

A faded, grayscale image of a bus is visible in the background, positioned behind the main title text.

Final Draft
Cobb County
Transit Planning Study

Executive Summary

URS

May 31, 2006



Cobb County Transit Planning Study

Executive Summary

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May 31, 2006

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1.0 INTRODUCTION AND PURPOSE

In December 2004, Cobb County issued a Request for Proposal to prepare a Transit Planning Study (TPS) for Cobb Community Transit (CCT). The impetus for conducting the TPS was to address a number of service, community, infrastructure, and financial aspects of the system to reinforce CCT's mission to provide a safe, reliable, attractive, and cost effective public transportation system for the county.

The purpose of the TPS was to enhance the transit service provided by CCT through collecting detailed operations and system information, evaluating the information, and formulating recommended service and capital improvements for the system. Key elements of the TPS included:

- Fixed and Express Service Review
- Fare Structure Evaluation
- New Service Analysis
- Bus Stop Inventory and Improvement Plan
- Customer Service Assessment
- **Public Involvement**

A consulting team led by URS Corporation was retained to aid in the development of the study. The Cobb County Transit Planning Study Executive Summary serves as final documentation for the study. This report presents a summary of the activities required to complete the study, highlights of major findings, and contains recommendations of projects and actions to enhance CCT.

1.1 Background

CCT is owned by Cobb County and operated by a third party transit management firm under contract to the county. CCT began service on July 10, 1989 with five local fixed routes. Express bus service was introduced in October 1989 to provide service between park and ride lots in Cobb County, midtown and downtown Atlanta. The initial two express routes were the Route 100, operating from space the County leased from Kennesaw State University to downtown Atlanta, and the Route 101, operating from the Cobb County Civic Center to downtown Atlanta. Complementary paratransit service, initiated in June 1994, is provided upon request within $\frac{3}{4}$ mile of the fixed bus routes for persons with disabilities. In 1994, 19 additional 40-foot buses were added to local service. The extra capacity provided by these buses helped alleviate overcrowding on popular routes, especially Route 10 which connects to the MARTA Arts Center Station.

In 1998, CCT opened the Cumberland Boulevard Transfer Center across from Cumberland Mall. Cumberland Boulevard was widened to accommodate a new dedicated lane for buses to pull off the Boulevard. Eight custom designed brick shelters were constructed in the new passenger waiting area. In addition, a 15,000 square foot operations and security building was built on the west end of the site.

In 1999, CCT acquired a 60,000 square foot building on South Marietta Parkway which is the system's administrative, operations and maintenance facility. The facility was completed in the fall of 2000.

In 2001, service was expanded through a new Route 30 between southwest Cobb County and the Hamilton E. Holmes MARTA. This route has continued to experience increased ridership and is currently the second most utilized CCT service.

In 2002, Cobb County acquired land and constructed a 364 space Park and Ride Lot for the Route 100, and in 2003, the Route 100 was relocated to the Busbee Park and Ride in Kennesaw from a nearby Kennesaw State University facility.

Also in 2002, Cobb County acquired land and constructed a 287 space Park and Ride Lot in Marietta for the Route 101, and in 2003, the Route 101 was moved to the Marietta Park and Ride, adjacent to the CCT Marietta Transfer Center.

In 2003, the third CCT Park and Ride Lot was constructed in Acworth with 161 spaces to accommodate the Route 102, CCT's newest express route. Route 102 operates from the Acworth Park and Ride Lot located on Lake Acworth Drive, Highway 92 and travels to the MARTA Arts Center Station.

Since 1989, CCT passenger fares have only increased once to the current one-way local fare of \$1.25. Express fares are currently \$3 one-way and \$4 round-trip. A passenger can ride more than one CCT bus to reach their destination for one fare through the free transfer policy. In addition, a reciprocal fare agreement with MARTA has been in place since 1989 and enables passengers to transfer between the systems with no additional charge.

In 2003, CCT completed a Transit Development Plan (TDP) that recommended significant service enhancements; of which a number were subsequently implemented. Since FY 2003, revenue hours have increased 19 percent and ridership has increased 23 percent. Annual ridership has reached record levels exceeding 3.7 million trips in 2005.

In January 2006, CCT began operating limited weekday express trips between Canton/Woodstock through a contract **service** arrangement with Cherokee County.

Supplementing the CCT services operating in Cobb, the Georgia Regional Transportation Authority (GRTA) also provides Cobb express services **that were previously developed as part of the Regional Transit Action Plan (RTAP)**. Selected services are or will be operated by CCT within GRTA's regional "Xpress" program that operates in partnership with ten other metropolitan Atlanta counties. Each of the participating counties made a one-time payment to help fund the first five years of the Xpress operations. In exchange for this support, funds were provided to the County for the construction of arterial road improvements, which are scheduled in the Atlanta Regional Commission's Transportation Improvement Program. The current or pending Cobb related GRTA services include:

- Route 470-Powder Springs/Downtown Atlanta-Implemented January 2005*
- Route 460-Douglasville/Cumberland-Implemented June 2005

- Route 480-Acworth/Atlanta-Implemented November 2005*
- Route 481-Town Center/Midtown-Implemented April 2006*
- Route 70-Extension to Perimeter Center-Implementation TBD
- Route 407-Macfarland Road/North Springs/Cumberland-Implementation TBD
- Route 477-Powder Springs/Cumberland-Implementation TBD
- Route 485-Cumberland/Airport-Implementation TBD

Note (*) Operated by CCT

1.2 Study Documentation

The Cobb County Transit Planning Study Executive Summary serves as the final documentation of the comprehensive study process undertaken to develop the TPS. All of the planning and analysis results documentation is included in the TPS by reference. In development of the TPS, 5 primary reports have been produced during the study tasks that present both technical and qualitative information, research, findings, and recommendations. All documents are available from the Cobb County Department of Transportation.

1.2.1 Fixed and Express Service Review

The Fixed and Express Route Service Review documents the on-board ride check and passenger survey conducted on the system between April and June 2005 and summarizes the subsequent evaluation and analysis of service data. The primary tasks included in this review were:

- Develop comprehensive ridership database
- Review current CCT local and express services in order to recommend improvements
- Evaluate service relative to selected performance measures and recommend changes in service if appropriate
- Receive input from system users and others through public forums and other sources
- Review system facilities and ITS program for relevant recommendations

1.2.2 Fare Structure Evaluation

An analysis of the CCT fare structure was conducted to establish future revenue requirements and enhance customer convenience associated with fare media and payment. The evaluation addressed fare media, farebox recovery objectives and alternatives, and peer transit agency comparisons which resulted in a number of recommendations.

1.2.3 New Service Analysis

The prior TDP recommended new services for the Austell/Powder Springs and Kennesaw/Acworth areas. A comprehensive review was undertaken of existing CCT services and their relationship to potential new areas of services along with area demographic data. This analysis documents the process undertaken and resources required for potential new CCT service recommendations.

1.2.4 Bus Stop Inventory and Improvement Plan

When the TPS commenced, one of the major tasks was conducting a bus stop inventory and developing an associated database. Once the RideCount and On-Board Survey tasks were completed, a system wide bus stop inventory was performed. From the inventory, detailed information on each stop was placed into an interactive database with information from the RideCount then included which enabled analysis of not only the condition and physical characteristics of each stop, but also the passenger activity for weekday and Saturday associated with each stop. The CCT bus stops and program were then analyzed to identify improvements for sign design, stop accessibility, general conditions, and placement of passenger amenities

1.2.5 Customer Service Assessment

A review of county and CCT customer programs and functions was conducted to gain insight into the emphasis placed on customer service as well as actual customer service practices. The assessment process included review of various county and system documentation, interviews and conversations with Cobb Department of Transportation (DOT), CCT, and service contractor representatives, direct contact with customer service functions, and discussion with telephone equipment vendors.

1.3 Public Involvement

A key and ongoing element of the TPS was to obtain meaningful input from local citizens, CCT riders, stakeholders, public officials, employers, and other groups. This was accomplished through a structured and extensive public involvement program throughout the study process. The primary methods of sharing study information and obtaining community input were through study awareness forums aimed at CCT riders, a system-wide passenger survey, stakeholder interviews, attendance at selected community meetings, a focus group meeting, and a series of county-wide public meetings to present potential recommendations.

1.4 Marietta Trolley Study

The purpose of this study was to determine the feasibility of implementing a rubber tire type trolley system for the City of Marietta to serve and connect key local points of interest. The study determined potential trolley route alignments, transfer locations for connections with Cobb Community Transit (CCT), operational requirements, and vehicle requirements. The Marietta Trolley Feasibility Study was funded by the City of Marietta and performed as a stand alone effort under the Cobb Community Transit (CCT) Transit Planning Study (TPS) that was ongoing during this time period.

2.0 FIXED & EXPRESS ROUTE SERVICE REVIEW

The CCT system currently operates thirteen local routes, five express routes and complementary paratransit service. One of the local routes, Route 47, and two of the express routes, Routes 460 and 470, are operated for GRTA by CCT and are not included in this study. The paratransit service is also not included in this study. The CCT system is displayed in Figure 2-1. Local Route 10 and Express Route 102 connect to the MARTA Arts Center Station, Routes 30 and 70 connect to the MARTA Holmes Station and Route 65 provides service to the MARTA Dunwoody Station. Express routes 100, 101, and 102 connect to the Five Points and other downtown MARTA stations.

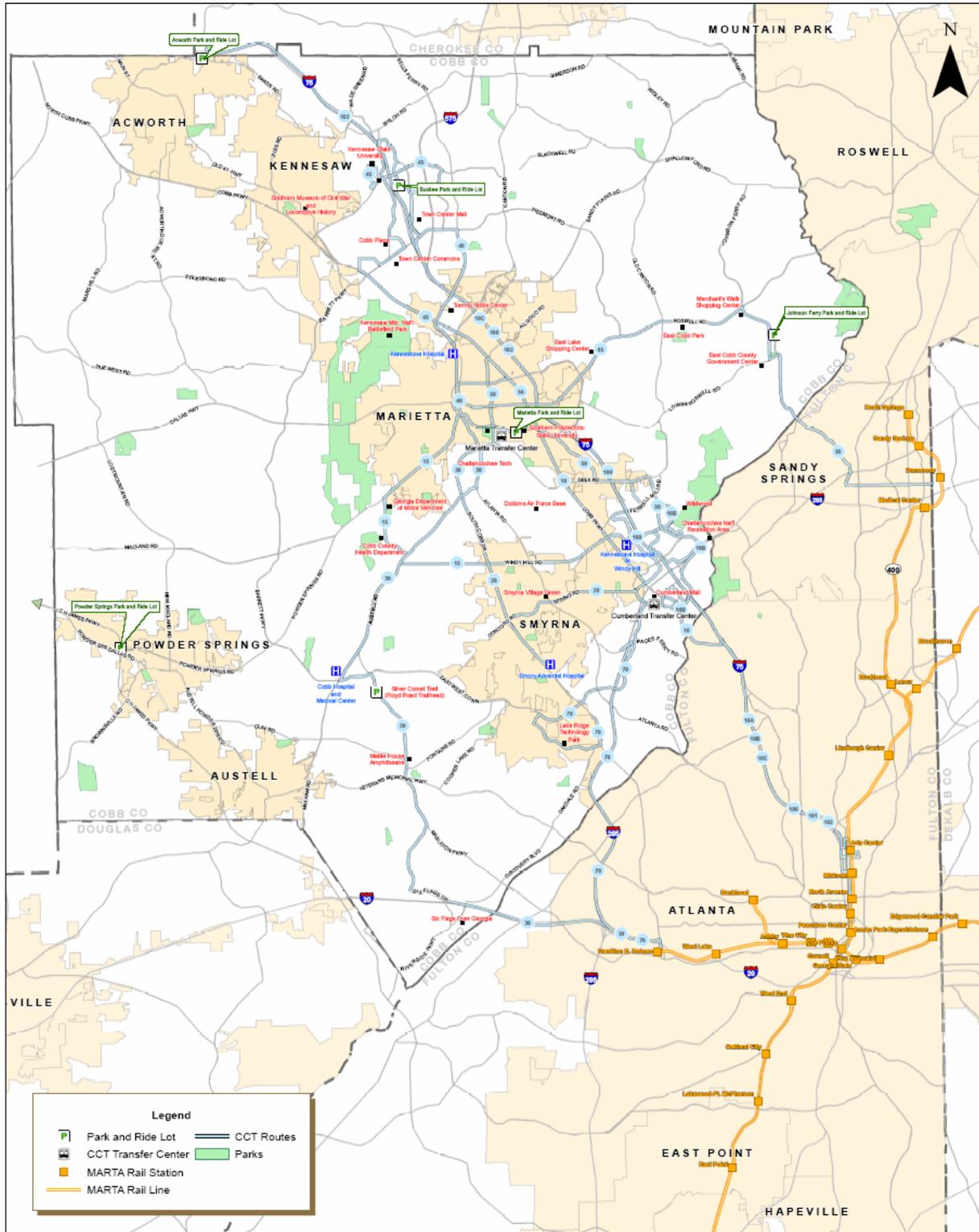
Table 2-1 provides summary statistics for the CCT routes and the full system. Annual scheduled revenue-hours are currently approximately 145,000. Annual ridership for FY2005 was approximately 3.7 million passenger boardings, based on farebox counts. Figure 2-2 gives ridership activity by stop for the entire system. More detailed statistics are given for each route in the subsequent sections of this chapter.

