No Service
14 – Abercorn	2,225	2,497	1,095
17 – Silk Hope/Savannah Festival Center	606	496	190
24 – Savannah State/Wilmington Island	302	122	No Service
25 – MLK Jr. Blvd/West Lake Apartments	994	828	264
27 – Waters Road	814	912	428
28 – Waters Road	703	480	No Service
29 – West Gwinnett/Cloverdale	350	207	78
31 – Skidaway/Sandfly	564	496	194
<b>Total</b>	<b>11,482</b>	<b>10,033</b>	<b>3,468</b>

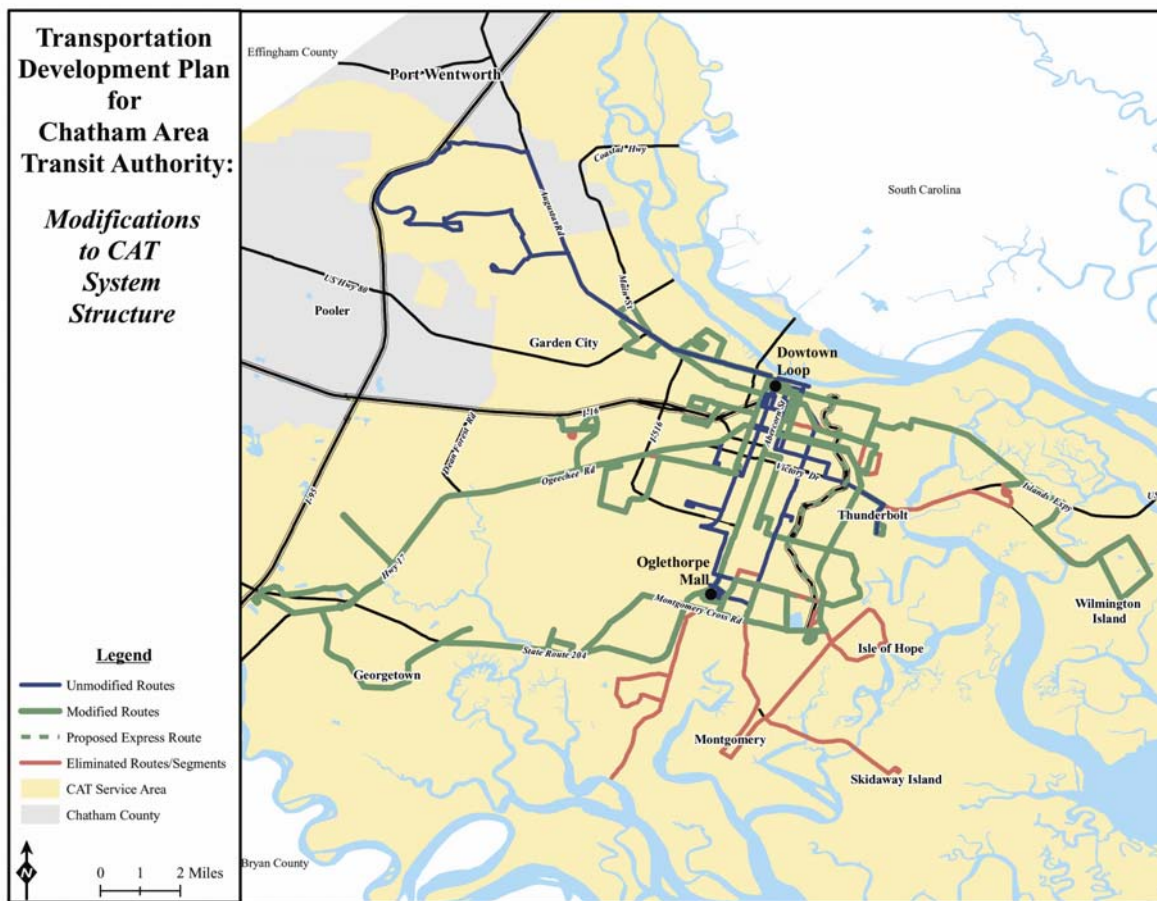
Source: CAT Farebox (FY 2005 reporting)

Based on the route diagnostics analysis, field investigation, discussions with CAT staff and stakeholders, and extensive public outreach, the TDP recommends the following:

