

North Georgia Regional Development Center

Transportation Needs Study

Prepared for
Dalton-Whitfield County NGRDC

Prepared by
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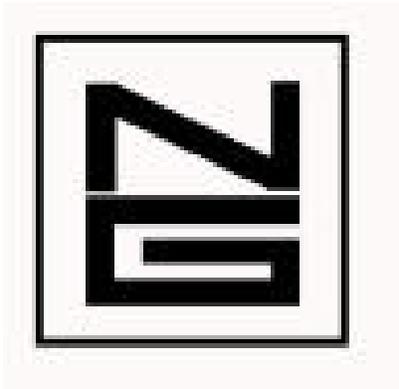
In association with
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Task 1.
Community Goals and
Objectives



Dalton-Whitfield County Transit Needs Study

Task 1: Community Goals and Objectives

The purpose of this technical memorandum was to develop and implement a set of market research tools to determine the following:

- Community activities toward transit Goals and Objectives;
- Major employers, anticipated growth, and potential employee demand for transit;
- Social Service Agency to identify behavior patterns of employees, attitudes about public transit, willingness to use the system and desired methods for financing the system; and
- Hispanic Outreach to the Spanish/Latino/Hispanic community.

1.0 Transit Policy Framework and Approach

Federal Guidance

Federal transportation legislation identifies seven planning factors that must be considered as part of the transportation planning process for all metropolitan areas including a factor to increase the accessibility and mobility options available to the public. Beyond the factors, several guiding principles are provided as direction for the development and maintenance of the transportation system and specify that the system include all modes and provide access and connectivity with diverse land uses and modes.

Regional Guidance

In keeping with its mission, the North Georgia Regional Development Center (NGRDC) provides a regional forum to address issues and opportunities of common regional interest, to partner with stakeholders to conduct needs assessments and develop strategies to meet those needs, and to establish policies for programs and initiatives of regional and local significance.

Approach

To stimulate a meaningful dialogue about transit as a viable transportation alternative, Dalton-Whitfield County embarked on a Comprehensive Transit Needs and Opportunities Study. The purpose of the study was to answer the question: "What role can public transportation fulfill in meeting the mobility needs of the Dalton-Whitfield County community?" Specifically, the goals of the study were to identify public transit mobility needs and formulate a plan to implement transit service, if feasible. To accomplish these tasks, the NGRDC surveyed citizens, each of the major employers, social service agencies and non-profit organizations in Dalton-Whitfield County to determine current and future transit needs.



The remainder of this section outlines the purpose, methodology and key findings from each survey. A copy of each survey instrument and related materials is attached as **Appendix A**.

1.1 Community Goals and Objectives

Purpose and Methodology

The Community Goals and Objectives Survey consisted of two parts. The first part was designed to gather public perception and general impressions of transit. The second part listed potential goals and objectives for the Dalton-Whitfield County transit needs and opportunities study and participants were asked to rank each goal in terms of priority. The written survey was distributed to attendees of a public meeting held in December 2004.

Results

Q1. Good public transit services should be a part of our community.

Response	% Total
Strongly Agree	61%
Somewhat Agree	23%
Neither Agree/Disagree	13%
Somewhat Disagree	3%
Strongly Disagree	0%
No Response	0%

Q2. Public transit services should be operated mostly for seniors and people who cannot drive.

Response	% Total
Strongly Agree	16%
Somewhat Agree	19%
Neither Agree/Disagree	13%
Somewhat Disagree	29%
Strongly Disagree	19%
No Response	3%

Q3. Public transit services should be comfortable and efficient.

Response	% Total
Strongly Agree	71%
Somewhat Agree	19%
Neither Agree/Disagree	10%
Somewhat Disagree	0%
Strongly Disagree	0%
No Response	0%



Q4. Using public transportation would cost me more than driving my own car.

Response	% Total
Strongly Agree	0%
Somewhat Agree	3%
Neither Agree/Disagree	39%
Somewhat Disagree	32%
Strongly Disagree	26%
No Response	0%

Q5. Public transit services should be expanded to allow people to commute to work locations outside Whitfield County.

Response	% Total
Strongly Agree	6%
Somewhat Agree	19%
Neither Agree/Disagree	19%
Somewhat Disagree	32%
Strongly Disagree	23%
No Response	0%

Q6. Public transit services should be expanded for seniors, disable, and people who cannot afford to own and drive a car.

Response	% Total
Strongly Agree	65%
Somewhat Agree	19%
Neither Agree/Disagree	6%
Somewhat Disagree	3%
Strongly Disagree	0%
No Response	6%

Q7. Whitfield County should seek federal, regional, and state funding for better public transit services.

Response	% Total
Strongly Agree	68%
Somewhat Agree	19%
Neither Agree/Disagree	6%
Somewhat Disagree	3%
Strongly Disagree	0%
No Response	3%

Q8. Whitfield County should provide local funding for better public transit services.

Response	% Total
Strongly Agree	45%
Somewhat Agree	29%
Neither Agree/Disagree	16%
Somewhat Disagree	6%
Strongly Disagree	3%
No Response	0%



Q9. If good public transit services were available to travel to work, I would use them.

Response	% Total
Strongly Agree	16%
Somewhat Agree	23%
Neither Agree/Disagree	19%
Somewhat Disagree	10%
Strongly Disagree	32%
No Response	0%

Q10. If good public transit services were available to travel to places other than work, I would use them.

Response	% Total
Strongly Agree	16%
Somewhat Agree	35%
Neither Agree/Disagree	19%
Somewhat Disagree	13%
Strongly Disagree	16%
No Response	0%

Rank

Goal

- #1 Provide Safe and Secure Public Transit Facilities.
- #2 Provide Good Value for the Public's Investment in Public Transit.
- #3 Help Reduce Traffic Congestion.
- #4 Support Economic Vitality and Growth.
- #5 Protect the County's Natural Environment.
- #6 Provide Transportation Options for People Who Cannot or Choose Not to Drive.
- #7 Support Efficient Land Development Patterns.
- #8 Provide An Interconnected System of Public Transit Services for Users.

1.2 Employer Survey

Purpose and Methodology

The Employer Survey consisted of a short series of questions to identify the basic trip-making behavior patterns of employees, attitudes about public transit, willingness to use the system, and desired methods for financing the system of employers.

As a first step, the study team obtained a list of the largest major employers in Dalton-Whitfield County from the Dalton-Whitfield County Chamber of Commerce. A member of the study team contacted the department of human resources, corporate and/or administrative office for each employer to determine the appropriate person within each company to complete the survey. A fact sheet, letter explaining the survey, and survey instrument was faxed to the contact person identified by each employer.

The survey was administered over the period of several weeks in April 2005. To promote a higher response rate, a member of the study team made follow up phone



calls to each employer to explain the purpose of the survey, how the information was going to be used, and to answer any questions or concerns.

Results

Number of respondents

A total of sixteen surveys were returned, representing a 32% response rate. The following major employers in Dalton-Whitfield County responded to the survey (one survey did not list the business name):

- J. C. Penney
- Dalton Beverage Company
- Mohawk
- Baron Industries
- Whitfield County Department of Family and Children's Services
- United States Postal Service
- City of Dalton
- SW Manufacturing
- Hamilton Home Health Care
- Dalton Whitfield Public Schools
- Dalton Utilities
- C&A Nurse
- Whitfield County
- Caremore
- North Georgia Electric

Nature of business

The nature of most businesses responding to the survey was government/public sector (37%) followed closely by manufacturing (31%). Other businesses included non-profit (19%) and retail/wholesale (13%).

Number and type of employees

Approximately 5,863 semi-skilled employees, 3,024 professionals, and 1,658 unskilled employees were represented by the employers responding to the survey.

Type of employment

The survey respondents employed a total of over 8,721 full-time employees and 42 part time employees.



From where most employees commute

Most employees commute from three areas: Dalton-Whitfield County, Murray County and Catoosa County. Other areas employees are commuting from in Georgia are Chatsworth, Gordon County, Rocky Face, Tunnel Hill, Ringgold, and Resaca. Other areas employees are commuting from in Tennessee include Chattanooga, Hamilton County, and Bradley County.

Shifts/Standard hours of operation

About 62.5% of employers use shifts. The most frequently occurring shift times/standard hours of operation are:

- 8:00 a.m. to 5:00 p.m.
- 7:00 a.m. to 3:00 p.m.
- 3:00 p.m. to 11:00 pm

About 37.5% of employers do not use shifts. For example, Dalton Utilities indicated that employees were on-call 24 hours and have to come and go to work at unusual hours

Flexible work hours

Over 80% of employers do not offer flexible hours to employees. Of the 20% of employers who do offer flexible hours, the flexibility only applied to certain workers (i.e. professional staff).

Plan to expand in next 1-5 years

Six of the major employers including Mohawk, Whitfield County Department of Family and Children Services, SW Manufacturing, Hamilton Home Health Care, and Dalton Whitfield Public Schools plan to expand in the near term.

Number of employees to be added

For those employers planning to expand, the number of additional employees ranged from 25 to 300 full time employees.

Where new employees will commute from

Employers indicated that the pool of new employees will commute from Whitfield and surrounding counties (Murray, Gordon, Catoosa, Hamilton, and Bradley).



Currently provide transportation services

Only one respondent, Hamilton Home Health Care, provides transportation services for its employees in the form of mileage reimbursement for staff using privately owned vehicles for work purposes.

Difficulty finding a dependable workforce due to lack of transportation

3 out of 16 (about 18%) of the surveyed respondents indicated difficulty finding a dependable workforce because employees lack transportation.

Employees who would use public transportation, if available

Half of the employers believed that less than 10% of their employees would use transit if available, and one-fourth believed up to 25% of their employees would use transit.

Public transit options company would support

The options most frequently cited by employers that would support public transit included:

- Marketing public transit services at work location (56%)
- Preferred parking areas for carpoolers/vanpoolers (31%)
- Subsidizing monthly transit passes for employees (12%)

Interested in subsidizing public transportation costs

Only 12% of the employers surveyed were interested in subsidizing public transportation costs.

Willing to amend shift times to accommodate employees using public transit

None of the major employers were willing to amend shift times to accommodate employees using public transit.

Believe expanded, reliable transit service will make Dalton-Whitfield County a more attractive place to do business

More than half of the employers, 10 out of 16, believed that expanded, reliable transit service will make the area more attractive.



1.3 Social Agency Survey

Purpose and Methodology

The Social Agency Survey consisted of a short series of questions to determine the basic trip making patterns of agency clientele, preferred transit options, willingness to use transit, and most important transportation related issues impacting the organization.

The study team obtained a list of all the registered non-profit organizations in Dalton-Whitfield County from an online information source. A fact sheet, letter explaining the survey, and survey instrument was faxed to the address listed in the database.

The survey was administered over the period of several weeks in June 2005.

Results

Number of Respondents

A total of twenty surveys were returned, representing a 26% response rate. The following social service organizations responded to the survey:

- United Way of Northwest Georgia
- Highland Rivers Mental Health
- Department of Family and Children Services
- North Georgia Health District
- Whitfield Family Connection/Children and Families First
- Family Support Council: Oak Haven Second Chance Home
- Whitfield County Schools
- Action Ministries, Inc. Rural Transitional Housing
- Whitfield County Health Department
- Children's Medical Services
- Phi Theta Kappa of Dalton State College
- Dalton State College Adult Literacy
- Team Resource Center
- North Georgia Health District Dental Program
- Dalton Education Foundation
- North Georgia Health District
- Looper Speech and Hearing Center
- Strain Family Charitable Foundation
- Environmental Health



- Northwest Georgia Regional Library System – Dalton Branch

Geographic areas served

The geographic area served by the respondents was primarily Whitfield County; other areas included Murray, Gordon, Fannin, Gilmer, Pickens, and Cherokee Counties.

Functions

Most social agencies in Dalton-Whitfield County provide the following services: health services (45%), children's services (40%); other services include adult education, immigrant services, employment services, and transitional housing.

Number of clients

The total number of clients served on an annual basis by the social agencies responding to the survey is approximately 62,000.

Clients accessing agency using taxis

A little more than half of the survey respondents indicated that clients access their services using taxis.

Agency provides transportation services

Six organizations (20%) provide transportation services to clients in need. These services include taxi fare, pre-paid gas cards, van pick up, school bus for children of at risk families, and transporting family members in automobiles for food, medical, job hunting and other needs.

Agency coordinates transportation services

Medicaid, private taxi companies, Dads Matter and Better Beginnings are the organizations social agencies coordinate with to provide transportation services for their clients.

Additional public transit would help

75% of the survey respondents indicated that additional public transit would help the social agency better fulfill its mission.

Types of public transit clients would use

Social agencies believe their clients would most likely use the following types of public transit:

- Local Bus Service (85%)



- Carpool/Vanpool (40%)
- Express Bus Service (35%)
- Commuter Rail (35%)
- Demand Response Service (35%)

Increase in demand for social services

When asked how much demand for social services has increased in the last five years, responses were as follows:

- It has increased so much that we cannot meet all the needs (45%)
- It has increased, but we have been able to manage it (35%)
- It has stayed about the same (10%)

Public transit services will help clients

The majority of survey respondents, 85%, believe expanded, reliable public transit service will help their clients in their daily lives.

Most important transportation related issues

The following is a list of key themes derived from written comments regarding the most important transportation related issues negatively impacting social service agencies in Dalton-Whitfield County:

- Our clients without transportation resources are much less likely to adhere to an ongoing treatment plan, to attend school, to get to and from work and medical appointments, and other community and social services because they cannot access services
- Often school bus transportation is not available for homeless children...a public transit system would allow students to remain in school
- Many of our clients are eligible for services but cannot access needed services due to the lack of transportation
- Problems with transportation are frequently discussed as major issues with our clients...we definitely need to find a solution for this community



1.4 Hispanic Outreach Survey

Purpose and Methodology

The Hispanic Outreach Study was conducted to specifically assess the travel characteristics, demographics and transit service preferences of the Hispanic/Latino/Spanish populations in Dalton-Whitfield County. The decision to target this market was driven by this growing minority population in the county, in fact, one in five (22.1%) Whitfield County residents were identified as Hispanic in the 2000 U.S. Census.

The Hispanic Outreach Survey instrument was provided in both English and Spanish. The survey included a series of questions to determine the trip making patterns, auto ownership, and willingness to use transit, attitudes regarding transit, and preferred transit options.

The study team consisted of English and Spanish speaking staff to address questions and explain service options as required with survey respondents. The survey was administered at two strategic locations recommended by the Transit Advisory Committee.

Site #1: Whitfield Public Health Dept

- Survey conducted on December 1, 2005 during peak service period.
- Survey participants were provided handouts, posters of the six proposed service options were presented, and the survey instrument was administered in Spanish and English.
- A total of 118 total surveys were completed at Site #1.

Site #2: Walnut Square Mall

- Survey was conducted on December 16, 2005 during peak hours.
- Posters of the six service options were provided in English and Spanish.
- Walnut Square Mall shoppers were intercepted at the strategic area in the mall and asked to participate in study and view service options.
- A total of 43 surveys were completed, most respondents simple responded with comments to the proposed service options.

Survey Reliability

The Hispanic Outreach Survey included a total of 161 completed surveys. The survey reliability for the study is reported as 95% +/- 7.71 %. The confidence level ensures that the research findings represent the true percentage of the population who chose the same answer within the stated confidence interval. The 95% confidence level means that decisions based on the survey findings are 95% certain. Survey confidence and accuracy also depends on the percentage of the sample that chose a particular answer.



If 99% of the sample said “yes” and 1% said “no”, the chances of error are remote; however, if the percentages “yes” were 51%, the chances of error maybe greater.

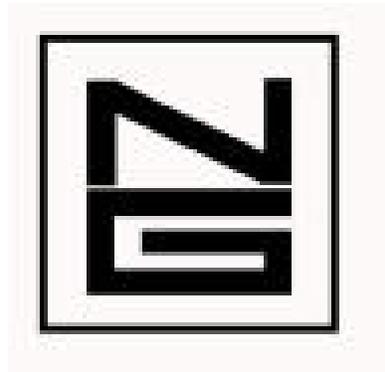
Results

Key findings from the Hispanic Outreach Survey determined that the top ranked routes were:

- Route 5: Walnut Square Mall/Wal-Mart/Walnut Avenue
- Route 2: Hamilton Medical Center/Broaderick
- Route 4: Bi-Lo/Glenwood Avenue

Additional issues and needs also included the following:

- Public transportation is needed to access jobs, social and health services, for those who cannot drive or who have no forms of transportation
- Current transportation options are not affordable



Task 2.
Needs Assessment



Dalton-Whitfield County Transit Needs Study

Task 2: Needs Assessment

The purpose of this technical memorandum was to review and assess the potential needs and opportunities for public transportation services in Whitfield County. Tasks in this activity include developing information on socioeconomic, demographic, market data, and land use characteristics.

2.0 Introduction

Potential transit riders are comprised of two markets: (a) those persons who have few or no other transportation options (also referred to as “transportation disadvantaged” population), and (b) those persons who have other transportation options available to them (e.g., private auto), but who may choose to take public transit because it is cheaper or more convenient than driving.

The first transit market, transportation disadvantaged population, are those persons who because of physical or mental disability, income status, or age are unable to transport themselves and are dependent on others to obtain access to employment, health care, education, shopping, or social activities. In a small community like Dalton-Whitfield County, which has low levels of congestion and free parking provided by most employers and retail establishments, transportation disadvantaged persons are the primary users of public transit services. As the community grows and trip times become longer and parking is less readily available (or more expensive), then public transit may become increasingly attractive to persons who currently drive.

This Needs Assessment considered a wide range of demographic and land use measures in assessing the potential need for transit in the Whitfield County study area. Several of these measures relate to conditions that may influence potential transit use by both the transportation disadvantaged and choice markets, such as total population, population density, and prevailing land use patterns. These factors reflect the experience of virtually every transit system in the U.S. – public transit is used more heavily in areas with larger populations and population densities. Several other measures were developed to determine the size and location of transportation disadvantaged persons in Whitfield County. These measures included persons with disabilities, elderly, low-income, low auto ownership, and minorities.

This Needs Assessment report begins with a brief description of the service area (Section 2.1), followed by a discussion of data sources and methods (Section 2.2). This is followed by a review of socio-economic characteristics of the



population (Section 2.3), travel destinations in the study area (Section 2.4), and land use patterns (Section 2.5) that provide an understanding of potential transit use in Whitfield County.

2.1 SERVICE AREA

The service area for the Dalton-Whitfield County Transit Needs Study includes all of Whitfield County. The study area encompasses a 290 square mile area with a population of 83,525 (2000 US Census). Physically, the study area is primarily rural, with most of the population located within the Dalton area. Whitfield County has four municipalities: Dalton, Cohutta, Tunnel Hill and Varnell. Dalton is the county seat and the largest municipality (27,912 population in 2000).

2.2 DATA SOURCES AND METHODS

Data sources used to complete this Needs Assessment were provided by the U.S. Decennial Census 2000, Census Transportation Planning Package (CTPP), Federal Highway Administration, Georgia Department of Community Affairs, Georgia Department of Transportation and the North Georgia Regional Development Center.

Census data was analyzed for both 1990 and 2000 to show where growth has occurred. The CTPP 2000 data provided population and demographic trends as well as travel habits. The CTPP 2000 data was available at the census tract level. Other 2000 Census socio-economic data was provided on the block group level. Future projections of population, employment and travel patterns were derived from the North Georgia Regional Development Center travel demand models at the TAZ level.

The principal method of analyzing the data was to illustrate spatial densities of each measure by mapping the measure for census tracts or traffic analysis zones (TAZs) in the study area. The data was arrayed into ranges then plotted with varying shades of color representing increasing or decreasing densities of activity.

2.3 SOCIO-ECONOMIC CHARACTERISTICS OF THE POPULATION

This analysis will generally provide a review of transit needs in Whitfield County for those population segments that are potentially transit dependent. Potential transit dependent population are those segments of the population that, because of demographic characteristics such as, age, disability, income, or automotive availability, may potentially require transit services to meet mobility needs (as an alternative to the private automobile). These segments of the population are



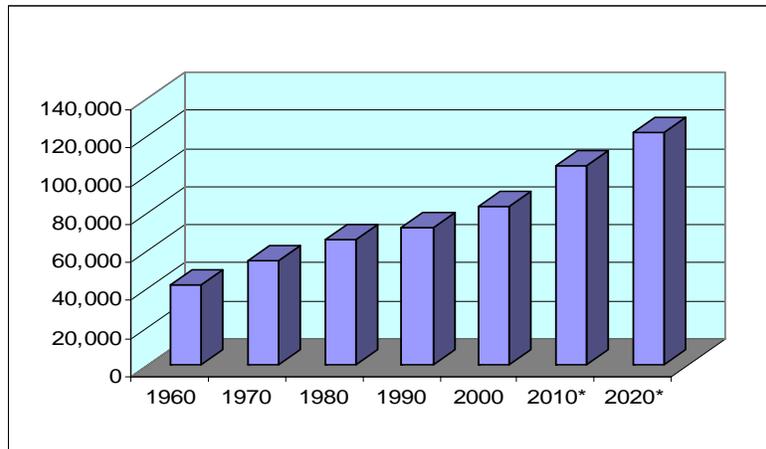
defined, using Bureau of Census data, as elderly (persons 65 or over), mobility limited persons, persons living below the poverty level, and households with no autos. In order to conduct this analysis, it was necessary to extract data from the US Census Bureau, using files SF1 and SF3, and summarize it at the block group level.

Total Population

Between 1990 and 2000, the population of Whitfield County grew by 15.3% (from 72,462 to 83,525). The 2000 population of Whitfield County's four municipalities was: Dalton 27,912, Cohutta 512, Tunnel Hill 1,209, and Varnell 1,491. The remaining population (52,401) resides in unincorporated parts of the county.

Population projections indicate that the county's population is expected to exceed 104,000 by 2010 and 122,000 by 2020 (source: Whitfield County Comprehensive Plan). Past and projected population growth is shown in Figure 1 below.

Figure 1. Whitfield County Population, 1960 to 2020 (Projected)



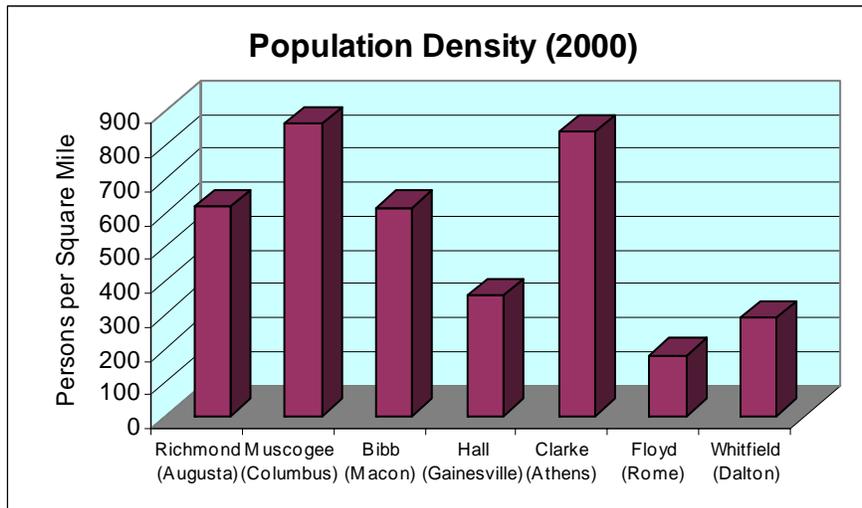
Sources: U.S. Census Bureau (1960-2000).
Whitfield County Comprehensive Plan (2010-2020).

Population Density

Population density is one variable that measures potential transit needs. Overall, the population density of the County is 288 persons per square mile. Figure 2 compares current (year 2000) population densities for Whitfield County compared to other Georgia counties that provide local bus route service. The current population density of Whitfield County exceeds that of only one other county that now operates fixed route bus transit – Floyd County (Rome Transit). However, within the City of Dalton the population density exceeds 1,400 persons per square mile. At this urban density, local fixed route transit may well be viable.

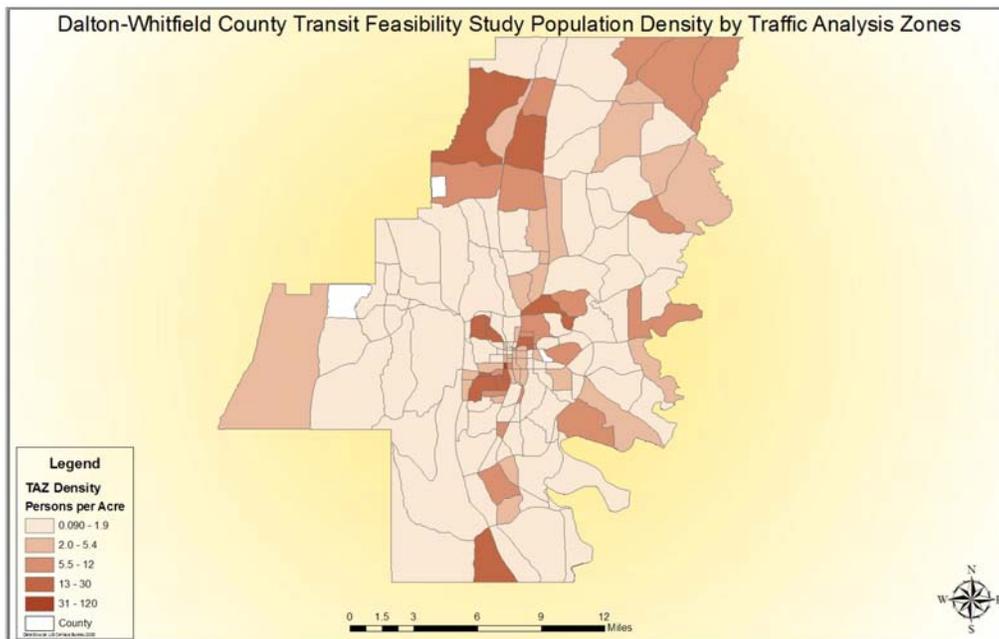


Figure 2. Population Density of Whitfield County and Peer Counties



2000 population data was gathered from the US Census Bureau and distributed amongst the TAZs. Figure 3 shows the 2000 population density in Whitfield County. The areas with highest concentration of potentially transit dependent persons can be found in the cities of Dalton, Cohutta and Varnell.

Figure 3. 2000 Population Density



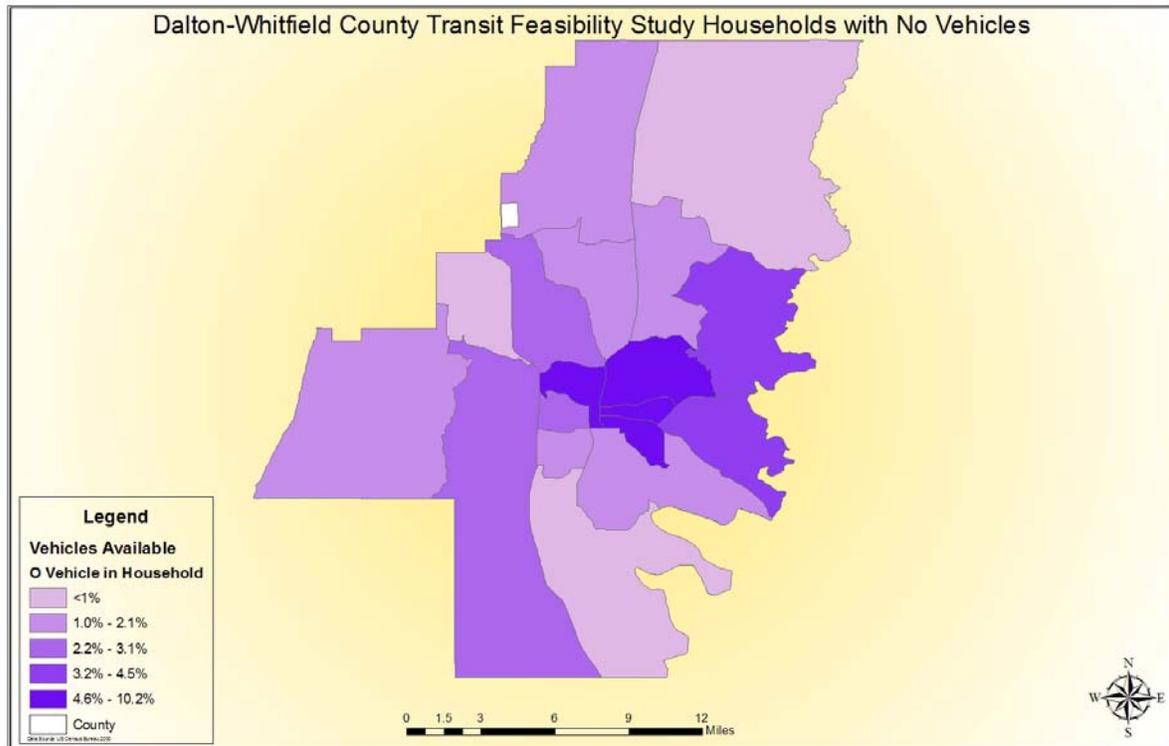
Households with No Autos



Concentrations of households with no autos are particularly important in identifying potential transit needs. Persons in these households must rely on alternate modes of transportation such as shared rides with others, taxis, and public transportation. Provision of public transportation services can greatly increase the mobility of persons in these households.

