HINESVILLE AREA TRANSIT FEASIBILITY STUDY

FINAL REPORT

Prepared for:
HINESVILLE AREA METROPOLITAN PLANNING ORGANIZATION

Prepared by:
MANUEL PADRON & ASSOCIATES, INC.

In Association with:
DW & ASSOCIATES

December 30, 2004

Introduction

In March 2004, the City of Hinesville contracted with Manuel Padron & Associates, Inc. (MPA) to conduct a transit feasibility study for the Hinesville urban area, as well as the rural areas of Liberty County. The study is intended to identify community goals, formulate and evaluate appropriate transit services, and prepare an implementation plan for the area. The study is being conducted under the direction of the City of Hinesville and the Hinesville Area Metropolitan Planning Organization (HAMPO), with additional participation on a project Steering Committee by the City of Allenhurst, City of Flemington, City of Walthourville, Liberty County, Long County, Fort Stewart, the Coastal Georgia Area Community Action Authority, and the Liberty County Development Authority. Transit service needs and opportunities are being examined to determine what is feasible and acceptable to the community. Because of the relative low density in residential development and the dispersed development pattern, the transportation solutions must be resourceful. The most advantageous funding and management options for operating the system must be defined. This study will develop alternatives for providing the most logical and cost-effective transit options available to the study area.

The study is divided into five distinct activities:

Activity 1: Identify Community Goals & Objectives and Define the Desired Role for Transit
Activity 2: Evaluate Existing Conditions & Short-Term Trends and Identify Potential Transit Markets
Activity 3: Define and Evaluate Potential Transit Options
Activity 4: Evaluate Most Promising Alternatives
Activity 5: Implementation Plan

This report includes three technical memoranda documenting the activities of the Hinesville Area Transit Feasibility Study as follows:

- Technical Memorandum #1:
  - Community Goals and Objectives and the Desired Role for Transit
  - Existing Conditions, Short-term Trends and Potential Transit Markets

- Technical Memorandum #2:
  - Define Potential Transit Options
  - Evaluate Most Promising Alternatives

- Technical Memorandum #3
  - Public Involvement Process Summary
  - Implementation Plan

The opinions, finding, and conclusions in this publication are those of the author(s) and not necessarily those of the City of Hinesville, the Georgia Department of Transportation, or the Federal Transit Administration.

HINESVILLE AREA TRANSIT FEASIBILITY STUDY

TECHNICAL MEMORANDUM #1

Prepared for:
HINESVILLE AREA METROPOLITAN PLANNING ORGANIZATION

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1.0 Identify Community Goals & Objectives and Define Desired Role for Transit

Activity 1 tasks included reviewing existing plans and programs; conducting stakeholder interviews; assessing potential funding sources; and defining the desired role for transit.

1.1 Existing Plans and Programs

The development of feasible transit services must be compatible and coordinated with current land use/transportation plans. In order to achieve this objective, the following plans and documents were obtained and reviewed:

- Liberty County Joint Comprehensive Plan, June 1999,
- City of Hinesville Redevelopment Master Plan, March 2003,
- Relevant sections of the Georgia Department of Transportation (GDOT) 2004-2006 State Transportation Improvement Program (STIP),
- Relevant sections of GDOT's 2005-2007 Draft State Transportation Improvement Program (STIP),
- Relevant sections of GDOT's Construction Work Program
- Fort Stewart Comprehensive Traffic Engineering Study, Assessment of Existing Conditions (Draft), February 2004,
- Relevant and most recent data on public transportation services being provided in the area.

1.1.1 Local Land Use Plans

The *Liberty County Joint Comprehensive Plan* was completed in June 1999. Its purpose is to serve as a guide for the future vision of unincorporated Liberty County and the municipalities of Allenhurst, Flemington, Gum Branch, Hinesville, Midway, Riceboro, and Walthourville. It addresses the health, safety, and welfare of Liberty County's residents; social and economic needs of the community; environmental protection concerns; and the location of future development activity. The plan has three distinct components: inventory and assessment, statement of needs and goals, and implementation strategy. Relevant goals, objectives, and strategies address the need to provide better access to vocational schools, improve automobile circulation within the county and identify the feasibility of non-automotive transportation modes, develop a comprehensive transportation plan, and promote the use of alternative modes of transportation as the county develops.

The *City of Hinesville Redevelopment Master Plan* was completed in March 2003. The plan is intended to serve as a guide to the revitalization of the urban core of Hinesville, including the Fort Stewart main gate area, the downtown core, and surrounding residential and commercial areas. Its implementation strategy focuses on major transportation corridors, multi-modal transportation systems, enhancement of the city center, community gateways, and identification of redevelopment districts. With regards to the need and feasibility of public transit services, community feedback was mixed. While a need was generally recognized for certain sectors of the population (e.g., those without access to a vehicle, the elderly, military spouses, and youth) there was concern expressed about costs and willingness of people to ride it. An implementation initiative was identified to introduce public transit services, especially in the Memorial Drive corridor linking Fort Stewart and downtown Hinesville. Frequent rubber-tired trolley shuttle service was identified to make this connection and support the redevelopment of the Memorial Drive area. Additional fixed-route service in the core area could become financially viable in the future as the type and intensity of land uses and demographics change.

1.1.2 Local Transportation Plans

The Georgia Department of Transportation (GDOT) develops and maintains a three-year *Statewide Transportation Improvement Program* (STIP), as well as a six-year *Construction Work Program* (CWP). The STIP is a multimodal program, updated annually, that includes federally funded transportation projects throughout the state identified through the planning process. For the rural areas of the state, GDOT identifies projects in consultation with local officials. In each urbanized area, the Metropolitan Planning Organization (MPO) develops a TIP, which is then included in the STIP. The Hinesville Area MPO (HAMPO) has developed an Interim TIP for FY 2005 to 2007, but has not yet completed development of its Long Range Transportation Plan.

Major roadway projects in the draft 2005-2007 STIP for the area include the widening of SR 196 from US 84 east of Hinesville to US 17 southwest of I-95, which will complete a four-lane corridor from I-95 into Hinesville, as well as passing lanes on SR 144 through Fort Stewart. Funds programmed in the draft STIP for area transit projects are discussed further in Section 1.4. Section 5310 and 5311 funds are programmed at the GDHR Region and GDOT District levels, respectively. No Section 5307 funds for the Hinesville urbanized area are programmed in the STIP at this time. An additional major road project in the longer-range *Construction Work Program* is the construction of a new four-lane roadway, the US 84 Connector from just east of the SR 196/US 84 intersection to US 84 west of Walthourville.

To accommodate and support the existing divisional units stationed at Fort Stewart, a *Fort Stewart Comprehensive Traffic Engineering Study* is currently underway. A draft report, *Assessment of Existing Conditions*, was completed in February 2004. It provides an analysis of the existing transportation infrastructure supporting the installation (roadways and parking), examines traffic flow characteristics and accident history, and identifies transportation deficiencies. It identifies deficiencies at four of the six operational gates that provide access to Fort Stewart. These gates experience heavy traffic volumes entering the installation during the morning and afternoon peak periods with long delays and queuing inbound. Lunchtime congestion is also a problem at the gates adjacent to Hinesville. Queuing during peak hours often extends as far as one-half mile or more. The draft report also identifies deficiencies at a

number of intersections within the installation, parking deficiencies, and pedestrian deficiencies. The final submittal of the report will provide conceptual designs of recommended improvement projects to address these deficiencies.

1.1.3 Local Public Transportation Services

Private providers, Long County Transit, and the Coastal Georgia Area Community Action Authority (CGACCA) are currently providing public transportation services in the Hinesville and Liberty County area. Private providers include taxicab companies, including Yellow Cab and Blue Line Taxi. In addition, Fort Stewart is currently providing on-post shuttle services using a leased fleet of approximately 25 vans seating 20 passengers.

Long County Transit provides publicly funded transit services under two programs described below serving Long County, a small portion of which is within the HAMPO area—Rural Public Transportation and Coordinated Transportation. The two programs share a fleet of five vehicles (12 and 15-passenger vans) with no spares.

Locally-matched Federal Transit Administration (FTA) Section 5311 funds provided through the Georgia Department of Transportation (GDOT) are used to provide rural transportation services in Long County. Service is provided within all of Long County, and also to Hinesville and other locations in Liberty County, Jesup, and other out-of-county locations. Service is operated on a demand response basis, with 24-hour advance reservations, on weekdays from 6:00 a.m. to 6:00 p.m. Current one-way fares are $2.00 within Long County, $3.50 out of the county up to 30 miles, and $24.00 for trips over 30 miles.

Long County Transit also provides Coordinated Transportation services which are administered and funded by the Georgia Department of Human Resources (DHR). Under DHR Coordinated Transportation, a single contracted provider delivers program-related transportation services to clients of several DHR divisions. In Long County, these include clients of three DHR divisions—Aging Services, Family and Children Services (DFCS), and Mental Health, Developmental Disabilities, and Addictive Diseases (MHDDAD). This system allows for the most efficient and cost-effective provision of services. For Long County, DHR contracts with the Coastal Georgia Regional Development Center (CGRDC), who is sub-contracting with Long County Transit to provide the transportation services. Service is provided on a demand response basis, with 24-hour advance reservations, 24 hours a day, seven days a week. Much of the service is provided to locations outside Long County, particularly to Hinesville and Liberty County, but also to Jesup, Glenville, Savannah, etc.

In Liberty County, DHR contracts with the CGRDC to provide transportation services for DHR clients. The RDC is currently sub-contracting with the CGACAA to deliver transportation services to clients of three DHR divisions—Aging Services, Family and Children Services (DFCS), and Mental Health, Developmental Disabilities, and Addictive Diseases (MHDDAD) —using seven vehicles (15-passenger vans, paratransit vans, mini-vans) with no spares. Service is provided on a demand response basis, with 24-hour advance reservations, 24 hours a day, seven days a week.

Peak service times, primarily for DFCS clients needing transportation to and from work, are from 6:30 to 9:00 a.m., from 2:00 to 5:00 p.m., and from 10:00 p.m. to 1:00 a.m. About half of the service is provided to locations within Liberty County, with the remainder provided to locations outside the county, including Savannah and Brunswick.

It is important to note that DHR Coordinated Transportation services are available only to clients of the DHR divisions being served, and there are limitations on the types of trips that can be provided. For instance, DHR uses Temporary Assistance for Needy Families (TANF) funding to provide trips to DFCS clients. Due to TANF program regulations, DHR trips to work can only be provided to those receiving TANF. Once a person's income reaches a certain level, he or she is no longer eligible for TANF. So, if getting a job means getting off TANF, it also means giving up essential benefits, including DHR transportation. Many TANF recipients who are transitioning from welfare to work often obtain jobs with very low wages that are not sufficient to cover private transportation costs, making it very difficult to maintain employment.

1.2 Stakeholder Interviews

Stakeholder Interviews were conducted to brief key leaders in the community on the Transit Feasibility Study and to gain insight into their perspectives on transit needs, potential markets, and the desired role of transit in the area. Stakeholders were initially identified cooperatively by the MPA team and City of Hinesville, Liberty County, and Long County representatives, with some additions made at the suggestion of stakeholders. The list of interviewees includes public officials, business leaders, civic leaders, education leaders, and officials of social service organizations. A total of 15 stakeholder groups were interviewed in person or over the telephone in May 2004.

A summary of the interview process is included as Appendix A, and is organized based on the major issues put forth in the interview questionnaire:

- Is some form of public transit needed in the Hinesville and Liberty County area?
- Will public transportation contribute to the economic development of the area?
- How high a priority is transit for the area?
- Who are the people that most need to be served by transit and what destinations should be targeted?
- What types of transportation options should be considered?
- Will the people of the Hinesville and Liberty County area support some form of financial assistance for public transportation?
- What should the role of public transit in the Hinesville and Liberty County area be?

Common themes heard through the course of interviews included the following:

- Some type of public transit is needed in both the urban and rural areas
- Transit would help improve mobility, quality of life, and traffic congestion
- For people who can't drive or don't have access to a car, transit is a high priority
- Specific groups that would benefit include low-income families, military dependents, seniors, disabled residents, and youths
- The general public may not be as likely to use or support transit
- People who don't drive need transportation to jobs, job training, doctors, shopping, recreation, and government services
- Many people need to be able to get to Ft. Stewart; Savannah Tech; industrial parks in Midway and Riceboro; Wal-Mart and grocery stores; government offices in downtown Hinesville; and area parks
- Transit services should be tailored to meet the area's diverse needs
- Local bus routes might work well to Ft. Stewart, downtown Hinesville, and businesses along US 84
- Demand response service might be best in the rural areas and for seniors and the disabled
- Express bus service or vanpools during peak hours to Ft. Stewart and east end industrial parks should be considered

1.3 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.

Finally, this section discusses recent changes in the federal tax code that make it easier for all employers, including the federal government, to offer public transit and vanpool benefits to their employees. The benefit is called Commuter Choice (also known as the Transportation Incentive Program as implemented by the Department of Defense) because it gives employees an attractive alternative to driving to work alone.

1.3.1 Federal Funds

The Transportation Equity Act for the 21st Century (TEA-21), signed into law on June 9, 1998, authorized a six-year federal transit program. The Federal Transit Administration (FTA) administers the Section 5307 Urbanized Area Formula Program which would be the primary federal funding program applicable to 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. There are several other categories of funding available under the provisions of TEA-21, such as the flexible highway programs.

The Fiscal Year (FY) 2003 appropriations, signed into law by President Bush on February 20, 2003, were to mark the final year of transportation funds authorized under TEA-21. In May 2003, the President submitted the Administration's reauthorization proposal (known as Safe, Accountable, Flexible, and Efficient Transportation Equity Act of 2003, or SAFETEA) that proposed a six-year, $247.4 billion transportation bill with $45.8 billion for transit. The SAFETEA proposal includes a reorganization of the structure of transit funding programs with new programs, elimination of some current programs, and movement of several programs from the Capital Investment category to the formula category. For example, the Administration proposes to formularize the funds associated with the existing Bus / Bus Facility category of the Section 5309 Capital Program into other programs rather than use the congressional earmarking process as is now the case. The Administration argues that formula programs would supply more predictable funding streams, enable grantees to identify and plan projects to meet priority needs, and provide a broader and more equitable distribution of funds.

However, Congress has attempted to reauthorize the transportation bill at higher funding levels (at least one House Committee proposal was for $375 billion over six years). As of July 2004, the Senate conferees had counter-offered funding levels of $318 and $289 billion; the House had offered $284 billion with some indication of support by the President. The House and Senate could not reach an agreement and passed the sixth extension of TEA-21, and the President signed it into law on September 30, 2004, which extends TEA-21 through May 31, 2005. The extension bill does not make changes to current law or the transit program structure under TEA-21, but simply provides a temporary extension of current law in order to provide Congress with more time to consider passage of a comprehensive reauthorization of TEA-21.

Congress passed the FY 2005 Omnibus Appropriations Act on November 20, 2004. The bill provides $7.644 billion for the FTA programs as compared to the FY 2004 appropriation of $7.266 billion. The FTA formula programs for FY 2005 will increase by approximately 4.8 % over FY 2004 levels. A summary of the formula programs follows.

1.3.1.1 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 are summarized in Table 1-5. 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 1-5
FY 2004 Georgia Urbanized Area Apportionments

U.A.	Population	Density	Pop. Rank	Apportionment
Atlanta	3,449,840	1783	11	$53,956,958
Augusta	335,630	1448	92	$1,860,902
Columbus	242,324	1780	129	$1,740,136
Savannah	208,000	2040	144	$2,656,479
U.A.s under 200,000 in population				
Macon	135,170	1679	203	$1,323,483
Athens	106,482	1338	247	$946,339
Albany	95,450	1449	271	$876,379
Warner Robins	90,838	1123	282	$755,534
Gainesville	88,680	981	291	$704,205
Rome	58,287	1427	391	$531,766
Dalton	57,666	1060	398	$470,000
Valdosta	57,647	1520	399	$540,139
Brunswick	51,653	1201	438	$440,298
Hinesville	**50,360**	**1854**	**448**	**$516,449**

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. For U.A.s under 200,000 in population, the Section 5307 apportionments are based on population and population density only. The FY 2004 unit values of data for U.A.s under 200,000 in population were:

Apportionment $ = (Population × $5.34049101) + (Population × Density × $0.00265084)

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 Hinesville (and the other nine, small 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.

Currently, no Section 5307-funded projects are programmed in the Hinesville Transportation Improvement Program (TIP) and the draft 2005-2007 Georgia State

Transportation Improvement Program (STIP). The FY 2004 Section 5307 Hinesville U.A. apportionment of $516,449 is available for programming. Unprogrammed, prior year apportionments to Georgia U.A.s may also be available. As discussed in the previous section, there are a number of proposed funding levels being considered for reauthorization. For example, some budget writers have estimated annual increases in the Section 5307 program of approximately 5%. However at this time, we would recommend a more conservative assumption for future growth in Section 5307 funding. Table 1-6 presents actual TEA-21 and preliminary annual estimates of Section 5307 funds for the Hinesville Urbanized Area over the next reauthorization period. The estimates assume the 4.8% increase in formula programs from FY 2004 to FY 2005 as passed in the FY 2005 Omnibus Appropriations Act, and a 2.5% annual growth rate from FY 2005 to FY 2009.