Table 2-1: CCT System Statistics -FY 2005

Route Type	Route Number	Number of Buses		Bus Trips		Revenue Hours		Passenger Boardings*	
		Weekday	Saturday	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday
Local	10	8	4	129	62	121	61	4,468	2,802
	15	4	2	45	26	44	20	1,314	546
	20	4	2	53	31	52	28	1,401	816
	30	5	3	64	33	74	38	2,567	1,661
	40	2	2	33	28	32	28	699	438
	45	2	2	28	26	28	26	608	323
	50	4	2	49	31	48	31	1,716	1,112
	65	2	1	26	20	22	13	436	207
	70	2	1	32	28	21	13	312	133
	10A	3	n/a	11	n/a	12	n/a	106	n/a
	10B	3	n/a	8	n/a	10	n/a	104	n/a
	10C	3	n/a	12	n/a	10	n/a	176	n/a
Express	100	6	n/a	22	n/a	17	n/a	789	n/a
(Weekday	101	3	n/a	11	n/a	8	n/a	265	n/a
Only)	102	3	n/a	12	n/a	10	n/a	225	n/a
Daily Totals:		54	19	535	285	509	258	15,186	8,038

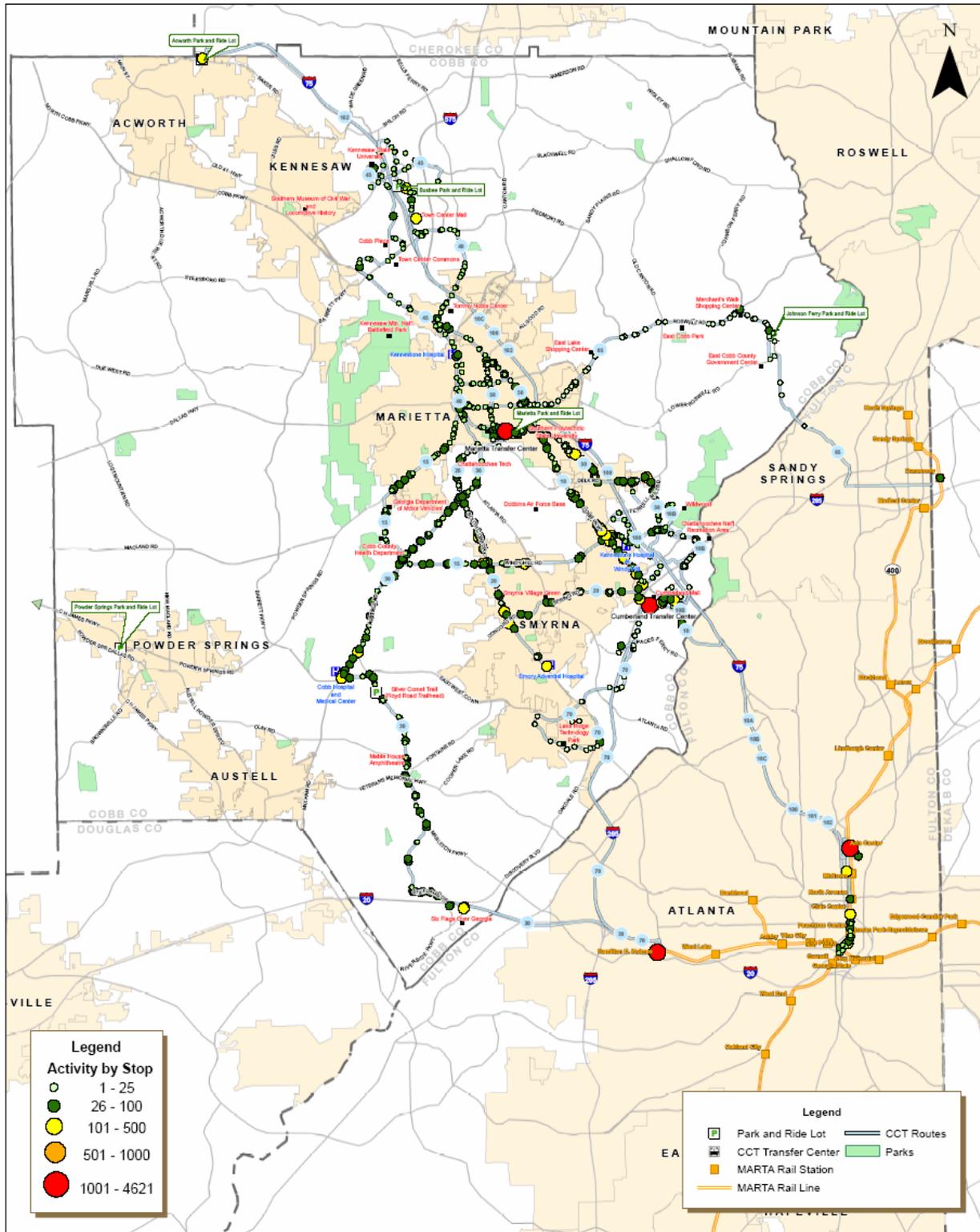
*Passenger Boardings are from CCT Ridership Averages Report - September 2005

Figure 2-1: CCT System Map



January 2006

Figure 2-2: CCT System Activity by Stop



January 2006

2.1 Service Evaluation Methodology

The service evaluation methodology included review of relevant CCT information and conducting ride counts, passenger surveys, public awareness forums and stakeholder interviews.

2.1.1 Ride Check

All CCT local and express routes were checked for passenger activity and schedule adherence between April 14 and June 5, 2005. The ride checkers counted passengers boarding and alighting at each stop along their assigned route. The ride checkers entered the data into hand held devices that tracked boardings and alightings and calculated the passenger load. The devices also recorded the time the bus passed key timepoints along the route. A ride check was performed once on every trip in a typical weekday and Saturday. However, all trips were not necessarily checked on the same day. One consideration in assigning the ride checks was to identify days in the week that would reflect the typical CCT passenger activity (i.e., not influenced by special events, holidays, etc.). It was decided that typical or average weekday passenger activity is best captured if ridership checks were performed on Tuesdays, Wednesdays or Thursdays.

Table 2-2 compares the ridership figures from the September 2005 CCT Ridership Averages Report with the ride check results conducted during Spring 2005.

Table 2-2: Comparison of CCT Ridership Counts with Ride Check Results

Route Type	Route Number	Weekday			Saturday		
		CCT September 2005 Passenger Boardings	Ride Check Passenger Boardings	% Difference	CCT September 2005 Passenger Boardings	Ride Check Passenger Boardings	% Difference
Local	10	4,468	3,926	12%	2,802	2,542	9%
	15	1,314	1,242	5%	546	679	-24%
	20	1,401	1,354	3%	816	802	2%
	30	2,567	2,140	17%	1,661	1,364	18%
	40	699	529	24%	438	371	15%
	45	608	527	13%	323	242	25%
	50	1,716	1,551	10%	1,112	985	11%
	65	436	369	15%	207	178	14%
	70	312	291	7%	133	81	39%
	10A	106	139	-31%	n/a	n/a	n/a
	10B	104	154	-48%	n/a	n/a	n/a
10C	176	183	-4%	n/a	n/a	n/a	
Express (Weekday Only)	100	789	665	16%	n/a	n/a	n/a
	101	265	221	17%	n/a	n/a	n/a
	102	225	187	17%	n/a	n/a	n/a
Daily Totals:		15,186	13,478	11%	8,038	7,244	10%

Source: CCT September Monthly Report and Spring 2005 System Ride Check

In addition, according to CCT 2005 annual ridership figures, the average weekday ridership for the entire year was 13,396 passengers. This is almost identical to the 13,478 weekday passengers reported in the ride check. The average Saturday ridership for 2005 is also extremely close, with 7,011 reported by CCT and 7,244 reported by the ride check. This is a difference of approximately 3%.

2.1.2 Passenger Survey

The passenger survey methodology consisted of a random sample of weekday and Saturday trips that covered every route and every time period based on the results of the ride check. The survey was conducted among CCT local and express route riders during the months of June and July 2005. The same checkers who worked on the ride check also distributed the survey. The survey was designed to collect origin and destination data, access and egress mode, fare payment method, demographic data, and service evaluation data. A total of 1,550 completed and usable surveys were collected out of the 5,901 surveys distributed for a response rate of 26%. Subsequent to the data collection, data were processed, edited, geocoded, and weighted/expanded. Key findings of the survey were:

- The most common home cities were Marietta, Atlanta, Smyrna, Kennesaw
- 18% of the weekday ridership and 14% of the Saturday ridership transfer from other systems to CCT
- The most common trip purpose is home to work (35% Local; 50% Express)
- The second most common trip purpose is work to home (20% Local; 39% Express)
- The next most common trip purposes are: Home to Social/Church/Personal (7%), Home to Medical (2%), and Home to College/University (2%)
- The majority of local riders pay with cash fare (76%)
- The majority of express riders pay with 31-day pass (39%) or Express 20-ride (18%)
- The majority of local riders ride 5 or more days a week 58%
- The majority of Express riders ride 5 days a week 81%
- The riders rank the system overall at 3.6 out of 5
- Local riders want Sunday service (64%), more frequent buses (46%), and to end service later (33%)
- Express riders want more frequent service (53%), to end service later (29%), and service to un-served areas (19%)
- 52% of local riders own no vehicles
- 70% of express riders own 2 or more vehicles
- Local riders are younger (61% <34)
- Express: (69% 35-64 years old)
- The majority of local riders earn less than \$35,000
- The majority of express riders earn more than \$35,000
- The most common requests for new service were: Service from Lindbergh Rail Station, from Cumberland Mall to north line of MARTA, along Terrell Mill Road, and along Powder Springs Road

2.1.3 Bus Stop Inventory Process

Once the ride check and onboard survey tasks were completed, a system-wide bus stop inventory was conducted in order to verify the accuracy of the geocoded data and to assess the basic infrastructure of the CCT bus stops. The GPS data points collected during the ride check study combined with the CCT-provided GIS route files were used to generate preliminary route and bus stop files for the data collection effort. The two-person data collection team was provided

with a Tablet PC programmed with a bus stop inventory application. This application collected GPS coordinates, two digital images of each bus stop, and bus stop attributes for each bus stop found along each route. The field work for the bus stop inventory began on June 30 and finished on August 10.

2.1.4 Public Awareness Forums

A series of four Public Awareness Forums was conducted from June to September of 2005. A total of 628 comment forms were returned from the forums/meetings. The forms distributed at the forums sought to solicit ridership patterns among local and express riders. Although this survey was not as scientific as the passenger survey, it gave patrons an opportunity to specifically identify unmet needs and desired changes to the system. The results identified that work was the most common trip purpose, but many CCT patrons use the system for multiple trip purposes. It also identified that a majority of CCT patrons also use MARTA. Most respondents are interested in expansion of the CCT system, mainly within Cobb County. However, a significant number of CCT patrons want additional service to downtown Atlanta and new service to Cherokee and Douglas Counties. Forty-eight percent of patrons feel CCT's service frequency, days, and hours meet their travel needs. The categories of other requested needs include later service, limited midday express trips, Sunday/holiday service, and more frequent service. In addition to the public awareness forums, a number of community meetings and events were attended by members of study team, and an additional Route 30 on-board random passenger survey was conducted.