- Provide new crosstown connections for Quacco Road residents with route 6 Crosstown
- Provide more direct service for residents in East Savannah to the Downtown Loop
- Provide two-way service along entire length of the 11 Candler, simplify routing
- Improve service to industrial and employment sites in West Savannah (routes 2, 3A, 3B)
- Improve service frequency on CAT's busiest route, the 14 Abercorn
- Improve efficiency of 17 Silk Hope, shift detention center trips to extended 25 MLK Jr. Blvd
- Extend service to Savannah State University (10 East Savannah)
- Shorten travel time from Wilmington Island to downtown Savannah
- Simplify 29 West Gwinnett/Cloverdale services
- Eliminate ineffective services (13 Coffee Bluff, 20 Montgomery/Skidaway Island)
- Eliminate unproductive segments of 31 Skidaway/Sandfly, provide more direct service

Net cost savings from the elimination of unproductive services could total \$275,000 annually, while enhanced and expanded services to fuel system productivity and customer convenience would require additional investment of \$1.5 million annually if fully implemented. These recommendations provide CAT with a range of options available, either individually or as a combination. The following figure provides a visual summary of proposed changes to the CAT route network.

**Proposed CAT Route Network (All TDP Recommendations)**



**Teleride Program Review**

Teleride is the paratransit service required by the Americans with Disabilities Act (ADA) to eligible people throughout Chatham County. The service offered is door-to-door paratransit, and is provided using 10-passenger lift-equipped cutaway vans. If assistance is required, passengers are accompanied to the doorstep. The service is available to disabled patrons throughout Chatham County who have registered with CAT for ADA service, filling out Teleride’s Application for Determination of ADA Eligibility. Teleride service is operated by an independent operator under contract to CAT.

**Teleride Operating Statistics**

	<b>Weekday</b>	<b>Saturday</b>	<b>Sunday</b>
Ridership	247	75	49
Revenue Miles	1,627	519	435
Revenue Hours	121	41	35
Peak Vehicles	16	7	7

Source: National Transit Database 2005

As part of this TDP, the study team analyzed a sampling of a typical month of operating and performance data provided by Teleride and CAT. Teleride keeps very complete records on a daily basis of its ridership, cancellations, no-shows, fares and tickets, and revenue hours and miles of service provided. A few key findings can be drawn from the data:

- A large number of reservations (~ 20 percent) do not materialize as trips
- Operating statistics and focus group feedback highlight on-time performance as an issue
- Teleride shows very few turndowns, typically for customers late in requesting reservations
- Subscriptions account for roughly 35 percent of all trips (well within ADA parameters)

Teleride is a well-conceived, well-managed program with some specific areas of concern where modest adjustments can be made that should contribute to an improved level of service for the community. Based upon discussion with CAT and Teleride staff and observations of administration and operations, the following actions are recommended for consideration by CAT to increase productivity and efficiency and to improve overall service quality:

- Tighten eligibility certification to ensure that users of the system meet ADA guidelines
- Increase CAT travel training to encourage use of CAT fixed route services
- Consider tightening the geographic coverage to the three-quarter mile ADA standard
- Seek New Freedom Initiative funds for flexible, demand response service for individuals who may need assistance but are ineligible for ADA paratransit
- Increase the one-way fare to \$2.00 as permitted by the ADA
- Reduce the reservation time from 14 days to 7 days
- Set a cancellation policy for frequent abusers of the advance notice policy
- Review wage and benefits package, hire additional part-time operators as necessary to meet service demand
- Implement a quality assurance program
- Add CAT administrative costs to the financials for Teleride
- Take advantage of Teleride vehicle capacity to offer general public trips in portions of the CAT service area that do not presently warrant traditional fixed route transit

## **Market Research**

The market research component of the TDP focuses on expanding transit ridership with emphasis on choice riders, specifically engaging those riders who have an option to use a private vehicle or public transit. The research was built upon the feedback gained through a focus group with representatives of Savannah area businesses as well as interviews with individual employers. Participants discussed the use of public transit by their employees, accessibility, barriers, potential incentives, and trends that might increase demand for transit services in the future. Sixteen participants representing 13 organizations were present and

included government agencies, health facilities, human service organizations, and other public and private sector organizations.