CTPP data was used to determine the percentage of households with no autos. In 2000, 1,951 households (6.6%) reported having no autos available, 9,221 households (31.4%) had one auto available, and 18,213 households (62.0%) had two or more autos available. The highest concentrations with no auto households can be found around the City of Dalton, extending east to the Murray County line and following up the I-75 corridor.

Figure 4. 2000 Households with No Autos

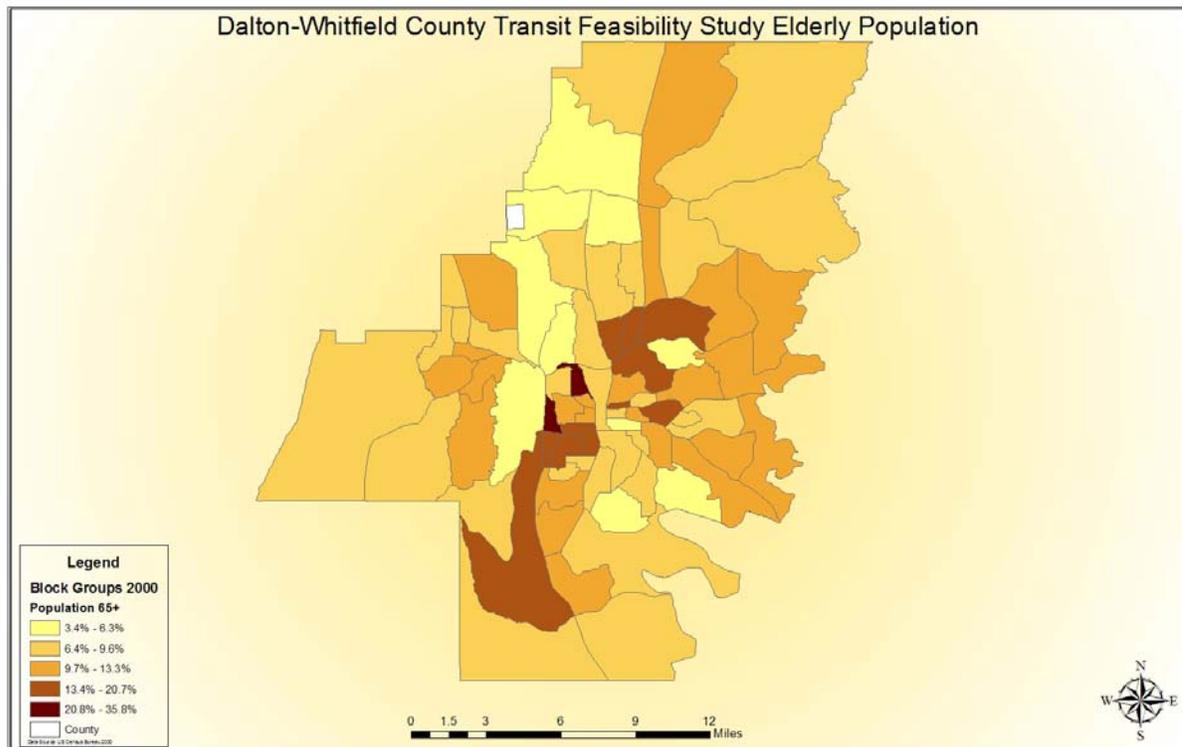




Elderly Population

The elderly are also a potential market for public transit services since they often do not drive or do not have access to an automobile and, due to limitations sometimes resulting from the aging process, are no longer able and/or willing to drive. Elderly, as defined by the US Census Bureau, is those persons 65 and over. In 2000, 8,576 residents (10.3 percent) of Whitfield County were elderly. Figure 5 shows the distribution of elderly residents in the county. The distribution of elderly persons is mainly concentrated to the west and north of the city of Dalton. Two block groups west of Dalton show about 35% of the population as being elderly.

Figure 5. 2000 Elderly Population (>65 Years)

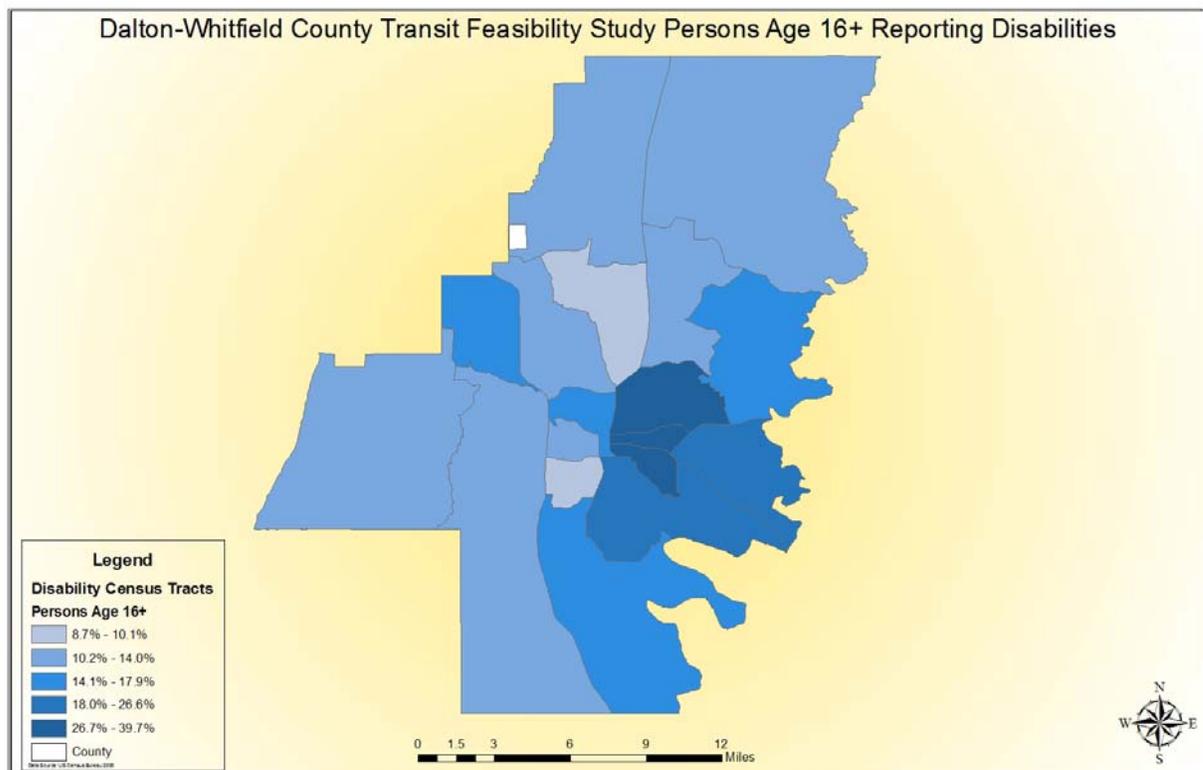




Disabled Persons

This segment of the population is very dependent on transit and could potentially be a frequent user of a transit system. In 2000, 16,805 persons older than age 5 (20.1 percent) of Whitfield County reported a disability. Figure 6 shows the distribution of disabled persons in the county. The highest concentration of disabled persons over the age of 16 is mainly in the eastern and southwestern parts of the county.

Figure 5. 2000 Disabled Population (>16 Years)

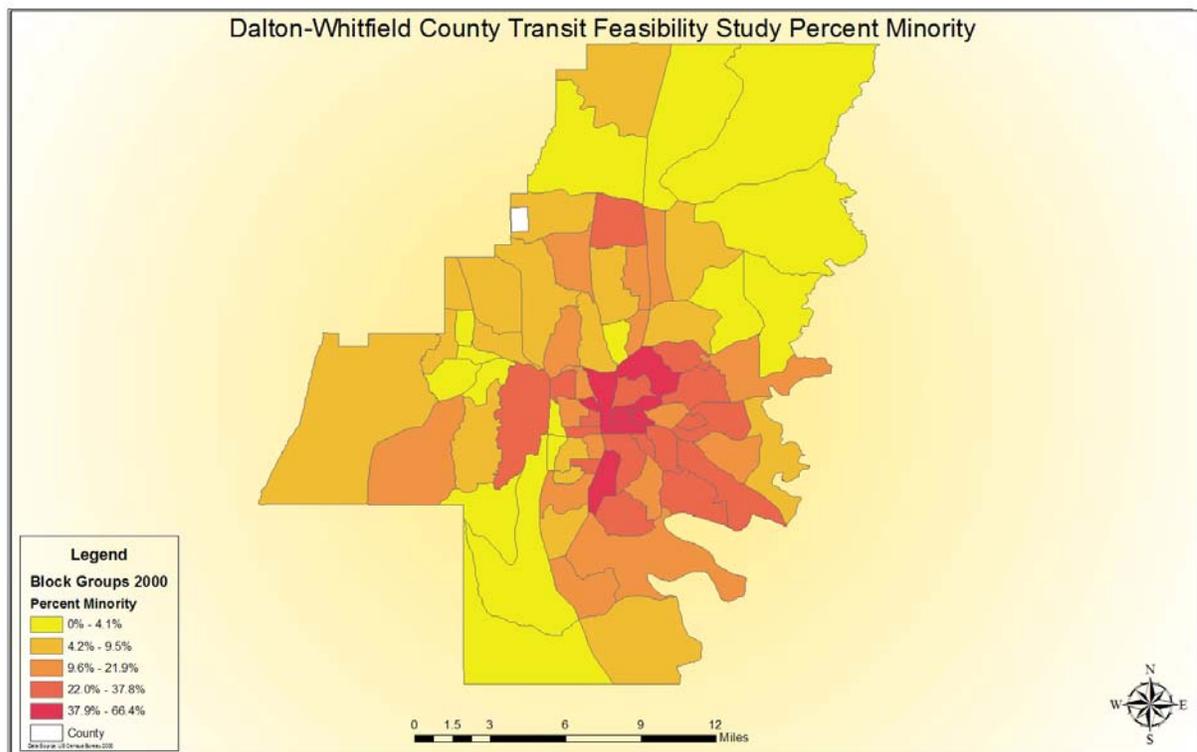




Minority Population

Minority populations are sometimes dependent on transit to serve their mobility needs. According to the U.S. Census, Whitfield County's population in 2000 was 27.8% minority. The majority of the minority population in Whitfield County is made up by Hispanics -- 22.1% of the population. In the City of Dalton, minorities comprise 50.3% of the population. Hispanics are the single largest minority population in the City, accounting for 40.2% of the population. A high concentration of minority persons can be found in block groups in central and eastern Dalton as well, and block groups to the north of Dalton. Figure 7 shows the distribution of minority populations in the county.

Figure 7. 2000 Minority Population





Poverty Status and Household Income

Poverty status and median household income are also important factors when determining transit feasibility. The average median household income for Whitfield County (in 1999) was \$39,377, which is less than the average household income for the United States and the State of Georgia. Figure 8 shows the average median household income throughout the county.

The number of persons living in poverty in Whitfield County (in 1999) was 9,494 or 11.5% of the population. The highest concentrations of poverty can be found within the City of Dalton. Other pockets of poverty can be found spreading northeast of Dalton towards Murray County. Figure 9 shows the distribution of persons living in poverty.

Figure 8. Average Median Household Income (1999)

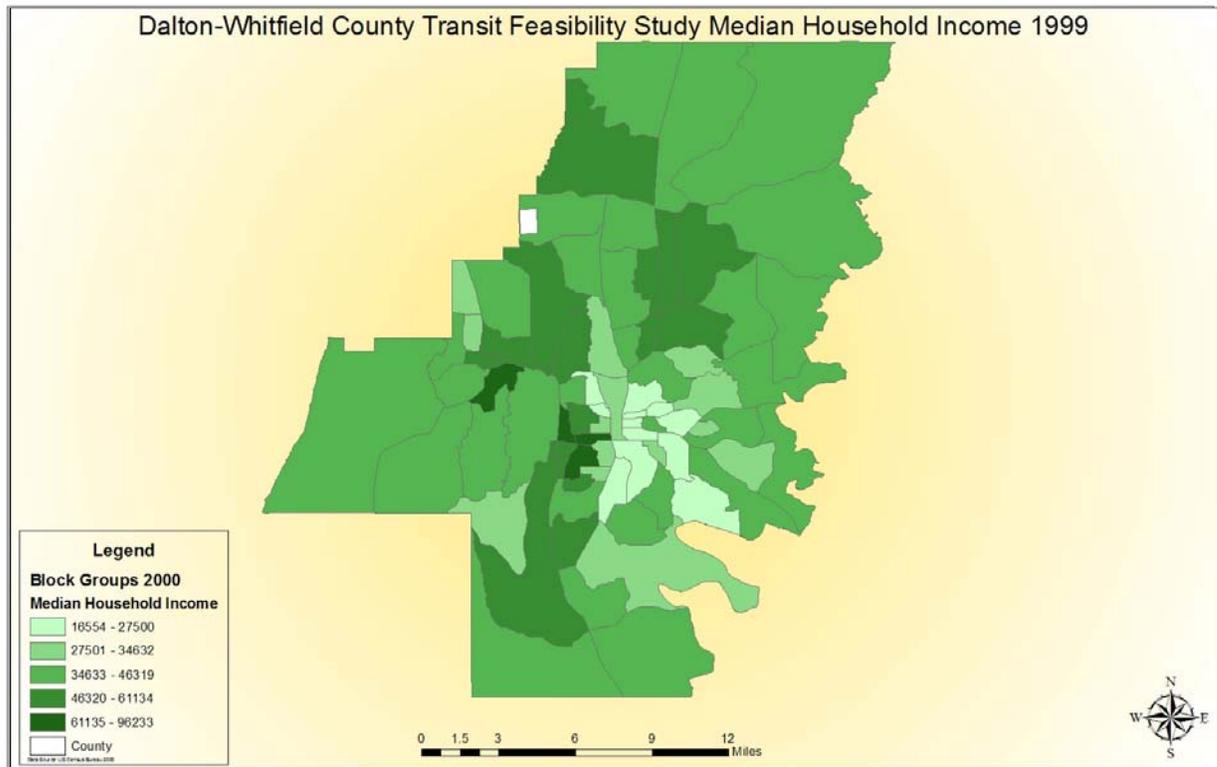
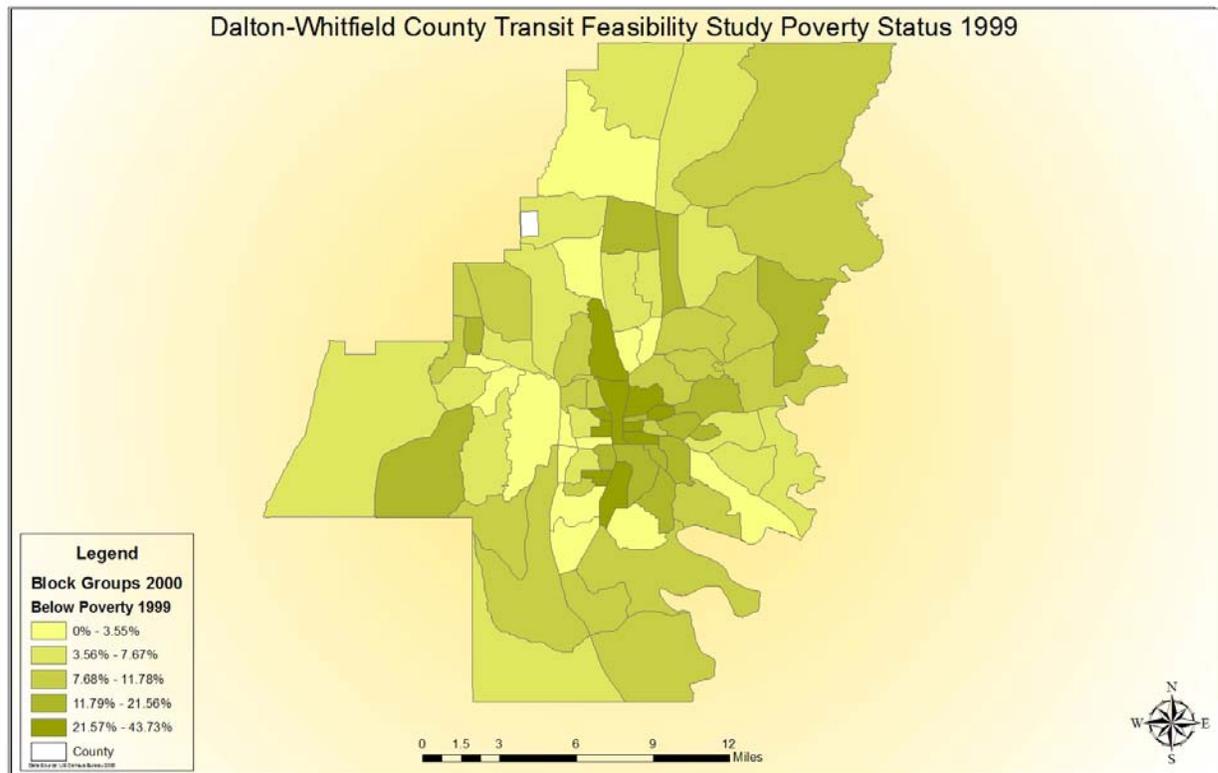




Figure 9. 2000 Persons Living Below Poverty Level



2.4 TRAVEL DESTINATIONS

Another component of the transit planning process is to identify major trip destinations within the study area, including major employers, shopping centers, schools, and medical facilities. A discussion of each type of destination is provided below.

Major Employers

All employers with at least 250 employees at a single employment site were identified. Table 1 summarizes the top ten employers in the County. Table 2 lists these and other major employers in Whitfield County by employment site. Figure 10 shows the location of major employers in the county. Most of the larger employers are located inside Dalton or just beyond the city limits.



Table 1. Ten Largest Employers in Whitfield County

<u>Company</u>	<u>Product/Service</u>	<u>Employees</u>
Shaw Industries, Inc.	Carpet	8,996
Mohawk Industries	Carpet	5,934
Beaulieu of America, Inc.	Carpet	3,112
Hamilton Medical Center	Health Services	1,686
Whitfield County School System	Education	1,632
Dalton City Schools	Education	838
J & J Industries, Inc.	Carpet	798
Collins & Aikman Corp.	Carpet	794
Alltel Communication Service	Telecommunications	715
Conagra Poultry Co.	Poultry Processing	615

Source: Whitfield County Comprehensive Plan.

Figure 10. Major Employers in Whitfield County

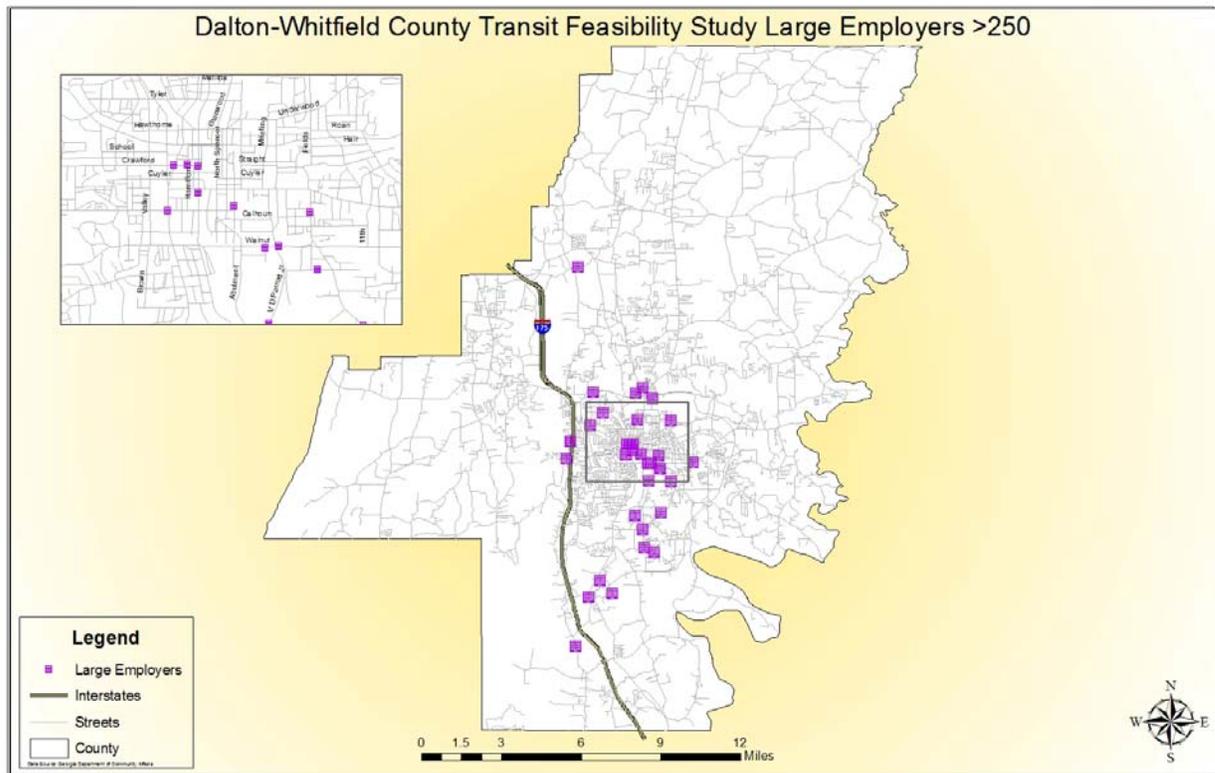




Table 2
Major Employers in Whitfield County

AVGEMP	CITY	STATE	ZIP5	NAICS	Industry	Name	Address	Street
1000+	DALTON	GA	30721	314110	Manufacturing	ALADDIN MANUFACTURING CORP	2001	ANTIOCH RD
1000+	DALTON	GA	30721	541513	Professional, scientific/tech svcs	SHAW INDUSTRIES GROUP INC	616	E WALNUT AVE
1000+	DALTON	GA	30720	622110	Health care and social services	HAMILTON MEDICAL CENTER INC	1200	MEMORIAL DR
500+	DALTON	GA	30721	314110	Manufacturing	J & J INDUSTRIES INC	818	JANDJ DR
500+	DALTON	GA	30721	314110	Manufacturing	SHAW INDUSTRIES GROUP INC	2305	LAKELAND RD SE
500+	DALTON	GA	30720	484121	Transportation and warehousing	METAL TRANSPORTATION SYSTEMS	1104	WALSTON ST
500+	DALTON	GA	30721	314110	Manufacturing	ALADDIN MANUFACTURING CORP	3580	CORPORATE DR
500+	DALTON	GA	30720	313111	Manufacturing	SHAW INDUSTRIES GROUP INC	103	S HAMILTON ST EXT
500+	DALTON	GA	30720	314110	Manufacturing	SERETEAN PLANT	1501	CORONET DR
500+	DALTON	GA	30720	313111	Manufacturing	ALADDIN MANUFACTURING CORP	2100	S HAMILTON ST
500+	DALTON	GA	30720	921140	Local government	DALTON-CITY	114	N PENTZ ST
500+	DALTON	GA	30721	314110	Manufacturing	SHAW INDUSTRIES GROUP INC	1529	WARING RD
500+	DALTON	GA	30721	314110	Manufacturing	DISTRIBUTION CENTER	3201	NORTH DALTON BYPASS
250+	DALTON	GA	30720	311615	Manufacturing	CONAGRA POULTRY COMPANY	433	S HAMILTON ST
250+	DALTON	GA	30721	314110	Manufacturing	BEAULIEU GROUP LLC	590	FIFTH AVE
250+	DALTON	GA	30721	314110	Manufacturing	ALADDIN MANUFACTURING CORP	431	S GREEN ST
250+	DALTON	GA	30720	611210	State government	DALTON STATE COLLEGE	213	N COLLEGE DR
250+	DALTON	GA	30720	921140	Local government	WHITFIELD COUNTY	300	W CRAWFORD ST
250+	DALTON	GA	30721	452112	Retail trade	WALMART ASSOCIATES INC	2103	E WALNUT AVE
250+	DALTON	GA	30721	561320	Administrative and waste svcs	COMPLETE PERSONNEL INC	511	BENJAMIN WAY
250+	DALTON	GA	30720	314110	Manufacturing	ORIENTAL WEAVERS OF AMERICA	3295	DUG GAP RD
250+	DALTON	GA	30721	314110	Manufacturing	CHEROKEE CARPETS	601	CALLAHAN RD SE
250+	DALTON	GA	30721	314110	Manufacturing	SHAW INDUSTRIES GROUP INC	920	TINSLEY ST
250+	DALTON	GA	30721	313112	Manufacturing	ALADDIN MANUFACTURING CORP	207	PHELPS RD
250+	DALTON	GA	30721	314110	Manufacturing	SHAW INDUSTRIES GROUP INC	2603	LAKELAND RD SE
250+	DALTON	GA	30720	314110	Manufacturing	SHAW INDUSTRIES GROUP INC	103	S HAMILTON ST EXT
250+	DALTON	GA	30721	314110	Manufacturing	SPRINGS INDUSTRIES INC	1414	CLEVELAND HWY
250+	DALTON	GA	30721	493110	Transportation and warehousing	SHAW INDUSTRIES GROUP INC	1020	RIVERBEND DR
250+	DALTON	GA	30721	325212	Manufacturing	TEXTILE RUBBER & CHEMICAL CO INC	1300	TIARCO DR SW
250+	DALTON	GA	30721	314110	Manufacturing	BEAULIEU GROUP LLC	1101	RIVERBEND RD
250+	DALTON	GA	30721	921190	Local government	DALTON WATER LIGHT & SINKING FUN	1200	V D PARROTT JR PKWY
250+	TUNNEL HILL	GA	30755	484110	Transportation and warehousing	XPRESS GLOBAL SYSTEMS INC	1537	NEW HOPE CHURCH RD
250+	DALTON	GA	30721	336370	Manufacturing	SWM GEORGIA LLC	901	SMITH INDUSTRIAL BLVD
250+	DALTON	GA	30721	541513	Professional, scientific/tech svcs	SHAW INDUSTRIES GROUP INC	1020	RIVERBEND DR
250+	DALTON	GA	30720	622110	Health care and social services	HAMILTON HEALTH CARE	500	HOLIDAY DR
250+	DALTON	GA	30720	517310	Information	ALLTEL COMMUNICATIONS INC	615	S THORNTON AVE
250+	DALTON	GA	30720	314110	Manufacturing	MATTEL CARPET & RUG INC	1900	WILLOWDALE RD



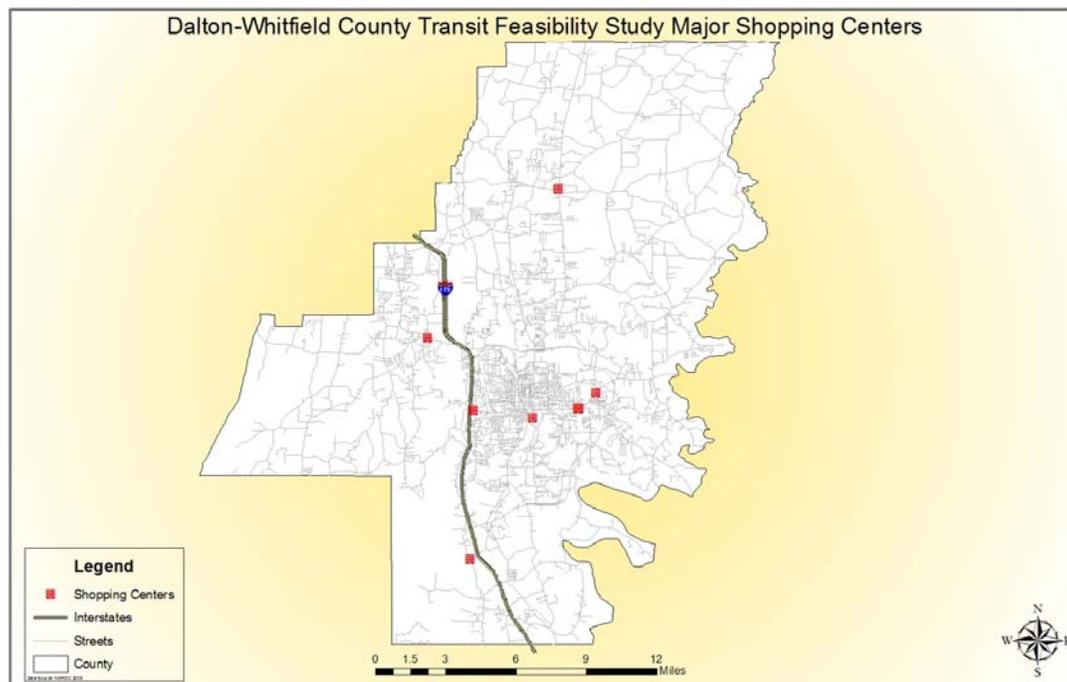
Shopping

Major shopping destinations throughout the county were identified and located. Since different types of shopping call for different levels of transportation need, the destinations were broken up into three different categories:

- **Major Shopping Centers:** Including malls, and other regional attractors, such as Valley Spring Shopping Center, Liberty Square, and Whitfield Square.
- **Department Stores:** JC Penney, Sears, Wal-Mart, Lowe's and Home Depot.
- **Supermarkets:** Major food stores such as Bi-Lo and Kroger.