2.1.5 Stakeholder Interviews

In addition to the above public outreach and ridership data collection methods a series of thirty-four organizations/agencies/individuals were identified for individual interviews. All interviews were completed by November 2005. The results indicate these stakeholders rank public transit among all other key community issues an average rating of "6.7" for transit importance on a one-ten scale. The highest rating was ten and the lowest was three. Stakeholders generally felt the most appropriate transit mode for Cobb County is bus service and some form of rail will be needed for the future when densities justify the investment. Many of the stakeholders felt the CCT system is attractive/well kept, but some feel the system is not effective enough within the county in terms of coverage and ease of transfers. Virtually all of the respondents felt a blend of funding from local, state, and federal sources was the best method to fund transit. Areas mentioned for consideration of service enhancements included Sunday service on major routes, additional service to Six Flags Drive, new service to the Dallas Highway, south Cobb, and Kennesaw/Acworth areas, more frequent and later service, Kennesaw and Marietta circulator services, and express service improvements .

2.2 System Productivity

In the 2003 Transit Development Plan (TDP), a number of monthly performance monitoring measures were suggested **which included:**

- Operating expense per passenger;
- Passenger fares collected per passenger;
- Unlinked trips per revenue service mile; and
- Operating expense per revenue service mile.

These measures are adequate, **however passengers (boardings) per revenue hour are typically utilized in the transit industry and this measure was used to gauge route performance for CCT.**

The typical service standard for route productivity (passengers per revenue-hour) states that specific routes would be evaluated in comparison to overall system productivity. Table 2-3 summarizes productivity for each route and for the CCT system for weekday and Saturday service. The last column in each section shows how that route compares to the system average.

Table 2-3: CCT Route & System Productivity

Weekday				
Route	Boardings	Revenue Hours	Boardings per Rev. Hour	% of CCT System Average
10	3,926	121	32.4	122%
15	1,242	44	28.2	106%
20	1,354	52	26.2	99%
30	2,140	74	29.0	109%
40	529	32	16.6	62%
45	527	28	18.8	71%
50	1,551	48	32.3	122%
65	369	22	16.6	62%
70	291	21	14.1	53%
100	665	17	38.4	145%
101	221	8	28.3	107%
102	187	10	18.1	68%
10A	139	12	11.8	45%
10B	154	10	15.5	58%
10C	183	10	18.9	71%
System	13,478	508	26.5	100%

Saturday				
Route	Boardings	Revenue Hours	Boardings per Rev. Hour	% of CCT System Average
10	2,542	61	41.4	147%
15	679	20	34.8	124%
20	802	28	28.2	100%
30	1,364	38	35.6	127%
40	371	28	13.3	47%
45	242	26	9.3	33%
50	985	31	31.9	114%
65	178	13	14.2	51%
70	81	13	6.3	22%
System	7,244	258	28.1	100%

As CCT does not have formal service standards, the Project Management Team (PMT) determined that a two-tiered route productivity standard would be appropriate to use as this method is commonly used by a number of systems to identify under-performing routes. Fifty percent of the system average is used as a minimum standard, and 40% as a “watch list” threshold. If 50% of the system average is used as a minimum standard for detecting under-performing routes, then almost all weekday routes would meet the standard. Only Route 10A falls below standard at 45%. On Saturdays, Routes 40 (47%), 45 (33%), and 70 (22%) would be below the standard. Using the 40% “watch list” standard, Routes 45 and 70 on Saturday would warrant monitoring and corrective action to improve productivity.

2.3 Facilities

CCT currently utilizes the following facilities:

2.3.1 Marietta Administrative, Operations, and Maintenance Facility

This facility is immediately adjacent to the Marietta Transfer Center but its principal address is on Commerce Drive. All buses enter the site from South Marietta Parkway, are stored here, and all maintenance, cleaning, administrative, and personnel operations are performed here as well. There is capacity for approximately 60 additional buses to be parked on site and a ¾ acre site is available for parking once it is repaved.

2.3.2 Marietta Transfer Center

The MTC functions as the main transfer hub for the entire CCT route system. All routes converge here except for Route 70 which operates between Cumberland Transfer Center and the Hamilton. E. Holmes MARTA station. There are 287 parking spaces in the adjacent park and ride lot and a windshield survey indicated a 27% to 35% utilization rate depending on the weather. Approximately 75% to 85% of the cars had Cobb plates.

2.3.3 Cumberland Transfer Center

The Cumberland Transfer Center is the second major hub in the CCT system. Bus routes 10, 10A, 10B, 20, 50, and 70 accommodate transfers at this center.

2.3.4 Busbee Park and Ride Facility

The Busbee Park and Ride Facility has 364 spaces and a pending expansion is currently underway to accommodate the heavy current demand and projected future demand once the GRTA/GDOT BRT in HOV lanes project is implemented. This facility was built in 2003 to replace an earlier facility at the Kennesaw State University campus. A windshield survey indicated an 87% utilization rate with approximately 54% to 66% of the cars having Cobb plates.

2.3.5 Acworth Park and Ride Facility

The Acworth Park and Ride was built in 2004 and currently has 161 spaces but will be expanded to 230 spaces later this year to accommodate the new GRTA express route 481 to Midtown. A windshield survey indicated a 42% utilization rate with approximately 49% to 67% of the cars having Cobb plates.

2.3.6 Floyd Road (Silver Comet Trail) Park and Ride Facility

The County's 100 space Silver Comet Trail parking lot located on Floyd Road near the East-West Connector, **is a shared use lot** that is also a CCT park and ride facility served by Route 30.

2.3.7 Mableton Park and Ride

A new **shared use** park and ride facility is under development in Mableton near the intersection of Floyd Road and Maran Road. This facility will be located immediately adjacent to the existing Mable House Amphitheater and contain approximately 135-200 parking spaces for use by CCT Route 30 riders. The facility is anticipated to be open in **mid-late** 2007.

2.3.8 Bus Stops

There are 724 bus stops in the system as documented in the Bus Stop Inventory conducted during the summer of 2005.

2.3.9 Bus Stop Shelters

There are a total of 348 shelters are placed within the CCT system which includes advertising shelters owned by a contractor (ATDS) and county owned shelters. The County receives revenue from the advertising shelters located in the county, but not from their shelters or the advertising shelters located in the cities.

2.4 Intelligent Transportation System (ITS) Technologies

As mentioned in the CCT Transit Development Plan prepared in August 2003, ITS technologies have the potential to improve operational, communication and fare collection efficiency, customer service effectiveness, and regional transit integration. Primary ITS transit applications typically include the following elements:

- Automatic Passenger Counters
- Automatic Vehicle Location
- Mobile Data Terminals
- Fare Collection Systems
- Customer Information Displays
- Video and Audio Installations

Table 2-4 exhibits typical ITS components and estimated unit costs:

Table 2-4: Typical ITS Components and Estimated Unit Costs

Component	Average Capital Cost per Bus
Automatic Passenger Counters	\$1,000 to \$10,000 ¹
Automatic Vehicle Locator	\$6,800 to \$30,500 ¹
Mobile Data Terminals & Related Equipment	\$10,000 ³
Fare Collection Systems	\$7,000 to \$12,000 ¹
Video and Audio Installations	
Enunciators	\$7,000 ²
Customer Information Displays	\$7,000 ²

1. Source: http://gulliver.trb.org/publications/tcrp/tcrp_rpt_90v2.pdf

2. <http://www.nyjournalnews.com/rockland/091200/12talkingbus/>

3. Ann Arbor Transportation Authority

While ITS can enhance various aspects of transit operations, customer convenience, and security, investment in these components should be given careful consideration due to their significant capital, operational, and maintenance costs. CCT has project applications in the current regional Transportation Improvement Program (TIP) for funding the automation and integration of their electronic fare payment systems with other regional operators to facilitate seamless transit in the region and improve customer convenience.

MARTA is in the process of making a considerable investment in an upgraded fare collection system. CCT is continuing with planned upgrades to their fare collection system in order to integrate with MARTA's new system. This will result in improved efficiency for collecting and tracking fare revenue, improved regional transit integration of fare media, and a reduction in fare evasion.

In addition, CCT has other TIP ITS projects for continuing automation such as bus video screens to display customer information, an Automated Vehicle Locator (AVL) system to provide

location of buses and additional messaging capabilities, and on-board video cameras to enhance security and customer safety. Once the AVL system is procured, an evaluation should be conducted to determine strategies for obtaining, funding, and maintaining additional ITS components.

Additional opportunities to obtain ITS transit technologies should be considered through regional initiatives such as the GRTA “Smart Corridor” (US Highway 41) program.

2.5 System Recommendations

System recommendations related to this section are grouped into categories including facilities, ITS, and service standards with local/express route services included in Section 4. The local/express service recommendations are grouped in four categories: Immediate, Near-Term, Mid-Term, and Long-Term. The recommendations are based on detailed analysis, observations, balance of service needs and available resources, and public/stakeholder input.

2.5.1 Facility Recommendations

The current CCT facilities are relatively new and appear adequate to support the existing and enhanced services as determined through the course of the TPS. This includes the ongoing development of improvements underway or planned for the Acworth and Mableton park and ride facilities. Depending on actual implementation of future new and/or modified services, development of a transit facility in the Cobb Hospital area, modification of the Busbee facility to accommodate additional services, and installation of a bus turn-around at the South Cobb Recreation Center should be considered.

2.5.2 ITS Recommendations

Implementation of ITS components should be given careful consideration due to the significant capital and operational costs. To ensure compatibility of the various ITS components, procurement sequencing, and future component technical support, CCT should conduct an ITS Implementation Plan to identify concise strategies and phases for proceeding with obtaining these pending ITS components.

2.5.3 Service Standards Recommendation

Consideration should be given to developing service standards for CCT that will effectively gauge system performance while allowing flexibility for the continuance or addition of special services. It is recommended that formal service standards be developed and adopted to include the following elements:

- Passengers per scheduled revenue vehicle hour - a comparison of the individual routes to the system wide productivity will be performed. A two-tiered route productivity standard should be used to identify under-performing routes. A route should not operate at less than 50% of the system average as a minimum standard and a 40% “watch list” limit should be utilized. Routes falling below the 40% standard would warrant monitoring and corrective action to improve productivity.

- Farebox recovery – a ratio between operating cost and farebox revenue of 35% or higher is recommended. Routes operating below a minimum of farebox ratio of 28% should be reviewed for possible operating modifications.
- Load factor - an average load factor for a local route should be in the range of 0.75 to 1.25 during peak hours, and between 0.5 and 1.0 during off-peak hours and Saturday. The average load factor for an express route should be in the range of 0.50 to 1.00.

2.6 Route Service Recommendations

- Service recommendations are included in Section 4.0 New and Modified Service Recommendations.

3.0 FARE STRUCTURE EVALUATION

3.1 Overview and Existing Fare Structure

Similar to the services provided, the fare structure in the Cobb Community Transit (CCT) system has slowly evolved over the years. As service has expanded, such as the introduction of express service, CCT has added new fare media to provide its customer base convenient methods of payment. The route system is heavily predicated upon offering free transfers to facilitate the exchange of passengers between local routes at the primary transfer center. There are also a number of patrons who transfer to and from other regional transit services. There is no distance based or zonal premium on the local service; however, express service which generally serves longer trip patterns has a higher fare consistent with the distance traveled.

CCT utilizes GFI fareboxes (relatively standard in the industry) and sixteen different types of fare payment dispositions in addition to cash, which include:

- Elderly/Handicapped Fare (Local);
- Student Fare (Local);
- 10-Ride Pass (Local);
- Monthly Pass AM (Express);
- CCT Transfer (Local/Express);
- MARTA Transfer;
- Child under 42”;
- Shorts/Misreads;
- Express One-way;
- Tickets;
- MARTA Tokens;
- 31-Day Pass (Express);
- 31-Day Pass (Local);
- 10-Ride Pass (Express);
- 20-Ride Pass (Express); and
- Local 10-Ride Pass (Express).