The fundamental goal of this effort was to solicit practical, local input from major employers who may, or already do, promote the use of transit with their employees. A questionnaire consisting of 18 items was developed to assess the following:

- Nature of the organization's business
- Type of employees and shifts worked (full time, part-time, etc.)
- Provision of free or subsidized parking, bus passes
- Commuter and other benefits provided on a pre-tax basis
- Interest in implementing Commuter Choice benefits
- Primary reasons for implementing Commuter Choice benefits as well as barriers
- Future company plans over the next three years for expansion, reduction, etc. that might impact parking and transit needs

The feedback gleaned from employers in Savannah and Chatham County underlines how transit properties nationwide face an ongoing challenge of engaging employers and successfully expanding the commuting market share. Across the country, interest is generally low among employers in providing transit benefits to employees, and more importantly, for encouraging the use of transit by limiting "free" parking or providing other incentives for alternative transportation modes. The study team learned that:

- Respondents were not experienced with incentive programs to reduce employee parking
- Organizations do not see pressing need for transit benefits given the availability of parking
- Several public and private agencies provide employees with subsidized rates at public parking facilities
- The public school system and the City of Savannah expressed interest in bulk pass purchases
- Employees working late nights/varied shifts represent a growing transit market

It is recommended that CAT continue to both market its services publicly as well as maintain ongoing interaction with large local employers such as St. Joseph's/Candler and Memorial Health. These employers have shown some interest in employee transit use already and may be receptive to expanding their relationship with CAT as parking availability and costs become more restrictive. Similarly, suburban office and industrial developments outside of the City of Savannah represent opportunities for vanpool or other non-traditional transit services. These may often be developed with Job Access Reverse Commute (JARC) funding assistance, as well as assistance from employers who rely on lower-wage workers and shift workers.

As a matter of policy, several approaches to improving access to transit – and transit’s viability – should be pursued based on the themes that emerged through discussions with these employers. The pervasive feeling that transit is not needed because parking is readily available for employees can be countered with policy considerations aimed at both changing employer and employee mindsets about commuting and improving the access and mobility provided by transit providers such as CAT. Therefore, CAT should work with the City of Savannah and Chatham County governments in the development of local policies that:

- Recognize the true cost of parking (to employer and employee) and provide better incentives to use transit as an alternative to personal automobiles
- Consider transit as an important tool in both regional mobility and congestion mitigation
- Strengthen the connection between land use and transportation in planning, zoning policies
- Plan proactively for transit and pedestrian accessibility in site design and roadway design

## **Fare Policy**

For any transit property, passenger fare policy represents an ongoing balancing act between recovering sufficient revenue for service operated and offering customers a payment structure that is considered affordable, convenient, and equitable. CAT’s current fare structure is convenient for customers in that it is easy to understand and the different fare categories and payment media are limited in number. The base cash fare of \$1 is in line with (or lower than) many peer systems; however, without a free or reduced price fare for transfers, many passengers’ one-way trips are substantially more expensive.

This question of whether or not to introduce a free transfer or reintroduce low-cost transfers is critical in establishing a fare structure that meets the needs of CAT’s customer base. An on-board survey conducted as part of the TDP process indicates that roughly half of all CAT passengers transfer from one bus to another at least once a day, while one-third of passengers surveyed said they would transfer two or more times in a day. For any passenger, multiple transfers in one day can mean daily costs of more than \$4. For passengers with children (of fare-paying age), this burden can double or even triple. Feedback from CAT customers and stakeholders throughout the planning process has reinforced the idea that an alternative is necessary.

In this study, two basic types of fare changes are considered: an increase in the base fare price combined with the introduction of free transfers, and an increase in the base fare price with a low cost (\$0.25) transfer fare. For each approach, two levels of increase in the price of weekly unlimited passes are tested. The first is a proportional increase in the pass prices, while the second is an increase in pass prices at a lower proportion than the base fare.

As a point of comparison, another alternative tested the likely outcome of a fare policy change that offers free transfers but makes no other changes to the base fare or unlimited pass prices. Not surprisingly, ridership increases somewhat (4.3 percent), but the negative impact on revenue is clear (-15.8 percent). This alternative is not recommended.