Figure 11 shows the location of shopping destinations in the county. The highest concentrations of large shopping centers and retail centers can be found in the City of Dalton, along US 71, I-75 and along Walnut St. in Dalton. Supermarkets and other smaller retail services can be found scattered throughout the county, especially heading towards Tunnel Hill and Varnell.

Figure 11. Shopping Destinations in Whitfield County

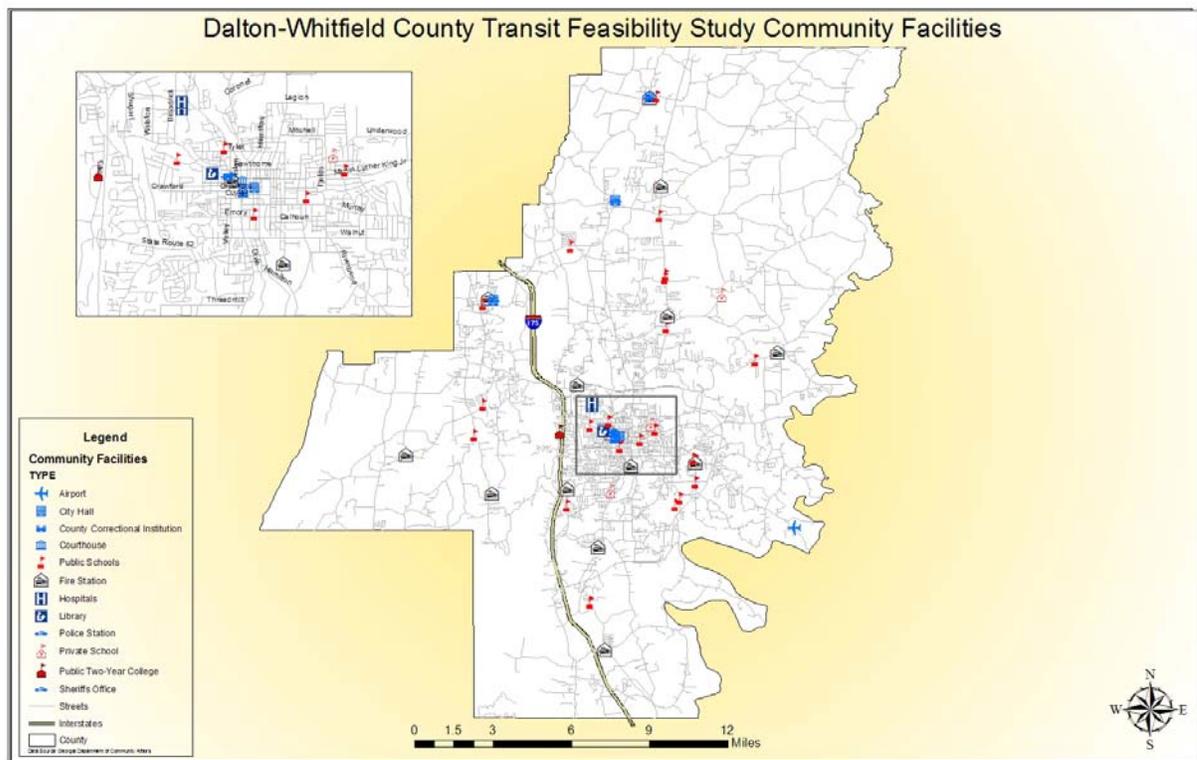




Community Facilities

Community facilities such as public schools, colleges and universities, hospitals and clinics, and government buildings were mapped for the study area. Figure 12 shows the locations of major community facilities. Dalton College is located on the west side of Dalton near I-75. Medical facilities are located in the City of Dalton. There are numerous doctors offices located within close proximity to the main hospital in Dalton. Many residents travel from all over Whitfield County to take advantage of the medical facilities located within Dalton.

Figure 12. Community Facilities in Whitfield County



2.5 LAND USE CHARACTERISTICS

Existing and future land uses were also mapped for the County.

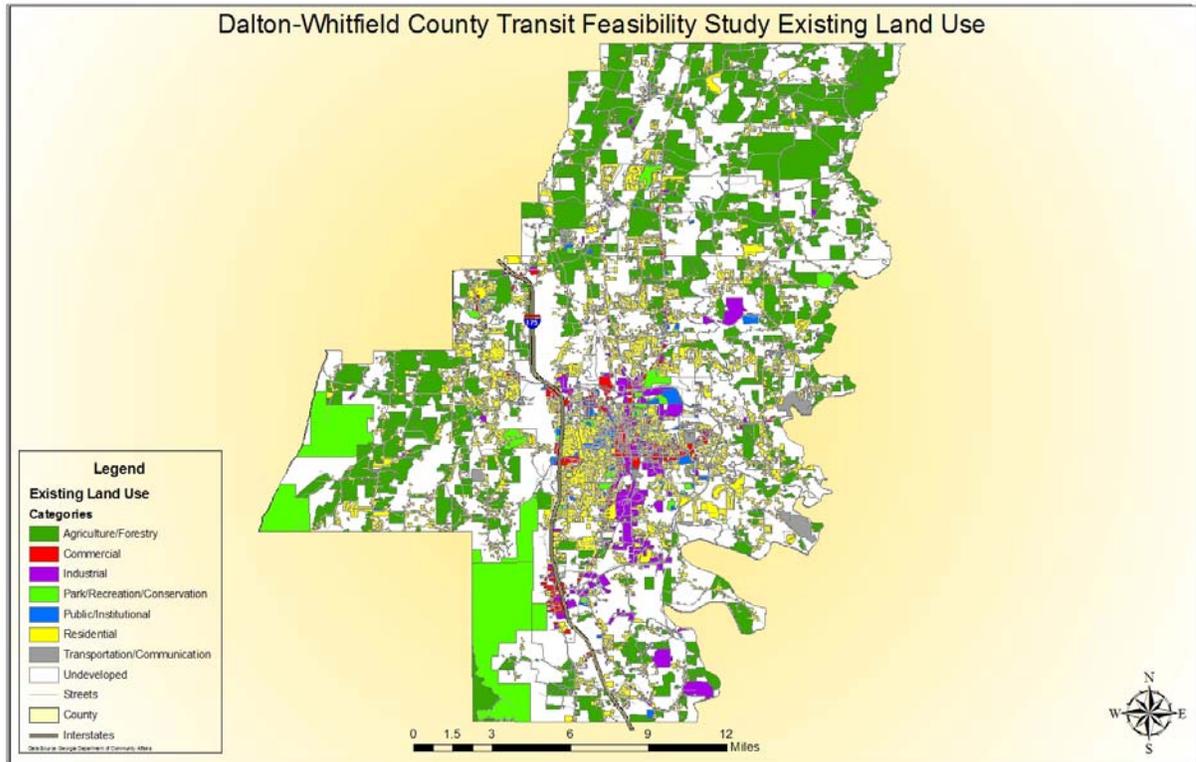
Existing Land Use

A review of the existing land use map, Figure 13, shows high concentrations of residential uses in west Dalton along the I-75 corridor, with commercial uses clustered along the interchanges and major intersections of arterials leading into Dalton. Industrial uses are clustered on the south and southeast side of Dalton,



as well as some industrial uses north of Dalton. There are smaller pockets of residential and commercial uses around Tunnel Hill, Varnell and Cohutta.

Figure 13. Existing Land Uses in Whitfield County

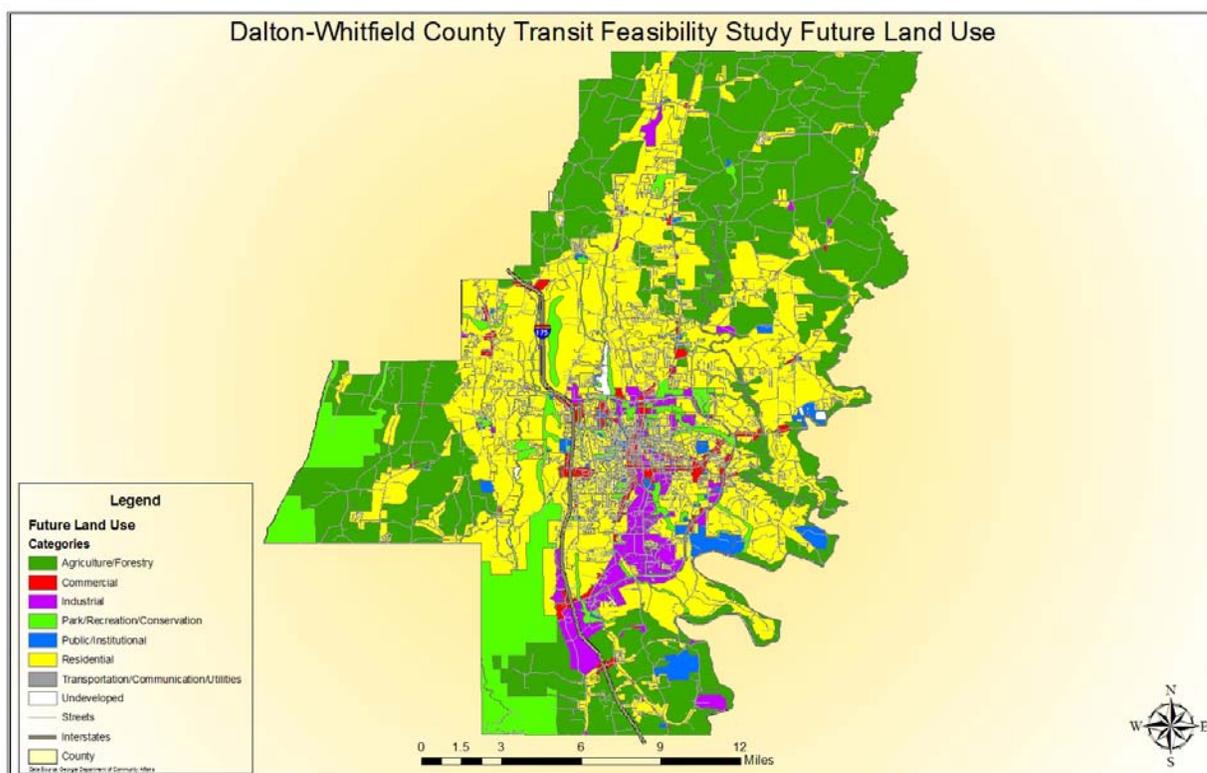




Future Land Use

A review of the future land use map for Whitfield County shows a large area of industrial uses stretching from the south side of Dalton down towards the I-75 corridor (Figure 14). There is also a large tract of industrial use located near Cohutta. Residential uses are prevalent and spread throughout the county. Commercial uses will be concentrated along the major corridors around Dalton, Cohutta, Tunnel Hill and Varnell. Large tracts of land will be preserved; this is especially true in the northeast and southern part of Whitfield County.

Figure 14. Future Land Uses in Whitfield County



2.6 FINDINGS

The Needs Assessment indicated that while Whitfield County does not have the population and population density commonly found in other areas with fixed route public transit service, there is a significant transportation disadvantaged population in the county, particularly in the City of Dalton that would benefit from public transit. Following are some specific findings:

- ✓ Overall, the population and population density of Whitfield County are less



than that of other communities that provide fixed route public transit service (other than Section 5311 rural transportation).

- ✓ Despite the low overall population and population density, there are moderately dense areas in the City of Dalton and in the Cleveland Highway corridor that may be sufficient to support fixed route public transit.
- ✓ The analysis of transportation disadvantaged populations indicated that there are sizable numbers of low-income, elderly, disabled, and minority persons within the county that would likely use a public transit system to access jobs, medical care, and shopping needs. The transportation disadvantaged population is largely focused in the City of Dalton.
- ✓ There are a number of large employers (more than 250 employees at an employment site) in Whitfield County in the manufacturing, medical care, and educational fields. Many of these employers are located in the City of Dalton, although the work sites are dispersed.
- ✓ Whitfield County is projected to continue to grow at a steady pace. As the population ages and the local manufacturing base grows, the need for public transit services will also increase.

Figure 15 shows typical indicators of potential transit need in Whitfield County. These indicators show that while the population base is small, there is a sizable transportation disadvantaged population that would be potential users of a public transit system.

Figure 15. Indicators of Potential Transit Need

Population	Population Density	Low Income	No Autos Available	Elderly Population	Disabled Population	Minority Population
						
83,525 in 2000	1,410 / sq mi in Dalton	11.5% Below Poverty Level	6.6% of Households	10.3% of Population	20.1% of Population	27.8% of Population



Task 3. Service Options



Dalton-Whitfield County Transit Needs Study

Task 3: Analysis of Transit Service Options

This chapter documents tasks that will build on the results of surveyed community goals and objectives and the desired role of transit in Chapter 1. In addition, this chapter will identify mobility challenges, factors that influence transit success, peer transit agencies, potential transit services, and an analysis of transit options.

3.0 MOBILITY CHALLENGES FOR AN URBANIZING COUNTY

Whitfield County, Georgia is rapidly changing to an urbanized North Georgia county. Just 30 years ago, in 1970, the population of Whitfield County was just 42,000. By 2000, Whitfield County's population was 87,000 and its employment was 41,000. Most of its residents work in the local industries within the County.

Public transit services have traditionally been designed to serve densely developed areas that allow for large numbers of people to travel along established routes following set schedules. These services – like those now operated in larger metropolitan areas – have worked well in heavily populated areas with strongly focused travel patterns, such as commuting to downtowns or other major activity centers.

Many growing communities find that the highway system alone does not meet all of the needs of their residents and workers. Those market segments that are unable to use a car (e.g., elderly, low income, disabled persons) are often left without any viable mobility choices if a public transportation system is unavailable. In the past two decades, transit planners have experimented with a range of transit services to meet the mobility needs of suburban development patterns. For example, many growing communities have looked to provide limited transit service that is targeted at a specific travel market segment or non-traditional transit services (such as flexible route and flexible schedule services) that are more effective for low density areas.

The development patterns of Whitfield County have several implications on how transit services may be provided. For example, the southern side of the City of Dalton is primarily industrial in nature; therefore, trip demand tends to occur at peak times associated with work shift changes.

- Demand will be heavily peaked, and these peaks may be at different times of day. For example, an industrial park will have high job-related peaks,



whereas a shopping center will have midday and evening peaks. To maintain reasonable levels of service effectiveness, vehicles may need to operate different routes and service patterns at different times.

- The lower average densities of urbanizing areas means not only that fewer origins or destinations are within walking distance of any transit route but also that the distances traveled between points, on average, are longer. In addition, the sparseness and patterns of suburban and rural streets result in less direct routings and more vehicle miles traveled to serve activities than in urban settings.
- Where buildings are set back from roadways, transit routes may need to deviate off the primary route to provide more convenient service.

3.1 FACTORS THAT INFLUENCE TRANSIT SUCCESS

The selection of transit options for a successful transit system depends to a large extent on segmenting the various travel market segments and matching them to the most appropriate transit services. Figure 1 shows the typical population density ranges (in persons per square mile) for the potential “family of transit services” that may apply to for Whitfield County. Figure 2 compares the current (year 2000) average population density of Whitfield County to that of other similar peer counties.

Figure 1 – Typical Population Density Ranges for Family of Transit Service Options

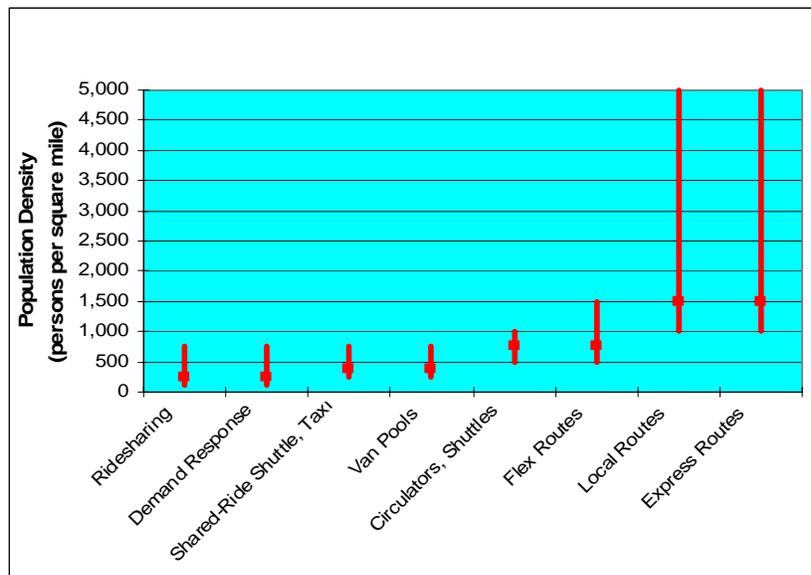
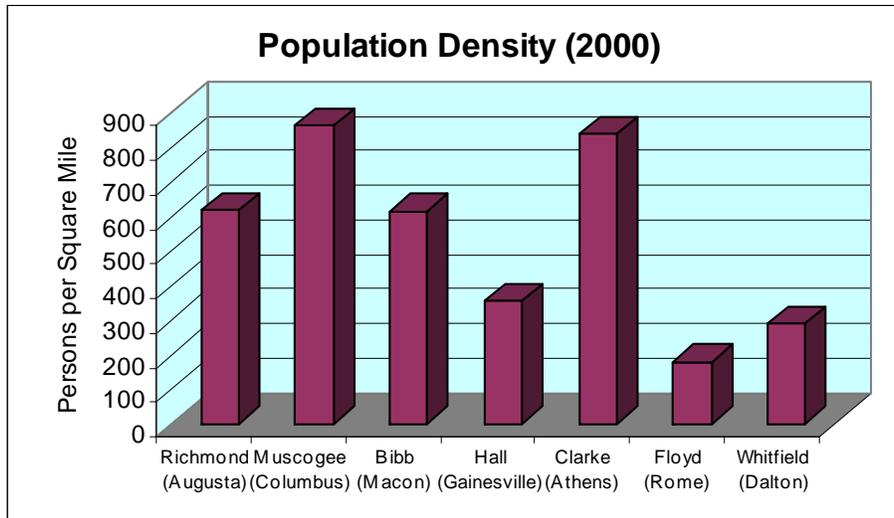




Figure 2 – Average Population Density of Whitfield County and its Peer Counties



The current (2000) average population density for Whitfield County is 288 persons per square mile. While Whitfield's overall density is lower when compared to most peer counties, a closer examination of density at the census tract level reveals higher sub-area densities, particularly within the City of Dalton. Population density is a basic measure of transit ridership potential. Employment density is also an important measure of transit demand because the largest share of transit travel is for commuting to and from work places. Areas with higher density tend to have higher rates of public transportation usage, and denser areas also make for more efficient transit routes.

Planning effective transit solutions for a low density community like Whitfield County can be a challenge. The following sections identify peer transit agencies comparable to the Dalton and Whitfield County area, the range of potential transit service options, and formulate a set of service alternatives for the City of Dalton and the County.

3.2 PEER TRANSIT SERVICE AGENCIES

A review of transit programs operating in similar size cities was performed to determine the type of transit services that are operated and their individual ridership patterns. Transit agencies were chosen based on both the service area population and the county population. In some cases, the population served by transit is roughly half of the county population. These peer agencies provide a useful benchmark for Dalton and Whitfield County during the transit implementation process. The peer transit systems are:



- Albany, GA
- Athens, GA
- Johnson City, TN
- Macon, GA
- Monroe, LA
- Parkersburg, WV
- Rome, GA

Table 3-1 profiles four key operating characteristics of seven peer transit systems: annual passenger trips, annual operating costs, annual revenue vehicle-hours, and annual revenue vehicle-miles for both fixed route bus operations and demand response operations. When comparing all the peer systems, average annual passenger trips are about 721,000 passengers and 17,000 passengers for bus and demand response, respectively.

Total average annual operating cost (bus plus demand response) for these seven systems is approximately \$1.9 million; Johnson City, TN has the lowest annual cost at approximately \$930,000 and Macon has the highest annual cost at approximately \$3.0 million. The peer systems provide an average of about 425,000 annual revenue vehicle-hours and 587,000 annual revenue vehicle-miles of bus service and an average of about 8,500 annual revenue vehicle-hours and 75,000 annual revenue vehicle-miles of demand response service.

As additional comparative information, Table 3-1 also provides population, service area (square miles), population density and peak vehicles for each of the peer systems and for Dalton and Whitfield County. The FY 2002 service area population ranges from 37,000 (Rome) to 135,000 (Macon). The geographic area served by the peer systems, ranging from 14 to 81 square miles, compares to 20 square miles in the City of Dalton and 290 square miles in the county. The range of population densities served in the peer systems is also generally comparable to the City of Dalton. The number of peak vehicles in these seven agencies range from 6 to 22, with an average of 14.



**Table 3-1
 System Characteristics
 Bus and Demand Response Agencies, FY 2002**

Peer Agency	2000 Census Urbanized Area			FY 2002 Service Area			Peak Vehicles		Annual Operating Cost		Annual Passenger Trips		Annual Revenue Vehicle Miles		Annual Revenue Vehicle Hours	
	Population	Square Miles	Population Density	Population	Square Miles	Population Density	Bus	Demand Response	Bus	Demand Response	Bus	Demand Response	Bus	Demand Response	Bus	Demand Response
Albany, GA	95,450	66	1,446	75,929	17	4,466	8	4	\$1,224,584	\$459,887	613,585	30,897	508,076	178,890	37,036	14,331
Athens, GA	106,482	80	1,331	101,000	44	2,295	19	3	\$2,288,243	\$254,249	787,110	11,477	650,127	11,477	47,376	6,550
Johnson City, TN	102,456	91	1,126	49,381	33	1,496	6	8	\$930,627	\$519,060	322,576	32,642	286,142	158,063	20,110	16,336
Macon, GA	135,170	81	1,669	135,170	81	1,669	19	N/A	\$3,086,114	N/A	1,447,535	N/A	1,121,821	N/A	88,144	N/A
Monroe, LA	113,818	78	1,459	55,000	31	1,774	15	2	\$2,593,288	\$280,065	667,192	6,392	632,924	27,955	47,288	4,216
Parkersburg, WV	85,605	50	1,712	49,910	14	3,565	9	2	\$1,287,433	\$198,314	288,414	12,722	445,097	38,476	33,488	5,266
Rome, GA	58,287	41	1,422	37,000	24	1,542	22	2	\$1,667,243	\$99,409	920,040	7,650	465,630	35,190	24,225	4,080
Peer System:																
Average	99,610	70	1,452	71,913	35	2,401	14	4	\$1,868,219	\$301,831	720,922	16,963	587,117	75,009	42,524	8,463
Low	58,287	41	1,126	37,000	14	1,496	6	2	\$930,627	\$99,409	288,414	6,392	286,142	11,477	20,110	4,080
High	135,170	91	1,712	135,170	81	4,466	22	8	\$3,086,114	\$519,060	1,447,535	32,642	1,121,821	178,890	88,144	16,336
Dalton, GA	57,666	54	1,068													

Notes:
 2000 Census Urbanized Area statistics from the U.S. Census Bureau.
 All other statistics from FY 2002 National Transit Database transit agency profiles.



System Performance Measures

Table 3-2 compares the performance of the peer transit systems in FY 2002 in areas of service efficiency, cost effectiveness, and service effectiveness.

- **Service Efficiency.** Service efficiency measures indicate how well a transit system uses its resources in providing service. Two measures are included: operating cost per revenue vehicle-mile and operating cost per revenue vehicle-hour. Lower costs indicate systems performing more efficiently than systems with higher costs.
- **Cost Effectiveness.** Cost effectiveness measures indicate how productive a transit system is in terms of costs. The following cost effectiveness measures are included: operating cost per passenger trip and farebox recovery ratio (for bus operations and demand response services), and system-wide subsidy per passenger trip (for all funding sources and for local funding). For farebox recovery, higher percentages indicate systems performing better than those with lower percentages. For cost per passenger trip and subsidy per passenger trip, lower costs signify more effective systems.
- **Service Effectiveness.** Service effectiveness measures indicate how productive a transit system is in providing service. Two measures are included: passenger trips per revenue vehicle-mile and passenger trips per revenue vehicle-hour. In both cases, higher amounts designate better performing systems.

While some peer systems perform better than others, this peer agency analysis section is primarily intended to provide a range of the performance of these systems as a whole. For service efficiency, the Albany system has the lowest cost per revenue-mile (\$2.41) and per revenue vehicle-hour (\$33.06). For cost effectiveness and service effectiveness, Rome's bus operations system performs better than the other six peer systems except in the category of farebox recovery. The Athens Transit System has the highest farebox recovery ratio at 32%. Looking at system-wide (bus operations and demand response combined) subsidy per passenger trip, the average subsidy required by all funding sources is \$2.75 with a range of \$1.39 (Rome, GA) to \$4.48 (Parkersburg, WV); the average subsidy required by only local funds is \$1.57 with a range of \$0.88 (Rome, GA) to \$2.59 (Monroe, LA).



Table 3-2
System Performance Measures
Bus and Demand Response Agencies, FY 2002

Peer Agency	Service Efficiency				Cost Efficiency						Service Effectiveness			
	Cost per Rev. Veh-Mile		Cost per Rev. Veh-Hour		Cost per Pass. Trip		Farebox Recovery (1)		Subsidy per Pass. Trip All Funding (2)		Pass Trips per Rev. Veh-Mile		Pass Trips per Rev. Veh-Hour	
	Bus	Demand Response	Bus	Demand Response	Bus	Demand Response	Bus	Demand Response	Local Funding		Bus	Demand Response	Bus	Demand Response
Albany, GA	\$2.41	\$2.57	\$33.06	\$32.09	\$2.00	\$14.88	25%	9%	\$2.37	\$1.74	1.21	0.17	16.57	2.16
Athens, GA	\$3.52	\$3.64	\$48.30	\$38.82	\$2.91	\$22.15	32%	9%	\$2.25	\$1.61	1.21	0.16	16.61	1.75
Johnson City, TN	\$3.25	\$3.28	\$46.28	\$31.77	\$2.88	\$15.90	13%	13%	\$3.56	\$0.91	1.13	0.21	16.04	2.00
Macon, GA	\$2.75	N/A	\$35.01	N/A	\$2.13	N/A	27%	N/A	\$1.55	\$1.00	1.29	N/A	16.42	N/A
Monroe, LA	\$4.10	\$10.02	\$58.84	\$66.43	\$3.89	\$43.81	15%	1%	\$3.69	\$2.59	1.05	0.23	14.11	1.52
Parkersburg, WV	\$2.89	\$5.15	\$38.49	\$37.66	\$4.46	\$15.59	10%	3%	\$4.48	\$2.23	0.65	0.33	8.62	2.42
Rome, GA	\$3.58	\$2.82	\$68.82	\$24.36	\$1.81	\$12.99	26%	38%	\$1.39	\$0.88	1.98	0.22	37.68	1.88
Peer System:														
Average	\$3.21	\$4.58	\$46.97	\$38.52	\$2.87	\$20.89	21%	12%	\$2.75	\$1.57	1.22	0.22	18.01	1.96
Low	\$2.41	\$2.57	\$33.06	\$24.36	\$1.81	\$12.99	10%	1%	\$1.39	\$0.88	0.65	0.16	8.62	1.52
High	\$4.10	\$10.02	\$68.82	\$66.43	\$4.46	\$43.81	32%	38%	\$4.48	\$2.59	1.98	0.33	37.68	2.42

Notes:

Statistics are from FY 2002 National Transit Database transit agency profiles.

(1) Farebox Recovery reflects portion of operating expenses recovered from fare revenues. Fare revenues include local service contracts with area organizations, in addition to farebox revenue.

(2) All Funding Subsidy per Passenger Trip includes federal, state, local, and other miscellaneous funding sources, excluding fare revenue.



3.3 DEVELOP INITIAL TRANSIT SERVICE OPTIONS

This section documents the development of initial transit service options designed to meet the mobility needs of the Dalton and Whitfield County area. The process of defining transit options began with field work examining land uses and access conditions throughout Whitfield County, paying special attention to developing preliminary bus route corridors and service areas for more detailed service planning and analysis.

Introduction to Transit Service Types

Where transit operators once had well-defined downtown cores and could provide radial networks that served them effectively, the development pattern of most urban areas now contains multiple centers, lower overall densities, and multiple origin/destination pairs. Some transit operators have been successful by offering riders a “family of services” concept, such as local and express bus routes, cross-town services, activity center circulators, carpools/vanpools, and demand response community-based services. In many cases, non-traditional transit services have been added to enhance existing fixed route services. These complementary services are designed to meet localized needs, niche markets and low density markets where fixed route services cannot be effective.

The various types of possible transit service options vary in terms of “where” and “when” service is provided. Routing is the spatial path of the vehicles, and determines the accessibility of the transit system to potential riders and the degree to which the desired destinations are served. Scheduling defines when transit vehicles will be available to riders for service. Both routing and scheduling can be fixed or flexible. Table 3-3 shows various types of fixed-route and flexible-route transit. Service types applicable to small urbanized and rural areas such as the Dalton and Whitfield County area are described below.