The number of inputs indicates the complexity of the fare structure that has evolved since the inception of service in 1989, and though there are instances of use for all fare media, the on-board survey and farebox data analysis revealed a definite preference for type of fare media depending on whether a passenger is using local or express service. Paying the cash fare is the clear preference for local service users (76%), while 57% of express service passengers either use a monthly pass or the 20-trip pass. This pattern of fare media use supports the general characteristics of each type of service. Express riders have higher disposable incomes and generally choose to make the more sizable cash outlay for a pass, while local riders tend to be lower income and less willing to make larger payments in advance for fare media.

3.2 Fare Analysis

The primary purpose of a fare structure is to balance the desire to provide convenient methods of payment for system users and encourage ridership with the goal to maximize the income generated in the farebox. There are no public transit systems in the United States that generate enough revenue from the farebox to pay for their operating costs. In fact, there are very few individual fixed route that are autonomous. Generally, the goal for farebox recovery ranges from 25% to 50% depending on the system. The average farebox recovery is 37% nationally, but this number includes the large metropolitan areas like New York, Chicago, Los Angeles and Philadelphia where major heavy rail systems push the farebox recovery closer to 45-50%. Systems that operate at levels closer to CCT typically generate farebox revenues equivalent to 30% of operating expenses. A closer look at peer systems is included in the next section.

A focal point of a fare structure is maintaining a certain amount of fare revenue per unlinked trip. Passengers make an unlinked trip every time they board a bus, but as shown among the farebox inputs, they may not be adding revenue to the fare box every time they board. As an example, a passenger who rides a bus to the Marietta Transfer Center and pays the base fare and then transfers to another route to complete their trip has completed two unlinked trips and paid 62.5¢ per unlinked trip. The current fare revenue per unlinked trip at CCT is approximately 68¢ or 54% of the base fare. It is possible to realize small incremental changes in revenue per unlinked trip by making alterations to the fare structure. This is something that will be explored in the recommendations section of this report.

3.3 Comparison to Peer Transit Systems

As shown in Table 3-1, CCT's fare structure and its associated revenue level compare favorably to that of its peer systems (based on 2003 NTD Data). Examining systems that have similar mix of services provided, shows that Cobb County is consistent in terms of their farebox recovery and the discounts for trips using passes. Farebox recovery for CCT (29%) is very close the average for the peer systems, even though the discount offered on pass sales is slightly below average.

Several of these systems have similar base fares as CCT and with the exception of Richmond, VA and San Joaquin Valley, CA; they all generate higher farebox recovery. For the most part, this can be attributed to moderately higher route productivity and possibly lower transfer rates. Without a more in depth analysis of their ridership statistics, it is difficult to determine why systems with the same base fare are able to generate higher farebox recoveries. Santa Barbara has very high revenue per unlinked trip (79¢), which most likely is attributable to a lower transfer rate and higher ridership productivity in general.

The Capital Area Transit System (CATS) in Baton Rouge (LA) raised fares as of January 1, 2006. The base fare is now \$1.75 and their monthly pass prices rose to \$56.00. The primary reason for the increase is the rising cost of fuel, especially in the Gulf Coast region and Baton Rouge is still experiencing increased demand due to the number of people relocated there as a result of Hurricane Katrina. With such a large increase in fare, demand should decrease significantly, but average fare revenue per unlinked trip will increase considerably.

FY 2004 statistics for Gwinnett County Transit (GCT) are somewhat misleading because the system was almost exclusively express bus transit and ridership had not yet matured. Nevertheless, GCT still offered a 25% discount per trip through their monthly pass, which combined with the base fare, generated an average fare revenue per unlinked trip of \$1.50. The farebox recovery rate is low, as trip length is much higher than the other peer systems, so their cost is higher.

Table 3-1: Table Fare Revenue and Structure at Peer Systems

Agency	Fare Revenue Recovery			Fare Structure				
	Operating Expenses	Fare Revenue	Fare Recovery %	Base	Monthly Pass	7 or 10-trip Pass	15 or 20-Trip Pass	Pass Discount
Cobb County Transit	\$8,395,590	\$2,440,288	29%	\$1.25	\$45.00	10 / \$11.25	20 / \$36.00	\$1.07
Regional Peer Agency								
Gwinnett County Transit	\$8,654,557	\$1,368,896	16%	\$1.75	\$55.00	10 / \$14.00	n/a	\$1.31
Other Peer Agencies								
Santa Barbara Metropolitan Transit District (CA)	\$14,078,462	\$5,547,712	39%	\$1.25	\$41.00	10 / \$10.00	n/a	\$0.98
Greater Bridgeport Transit Authority (CT)	\$10,634,738	\$4,077,259	38%	\$1.25	n/a	n/a	n/a	n/a
Montebello Bus Lines (CA)	\$15,478,471	\$5,666,925	37%	\$0.90	\$58.00	n/a	n/a	\$1.38
Capital Transportation Corporation (LA)	\$10,177,517	\$3,706,698	36%	\$1.25	\$44.00	7 / \$14.00	15 / \$18.75	\$1.05
City of Tallahassee (FL)	\$9,405,042	\$3,036,507	32%	\$1.25	\$41.25	7 / \$10.00	n/a	\$0.98
Monterey-Salinas Transit (CA)	\$15,645,561	\$4,588,054	29%	\$2.00	\$60.00	n/a	20 / \$40.00	\$1.43
Greater Richmond Transit Company (VA)	\$26,595,285	\$7,301,828	27%	\$1.25	n/a	10 / \$10.00	n/a	n/a
San Joaquin Regional Transit District (CA)	\$22,841,193	\$4,186,546	18%	\$1.25	\$50.00	10 / \$12.50	n/a	\$1.19
Average	\$14,190,642	\$4,192,071	30%	\$1.34	\$49.28	n/a	n/a	\$1.17

Source: National Transit Database (NTD)

3.4 Fare Recovery Objectives

In order to maintain consistency in the budgeting process many transit systems set a goal for farebox recovery, usually based on some percentage of the overall cost of the system. MARTA for instance, has a goal of 35% mandated in their enabling legislation. This has placed the Authority into the unenviable position of being forced into small fare increases and budget reductions on a number of occasions. Each instance has resulted in strained customer relations and reduced long term ridership.

Cobb County has taken a much different approach to this issue than most systems. Considering that CCT has had only one fare increase since its inception in 1989, it is a credit to the County that they have been able to effectively control the system's budget while providing a wide range of services for so many years. Steady increases in ridership, especially in recent years, without major increases in services have contributed to the success of the system. As mentioned earlier, a key statistic for transit system's to track is the revenue per unlinked trip. Currently, CCT generates 68¢ per unlinked trip. This number will always be well below the base fare rate due to the large percentage of transfers within the system. However, there are number of trends and policy decisions that could contribute to increased fare revenue per unlinked trip.

CCT's growth market is in its express services which generally exhibits higher fare revenue per trip. According to CCT's September 2005 ridership figures, less than **nine percent** of the overall ridership in the system rides express services. Even though, many of these patrons use monthly passes or ticket programs, the revenue generated per trip ranges from \$1.64 to \$1.80 per trip. Taking this a step further, trips in this category are also generating a higher farebox recovery ratio than local service trips. As more express service is added to the system and ridership matures on these routes, CCT should experience modest gains in its fare revenue per unlinked trip.

The policy decisions that can benefit fare revenue center on discount rates offered on multiple trip fare media. Transit systems must strike a balance between encouraging customers to purchase more convenient advance fare media and the negative impact discounted passes and tickets can have on revenue. Based on the 42 trip average for monthly passes, Cobb County is discounting these trips by 45% and 15% on the express and local services, respectively. Reducing the discounts to a level that will not overly discourage their use could result in substantial increases in the fare revenue per unlinked trip.

Another policy decision is to allocate capital funds to increase the number of outlets at which transit fare media can be purchased. Lack of access to outlets was cited by the project focus group and the system survey as a reason why patrons do not use passes or tickets.

3.5 Focus Group Meeting

As a part of the fare structure task, a focus group meeting of selected community and transportation representatives was held in December 2006. The purpose of the meeting was to seek input for obtaining guidance in developing study recommendations, specifically for making revisions to the current CCT fare structure. Twenty four participants were identified and invited and 15 actually attended. The information discussed and input from the group is summarized as follows:

- CCT operating funding is derived from user, local, state, and federal sources
- Time of day limitations on senior fare seems to be confusing to customers
- It would be good to reduce cash fares (even though difficult to achieve due to many low income users) as this slows the boarding process and is expensive to process
- A goal should be to increase fare recovery above 30%, however, the group felt that any change(s) should be done as “package” in conjunction with service changes
- Marketing of CCT services needs to be undertaken to help users understand fare information from a community friendly perspective and consider fare as a “gift certificate” format
- A future transfer charge should not be considered as this was viewed as a penalty for riders who must transfer to complete their entire trip
- The largest fare concern by bus operators is having to confront boarding passengers who do not have the entire fare amount required
- Should consider special transfer to allow riders to exit the bus for various personal reasons and then use the transfer to continue trip on same route
- If CCT express fare made consistent with GRTA Xpress fares, it could be viewed as a penalty to existing riders
- Methods should be explored to increase express usage such as increased pass sales outlet locations
- Considerations for implementing a fare increase should include timing, package approach, and a more simplified fare structure

3.6 Recommendations

3.6.1 Eliminate Certain Fare Media

The on-board survey and the data generated by the GFI fare collection system indicate that there are several under-utilized fare media. This presents an opportunity to CCT to reduce the different types of media, simplify the fare payment system overall and begin preparations for the implementation of regional smart cards. Less than 4% of all unlinked trips are paid for using one-way trip tickets, 10-ride express bus tickets, 10-ride local bus tickets, MARTA tokens and local bus monthly passes combined. It is recommended that all of these fare media, with the exception of the local bus monthly pass, be phased out from use. MARTA is in the process of phasing out their token program and the other ticket programs at CCT do not have enough usage to justify the expense of printing and maintaining an inventory of the tickets.

3.6.2 Improve Recovery Rate on Pass Programs

The discounts per trip on CCT's monthly pass programs differ greatly. The 15% discount of the local monthly pass compares favorably to other systems and sets the rate at a level that encourages patrons to utilize the pass with just a modest impact to fare revenue per unlinked trip. The express service monthly pass, however, offers a 45% discount on the regular base fare. The \$70 rate translates to \$1.66 per one-way trip based on 42 one-way trips per month on average. The \$80 price for a GRTA pass translates into \$1.90 per one-way trip.

Both of these rates are too low to generate the revenue needed to reach a standard recovery rate. A strategy to increase the pass prices should be pursued but only at a rate that would not create major ridership decreases. The service is still new and productivity on these routes should be more important than revenue until the service matures and establishes itself. CCT may want to consider changing the monthly pass price to match that of GRTA, however, once this is accomplished, future GRTA Xpress fare changes would need to be addressed by CCT.

3.6.3 Allow Half-fare Programs During All Service Hours

Currently, CCT does not allow those eligible for the use of half-fare cards during peak hours of service. One of the findings of the on-board survey was that there elderly use of the system is very low, in general. Since elderly ridership is a target market and a growing sector of the population, eliminating the restrictions on the half-fare card may encourage usage.

3.6.4 Increase the Number of Fare Media Sales Outlets

Explore opportunities to increase CCT pass availability and customer convenience through expansion of media sales outlets.

3.6.5 Revenue/Cost Projections

Trends in transit, like every other industry, point toward higher expenses, the need for increased budgets and the commitment to maintaining or expanding service. All of these factors contribute to the challenge of generating enough revenue from the farebox to keep CCT affordable for the County. Based on the past 4 years of data the following trends face CCT:

- Operating costs are projected to rise 6.8% annually until 2015 through service expansion and inflation (2005 Dollars);
- Projected annual operating cost exceeds \$15M in 2011, if recommended service improvements are implemented (\$14.4M without service improvements);
- Ridership is projected to increase 4.8% annually;
- The existing fare structure nets a 3.9% annual increase in farebox revenue; and
- The farebox recovery rate dips below 25% of operating costs in 2008 and drops to 22.38% in 2015.