TABLE 1-6
Hinesville Urbanized Area
Section 5307 Funding Estimates

FY	5307 Funds
2004	$516,449*
2005	$541,000
2006	$555,000
2007	$569,000
2008	$583,000
2009	$597,000

*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 Section 5307 funds/State funds/ local funds, respectively.

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.

1.3.1.2 Other State Administered Formula Transit Programs

The Administration is proposing that a number of formula programs be administered directly by the States including the Section 5310 Elderly and Persons with Disabilities Program, Section 5311 Non-Urbanized Area Formula Program, and Job Access & Reverse Commute Program (JARC). The JARC program has been a discretionary program during TEA-21, but the Administration's intent is to formularize this program in SAFETEA. The Administration is also seeking legislation to create a new program entitled the New Freedom Initiative (NFI). The NFI initiative supports the President's goal of reducing barriers to work, and increasing access and opportunities, for persons

with disabilities by providing funding to implement innovative transportation solutions. 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 $2,288,079 in Section 5310 funds for FY 2004.

  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. Table 1-7 summarizes the Section 5310 capital schedule in the draft 2005-2007 STIP for GDHR Region 12 (9 counties including Liberty).

  TABLE 1-7
  Draft 2005-2007 STIP
  GDHR Region 12
  Section 5310 Schedule

FY	Capital*
2005	$480,497
2006	$504,521
2007	$529,747

  Based on a review of programmed Section 5310 projects in the draft 2005-2007 STIP for Albany, Brunswick, Rome and Warner Robins, the estimated FY 2006 available funding for Hinesville would be approximately:

  Estimated FY 2006 Hinesville Section 5310 Available Funding
  Capital Project Funding Range: $30,000* - $45,000*

  ** These are matched amounts with an assumed breakout of 80% federal and 20% State (GDHR) funds.*

- 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, Liberty County would be eligible for these funds where transit services are provided outside the Hinesville Urbanized Area. The State of Georgia was apportioned $8,451,488 in non-urbanized area funds for FY 2004. The federal fiscal year funding is programmed by GDOT toward the subsequent calendar year projects. That is, the FY 2004 federal dollars are allocated by GDOT to projects proposed

for calendar year 2005. The GDOT issues an Administrative Guide for applying for these funds. The Guide and process are coordinated through GDOT District Offices (Liberty County is in District 5, Jesup). The submission of project applications is due to GDOT by August 1 – 31 in order to receive funding for the subsequent calendar year.

Table 1-8 summarizes the Section 5311 schedule in the draft 2005-2007 STIP for capital and operating amounts into the draft 2005-2007 STIP for District 5. Programmed amounts are subsequently adjusted to reflect actual federal appropriations and project needs.

TABLE 1-8
Draft 2005-2007 STIP
GDOT District 5
Section 5311 Schedule

FY	Capital**	Operating***
2005	$394,000	$1,094,822
2006	$172,400	$1,076,652
2007	$234,000	$1,153,509

In FY 2005, there are eight rural programs operating in GDOT District 5. 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 5 would be approximately:

Estimated FY 2005 GDOT District 5 Section 5311 Average Project Funding

Capital Project:	$49,000**
Operating Project:	$137,000***

*** 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.

- Job Access and Reverse Commute Program: The JARC program funds transportation services designed to increase access to jobs and employment-related activities. Job Access projects are those that transport welfare recipients and low-income individuals in urban, suburban, or rural areas to and from jobs and activities related to their employment. Reverse Commute projects provide transportation services for the general public from urban, suburban, and rural areas to suburban employment opportunities. Funds can be provided for capital and operating costs of equipment, facilities and associated capital maintenance items; promoting the use of transit vouchers by appropriate agencies; and promoting use of employer-provided transportation and transit pass benefits. Funds from non-DOT federal programs can be used to pay for the local match, which is 50%.

  One of the goals of the Job Access and Reverse Commute program is to increase collaboration among transportation providers, human service agencies, employers, metropolitan planning organizations, states, and affected communities and individuals. A key element of the program is making the most efficient use of existing public, nonprofit, and private transportation service providers.

What is the near term outlook for these funding programs?

The proposed federal budgets for existing and new State Administered Formula Programs are summarized in Table 1-9. These budget estimates assume that SAFETEA would be enacted prior to FY 2006. The Section 5310 program on average would be about the same. The Section 5311 program would increase by nearly 48% from FY 2005 to FY 2006; Section 5311 funding would then increase modestly to keep pace with inflation through the remainder of the reauthorization period. Combined, the new formula programs–JARC and NFI–would provide additional formula monies that would amount to approximately 120% of today's Section 5311 program.

TABLE 1-9
Potential National Funding Levels in SAFETEA
For State Administered Formula Programs
(Proposed Budgets in millions)

FY	5310	5311	JARC	NFI
2005	$95.5	$253.4	N/A	N/A
2006	$90.6	$374.2	$156.2	$151.0
2007	$92.7	$382.6	$159.7	$154.4
2008	$95.0	$392.1	$163.6	$158.2
2009	$97.3	$401.6	$167.6	$162.0

1.3.1.3 Additional Considerations in Federal Formula Programs

- Expanded Definition of Capital in Formula Programs. Effective with the DOT 1998 Appropriations Act and now eligible under TEA 21 for subsequent fiscal year appropriations, the definition of an eligible capital project has been expanded to include preventive maintenance for Section 5307, 5310, and 5311 formula programs. This change means that maintenance expenses previously funded at up to a 50% federal match may now be matched at an 80% federal share. This expanded capital definition places transit operators in a stronger and more flexible position by providing eligibility to expenses that were previously eligible only as operating costs.

  The recipient may continue to request assistance for capital expenses under the FTA policies governing associated capital maintenance items (spare parts); maintenance of vehicles leased under contract, and vehicle overhauls; or a recipient may choose to capture all maintenance under preventive maintenance. If a grantee purchases service instead of operating service directly and maintenance is included in the purchased service contract, then the grantee may apply for capital assistance under preventive maintenance for the actual maintenance costs of the purchased service.

- ADA Complementary Paratransit Service. TEA-21 expanded the definition of an eligible capital project to include the provision of non-fixed route paratransit transportation in accordance with Section 223 of the Americans with Disabilities Act of 1990 for grant recipients that are in compliance with the applicable requirements of the ADA. Recipients of formula funds under the Sections 5307 and 5311 programs may now use up to 10% of their annual formula apportionment to pay for ADA paratransit operating costs. Section 223 of the ADA defines the specific type of paratransit service that is eligible for this new provision, which is implemented in USDOT's ADA regulation that explains the ADA paratransit eligibility process, and the service criteria (service area, response time, fares, trip purpose restrictions, hours and days of service and capacity constraints).

1.3.1.4 Flexible Highway Fund Programs

A key feature of TEA-21 has been the flexibility provision that provides the option to state and local governments of using some Federal Highway Administration (FHWA) funds for transit projects. The flexible funds feature is expected to be part of the SAFETEA reauthorization. These flexible highway fund programs include the Surface Transportation Program (STP) and Congestion Mitigation and Air Quality Improvement Program (CMAQ):

- Surface Transportation Program (STP): For supporting proposed transit services in Hinesville, the STP funds would currently be the only reasonably available flexible fund program. The STP funding is at the 80% federal share and may be used for all projects eligible for funds under current FTA programs. For example, in the Atlanta region where air quality issues have limited road construction projects, STP funds are programmed for bus purchases, pedestrian improvements, park-ride lots, and other transit projects; STP funds also are programmed for the maintenance facility for the Buckhead shuttle service. On the other hand, in Hinesville like most areas, the number of identified transportation needs far exceed available federal assistance from STP and other programs. Therefore, project prioritization and funding decisions must be developed cooperatively by the area's local governments, transit operators, and GDOT acting through the Hinesville transportation planning process, and included in subsequent TIPs.

- Congestion Mitigation and Air Quality Improvement Program (CMAQ): **The CMAQ funding is only available to areas designated as air quality nonattainment for carbon monoxide or ozone; the Hinesville Urbanized Area is currently not eligible for this funding.** CMAQ projects and programs are innovative solutions to common mobility problems and are driven by Clean Air Act mandates to attain national ambient air quality standards. Eligible projects include transit improvements, shared-ride services, demand management strategies, and pedestrian & bicycle programs. The CMAQ funding appropriations are used in those areas designated by the U.S. Environmental Protection Agency (EPA) as being nonattainment for carbon monoxide and ozone air quality standards.

1.3.2 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 2005 budget was set (and projects were funded) during the 2004 Session of the Georgia General Assembly.

As next steps: By September 2004, the GDOT would receive supplemental requests that could potentially be part of the Supplemental FY 2005 State Budget considered early in the 2005 Session of the Georgia General Assembly. By September 2004, GDOT may also consider final additions to the proposed FY 2006 State transportation assistance request. After September, the May 2005 timetable for GDOT to receive funding requests for FY 2007 and FY 2008 would apply. The Hinesville MPO would work closely with GDOT over the next year to include the transit projects in the subsequent Hinesville TIP and STIP, as well as work with GDOT and the local legislative delegation during the 2005 and subsequent sessions of the Georgia General Assembly to secure the State funding.

1.3.3 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.

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 1 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).

1.3.4 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:

- In the Orlando area, the Seminole Town Center (a new shopping mall) approached the City of Sanford about serving the site with transit. The developer annually contributes $10,000 to the transit agency, LYNX, toward the cost of the service and the City of Sanford matches that contribution.

- Escambia County Area Transit (Florida) entered into an agreement with two malls to underwrite the cost of transportation from the Pensacola Naval Air Station to the malls during the weekend and on nights when normal bus service was unavailable. The malls decided to split all costs not covered by the farebox on a 50/50 basis. This premium service is provided at no cost to taxpayers and is open door, that is, available to the general public.

- 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.

1.3.5 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.

1.3.6 Financing Mechanisms

A range of financing options can be considered in the financial analysis. 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.

The FTA through the Innovative Finance Initiative allows financing techniques and asset management tools which may be used in connection with projects receiving federal transportation assistance in order to leverage federal, state, and local funds. Many of the following mechanisms may be more appropriate to the scale and capital needs of the locally-envisioned transit project start-up than a traditional general obligation or revenue bond issue.

- Lease Payment: FTA funds may be used to lease, rather than purchase, transit equipment and facilities. The FTA Section 5307-Urbanized Formula program may be used to cover the costs of new and pre-existing leases, so long as leasing is more cost effective than a direct purchase. FTA regulations at 49 C.F.R. Part 639 prescribe how leasing of transit equipment may be eligible. Moreover, FTA permits on a case-by-case basis, using slightly different criteria, such leasing under the FTA Section 5309-Capital Program, Section 5311-Nonurbanized Area Formula Program, and Section 5310-Elderly and Persons with Disabilities Program. This capability also applies to the capital and interest costs of contracting for service, referred to as "Capital Cost of Contracting." Under a lease structure (provided the grantee demonstrated that a lease was more cost-effective than direct purchase) the equipment or facility could be purchased by a leasing company, and then leased to the grantee. The grantee would make lease payments from a combination of Federal funds and local matching funds. The primary benefit of such a structure is that it allows the grantee to arrange its cash flow needs on a more level basis.

Secondary benefits include the ability to bank the local share, allowing it to earn interest pending its use for making lease payments, as well as the ability to reprogram some of the current formula grant funds to other projects.

- State Revolving Loan Fund: States have the ability to use FTA grant funds to establish and operate Revolving Loan Funds in support of public and private non-profit transit operators. The revolving loan fund allows pooled vehicle purchases that may help reduce acquisition costs. It provides a mechanism for the state to make loans (with interest) or leases to transit operators who might not be able to arrange such transactions on their own. The local grantees are able to use subsequent years' rural or urban grant funds to make loan or lease payments, including reasonable interest.

- Joint Development: There is a great deal of flexibility in FTA's treatment of Joint Development, particularly as it relates to transit supportive development in FTA's "Livable Communities Initiative." Grantees can lease air rights above a transit facility, or transfer the FTA interest in one property to another, to allow the private development or other use of the property. FTA funds cannot generally be used to support development of property that is not directly adjacent to the transit facility. However, if property can be subdivided, the FTA interest can be vested wholly in one part while the other would be considered 100% local share, for purposes such as leasing or mortgaging, which allows the transit agency or local government to actively support land use changes that increase transit use and program income.

1.3.7 Commuter Choice (or Transportation Incentive) Program

Commuter Choice refers to recent changes in the Internal Revenue Code (section 132 of title 26, United States Code), which permit employers to offer employees a tax-free benefit to commute to work by methods other than driving alone. For those employers that elect to participate in such a program, Commuter Choice offers employees a tax-free fringe benefit to commute on public transit (buses, trains, or ferries) or in vanpools. A vanpool vehicle must have a seating capacity of 6 adults (not including the driver) and at least 80% of the mileage use must be for purposes of transporting employees in connection with travel between their homes and places of employment. For these commuting trips, the number of employees transported must be at least one-half of the adult seating capacity, excluding the driver.

There are several ways that the employee may receive a transit or vanpool benefit. The most attractive option to employees is for the company to cover the full cost of the benefit. Some companies offer the Commuter Choice benefit as a low-cost salary or wage enhancement. Others elect to provide a partially subsidized benefit in addition to the employees' current salary. The benefit would be free of all payroll and income taxes to the employees, and the employer would deduct the cost from their business income taxes.

A second option is to offer Commuter Choice as a "pre-tax" benefit. In 2005, the employer can permit the employee to have up to $105 per month taken out of their current monthly salary, towards the *actual* cost of commuting on transit or in vanpools before taxes are applied. The employee would save federal income and payroll taxes on the amount of the benefit selected. In

2005, up to $1,260 a year of the employee's wages or salary would be treated as a tax-free benefit rather than as taxable income. After 2005, the amount eligible to be treated as a tax-free benefit would be indexed to the cost-of-living in subsequent years. Many employers prefer this option because the employee pays the cost. The employer's share of FICA and unemployment taxes is also reduced.

Third, the employer may share the cost of commuting with employees. The employer would elect to pay for a portion of the tax-free Commuter Choice benefit and allow their employees to pay the balance of the costs by having the share taken out of their salary before taxes. In 2005, the total maximum amount eligible for a tax-free benefit would be up to $105 per month of the *actual* cost, even when the costs are shared. The maximum amount would be indexed to the cost-of-living in subsequent years as above.

Providing federal leadership on the Commuter Choice initiative, on April 21, 2000, President Clinton signed Executive Order 13150 to reduce Federal employees' contribution to traffic congestion and air pollution and to expand their commuting alternatives. The Executive Order requires Federal agencies to establish transportation fringe benefit programs that offer qualified Federal employees the option to exclude employee commuting costs incurred through the use of mass transportation and vanpools from taxable wages and compensation, consistent with section 132 of title 26, United States Code.

In response to Executive Order 13150, the Department of Defense (DOD) has established the Transportation Incentive Program. The incentive program applies to all Military Service members and civilian employees including nonappropriated fund (NAF) employees. Members of the Guard and Reserve components serving on active duty are also eligible for the program. Given the diversity of mass transit options available across component installations, management of the incentive program will be accomplished locally.

Additional information on the Commuter Choice Program may be found at:

www.fta.dot.gov >> click on Research and Technical Assistance; under Customer Service, click on Commuter Choice Program. There you will find links explaining the program and Executive Order 13150.

Additional information related to the DOD Transportation Incentive Program and its implementation by the Department of the Army may be found at:

www.asafm.army.mil/rabp/masstrans/masstrans.asp

1.4 Defined Desired Role for Transit

In addition to the Stakeholder Interviews discussed in Section 1.2, two Steering Committee meetings (in May 2004 and August 2004) and two public meetings (August 2004) were held to discuss community goals and objectives, the desired role of transit for the Hinesville and Liberty County area, and an assessment of potential local markets. At the August 2004 meetings, information was presented on the purpose of the study, the results of the Stakeholder Interviews, areas with high potential for transit (based on socioeconomic and employment data), and potential service options. A Public Opinion Survey was distributed at the public meetings and to other interested members of the public. Appendix B contains summaries of the Steering Committee meetings and Appendix C presents the results of the Public Opinion Survey.

Regarding the potential role of transit in the Hinesville and Liberty County area, Steering Committee discussions and the Stakeholder Interviews yielded several common themes. These themes included:

- Public transportation would provide an alternative to the automobile and help relieve traffic relieve congestion;
- Public transportation would help establish a reliable, affordable, and balanced transportation system in the area;
- Public transportation would help equalize accessibility for segments of the population who are limited in their transportation options, such as low-income families, military dependents, seniors, disabled residents, and youth;
- Public transportation would contribute to the economic development of the area by improving access to jobs, job training, medical care, government services, shopping, and recreation;
- Public transportation would promote the development and redevelopment of the area by providing transportations services to the urban core and key growth areas; and
- Public transportation would contribute to improving the quality of life for current and potential residents by improving mobility.