Table 3-3: Range of Service Types

	Fixed-Route	Flexible-Route
Fixed-Schedule	<ul style="list-style-type: none">• Local Bus• Express Bus• Activity Center Circulators	<ul style="list-style-type: none">• Route Deviation• Point Deviation• Carpools/Vanpools
Flexible-Schedule	<ul style="list-style-type: none">• Jitneys	<ul style="list-style-type: none">• Demand Response



- Local bus service is fixed-route, fixed-schedule service. It operates along a defined route and reaches certain points at set times. Transit providers may vary the type of vehicles (small, medium or large), frequency of service, and operating hours (weekdays, Saturdays and Sundays) according to passenger demand. Typical fares in neighboring areas range from \$1.00 to \$1.25. Examples of local routes are Rome Transit Department's #1A, 2A, 1B, 2B, and 3 operating throughout the City of Rome.
- 
- Express bus service is a variation where buses make very limited stops, and service is provided from a single origin, usually a park and ride lot, to a downtown or major activity center. Express bus services operate at their optimal level where densities (population and employment) are high and people are likely to walk to and from the bus stops to their destinations.
 - Deviation service (route or point) has a fixed-schedule, but the route alignment is flexible. Route deviation service involves vehicles traveling along a fixed route and maintaining a schedule, but may leave and return to the fixed route to pick up passengers within a limited distance from the route. With point deviation service, vehicles make stops at certain points at scheduled times, but the vehicle has the flexibility to follow any route needed to pick up passengers along the way. Deviation service offers more personalized service in areas where most of the riders have some flexibility in schedules that allow for deviations without being seen as a decrease in service quality.
 - Carpools and vanpools are also generally fixed-schedule, but flexible-route options. A number of people ride to and from work together (either in a car or a van) on a regular basis. Passengers can be picked up at their homes or meet at one location (such as a park and ride lot), and are dropped off at or near their jobs.
- 
- Activity center circulators are typically vans or small buses that operate along a fixed route within a fairly densely developed activity center like a downtown area or a regional shopping center. These circulators often



cater to short trips, usually between a work place and a shopping or restaurant destination. Passenger fares are typically nominal or free.

- Demand response service is the most flexible type of service and is activated based on passenger requests. Usually passengers call ahead to request a ride for a particular date and time between a particular origin and destination. Passengers are picked up and dropped off either at the door or at the closest curb location along the road.

The following operating scenarios exist for demand responsive transit.

- many-to-many,
- many-to-few,
- few-to-many,
- few-to-few, and
- many-to-one.



Many-to-many occurs when the transit provider places no constraints on the type of trips it handles. In other words, the origins and destinations are random and can occur anywhere. *Many-to-few* occurs when the provider has only a couple of popular destinations (hospitals, shopping areas, and the like) and random origins. *Few-to-many* occurs when the reverse happens. *Few-to-few* serves a limited number of origins and destinations. Finally, *many-to-one* occurs when there is only one destination, such as a senior center, and random origins.

Demand response service can be provided as subscription service, advanced reservation service, or real-time scheduling service. Subscription services work best when a passenger or group of passengers requests the same trip repetitively. These trips are scheduled on a subscription or “standing order” basis. Subscription services are useful where there is some regularity to ridership patterns. Advanced reservation services require passengers to call ahead and reserve a ride for a particular date and time in the future, for every trip they make. Many operators provide both subscription and advanced reservation services. Real-time scheduling closely resembles taxi operations and allows passengers to call and request a trip just before it is needed. This type of service is not common along public transit operators as a stand-alone service, but some providers will try to fit last-minute callers into scheduled trips when possible.

- Complementary paratransit service is a specific type of demand response service, required by the Americans with Disabilities Act (ADA), which is



operated in addition to fixed-route local bus service to accommodate disabled persons who cannot use the fixed-route system. The requirements for this type of service are discussed in the Complementary Paratransit Service section of this report.

Current Public Transit Service in Whitfield County

Demand responsive service within Whitfield County is operated by Mountain Area Transportation Services (MATS). The federal Non-Urbanized Area Formula Program (Section 5311) provides federal funding for capital, operating and administrative uses to enhance the accessibility of people in non-urbanized areas to health care, shopping, education, employment, public services, and recreation. MATS is operated by the non-profit North Georgia Community Action Program through Third Party Operator agreements with six county units of government as recipients of Section 5311 funds: Whitfield, Fannin, Gilmer, Gordon, Pickens, and Whitfield counties. Within Whitfield County, MATS provides demand responsive public transit services to shopping areas, medical appointments, and other locations. MATS is an approved Medicaid non-emergency transportation provider. MATS' major client groups are senior citizens and those with physical or mental disabilities that inhibit them from using private transportation. Passengers must call in advance to schedule a trip. Reservations for service are generally made 24 hours in advance. Curb-to-curb service is provided.

MATS operates a total of eight vehicles, including three ambulatory vehicles and five ADA-capable vehicles, in Whitfield County from 8:30 AM to 4:30 PM, Monday through Friday. Five of the vehicles are equipped with wheel chair lifts. Each vehicle handles a designated area of the County, but can deviate from that area depending on the location of reserved riders.

Service for the general public is provided by MATS primarily to shopping centers and doctors' offices. Within Whitfield County about 150 trips per day are made by members of the general public (not sponsored by a social service agency). The fare for the general public is 30 cents per mile with a minimum one-way trip fare of \$1.50 or a minimum round-trip fare of \$3.00. Wheelchair services costs \$3.85 for the first ten miles plus 42 cents per mile.

The small number of general public customers is due to the lack of frequent service, the limited service area, and its short span of service. Due to its relatively short operating schedule, MATS services are not suitable for work trips.

Within Whitfield County, MATS is presently unable to expand its service due to lack of funds.

A number of private taxi companies operate in the City of Dalton and Whitfield



County including American Cab, Dalton Taxi, Mary's Taxi, Express Taxi, and Servi-Taxi LLC. Service is also available to the Chattanooga Airport and Hartsfield-Atlanta International Airport. Typical rates from taxi companies are \$1.50-\$2.00 for a pull-up fee and each additional mile costs \$1.00-2.00. Taxi fleet sizes in the Dalton area vary from 4-10 taxis.

3.4 POTENTIAL TRANSIT SERVICE ALTERNATIVES

The pattern of development in Dalton, including the location of major destinations, was examined to assess the area's potential to be served by transit. Within Whitfield County, development of larger employment, residential, shopping, and community facilities has been largely confined to the city limits of Dalton. Additionally, a number of activity centers are located within the city limits of Dalton, including retail, commercial, industrial areas, the Hamilton Medical Center and related medical facilities, government offices, Dalton State College and social service agencies. Many of these activity centers are located along major linear corridors extending outward from downtown Dalton. For a new transit service to be successful in Dalton, it should be designed to provide linkages to the community's primary destinations, including downtown Dalton, Dalton State College, retail and commercial areas, major medical facilities, and a number of employment centers along these linear corridors.

This pattern of development exhibited in Dalton makes the area conducive to transit, especially by a local fixed-route service. Fixed-route service can accommodate a larger number of people and be more cost effective than a demand-response service in areas where larger numbers of residents, activity centers, and destinations can be served by a fixed-route pattern.

Potential Local Routes

Local fixed-route service is proposed within the city limits of Dalton. The remaining municipalities within Whitfield County do not have the necessary densities to support local fixed-route service. Dalton has a high concentration of Hispanic residents that are typically identified as needing or choosing public transit service. Specifically, forty percent (11,219) of Dalton's city population is Hispanic.

Public transit could serve two primary types of trip needs in the Dalton area:

- Work trips utilized primarily by low-income persons who do not have automobile access.
- Non-work trips to shopping, medical or personal business destinations made by residents who do not have automobile access.



The transit service alternatives developed for Dalton includes six fixed routes radiating from a proposed Cuyler Street Multi-Modal Transit Center (MMTC) to major outlying activity center destinations. Five of these routes are primarily linear routes offering service to the major commercial, medical, employment and residential corridors within Dalton. The sixth route is a circulator route serving the major industrial employment sites located in the southern section of Dalton.

The outer destinations of the five linear routes are:

- Chatsworth Highway Wal-Mart
- Walnut Square Mall
- Dalton State College
- Hamilton Medical Center
- Northside Shopping Center Bi-Lo/Glenwood Avenue area

Multi-Modal Transit Center (MMTC)

The City of Dalton recently acquired the historic Norfolk Southern Railway Depot located in downtown Dalton. The site is located between Hamilton Street, the Norfolk Southern Railway line, West Morris Street and Cuyler Street. The depot is within convenient walking distance to many commercial destinations in downtown. Furthermore, with sidewalk improvement, the MMTC will connect the site to the adjacent downtown developments and businesses. The MMTC will provide a focal point for transportation services in the City and make it easier for residents and visitors to access the various bus routes and transfer between routes.

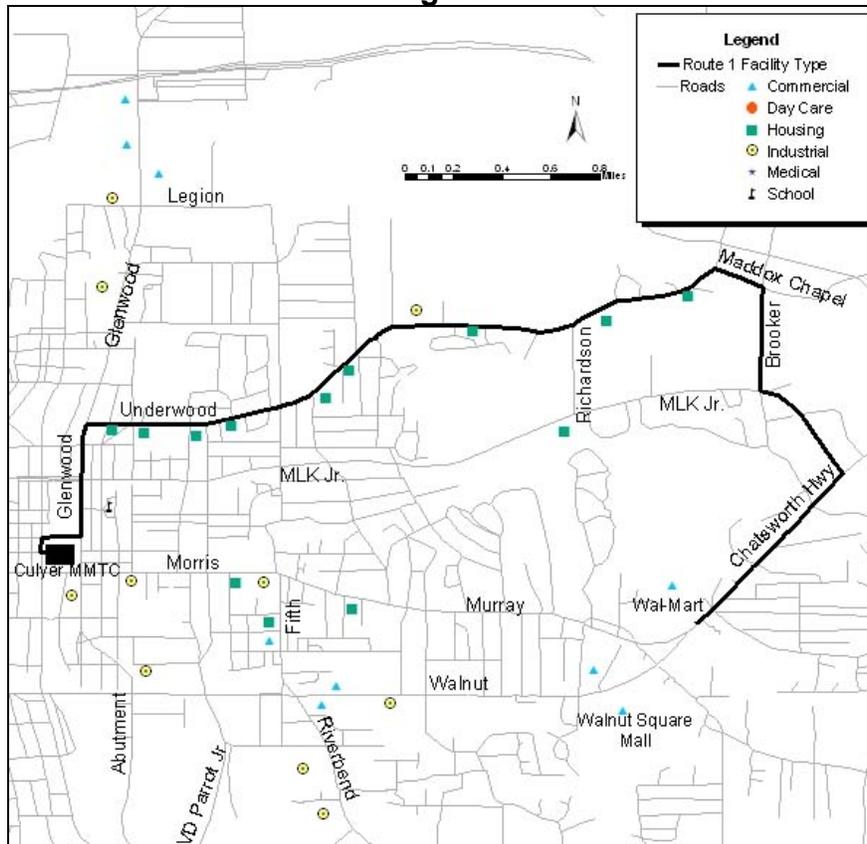
A preliminary review of the building and site revealed that the MMTC could accommodate at least four bus bays for local bus service and parking for staff vehicles. The existing street immediately west of the building would need to be closed to public traffic to enable buses to travel a northbound circulation pattern to access the MMTC and allow for the boarding and alighting of passengers. Additionally, there is adequate interior space for a passenger waiting area with seating, public and staff restrooms, customer service/ticket sales area, a supervisor office, a transit system information kiosk and an area displaying other community information and/or local area advertisements.



Route 1 – Wal-Mart/Underwood

This proposed route would operate service from the Multi-Modal Transit Center to the Wal-Mart Supercenter via Glenwood, Underwood, Brooker, Martin Luther King, Jr, and Chatsworth Highway. Buses would operate every 30 minutes during peak and midday periods, Monday through Saturday.

Figure 3-1



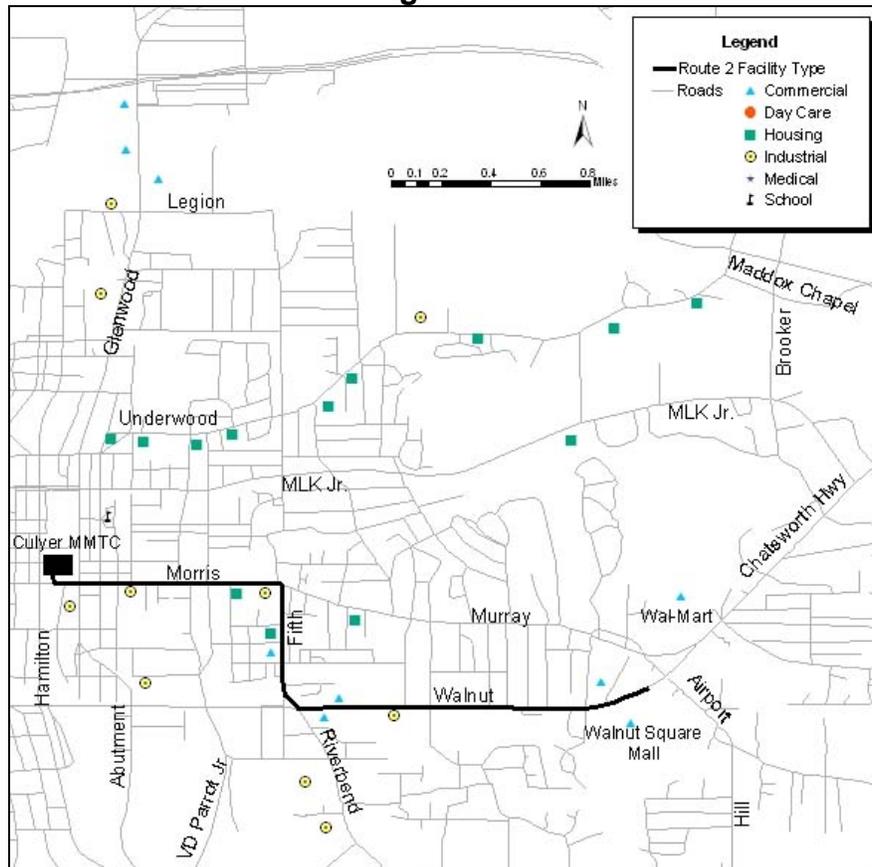
Operating Statistics	
Route Length	5.1 miles
Span of Service	6am - 6pm, Monday - Saturday
Service Frequency	30 minutes
Peak Buses	2
Daily Revenue Hours	24
Daily Revenue Miles	244.8
Total Population Served	2,814
Low Income Population Served	782
Estimated Annual Operating Costs	\$404,000.00
Estimated Daily Ridership	480
One-Way Trip Time	20 minutes



Route 2 – Walnut Square Mall/Walnut Avenue

This proposed route would operate service from the Multi-Modal Transit Center to Walnut Square Mall via Morris, Fifth and E. Walnut. Buses would operate every 30 minutes during peak and midday periods, Monday through Saturday.

Figure 3-2



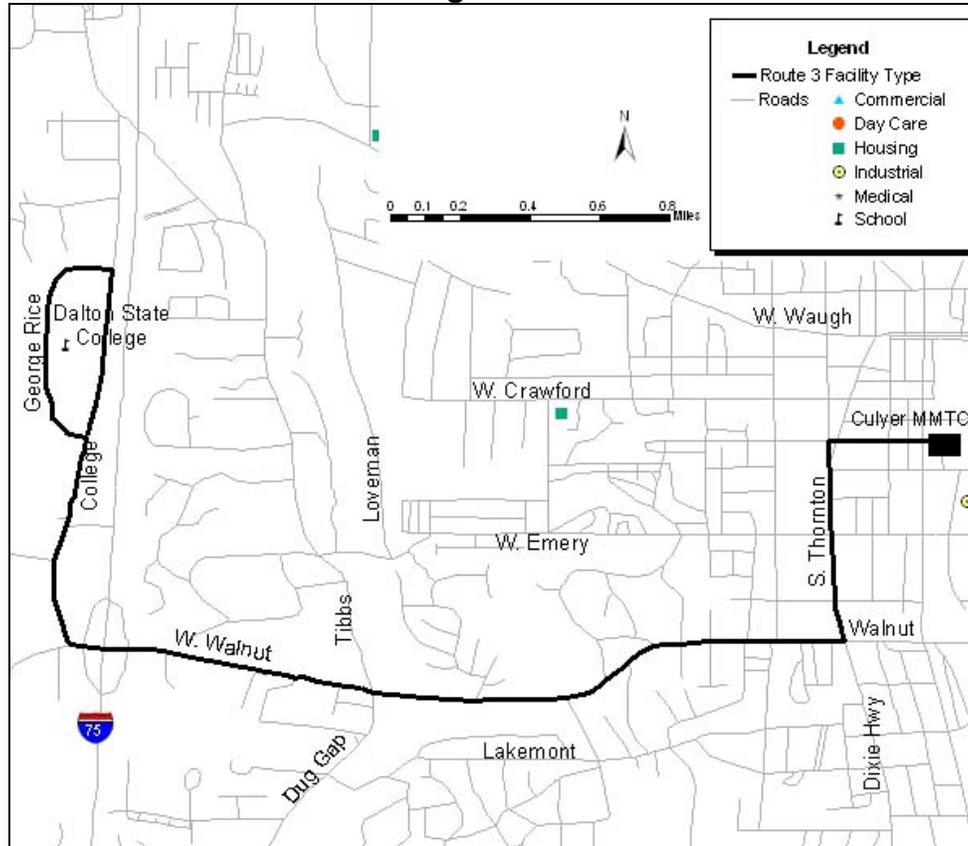
Operating Statistics	
Route Length	2.8 miles
Span of Service	6am - 6pm, Monday - Saturday
Service Frequency	30 minutes
Peak Buses	1
Daily Revenue Hours	12.0 hours
Daily Revenue Miles	134.4
Total Population Served	2,067
Low Income Population Served	557
Estimated Annual Operating Costs	\$202,000.00
Estimated Daily Ridership	180
One-Way Trip Time	14 minutes



Route 3 – Dalton State College/W. Walnut Avenue

This proposed route would operate service from the Multi-Modal Transit Center to Dalton State College via Thornton, W. Walnut, College, and George Rice. Buses would operate every 30 minutes during peak and midday periods, Monday through Saturday.

Figure 3-3



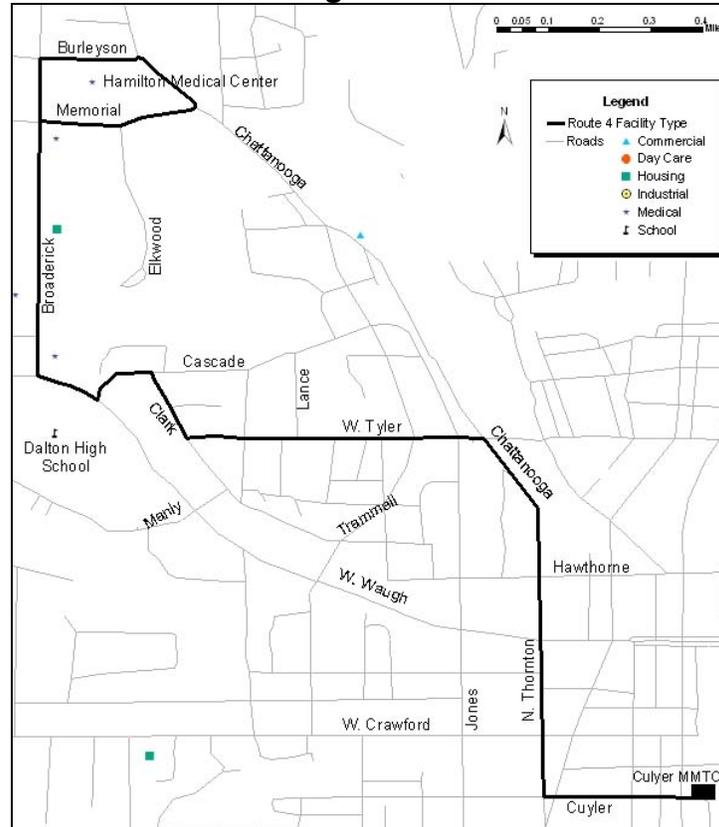
Operating Statistics	
Route Length	4.7 miles
Span of Service	6am - 6pm, Monday - Saturday
Service Frequency	30 minutes
Peak Buses	1
Daily Revenue Hours	12.0 Hours
Daily Revenue Miles	225.6
Total Population Served	2,459
Low Income Population Served	501
Estimated Annual Operating Costs	\$202,000.00
Estimated Daily Ridership	120
One-Way Trip Time	16 minutes



Route 4 – Hamilton Medical Center/Broaderick

This proposed route would operate service from the Multi-Modal Transit Center to the Hamilton Medical Center via Thornton, Tyler, Clark, Cascade, W. Waugh, Broaderick, Burleyson, and Memorial. Buses would operate every 30 minutes during peak and midday periods, Monday through Saturday.

Figure 3-4



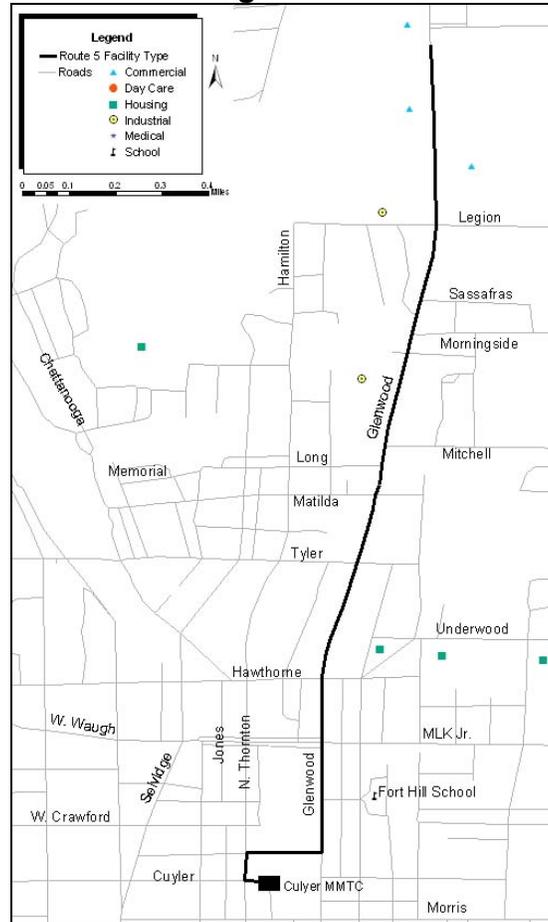
Operating Statistics	
Route Length	2.7 miles
Span of Service	6am - 6pm, Monday - Saturday
Service Frequency	30 minutes
Peak Buses	1
Daily Revenue Hours	12.0
Daily Revenue Miles	129.6
Total Population Served	1,757
Low Income Population Served	323
Estimated Annual Operating Costs	\$202,000.00
Estimated Daily Ridership	180
One-Way Trip Time	13 minutes



Route 5 – Bi-Lo/Glenwood Avenue

This proposed route would operate service from the Multi-Modal Transit Center to the Northside Shopping Center Bi-Lo via Gordon and Glenwood. Buses would operate every 30 minutes during peak and midday periods, Monday through Saturday.

Figure 3-5



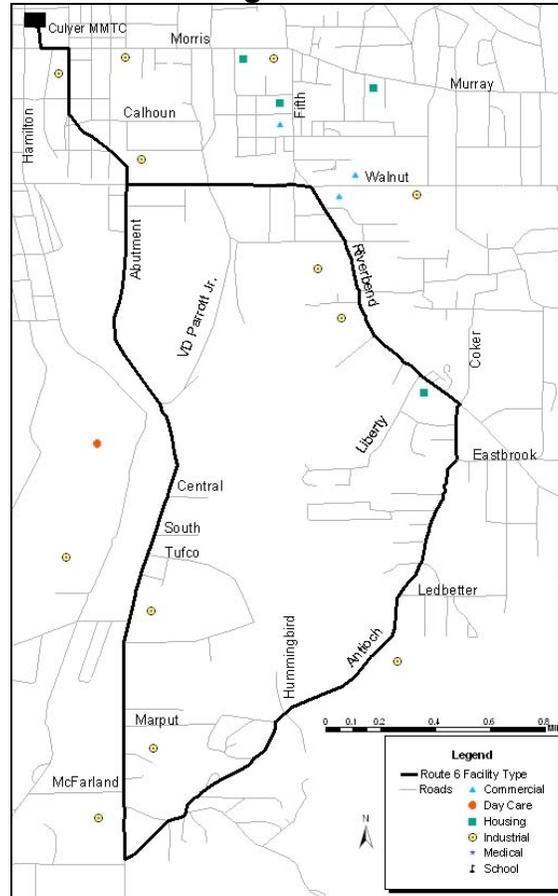
Operating Statistics	
Route Length	2.3 miles
Span of Service	6am - 6pm, Monday - Saturday
Service Frequency	30 minutes
Peak Buses	1
Daily Revenue Hours	12 hours
Daily Revenue Miles	110.4
Total Population Served	2,206
Low Income Population Served	528
Estimated Annual Operating Costs	\$202,000.00
Estimated Daily Ridership	180
One-Way Trip Time	13 minutes



Route 6 – Abutment/Antioch/Riverbend Circulator

This proposed south Dalton industrial-center loop route would operate a circulator service from the Multi-Modal Transit Center via Abutment, Antioch, Riverbend, and W. Walnut. Buses would operate every 30 minutes during peak and midday periods, Monday through Saturday.

Figure 3-6



Operating Statistics	
Route Length	7.7 miles
Span of Service	6am - 6pm, Monday - Saturday
Service Frequency	30 minutes
Peak Buses	1
Daily Revenue Hours	12.0
Daily Revenue Miles	369.6
Total Population Served	2,612
Low Income Population Served	513
Estimated Annual Operating Costs	\$202,000.00
Estimated Daily Ridership	90
One-Way Trip Time	12 minutes



This local route system would require the operation of seven vehicles in peak service, providing a service frequency of approximately 30 minutes on each route. Due to the level of anticipated ridership demand, the buses should be of a configuration with approximately 20-25 seats and be ADA accessible.

A key element of the service design is the connection of routes at the downtown Multi-Modal Transit Center (MMTC). The individual route schedules will be synchronized to arrive simultaneously, with departures occurring a few minutes later. This would permit convenient transfer opportunities between the routes and minimize passenger travel times and wait times at the MMTC. In addition to the Cuyler Street MMTC and outer terminal destinations, bus stops should be strategically placed in locations where typical ridership activity is expected, such as shopping centers and commercial areas, employment centers, and intersecting residential streets. Furthermore, traffic and pedestrian issues should be considered when placing bus stops.

Potential service will be provided Monday through Saturday from approximately 6:00am to 6:00pm. An estimate of the transit program costs were also prepared and are listed in the associated table for each route.

Complementary Paratransit Service

The Americans with Disabilities Act of 1990 (ADA) includes regulations that apply to the accommodation of disabled individuals as specified in the Act. The ADA regulations are intended to mainstream people with disabilities into a common transportation system by ensuring that the basic system is accessible, and to provide a “safety net” of service for those who cannot use the fixed-route system. All new transit system must be in full compliance with ADA requirements; no phase-in period is permitted for new systems.

Paratransit Planning Regulatory Requirements

When local fixed-route service is provided, paratransit service must also be provided to those individuals unable to use the fixed-route service, as defined in the ADA. The paratransit service element must be “complementary” and “comparable” to the fixed-route transit service.

Specifically, the paratransit service must, at a minimum:

- Be provided in all areas where local fixed-route service is operated (defined, at a minimum, as all areas within $\frac{3}{4}$ of a mile of fixed routes);
- Offer at least “next day” service, with advance reservations more than one



day in advance to be defined locally;

- Have a fare that is no more than twice the base, non-discounted fixed-route fare;
- Be provided during all days and hours that local fixed-route service is operated;
- Be provided for all types of trips, without prioritization; and
- Be offered without waiting lists, trip caps, or other capacity constraints.

When local fixed-route service is provided by a public entity, paratransit service is a required complementary element. However, for other types of services, the paratransit requirements differ:

- Commuter (express) bus service does not require complementary paratransit service, however all vehicles must meet ADA accessibility requirements.
- Route or point deviation service does not require complementary paratransit service, because it is considered equivalent to that which would be required under the ADA.
- Demand response service does not require complementary paratransit service, because it is considered equivalent to that which would be required under the ADA.

The ADA also includes requirements regarding vehicle accessibility. In almost all cases, vehicles used in transit service must be readily accessible to and usable by individuals with disabilities, including individuals who use wheelchairs, meaning vehicles must have wheelchair positions and lifts or ramps.

Paratransit Service Options

By federal law any transit system providing local fixed-route service is required to provide complementary paratransit service for disabled persons. The service required is specific, though somewhat limited in geographic service level. Service providers can choose to expand the paratransit service beyond the basic requirements if they so desire. Given these factors, the options for the paratransit component of an agency transit system are outlined below.

If fixed-route service is provided, the options available for the



complementary paratransit service (ranked low cost to high) are:

1. Provide complementary paratransit service only in the required $\frac{3}{4}$ mile buffer areas only at levels required in ADA. *Operational implications – paratransit service would provide origin/destination service within the fixed-route buffer area.*
2. Provide complementary paratransit service in required buffer area plus demand response service in expanded geographic area (which could include the entire urbanized area or county) with a limited level of service (i.e. a limited service schedule such as only on certain days of the week or with user prescheduling requirements). *Operational implications – would function in a fashion which mirrors fixed-route service providing origin/destination service focused primarily on the required buffer area, with feeder demand response service in and out of the buffer area.*

If no fixed-route service is provided, the options available for demand response service (ranked low cost to high) are:

1. Provide no demand response service (no federal ADA requirement).
2. Provide demand response service in a limited geographic area with a limited level of service. *Operational implications – provides curb to curb or door to door service operated in a fashion which does not place constraints by origin and destination, but may not reach or optimally serve all residents.*
3. Provide demand response service on a county-wide basis at optimal level of service. *Operational implications – provides curb to curb or door to door service operated in a fashion which does not place constraints by origin and destination.*

A human service agency component is not required as a part of the regulations and most public transit agencies elect not to provide coordinated service for those agencies due to cost and difficulty in meeting the various needs.