The preferred alternative sets the base cash fare at \$1.50, offers free transfers, and raises weekly and monthly unlimited ride passes to \$16 and \$60 from \$12 and \$48, respectively. This alternative would lead to a revenue increase of almost 2.5 percent, while limiting ridership losses to just under 4 percent. This alternative is simple for customers from a user standpoint, offers savings to riders who transfer frequently (even when paying cash), and avoids revenue loss to the system. Critical components of a successful fare policy include:

- Simple, equitable structure that suits needs of CAT customers
- Maximum revenue gain for CAT without excessive burden on riders
- Extensive public education and marketing (including promotion of unlimited ride passes)
- Availability of fare media for sale throughout CAT service area

## Downtown Transit Station

At present, nearly all of CAT's routes begin in the City of Savannah and circulate via the Downtown Loop, bounded by Oglethorpe Avenue, Martin Luther King, Jr. Boulevard, Broughton Street, and Abercorn Street. Buses enter and exit the loop at several locations, depending upon their orientation, and all routes travel in a clockwise direction, i.e., west on Oglethorpe Avenue and east on Broughton Street. The Downtown Loop provides CAT customers with several locations to transfer between bus routes; the primary transfer location is on Broughton Street between MLK Jr. Boulevard and Montgomery Street, where buses also lay over before beginning their outbound trips.

Chatham Area Transit is currently studying two locations for the development of a transit station to consolidate and coordinate services and provide a passenger transfer facility for the core bus routes. The two potential sites are both at the western edge of downtown Savannah:

1. **Greyhound:** Block bounded by Oglethorpe Avenue, Fahm Street, Youmans Street, Ann Street
2. **Louisville Road:** Parcel located at northwest corner of Louisville Road and Boundary Street

As part of this TDP, the study team analyzed the two locations from an operations perspective to provide a recommended circulation path for each CAT bus route in downtown Savannah and to the transit station, as well as the cost impacts of moving the transfer nexus from the Downtown Loop to either site. Cost impacts were calculated relative to the current CAT route network as well as the proposed route network outlined in this TDP. The analysis was based upon a desire to meet four principal goals:

- Provide optimal route connections to facilitate passenger transfers and simplify travel
- Maintain core bus services within downtown Savannah
- Streamline route network where possible to reduce travel times and operating costs
- Eliminate bus layovers and idling on downtown streets

The Greyhound site is within close proximity to the Downtown Loop, while the Louisville Road site is more removed, however both sites allow for a similar approach to bus routing through the city. The Greyhound site location is clearly preferable from both a geographic perspective, reflecting service and transfers located closer to downtown Savannah, as well as a financial perspective, due to potential cost savings relative to the current Downtown Loop. Furthermore, long-distance bus service already provided by Greyhound at this site provides CAT customers with additional travel options. The Louisville Road site, being more removed from the downtown core of CAT's operations, presents the likelihood of increased costs as well as added inconvenience for CAT customers.

## Summary and Implementation Plan

The TDP process is designed to consider a five-year planning horizon. The majority of the service plan recommendations are anticipated for implementation in the first two years. All route changes that are designed to reduce overall operating costs or remain cost-neutral (i.e., redistributing resources) are to be implemented in the first year following submittal of the plan. In the second year, service enhancements should be reviewed for feasibility and implementation. Other aspects of the TDP, such as the fare policy changes and Teleride policy review should be considered throughout the five-year timeframe. The TDP delivers six focal conclusions:

1. CAT's existing route structure is effective and serves downtown Savannah well
2. Expansion of the Transit District should be considered to provide true regional service
3. Modest enhancements to current routes can improve efficiency, customer convenience
4. Transit must increasingly address the needs of shift work and non-traditional work hours
5. CAT's fare structure requires change to achieve better equity and customer convenience
6. Regional parking and development policies encourage automobile use over transit and should be addressed

Public transportation is a critical component to our community's mobility, and as such plays an important role in the local economy, connecting people with jobs, healthcare, and social and commercial opportunities. The continued maintenance of a strong public transportation system and commitment to its growth, in conjunction with infrastructure and development expansion, will provide Savannah, Chatham County and the region with an invaluable service.