Table 3-2 outlines the required fare amounts to achieve desired farebox recovery rates. All of these figures are based on straight line trends from the previous 3 years of service. Direct costs are based on the contract between the county and the system management provider, administrative costs increased by a 3.5% per year multiplier based on inflation and the potential for wage increases and fuel costs are increased by 3% per year. Ridership estimates are based on

a conservative trend lines from previous years of service and ridership estimates for new recommended services. The horizon year of 2008 was selected to test different fare structures since the existing fare structure dips below 25% in that year.

Table 3-2: Fare Requirements to Achieve Projected Recovery Rates

Projected Recovery Rate in 2008	30%	35%	40%*	45%*
Base Fare	\$1.50	\$1.75	\$2.05	\$2.30
Half Fare	\$0.75	\$0.85	\$1.00	\$1.15
Monthly Pass – rev. rate	\$1.30	\$1.48	\$1.70	\$1.96
Transfers	\$0.00	\$0.00	\$0.00	\$0.00
Express Base Fare	\$2.50	\$3.00	\$3.30	\$3.50
Express Pass – rev. rate	\$2.27	\$2.55	\$2.80	\$2.97

* An increase to \$2.05 or \$2.30 is not realistic for 2008 since such a large increase in fare could result in a significant loss in ridership. They do represent the require fare level keeping service and ridership relatively constant.

These rates take into consideration some loss of ridership due to fare increases that are offset by service expansion and improvements and the general trend of increased ridership. If the structure in the 30% column were implemented the farebox recovery will increase 6.7% through the year 2015, which is more in line with the 6.8% rise annually in operating costs. The farebox recovery rate remains above 27% through the year 2015.

The most significant issue represented by these statistics is that the increases in farebox revenue are growing at a slower rate than operating expenses. A fare increase some time in the future could bring revenue trends back in line. However, even if fare revenue and operating cost increase at the same percentage rate the net operating cost (operating cost minus farebox revenue) will continue to grow. As the County considers a base fare increase, an examination of the projected net operating cost is critical to making a sound decision.

A fare increase should be considered a policy decision and effort to slow the growth of net operating expenses for the system. Tables 3-3 and 3-4 show the impact on net operating costs given certain base fares. These projections assume that pass prices and other fare media will increase accordingly. Ridership estimates are adjusted for the fare increases. However, the estimates assume small changes in the base fare which generally do not have a significant impact on ridership. Larger fare increases (>\$0.25) could result in more substantial losses of ridership. Small incremental changes in fare would be necessary to reach the \$1.75/3.00 base fare without major losses in ridership.

Fare increases for CCT are a policy decision of the Cobb County Board of Commissioners. The County has established a track record of avoiding fare increases by virtue of implementing only one fare increase since 1989. Should the County decide to raise fares, it is recommended to package the fare increase with service improvements if at all possible. Increased transit service offers a reasonable condition requiring increased revenues and can be more palatable to the riding public when undertaken concurrently. As highlighted in Table 3-3, the net operating cost (\$9.39 M) for CCT in 2008 without a fare increase and without the service improvements is actually higher than the net operating cost if both the fare increase and the service improvements were implemented.

Table 3-3: 2008 Projected Net Operating Cost and Farebox Recovery Rate

2008 Net Operating Cost (Recovery Rate)	Base Fare \$1.25/2.00	Base Fare \$1.50/2.50	Base Fare (#) \$1.75/3.00
w/o Service Improvements	\$9.39 M (24.79%)	\$8.75 M (29.92%)	\$8.16 M (34.62%)
With Service Improvements	\$9.58 M (24.77%)	\$8.88 M (29.91%)	\$8.26 M (34.46%)

This illustrates the ability of the County to raise revenues with a modest \$0.25 increase in base fare to a level that will pay for the service improvements, fare recovery nearly reaches 30% and it saves the County just over \$500,000 for that year (2008). This is a short-term benefit because net operating costs will still rise from year to year. Table 3-4 shows that by 2015 the fare increase with service improvements will generate about \$400,000 over the status quo. The fare increase combined with the service improvement still nets nearly \$1 million more than the scenario with service improvements and no fare increase.

Table 3-4: 2015 Projected Net Operating Cost and Farebox Recovery Rate

2015 Net Operating Cost (Recovery Rate)	Base Fare \$1.25/2.00	Base Fare \$1.50/2.50	Base Fare (#) \$1.75/3.00
w/o Service Improvements	\$13.19 M (22.51%)	\$12.49 M (26.65%)	\$11.64 M (30.85%)
With Service Improvements	\$14.52 M (22.38%)	\$13.58 M (27.09%)	\$12.90 M (30.77%)

- Projected revenues do not reflect a more sizeable loss in ridership for large fare increase.

Additional staged fare increases after 2008 would also benefit the County in terms of net operating expense and bring fare box recovery to a desired level (See Table 3-2). National research indicates that small increase in fare do not result in appreciable losses in ridership. To avoid major losses in ridership, the County should pursue a program of small incremental increase in base fare less than or equal to \$0.25 to bring the system into a desired range of annual farebox recovery rates. Table 3-5 shows revenue, cost and ridership information for a possible phased approach to fare increases. These changes could be implemented as a program with intended service improvements. Smaller fare increases would be scheduled bi-annually and will return farebox recovery rate to 35% by the year 2014. Annually, operating costs rise 6.8%, farebox revenues rise 11.0% and net operating costs rise 5.8% under this scenario. These estimates do take into consideration small declines in ridership as a result of each fare increase.

Table 3-5: Cost and Revenue Projections for Phased Fare Increases

	Rev. Hours	Operating Cost (Millions)	Farebox Revenue (Millions)	Unlinked Trips	Farebox Recovery Rate	Base Fare	Fare per UnInkd Psgr.	Psgr. / Rev. Hour	Net Operating Expense
2005	145,655	\$ 10.629	\$ 2.912	3,793,253	27.40%	1.25	\$ 0.768	26.04	\$ 7,717,481
2006	153,990	\$ 11.584	\$ 2.944	4,080,224	25.41%	1.25	\$ 0.722	26.50	\$ 8,640,413
2007	153,990	\$ 11.939	\$ 2.998	4,155,267	25.11%	1.25	\$ 0.722	26.98	\$ 8,941,701
2008	158,470	\$ 12.665	\$ 3.787	4,273,946	29.91%	1.50	\$ 0.886	26.97	\$ 8,877,957
2009	168,610	\$ 13.890	\$ 4.091	4,616,531	29.45%	1.50	\$ 0.886	27.38	\$ 9,799,340
2010	175,750	\$ 14.923	\$ 4.717	4,804,486	31.61%	1.65	\$ 0.982	27.34	\$10,206,076
2011	178,228	\$ 15.599	\$ 4.867	4,957,032	31.20%	1.65	\$ 0.982	27.81	\$10,732,236
2012	180,741	\$ 16.306	\$ 5.529	5,024,489	33.91%	1.85	\$ 1.100	27.80	\$10,777,337
2013	183,290	\$ 17.045	\$ 5.703	5,182,808	33.46%	1.85	\$ 1.100	28.28	\$11,342,243
2014	185,874	\$ 17.816	\$ 6.391	5,252,126	35.87%	2.05	\$ 1.217	28.26	\$11,425,150
2015	188,495	\$ 18.630	\$ 6.590	5,416,407	35.38%	2.05	\$ 1.217	28.74	\$12,039,582

A program of fare increases could be tailored to any policy related to fare structure set by the County that establishes a desired farebox recovery rate, revenue growth rate or net operating cost. Since there has not been a fare increase recently, the County may want to consider only one fare increase at this time. Once implemented, data regarding ridership and financial information will be generated to give the Commission better information on the elasticity of ridership in Cobb County specifically. This information will be vital to tailor a program for future changes in fare structure.

4.0 NEW SERVICE ANALYSIS

The 2003 TDP recommended two new services in the near-term category which have not been implemented. The proposed services included Route 80 to operate between the Marietta Transfer Center and downtown Acworth and a Call and Ride Service for the Austell area that would connect with Route 30 in Mableton. To further refine the TDP new service recommendations, the TPS included a task to assess the feasibility for establishing the most appropriate future services to the Acworth/Kennesaw and Austell/Powder Springs areas.

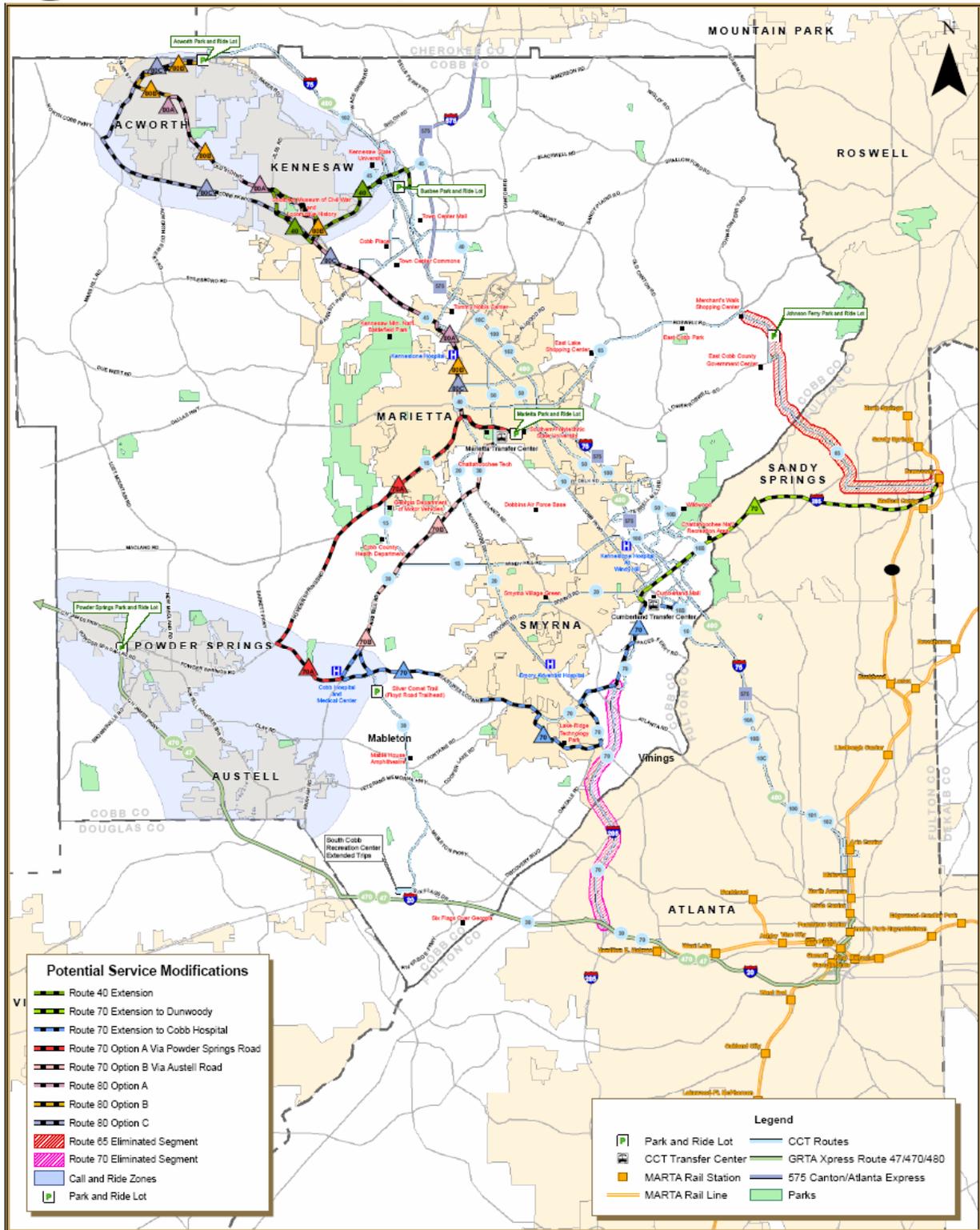
The New Services Recommendations Technical Report documents the process undertaken and resources required for potential new CCT service recommendations. The following considerations were included in this process:

- Compile demographic and socioeconomic data and other relevant service area information
- Review current CCT local and express services
- Consider relevant GRTA service plans
- Review current and projected growth, development, and travel patterns
- Consider input received from CCT riders, stakeholder interview, and subsequent public meetings
- Balance service needs with system resources
- Determine most appropriate service types and parameters
- Establish future service recommendations
- Prepare resource and cost requirements for implementation

4.1 New Service Evaluation Methodology

The new services proposed in this section were developed based on input from various sources. The initial source was the 2003 CCT TDP which recommended a new Route 80 in the Acworth-Kennesaw area and a new service (Call and Ride/demand response) in the Austell area. Data collected to analyze the existing system and to propose potential service modifications was also used for the purpose of identifying those areas most likely to support some form of transit. The demographic data includes the ridecheck and the on-board survey conducted in the spring and summer of 2005. A series of public awareness forums and stakeholder interviews was also conducted during this time period to solicit passenger input and public opinion on all aspects of CCT service, but particularly on desired changes and new service requests. The proposed CCT system modification map is presented in Figure 4-1.