Consistent with the ADA guidelines, complementary paratransit service will be planned for each of the six Dalton local fixed routes. Accessible paratransit service would be provided within $\frac{3}{4}$ mile of each route, during the same operating hours as the local service.



3.5 ANALYSIS OF TRANSIT SERVICE OPTIONS

The proposed transit service options have been screened based on preliminary estimates of ridership, operating and capital cost estimates, and operating characteristics.

Transit Service Options

This section documents the development of an initial set of transit service options that meet the needs of the Dalton and Whitfield County area. A broad range of options has been identified and then narrowed into a set of three service options offering different combinations of demand response and local bus service. Each option includes alternative service areas and varying funding levels.

Using the demand response options and the proposed local routes described in Section 3.4, a set of three initial service option “packages” comprised of combinations of service options were developed. These service options are intended to encompass a broad range of possible service levels and a corresponding range of funding commitments for review.

<u>Option</u>	<u>Description</u>
1	Option 1 is the existing MATS service with no upgrades or expansion in current service levels. This option would require the eight peak demand response vehicles currently operating by MATS, Monday through Friday.
2	Option 2 would expand MATS’ demand response service to better meet the demand for services throughout Whitfield County. This option would require 12 peak demand response vehicles operating an average of 10 hours per day, Monday through Saturday. This option would require the purchase of four additional demand response vehicles.
3	Option 3 represents the largest transit system that could be operated with the service options listed above. This option includes local fixed route service limited to the City of Dalton. This option also includes complementary paratransit service operated within $\frac{3}{4}$ mile of the local routes for eligible persons. In addition, demand response service would be extended outside the City of Dalton to the remainder of Whitfield County. This option would require seven peak vehicles for local fixed route and two vehicles for complementary paratransit service plus the eight demand response



vehicles operated by MATS.

The three packages of initial transit service options, described above, are summarized in Table 3-4.

Table 3-4
Summary of Transit Service Options

Service Option	Demand Response				Local Bus Service				Total			
	Area	Peak Vehicles	Annual Vehicle-Hours	Annual Operating Costs	Routes	Peak Vehicles	Annual Vehicle-Hours	Annual Operating Costs	Routes	Peak Vehicles	Annual Vehicle-Hours	Annual Operating Costs
1	Existing MATS service	8	16,256	\$731,520	None	None	None	None	None	8	16,256	\$731,520
2	Whitfield County	12	36,000	\$1,620,000	None	None	None	None	None	12	36,000	\$1,620,000
3	Dalton & Whitfield County	10	31,200	\$1,404,000	6	7	25,200	\$1,386,000	6	17	56,400	\$2,790,000

Notes:

1. Unit costs of revenue service are: \$45/hour for demand response; \$55/hour for local fixed route.
2. Costs are estimated in FY 2005 dollars.

3.6 CAPITAL FACILITIES AND EQUIPMENT

In addition to ongoing operating costs, the start-up of new transit services would require a sizeable investment in buses and facilities. The estimated capital costs (revenue vehicle and facility costs) are described below.

Revenue Vehicle Costs

For full implementation of all six fixed routes, nine (9) fixed route vehicles would be required. To offer both fixed route service and complementary paratransit service, two (2) additional vehicles will be required for the ADA paratransit service for a total of eleven (11) vehicles.

For the Dalton local bus service plan, small buses (30 feet or less in length) are recommended, with a typical seating capacity of between 16 and 20 passengers plus two wheelchair positions. The use of smaller buses allow ease of maneuverability on narrow and circuitous streets, permitting them to serve neighborhoods and shopping centers that large buses cannot. Small buses also allow transit agencies to more effectively match vehicle capacity with demand, by appropriately sizing the vehicle to match ridership. Unit costs were derived from the American Public Transportation Association's (APTA) 2000 Transit Vehicle Data Book. The APTA Data Book provides actual bid costs for recent U.S. transit agency bus orders from a robust sample of manufacturers and various vehicle specifications. Based on a unit cost of \$225,000 for a 30-foot bus, the estimated capital cost for the six local routes is \$2,025,000.



For the two ADA paratransit vehicles required, it is recommended that the vehicles be purchased through the Georgia Department of Administrative Service's Statewide Vehicle Procurement contract. The current contract includes a 21-foot Goshen shuttle van. The vehicle is equipped with a wheelchair lift and has seating for 11 passengers plus two wheelchair positions. The estimated unit cost for these vehicles is \$35,000 for a total of \$70,000 for two vehicles.

Facility Costs

Potential facility costs associated with the start-up plan include bus stop signs and shelters, the renovation of the Cuyler Street MMTC, and perhaps a maintenance facility. The facility costs are described below.

Multi-Modal Transit Center

In order to make passenger transfers as convenient as possible and for use in the local transit system, the existing Cuyler Street train depot must undergo extensive renovation. Some additional work will be required to explore the feasibility of developing the depot into a transit center. Those tasks include:

- Preparation of a detailed facility plan for the site with building and site layout, required facility and paving improvements, costs and associated funding program.
- Any environmental activities to comply with National Environmental Protection Agency (NEPA) regulations.
- Architectural design and engineering plans of proposed transit center.
- Specific construction and renovation needs for the proposed site.

The order-of-magnitude capital cost for a transit center can vary significantly, from about \$100,000 to \$2.0 million, depending on the condition of the building and grounds, number of bus bays/spaces and passenger amenities provided.

Maintenance Garage

Finally, it is assumed that maintenance, storage and fueling functions for the proposed transit services could be accommodated at an existing fleet maintenance facility owned by the local government. If no facility is currently available, the construction cost of a maintenance garage can vary significantly, depending on the location and size of the garage. Order-of-magnitude costs to renovate an existing building or construct a new one could range from \$1 to \$2 million for the proposed fleet size.

3.7 INSTITUTIONAL REQUIREMENTS



This section evaluates the various management options for operating the proposed transit service options. It is assumed that Options 1 and 2, described above, could be operated under contract with MATS or a similar agency. The introduction of fixed route transit services, however, introduces operational and management issues that may require changes in current City or County government.

The management structure must allow for effective and efficient management and control of costs while being consistent with the laws and regulations that define the City's and/or partnering local government's powers. There are a number of potential management options available to local officials to implement and operate the fixed route transit service. Each management option has distinct advantages and disadvantages that can vary significantly depending on overall City/County objectives, the type(s) of services to be provided, financial resources, accountability, ease of implementation, legal impacts, and other issues.

Several transit ownership and management options are available to the City of Dalton and Whitfield County. Four management options are defined below which each represent differing types of involvement by the City of Dalton and other public entities in providing the proposed transit service alternatives. Opportunities for the public entities to use private-sector transit providers have been given special attention, since contracting with the private sector may offer both financial and administrative benefits. Options B, C and D all allow for contracted service providers. One benefit from contracting service to a private transportation provider is obtaining a lower cost through competitive bidding. The competitive process would give bidders an incentive to offer their services to the City and/or County at the lowest possible cost.

Following are four potential management options for providing the fixed route transit services. Each option assumes a lead role by the City of Dalton, as the proposed fixed route transit service would be operated principally within the City.

Option A – City Owned & Operated. The City of Dalton would have the primary responsibility to plan, finance, and operate all of the recommended public transportation services. The City would purchase vehicles and employ all personnel required for service delivery.

Option B – Contract Service. This option would give the City of Dalton overall responsibility for both the operations and contracting with a service provider which would be responsible for providing all aspects of the recommended fixed route services. Under this approach, the City would issue a Request for Proposals (RFP) to qualified operators who would



develop technical and cost estimates for a pre-determined level of service specified in the RFP.

Option C – City Owned/Operations Contracted Out. This approach is essentially a combination of Options A and B. The City would have overall responsibility for the operations and would purchase and own the vehicles, and perhaps, the maintenance facility. Then, a service provider would be retained by competitive procurement to hire the employees, operate and maintain the new services.

Option D – Multi-Agency Operating Agreement. Another option would be an interagency operating agreement wherein a public partnership would be formed between two or more partners (City of Dalton, Whitfield County, and North Georgia Regional Development Center). The agreement would establish partner roles and responsibilities for administration, planning, financing, operating, and maintaining the various transportation services.

3.8 OTHER IMPLEMENTATION ISSUES

The management options were analyzed with respect to three concerns:

- Legal issues,
- Functional criteria, and
- Compatibility with alternative service plans.

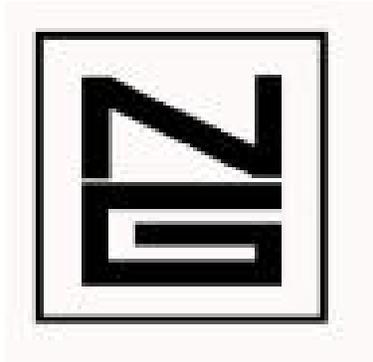
The evaluation of these concerns included evaluation criteria such as administration, financial responsibility and risk, cost, flexibility and ease of implementation.

- Legal Issues: Each of the management structures potentially requires some action by one or more of the following: the City of Dalton, Whitfield County, and the North Georgia Regional Development Center. An additional voter referendum may be mandated dependent on financing options that may be considered. The Georgia Constitution prohibits a county from incurring any new debt without the assent of a majority of voters voting in an election held for that purpose. A fiscal liability that cannot be discharged by taxes levied within the year in which the liability is undertaken is considered “debt,” although multi-year vehicle leases are specifically exempted from this requirement by state law.
- Functional Criteria: The functional criteria that the public agency takes responsibility for is an important concern. With option A, the City of Dalton



would assume all functional responsibilities. With option B, the City can rely on a contract to provide all services including the direct operations, the acquisition of fixed assets (buses, maintenance facility, bus stops & shelters), and marketing and customer service. With option C, the City can retain all responsibilities except for the “pure” transportation and maintenance functions, i.e., for drivers and vehicle maintenance.

- Compatibility with Alternative Service Plans: Regardless of the level of investment in services that the public partners decide to pursue, Option B or C would offer a new public service without significantly increasing the number of City employees and affecting their associated expertise with both the delivery and maintenance of a local bus and/or demand response transit system.



Task 4.

Service Alternatives



Dalton-Whitfield County Transit Needs Study

Task 4: Service Alternatives

The objective of Technical Memorandum 4 was to refine and evaluate the alternatives developed in the previous task 3. This chapter refines these options and describes associated service levels and operating characteristics. Potential sources of funding, proposed service plan, ridership and passenger revenue, operating costs, capital costs, and a five-year finance plan for the proposed transit system are included in this memorandum.

4.0 ASSESS FUNDING SOURCES

This section outlines potential federal, state, and local sources of revenue, as well as potential public/private partnerships, advertising programs, and alternative funding mechanisms that could be used to fund the capital and operating costs of the proposed transit services. A feasible public transportation service proposal depends upon the identification of secure funding sources with sufficient revenue capacity to support its implementation and operation. As a result, a key feature of the financial analysis is to evaluate each funding option's revenue capacity and stability. We are then able to determine general service volumes (e.g., fleet size, vehicle miles, vehicle hours, etc.) that could be supported by the identified sources and levels of funding.

Federal Funds

The Safe, Accountable, Flexible and Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU) was signed into law on August 10, 2005. The SAFETEA-LU bill includes authorization for funding for FY 2005 through FY 2009. The bill provides \$286.4 billion in guaranteed funding for federal surface transportation programs, including \$52.6 billion for federal transit programs. In addition, there are several new transit programs created under the bill.

The Federal Transit Administration (FTA) administers the Section 5307 Urbanized Area Formula Program which would be the primary source of federal funding available to the proposed transit services in Dalton. In addition, Section 5309 Capital Investment Program may be an additional source of discretionary funding for the proposed transit services. Other formula programs administered by the FTA include the Section 5310 Elderly and Persons with Disabilities Program and the Section 5311 Non-Urbanized Area Formula Program.



The primary sources of federal funds for Dalton/Whitfield County are discussed below:

Section 5307 Urbanized Area Formula Program

This formula program provides funding for transit related purposes. Eligible purposes are planning, engineering design and capital investments in bus, fixed guideway systems and related equipment and facilities. All preventive maintenance and some Americans with Disabilities Act (ADA) complementary paratransit service are considered capital costs. The federal share for planning and capital assistance projects is generally 80% of the net project cost. Net project cost is that portion of the cost of a project that cannot be reasonably financed from revenues. There are some exceptions to the 80% federal share for capital projects. For example, a 90% federal share is allowed for the cost of vehicle-related equipment to comply with ADA. The federal share may not exceed 50% of the net project cost of operating assistance. The FY 2004 FTA Section 5307 Urbanized Area (U.A.) formula apportionments for Georgia U.A.s fewer than 200,000 in population are summarized in Table 4-1. The Census population, density, and population rankings are from: List of Census 2000 Urbanized Areas as revised 11/20/02 (Total number of U.A.s = 465).

TABLE 4-1
FY 2005 Georgia Urbanized Area Apportionments under 200,000 in Population

U.A.	Population	Density	Pop. Rank	Apportionment
Macon	135,170	1679	203	\$1,386,994
Athens	106,482	1338	247	\$991,751
Albany	95,450	1449	271	\$918,435
Warner Robins	90,838	1123	282	\$791,791
Gainesville	88,680	981	291	\$737,998
Rome	58,287	1427	391	\$557,284
Dalton	57,666	1060	398	\$492,554
Valdosta	57,647	1520	399	\$566,059
Brunswick	51,653	1201	438	\$461,427
Hinesville	50,360	1854	448	\$541,232

For U.A.s over 200,000 in population, the Section 5307 apportionments are based on population, population density, the amount of service provided, and ridership incentives. However, for U.A.s under 200,000 in population, the Section 5307 apportionments are only based on population and population density.

The 2000 Census data was first used to apportion the FY 2003 FTA formula programs. For the next ten years, the annual formula apportionment for Dalton (and the other nine smaller Georgia U.A.s) will continue to be based on the 2000 Census and vary only by the overall level of the national urbanized formula appropriation. Under the current



regulations, the proportions will be adjusted in 2013 after Census 2010 population estimates are available, and every ten years thereafter.

The FY 2005 Section 5307 Dalton U.A. apportionment of \$492,554 is available for programming. Table 4-2 presents the actual 5307 FY 2005 apportionment and preliminary annual estimates of Section 5307 funds for the Dalton Urbanized Area from FY 2006 to FY 2009. The estimates are calculated by computing the percent change for the Federal SAFETEA-LU total Section 5307 funding levels from FY 2005 to FY 2009 and then using those percent changes to calculate Dalton's apportionment for that same time period. For example, from FY 2005 to FY 2006 SAFETEA-LU total Section 5307 funding amounts dropped by 3.5%. This same percentage drop is reflected in the amount of Section 5307 funding Dalton will receive from FY 2005 to FY 2006. Likewise, from FY 2006 to FY 2007, SAFETEA-LU total Section 5307 funding amounts will increase by four percent. This four percent change is applied to Dalton's Section 5307 funding levels for FY 2006 to FY 2007. Finally, from FY 2007 to FY 2008, SAFETEA-LU total Section 5307 funding amounts will increase by eight percent and from FY 2008 to FY 2009, will increase by six percent. These percent increases were used to compute the Dalton funding levels for FY 2008 and FY 2009 in Table 4-2.

TABLE 4-2
Dalton Urbanized Area
Section 5307 Funding Estimates

FY	5307 Funds
2004	\$470,000*
2005	\$492,554*
2006	\$475,200
2007	\$495,400
2008	\$537,200
2009	\$571,500

*actual appropriation

The Georgia Department of Transportation (GDOT) generally provides one-half (10%) of the non-federal share for capital projects. That is, a capital project would be funded 80/10/10 with Federal Section 5307 funds/State funds/local funds, respectively. Since 80% of the funding for the capital costs is from Section 5307 funds, this will be the primary source of funding for proposed transit services in Dalton.

For operating projects, the State currently does not provide operating assistance. Therefore, after farebox and other local revenues were applied to the system's operating costs, a maximum of 50% of the net operating project costs could be covered by Section 5307 funds; local funds would be required to cover the remaining costs.



Section 5309 Capital Program

This program funds major investments in three categories: New Starts/Extensions, Fixed Guideway Modernization, and Bus/Bus Facility programs. The proposed transit project in Dalton would be eligible for funding from the Bus/Bus Facility category and could seek these funds to assist with start-up costs that may exceed available federal formula funds. The Bus/Bus Facility funds are discretionary funds for major capital expenses such as bus purchases, maintenance facilities and park-ride/ transit centers. The federal share of the project cost is a maximum of 80 percent with non-federal sources providing the balance.

At the present time, according to the FTA Region IV office, the costs of proposed projects requesting the discretionary Section 5309 funds far exceed likely funding levels nationally. There is also intense competition for these funds within the State of Georgia, including bus and facility replacement needs of existing services as well as proposed new transit services.

Project funding examples include: in FY 2005, the Moultrie Georgia Intermodal Facility received \$485,888 in Section 5309 discretionary spending. In FY 2004, Chatham Area Transit received \$5,825,241 for buses and bus facilities. Also, in FY 2004, Albany and Rome received \$970, 874 for buses and bus facilities, the Georgia Regional Transportation Authority received \$4,854,368 for bus and bus facilities, and Leesburg Georgia received \$291,262 for renovation and restoration of a train depot. Based on these projects that have received Section 5309 funding, Dalton may be able to secure a portion of this funding to be used toward initial capital costs.

Other State Administered Formula Transit Programs

As part of the SAFETEA-LU bill, the States administer other federal formula programs including the Section 5310 Elderly and Persons with Disabilities Program and Section 5311 Non-Urbanized Area Formula Program. A summary of the existing programs follows:

- Section 5310 Elderly & Persons with Disabilities Program
This program provides capital assistance for specialized transportation services to elderly persons and persons with disabilities. Eligible capital expenses may include, at the option of the recipient, the acquisition of transportation services by a contract, lease, or other arrangement. This assistance is intended primarily for private non-profit organizations or public bodies that coordinate services for the elderly and persons with disabilities. The federal share of the project cost is a maximum of 80% with non-federal sources providing the project balance. The State of Georgia was apportioned \$2,395,977 in Section 5310 funds for FY 2005.

The Section 5310 program is administered by the Georgia Department of Human Resources (GDHR). The GDHR allocates the money by county to cover annual



social service agency grant applications.

- **Section 5311 Non-Urbanized Area Formula Program:** This program provides for capital, operating and administrative assistance for non-urbanized areas. The matching ratio is the same as the Section 5307 Program. For example, Whitfield County would be eligible for these funds where transit services are provided outside the Dalton Urbanized Area. The State of Georgia was apportioned \$8,846,033 in non-urbanized area funds for FY 2005. The federal fiscal year funding is programmed by GDOT toward the subsequent calendar year projects. That is, the FY 2005 federal dollars are allocated by GDOT to projects proposed for calendar year 2006. The GDOT issues an Administrative Guide for applying for these funds. The Guide and process are coordinated through GDOT District Offices (Whitfield County is in GDOT District 6, Cartersville). The submission of project applications is due to GDOT by August 1 – 31 in order to receive funding for the subsequent calendar year.

Table 4-3 summarizes the Section 5311 schedule in the draft 2006-2008 STIP for capital and operating amounts for District 6. Programmed amounts are subsequently adjusted to reflect actual federal appropriations and project needs.

TABLE 4-3

**Draft 2005-2007 STIP
GDOT District 6
Section 5311 Schedule**

<u>FY</u>	<u>Capital**</u>	<u>Operating***</u>
2006	\$1,433,100	\$3,505,818
2007	\$826,400	\$3,872,090
2008	\$1,752,500	\$3,972,000

In FY 2005, there are 16 rural programs operating in GDOT District 6. Assuming an equal distribution of funds across each program for planning purposes, the average project estimates (matched up) for each recipient funded in GDOT District 6 would be approximately:

Estimated FY 2005 GDOT District 6 Section 5311 Average Project Funding

Capital Project: \$90,000**
Operating Project: \$219,000***

** *These are matched amounts with an assumed breakout of 80% federal, 10% State (GDOT), and 10% local funds.*

*** *These are matched amounts with an assumed breakout of 50% federal and 50% local funds.*

However, the amount of available Section 5311 funding is not fixed. The project



amount approved for funding by GDOT is dependent on the needs and justification developed for the project in accordance with policies and procedures of GDOT's Georgia State Management Plan and Administrative Guide. In other words, while the above average project funding amounts may be a good rule of thumb for ongoing annual support of a project, the actual project funding levels will depend on the needs and merits of the specific program. Also, GDOT likely would favorably consider the additional capital costs associated with the needs of a new start-up program. Additionally, when comparing the funding operating schedule for Section 5311 from the draft FY 2006 to FY 2008 Georgia STIP with the FTA FY 2005 Section 5311 apportionments, the amount of funding available through Section 5311 appears to be fairly constant from FY 2006 to FY 2008. The MATS rural demand response service is operated in Whitfield County through an FTA 5311 grant. The total FY 2005 MATS operating budget was \$408,298. Whitfield County provides some of the local funding match (for example, in FY 2005, Whitfield County provided \$117,509.) The MATS estimated FY 2006 total operating budget is \$429,612. Based on the Section 5311 funding levels for Georgia from FY 2005 to FY 2009 in Table 4-4, it appears as though there may be funding available to expand the existing MATS system. In Table 4-4, the FY 2005 Section 5311 figure is the actual apportionment for Georgia. For FY 2006 to FY 2009, these Section 5311 funding amounts have been calculated using the percentage change in SAFETEA-LU total Section 5311 funding levels from FY 2006 to FY 2009.

Table 4-4
Section 5311 Apportionment for Georgia

FY	5311 Funds
2005	\$8,846,033*
2006	\$13,622,800
2007	\$14,167,700
2008	\$15,301,100
2009	\$16,219,100

*actual apportionment

Section 5311 funding should be supportive of local economic activity by facilitating access to local markets, industries, and commerce. As such, vehicles operating may access the urbanized area of Dalton but only to the extent that passengers may be picked up or dropped off in a certain location such as a transfer stop. Rural transit services should not be duplicative of other transportation services within the urbanized area of Dalton.



Additionally, transit programs are expected to meet the minimum criteria established in GDOT's Rural Public Transportation Service Policy. The policy criterion establishes a guide for evaluation of the program operations and applications for funding. These are as follows:

- A. Services should not be duplicative of other transportation services;
- B. Vehicles should be utilized to produce 500 one-way person trips per vehicle per month **or** be operated 120 hours per month per vehicle **or** 1,000 revenue miles per vehicle per month;
- C. Vehicles should be available for service on a daily basis;
- D. Vehicle trips for contract, charter or subscription service should recover fully allocated costs;
- E. Service ridership should equal or exceed 0.5 passengers per vehicle service mile.

Systems should recover a minimum of 20% of its public transportation costs from farebox revenues generated through regular public transportation operations. Public transportation costs are defined as the total operating budget minus purchase of service agreements. All purchase of service agreements must recover the fully allocated costs.

State Funds

The Georgia Public Transportation Code authorizes GDOT to participate in providing public transportation services in Georgia. However, the State of Georgia does not have any funds specifically designated for transit purposes. The GDOT has provided some funding for transit capital projects, such as park-ride lots, and for assistance with the non-federal matching share of capital and preventive maintenance projects. The GDOT provides this funding through State General Fund budget requests. Typically, the GDOT is able to request State General Funds for one-half of the non-federal match or 10% of the total project cost of the 80/20, federal/non-federal share capital projects. During the start-up capitalization of the Cobb and Gwinnett County transit systems, the Governor provided additional 100% State supplemental funds to assist with start-up needs.

The State funds are administered by the GDOT Office of Intermodal Programs. In May of each year, the Office requests that transit providers submit their State assistance needs for two years in advance. If the requested projects are included in the adopted STIP, the project line item would include the 10% State matching share for the programmed project. Then, the new programmed State funds are included in the next GDOT State General Funds budget request for consideration by the Georgia General Assembly. For example, the State FY 2006 budget was set (and projects were funded) during the 2005 Session of the Georgia General Assembly.



In the fall of 2005, GDOT received supplemental requests that could potentially be part of the Supplemental FY 2006 State Budget considered early in the 2006 Session of the Georgia General Assembly. GDOT may also consider final additions to the proposed FY 2007 State transportation assistance request. The City of Dalton will work closely with GDOT over the next year to include the transit projects in the subsequent Dalton TIP and STIP, as well as work with GDOT and the local legislative delegation during the 2006 and subsequent sessions of the Georgia General Assembly to secure the State funding.

Local Funds

Local funds will be necessary to provide the local match share of the federal capital grants and the operating and maintenance costs not covered by the passenger farebox revenue and federal operating assistance. Local funds for transit can come from any available local funding source. For example, the Macon-Bibb County Transit Authority receives local general funds from the City of Macon and Bibb County through annual budget requests to each local government. General fund revenues typically include property taxes, hotel/motel taxes, business licenses, and other sources.

A complete fare structure will be offered in technical memorandum 5. A full adult cash fare was set for this technical memorandum to estimate projected revenue amounts. For the proposed transit services in Dalton the full adult cash fare for all fixed-route local service will be \$1.25. This fare was decided upon based on the full fare from other Georgia transit systems. Table 4-5 outlines these systems and their fares.

Table 4-5
Georgia Transit System Full Adult Cash Fares

Transit Agency	Full Fare
Albany Transit System	\$0.75
Athens Transit System	\$1.25
Augusta Public Transit	\$1.00
Chatham Area Transit (Savannah)	\$1.00
Cobb Community Transit	\$1.25
Macon Transit Authority	\$1.00
METRA Transit System (Columbus)	\$1.25
Rome Transit Department	\$1.00

Besides passenger farebox revenues, local general funds are the primary local funding source for Georgia transit agencies except the Metropolitan Atlanta Rapid Transit Authority (MARTA). MARTA receives all of its local funding from a special one percent sales tax levied in Fulton and DeKalb counties, which required Legislative authorization and a favorable referendum. Special Purpose Local Option Sales Tax (SPLOST)



programs can be used to fund road improvements and some public transit capital improvements (such as park-ride lots).

Public/Private Partnerships

Transit systems can leverage their limited resources by forging new partnerships that can bring non-traditional sources of support (including cash, facilities and equipment, in-kind services, and financing mechanisms) that pay partially or fully for new services or facilities where they would not otherwise be feasible. Financing mechanisms refer to bonds, notes, leases and other forms of debt which are supported by a pledge of future revenues from one, or more, funding sources. Public entities use financing because it provides the ability to access the capital markets and secure sufficient resources to implement a capital project within an optimal time period. Without debt financing, public entities would be limited to a pay-as-you-go approach where only annual revenues generated from taxes, user fees and other sources could be used to fund a project. Local governments and transit agencies are expanding their list of partners to include developers, major employers, colleges and universities, non-profit social service agencies, utilities, property managers and various other entities. Examples of public/private partnerships that have been used in other areas to leverage public funds for new or expanded transit services follow:

- The Indianapolis Transit Agency was approached by 20 employers who pooled their resources and paid 70% of the expense of providing late evening and weekend bus services due to an employee shortage problem caused by lack of transportation for such workers (e.g., fast food restaurants, hotels, etc.).
- Through a Livable Communities Initiatives grant, Corpus Christi Regional Authority bought an old bank building and designed a passenger transfer facility around it. The authority rents space to private businesses including a barber shop and florist. The investment in the transfer center also helped spur other private development in the immediate area.
- The San Diego Metropolitan Transit Development Board's "Adopt a Bus Stop" program reduces maintenance costs where adjacent businesses or residences "sign up" to maintain the bus stop in front of their building. Such a program could be extended to bus shelters, benches, and kiosks.

Sale of Advertising Rights

The sale of advertising rights is the most common method used by transit agencies across the country to generate non-farebox revenue. Transit systems now sell the rights for companies to advertise on buses, benches, shelters, transfer facilities, kiosks, schedules, transfers, passes, system maps, etc. The transit system can realize cash



revenue, or be compensated in trade (e.g., getting “free” advertising on radio stations that are advertising on the bus). Described below are some examples of transit systems which reported gaining revenue or other benefits from selling advertising rights:

- Hampton Roads Transit (HRT) in Virginia administers an advertising program on its buses and vans that offers three approaches for advertisers. They can either pay for individual racks on buses at rates that encourage multi-month purchases, or they can participate in the Adopt-A-Bus or the Adopt-A-Van program. The “adoption” programs provide advertisers with exclusive access to the vehicles’ interiors and exteriors.

For the Adopt-A-Bus program, there is a one-time preparation charge of \$750 for painting the bus a base color prior to the application of graphics and returning the bus to HRT colors at the end of the contract. The advertising charge for a one-year contract is \$800 per month, and \$750 per month for a two-year contract. The respective charges for the Adopt-A-Van program are \$300, \$300, and \$250.