A list of potential roles of transit framed by these themes and refined through discussions with Steering Committee members and stakeholders regarding specific transportation and economic objectives was included in the Public Opinion Survey conducted in August 2004. Table 1-10 presents the results of the question regarding the potential roles of transit by respondents to the survey. Half of the respondents indicated that providing transportation services for low-income workers (26%) and seniors and the disabled (24%) are the most important roles for public transit in the area. Nearly 30 percent also viewed transit for the general public (15%) and reducing traffic congestion in Hinesville (14%) as important roles for public transit.

TABLE 1-10
Responses to Public Opinion Survey
Regarding the Potential Role of Transit

What is the Most Important Role for Public Transit?	Number of Responses	Percent of Total
Provide an alternative to driving alone for the general public	28	15%
Improve access to jobs & job training for low-income workers	50	26%
Help seniors & the disabled remain independent	45	24%
Reduce traffic congestion in Hinesville	26	14%
Improve mobility for Ft. Stewart personnel and their dependents	20	11%
Provide transportation to area recreational activities	18	10%
Other	2	1%
Total	**189**	**100%**

Based on the input provided by the Steering Committee, Stakeholder Interviews, and Public Opinion Survey, the following desired role for transit and corresponding community goals and objectives were defined.

Desired Role for Transit:

Protect and improve the economic vitality of the Hinesville and Liberty County area and the quality of life for all area residents, by providing affordable public transportation options that improve access to jobs and job training opportunities, improve mobility for segments of the community who are limited in their transportation options, and connect people to other major destinations such as shopping, recreational activities, medical care, and government services.

Goal: Enhance economic development and redevelopment in the Hinesville and Liberty County area and improve access to employment opportunities for area residents and workers

Objective: Support the economic vitality and competitiveness of the area by improving transportation access to existing and future job opportunities

Objective: Improve access to jobs and job training opportunities in the area, particularly for residents who cannot afford a personal vehicle

Goal: Improve accessibility and mobility options available to Hinesville and Liberty County residents

Objective: Improve mobility and provide transportation choices for all area residents

Objective: Provide affordable transportation options to equalize accessibility for those with limited transportation options

Goal: Improve and maintain the performance of the Hinesville and Liberty County area's transportation system

Objective: Position public transportation as a viable alternative to single occupant vehicles to reduce congestion on area roadways, particularly in Hinesville

Goal: Protect and improve the quality of life in the Hinesville and Liberty County area

Objective: Provide transportation options that allow seniors and those with disabilities to remain independent

Objective: Improve access to area shopping and recreational activities for those with limited transportation options, particularly the County's youth and Fort Stewart personnel and their dependents

2.0 Evaluate Existing Conditions & Short-Term Trends and Identify Potential Transit Markets

Activity 2 tasks included developing information on socioeconomic, demographic, and market data and identifying the primary corridors and subareas with the best potential for transit and potential transit markets that should be served.

2.1 Socioeconomic Characteristics and Market Data

Socioeconomic characteristics such as population, housing, employment, and transportation disadvantaged persons are essential to identifying transit needs and developing transit services which address those needs. These characteristics are presented in tables and maps on the following pages.

Data on population, households, and employment by Planning District was obtained from the Hinesville Area MPO, and is presented in tables and maps. Data was included for the Planning Districts covering the Study Area, including all of Liberty County and the urban portion of Long County. The maps present the data in terms of density (number of persons, households, jobs, etc. per acre).

Data on populations who have may have limited abilities to drive private vehicles, often referred to as "transportation disadvantaged" persons, was obtained from the 2000 Census. These populations typically include individuals who have low incomes, have limited or no access to an automobile, are disabled, are elderly, or are under 16 years of age. The data on these populations is presented at the Census Block Group level, the smallest unit of geography for which it is available. Due to the size of Census Block Groups in Long County, the information is presented only for Liberty County.

Taken together, the maps show spatial distribution of socioeconomic characteristics, as the character of the area varies considerably from the Hinesville urban area to the rural areas of Liberty County. Areas with higher densities or concentrations of transportation disadvantaged persons are more likely to support efficient public transportation systems.

Also important is an understanding of the area's major employers and other trip attractors, as well as commuting patterns. Data on major employers such as Fort Stewart, industrial parks, major shopping destinations, government offices, higher education facilities, and health facilities were compiled and mapped. Land use information was field checked to ensure that all significant trip origin and destination patterns in the study area were identified.

2.1.1 Current Population, Households, and Employment

The three measures of population, households, and employment provide an excellent overview of development patterns within the area. Table 2-1, below, summarizes the estimated 2003 data for the Study Area obtained from the MPO, with adjustments for Fort Stewart population, households, and employment obtained from the Directorate of Public Works.

TABLE 2-1
Study Area Population, Households, and Employment: 2003

	Urban Area	Rural Area	Total Study Area
Population	52,697	14,506	67,203
Households	17,450	5,178	22,628
Employment	33,552	2,508	36,060

Sources: Hinesville Area MPO; Fort Stewart Directorate of Public Works

Notes:
1) Urban Area figures approximate urbanized area

As the table shows, population, households, and employment is concentrated in the urban area. Approximately 80 percent of the Study Area's population and households and 90 percent of employment is located in the urban area.

2.1.1.1 Population and Population Density

Population density is a basic measure of growth and transit ridership potential. From the standpoint of public transit, areas with higher population densities tend to have higher rates of public transportation use than areas that are less dense. Denser areas also make for more efficient public transportation routes.

Table 2-2 shows the estimated population and population density in 2003 for the Hinesville Area MPO Planning Districts covering the Study Area. District A, covering Fort Stewart, is divided into two areas—the area roughly corresponding to the occupied portion of the Cantonment Area (urban), and the remainder of the installation comprised primarily of woodlands and training areas (rural). In 2003, Fort Stewart had a population of 16,239 living on-post, including soldiers (10,124) and their dependents (6,115). In 2004, there was a permanent increase in the number of soldiers stationed at Fort Stewart. As a result the population on-post has increased by approximately 5,000.

The table shows the clear differences in densities between the urban and rural areas. The urban area has an overall population density of 1.46 persons per acre, while the rural area density is only 0.04 persons per acre. However, it is important to note that the acreages include both land and water area. Particularly in the eastern end of Liberty County, coastal and inland waterways are significant features of the landscape. Population in this area is limited to pockets of development.

Figure 2-1 presents the spatial distribution of population density in the Study Area in 2003, which is clearly concentrated in portions of the urban area. The highest population

density is in Planning Districts H and I, which includes the residential area just south of downtown Hinesville, roughly bounded by Fort Stewart and General Screven Way to the north, Oglethorpe Highway and Shaw Road to the east, Walthourville city limits to the south, and Terrells Millpond and Mill Creek to the west. This area has a population density of more than five persons per acre. At more than three persons per acre, Planning District G, covering downtown Hinesville, and the occupied area of Fort Stewart (Planning District A) also have high densities. A common threshold used to determine areas most suitable for hourly fixed-route bus service is densities of over 3.0 persons per acre, as discussed later in this report.

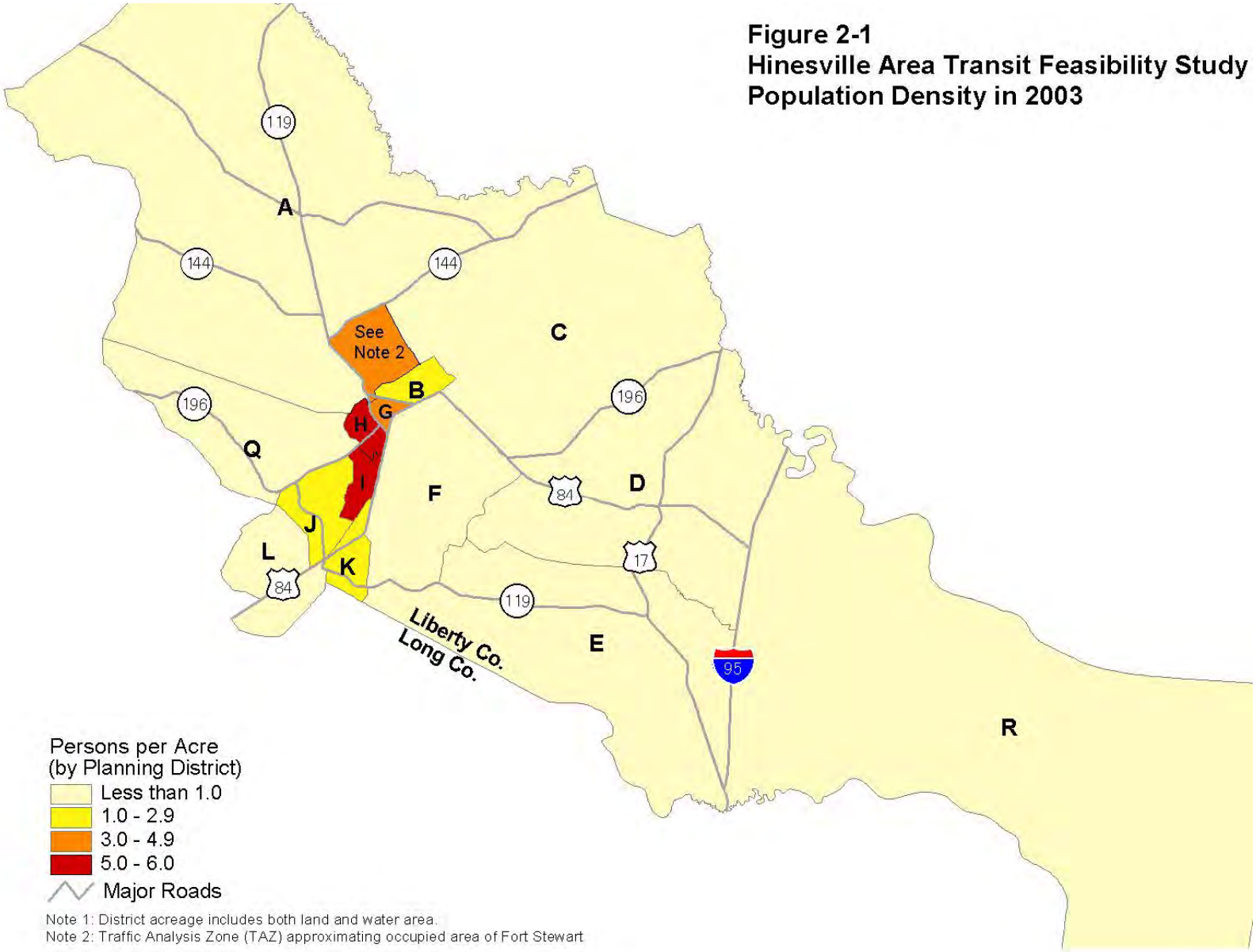
TABLE 2-2
Population and Population Density by Planning District: 2003

District	Population	Acres (see Note 1)	Density
Urban Area Districts			
A Fort Stewart - TAZ 1 (See Note 2)	16,239	3,845	4.22
B Flemington North	3,128	1,563	2.00
F South US 84 Urban	5,763	14,701	0.39
G Hinesville Center	1,883	573	3.28
H Hinesville S-Central	6,119	1,186	5.16
I Hinesville-196 South	8,070	1,357	5.95
J Airport Rd North	5,887	3,795	1.55
K Allenhurst-Walthourville	4,097	2,138	1.92
L Long Co Urban	1,511	6,890	0.22
Urban Subtotal	**52,697**	**36,049**	**1.46**
Rural Area Districts			
A Fort Stewart - remainder	0	94,791	0.00
C SR 196 North	556	43,463	0.01
D Midway Central	5,944	37,287	0.16
E Riceboro Central	1,607	40,050	0.04
Q Gum Branch Central	4,980	14,262	0.35
R Liberty Co East	1,419	126,723	0.01
Rural Subtotal	**14,506**	**356,578**	**0.04**
Total Study Area	**67,203**	**392,626**	**0.17**

Sources: Hinesville Area MPO; Fort Stewart Directorate of Public Works

Notes:
1) Acreage includes both land and water area, including coastal and inland water.
2) Traffic Analysis Zone (TAZ) 1 approximates occupied area of Fort Stewart.

Figure 2-1
Hinesville Area Transit Feasibility Study
Population Density in 2003



2.1.1.2 Households and Household Density

Household density is also a good measure of transit ridership potential. Table 2-3 shows the estimated population and population density in 2003 for the Hinesville Area MPO Planning Districts covering the Study Area.

Mirroring population densities, Table 2-3 shows clear differences in urban versus rural household densities. The urban area has an overall density of 0.48 households per acre, while the rural area density is only 0.01 households per acre.

Figure 2-2 presents the spatial distribution of household density in the Study Area in 2003. The overall patterns of household density are very similar to the patterns of population density. The highest household density is in Planning Districts H and I (just south of downtown Hinesville), with a density of nearly two households per acre. At over one household per acre, Planning District G (downtown Hinesville) and the occupied area of Fort Stewart (Planning District A) also have high household densities.

TABLE 2-3
Households and Household Density by Planning District: 2003

District	Households	Acres (see Note 1)	Density
Urban Area Districts			
A Fort Stewart - TAZ 1 (See Note 2)	4,824	3,845	1.25
B Flemington North	1,177	1,563	0.75
F South US 84 Urban	1,976	14,701	0.13
G Hinesville Center	877	573	1.53
H Hinesville S-Central	2,064	1,186	1.74
I Hinesville-196 South	2,648	1,357	1.95
J Airport Rd North	1,913	3,795	0.50
K Allenhurst-Walthourville	1,445	2,138	0.68
L Long Co Urban	526	6,890	0.08
Urban Subtotal	**17,450**	**36,049**	**0.48**
Rural Area Districts			
A Fort Stewart (remainder in Liberty)	0	94,791	0.00
C SR 196 North	191	43,463	0.00
D Midway Central	2,161	37,287	0.06
E Riceboro Central	564	40,050	0.01
Q Gum Branch Central	1,675	14,262	0.12
R Liberty Co East	587	126,723	0.00
Rural Subtotal	**5,178**	**356,578**	**0.01**
Total Study Area	**22,628**	**392,626**	**0.06**

Sources: Hinesville Area MPO; Fort Stewart Directorate of Public Works

Notes:
1) Acreage includes both land and water area, including coastal and inland water.
2) Traffic Analysis Zone (TAZ) 1 approximates occupied area of Fort Stewart.