Figure 4-1: Proposed CCT System Modifications



January 2006

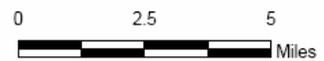


Table 4-1 was presented at a series of five public meetings conducted during January 2006 which included:

- January 17 - Powder Springs and Austell
- January 19 - Acworth and Kennesaw
- January 31 - Marietta

Table 4-1: Description of Proposed CCT Service Enhancements and Modifications

Potential Service Modifications	
Route	Proposed Modification Description
10	Increase Saturday frequency from 30 to 15 Minutes
15	Extend weekday service hours from 9:38 PM to 12:00 AM and add earlier am trip from MTC
20	Add earlier AM trip from MTC
30	Increase Weekday peak period frequency from 30 to 15 Minutes, extend service hours from 9:55 PM to 12:30 AM, and extend off peak service to Cobb County Recreation Center on Six Flags Drive
30	Increase Saturday frequency from 60 to 30 minutes
40	Extend weekday service hours from 10:40 PM to 12:00 AM
40	Extend route to downtown Kennesaw
45	Extend weekday service hours from 9:13 PM to 12:00 AM
50	Extend weekday service hours from 10:13 PM to 12:00 AM
70	Extend from South Atlanta Road via East / West Connector to Cobb General Hospital and extend to Marietta Transfer Center
100	Add 4:40 PM inbound trip
Potential Service Eliminations	
Route	Proposed Elimination Description
65	Eliminate segment from Johnson Ferry / Roswell Road to Dunwoody MARTA Station
70	Eliminate segment from South Atlanta Road to Holmes MARTA Station
Potential New Services	
Route	Proposed New Service Description
80	New weekday service to Acworth / Kennesaw area
Sunday Service	Consider implementation of selected Sunday routes to include Routes 10 and 30 and complementary paratransit service
Flexible Route Service	New weekday demand response zone service for northwest and southwest areas

The potential new services and alignment modifications are described as follow:

4.2 New Route 80

The prior TDP recommended a new Route 80 along Old Highway 41 to Acworth City Hall. The new Route 80 was proposed to operate as a weekday local route with all day hourly service from Marietta Transfer Center to Acworth via South Marietta parkway, Church Street, North Cobb Parkway and Old Highway 41 to downtown Acworth. Route 80 would provide service to several important destinations, including:

- Marietta Transfer Center
- Downtown Marietta
- Kennestone Hospital
- Downtown Kennesaw
- Downtown Acworth (western end)

Detailed review of this proposed service including area characteristics and development changes underway and pending along with input received through public and stakeholder input resulted in three routing options developed for further review and comment. The previously described routing was designated as Option A with outer segment modifications to extend the route from downtown Acworth to the Acworth Park and Ride Lot identified as Option B and a third Option C for the route to continue along North Cobb Parkway and Lake Acworth Drive to the Acworth Park and Ride Lot.

The three proposed Route 80 options are depicted in Figure 4-1.

4.3 Route 70 Modifications

Route 70 is currently the most poorly performing local route in the CCT system. The proposed modified Route 70 would provide new mobility options and a transfer connection for citizens of Southwest Cobb to reach the Cumberland Galleria area faster and allow for the potential of locating a new transfer point near Cobb General Hospital. The hospital is one of the busiest bus stops along Route 30 which is one of the fastest growing CCT routes. If a stronger ridership base for the Route 70 could be forthcoming from this proposed extension, then additional service expansion into the lower-density portions of southwest Cobb would be more feasible for future consideration.

The Route 70 extension would operate as a local route with weekday and Saturday service from Cumberland Transfer Center to the Cobb General Hospital via the East-West Connector. It would mimic the existing routing of the Route 70 until it reached the current time point at South Cobb Drive and Industrial Boulevard. It would then travel west on South Cobb Drive to the East-West Connector, proceed along the East-West Connector to Austell Road, turn north on Austell Road, right on Hurt Road, right on Floyd Road, and finally left on the East-West Connector to return to Cumberland Transfer Center. The new portion of Route 70 would service to several important destinations, including:

- Cumberland Transfer Center
- East-West Connector
- Cobb General Hospital

The modified Route 70 could eventually be further extended northward to MTC in two directions to operate as a connecting local route to tie in with Route 30 or Route 15 and reinforce the frequency on one of these routes for a portion of the alignments. The modified Route 70 could be extended west along the East-West Connector to Powder Springs Road (a commonly requested new service area), then northeast along Powder Springs Road to connect with Route 15 and follow its alignment to MTC.

Another option would be to extend the modified Route 70 from Cobb General Hospital south along Floyd Road to match the alignment of the Route 30 all the way to the Holmes MARTA station. Either one of these routing options would improve service frequency on the affected segments of routes 15 or 30 and could make the short term recommendations to improve Route 30 frequency less pressing. Either option could be used to reinforce the Cobb General Hospital location as a potential transfer center for South Cobb which is ideally located between Powder Springs, Austell, Mableton, Marietta, and Smyrna.

The Georgia Regional Transportation Authority (GRTA) Regional Transit Action Plan (RTAP) included a recommendation to extend Route 70 from the MARTA Holmes Station to Perimeter Center via I-285. This extension was originally anticipated for implementation in 2005 but the schedule has been delayed. It is proposed to pursue this recommendation in conjunction with the previously described modifications to Route 70. This extension will require elimination of service between the South Atlanta Road area and the MARTA Holmes Station which currently exhibits extremely low ridership. This new portion of Route 70 would provide service to several important destinations including:

- Cumberland Transfer Center
- Cumberland-Galleria Malls
- Perimeter Center-Perimeter Mall
- MARTA North Line

The proposed Route 70 options are depicted in Figure 4-1.

4.4 Route 65 Segment Elimination

Route 65 is a low productivity service. It is proposed to eliminate the segment of Route 65 between the Johnson Ferry Road Baptist Church Park and Ride Lot and the MARTA Dunwoody Station due to very low ridership. Service on this segment has previously been reduced and currently seven trips operate during weekday peak periods. Elimination of this segment would, however, discontinue CCT service to and from the Dunwoody MARTA station. The proposed Route 65 modification is shown in Figure 4-1.

4.5 Route 40 Extension

An extension of Route 40 to downtown Kennesaw would operate on weekdays local with all day service from the existing Route 40 terminus at Kennesaw State University (KSU) via Chastain

Road/McCollum Parkway, Old Highway 41, North Main Street, Jiles Road, North Cobb Parkway, McCollum Parkway back to the regular Route 40 pattern at KSU. The new Route 40 would provide service to several important destinations, including:

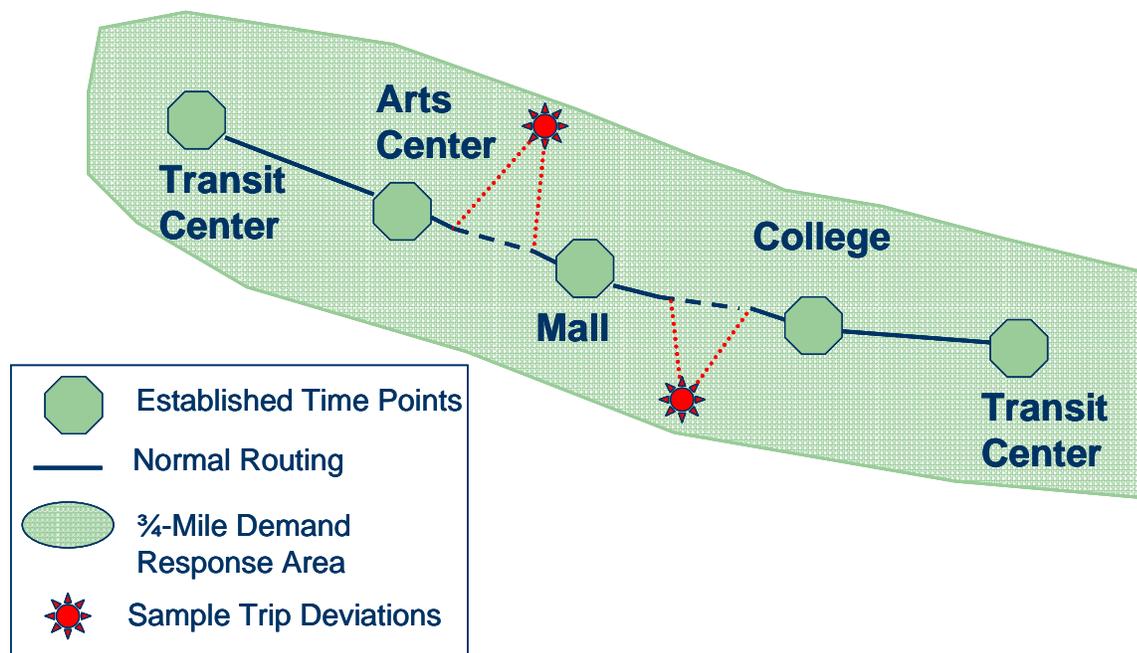
- McCollum Parkway
- Downtown Kennesaw
- North Cobb Parkway
- Kennesaw State University

The proposed Route 45 extension is depicted in Figure 4-1.

4.6 New Flexible / Demand Response Services

The prior TDP recommended a Call and Ride demand response service for the Austell area based out of the proposed Mableton Amphitheater Park and Ride Lot. As the Acworth/Kennesaw and Austell Powder Springs areas are emerging as potential implementation sectors for CCT services, a step approach to deploying service was proposed through a pilot program of combining fixed route and demand response service into a flexible route concept. The service as envisioned would operate only within the defined northwest and southwest sectors as shown in Figure 3-3. The specific routing(s) would be determined within the sectors to connect various key locations and activity areas. The service would be provided by smaller transit vehicles on weekdays between approximately 9:00AM and 4:00PM with connection(s) to CCT routes. Scheduled service would connect identified time points and also provided requested passenger pick-ups and drop-offs within $\frac{3}{4}$ mile of the normal routing. Depending on the success of the pilot program, service could eventually be expanded or considered for implementation of regular local service. Figure 4-2 is an example of this type of service.

Figure 4-2: Example of Flexible Route Concept



4.7 Recommendations

Based on the further review of the future potential services and input received from the public meeting process, the following recommendations have been prepared. The recommendations regarding the proposed service options are grouped in three categories: recommended service options, service options not recommended for implementation, and service options requiring more study/evaluation. The recommended service options are divided into two categories depending on when they are recommended for implementation: short-term and long-term. Additionally, paratransit recommendations are presented in this section.

4.7.1 Recommended Service Options and Cost Estimates

The routes recommended for short-term implementation and the estimated annual operating cost of implementing the short-term recommendations are presented in Table 4-2.

Table 4-2: Estimated Annual Operating Cost of Short-Term Implementation

Short-Term Priority		
Route	Recommended Service Options	Total Estimated Additional Annual Operating Cost
30	Increase weekday peak frequency, extend certain night service hours, and extend trips to South Cobb Recreation Center	\$310,900
70	Eliminate segment of route to/from MARTA Holmes Station Extend route weekday and Saturday via East-West Connector to Cobb General Hospital and via Powder Springs Road to Marietta Transfer Center.	n/a
15	Add earlier weekday morning trip	\$8,300
20	Add earlier weekday morning trip	\$8,700
50	Extend weeknight service	\$34,500
10	Increase Saturday frequency	\$73,600
Short-Term Priority Sub-Total:		\$436,000

* **Note:** Represents total cost - less estimated farebox revenue.

The routes recommended for long-term implementation and the estimated annual operating cost of implementing the long-term recommendations are presented in Table 4-3.