- MARTA currently has contracts with private contractors and agreements with local governments to place bus shelters along bus routes. The shelters are erected by the contractor at no cost to MARTA. The contractor rents advertising space on these shelters, and is responsible for repairs, lighting, and trash removal. Annually, MARTA nets about \$600 per shelter, with an additional \$600 per shelter paid by the contractor to the local government. MARTA avoids the expense of constructing shelters (\$8,000 each) and their maintenance and repair (approximately \$2,000 per year).
- Augusta Public Transit (APT) has contracted with a private company for bus shelters at no cost to APT. The shelters are erected and maintained by the private company, and feature space for advertising, trash receptacles, and soft-drink vending machines.

4.1 PROPOSED OPERATING CHARACTERISTICS

The transit options presented in the previous task has been refined to better serve the needs of the Dalton area and provide a better fit for potential funding sources. Using the existing MATS system, flexible routes, and six potential fixed routes as transit options, a set of five service option “packages” comprised of combinations of the options was developed. Options 1 and 2 are designed as demand response options that serve Whitfield County as a whole. Options 3, 4 and 5 are designed to offer various types of services to serve the urbanized area of the City of Dalton. These service options were intended to encompass a broad range of possible service levels and a corresponding range of funding commitments by the City of Dalton and the public.



Service Option 1

This option will continue the level of service operated by MATS currently. This option requires 10 peak vehicles operating 8 hours per day, Monday through Friday.

Service Option 2

This option will expand the level of service operated by MATS to 12 hours per day, Monday through Friday. This option requires the same number of peak vehicles as option 1. This option addresses the City of Dalton's possible expansion of its support of the MATS service operating in Whitfield County to address unmet rural and special transportation needs. In particular, early morning and late afternoon service expansion could meet more of the work trip needs cited in Technical Memorandum #2: Needs Assessment. The current 8:30am to 4:00pm operating hours could be expanded to a 12-hour span of service (6:00am to 6:00pm). For example, the FTA Section 5311 Non-Urbanized Formula Program funds administered through Georgia's DOT District 6 potentially could be increased to the County to address unmet rural transportation needs. Section 5311 administrative and capital projects such as new vehicle purchases are funded 80% federal, 10% State, and 10% local. Section 5311 operating assistance projects for the net operating costs are funded 50% federal and 50% local. Thus, Whitfield County could leverage federal and State funds toward expanding MATS operating hours so that additional general public work trips could be provided for rural residents.

Service Option 3

This option offers four flexible routes serving the urbanized area of Dalton only. Span of service offered is from 6:00am to 6:00pm, Monday through Friday. Five small buses or paratransit vehicles would be required for this option. Transit service can be implemented within the urbanized area to offer more services that resemble those of a fixed route system.

Flexible routes can be utilized with the current MATS service which involve route deviation services targeted to the special needs clients but also open to the general public to replace some of the traditional, specialized paratransit service. In this type of service, demand response and human service transportation services have been coordinated together to form deviated fixed-routes. In some small transit systems, the transit agency and local social agencies have worked together to develop a route and schedule with some designated bus stops. The objective of the flexible routes is that some of the human service agencies' clients could use the bus stops, that general public riders could also use the bus stops to access the transit services, and that flexibility in the schedule would allow the bus to provide curbside pick ups for those agency clients who could not get to the bus stop. Riders receiving the personalized pick ups will have to conform to the schedule of the route, which would be a change



from the current MATS service where trips were available at riders' requested times. Human service agency clients living beyond the corridor of the route will still be provided demand response transportation, as had been for all riders prior to possible implementation of the flexible route.

For Dalton and Whitfield County, this type of service would require close interagency coordination with local human service agencies. In addition, any potential expansion of the current MATS services would require getting information out to riders and the community, local medical facilities, and other social agencies in Dalton and Whitfield County.

Four flexible routes are proposed to serve a different quadrant of the City of Dalton; a north, south, east and west quadrant of the city with a specific route and schedule being devised for each of the four quadrants. This system will ensure adequate transit coverage for the urbanized area of Dalton.

Service Option 4

This option provides four fixed routes serving the City of Dalton with complementary ADA paratransit service and two flexible routes to serve the urbanized area of Dalton. Span of service offered is from 6:00am to 6:00pm, Monday through Friday. Five small buses and five paratransit vehicles would be required for this option. The four local fixed routes chosen serve mainly commercial and high-density residential areas of the City of Dalton.

Service Option 5

This option provides fixed route service to the City of Dalton with the complementary ADA paratransit service. Span of service offered is from 6:00am to 6:00pm, Monday through Friday on all routes, with no Saturday or Sunday service. On all routes, the peak frequency will be 30 minutes and the base frequency will be 60 minutes to maintain a high level of service effectiveness. In addition, all routes were interlined with another route to decrease the amount of buses needed in the base period to accommodate the increased frequency of 60 minutes. Eight small buses and five paratransit vehicles are required for this option.

The proposed transit service plan developed for Dalton can have up to six fixed routes radiating from a proposed downtown Multi-Modal Transit Center (MMTC) to major outlying activity center destinations. Five of these routes are primarily linear routes offering service to the major commercial, medical, employment and residential corridors within Dalton. The sixth route is a circulator route serving the major industrial employment sites located in the southern section of Dalton.



The outer destinations of the five linear routes are:

- Chatsworth Highway Wal-Mart
- Heritage Circle on Underwood Road
- Dalton State College
- Hamilton Medical Center
- Northside Shopping Center Bi-Lo/Glenwood Avenue area

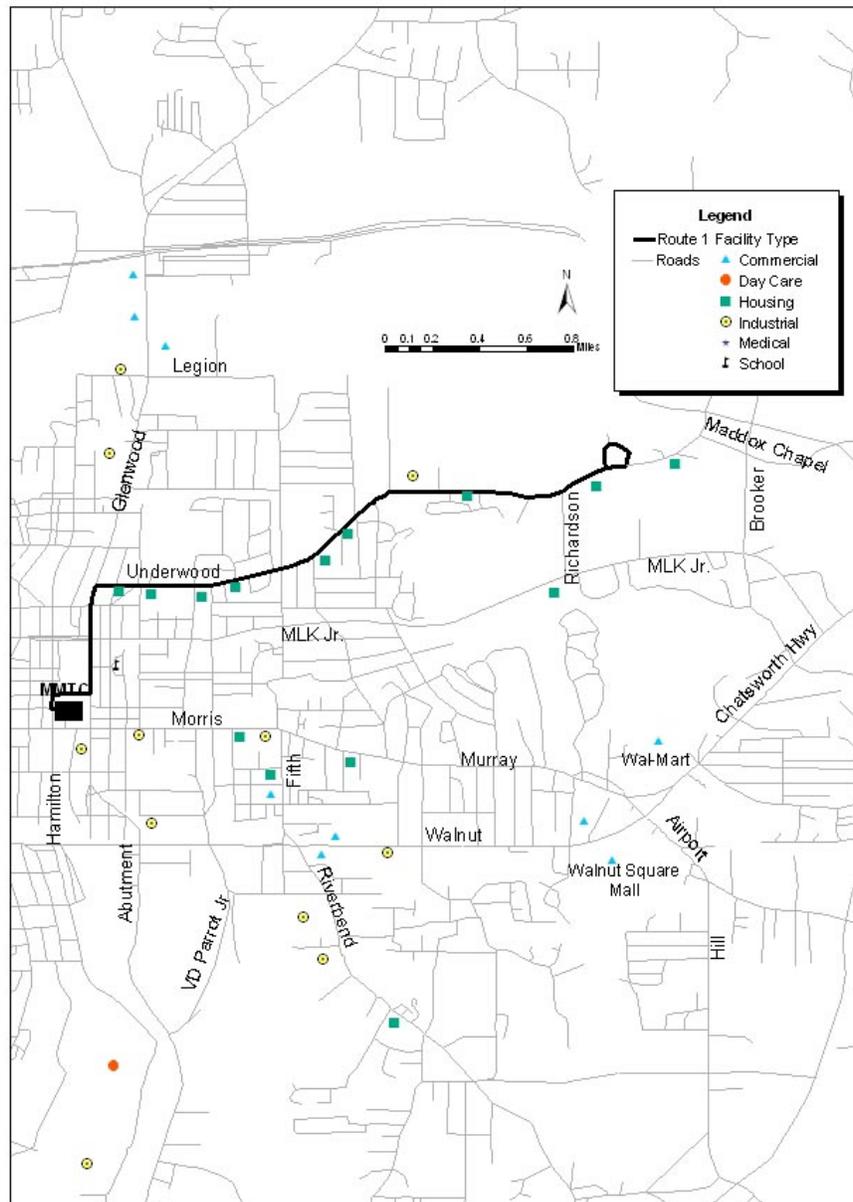
The specific service characteristics are described below for each route.



Route 1: Underwood Road (Figure 4-1)

The proposed route would operate service from the downtown Multi-Modal Transit Center to Heritage Circle on Underwood Road via Glenwood and Underwood Road. Buses would operate every 30 minutes during peak and 60 minutes during midday off-peak periods, Monday through Friday. Additionally, this route will be interlined with route 2: Hamilton Medical Center/Broaderrick.

Figure 4-1

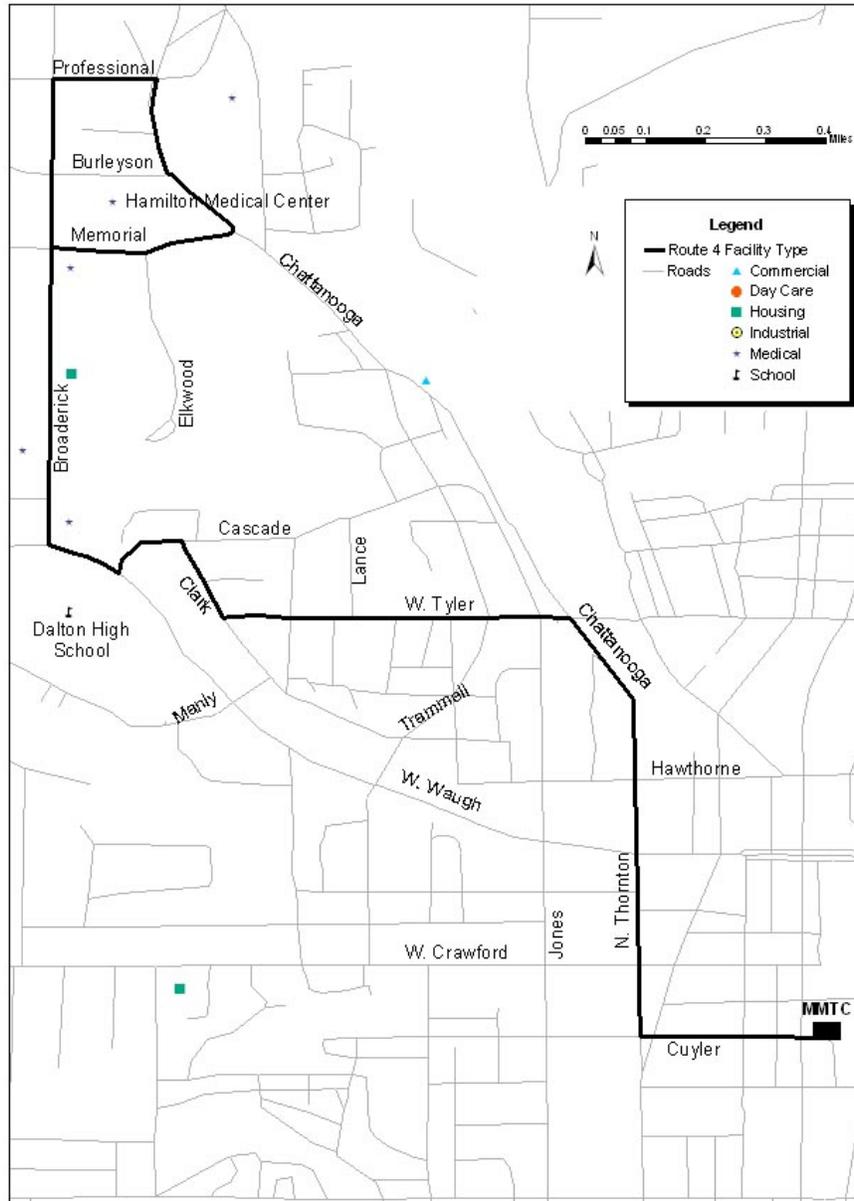




Route 2: Hamilton Medical Center/Broaderrick (Figure 4-2)

This proposed route would operate service from the downtown Multi-Modal Transit Center to the Hamilton Medical Center via Thornton, Tyler, Clark, Cascade, W. Waugh, Broaderrick, Professional, and Memorial. Buses would operate every 30 minutes during peak and 60 minutes during midday off-peak periods, Monday through Friday.

Figure 4-2

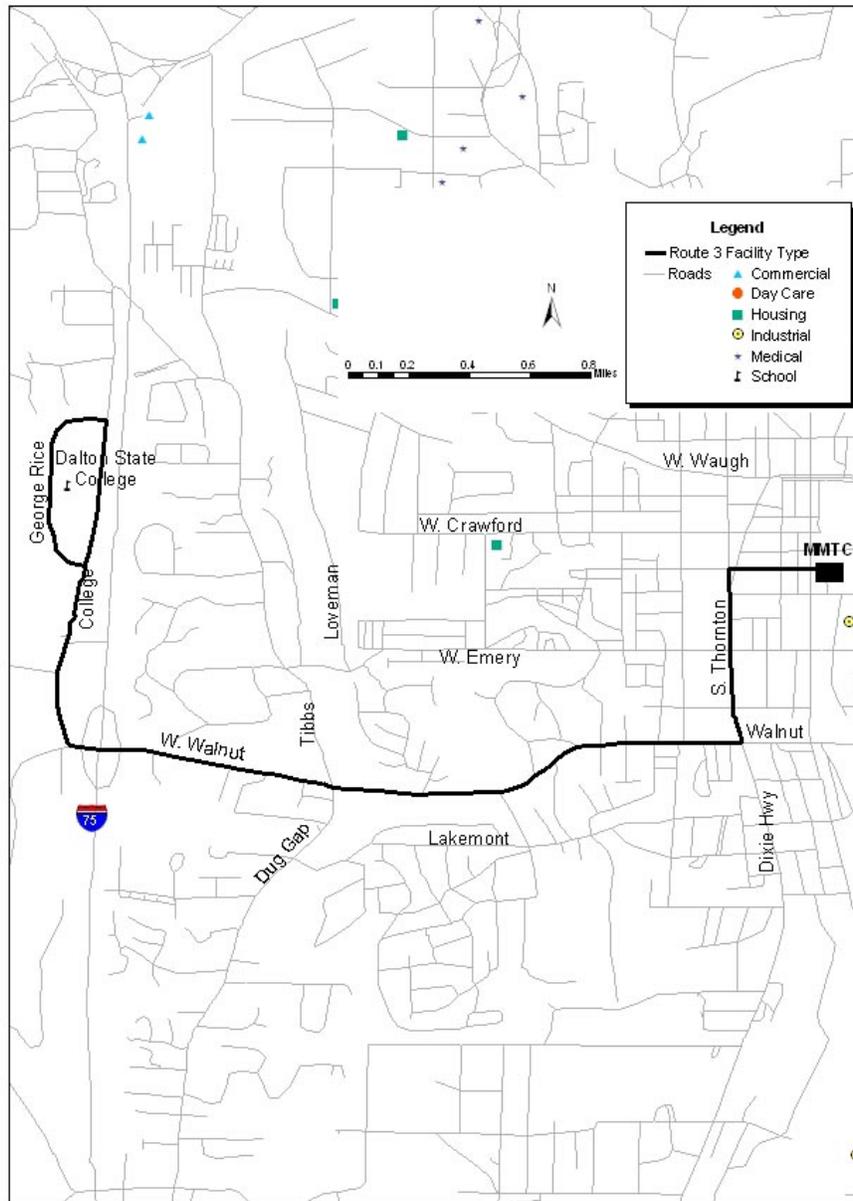




Route 3: Dalton State College/W. Walnut Avenue (Figure 4-3)

This proposed route would operate service from the downtown Multi-Modal Transit Center to Dalton State College via Thornton, W. Walnut, College, and George Rice. Buses would operate every 30 minutes during peak and 60 minutes during midday off-peak periods, Monday through Friday. In addition, this route will be interlined with route 4: Bi-Lo/Glenwood Avenue.

Figure 4-3

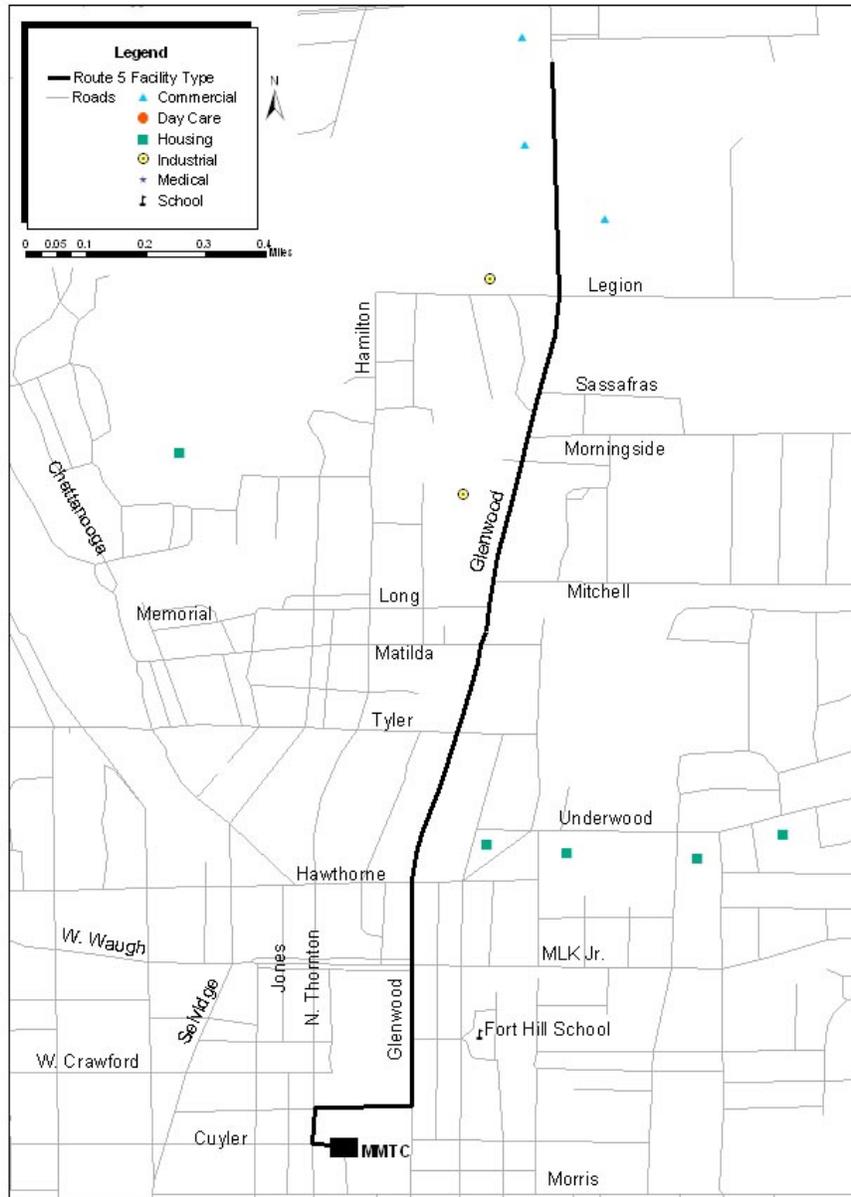




Route 4: Bi-Lo/Glenwood Avenue (Figure 4-4)

This proposed route would operate service from the downtown Multi-Modal Transit Center to the Northside Shopping Center Bi-Lo via Gordon and Glenwood. Buses would operate every 30 minutes during peak and 60 minutes during midday off-peak periods, Monday through Friday.

Figure 4-4

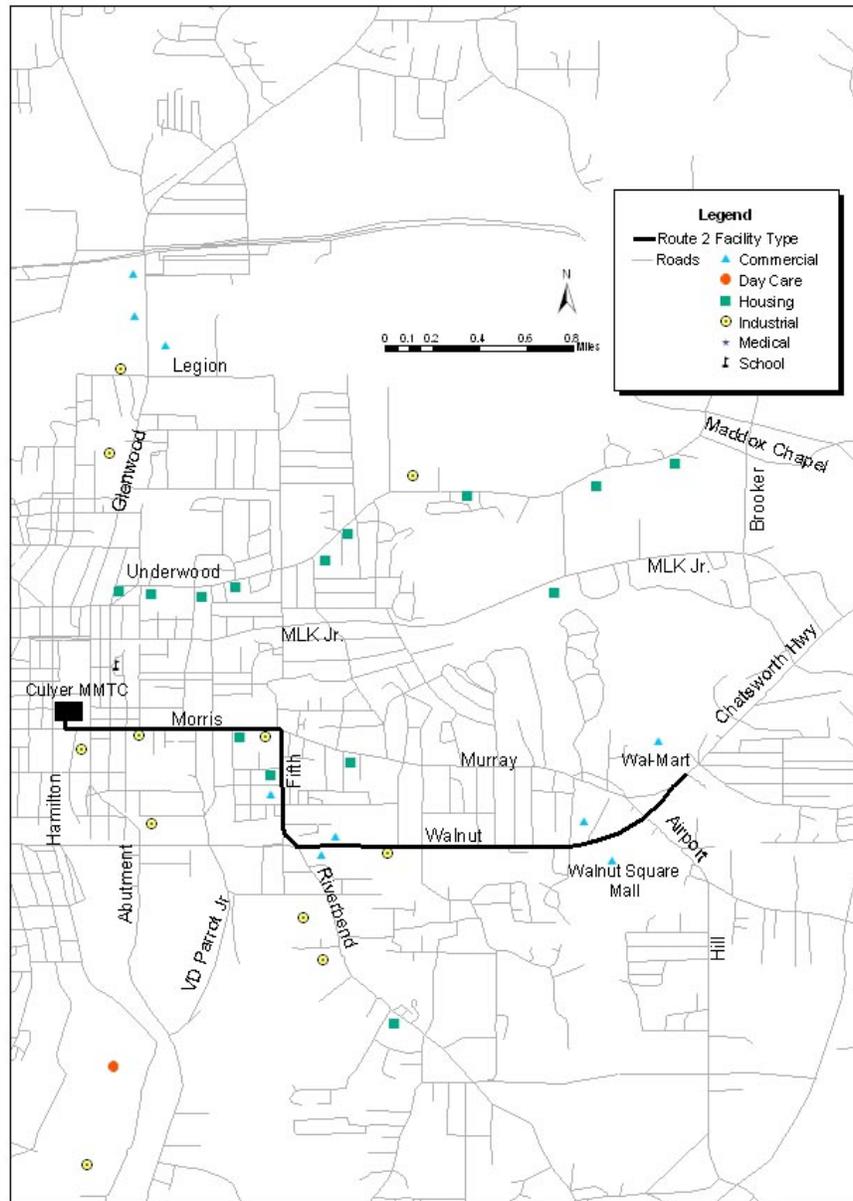




Route 5: Walnut Square Mall/Wal-Mart/Walnut Avenue (Figure 4-5)

This proposed route would operate service from the downtown Multi-Modal Transit Center to Walnut Square Mall via Morris, Fifth and E. Walnut. Buses would operate every 30 minutes during peak and 60 minutes during midday off-peak periods, Monday through Friday. In addition, this route will be interlined with route 6: Abutment/Antioch/Riverbend.

Figure 4-5





Route 6: Abutment/Antioch/Riverbend (Figure 4-6)

This proposed south Dalton industrial-center loop route would operate a circulator service from the downtown Multi-Modal Transit Center via Abutment, Antioch, Riverbend, and W. Walnut. Buses would operate every 30 minutes during peak and 60 minutes during midday off-peak periods, Monday through Friday.

Figure 4-6

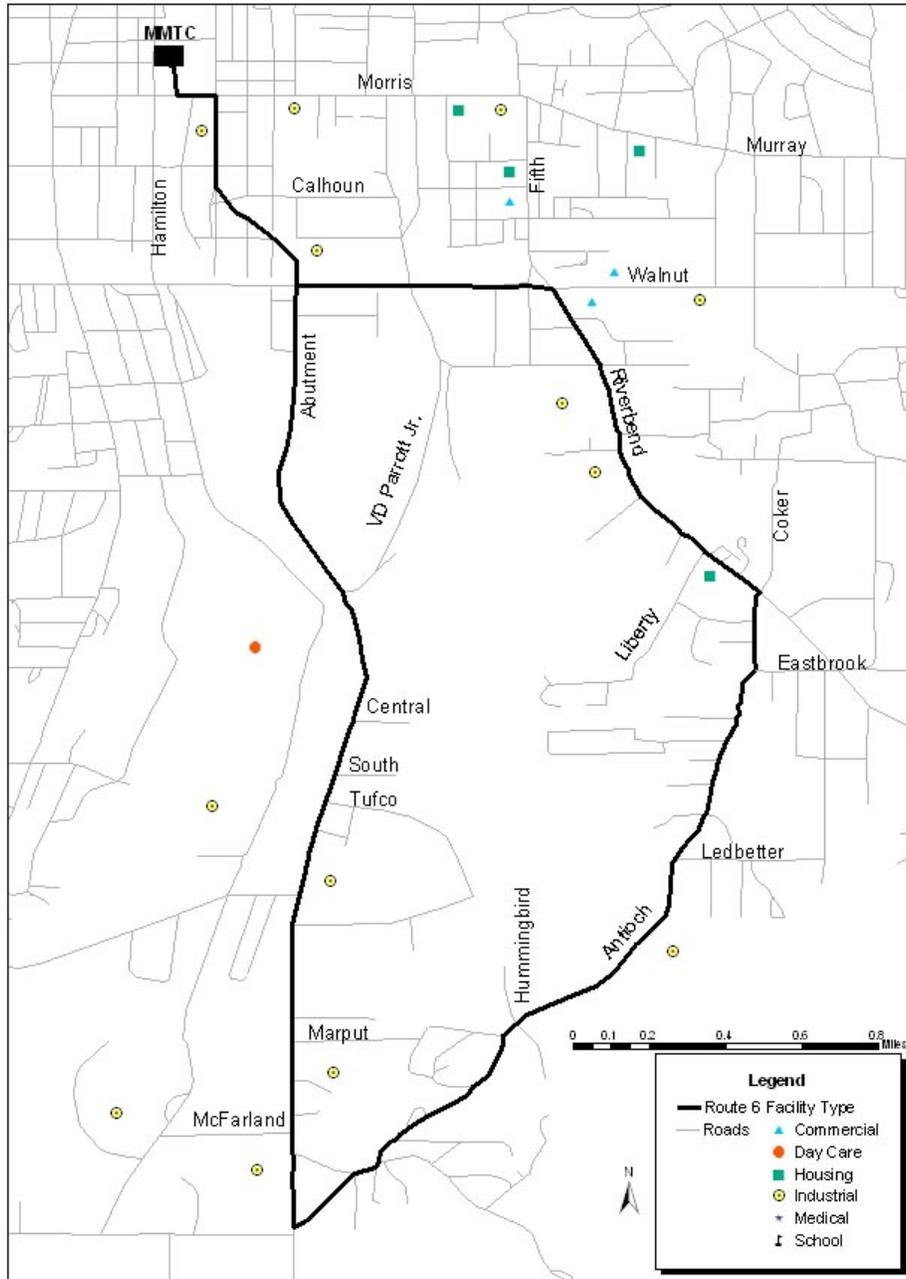




Table 4-6 outlines the proposed operating requirements for each of the five service options presented. For each option with a demand response element, the peak vehicles and service area are outlined. Two options require local bus service and for both of these options, daily revenue vehicle miles, daily revenue vehicle hours, peak buses, and the service area for the complementary ADA paratransit service are given.

**Table 4-6
 Dalton/Whitfield County – Proposed Operating Requirements for Each of the
 Transit Options**

Service Scenario	Local Bus Service			ADA Paratransit Service		Demand Response Service	
	Daily Revenue Vehicle Hours	Daily Revenue Vehicle Miles	Peak Vehicles	Area	Peak Vehicles	Area	Peak Vehicles
1	None	None	None	None	None	Rural Area (8 Hours)	10
2	None	None	None	None	None	Rural Area (12 Hours)	10
3	None	None	None	None	None	Urbanized Area (12 hours)	5
4	36.0	243.0	2	3/4 mile	4	Urbanized Area (12 hours)	2
5	54.0	431.0	8	3/4 mile	5	None	0

Paratransit Services

As described in Technical Memorandum #3, any transit system providing local fixed-route service is required, at a minimum, to provide complementary paratransit service for eligible persons within $\frac{3}{4}$ of a mile of each route. Consistent with those guidelines, complementary paratransit service has been planned for each of the local fixed routes described above in options 4 and 5. Accessible paratransit service would be provided within $\frac{3}{4}$ of a mile of each route, during the same operating hours as the local service. Paratransit service would be available only to certified, eligible passengers.

This complementary paratransit service would be provided with the six local fixed routes. Span of service will be the same as with the fixed route system, 6:00am to 6:00pm, Monday through Friday. The complementary paratransit service is projected to attract an average of 2 passenger trips per vehicle hour. This figure is consistent with the experience of the peer systems. This figure equates to 24,384 annual passenger trips. For adequate coverage and to accommodate future expansion into Whitfield County as a whole, four paratransit vehicles are proposed. In addition, any potential under-utilized capacity in operating these four vehicles can be used to provide a demand response feeder system for the local six fixed routes. Table 4-7 provides the operating requirements for the complementary ADA paratransit service.