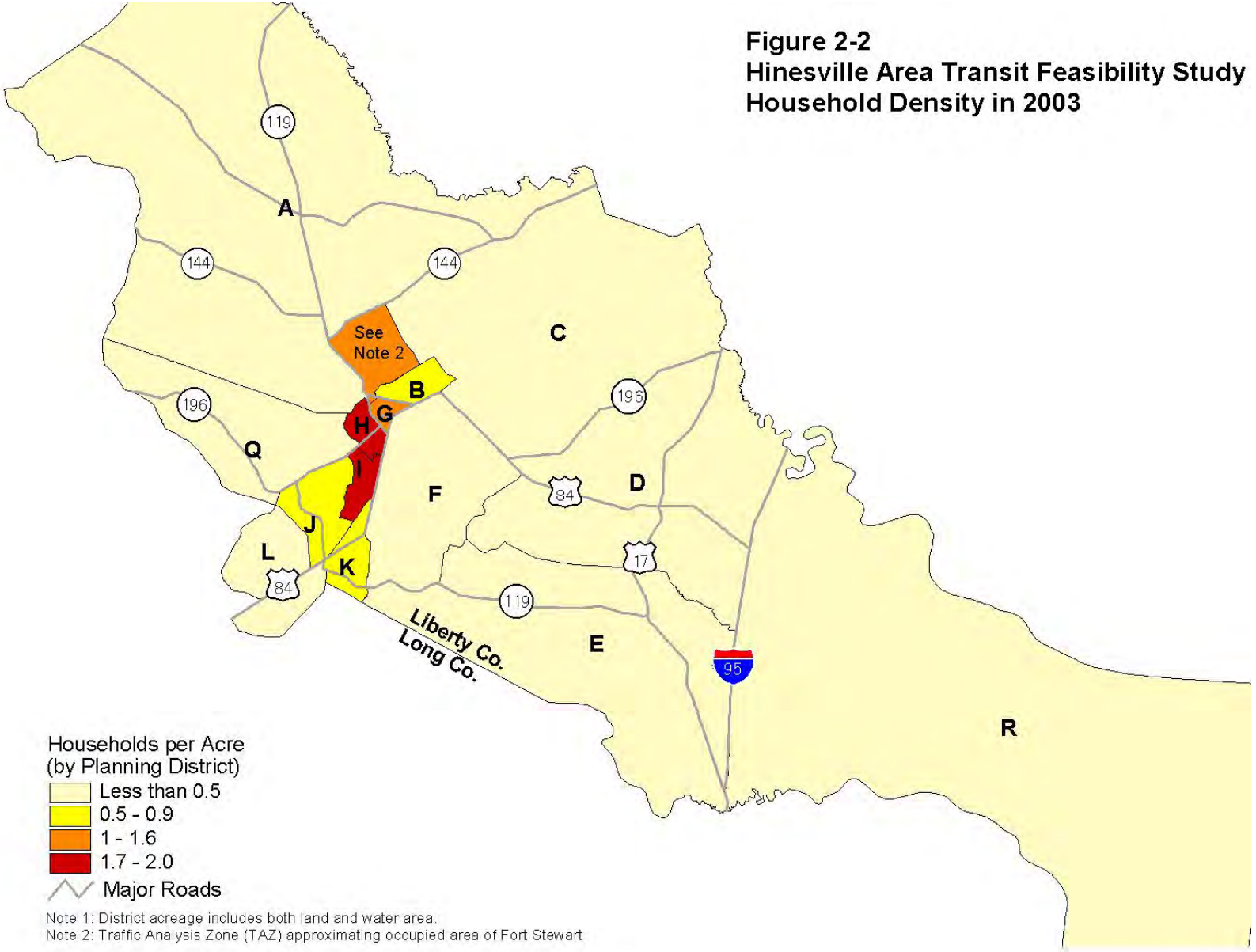


Figure 2-2
Hinesville Area Transit Feasibility Study
Household Density in 2003
119
144
144
196
196
84
84
17
119
95
A
B
C
D
E
F
G
H
I
J
K
L
Q
R
See Note 2
Liberty Co.
Long Co.
Households per Acre
(by Planning District)
Less than 0.5
0.5 - 0.9
1 - 1.6
1.7 - 2.0
Major Roads
Note 1: District acreage includes both land and water area.
Note 2: Traffic Analysis Zone (TAZ) approximating occupied area of Fort Stewart

2.1.1.3 Employment and Employment Density

Employment density is an important measure of transportation demand because the largest share of travel is for commuting to and from work places. Table 2-4 shows the estimated employment and employment density in 2003 for the Hinesville Area MPO Planning Districts covering the Study Area. The urban area has an overall population density of 0.93 employees per acre, while the rural area density is only 0.01 employees per acre.

TABLE 2-4
Employment and Employment Density by Planning District: 2003

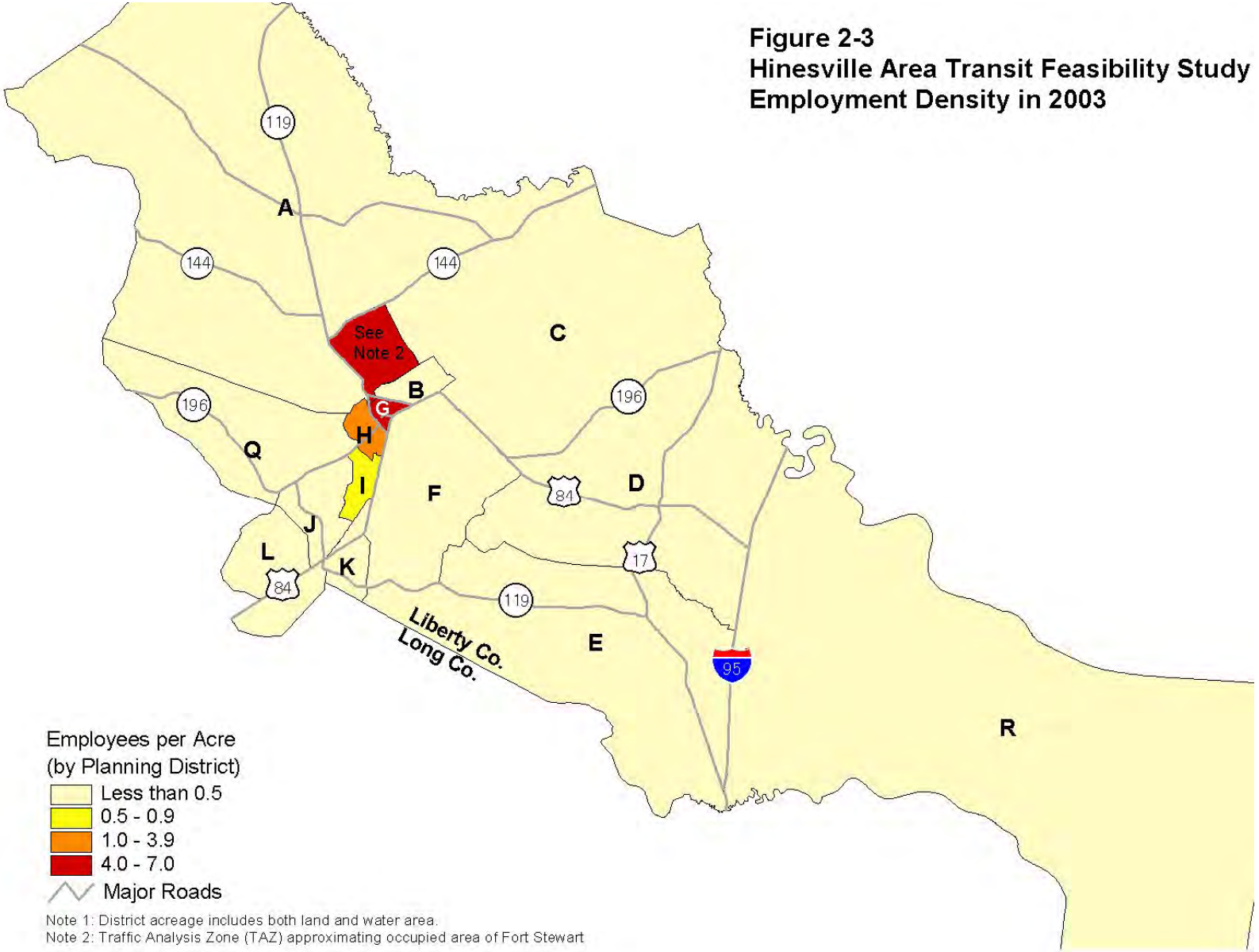
District	Employment	Acres (see Note 1)	Density
Urban Area Districts			
A Fort Stewart - TAZ 1 (See Note 2)	25,882	3,845	6.73
B Flemington North	53	1,563	0.03
F South US 84 Urban	1,305	14,701	0.09
G Hinesville Center	3,114	573	5.43
H Hinesville S-Central	1,752	1,186	1.48
I Hinesville-196 South	1,028	1,357	0.76
J Airport Rd North	164	3,795	0.04
K Allenhurst-Walthourville	215	2,138	0.10
L Long Co Urban	39	6,890	0.01
Urban Subtotal	**33,552**	**36,049**	**0.93**
Rural Area Districts			
A Fort Stewart - remainder	0	94,791	0.00
C SR 196 North	224	43,463	0.01
D Midway Central	1,005	37,287	0.03
E Riceboro Central	763	40,050	0.02
Q Gum Branch Central	398	14,262	0.03
R Liberty Co East	118	126,723	0.00
Rural Subtotal	**2,508**	**356,578**	**0.01**
Total	**36,060**	**392,626**	**0.09**

Source: Hinesville Area MPO

Notes:
1) Acreage includes both land and water area, including coastal and inland water.
2) Traffic Analysis Zone (TAZ) 1 approximates occupied area of Fort Stewart.

Figure 2-3 presents the spatial distribution of employment density in the Study Area in 2003, which is clearly concentrated in portions of the urban area. The highest employment density is in the occupied area Cantonment Area of Fort Stewart (Planning District A) at nearly seven employees per acre and Planning District G (downtown Hinesville) at over five employees per acre. These districts reflect the areas meeting the common threshold of over 4.0 employees per acre used to determine areas most suitable for hourly fixed-route bus service.

Figure 2-3
Hinesville Area Transit Feasibility Study
Employment Density in 2003



2.1.2 Transportation Disadvantaged Populations

Individuals who are most likely to use public transit are those with the most limited access to private means of transportation. Such individuals may not be able to drive their own automobiles for economic reasons or physical reasons, and thus are dependent on other means of transportation. Table 2-5 presents 2000 Census data for five such segments of the population, in terms of number and percentages—persons with income below the poverty level, households with one or no automobiles, persons 16 years and older with a disability, persons 65 years or older, persons under 16 years of age. Figures 2-4 through 2-8 present the spatial distribution of each of these populations, showing the number of persons or households in each Census Block Group.

TABLE 2-5
Transportation Disadvantaged Populations by Census Block Group: 2000

Census Tract	Block Group	Population with Income Below Poverty Level		Households with 1 or No Vehicle Available		Population 16 Years and Older with a Disability		Population 65 Years and Older		Population Under 16 Years Old	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
101	9	997	11%	1,011	42%	449	15%	9	0%	4,131	31%
102.01	1	1,578	21%	1,026	41%	895	21%	182	2%	3,155	41%
102.01	2	113	11%	138	40%	172	26%	77	8%	335	33%
102.02	1	583	13%	749	47%	591	24%	109	2%	1,661	36%
102.03	1	205	11%	216	39%	113	12%	20	1%	842	44%
102.03	2	1,056	15%	1,012	43%	599	16%	88	1%	2,899	40%
102.04	1	349	12%	460	46%	329	21%	93	3%	1,093	37%
102.04	2	103	26%	114	73%	108	34%	27	7%	144	37%
103	1	149	20%	118	41%	119	22%	63	8%	276	35%
103	2	179	13%	392	62%	102	15%	73	5%	313	23%
103	3	114	25%	127	65%	93	29%	55	12%	144	31%
103	4	357	13%	450	43%	275	18%	135	5%	946	34%
103	5	411	23%	289	44%	145	15%	95	6%	626	37%
104	1	335	17%	522	69%	246	22%	103	5%	633	32%
104	2	185	6%	376	37%	233	13%	116	4%	1,064	36%
104	3	252	18%	205	38%	217	22%	98	6%	473	30%
105	1	354	15%	310	38%	608	41%	290	12%	799	34%
105	2	171	13%	192	38%	286	29%	150	11%	383	29%
105	3	452	19%	336	35%	444	23%	294	12%	629	26%
105	4	30	4%	108	30%	171	24%	136	15%	215	23%
106	1	371	27%	243	50%	250	25%	155	11%	489	35%
106	2	120	24%	97	54%	112	30%	64	13%	158	31%
Total		8,464	15%	8,491	44%	6,557	21%	2,432	4%	21,408	35%

Source: Census 2000 Summary File 3

Figure 2-4 shows population with income below the poverty level in 1999, which accounts for 15 percent of the Liberty County population. The largest concentrations of this group are in the occupied area of Fort Stewart and the residential area to the south roughly bounded by SR 196 and SR 119 to the west and south and Shaw Road/S. Main Street to the east. Smaller concentrations are located in the Sandy Run Drive area of Hinesville and the area including Dorchester and the Isle of Wight in eastern Liberty County.

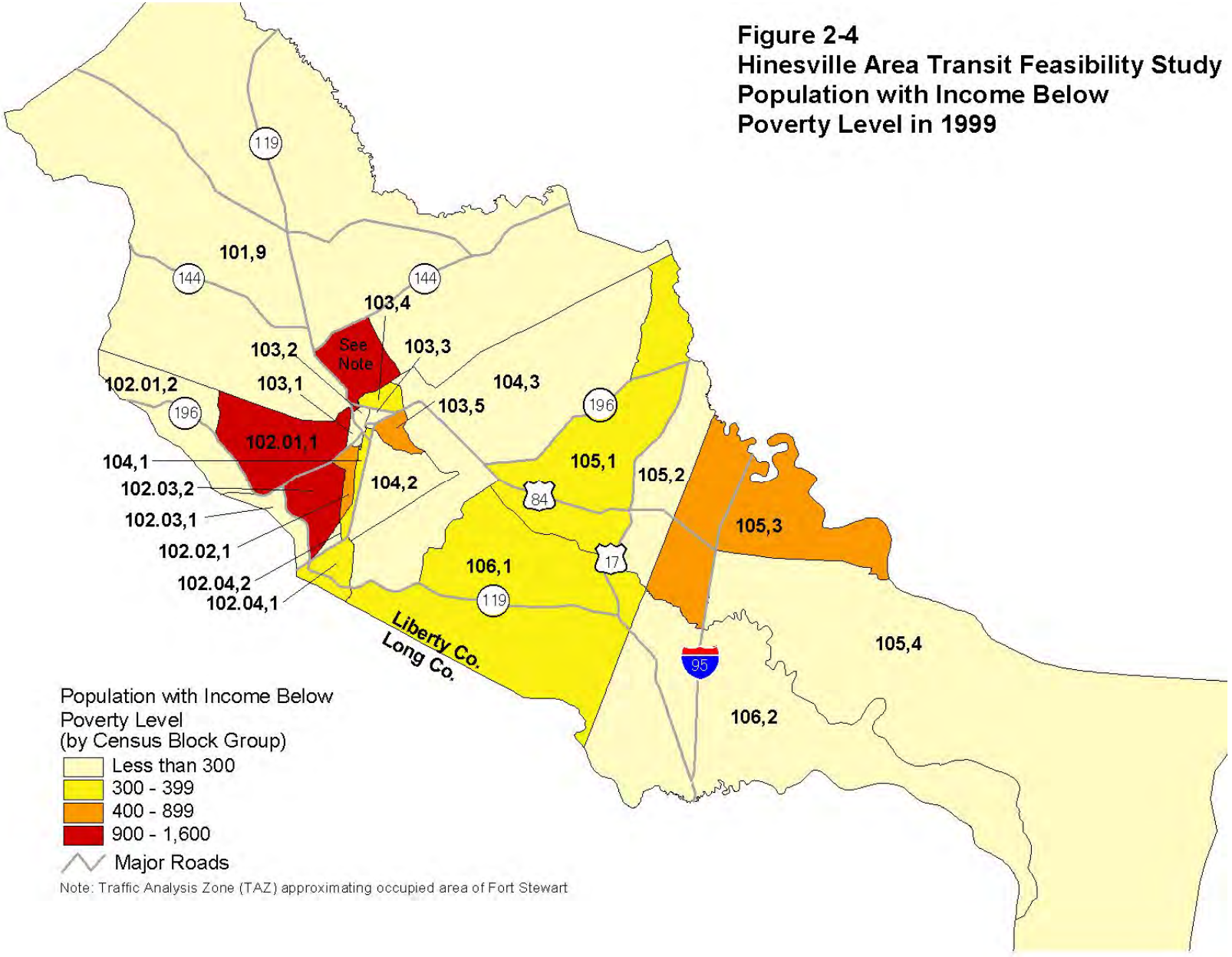


Figure 2-4
Hinesville Area Transit Feasibility Study
Population with Income Below
Poverty Level in 1999
119
144
144
101,9
103,4
See Note
103,2
103,3
102.01,2
103,1
104,3
196
103,5
196
102.01,1
104,1
105,1
105,2
102.03,2
104,2
84
102.03,1
105,3
102.02,1
17
106,1
102.04,2
102.04,1
119
Liberty Co.
Long Co.
105,4
95
106,2
Population with Income Below
Poverty Level
(by Census Block Group)
Less than 300
300 - 399
400 - 899
900 - 1,600
Major Roads
Note: Traffic Analysis Zone (TAZ) approximating occupied area of Fort Stewart

Figure 2-5 shows households with one or no vehicle available in 2000. As is typical, nearly 45 percent of households in Liberty County are in this category, with seven percent having no vehicle available to them and 37 percent having one vehicle. Similar to the poverty level population, the largest concentrations of this group are in the occupied area of Fort Stewart and the residential area to the south roughly bounded by SR 196 and SR 119 to the west and south and Shaw Road/Oglethorpe Highway to the east.

Figure 2-6 shows working-age persons with disabilities (physical and/or mental). Twenty-one percent of Liberty County's civilian non-institutionalized population 16 years and over has one or more disability, consistent with national and state averages. This particular population is most concentrated in one Census Block Group, located north of SR 196 and south of Fort Stewart. Smaller concentrations are located immediately to the southeast, as well as in the area of the county stretching from Midway north to Fleming.

Figure 2-7 shows the elderly (65 and over) population. This age group comprises a relatively small percentage of the population, at only 4 percent. However, it is one group for whom transportation is a major concern when they lose the ability to drive. This group is most concentrated in central Liberty County, including Midway (where the County's only nursing home is located), Fleming, and Dorchester, with slightly smaller concentrations in the area of Riceboro and the Crossroad community, as well as in Hinesville north of SR 196 and south of Fort Stewart.