Table 4-3: Estimated Annual Operating Cost of Long-Term Implementation

Long-Term Priority		
Route	Recommended Service Options	Total Estimated Additional Annual Operating Cost*
40	Extend weekday to serve downtown Kennesaw.	\$228,100
80	New route to the Kennesaw/Acworth area	\$336,200
Conceptual Service	Limited weekday service for Austell/Powder Springs and Acworth/Kennesaw areas	\$311,000
Long-Term Priority Sub-Total:		\$875,300
Short-Term Priority Sub-Total:		\$436,000
Total Service Modifications:		\$1,311,300
Estimated Additional Paratransit Costs		\$414,000
Grand Total:		\$1,725,300

* Note: Represents total cost - less estimated farebox revenue.

4.7.2 Service Options Not Recommended for Implementation

The following revisions were not recommended for implementation:

- Route 15 - To accommodate rider requests and offer additional travel opportunities, extend weeknight service from 9:38 PM to 12:00 AM. Not recommended at this time due to current lower evening ridership.
- Route 40 - In response to rider requests and to offer later travel opportunities, extend weeknight service from 10:40 PM to 12:00 AM. Not recommended at this time due to current lower evening ridership.
- Route 45 - In response to rider requests and to offer later travel opportunities, extend weeknight service from 9:13 PM to 12:00 AM. Not recommended at this time due to current lower evening ridership.

4.7.3 Service Options Requiring Further Review

The following routes are recommended for further review by CCT staff:

- Route 30 - Observe ridership response to weekday service improvements and determine if investment in improving Saturday frequency from 60 to 30 minutes is warranted.
- Route 45 - Due to low ridership, terminate service after 7:00 PM.

- Route 65 - Due to low ridership, eliminate segment of route between Johnson Ferry / Roswell Roads and MARTA Dunwoody Station.
- Route 100 - Monitor operations of new GRTA Xpress routes operating in Cobb County to determine if need exists to provide additional inbound afternoon trip from downtown Atlanta.
- Flexible Route / Demand Response Services - If daily service is not deemed necessary for the Austell/ Powder Springs and Kennesaw/Acworth areas, implementing flexible route/demand response service three days per week in Kennesaw/Acworth and two days per week in Austell/Powder Springs may be feasible.
- Sunday Service – Consider implementation of selected Sunday routes to include Routes 10 and 30 and complementary paratransit service.

4.7.4 Paratransit Recommendations

The following route recommendations will either extend paratransit service hours or expand paratransit service into areas where currently no CCT service is provided:

Extension of Service Hours

- Route 30 - Extend weekday service from 9:55 PM to 12:30 AM
- Route 50 - Extend weeknight service from 10:13 PM to 12:00 AM.

The extension of service hours is expected to have little impact on paratransit costs as current paratransit ridership after 9:00 PM is extremely low.

Service Area Expansion

- Route 40 – The weekday extension from KSU to downtown Kennesaw will expand the paratransit service area.
- Route 70 – The elimination of the route segment between South Atlanta Road and MARTA Hamilton E. Holmes Station and the proposed weekday extension from Cumberland Transfer Center to MARTA Dunwoody Station should have no impact on paratransit service because the route will operate on major interstates. The extension from South Atlanta Road via East-West Connector to Cobb General Hospital will slightly increase the paratransit service area.
- Route 80 – Service provided from downtown Kennesaw to downtown Acworth and/or the Acworth Park and Ride lot via either Old Highway 41 or North Cobb Parkway will require an expansion of complementary paratransit service.

The Route 80 configuration is very similar to that proposed in the 2003 TDP. The TDP recommended at least one additional paratransit vehicle, and possibly two vehicles, depending on the paratransit trip activity that actually occurs. The Route 80 alignment passes through downtown Kennesaw, and would encompass most of the paratransit expansion area generated by the Route 40 extension.

The additional paratransit service area required by the extension of Route 70 is very limited because paratransit service is currently provided on the east and west ends of the East/West Connector due to Route 70 and Route 30 local service, respectively. The addition of one or two paratransit vehicle for Routes 40 and 80 should be sufficient to also provide paratransit service for the segment of the East/West Connector not currently in the paratransit service area.

5.0 BUS STOP INVENTORY AND IMPROVEMENT PLAN

A key component of the TPS was to establish a bus stop database and recommendations for bus stop improvements in signage, accessibility and amenities. This section outlines the process by which the CCT bus stop signage improvements were developed and the analysis undertaken to identify the improvements. The CCT system exhibits a predominance of well placed bus stops and a large number of shelter installations.

5.1 Objectives

The individual bus stop is an often overlooked, but it serves as the critical customer information and public relations image element of any transit system. The stop location, accessibility, passenger amenities, and sign design should be periodically reviewed to ensure provision of the most customer friendly arrangement possible. The Bus Stop Signage Improvement Analysis included a review of the CCT bus stop locations and functions.

The general guidelines or goals of bus stop signage improvements are as follow:

- CCT bus stops should have a clear and distinct new identity;
- Stop locations should meet ADA requirements;
- CCT bus stops should fit into and be compatible with the existing environments; and
- CCT bus stops should be designed to be comfortable, safe, durable, and easy to maintain.

5.2 Approach

Data collected in the bus stop inventory task was used as a starting point for the bus stop signage improvement analysis. This data provided information about every bus stop, including the condition of the signposts, and amenities at each stop. The database was used to perform an in depth analysis of all bus stop locations and the amenities at each stop. Although it may be desirable to provide as many amenities as possible, most bus stops are not this elaborate nor do they need to be. The recommendations will focus primarily on bus stop signage and shelters with the other components.

In addition to the physical characteristics, the analysis addressed pedestrian accessibility to transit stops, which is controlled by walking distance and comfort. Crossing busy streets or walking along roads without pedestrian facilities limits accessibility. By comparing locations with high demand and low accessibility, service changes can be prioritized.

5.3 Findings

The objective of this analysis is to assess the condition of amenities and infrastructure at each bus stop and develop a bus stop improvement plan. The data collected in the bus stop inventory was grouped into two categories for the bus stop assessment: stop characteristics and accessibility. The following section discusses the results of the analysis in these categories.

5.3.1 Bus Stop Characteristics

During the data collection activities for the bus stop, two database bases were created. The ridecount database consisted of daily boarding at each bus stop. A total of 694 bus stops are

included in this database. The survey database consists of data pertaining to the amenities located at each bus stop. A total of 724 bus stops are included in this database. The variance between the two databases is 30 bus stops. This variance is due to inactivity at 30 locations, where there was no data collected to address ridership activities, however amenity information was collected at those locations. The data used for this analysis includes the 694 bus stops having ridership and amenity data.

The data analyzed consisted of 20,656 daily passenger boardings (weekday and Saturday) at 694 bus stops, 580 have bus stop signs, 530 have sidewalks, and 348 include shelters. Bus stop characteristics were grouped into four sections. These sections include: signage, shelters, lighting, and trash receptacles. The following presents the findings in each of these sections.

Bus stop signage was inventoried to identify any location without a sign. Of the 694 bus stops included in the database, 114 bus stops did not have a sign posted. However, 111 of those bus stops were at locations where a shelter was provided and CCT desires that a bus stop sign is placed at all shelter locations. There were only three locations where there was no sign and no shelter.

Daily passenger boardings were used to determine where to place additional shelters and benches. Any location with more than 25 daily boardings was a candidate for a shelter, and any location with between 10 and 25 daily boardings was a candidate for a bench.

Bus stop shelters are provided through an advertisement firm or owned by the county. The advertisement shelters are not installed based on passenger boardings, but primarily on the ability to provide a good location for advertisement exposure. Shelters contain additional amenities, of benches, lighting, and trash receptacles. The analysis conducted at the shelters included identifying the amenities at each location. A total of 348 shelters were identified in the bus stop inventory, with a remaining 346 stop locations without shelters. Of the 346 locations without shelters, 44 locations have greater than 25 daily boardings.

Benches were provided at 339 shelter locations. There were only nine shelters in the system without benches. Lighting was provided at 208 shelters, and 343 locations have trash receptacles.

It is CCT's goal to provide trash receptacles at all locations. Of the 694 locations (those with and without shelters) analyzed, 392 have trash receptacles. There are 302 locations without trash receptacles and 294 of the locations without trash receptacles are at locations without shelters. However, only 20 locations without trash receptacles have greater than 25 daily boardings.

5.3.2 Bus Stop Accessibility

GIS was used to assess the accessibility provided for customers accessing the bus stops. A quarter mile buffer was established for each bus stop. Proximal Land Use for acceptable types was assigned to each bus stop buffer based on ARC LandPro03 data. For the census blocks that intersect each bus stop buffer, population density was calculated from 2000 U.S. Census data. The population density values were then assigned to each bus stop buffer. Bus stops were assigned the data from their respective buffers. Though the GIS techniques each bus stop was indexed by combining the factors for: population density, sidewalk condition, bus stop

connectivity, crosswalk accessibility, and the presence or absence of preferred proximal land use types. Table 5-1 summarizes the bus stop accessibility ratings:

Table 5-1: Bus Stop Accessibility Analysis

Accessibility Level	Bus Stop Count	Percent of Total
Excellent	149	21.47%
Fair	247	35.59%
Good	277	39.91%
Poor	21	3.03%
Grand Total	694	n/a

5.4 Recommendations

The following recommendations were developed after assessing the bus stop inventory data and review with the TPS Project Management Team (PMT). These recommendations are designed to assist CCT in prioritizing improvements for implementation. Most of the short term improvements recommend reviewing the boardings at bus stops to prioritize implementation. The threshold used during this task for the installation of shelters, lighting, trash receptacles, and sidewalks was 25 or more daily boardings at the bus stop. For the installation of benches the threshold was between 10 and 25 boardings at the bus stop. By improving access to the stops, the sign image, adding shelters at key boarding locations, and other stop amenities, customers will experience increased safety and comfort which should result in additional ridership for the system

5.4.1 Signage

The bus stop sign is the first item that should be addressed. It is important for the customers to know where the bus stop is located. The bus stop sign is the first indicator of where customers should wait for the service. Of the 694 bus stops included in the database, 114 bus stops did not have a sign posted. However, 111 of those bus stops were at locations where a shelter was provided and CCT desires that a bus stop sign is placed at all shelter locations. There were only three locations where there was no sign and no shelter.

5.4.2 Sidewalks

It is recommended CCT discuss existing sidewalk deficiencies with the local applicable jurisdictions prior to discussions on installing any new sidewalks. There are 18 existing sidewalks needing repair. All bus stops adjacent to an intersection should have a curb ramp. Install sidewalks at each bus stop location with priority given the 22 installations at stops that exhibit over 25 daily passenger boardings. Using the available data on sidewalk connectivity, there are four locations where the bus stop is not connected to adjacent land uses, and 134 locations where the bus stop is not located near the intersection. Three heavily utilized stop locations were identified for needing crosswalk striping. These are potential areas of opportunity for improvement.

5.4.3 Shelters and Lighting

Installing shelters at the bus stops is one of the most costly items needed to provide for the comfort of the customers. Based on guidance from the PMT, a methodology to identify the most appropriate location for shelters was prepared. Shelters should be considered for placement at all bus stops that exceed 25 average weekday passenger boardings. This would require an additional 36 shelters. It is assumed that a number of these shelters would be placed by the advertising contractor and others would need to be procured and installed by the county.

5.4.4 Benches and Lighting

The bus stop inventory data identified a total of 367 benches at CCT bus stops. The majority of the benches are located at bus stops with shelters; however there are six stand-alone benches in the CCT system. There were only 9 shelters that did not have a bench. It may be advantageous to develop a bench identification process, where a standard design bench is implemented at stops with less than 25, but greater than 9 weekday passenger boardings which is 52 locations.

In addition to benches being provided at shelters, shelters also have lighting features. There were 33 shelters without lighting features of which 13 were county provided shelters and 20 were advertisement shelters. Lighting features should be installed at these locations. There are 8 stop locations that exceed 25 daily boardings that are in need of supplemental lighting.