**Table 4-7
 ADA Paratransit Service**

Area	Paratransit Vehicles	Daily Revenue Vehicle Hours	Annual Revenue Vehicle Hours	Annual Passenger Trips
3/4 mile	4	48	12,192	24,384

4.2 PROJECTED RIDERSHIP AND REVENUE

Future ridership and revenue was projected for all the service options using route-level ridership and elasticity factors for changes in service levels and route alignments (Table 4-8). Revenue forecasts were then applied by calculating an average fare per passenger, which differed among the service options. Annual revenue for option 2 of \$64,500 was calculated based on both the current, FY 2005, farebox recovery ratio from the existing MATS system and a ridership projection for option 2 based on a 50% increase from the current, FY 2005, ridership of the existing MATS system. The flexible route fare used in option 3 assumed an a fare of \$2.50. To calculate annual revenue for the flexible route structure, an estimate of five riders per revenue hour was used, based on the ridership trends of the peer systems analyzed. Table 4-8 gives the vehicle hours, riders per hour and annual revenue for the option 3 flexible route system.

**Table 4-8
 Projected Future Ridership and Fare Revenue for Option 3**

Flexible Routes	Annual Revenue Vehicle Hours	Riders per Hour	Average Fare	Annual Projected Revenue
4	12,192	5	\$2.50	\$152,400

For the local fixed route system proposed in options 4 and 5, we assumed the local adult cash fare would be \$1.25 and the paratransit fare would be set at the maximum allowed two-time the local cash fare, or \$2.50. The average fare for local service and paratransit service was assumed to be 70% of the adult cash fare, based on a mix of full case fares and discounted fares (seniors, youth and multi-trip passes). For the fixed route system, annual passenger farebox revenue was calculated by applying the average fare per passenger to the ridership forecasts for each route factoring by 254 operating weekdays. In addition, general population and low income population data served by the proposed route system was calculated. General population and low income population figures were calculated using GIS by placing a buffer with a radius of 0.25 miles extending outward from each route. Using 2000 U.S. Census tract data, the general population and low income population for each affected tract was calculated



using the average population density for that particular tract. Annual revenue was calculated for the two flexible routes based on 50% of the annual revenue for four flexible routes. Table 4-9 summarizes the populations served by each fixed route, weekday ridership, and annual projected revenue for both the fixed routes and the flexible routes.

**Table 4-9
 Projected Future Ridership and Fare Revenue for Option 4**

No.	Route	General Population	Low Income Population	Weekday Ridership	Annual Projected Revenue
1	Underwood Road	2,814	782	260	\$57,785
2	Dalton State College/W. Walnut Avenue	2,459	501	180	\$40,005
3	Bi-Lo/Glenwood Avenue	2,206	528	180	\$40,005
4	Walnut Square Mall/Wal-Mart/Walnut Avenue	2,067	557	260	\$57,785
Two Flexible Routes					\$76,200
OPTION 4 TOTAL					\$271,780

Notes:

1. Population and Low Income Population data from 2000 Census.
2. Annual Projected Passenger Revenue calculated from an average fare based on a mix of full cash fares and discounted fares (seniors and youth).

Table 4-10 summarizes the projected ridership and fare revenue for option 5, the full local fixed route system plus the complementary ADA paratransit service. In addition, the general population and low income population served by each route are shown.

**Table 4-10
 Projected Future Ridership and Fare Revenue for Option 5**

No.	Route	General Population	Low Income Population	Weekday Ridership	Annual Projected Passenger Revenue
1	Underwood Road	2,814	782	260	\$57,785
2	Hamilton Medical Center/Broaderrick	1,757	323	180	\$40,005
3	Dalton State College/W. Walnut Avenue	2,459	501	180	\$40,005
4	Bi-Lo/Glenwood Avenue	2,206	528	180	\$40,005
5	Walnut Square Mall/Wal-Mart/Walnut Avenue	2,067	557	260	\$57,785
6	Abutment/Antioch/Riverbend Circulator	2,612	513	90	\$20,003
Fixed Route Totals		13,915	3,204	1,150	\$255,588
ADA Paratransit Service		N/A	N/A	96	\$36,576
TOTAL TRANSIT SYSTEM				1,246	\$292,164

Notes:

1. Population and Low Income Population data from 2000 Census.
2. Annual Projected Passenger Revenue calculated from an average fare based on a mix of full cash fares and discounted fares (seniors and youth).
3. ADA Paratransit service passenger revenue was calculated based on a \$2.50 fare.



4.3 ESTIMATED OPERATING COSTS

Annual O&M costs were estimated for each of the service options. Option 2 operating costs were estimated at \$645,000, representing a 50% increase from the existing MATS operating budget of \$430,000.

Operating costs for option 3 have been calculated for the flexible routes using the unit cost of \$46.29 per hour. This unit cost is derived from Athens Transit System FY 2004 NTD report. Athens Transit System NTD data was used for several reasons. First, for urban areas in Georgia providing transit with a population under 200,000 Athens Transit System delivered the most cost effective system in FY 2004. Athens Transit System is owned by Athens-Clarke County with management contracted to a private transit company that provides the day-to-day management of Athens-Clarke County employees at Athens Transit System. Because of its cost effectiveness, Athens Transit System data was used to calculate these initial cost estimates. Athens Transit System data was chosen to estimate flexible route operating costs to maintain consistency with the other calculation of transit operating costs. Using the Athens Transit System FY 2004 unit cost and assuming weekday operations of 254 weekdays, option 3 operating costs are estimated to be \$627,000.

For options 4 and 5, annual O & M costs were estimated for the proposed fixed route transit system using fiscal year 2004 National Transit Database values for Vehicle Operations, Vehicle Maintenance, Non-Vehicle Maintenance, and General Administration costs from the Athens Transit System and the proposed operating characteristics. To calculate operating costs for the fixed route system a three-variable cost model utilizing both Athens Transit 2004 NTD values and the proposed amounts for annual revenue-miles, annual revenue-hours and peak buses was used to calculate annual operations and maintenance costs for each individual route. The resulting annual unit costs are \$29.82 per revenue bus-hour, \$0.50 per revenue bus-mile and \$20,133 per peak bus-day. Estimated annual operating costs have been calculated for complementary paratransit service using the unit cost of \$46.29 per hour. Athens Transit System data was chosen to estimate paratransit operating costs to maintain consistency with the calculation of transit operating costs. All cost figures were inflated by 3% to arrive at an estimated FY 2005 costs. Option 4 operating costs were estimated to be \$1,060,000 representing four fixed routes and two flexible routes. Table 4-11 presents the annual operating costs for each individual fixed route and ADA paratransit service plus the total system operating cost for option 5.



Table 4-11
Estimated Annual Operating Costs for Option 5

No.	Route	Annual Vehicle Revenue-Miles	Annual Vehicle Revenue-Hours	Peak Buses	Annual Operating Costs (2005 dollars)*
1	Underwood Road	16,000	2,290	1	\$99,267
2	Hamilton Medical Center	12,450	2,290	1	\$97,449
3	Dalton State College/W. Walnut Ave	21,590	2,290	1	\$102,129
4	Bi-Lo/Glenwood Ave	10,410	2,290	1	\$96,404
5	Wal-Mart/Walnut Square Mall/Walnut Ave	13,720	2,290	1	\$98,099
6	Abutment/Antioch/Riverbend	35,310	2,290	1	\$109,154
Fixed Route Totals		109,480	13,740	6	\$602,502
ADA Paratransit Service		N/A	12,192	4	\$564,368
TOTAL PROPOSED TRANSIT SYSTEM COST					\$1,166,869

Notes:

* 2004 unit costs have been inflated by 3% to calculate 2005 dollars.

4.4 ESTIMATED CAPITAL COSTS

Capital costs were estimated for each of the service options proposed. Option 2 capital costs are estimated to be \$150,000 representing the procurement of two additional demand response type vehicles. Option 3 capital costs are calculated to be \$445,000 for the procurement of five small buses or paratransit vehicles. The recommended vehicle is a 21-foot Goshen shuttle van. The vehicle is equipped with a wheelchair lift and has seating for 11 passengers plus two wheelchair positions. The estimated unit cost for these vehicles is \$47,000 for a total of \$445,000 for five vehicles.

Option 4 capital costs are estimated to be \$1,610,000. This amount assumes the purchase of five 30-foot buses with a typical seating capacity of between 16 and 20 passengers plus two wheelchair positions. Unit costs are \$225,000 for a standard 30-foot bus. A maintenance spare ratio of 20% has been assumed to account for repair and general maintenance of buses. In addition, five paratransit vehicles will be required for option 4. The recommended paratransit vehicles are the Goshen vans proposed for option 3.

The estimated capital cost for the recommended local fixed route bus service proposed in option 5 is \$1,800,000 representing the purchase of eight 30-foot buses and \$225,000 for five paratransit Goshen vans. The total capital costs for required vehicles for the proposed transit system in option 5 are \$2,305,000.

Facility Costs

Potential facility costs associated with the start-up plan include bus stop signs and shelters, the renovation or construction of a proposed downtown MMTC, and perhaps a



maintenance facility. The facility costs are described below for each transit option.

Multi-Modal Transit Center

In order to make passenger transfers as convenient as possible and for use in the local transit system, a downtown transit center is proposed. This downtown transit center may either be a newly constructed space or the renovation of an existing facility. Some additional work will be required to explore the feasibility of renovating an existing location into a transit center. Those tasks include:

- Preparation of a detailed facility plan for the site with building and site layout, required facility and paving improvements, costs and associated funding program.
- Any environmental activities to comply with National Environmental Protection Agency (NEPA) regulations.
- Architectural design and engineering plans of proposed transit center.
- Specific construction and renovation needs for the proposed site

Section 5309 funds may be available for the renovation of the existing train station for the MMTTC. Renovating the existing facility can incur order-of-magnitude costs ranging from \$200,000 to \$1.5 million. No funding for this project was included in the following five year finance plan.

Maintenance Garage

The construction of a maintenance garage can vary significantly, depending on the size and location of the garage and the type of fueling facilities. It is recommended that the city of Dalton renovate an existing facility to serve as a maintenance garage. Renovating an existing facility will likely reduce costs given that construction of a new facility can incur order-of-magnitude costs ranging from \$6.0 to \$8.0 million. No funding for this project was included in the following five year finance plan.

Miscellaneous Costs

The proposed transit plan for Dalton will also require the procurement of the following miscellaneous items:

Bus-Related Costs

Typically, revenue vehicle unit costs do not include ancillary equipment such as fare boxes, destination signs and radios. An additional cost of about \$10,000 per bus should be added for each local and paratransit vehicle. A total cost of \$50,000, \$100,000 and \$100,000 was included in the five year finance plan for options 3, 4, and 5, respectively.



Tools and Equipment

Likewise, revenue vehicle unit costs do not include special tools and equipment needed to maintain the buses. A total cost of \$40,000, \$40,000 and \$50,000 was included in the five year finance plan for options 3, 4, and 5, respectively.

Start-Up Marketing Program

A system start-up requires a highly visible marketing program to inform the public about the transit services that will be provided. The marketing program may include system maps and signs, passenger timetables, radio and television advertisements, informational meetings, and other media campaigns. A total cost of \$40,000, \$40,000 and \$50,000 was included in the five year finance plan for options 3, 4, and 5, respectively.

Computer-Related Costs

A transit system has extensive reporting requirements. Annual operations and budget reports would have to be provided to the state and federal governments. It is assumed that the county will not need to procure specialized software for paratransit scheduling and dispatching because of the presence of the MATS system. A total cost of \$40,000, \$30,000 and \$20,000 was included in the five year finance plan for options 3, 4, and 5, respectively. Option 3 costs are assumed to be higher than the other transit option costs to allow for greater dispatching capabilities to accommodate flexible routing.

Signs and Shelters

Bus stop signs and shelters will also be required for the proposed transit system. A total cost of \$40,000, \$40,000 and \$50,000 was included in the five year finance plan for options 3, 4, and 5, respectively.

4.5 COST SUMMARY

A feasible financial plan depends on the identification of secure funding sources with sufficient revenue capacity to support the financing, implementation and operation of any proposed transit options. As a result, a key feature of the financial analysis will be to evaluate each funding option's revenue capacity and stability and to develop funding packages that will provide sufficient resources to support the project.

The FTA administers Section 5307 Urbanized Area Formula Program, which will be the primary federal funding program applicable to the proposed transit services in the urbanized area (Options 3, 4, and 5), as well as the Section 5311 Non-Urbanized Area Formula Program, which would provide funding for the transit services in the rural area



of Whitfield County. Section 5311 funds are assumed for the rural demand response service in options 1 and 2. Both Section 5307 and 5311 funds can be used for capital expenses (including vehicles) or operating expenses. These federal funds must be matched with non-federal funds at specified ratios, as discussed in the funding assessment. For capital expenses, a funding split of 80% federal, 10% state, and 10% local funds can generally be assumed. For operating expenses, assuming 20% farebox recovery, the remaining 80% of costs would be split half and half between federal and local funds.

Applying these ratios to the assessment of rounded Section 5307 and 5311 funds potentially available to the Dalton area and Whitfield County, Table 4-12 offers a breakdown of the operating costs, capital costs, passenger revenue, and net operating costs for each transit service option.

Table 4-12
Cost Summary for Each Transit Service Option

Option	1	2	3	4	5
Capital Expenses	\$94,000	\$150,000	\$445,000	\$1,610,000	\$2,305,000
Operating Expenses	\$430,000	\$645,000	\$627,000	\$1,060,000	\$1,200,000
Passenger Revenue	\$43,000	\$64,500	\$152,000	\$272,000	\$292,000
Net Operating Cost	\$387,000	\$580,500	\$475,000	\$788,000	\$908,000
Funds Operating					
--Federal (50%)	\$193,500	\$290,250	\$237,500	\$394,000	\$454,000
--Local (50%)	\$193,500	\$290,250	\$237,500	\$394,000	\$454,000
Total	\$387,000	\$580,500	\$475,000	\$788,000	\$908,000
Capital					
--Federal (80%)	\$75,200	\$120,000	\$356,000	\$1,288,000	\$1,495,801
--State (10%)	\$9,400	\$15,000	\$44,500	\$161,000	\$186,975
--Local (10%)	\$9,400	\$15,000	\$44,500	\$161,000	\$186,975
Subtotal	\$94,000	\$150,000	\$445,000	\$1,610,000	\$1,869,751
Additional 100% State funds	\$0	\$0	\$0	\$0	\$200,000
Additional Local funds	\$0	\$0	\$0	\$0	\$235,249
Subtotal	\$0	\$0	\$0	\$0	\$435,249
Total	\$94,000	\$150,000	\$445,000	\$1,610,000	\$2,305,000
Total Funding					
--Federal	\$268,700	\$410,250	\$593,500	\$1,682,000	\$1,949,801
--State	\$9,400	\$15,000	\$44,500	\$161,000	\$386,975
--Local	\$125,000*	\$200,000**	\$282,000	\$555,000	\$876,224
Total	\$278,100	\$425,250	\$920,000	\$2,398,000	\$3,213,000

Notes:

* Whitfield County portion estimated at \$125,000.

** Whitfield County portion estimated at \$200,000.

A five year finance plan for options 3, 4, and 5 was completed. A five year finance plan was not completed for options 1 and 2 since either of these options can be implemented within the year using the existing funding sources that were evaluated. For option 3 implementation, the first year of funding must be used for the procurement of capital



expenses (e.g. vehicle purchases) and operations beginning in years 2-5. In addition, 10% of the total Section 5307 funds appropriated to Dalton in years 2-5 were withheld for a capital replacement reserve fund to be used for the purchase of replacement buses, maintenance costs or as a general capital savings fund. Table 4-13 shows the transit budget example for option 3.

**Table 4-13
Five Year Finance Plan for Option 3**

	Year 1	Year 2	Year 3	Year 4	Year 5
	Procurement of Capital Equipment	First Year of Revenue	Second Year of Revenue Service	Third Year of Revenue Service	Fourth Year of Revenue Service
Operating Expenses					
Annual Operating Expenses		\$627,000	\$645,810	\$665,184	\$685,140
Annual Passenger Farebox Revenue		\$152,000	\$152,000	\$152,000	\$152,000
Net Annual Operating Cost		\$475,000	\$493,810	\$513,184	\$533,140
Capital Expenses					
Capital Reserve Fund		\$53,125	\$78,869	\$104,260	\$129,288
-Local Coaches	\$235,000				
-Bus Related Equipment	\$50,000				
-Tools and Misc.	\$40,000				
-Signs and Shelters	\$40,000				
-Start-Up Marketing	\$40,000				
-Office and Computer-Related Costs	\$40,000				
Total	\$445,000				
Funds					
Operations					
-Federal (50%)	\$0	\$237,500	\$246,905	\$256,592	\$266,570
-Local (50%)	\$0	\$237,500	\$246,905	\$256,592	\$266,570
Total	\$0	\$475,000	\$493,810	\$513,184	\$533,140
Capital					
-Federal (80%)	FY 04 Section 5307	\$42,500	\$63,095	\$83,408	\$103,430
-State (10%)		\$5,313	\$7,887	\$10,426	\$12,929
-Local (10%)		\$5,313	\$7,887	\$10,426	\$12,929
Subtotal		\$53,125	\$78,869	\$104,260	\$129,288
Additional 100% State Funds		\$0	\$0	\$0	\$0
Additional Local Funds		\$0	\$0	\$0	\$0
Subtotal		\$0	\$0	\$0	\$0
TOTAL Excess Budget		\$0			
Total Funding From:					
-Federal	\$356,000	\$280,000	\$310,000	\$340,000	\$370,000
-State	\$44,500	\$5,313	\$7,887	\$10,426	\$12,929
-Local	\$44,501	\$242,813	\$254,792	\$267,018	\$279,499
Total	\$445,001	\$528,125	\$572,679	\$617,444	\$662,427

Table 4-14 shows a transit budget example over the course of five years for implementation of option 4, with two years worth of funding used for capital expenses (e.g., vehicle purchases) and operations beginning in year 3. In addition, 10% of the total Section 5307 funds appropriated to Dalton in years 3-5 were withheld for a capital replacement reserve fund to be used for the purchase of replacement buses, maintenance costs or as a general capital savings fund.



Table 4-14
Five Year Finance Plan for Option 4

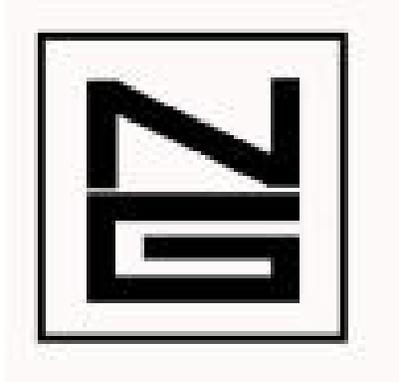
	Year 1 & 2	Year 3	Year 4	Year 5
	Procurement of Capital Equipment	First Year of Revenue	Second Year of Revenue Service	Third Year of Revenue Service
Operating Expenses				
Annual Operating Expenses		\$1,060,000	\$1,091,800	\$1,124,554
Annual Passenger Farebox Revenue		\$272,000	\$272,000	\$272,000
Net Annual Operating Cost		\$788,000	\$819,800	\$852,554
Capital Expenses				
Capital Reserve Fund		\$70,000	\$106,875	\$138,654
-Local Coaches	\$1,125,000			
-Paratransit Vehicles	\$235,000			
-Bus Related Equipment	\$100,000			
-Tools and Misc.	\$40,000			
-Signs and Shelters	\$40,000			
-Start-Up Marketing	\$40,000			
-Office and Computer-Related Costs	\$30,000			
Total	\$1,610,000			
Funds				
Operations				
-Federal (50%)	\$0	\$394,000	\$409,900	\$426,277
-Local (50%)	\$0	\$394,000	\$409,900	\$426,277
Total	\$0	\$788,000	\$819,800	\$852,554
Capital				
-Federal (80%)	FY 04, FY 05, FY 06 Section 5307	\$56,000	\$85,500	\$110,923
-State (10%)		\$7,000	\$10,688	\$13,865
-Local (10%)		\$7,000	\$10,688	\$13,865
Subtotal	\$1,610,000	\$70,000	\$106,875	\$138,654
Additional 100% State Funds	\$0	\$0	\$0	\$0
Additional Local Funds	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0
TOTAL	\$1,610,000			
Excess Budget	\$0			
Total Funding From:				
-Federal	\$1,288,000	\$450,000	\$495,400	\$537,200
-State	\$161,000	\$7,000	\$10,688	\$13,865
-Local	\$161,001	\$401,000	\$420,588	\$440,142
Total	\$1,610,001	\$858,000	\$926,675	\$991,208

Table 4-15 shows a transit budget example over the course of five years for implementation of option 5. This budget is similar to option 4 with two years worth of funding used for capital expenses (e.g., vehicle purchases) and operations beginning in year 3. Like option 4, 10% of the total Section 5307 funds appropriated to Dalton in years 3-5 were withheld for a capital replacement reserve fund to be used for the purchase of replacement buses, maintenance costs or as a general capital savings fund.



**Table 4-15
 Five Year Finance Plan for Option 5**

	Year 1 & 2 Procurement of Capital Equipment	Year 3 First Year of Revenue Service	Year 4 Second Year of Revenue Service	Year 5 Third Year of Revenue Service
Operating Expenses				
Annual Operating Expenses		\$1,166,869	\$1,201,875	\$1,237,931
Annual Passenger Farebox Revenue		\$292,000	\$292,000	\$292,000
Net Annual Operating Cost		\$874,869	\$909,875	\$945,931
Capital Expenses				
Capital Reserve Fund		\$72,457	\$102,828	\$123,168
-Local Coaches	\$1,800,000			
-Paratransit Vehicles	\$235,000			
-Bus Related Equipment	\$100,000			
-Tools and Misc.	\$50,000			
-Signs and Shelters	\$50,000			
-Start-Up Marketing	\$50,000			
-Office and Computer-Related Costs	\$20,000			
Total	\$2,305,000			
Funds				
Operations				
-Federal (50%)	\$0	\$437,435	\$454,938	\$472,966
-Local (50%)	\$0	\$437,435	\$454,938	\$472,966
Total	\$0	\$874,869	\$909,875	\$945,931
Capital				
-Federal (80%)	FY 04, FY 05, FY 06 Section 5307	\$57,966	\$82,262	\$98,534
-State (10%)		\$7,246	\$10,283	\$12,317
-Local (10%)		\$7,246	\$10,283	\$12,317
Subtotal	\$1,797,193	\$72,457	\$102,828	\$123,168
Additional 100% State Funds	\$255,000	\$0	\$0	\$0
Additional Local Funds	\$255,000	\$0	\$0	\$0
Subtotal	\$510,000	\$0	\$0	\$0
TOTAL	\$2,307,193			
Excess Budget	\$2,193			
Total Funding From:				
-Federal	\$1,437,754	\$495,400	\$537,200	\$571,500
-State	\$434,719	\$7,246	\$10,283	\$12,317
-Local	\$434,720	\$444,680	\$465,220	\$485,282
Total	\$2,307,194	\$947,326	\$1,012,703	\$1,069,099



Task 5. Implementation Plan



Dalton-Whitfield County Transit Needs Study

Task 5: Implementation Plan

This chapter evaluates the various management options for operating the proposed transit service in the Dalton area. The management structure must allow for effective and efficient management and control of costs while being consistent with the laws and regulations that define the City's and/or partnering local government's powers. It is appropriate that the final chapter of the Dalton Transit Feasibility Study deal with implementation, since this is the final step in any plan. The implementation phase will be critical to the overall success of the project. This chapter includes a discussion of several key implementation issues, such as financial capacity, management structure, fare structure, and marketing. Finally, it lays out a series of tasks that should be undertaken when implementation planning efforts begin.

5.0 COMMITTEE MEETINGS

On August 22, 2005, the Consultant team attended two meetings of the Technical Coordinating Committee (TCC) and the Citizens Advisory Committee (CAC) in order to provide a project update and the proposed transit service plan, as well as gather the committee's input. Because of the committees' roles in transportation decision making for the Dalton/Whitfield County area, the consultant team felt it was important to inform the group of the work to date on the study, hear and understand the preliminary findings from the three community surveys performed and have any questions answered. A presentation was given to review the project approach, present the community survey results, and offer the potential service options. Most of the presentation then focused on the components of the specific routes/services included in the transit service scenarios and potential federal, State and local funding sources. The committees were then asked to provide their perspectives on the potential role of transit in the Dalton/Whitfield County area and the viability of providing the proposed transit system considering the possible funding sources and associated transit costs. Committee members raised questions regarding local funding and the benefit of public transportation to the community. Additionally, committee members asked if there is a base of people in the community to support the fixed route transit system proposed in the presentation and if simply expanding the current MATS system is sufficient in Dalton/Whitfield County.

5.1 MANAGEMENT STRUCTURE

There are a number of potential management options available to local officials in the Dalton and Whitfield County area to implement and operate some level of public transit services as envisioned in Technical Memorandum #4. Each management option, of course, has distinct advantages and disadvantages that can vary significantly



depending upon overall city/county objectives, the type(s) of services to be provided, financial resources, accountability, ease of implementation, legal impacts and other key issues.

Potential Management Options

Many transit ownership and management options are available. Four management options were defined, representing different type of involvement by the City of Dalton, Whitfield County, and other public entities in providing transit service options. Opportunities for the public entities to use private-sector transit providers were given special attention, since contracting with the private sector may offer both financial and administrative benefits. Management options B, C, and D would allow for a role for contracted service, if that were desired.

There are several reasons for an emphasis on contracted service. One reason is cost. Where service providers are retained by contract to operate services, they are typically sought through competitive bidding. That competitive process would give bidders an incentive to offer their services to participating local governments at the lowest possible cost.

A second reason is flexibility in dealing with employees and workplace issues. Where public employees provide public services, it can be difficult to make major changes, such as major expansion or reduction in the amount of service provided. Public employee work rules may prevent some practices and limited opportunities for change. But where a service provider is retained by contract to provide service, contracts can be structured to be periodically reviewed, or to require regular renewal or renegotiations at which time changes can be made. Also, if any of the new proposed transit services proved to be unsuccessful, the public agency likely could more easily discontinue that service if it was contracted out to a private company.

A broad outline of potential management options for providing the public transit services is presented below. All of these options assume a primary role by the City of Dalton, as the proposed transit services would be operated wholly or partly within the City. However, it is recognized that Whitfield County would likely be involved to some degree.

Option A – Local Government Owned & Operated. The City of Dalton or Whitfield County would have the primary responsibility to plan, finance, and operate the public transportation services. The City or County would purchase vehicles and employ all personnel required for service delivery.

Option B – Contract Service. This option would involve the City of Dalton or Whitfield County having overall responsibility for the operations, but contracting with a service provider who would be responsible for providing all aspects



(vehicles, operations & maintenance facility, bus stops/shelters, employees) of the public transit services.

Under this approach, the City or County would issue a Request for Proposals (RFP) to qualified operators who would develop technical and cost proposals for a pre-determined level of service specified in the RFP. Then, the City or County would receive proposals, evaluate, and select the best qualified service provider based on a set of pre-determined evaluation criteria. Industry analysts advocating this approach to service delivery are of the opinion that competitive proposals result in significantly reduced operating costs when compared to the approach whereby the service is the sole responsibility of a government body or authority.

The service provider could be private or public. Thus any one of the numerous companies providing transit services could propose and be selected to provide the services. For example, Whitfield County currently contracts out the operation and administration of the MATS demand response service with North Georgia Community Action Agency (NGCAA), a nonprofit corporation that provides services oriented to low income communities.

Option C – Local Government Owned/Operations Contracted Out. This approach is essentially a combination of the two options described above. The City or County would have overall responsibility for the operations and would purchase and own the vehicles, the transit center facilities, and perhaps, the operations and maintenance (O&M) facility. Then, a service provider would be retained by competitive procurement to hire the employees, operate, and maintain the new transit services. In Georgia, Cobb County Community Transit (CCT) and Gwinnett County Transit (GCT) are examples of this type of service delivery.

Option D – Multi-Agency Operating Agreement. A final option for the service options envisioned for the area would be an interagency operating agreement wherein a public partnership would be formed between two or more partners (e.g., City of Dalton, Whitfield County, other municipalities, and/or North Georgia Regional Development Center). The agreement would establish partner roles and responsibilities for administration, planning, financing, operating, and maintaining the various transit services.

Mirroring Options A through C, the system could be public agency owned and operated, completely contracted out, or partially contracted out. Contracting out the service would be an attractive option under such an agreement, with the

participating agencies potentially reaping cost savings due to economies of



scale.

Evaluation of Management Options

The organizational options were analyzed with respect to three concerns:

- Legal Issues
- Functional Criteria, and
- Compatibility with alternative service plans.

The evaluation of these concerns included evaluation criteria such as administration, financial responsibility and risk, cost, flexibility and ease of implementation.