Finally, Figure 2-8 show the youth population (under 16 years old). At 35 percent of the population, Liberty County has a large school-age population. The ability to get to recreational activities offered in the county is a major concern for this age group. The greatest concentrations of youth mirror those with poverty level income or households with one or no vehicle available, and are located in the occupied area of Fort Stewart and the residential area to the south roughly bounded by SR 196 and SR 119 to the west and south and Shaw Road/S. Main Street to the east. Smaller concentrations are located south of downtown Hinesville in residential areas on both sides of Oglethorpe Highway.

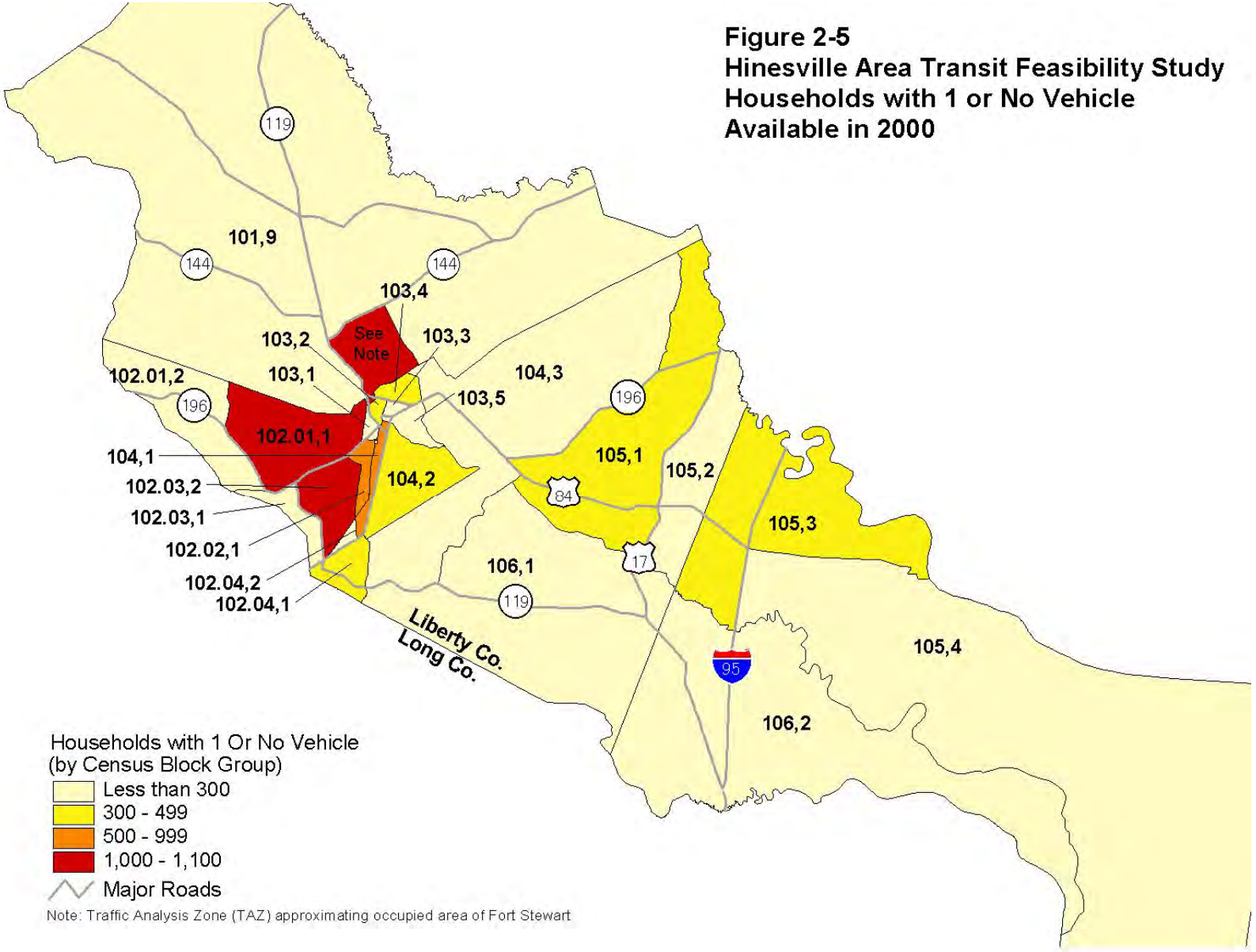


Figure 2-5
Hinesville Area Transit Feasibility Study
Households with 1 or No Vehicle
Available in 2000
119
101,9
144
144
103,4
See
Note
103,2
103,3
102.01,2
103,1
104,3
196
103,5
196
102.01,1
104,1
105,1
105,2
102.03,2
104,2
84
102.03,1
105,3
102.02,1
17
106,1
102.04,2
119
102.04,1
Liberty Co.
Long Co.
105,4
95
106,2
Households with 1 Or No Vehicle
(by Census Block Group)
Less than 300
300 - 499
500 - 999
1,000 - 1,100
Major Roads
Note: Traffic Analysis Zone (TAZ) approximating occupied area of Fort Stewart

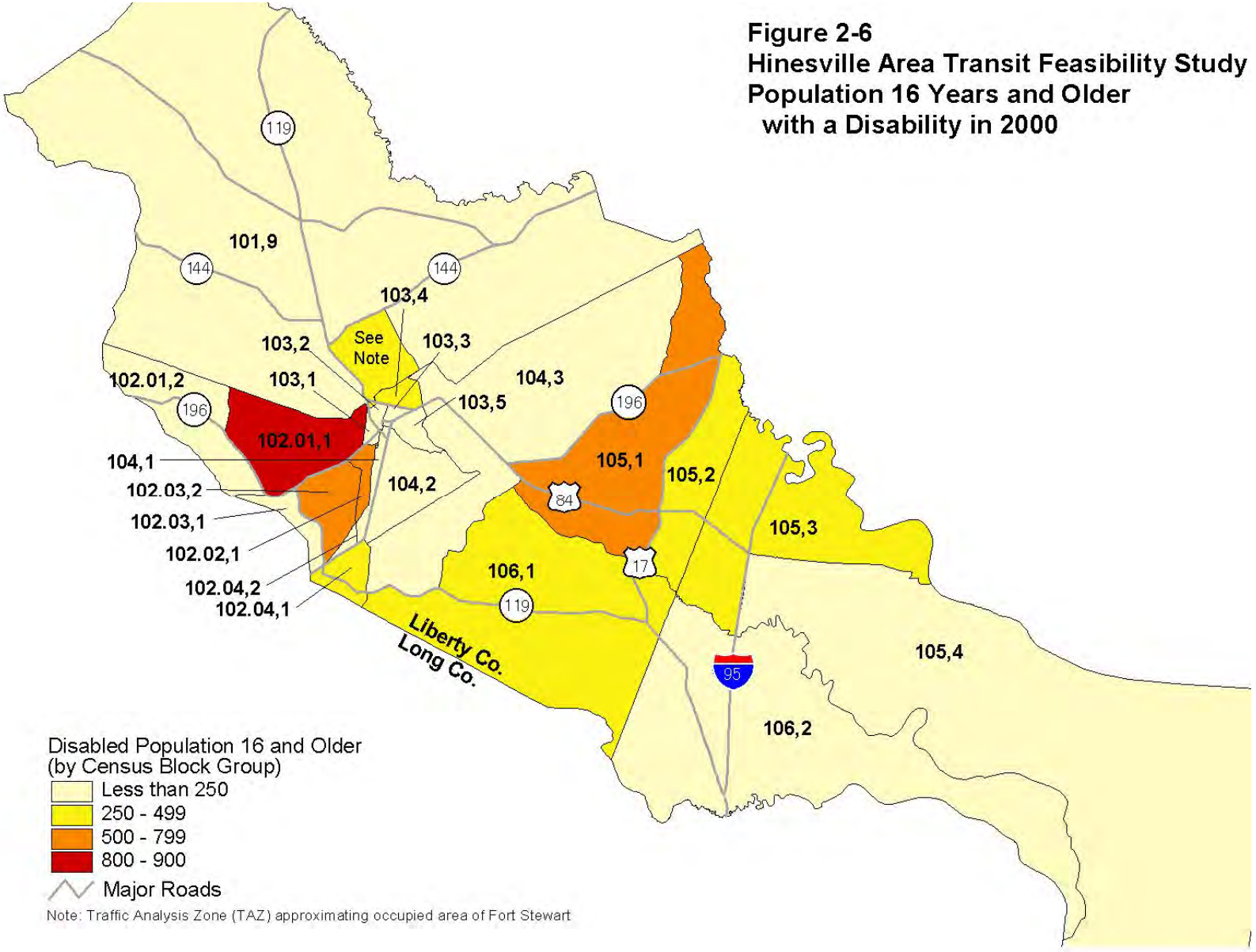


Figure 2-6
Hinesville Area Transit Feasibility Study
Population 16 Years and Older
with a Disability in 2000
119
144
144
101,9
103,4
See Note
103,2
103,3
102.01,2
103,1
104,3
196
103,5
196
102.01,1
104,1
105,1
105,2
104,2
102.03,2
84
102.03,1
105,3
102.02,1
17
106,1
102.04,2
102.04,1
119
Liberty Co.
Long Co.
105,4
95
106,2
Disabled Population 16 and Older
(by Census Block Group)
Less than 250
250 - 499
500 - 799
800 - 900
Major Roads
Note: Traffic Analysis Zone (TAZ) approximating occupied area of Fort Stewart

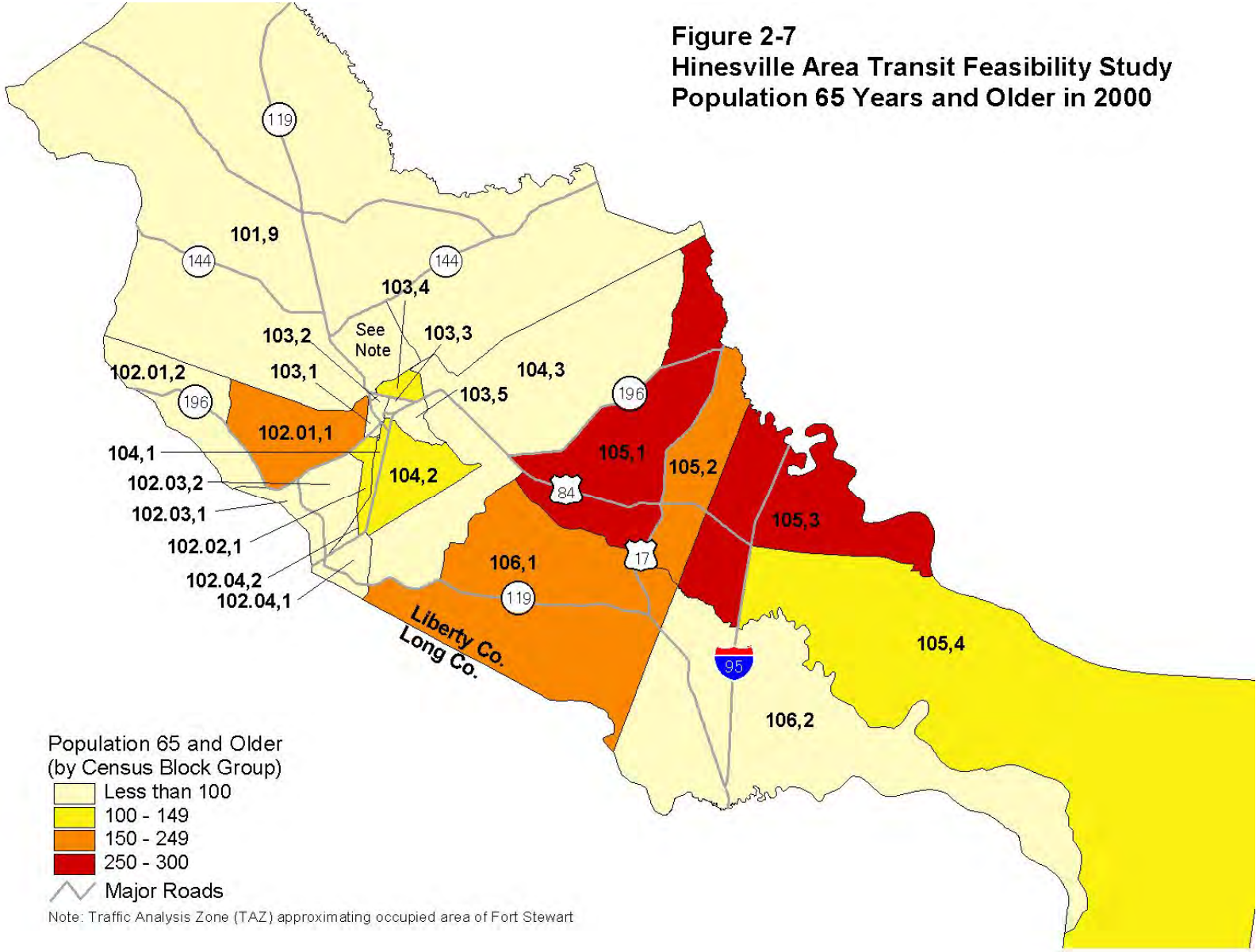


Figure 2-7
Hinesville Area Transit Feasibility Study
Population 65 Years and Older in 2000
119
101,9
144
144
103,4
103,2
See Note
103,3
102.01,2
103,1
104,3
103,5
196
196
102.01,1
104,1
105,1
105,2
104,2
102.03,2
84
102.03,1
105,3
102.02,1
17
106,1
102.04,2
119
102.04,1
Liberty Co.
Long Co.
105,4
95
106,2
Population 65 and Older
(by Census Block Group)
Less than 100
100 - 149
150 - 249
250 - 300
Major Roads
Note: Traffic Analysis Zone (TAZ) approximating occupied area of Fort Stewart

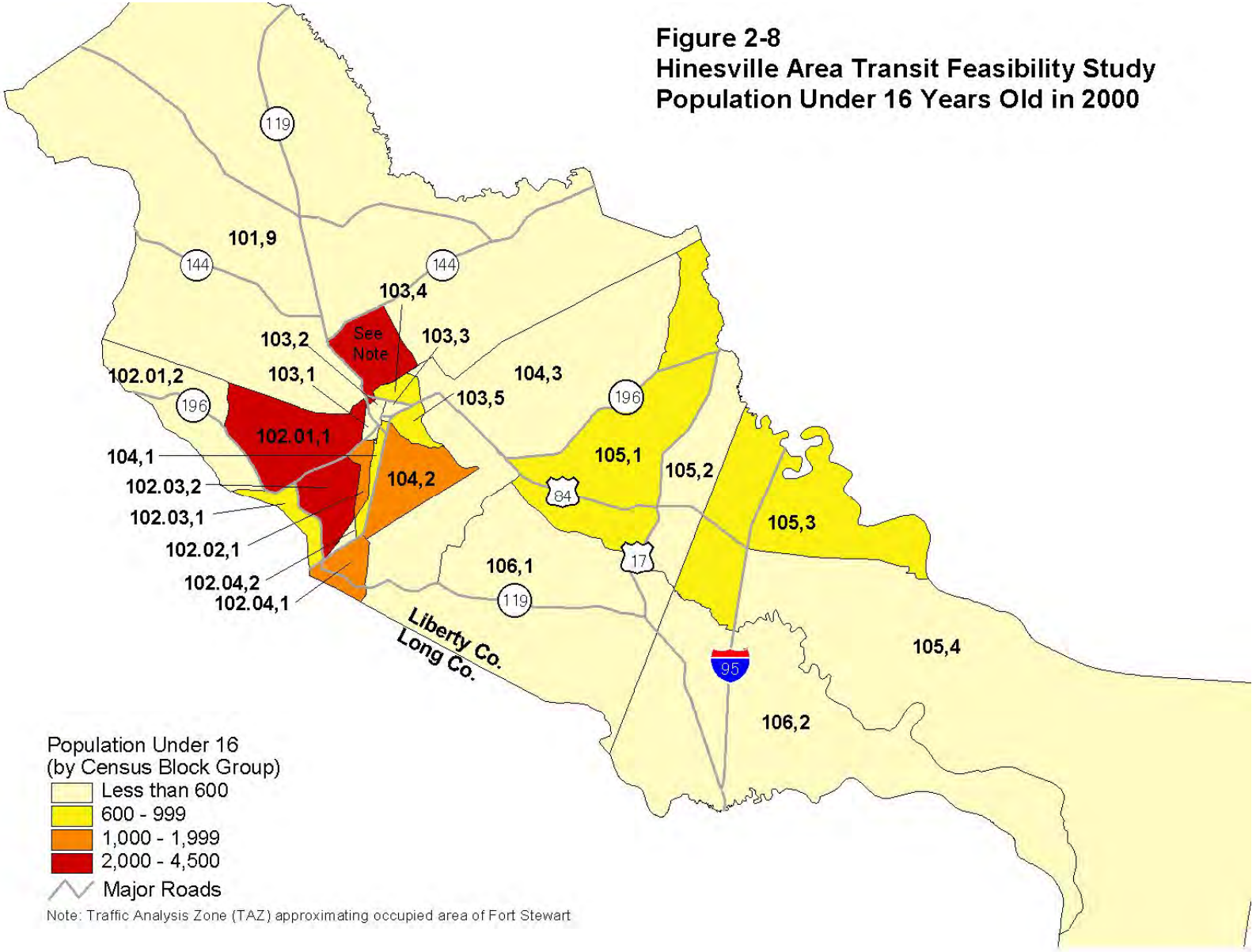


Figure 2-8
Hinesville Area Transit Feasibility Study
Population Under 16 Years Old in 2000
119
144
144
101,9
103,4
See Note
103,2
103,3
102.01,2
103,1
104,3
196
103,5
196
102.01,1
104,1
105,1
105,2
104,2
102.03,2
84
102.03,1
105,3
102.02,1
17
106,1
102.04,2
102.04,1
119
Liberty Co.
Long Co.
105,4
95
106,2
Population Under 16
(by Census Block Group)
Less than 600
600 - 999
1,000 - 1,999
2,000 - 4,500
Major Roads
Note: Traffic Analysis Zone (TAZ) approximating occupied area of Fort Stewart

2.1.3 Travel Patterns

Residents of Liberty County work primarily in Liberty, Chatham, or Byan counties, as shown in Table 2-6, which shows the top five counties of employment. While over 80 percent both live and work in Liberty County, a full 11 percent work in Chatham County to the northeast (where Savannah is located).