5.4.5 Trash Receptacles

Trash receptacles are a benefit to everyone, and easy to implement at all bus stops. A total of 352 additional trash receptacles would be needed in order to have a container at every bus stop. As the associated cost of providing and maintaining this quantity of containers would be significant, it is recommended that containers initially be placed at the 24 stops without containers that exhibited over 25 daily boardings. All shelter locations should have a trash receptacle installed, and one needs to be installed at a county shelter and four at advertising shelters. Trash receptacles at transfer centers and major park and ride lots should be durable and compliant with the Homeland Security directive on explosive resistant security cans. Existing trash receptacles at the two transfer facilities and the Acworth and Busbee park and ride lots should be considered for replacement with compliant security containers. The estimated cost of the recommended bus stop improvements is summarized in Table 5-2:

Table 5-2: Estimated Costs of Short-Term Bus Stop Improvements

Category	Quantity	Estimated Unit Cost	Total
System Sign Replacement	610	\$100	\$61,000
Additional Shelter Installations*	36	\$7,000	\$252,000
Bench Installation	52	\$400	\$20,800
Supplemental Lighting	21	\$1,500	\$31,500
Additional Trash Receptacles	20	\$100	\$2,000
Security Trash Receptacles	20	\$600	\$12,000
Sidewalk Repair	18	\$700	\$12,600
Sidewalk Installation	22	\$2,500	\$55,000
Sign Installation	114	\$250	\$28,500
Total for all Categories			\$475,400

Note (*): Certain shelter installations may be provided through the advertisement contract.

6.0 CUSTOMER SERVICE ASSESSMENT

An assessment of CCT's customer service functions was included as an element of the TPS. The purpose of this section is to summarize the Customer Service Assessment process, findings, and recommendations. The following customer service components are included in this assessment:

- Cobb County Customer Service Program
- Service Contractor Customer Service Functions

6.1 Customer Service Review and Findings

A review of county and CCT customer programs and functions was conducted to gain insight into the emphasis placed on customer service as well as actual customer service practices. The assessment process included review of various county and system documentation, interviews and conversations with Cobb Department of Transportation (DOT), CCT, and contractor representatives, direct contact with customer service functions, and discussion with telephone equipment vendors.

6.1.1 Cobb County Customer Service Program

Cobb County continually emphasizes customer service to employees through a structured program. A high degree of emphasis is placed on customer service through the designation of *Cobb County...Expect the Best!*, and the Customer Service Mission Statement which states:

Helping to make Cobb County the best place to be through efficient, effective and responsive government that delivers quality services is the mission of Cobb County.¹

Enhanced customer service is to be promoted as a five part criteria:

- **Promote** customer service beyond job descriptions of Cobb County employees
- **Create** programs to enhance customer service
- **Implement** the programs to enhance customer service
- **Monitor** the programs to measure customer service levels
- **Recognize** employees that exemplify enhanced customer service

A customer service council was created in 1991 to emphasize a strong commitment to service and recommend ways to improve service to internal and external customers. Formal bylaws were established to promote and reinforce customer service through the above criteria.

¹ Cobb County Customer Service Program

6.1.2 Contractor Customer Service

The customer service function is included in the CCT service contract as a responsibility of the contractor. The contractor's customer service responsibilities are primarily included in the functions of staffing/operating a customer service call center and customer service kiosk at the Marietta Transfer Center.

6.1.3 Customer Service Center

The CCT Customer Service Center accepts calls Monday through Saturday from 4 a.m. to 12:00 a.m. The center responds to customer telephone calls and correspondence. The CCT telephone information number is included on various system materials such as time tables, maps, notices, CCT webpage, and on bus stop signs (the signs currently do not include the area code). The center is staffed by a manager and five agents, of which some are capable of providing information in Spanish. The center currently handles approximately 16,000 calls per month, and the peak call time is on weekdays between 3 p.m. and 4 p.m. Calls are categorized as service inquiries, complaints, compliments, or informational and are counted for each of six extensions. Of the monthly calls received, about 45-50 or 0.3 percent are actual complaints. Complaints are categorized as follow with courtesy typically exhibiting the highest number:

- Courtesy
- Late Bus
- Early Bus
- No Show
- Operator Action
- Safety
- ADA/Wheelchair
- Mechanical
- Schedule
- Service Area
- Stops/Shelters
- Evaluation
- Miscellaneous

A profile of the complaints received reveals:

- Sixty percent are controllable, and forty percent are non-controllable
- Of the controllable complaints,
 - 1 of 10 is related to mechanical problems;
 - 2 of 10 are related to operator actions;
 - 3 of 10 are courtesy complaints; and
 - 4 of 10 are regarding the bus being early, late or missing a stop.

To better understand the center's response to customers, a number of random sample calls were made to request information over various time periods. Calls made during the weekday afternoon period occasionally received a busy signal; however, calls made during other times

were answered in a timely fashion. The agents addressed the inquiries in a knowledgeable and courteous manner.

6.1.4 MTC Customer Service Kiosk

A customer service kiosk with a service window for walk up customers is operated at the Marietta Transfer Center. The kiosk provides system information as well as fare media sales. The kiosk is operated from 6 a.m. to 6 p.m. on weekdays. Two positions are utilized to staff this function. Observations made at the kiosk revealed staff in place to address the significant customer activity.

CCT information and fare media sales are also available at the CCT headquarters office on Commerce Drive which is open on weekdays from 8 a.m. to 5.p.m.

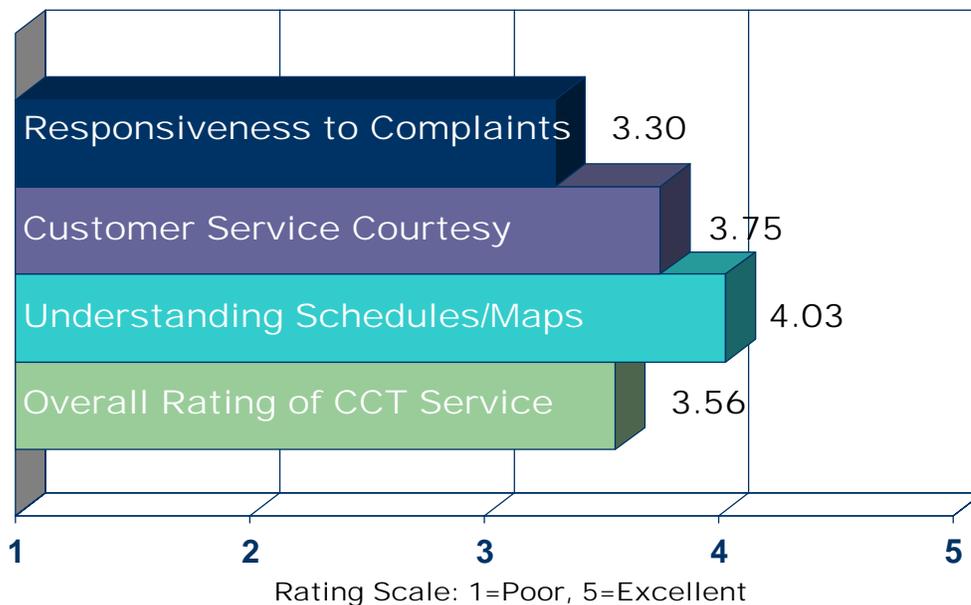
6.1.5 Customer Service Training

Customer service training is included in the Contractor’s bus operator training program ,which is the firm’s standard training element. The contractor’s customer service manager recently initiated the practice of meeting directly with bus operators in an attempt to more effectively address complaints and raise the operator’s awareness of excellent customer service.

6.1.6 Passenger Survey

The TPS included an on-board passenger survey that was conducted on all CCT routes through random weekday and Saturday trips. The survey form was printed in English and Spanish and offered to each boarding passenger on the affected trips. The survey contained a number of questions that directly related to CCT customer service. The results are displayed along with the overall CCT rating in Figure 6-1.

Figure 6-1: Passenger Survey Results



6.2 Recommendations

As noted in the results of the passenger survey and the follow up assessment undertaken, CCT customer service is functioning in an above average range. However, to further enhance the CCT customer service experience, the following actions are recommended:

- Immediately determine funding availability and initiate procurement for a new telephone system software component to more effectively accommodate and track incoming customer service calls by providing automated capability for:
 - Ability to install prompts for automated system information;
 - Summarize number of calls received by time periods;
 - Monitor and record actual calls;
 - Summarize average time to answer calls, track time on hold, and respond to inquiries;
 - Determine number and percentage of lost calls; and
 - Inclusion of caller ID display to document source of emergency or threatening calls.

It is estimated that new telephone software with these capabilities would require a capital investment between \$8,000 and \$12,000. As the current CCT telephone system was implemented a number of years ago when the facility was constructed, consideration should be given to evaluating this system for possible replacement. A new system would provide improved reliability through updated technology features including the previously described customer service related automated software capabilities, however, this approach would be more costly than only implementing the additional software described above.

- Include the county's customer service program as a part of the CCT service contractor's staff training and information functions. The CCT contract employees are daily representatives of the County to a broad public spectrum, and the county's customer service expectations should be shared with them.
- Once the new telephone capability is implemented to complement the county's customer service program monitoring element, performance measures should be developed and continually applied to uniformly assess the individual and overall performance of the centers activities on a quarterly and annual basis.
- Consider opportunities to more effectively promote and enhance CCT services as well as excellent customer service. The customer service and marketing functions are typically within the same unit at transit agencies. Although CCT does not have a formal marketing program, a need exists to more effectively promote the system through new concepts which could include the establishment of a marketing unit with customer service included as a component.

GLOSSARY

Americans with Disabilities Act (ADA)

Federal legislation passed in 1990 that prohibits discrimination on the basis of disability. In addition to other public and private facilities, the act requires all transportation facilities and services must be accessible to individuals with physical handicaps.

Automatic Passenger Counter (APC)

Automated devices that count passengers as they enter and exit a transit vehicle or system.

Automatic Vehicle Locator (AVL)

Automated devices that utilize Global Positioning System (GPS) technology to determine and transmit the location of vehicles.

Bus Rapid Transit (BRT)

BRT is a public transit mode that uses buses to provide a light rail quality of service by combining the benefits of light rail transit with the flexibility and efficiency of bus transit.

Cobb Community Transit (CCT)

County operated transit system that provides local bus and paratransit services in Cobb County and express bus service to midtown and downtown Atlanta.

Density

The number of dwellings or principle buildings or uses per acre of land.

Farebox Recovery

Measure of the proportion of transit system operating expenses covered by passenger fares; derived by dividing farebox revenue by total operating expenses.

General Farebox, Inc. (GFI)

Manufacturer of CCT's current farebox equipment.

Georgia Regional Transportation Authority (GRTA)

State authority designated to improve air pollution, traffic congestion, and development patterns in the metropolitan Atlanta region.

Geographic Information System (GIS)

GIS is a collection of computer hardware, software, and geographic data for capturing, managing, analyzing, and displaying all forms of geographically referenced information.

Global Positioning System (GPS)

A system of satellites and receiving devices used to compute positions on the Earth.

Gwinnett County Transit (GCT)

Gwinnett County Transit was formed in 2000 to provide express and local bus service, as well as complementary paratransit services for Gwinnett County.

High Occupancy Vehicle (HOV)

Vehicles that can carry multiple persons such as buses, vanpools and carpools. These vehicles sometimes utilize exclusive traffic lanes called HOV lanes.

Intelligent Transportation System (ITS)

An umbrella term for a broad range of technologies utilized to improve transportation in the areas of safety, convenience, efficiency, and reliability.

Metropolitan Atlanta Rapid Transit Authority (MARTA)

Provides local bus, shuttle, paratransit, and heavy rail services within Dekalb and Fulton counties. MARTA also provides seasonal bus service to Six Flags Over Georgia in Cobb County

RideCheck

The process of utilizing transit staff to count and record passenger boardings, alightings, and other operational information along a designated transit route.

Ridership

The number of passengers that utilize a public transport system.

Stakeholder

An individual or organization involved in or affected by the transportation or land use planning processes. In a broad sense, everyone is a stakeholder in both transportation and land use planning.

TDP

Acronym for Transit Development Plan

Transportation Improvement Program (TIP)

The first three to five years of a Regional Transportation Plan. The TIP must include specific funding for the projects as well as the project schedule from preliminary engineering to construction.

Unlinked Passenger Trips

The number of passengers who board public transportation vehicles. Individual passengers are counted each time they board a vehicle, no matter how many vehicles they use to travel from their origin to their destination.