- Legal issues: Each of the management structures potentially requires some action by one or more of the following: the City of Dalton, Whitfield County, and the North Georgia Regional Development Center. An additional legal requirement could be for a voter referendum dependent on financing options that may be considered. The Georgia Constitution prohibits a county from incurring any new debt without the assent of a majority of voters voting in an election held for that purpose. A fiscal liability that cannot be discharged by taxes levied within the year in which the liability is undertaken is considered “debt,” although multi-year vehicle leases are specifically exempted from this requirement by state law.

For all options, the Dalton City Council and/or Whitfield County Board of Commissioners must approve the transit service and budgets. If Option D were selected, actions would have to be taken by all partnering agencies, including developing the interagency agreement for service roles and responsibilities.

- Functional Criteria: The functional criteria for which the public entity operating the system desires to take responsibility for are an important concern. With Option A, the City of Dalton or Whitfield County would take on all functional responsibilities for the transit services they provide. At the other extreme with Option B, the public entity can rely on contractors to provide all services including the direct operations, the acquisition of fixed assets (buses, O&M facility, bus stops and shelters), and marketing and customer service. In between with Option C, the public entity can retain all responsibilities except for the “pure” transportation and maintenance functions, i.e., for drivers and vehicle maintenance. Where in this spectrum the public entity will eventually choose to position themselves will depend on many considerations, including:

Knowledge and experience of staff: While some functions of transit service delivery are like any other governmental service, there remain



significant aspects of the scope of work that are unique to the transit industry. These include the time-sensitive delivery of the service (the buses must be on-time, neither early nor late), the reliability expected by the public, the peaked nature of the service, and associated labor issues. The more responsibilities a public entity assumes, the greater level of knowledge required. Some of the knowledge can be procured from consultants (indeed, this project is an example of such a resource). But in the long-term, if a public entity assumes many of the functional responsibilities, then it must “staff-up” with experienced transit professionals to manage the unique aspects of the service.

Assumption of risk: At one extreme, by contracting out all of the responsibilities for the provision and management of transit services, a public entity can place all of the performance risk on the service provider. But a risk remains that the service provider will not perform (or, at least, not perform well). If the service provider were to not perform to the public entity’s expectation, then it could (within the limitation of the contract) terminate the service provider for cause. The disruption in service that might result, however, could be over an extended period of time, particularly if the service provider also provides the buses. As a result, service to the public would suffer.

At the other extreme, a public entity could assume more of the management responsibility for the service. This provides more control and a greater opportunity to assure quality service. But, the public entity assumes a greater in-house burden.

A compromise that many transit agencies have taken is that the public entity procures and owns the vehicles (and, perhaps, the O&M facility.) The service provider’s responsibilities are then limited to vehicle operations and maintenance and other functions that the public entity determines, including planning, scheduling, marketing, and customer service.

Implementation time: Procurement of vehicles and an O&M facility (if a facility exclusively for transit is required) can have long lead times. Shifting the responsibility to the vendor may significantly reduce the time required particularly if the public entity is inexperienced in these types of procurements. This may also reduce the implementation time (if a national vendor can rotate in an existing fleet of vehicles.)

- Compatibility with Alternative Service Plans: Regardless of the level of investment in services that the public partners decide to pursue, either Option B or Option C appears to be the most compatible service delivery approach for the



transit services, with all or some of the responsibilities contracted out to a service provider. Contracted services provide a means for Dalton-Whitfield County to offer a new public service without significantly increasing the number of City employees and having to become experts in the delivery and maintenance of local bus and/or demand response transit services. The selection of Option B or C would be largely dependent on the level of investment in services and anticipated timeframe for implementation that the public partners decide to pursue.

- Administrative Options: Administration is generally defined as local authority and control, staff responsibility and reporting functions. The level of local control is important in terms of responsiveness to area citizens, businesses and transit customers, service quality and efficiency, and cost effectiveness. Option A and Option C give the City of Dalton or Whitfield County the highest level of control. Option A would require the most additional staff, but even Option B and Option C will require some additional administrative staff to manage and administer the service provider contract. As a local government new to transit services, Option B and Option C would shift the provision of supervisors, drivers, and mechanics and much of the reporting to the contractor. Option D involving an interagency operating agreement would spread control and administrative functions among the parties, but roles would be specified in the agreement.
- Financial Responsibility: The public entities will have a high level of financial responsibility for subsidizing services under all options. However, options involving contracted services should have lower financial risks, since a fixed price contract would be awarded to a contractor every three to five years. The amount of local government funding required will, of course, depend on the service alternative selected, the degree of federal and state assistance, and the cost recovery from the farebox (which is dependent on ridership and the fare structure). The Option D interagency agreement would spread the local financial commitment among the participating public entities.
- Ease of Implementation: The ease of implementation is the last issue examined. For this analysis, ease of implementation is defined as the ability to implement some transportation service within a two to three-year time period after the City, County, and other public entities decide to do so and appropriate the required funds.

5.2 FARE STRUCTURE

Determining the optimal fare structure is a critical implementation decision faced by all transit agencies. Ridership and fare structure are closely linked to one another, and



both directly impact the costs recovered from the farebox. Like most products or services, lower fares tend to result in higher ridership but lower revenue, while higher fares tend to reduce ridership but *may* increase revenue. Fares should be set at levels that are consistent with comparable systems and affordable to the general public.

Variables driving fare structure include type of service (e.g., local routes, circulators, rural demand response, ADA paratransit), classes of passengers (e.g., adults, seniors, youth), and fare media (e.g., cash fare, discounted passes or tickets). The assumed fare structure for the proposed transit services is based on the fares of other peer agencies in Georgia and is as presented in Table 5-1.

The full adult fare for all fixed-route local service is assumed to be \$1.25, with a discounted fare of \$0.60 for seniors and persons with disabilities, consistent with FTA half-fare requirements. It is proposed that youth under 18 also be eligible for the discounted fare, with children under age five riding free.

The full fare for ADA paratransit service is assumed to be twice the full adult cash fare for local fixed-route service (or \$2.50), consistent with what the ADA allows. The \$2.50 fare was also assumed for the complementary paratransit services, if implemented, which would provide a higher level of service than traditional fixed route bus service by offering curb-to-curb or possibly even door-to-door service. In addition, the average fare for paratransit operations was assumed to be 100% of the full fare of \$2.50 where no discounts are offered.

Transfers between local routes are assumed to be free, to encourage the use of transit even when a transfer is required. Monthly passes or multi-ride tickets would likely be offered for passenger convenience, most likely at a discount.

Table 5-1
Fare Structure Assumptions

<u>Local Service</u>	<u>One-Way Fare</u>
Base adult cash fare	\$1.25
Senior citizens & persons with disabilities	\$0.60
Youth 18 years old and under	\$0.60
Children under age 5	Free
Transfers	Free
Monthly passes or multi-ride tickets	Price and media to be determined
 <u>ADA Paratransit Services</u>	
Cash fare	\$2.50

5.3 MARKETING

Effective marketing is essential to the success of a new transit system. The basic ingredients of every marketing program are product, price, placement, and promotion.



While the variables that make up the marketing mix are common to every transit system, the way each community blends them is unique.

Product. Transit's product is service—various service characteristics can be classified as type, quality or access. These are all variables that can be used in marketing efforts.

- ✓ **Type of Service.** The type of service is important for marketing efforts. For example, from a marketing perspective, the rural demand response can be thought of as a special service that provides an added measure of customer access and convenience over traditional fixed-route bus service, offering the possibility of curb-to-curb or even door-to-door service to both the general public and those individuals needing special services.
- ✓ **Quality of Service.** Examples of items that typically signify higher service quality are passenger amenities, reliability, safety, courteous drivers and customer service representatives.
- ✓ **Access to Service.** Access is related separately because of its importance. Access is really a dimension of the ease of using the transit service. In addition to offering frequent enough service during the right times of the day to meet the needs of the customer, access including providing adequate and secure parking facilities, transfer centers, and bus stops/shelters. These facilities must also be adequately promoted to provide the customer with that sense of ease in using the system.

Price. Transit's price is reflected in its fare structure. Because price is part of the package that consumers buy or reject, transit fares should be considered a promotional variable as well as a source of revenue. The proposed fares structure covering the various types of service proposed (e.g., local route, rural demand response, etc.) was designed to provide an affordable transportation option for all citizens. No assumptions were made regarding multi-ride tickets and/or monthly passes, but would be an attractive convenience to riders.

Placement. Placement refers to the network for distributing system information and fare media. High community visibility is essential. Information about the system (e.g., schedule and route maps) should be made available in as many convenient locations as possible (e.g., transit centers, major retail stores, government complexes, educational institutions, other major employment sites, and social service agencies). Information on local government and community information web sites is also a good way to provide information, especially to choice riders.

Promotion. The promotional side of the marketing mix includes advertising, public information, and community relations.



- ✓ **Advertising** makes use of various forms of media, ranging from radio and newspapers to circulars and handbills. This includes various advertising and promotions such as media coverage of milestones (e.g., delivery of the buses, implementing new services/routes), groundbreaking ceremonies, campaign advertising, news releases, speakers' bureaus, service bulletins (e.g., notices to inform riders of temporary and permanent service changes), and event marketing.

- ✓ **Public information** encompasses maps, schedules, signs and other forms of information on available services and how they may be used. The opportunities for potential customers to access timely and accurate information about the services provided are essential. Information should be made available to the public via the telephone, printed literature and the Internet. A telephone information line should be staffed during the hours of operation, and operators should be trained to be knowledgeable and courteous. System maps and passenger timetables should be readily available and easy to understand.

- ✓ **Community relations** is the process of meeting the public, keeping the public informed of transit activities, finding out what the community wants, and returning that information to transit management for appropriate action. It will also be important to market the proposed services to people who may never ride transit, such as the higher-income taxpayers, elected officials, young school children, and the media.

5.4 IMPLEMENTATION PLANNING

As a guide for future planning efforts, this section describes the major implementation planning tasks that will have to be undertaken to implement a transit system in the Dalton and Whitfield County area, as well as highlighting some general schedule considerations.

The transit service scenarios proposed in Technical Memorandum #4 provide a wide range of service types and levels for consideration by area local governments. As outlined in Technical Memorandum #4, an assessment of local financial capacity and anticipated levels of FTA and State funding will be critical as public partners wrestle with several key questions. These include how much transit service should be provided (initially and low-term), what areas and transit markets should have the highest priority for service, and what type of service should be operated (particularly in the rural area). Elements of the proposed scenarios selected for implementation, such as routing, span of service, frequency and other operating characteristics would be refined as necessary



based on input from local staff and leaders, and system performance would be projected for each phase of the implementation strategy.

As recognized in the peer review completed in Technical Memorandum #3, performance varies significantly from system to system. Once an initial implementation strategy has been identified, we recommend identifying and visiting two or three of the best performing transit systems operating similar service. By meeting with key staff at these agencies and seeing their systems firsthand, local staff can gain insight into what has worked well, what to emulate, and what to avoid. These visits could result in refinements to the implementation plan or simply affirm and build confidence for the start-up.

Prior to making final decisions on moving forward with a start-up transit plan, it may be very important for City and County leaders to build support by meeting with and gaining the support of key individuals and groups in the community. In turn, these key community leaders would then build support for the system in the larger community. This step would be especially critical if a local referendum may be required to support the system.

Once local government leaders make final decisions on moving forward with a start-up transit system, it is anticipated that an Implementation Work Plan would be prepared. The Implementation Work Plan would further detail and define the tasks and subtasks, assign responsibilities, and develop detailed schedules, milestones, and a financial plan.

The range of management and ownership options were addressed earlier in this chapter. For discussion purposes, the Consultant Team has assumed "Option B – Contracted Service or Option C – City Owned/Operations Contracted Out." Regardless of the ownership and management structure ultimately selected by the public partners, however, most of the same major activities described below still would be applicable.

The first 12 months will involve activities to secure the necessary capital and operating funding for the system. This would include establishing the contracted services; adding transit projects to the metropolitan Transportation Improvement Program (TIP) and Statewide TIP; applying for FTA grants through Georgia DOT; requesting funding and contracting with the State for match commitments and budgeting the required local funds (assuming a local referendum is not required). Then, adequate lead times would be required for 1) procurement of the transit vehicles, 2) procurement of the service provider, and 3) construction/renovation of facilities, such as transit centers and an O&M facility. A period of 12-18 months could be required for procurement, manufacture, and delivery of the vehicles. This schedule is based on current market conditions for new vehicle orders that would be built to local specifications for a small bus appropriate to the Dalton midday and peak period service. Lead time for procurement of ADA compliant shuttle buses for the complementary ADA paratransit

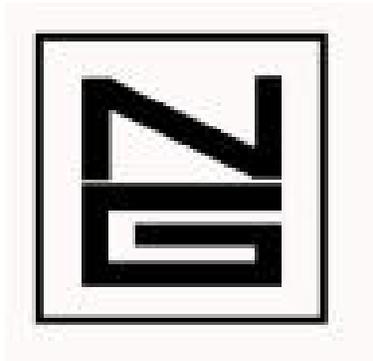


services would be much shorter, assuming they are purchased from the current statewide vehicle procurement contract. The procurement process to contract with a service provider generally requires a minimum of six months. Start-up time required by the service provider between the signing of the service contract and the first day of operations varies, but could be as little as three additional months.

The development of major transit facilities will likely require the longest lead times. Renovation of the downtown transit center into a multi-modal facility could require from 24 to 48 months for preliminary engineering, property acquisition, design and construction. Perhaps the most critical facility need will be the O&M facility. Facility functions typically include vehicle maintenance and fueling, parts storage, overnight vehicle storage, and administration and transportation areas (such as drivers' room and lockers). Generally, transit agencies develop and own their O&M facility so that over the long-term, operations costs can be minimized and effective preventive maintenance can be maximized. However, facility implementation time lines often require three to five years. In the interim years, Dalton or Whitfield County could explore existing City and/or County fleet maintenance facilities, existing MATS' facilities, public school bus facilities, and potential vacant private facilities (trucking companies, car dealerships, etc.) for potential short-term leasing locations. Another alternative would be for the service provider to be required to furnish an operations, maintenance and fueling garage as part of their contract, assuming an existing private maintenance facility is available.

Considering the above discussion, the implementation schedule for the first day of revenue service primarily will be driven by the 12 to 18 month time period required to secure funding, procure, manufacture and receive delivery of the vehicles. After the 6 to 18 months required to procure and manufacture vehicles (not on the statewide contract), we estimate initial start-up of revenue service could take place in as early as Spring, 2007.

Some major tasks involved in the implementation planning process for the proposed transit services are: securing funding sources, staffing requirements, vehicle specification development, procurements of vehicles and a service provider, administrative procedures, operations planning and marketing. Typically, the start-up of new transit services requires several months to reach a stable period of operation. During the transitional period, the Dalton or Whitfield County will monitor sufficiency of the service, customer response, operations and maintenance performance, and vehicle performance and will make adjustments as required.



Appendix A.
Survey Instrument and
Related Information



DALTON - WHITFIELD COUNTY TRANSIT NEEDS STUDY COMMUNITY GOALS AND OBJECTIVES

Your help is needed to assist the North Georgia Regional Development Center, City of Dalton and Whitfield County in learning about its citizens' views and level of interest in public transit services. This packet of information is intended to get your general impressions of public transit and your views on the goals and objectives which will guide the development of public transit planning in Dalton and Whitfield County.

INITIAL IMPRESSIONS OF PUBLIC TRANSIT

Please read each of the following statements and mark each with a "5", "4", "3", "2", or "1", depending on your opinion of the statement.

- 5 = Strongly Agree
- 4 = Somewhat Agree
- 3 = Neither Agree or Disagree
- 2 = Somewhat Disagree
- 1 = Strongly Disagree

1. Good public transit services should be an important part of our community.
___ 5 ___ 4 ___ 3 ___ 2 ___ 1
2. Public transit services should be operated mostly for seniors and people who cannot drive.
___ 5 ___ 4 ___ 3 ___ 2 ___ 1
3. Public transit services should be comfortable and efficient.
___ 5 ___ 4 ___ 3 ___ 2 ___ 1
4. Using public transportation would cost me more than driving my own car.
___ 5 ___ 4 ___ 3 ___ 2 ___ 1
5. Public transit services should be expanded to allow people to commute to work locations outside Whitfield County.
___ 5 ___ 4 ___ 3 ___ 2 ___ 1
6. Public transit services should be expanded for seniors, disabled people, and people who cannot afford to own and drive a car.
___ 5 ___ 4 ___ 3 ___ 2 ___ 1
7. Whitfield County should seek federal, regional, and state funding for better public transit services.
___ 5 ___ 4 ___ 3 ___ 2 ___ 1
8. Whitfield County should provide local funding for better public transit services.
___ 5 ___ 4 ___ 3 ___ 2 ___ 1
9. If good public transit services were available to travel to work, I would use them.
___ 5 ___ 4 ___ 3 ___ 2 ___ 1
10. If good public transit services were available to travel to places other than work, I would use them.
___ 5 ___ 4 ___ 3 ___ 2 ___ 1

VIEWS ON COMMUNITY GOALS AND OBJECTIVES

Many communities establish goals to help guide them in making decisions, especially those related to the development and management of land within its boundaries and investments of public funds. Goals can be defined as public policy statements which describe in general terms what the community wants to achieve in the broadest sense.

Public transit systems can help a community achieve its transportation goals as well as its goals for economic development, neighborhood preservation, environmental protection, and land development.

The following eight clusters of goals and objectives relate to the provision of public transit services in the City of Dalton and Whitfield County. **Please rank each of these clusters according to the importance you think each one should have in guiding the planning and development of public transit options. Please use “8” for the most important cluster and “1” for the least important one.** If you would like to add an objective to a particular goal, please note it in the blank provided.

GOAL 1: PROVIDE SAFE AND SECURE PUBLIC TRANSIT FACILITIES

OBJECTIVES:

- Assure that public transit service providers meet all state and federal safety requirements.
 - Maintain all public transit vehicles in good condition.
 - Provide passenger amenities, such as benches, shelters, signs, and lighting for transit users.
 - Provide communications equipment on all public transit vehicles.
 - Others?
-

GOAL 2: PROVIDE AN INTERCONNECTED SYSTEM OF PUBLIC TRANSIT SERVICES FOR USERS.

OBJECTIVES:

- Coordinate the provision of all transit services within the County, including services provided by the Mountain Area Transit System (MATS).
 - Create new public transit connections to activity centers in Rome, Chattanooga, or other locations outside Whitfield County for work and shopping trips.
 - Others?
-

GOAL 3: SUPPORT EFFICIENT LAND DEVELOPMENT PATTERNS.

OBJECTIVES:

- Coordinate transit system planning with the developers and local governments to create opportunities for transit-oriented development where it is appropriate.
 - Encourage good pedestrian networks to facilitate the use of public transit.
-

- Work with City, County and NGRDC staff members and developers to include transit-friendly design features in new developments.
 - Others?
-

GOAL 4: PROTECT THE COUNTY'S NATURAL ENVIRONMENT.

OBJECTIVES:

- Use clean fuel vehicles for the provision of public transit services.
 - Reduce air pollution from auto travel by increasing the number of transit riders in the County.
 - Avoid the construction of transit facilities in environmentally-sensitive areas.
 - Others?
-

GOAL 5: SUPPORT ECONOMIC VITALITY AND GROWTH

OBJECTIVES:

- Coordinate the location of new and expanding job sites with public transit services.
 - Encourage the marketing of public transit services at job sites.
 - Provide visitor-oriented transit services.
 - Publicize the availability of public transit services to visitors.
 - Others?
-

GOAL 6: PROVIDE TRANSPORTATION OPTIONS FOR PEOPLE WHO CANNOT OR CHOOSE NOT TO DRIVE.

- Expand the hours of service for the Mountain Area Transit System (MATS) and other social services transportation providers.
 - Provide transit services to new destinations for MATS and other social service agency clients.
 - Others?
-

GOAL 7: HELP REDUCE TRAFFIC CONGESTION.

OBJECTIVES:

- Provide transit services during commute periods for residents traveling to and from work sites within the County.
 - Provide transit services for special events which place heavy demands on the highway system.
-

- Construct park and ride lots to facilitate transit use, carpooling, and vanpooling.
 - Create shuttle and circulator transit services in appropriate areas to reduce auto trips on the arterial road system.
 - Others?
-

_____ **GOAL 8: PROVIDE GOOD VALUE FOR THE PUBLIC'S INVESTMENT IN PUBLIC TRANSIT.**

OBJECTIVES:

- Use a mixture of funding sources to support public transit in order to balance the costs and benefits of the services.
 - Minimize the number of transfers experienced by transit riders.
 - Involve the private sector in the provision of public transit services.
 - Manage operating costs within acceptable ranges based on State of Georgia peer systems.
 - Seek federal, state, and regional funds to supplement user fees and local funds for the implementation of public transit services in Whitfield County.
 - Replace capital equipment on a timely basis to reduce unnecessary operating costs.
 - Others?
-

COMMENTS OR ADDITIONAL GOALS AND OBJECTIVES

Thank you very much for your interest in this project and for providing your comments to us.

PLEASE RETURN THESE SHEETS TO:

**Mignon Allen
Dovetail Consulting, Inc.
427 Moreland Ave. NE, Suite 600
Atlanta, GA 30307
Fax: 404-223-1662**



NORTH GEORGIA REGIONAL DEVELOPMENT CENTER
FANNIN GILMER MURRAY PICKENS WHITFIELD

May 16, 2005

Dear Dalton-Whitfield County Social Service Agency:

The North Georgia Regional Development Center (NGRDC) is conducting a transit feasibility study (see attached TDP Fact Sheet). The goals of the study are to identify public transit mobility needs and formulate a plan to implement transit service, if feasible. To accomplish these tasks, the NGRDC is gathering information from a number of sources including the general public, major employers and social service agencies in Dalton-Whitfield County to determine current and future transit needs. The survey consists of a short series of questions to identify the basic trip-making behavior patterns of your employees, attitudes about public transit, willingness to use the system and desired methods for financing the system (see attached Social Agency Survey).

Please assist the NGRDC in this important transportation initiative by completing the survey on behalf of your agency and returning it using one of the following methods:

1. Fax: (404) 223-1662
2. Email: mallen@dovetailconsulting.net
3. Mail to: Dovetail Consulting
The Point Center Building
427 Moreland Avenue, Suite 600
Atlanta, Georgia 30307

**PLEASE RETURN
SURVEY BY
FRIDAY, MAY 27, 2005**

If you have any questions about the survey, please contact Mignon Allen of Dovetail Consulting at (404) 223-1660 or mallen@dovetailconsulting.net.

Thank you for your participation.

Sincerely,

Barry L. Tarter
Executive Director

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Attachments: TDP Fact Sheet
Social Agency Survey



**DALTON-WHITFIELD COUNTY
TRANSIT FEASIBILITY STUDY
SOCIAL AGENCY SURVEY
MAY 2005**

This survey is being conducted by the North Georgia Regional Development Center (NGRDC) to determine whether public transit services are needed in Dalton-Whitfield County to enhance mobility and quality of life in the county. Your responses will be kept confidential. Please complete the survey and fax to **Mignon Allen at 404-223-1662 by May 27, 2005. Thank you!**

1. Name of your organization:

2. What geographic area does your organization serve (i.e. specific counties, cities, or communities)?

3. Which of the following categories best describes the function of your organization? (choose one):
 - a. Senior Services
 - b. Children's Services
 - c. Immigrant Services
 - d. Employment Services
 - e. Health Services
 - f. Other (*specify*): _____
4. About how many clients do you serve? Daily? _____ Annually? _____
5. Do any of your clients currently arrive at your establishment using public transit?
Yes _____ No _____ If Yes, about how many use these services? _____
6. Do any of your clients currently arrive at your establishment using taxi service?
Yes _____ No _____ If Yes, about how many clients use this service? _____
7. Do you currently operate transportation services for your clients?
Yes _____ No _____ If Yes, what types of services do you provide? _____
8. Do you coordinate your transportation needs with or obtain transportation services from another agency or company?
Yes _____ No _____ If Yes, which agency/company? _____
8. Would additional transit services help your organization fulfill its mission better? Yes _____ No _____
9. In your opinion, what types of public transit would your clients or employees use (choose all that apply)?
 a. Local Bus Service (within County) d. More carpooling and vanpooling
 b. Express Bus Service (e.g., to Downtown Atlanta) e. Door-to-door on-demand service
 c. Commuter Rail f. None of the above
10. Given Dalton-Whitfield County's current growth trend, how much has the demand for your services increased in the past five years (choose one):
 a. It has stayed about the same c. It has decreased
 b. It has increased, but we have been able to manage it d. It has increased so much that we cannot meet all the needs
11. In your opinion, will expanded, reliable public transit service help your clients in their daily lives?
Yes _____ No _____
12. In general, what is the most important transportation-related issue negatively impacting your organization in Dalton-Whitfield County?



NORTH GEORGIA REGIONAL DEVELOPMENT CENTER
FANNIN GILMER MURRAY PICKENS WHITFIELD

March 10, 2005

Dear Dalton-Whitfield County Employer:

The North Georgia Regional Development Center (NGRDC) is conducting a transit feasibility study (see attached TDP Fact Sheet). The goals of the study are to identify public transit mobility needs and formulate a plan to implement transit service, if feasible. To accomplish these tasks, the NGRDC is surveying each of the major employers in Dalton-Whitfield County to determine current and future transit needs. The survey consists of a short series of questions to identify the basic trip-making behavior patterns of your employees, attitudes about public transit, willingness to use the system and desired methods for financing the system (see attached Employer Survey).

Please assist the NGRDC in this important initiative by completing the survey on behalf of your company and returning it using one of the following methods:

1. Fax: (404) 223-1662
2. Email: mallen@dovetailconsulting.net
3. Mail to: Dovetail Consulting
The Point Center Building
427 Moreland Avenue, Suite 600
Atlanta, Georgia 30307

We would appreciate your response by FRIDAY, MARCH 18, 2005.

If you have any questions about the survey, please contact Mignon Allen of Dovetail Consulting at (404) 223-1660 or mallen@dovetailconsulting.net.

Thank you for your participation.

Sincerely,

Barry L. Tarter
Executive Director

Attachments: TDP Fact Sheet
Employer Survey

**DALTON-WHITFIELD COUNTY - TRANSIT DEVELOPMENT PLAN
EMPLOYER SURVEY
MARCH 2005**

Please complete this brief survey and fax your responses to Mignon Allen at (404) 223-1662 no later than **Friday, March 18, 2005**. Thank you for your assistance.

Nature of Business

1. Which of the following categories best describes your type of business? (Choose one):

- Public Sector/Government
- Private Non-Profit Organization
- Professional and Related Services
- Manufacturing
- Finance/Insurance/Real Estate
- Retail/Wholesale
- Entertainment
- Restaurant
- Agricultural
- Other (specify): _____

Employee/Operational Characteristics

2. How many employees (approximately) do you employ in each of the following categories? (Please write the number in the space provided)

- _____ Professional (Management, sales, computers, engineers, etc.)
- _____ Semi-professional/ Skilled Labor (Electricians, maintenance, mechanic, technicians, etc.)
- _____ Semi-skilled Labor (Material handlers, security, assembly line, etc.)
- _____ Unskilled Labor (Service workers, clerks, janitor, etc.)

3. How many persons at this location are employed (Please write the number in the space provided)

- _____ Full-time? (work more than 20 hours a week)
- _____ Part-time? (work less than 20 hours a week)

4. From where do most of your employees commute?

5. Does your company use shifts?

- Yes
- No

5a. If yes, what are they:

- Office staff _____ to _____
- Day Shift _____ to _____
- 2nd Shift _____ to _____
- 3rd Shift _____ to _____

5b. If No, what are the standard hours of operation at your location? _____ to _____

6. Does your company offer flexible work hours for your employees?

Yes

No

If yes, please explain:

Expansion Plans

7. Does your company plan to expand in the next 1-5 years?

Yes

No

Don't Know

7a. If Yes, how many employees do you plan to add?

Full-time

Part-time

7b. If the work force grows, where do you believe the additional employees will live/commute from?

Public Transportation Services

8. Do you currently provide transportation services or subsidize transportation services for your employees?

Yes

No

If yes, please describe:

9. Has your business had difficulty finding a dependable work force due to a potential employee's lack of transportation?

Yes

No

If yes, please explain:

10. If more public transportation were available to your current employees, what percentage of your employees do you think would use it?

None

Less than 10%

Between 10-25%

Between 25-50%

More than 50%

11. If public transit services were available in Dalton-Whitfield County, which of these options do you think your company would support at your location (choose all that apply):
- Subsidizing monthly transit passes for employees
 - Having preferred parking areas for carpoolers and vanpoolers.
 - Providing some funding for employee vanpool services
 - Providing some funding for employee shuttles to transit stations
 - Marketing public transit services at the work location
 - Would not support public transit
12. Would your company be interested in subsidizing public transportation costs (and receiving the associated tax advantages) for each of your employees who use public transportation to get to work?
- Yes
 - No
13. Would your company be willing to amend current shift times to accommodate employees using public transportation?
- Yes
 - No
14. In your opinion, will expanded, reliable transit service make Dalton-Whitfield County a more attractive place to do business?
- Yes
 - No

General Comments

15. In general, what is the most important transportation-related issue that must be addressed to improve your business operations in Dalton-Whitfield County?
-
-
-
16. Do you have any other ideas, comments, or issues concerning current or future public transportation in Dalton-Whitfield County?
-
-
-

END OF SURVEY

Thank You!