TABLE 2-6
Commuting Patterns of Liberty County Residents by County of Employment: 2000

County of Employment	Workforce	
	Number	Percent
Liberty County	23,146	80.53%
Chatham County	3,214	11.18%
Bryan County	655	2.28%
Tattnall County	268	0.93%
Wayne County	179	0.62%
Glynn County	140	0.49%
Total Workforce Living in Liberty County	28,743	100.00%

Source: Census 2000 Summary File 3

As shown in Table 2-7, more than 75 percent of Liberty County workers also live in the county. An additional seven percent live in Long County to the southwest, and three percent live in Chatham County.

TABLE 2-7
Commuting Patterns of Persons Working in Liberty County by County of Residence: 2000

County of Residence	Workforce	
	Number	Percent
Liberty County	23,146	77.42%
Long County	2,149	7.19%
Chatham County	1,055	3.53%
Bryan County	907	3.03%
Tattnall County	630	2.11%
Wayne County	489	1.64%
Total Workforce Employed in Liberty County	29,895	100.00%

Source: Census 2000 Summary File 3

2.1.4 Major Employers

To gain a better understanding of travel patterns in the Hinesville and Liberty County area, the major employers in the area were compiled. Table 2-8 presents a list of the major employers in the area and their approximate number of employees. In most cases, these are single site employers, or have the majority of employees in one primary location. The largest employer by far in the area is Fort Stewart, employing approximately 25,882 people in Fiscal Year 2003. This figure includes soldiers, as well as civilian employees. Civilian employees include appropriated funds employees, non-appropriated funds employees, and contractors.

TABLE 2-8
Major Employers in the Study Area by Number of Employees

No. of Employees	Employer	Primary Location
17,517	Fort Stewart - Military	Fort Stewart, Hinesville
8,365	Fort Stewart - Civilian (See Note 1)	Fort Stewart, Hinesville
1,800	Liberty County Board of Education	various
575	Wal-Mart Supercenter	W. Oglethorpe Hwy., Hinesville
568	Chemtall, Inc.	Chemical Plant Rd., Riceboro
450	Liberty Regional Medical Center	E.G. Miles Pkwy., Hinesville
315	Liberty County Board of Commissioners	Downtown Hinesville
300	Interstate Paper Corp.	Interstate Paper Rd., Riceboro
183	The Heritage Bank	Downtown Hinesville
151	City of Hinesville	Downtown Hinesville
136	Lowe's	W. Oglethorpe Hwy., Hinesville
134	Coastal Communications	Patriots Trail, Hinesville
146	The Gift Wrap Company	Midway Ind. Park, Midway
125	Muskin Leisure Products	Midway Ind. Park, Midway
125	Midway Health Care Center	N. Coastal Hwy., Midway
83	Winn Dixie	W. Hendry St., Hinesville
80	National Guard Training Center	W. Oglethorpe Hwy., Hinesville
77	Operations Management International	E.G. Miles Pkwy., Hinesville
75	Kroger	W. Oglethorpe Hwy., Hinesville
65	Elan Technology	Midway Ind. Park, Midway
65	Waltrich Plastics	Walthourville Ind. Park, Walthourville
64	Mainship Corporation	Midway Ind. Park, Midway
52	Hugo Boss	Midway Ind. Park, Midway

Sources: Liberty County Development Authority, Hinesville Area MPO, Fort Stewart Directorate of Public Works, and The Coastal Courier

Note 1: Fort Stewart Civilian Employees include Appropriated Funds Employees, Non-Appropriated Funds Employees, and Contractors

Several other major employers are clustered together. For example, the Liberty County Courthouse, Hinesville City Hall, and the main branch of the Heritage Bank are located in downtown Hinesville, while Wal-Mart and Lowe's are located adjacent to each on Oglethorpe Highway in the southern end of Hinesville. Similarly, five of the major employers are located in the Midway Industrial Park.

Finally, Tables 1-9 and 1-10 present the distribution of Fort Stewart military and Fort Stewart/Hunter Army Airfield civil service appropriated funds employees, respectively, as of September 30, 2003. It is important to note that these numbers have increased significantly in the last year, and continue to grow.

Looking at Table 2-9, nearly 76 percent of military personnel assigned to Fort Stewart lived in Hinesville (over 5,600 soldiers). An additional 64 soldiers came from Midway. The largest group of soldiers commuting to Fort Stewart from outside Liberty County came from Savannah (over 800 soldiers), followed by Richmond Hill (nearly 500 soldiers) and Ludowici (over 300 soldiers.

TABLE 2-9
Fort Stewart Military Personnel by
Place of Residence in Fiscal Year 2003

City (County) of Residence	Military Personnel	
	Number	Percent
Hinesville (Liberty County)	5,604	75.80%
Savannah (Chatham County)	813	11.00%
Richmond Hill (Bryan County)	473	6.40%
Ludowici (Long County)	325	4.40%
Midway (Liberty County)	64	0.87%
Glennville (Tatttnall County)	33	0.45%
Other Places	81	1.10%
Off-Post Total	7,393	100.00%
Fort Stewart	10,124	
Total	17,517	

Source: Fort Stewart, Directorate of Public Works

Table 2-10 shows the civil service appropriated funds employees at Fort Stewart and Hunter Army Airfield, the vast majority of whom work at Fort Stewart. Over half of Fort Stewart/Hunter Army Airfield civilian appropriated funds employees lived in Liberty County (892 employees). Of these, over 83 percent lived in Hinesville or at Fort Stewart (over 740 employees), followed by Midway (over 60 employees) and Allenhurst (45 employees).

Of the civilian appropriated fund employees that lived outside Liberty County, the largest group of employees commuted from Savannah (nearly 250 employees), followed by Bryan County (over 155 employees), Tattnall County (over 150 employees), and Long County (nearly 100 employees).

TABLE 2-10
Fort Stewart/Hunter Army Airfield Civil Service Appropriated Funds Employees By Place of Residence in Fiscal Year 2003

County of Residence	Civil Service Appropriated Funds Employees	
	Number	Percent
Liberty	892	52.04%
Chatham	249	14.53%
Bryan	156	9.10%
Tattnall	151	8.81%
Long	95	5.54%
Wayne	71	4.14%
Bulloch	26	1.52%
Evans	24	1.40%
Effingham	24	1.40%
McIntosh	17	0.99%
Glenn	6	0.35%
Toombs	3	0.18%
12-County Total	1,714	100.00%

Place of Residence in Liberty County	Civil Service Appropriated Funds Employees	
	Number	Percent
Hinesville	673	75.45%
Fort Stewart	70	7.85%
Midway	62	6.95%
Allenhurst	45	5.04%
Walthourville	19	2.13%
Riceboro	13	1.46%
Flemington	10	1.12%
Liberty County Total	892	100.00%

Source: Fort Stewart, Directorate of Public Works

Notes:
Fort Stewart Employees = 1,465
Hunter Army Airfield Employees = 249

2.2 Potential Transit Markets

The information presented in the previous section provides the context for identifying potential corridors and subareas, as well as specific markets for transit service. This section identifies potential transit markets and service areas, as well as discussing potential service options for the area.

Building on the information gathered on socioeconomic characteristics and major employers and through the public involvement process, Figure 2-9 portrays the areas with the highest potential for transit in the Hinesville and Liberty County study area. From the standpoint of public transportation, areas with higher densities of population and employment, and concentrations of segments of the population who are transportation disadvantaged tend to have higher rates of

public transportation use than other areas. Areas with higher population and employment densities also make for more efficient public transportation routes.

Thresholds for housing and employment are often used to determine areas that are most likely to support various types of transit. The thresholds used for this study were obtained from the Transit Cooperative Research Program's (TCRP) *Transit Capacity and Quality of Service Manual* (January 1999). The methodology presented in this manual involves identifying areas that have sufficient population and employment density to support hourly local bus service, using thresholds of 3.0 persons per acre and 4.0 jobs per acre, respectively. The Census Block Groups most closely corresponding to the Planning Districts that are projected to meet these thresholds are presented in Figure 2-9 in orange (population) and red (employment).

Also highlighted are the Census Block Groups with the largest populations of transportation disadvantaged persons, including households with one or no automobiles, persons 65 years or older, persons 16 years and older with a disability, persons under 16 years of age, and persons with incomes below poverty level. Finally, major employers and employment centers, as well as other destinations cited by stakeholders, are mapped.

Figure 2-9 shows that the residential areas of Hinesville immediately south of downtown along South Main Street have the highest potential for hourly fixed-route local bus service based on their densities. Significant numbers of transportation disadvantaged persons/households are also located in the residential areas just to the west.

Primary employment destinations that meet the density threshold for local bus service are downtown Hinesville and the occupied area of Fort Stewart. In addition, just south of downtown are the Liberty Regional Medical Center and several shopping centers with supermarkets. Further south on Oglethorpe Highway are Wal-Mart and Lowe's. Key recreational facilities, including the Liberty County Recreation Department, James Brown Park, and the Liberty County YMCA, are all located in the vicinity of Oglethorpe Highway and Sandy Run Drive.

Along Airport Road near the Long County line is the new Savannah Tech campus. The student population at this campus is projected to grow by 400 to 1,000 students over the next year. As many of the students do not have access to a personal vehicle, transportation to the new campus is an important need. In addition, as the adjacent Liberty County airport is redeveloped into a new employment node, and construction supporting the proposed 15th Street housing development and a new Unit of Action at Fort Stewart, this area of Hinesville will become a new major node of activity in the coming years.

In the east end of Liberty County, the Midway Industrial Park is home to several of the county's largest employers, and Riceboro is home to Interstate Paper and Chemtall. The proposed MidCoast Business Center near the interchange of I-95 and US 84 will provide additional employment opportunities as it is developed. There are also significant numbers of transportation disadvantaged persons/households in the vicinity of Midway, Fleming, Dorchester, and the Isle of Wight.

It is important to note that Figure 2-9 identifies the areas with the highest transit potential for local bus service based on population and employment densities. Local bus service consists of buses traveling on a fixed route and maintaining a schedule along which many stops (about every ¼ mile) are made. However, local bus service or other more flexible service options may be feasible to other specific origins and destinations given adequate demand and similar daily trip patterns. More flexible service options that may be appropriate for these areas include route or point deviation service. Route or point deviation service maintains a fixed schedule but provides some level of flexibility in routing to respond to passengers who call ahead to request service.

In areas of low densities, other more flexible transit options may be appropriate and could be used to provide service to the larger community, such as to Midway and/or Riceboro, or to all of Liberty County. Demand response service provides the most flexibility, both in routing and schedules, and is most appropriate in areas where origins and destinations are dispersed and travel patterns vary significantly from day to day. Passengers call ahead to request a ride for a particular date and time and are picked up and dropped off either at the door or at the closest curb location along the road. These types of services are also often appropriate for passengers with disabilities who cannot use a fixed-route system.

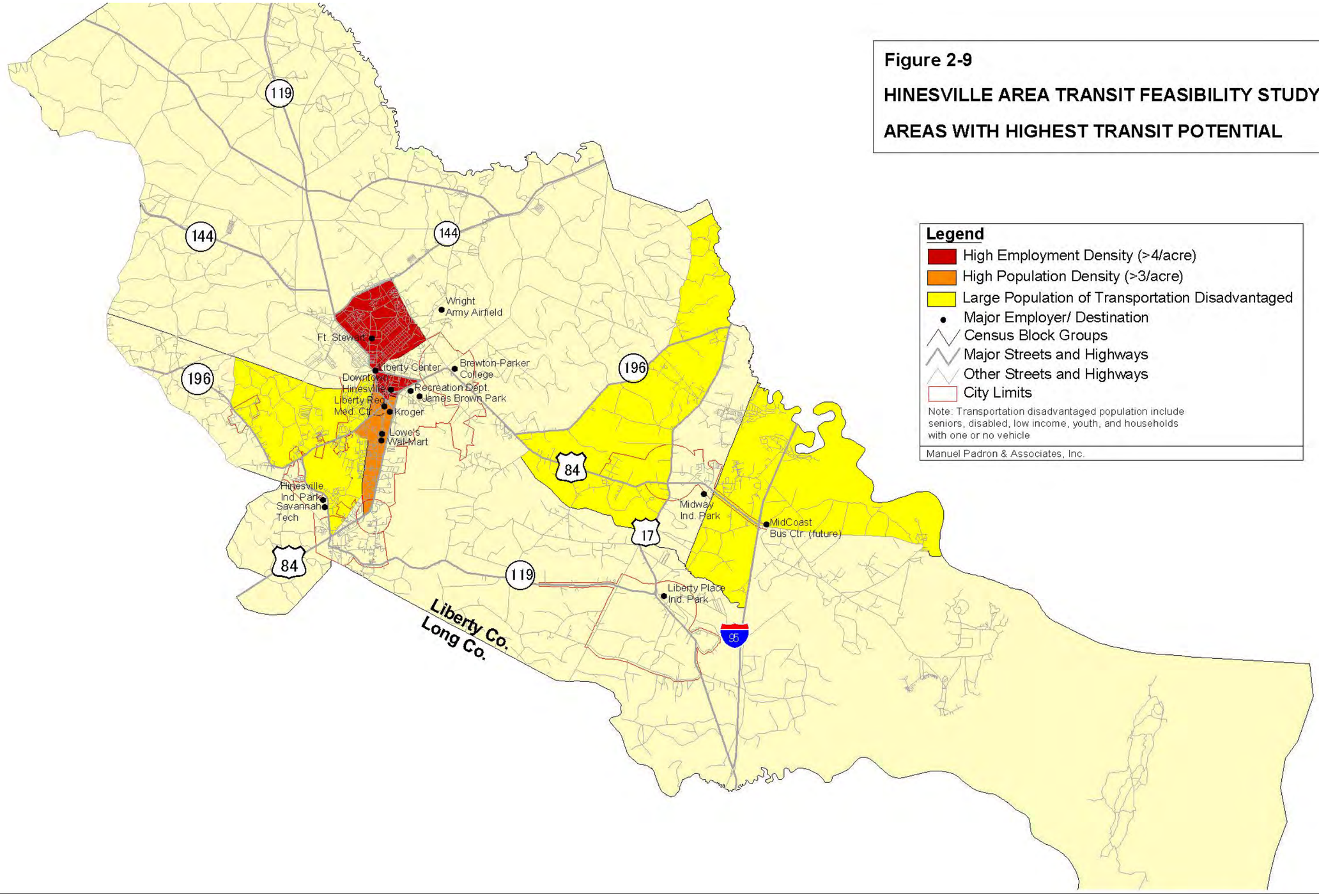
As the largest employer in the area, as well as home to a large, rapidly fluctuating population of military personnel and their dependents, Fort Stewart's transportation challenges are significant and diverse. In addition to providing connections between Fort Stewart and the adjacent commercial centers and residential areas of Hinesville (and thereby reducing traffic congestion at peak times), there is also a need to provide military spouses with access to employment opportunities both in the urban and rural areas, and provide the larger community with access to employment and recreational activities on post. Express bus or vanpool service may be supportable for longer distance work trips from outlying communities.

Finally, as traffic and parking are significant issues at Fort Stewart, some level of on-base transit shuttle or circulator services linked to transit services off-post would be of benefit. The objective would be to reduce automobile traffic and parking demand in the most congested employment, services, and residential areas of Fort Stewart.

Figure 2-9

HINESVILLE AREA TRANSIT FEASIBILITY STUDY

AREAS WITH HIGHEST TRANSIT POTENTIAL



Legend

- High Employment Density (>4/acre)
- High Population Density (>3/acre)
- Large Population of Transportation Disadvantaged
- Major Employer/ Destination
- Census Block Groups
- Major Streets and Highways
- Other Streets and Highways
- City Limits

Note: Transportation disadvantaged population include seniors, disabled, low income, youth, and households with one or no vehicle

Manuel Padron & Associates, Inc.

Appendix A

Summary of Stakeholder Interviews

HINESVILLE AREA TRANSIT FEASIBILITY STUDY
SUMMARY OF STAKEHOLDER INTERVIEWS

1.0 Purpose of Interviews

The purpose of the stakeholder interviews was to brief key leaders in the community on the Transit Feasibility Study and to gain insight into their perspectives on transit needs and potential markets and on the desired role of transit in the Hinesville metropolitan area and rural Liberty County. Stakeholders were initially identified cooperatively by the MPA team and City of Hinesville, Liberty County, and Long County representatives, with some additions made at the suggestion of stakeholders. The list of interviewees includes public officials, business leaders, civic leaders, education leaders, and officials of social service organizations.

Stakeholder Organization	**Interviewee**
City of Hinesville	Mayor Thomas J. Ratcliffe Billy Edwards
City of Midway	Councilman Henry O. Stevens, Sr.
Coastal Georgia Area Community Action Authority	Claire Robinson
Disabled American Veterans	Donald Spencer
Ft. Stewart – DPW	James Thomas
Gateway Behavioral Health Services	Ty Hill
Liberty Center	Ron Collins
Liberty County	Commissioner John McIver Joey Brown
Liberty County Chamber of Commerce	Kelly Davis
Liberty County DFACS	Cornelius McRae Carla Conyers
Liberty County Recreation Department	Jimmy Martin
Long County	Richard Douglas Mary Hamilton
Long County DFACS	Rick McCall
Long County Senior Services	Bonnie Glover
Savannah Technical College	Glenda Giddens Reginald Hendricks

The stakeholder interview process was an initial step in the public involvement process for the feasibility study. It was not intended to be all-inclusive and is not presented here as a representative sampling of public opinion. However, it does provide important insight into the views of leaders in the Hinesville and Liberty County area. In addition, because the group was relatively small, it was possible to obtain more detailed information than would have been possible through a much broader attempt to sample public opinion. This initial step will be followed by additional actions to expand public involvement in the feasibility study.

A list of 13 questions was prepared and used to provide some structure and focus to the interviews. A composite summary of all of the interviews follows.

2.0 Summary of Findings

The summary of findings from the stakeholder interviews is organized based on the major issues put forth in the interview questionnaire:

- Is some form of public transit needed in the Hinesville and Liberty County area?
- Will public transportation contribute to the economic development of the area?
- How high a priority is transit for the area?
- Who are the people that most need to be served by transit and what destinations should be targeted?
- What types of transportation options should be considered?
- Will the people of the Hinesville and Liberty County area support some form of financial assistance for public transportation?
- What should the role of public transit in the Hinesville and Liberty County area be?

Is some form of public transit needed in the Hinesville and Liberty County area*?*
All stakeholders responded in the affirmative to this question, focusing on the need to serve the City of Hinesville, where the lack of downtown parking is becoming a problem, as well as employment locations in Liberty County. In addition, most stakeholders noted the need for transportation for seniors, youth, and the disabled. Lack of reliable transportation is a barrier for many families, especially low-income families to get to work, health and recreation facilities, and schools and shopping. The need for transportation to recreation facilities in Liberty County was mentioned by several stakeholders. The need to provide better access to and from Fort Stewart for work, shopping, education and training, recreation, etc was emphasized by all stakeholders. There is acknowledgement that the Hinesville region is experiencing substantial growth, and it is time to consider alternative means of transportation for families that don't have access to an automobile or that have only one automobile.

Will public transportation contribute to the economic development of the area?
Almost all stakeholders believe that public transportation will contribute positively to the economic development of the Hinesville area. Reasons cited include:

- Local residents will be able to get and keep jobs, which will keep the money at home,
- Will provide access to new industrial parks and help attract businesses to these sites. Businesses will not move to locations if the workforce can't get to work,
- Will support the redevelopment of downtown Hinesville,
- Will provide access to and from new housing locations, thus encouraging the development of much needed housing for the growing population, and
- Will permit the region to more fully take advantage of the enormous economic power of Fort Stewart.

How high a priority is transit for the area?
Most stakeholders assign a relatively high priority to providing public transit in the region—in the city of Hinesville as well as the rural areas of Liberty and Long counties. There appears to be an urgent need to provide better access to Fort Stewart, to the east end of Liberty County and to the new Savannah Technical College Campus. For some, public transit will help relieve the growing traffic congestion problem in the vicinity of Fort Stewart, especially during peak periods.

Who are the people that most need to be served by transit and what destinations should be served?
Most stakeholders tend to agree that priority should be given to low-income persons (those who do not have access to a personal vehicle), seniors, the disabled, and youths. Low-income residents live throughout the study area, but tend to be concentrated in certain areas, such as mobile home parks and assisted housing developments in Hinesville, and in Walthourville, Riceboro, Midway, and Holmestown. Principal destinations would be job sites, job training, childcare, health care, and shopping. Access to DFACS and other government services; access to non-emergency health care services; access to after-school programs or youth recreation programs; and night and weekend access to jobs were all listed as needs. Fort Stewart military personnel and their dependents in one-car or no-car households are in great need of better transportation. They currently have poor access to off-post shopping, entertainment, and recreational activities as well as employment. Long County residents need access to jobs, job training, health care, and shopping in Hinesville.

Other prime destinations mentioned were US 84 for jobs and shopping, downtown Hinesville for government services, I-95 (MidCoast) Industrial Park, Midway Industrial Park, Hinesville Industrial Park, and Wright Army Airfield. Educational and training facilities were also mentioned, including Savannah Technical College, Brewton-Parker College, GED classes at the Adult Education Center, and the Department of Labor Vocational Rehabilitation Center. Service is also needed to locations outside Liberty County for employment, job training, and health care services (Savannah, Brunswick, Jesup, etc.). Some stakeholders feel that, initially, serving Fort Stewart personnel and their dependents should be the primary function of public transit, along with making it feasible to shape growth and create a pedestrian-friendly environment in downtown Hinesville.

What types of transportation options should be considered?
All service types should be considered and be tailored to meet the diverse needs of the area. A combination of demand response van service the general population in the rural areas, as well as seniors and the disabled, with limited fixed route local service in Hinesville might be appropriate. Transit service with attractive small vehicles, such as rubber-tired trolleys, could support downtown Hinesville redevelopment and provide a connection to Fort Stewart. Transit services (Liberty County, Hinesville, Long County, Fort Stewart) should be coordinated and inter-connected. Some express service and/or carpooling during peak hours to key employment locations should be considered. For persons re-entering the work force, scheduled bus or van service would promote accountability, helping workers to become more responsible for themselves and their schedules.

Would the people of the Hinesville and Liberty County area support some form of financial assistance for public transportation?

The general consensus is that if public transportation is seen as a need, the community will support it. Several stakeholders used the example of the current sales tax in Liberty County to help support the expansion of Savannah Technical College. Some suggested that the Board of Commissioners identify an option and put it to the voters; others suggested that more study would be needed to determine the best way to fund public transportation. Very few rejected the possibility of local funding for public transit. However, it was acknowledged that the need for local tax dollars to provide transit service may be an issue for the general public, who may not be as likely to use it.

What should the role of public transit in the Hinesville and Liberty County area be?

Common themes articulated by the stakeholders included:

- Public transportation would provide an alternative to the automobile and help relieve traffic relieve congestion.
- Public transportation would help establish a reliable, affordable, and balanced transportation system in the area.
- Public transportation would help equalize accessibility for segments of the population who are limited in their transportation options, such as low-income families, military dependents, seniors, disabled residents, and youth.
- Public transportation would contribute to the economic development of the area by improving access to jobs, job training, medical care, government services, shopping, and recreation.
- Public transportation would promote the development and redevelopment of the area by providing transportations services to the urban core and key growth areas.
- Public transportation would contribute to improving the quality of life for current and potential residents by improving mobility.

Stakeholder Interview Questionnaire

(Brief introduction of Consultant Team and a brief overview of the study)
Suggested Interview questions. Be flexible!

1. Have you heard about the Transit Feasibility Study? If so, how did you hear?

2. Do you think that the Hinesville area, including Liberty and Long counties, need some form of public transportation? If yes, continue with #3-11 and #13. If no, go to #12-13.

3. Is it a high, medium or low priority?

4. What locations should be given priority for service? Job sites? Health care facilities? Shopping sites? Educational sites? Identify specific locations.

5. Do you think it's important to provide service in the evenings and on weekends?

6. What segments of the population should be given priority for service? Workers? Seniors? Shoppers? Youth? Disabled?

7. What type of service would you prefer? Carpooling/vanpooling? Dial-a-ride van service? Local bus service on specific routes?

8. Do you think that public transportation will contribute to the economic development of the area?

9. Given that public transportation rarely pays for itself, would you support some form of public financial assistance? Sales tax? Property tax? Business license fees? Other?

10. Would you use the service? Do you believe the people you know and associate with would use the service?

11. Thinking about everything you've said, what do you think the role of transit should be?

12. If the answer to question #2 is no, please explain.

    a. What are the most critical transportation problems facing the area?

. b. What is the best way to provide transportation for people who do not drive? Seniors? Youth? People who can't afford a vehicle?

    c. Do you think the area will ever need public transportation?

13. Are there other individuals you think we should talk to about this Study?

Appendix B

Steering Committee Meeting Summaries

HINESVILLE AREA MPO TRANSIT FEASIBILITY STUDY
Project Steering Committee Meeting #1
May 18, 2004

Steering Committee Members:

Paul Andreshak, Ft. Stewart – Deputy to the Garrison Commander
Billy Edwards, Hinesville - City Manager
Henry Frasier, Walthourville - Mayor
Sandra Martin, Flemington - Mayor
Claire Robins, CGACAA – Transportation Coordinator
Thomas J. Ratcliffe, Hinesville - Mayor
Sonny Timmerman, HAMPO - Planning Director

Project Consulting Team:

Morris J. Dillard, DW&A
Milbrey Heard, MPA
Theodore R. Williams, DW&a

WELCOME AND INTRODUCTION

Ms. Heard welcomed everyone to the meeting, reviewed the meeting's purpose and format and introduced the project consulting team. She gave a power point presentation on the study.

PRESENTATION

The presentation on the study's approach and technical component was given to each attendee and is shown below:

Project Approach

- Involve the Community Throughout Process
- Take a Team Approach
- Gain Clear Understanding of Transit Potential
- Identify Resourceful Transit Options
- Accurately Cost Out Options & Tie to Funding

Public Involvement

- Initial Dialogue
- Identify Key Concerns and Needs
- Build Consensus
- Maintain Dialogue

Public Involvement

- Project Steering Committee Meetings
- Stakeholder Interviews
- Public Meetings (Citizen Surveys)

Activity I: Identify Goals and Objectives and Desired Roles for Transit

- Review Existing Plans & Programs
- Interview Key Stakeholders
- Assess Funding Opportunities
- Define Goals, Objectives, & Desired Transit Role

Activity 2: Evaluate Potential for Transit

- Conduct Transit Propensity Analysis
- Gain Public's Opinions Regarding Transit
- Identify Potential Transit Markets

Activity 3: Define & Evaluate Potential Transit Options

- Peer Cities Analysis
- Define & Cost Out Initial Service Options
- Gain Public's Feedback
- Screen Service Options

Activity 4: Evaluate Most Promising Alternatives

- Refine Routes, Service Levels, & Coverage Areas
- Refine Capital and Operating Cost Estimates
- Develop Ridership & Fare Revenue Projections
- Evaluate Against Performance Measures

Activity 5: Implementation Plan

- Prepare Short-Term & Long-Range Elements
- Define & Evaluate Management Options
- Develop Start-up Strategy & Schedule
- Develop Phasing Plan for Intermediate & Long-Range
- Prepare 5-Year Financial Plan

Study Products

- Participatory Plan
- Clear Understanding of Transit Potential
- Appropriate Service Recommendations
- Implementable Short & Long-Term Plans
- Information Necessary for Decisions & Next Steps

M. Heard then discussed the handout on Potential Service Options and distributed a glossary of transit terminology. The discussion material is shown below:

POTENTIAL SERVICE OPTIONS

Range of Possible Options

	Fixed-Route	Flexible-Route
Fixed-Schedule	➢ Local Bus ➢ Express Bus	➢ Point Deviation ➢ Route Deviation ➢ Carpools/Vanpools
Flexible-Schedule	➢ Jitney	➢ Demand Response

Where the Options Work Best

Local and Express Bus Service

- Densely populated area*
- Predictable trip patterns
- Similar origins and destinations from day to day

Route and Point Deviation Service

- Densely or sparsely populated area
- Similar trip patterns from day to day
- Origins and destinations vary from day to day

Demand Responsive Service

- Densely or sparsely populated area
- Unpredictable trip patterns
- Origins and destinations vary from day to day

** Common threshold densities for hourly local bus service are:*

- At least 3 housing units per acre

- At least 4 employees per acre

OTHER SERVICE ISSUES

Service Area

- Entire County
- Areas with Highest Transit Potential

Span of Service

- Weekdays, Saturdays, Sundays, Special Events
- Hours of Operation

Frequency of Service

- Every 30 or 60 Minutes
- Call Ahead

Facilities

- Transit Centers
- Park & Ride Lots

GENERAL DISCUSSION/COMMENTS

Given below is a summary of the major discussion comments that were made following the presentation:

- The Peer Cities' Analysis should include cities with military installations.
  - Determine if the branch (Army, Air Force, Navy, etc.) of the installation is important.
- Security requirements of a military installation present special challenges.
  - Dual ID system – civilian ID (e.g. driver's license) and military ID
  - IDs plus transit pass
- Ft. Stewart intra-post circulation is a critical issue.
- Must identify specific origins and destinations for both on and off post travel needs.
  - Ft. Stewart to downtown redevelopment area – downtown will be a pedestrian friendly destination.
  - Establish one stop shopping in downtown for new military arrivals (folks about to be deployed) to conduct necessary governmental transactions.
  - Identify major attractions beyond downtown Hinesville –Wal-Mart, new Savannah Tech campus, etc.

- Need to identify various transit market segments and tailor transit to satisfy that need.
  - Ft. Stewart to downtown Hinesville – fixed-route transit?
  - Unified transportation services (CGACAA) – demand responsive transit?
  - General transit – combination?
- CGACAA currently transports approximately 20 civilian employees daily onto Ft. Stewart. Riders without proper clearance are dropped off outside of the post and picked up on the vehicle's return off-post.
- The city of Walthourville has a railroad grade crossing problem that will negatively impact any transit service.

FACILITATED DISCUSSION

The next phase of the meeting was a facilitated discussion led by the project team. Listed below are the initial set of the discussion topics:

1) What do you see as the desired role of transit?
2) How can transit be an asset?
3) What specific opportunities for transit do you see?
4) What potential issues related to transit do you see?

However, during the discussion, comments were grouped into only three categories as documented below:

1. WHAT DO YOU SEE AS THE DESIRED ROLE OF TRANSIT?

- Transit should be part of total downtown experience. But there has to be a "hook." Standard vehicles won't cut it. Trolleys could be the "hook."
- Transit can shape growth; support redevelopment downtown –
  - We must lead with housing; treat retail as an experience (not necessarily "big box" retail). The unique government services experience is downtown
  - Sidewalk cafes; and pedestrian friendly environment
- Transit can help reduce number of cars on the streets
- It will make it possible for people to get out of cars and move about, particularly in Hinesville. It will be used if it is convenient, frequent and fast
- Service should be provided to Savannah Tech, Wal-Mart and other locations outside the downtown area if we can show feasibility
- Could be used to transport Youth to shopping and recreation facilities
- Might generate search for a solution to the serious railroad crossing issue in Walthourville which creates a problem for school buses, military vehicles, the general public, and will be a problem for transit if it is to serve the city of Walthourville.

Fort Stewart

- Has a $900M annual payroll. Members of the 3rd Infantry Division and their families in some cases don't have personal vehicles or have only one family vehicle. Transit would make it possible or at least more convenient for this rather large population to move about the region for shopping, schools recreation and other activities.
- In addition to the 3rd Infantry Division, large groups (Reservists, National Guard, etc) come to Fort Stewart to prepare for deployment. They stay 30-180 days and frequently do not bring personal transportation. Therefore, they do not have an inexpensive, convenient, reliable way to get on and off the Post. Transit could play a critical role for this group.
- Post vehicles are used strictly for military purposes. For non-military trips, servicemen and women and their families must walk or use taxicabs if they do not have a personal vehicle.
- The quality of life in the community, such as the availability of transit, is a review area during Base Realignment and Closure (BRAC) rounds.
- The three housing areas on Post are spread far apart: 15th Street (family housing), SR 144 (family housing), core area (single soldiers).

2. WHAT SPECIFIC OPPORTUNITIES FOR TRANSIT DO YOU SEE?

- We have the opportunity to coordinate and inter-connect the existing demand response service and a new fixed route transit service that would provide more service from the outlying areas to Hinesville.
- We have the opportunity to approach retailers about providing some financial assistance for transit if we can demonstrate that the result will be more customers in their establishments.
- We have the opportunity to greatly enhance the quality of life on Ft. Stewart and at the same time take greater advantage of the Post as the economic engine of the region.
- We have the opportunity to connect Savannah Tech, particularly with in-town housing and Post housing.
- In addition to Fort Stewart, there will be three major centers of economic activity in the region that could be served by transit: the Hinesville Industrial Park; the Mid-Coast Business Center near Midway at Highway 84 and I-95; and Wright Army Airfield.
- Vanpool service may work for some trips
- Could re-design seating on school buses and use them for certain types of non-school trips
- Transit could be used for out-of-region trips such as from Ft. Stewart to Savannah Airport

3. **WHAT POTENTIAL ISSUES RELATED TO TRANSIT DO YOU SEE?**

- Will the service be frequent enough to attract riders
- Public perception, expectations may be too high
- Will the hours of service be convenient- people don't want to get stranded
- Will service be clean and safe
- What will be the cost to ride and the cost to taxpayers
- Security related to getting on and off the Post
- Don't have enough housing. Will new housing developments be served
- Will transit compete with cabs and make the cab drivers unhappy
- What about mobile home parks along US 84 and Wal-Mart—will they be served

ADDITIONAL STEERING COMMITTEE PERSPECTIVES

Attempts were made to contact Steering Committee Members who were unable to attend the May 18, 2004 meeting in order to obtain their perspectives on the Transit Feasibility Study. Results of the successful contacts are given below:

Liberty County Administrator
Joey Brown

Public transportation could meet two primary needs of County residents:

1. Provide affordable transportation for citizens who do not have cars to get to jobs, job training, shopping, etc. Two examples are lower wage workers in the rural areas that need to get to Hinesville and Ft. Stewart military spouses who need to get to jobs in industrial parks in the eastern end of the County. Transportation to the technical schools is also a critical need.
2. Provide transportation to Liberty County's growing youth recreation programs. Most of the parks are located in Hinesville; there are limited opportunities at Ft. Stewart and in the eastern part of the County. Without transportation, kids can't participate.

Other considerations:

- Any public transportation system implemented should start small and grow as the demand for it is proven (demand response first, eventually fixed-route).
- User fees should support the system as much as possible.
- Lack of parking in downtown Hinesville is a growing issue for those going downtown for governmental services. Consider transit link from Ft. Stewart to downtown.
- The planned redevelopment of Wright Army Airfield and adjoining development park also has implications for public transportation.

Long County Administrator
Richard Douglas

The role of public transportation should be to provide transportation options for people who can't otherwise get around. Most Long County Transit riders are elderly, low income, or disabled (primarily developmentally disabled) persons. As employment, health care, job training, and shopping opportunities in Long County are very limited, the majority of trips provided are to cities outside the County.

Long County is interested in exploring ways to better integrate the transportation services of Long and Liberty counties. Two potential opportunities are as follows:

1. Permit Long County Transit to provide trips within Liberty County.
2. Initiate fixed-route, fixed-schedule service to Ft. Stewart from a central pick-up point in the County.

Liberty County Development Authority-CEO
Ron Tolley

The desired role of transit includes:

- Provide trolley service linking Ft. Stewart to downtown Hinesville, as well as, other destinations such as Wal-Mart, businesses along Highway 84 and the Hinesville Industrial Park.
- Provide accessibility for low-income residents and soldiers and young military couples who do not have cars or one car households where the car is used exclusively by only one household member.

Specific opportunities include:

- Mobile home parks to shopping locations such as Wal-Mart and similar shopping establishments.
- Low-income communities in rural areas such as Riceboro and Midway.

Potential issues relating to transit include:

- Local residents are not familiar with mass transit and may not use it because of the unfamiliarity.
- Use smaller vehicles rather than large city buses (i.e. dirty diesel fuel).
- Difficult time convincing folks to publicly finance transit given current concerns about property tax rates (millage rate growing along with property tax assessment). This is particularly critical in Liberty County where long term financing is not used ("pay-as-you").

HINESVILLE AREA MPO TRANSIT FEASIBILITY STUDY
Project Steering Committee Meeting #2
August 19, 2004

Steering Committee Members:

Paul Andreshak, Ft. Stewart – Deputy to the Garrison Commander
Joey Brown, Liberty County - County Administrator
Billy Edwards, Hinesville - City Manager
Claire Robins, CGACAA - Transportation Coordinator
Thomas J. Ratcliffe, Hinesville - Mayor
Sonny Timmerman, HAMPO - Planning Director

Project Consulting Team:

Phil Boyd, MPA
Morris J. Dillard, DW&A
Milbrey Heard, MPA

WELCOME AND INTRODUCTION

Ms. Heard welcomed everyone to the meeting, reviewed the meeting's purpose and format and introduced the project consulting team.

PRESENTATION

Ms. Heard began the presentation to the Steering Committee reviewing study findings to date, including results of the stakeholder interviews, socioeconomic data and transit propensity analysis, peer review, funding, and vehicle options. Copies of the presentation were also provided to attendees.

Milbrey discussed and distributed copies of a summary report describing the stakeholder interview process and results, and presented the team's findings related to key demographic data and transit propensity. The transit propensity analysis was also available as a presentation board, and highlighted the core areas of Hinesville where population and employment densities are supportive of hourly local bus service, and the areas of the county where there are large populations of persons who are transportation disadvantaged. There was a concern raised about the Census data on the distribution of low-income households in the City of Hinesville, and a comment regarding focusing the maps on the Cantonment Area of Ft. Stewart.

Phil Boyd continued the presentation. Using several tables distributed to attendees, Phil discussed information gathered on public transportation systems in peer areas. He discussed both peer areas with fixed-route bus systems and those with pure demand response systems (such as Dothan, Alabama). He also discussed the types of transit services provided to major military

installations around the U.S. Committee members debated the idea of providing express service to Ft. Stewart, with the need for a mature system on post first emphasized by Paul Andreshak.

Mr. Boyd then briefly described potential funding sources for transit capital and operations and the amounts from key Federal Transit Administration (FTA) programs that the city and county might reasonably expect. There were questions regarding the typical funding ratios for the FTA programs. Finally, he discussed vehicle options for the committee's consideration, including small buses, cutaway vans, and rubber-tired trolleys. Some committee members expressed an interest in rubber-tired trolleys for service in downtown Hinesville. Questions were also asked regarding the cost of electric vehicle vs. gas or diesel buses and about electric hybrid vehicles. Phil emphasized that hybrids are the new technology, but are still very expensive and essentially still in the development stage.

FACILITATED DISCUSSION

Ms. Heard asked for the committee's input on the types(s) of transit service that make the most sense for the area, as well as how much service should be provided. Committee members suggested service on and off Ft. Stewart that needs to operate early, late, and relatively frequently. Express service between key activity centers and local distribution on Ft. Stewart was seen as a possibility. An understanding of transit needs on-post vs. off-post on weekdays was seen as a critical item to service planning. Weekend service was seen as a limited need. Any local transit system must provide good service to Ft. Stewart, either by connecting outside the gate to an internal system at a transfer center, or by continuing onto the post (security issues permitting). It was suggested that the new Liberty Center (near the main gate) could be a good place for a Ft. Stewart transit center. Committee members also emphasized the need to start small, with frequent service in a limited area where there are high concentrations and high traffic volumes. As demand grows, so too can the system.

Milbrey thanked the committee for their input, reviewed the next steps in the study, and invited them to the public meeting that evening.

Appendix C

Summary of Public Meetings
and
Public Opinion Survey

August 18, 2004 Public Meeting—Liberty County Courthouse Annex

- 9 people signed in (see attached sign-in sheets), including stakeholders or representatives of stakeholders
- Sonny Timmerman represented the HAMPO staff. Commissioner Smith from Liberty County was present, as was Mayor Frasier of Walthourville. Joey Brown, Liberty County Administrator was also present. Two other individuals stopped by sign-in table to pick up material but did not want to sign in.
- Milbrey Heard, Phil Boyd, and Morris Dillard represented the Consultant Team
- Ms. Heard made a Power Point Presentation on the project. Following the presentation comments and questions were solicited.
- There were several comments, including the ones listed below:
    - Fort Stewart has approximately 4500 contract workers on base. Many are Hispanics who do not speak English, do not drive, and do not have driver's licenses. Transportation to and from work is a major challenge for them.
    - There are many young families on Post, many without cars or only one car. Transportation for spouses is a major challenge.
    - In addition to being home for the Third Infantry Division, Ft. Stewart is a primary staging area for units that come from all over the country to prepare for deployment overseas. There are always units in the pipeline. They stay from 90 to 180 days and usually come without personal transportation. As a consequence, they are pretty much confined to Post without public transportation.
    - A representative from Savannah Technical College expressed the need for evening service. The College offers courses from 8 am to 10 pm.
    - Service from Riceboro and the Crossroads Community to Savannah Tech was suggested.
    - Service is needed to area recreation facilities. There is a major recreation complex in Hinesville that serves all of Liberty County, but it is inaccessible without private transportation.

August 19, 2004 Public Meeting—Midway City Hall

- Sixteen people signed in (see attached sign-in sheet), including Mayor Shipman of Midway and Liberty County Commission Chair John McIver. Jennifer Swain, a Reporter for the *Coastal Courier* was present. The Clerk of the City, Lynette Cook was also present but did not sign in. Ms. Cook turned in several survey forms that had been filled out by residents of Midway.
- Sonny Timmerman opened the meeting and recognized all the elected officials in the audience. He introduced Milbrey Heard who made a Power Point presentation. Following the presentation there were several questions and comments. Phil Boyd and Morris Dillard joined Milbrey in responding. The questions and comments are listed below:
    - One citizen raised serious questions about the feasibility of rural public transportation. He cited (erroneously) MARTA costs and losses and questioned whether federal funds would be available, given the competition for federal funds.
    - What happens when federal funds run out? Will the service stop?
    - What will the fares be? Will the people who need the service most be able to afford it?
    - Will the service pay for itself?
    - Will taxes have to be raised?
    - Service is needed in rural Liberty County as well as Hinesville. Chairman McIver explained that he had insisted that the Study address the needs of Rural Liberty County in addition to the needs of the Urbanized Area. He will not support any attempt to put rural against city. Everybody needs service.
    - Need public transportation to get people to jobs, including new jobs that are expected to come to the east end of the county.
    - Need service to get to shopping, doctors and Savannah Tech.
    - When will the recommendations be ready?

Include sign-in sheets here.

HINESVILLE AREA TRANSIT FEASIBILITY STUDY

PUBLIC OPINION SURVEY

The Hinesville Area Metropolitan Planning Organization (HAMPO) is conducting a study to determine the need and opportunities for public transit in the Hinesville metropolitan area and the rural areas of Liberty County. You can contribute to this very important study by answering the questions below. To ensure confidentiality, please do not provide your name. **Your participation is very much appreciated!**

Please turn in your completed survey at the sign-in table before you leave.

1. In your opinion, how important is it for the area to have some form of public transit?
   (1)___very important (3)___not important
   (2)___important (4)___no opinion

2. If public transit were available in the area, would you use it?
   (1)___yes (2)___no (3)___not sure

3. If public transit were available, where would you use it most to go?
   (1)___work (4)___shopping
   (2)___recreation (5)___school/job training
   (3)___doctor's appointment (6)___other (specify):_____

4. If public transit were available, how often would you use it?
   (1)___every day (4)___once per week
   (2)___five times per week (5)___occasionally
   (3)___twice per week (6)___never

5. What is the most important role for public transit in the area? (please select top two)
   (1)___Provide an alternative to driving alone for the general public
   (2)___Improve access to jobs and job training for low-income workers
   (3)___Help seniors and the disabled remain independent
   (4)___Reduce traffic congestion in Hinesville, especially in the Ft. Stewart area
   (5)___Improve mobility for Ft. Stewart personnel and their dependents
   (6)___Provide transportation to area recreational activities (youth and adult)
   (7)___Other (specify):_____

6. In what part of the area do you live? (please do not give address—only the neighborhood, city, and nearest major intersection)
   _____

7. If you are in the workforce, where do you work and/or attend school/job training?
   _____

You may forward additional comments to:
Hinesville Area MPO
c/o DW & Associates
P.O. Box 11268
Atlanta, GA 30310-0268
Fax: 404-752-6464

Hinesville Area Transit Feasibility Study
Public Opinion Survey Results

A total of 91 comment forms were received. Questions 3 and 5 had multiple responses, thus the number of responses exceed 91. Responses to questions 1 through 5 are summarized below.

1) In your opinion, how important is it for the area to have some form of public transit?

	Number of Responses	Percent of Total
very important	78	86%
important	12	13%
no opinion	1	1%
Total	**91**	**100%**

Note: There were no responses of "not important"

2) If public transit were available in the area, would you use it?

	Number of Responses	Percent of Total
yes	74	81%
not sure	11	12%
no	4	4%
no response	2	2%
Total	**91**	**100%**

3) If public transit were available, where would you use it most to go?

	Number of Responses	Percent of Total
work	61	25%
recreation	22	9%
doctor's appointment	55	22%
shopping	62	25%
school/job training	33	13%
other	14	6%
Total	**247**	**100%**

4) If public transit were available, how often would you use it?

	Number of Responses	Percent of Total
every day	26	29%
five times per week	25	27%
twice per week	8	9%
once per week	3	3%
occasionally	22	24%
never	4	4%
no response	3	3%
Total	**91**	**100%**

5) What is the most important role for public transit in the area?

	Number of Responses	Percent of Total
provide an alternative to driving alone for the general public	28	15%
improve access to jobs & job training for low-income workers	50	26%
help seniors & the disabled remain independent	45	24%
reduce traffic congestion in Hinesville	26	14%
improve mobility for Ft. Stewart personnel and their dependents	20	11%
provide transportation to area recreational activities	18	10%
other	2	1%
Total	**189**	**100%**

HINESVILLE AREA TRANSIT FEASIBILITY STUDY

TECHNICAL MEMORANDUM #2

Prepared for:
HINESVILLE AREA METROPOLITAN PLANNING ORGANIZATION

Prepared by:
MANUEL PADRON & ASSOCIATES, INC.

In Association with:
DW & ASSOCIATES

December 21, 2004

Table of Contents

1.0 Define Potential Transit Options

Technical Memorandum #2 documents Activity 3 and 4 tasks and builds on findings identified in Technical Memorandum #1, including funding potential, the desired role of transit, socioeconomic characteristics and market data, and potential transit markets. This technical memorandum documents the development of an initial set of transit service options appropriate for the Hinesville and Liberty County area and a range of scenarios that are most promising. It begins with a review of peer cities, counties, and military installations with transit systems.

1.1 Peer Review

Geographical, demographic, economic and other factors combine in a variety of ways to ensure that no urban area is exactly like another. In evaluating transit services, however, it can be informative to establish a focus group of cities/counties with some characteristics in common. Peer comparison is especially useful in transit planning for the benefit of knowing how much or how little service is operated in similar areas and understanding the range of performance the systems are experiencing.

1.1.1 Peer Transit Agencies

Using information extracted from the 2000 Census and the Federal Transit Administration's FY 2002 National Transit Database, ten peer transit agencies were identified primarily from the southeast United States that operate both fixed-route and demand response transit service. In addition, seven peer transit agencies that operate only demand response services were also identified.

The peer agencies were selected primarily on the basis of their 2000 Census urbanized area and FY 2002 transit service area population, geographic area (square miles) and density statistics. Other factors in selecting areas were similar economies and demographic characteristics.

1.1.1.1 System Characteristics

Tables 1-1 and 1-2 show demographic and transit service characteristics for the peer transit agencies. Table 1-1 shows the agencies with fixed-route and demand response transit service. The 2000 Census urbanized area population in these cities ranges from 50,902 to 132,844. The FY 2002 transit service area population for the ten peer agencies ranges from 49,381 (Johnson City, Tennessee) to 90,000 (High Point, North Carolina). The average service area population of 64,902 is about five percent higher than Liberty County's population of 61,610. Average geographic size and population density of the FY 2002 service areas is also comparable to Hinesville. However, for the fixed-route peers selected, Liberty County has a remarkably lower population density at 119 persons per square mile.

The number of peak vehicles for bus operations for the ten peer transit systems ranges from five to 17, with an average of ten. Demand response vehicles range from two to eight, with an average of three.

Table 1-1 profiles four key operating characteristics of the peer transit systems – annual passenger trips, annual operating cost, revenue vehicle-hours, and revenue vehicle-miles – for both bus (fixed-route) and demand response operations. Average annual passenger trips (ridership) are about 511,000 passengers and 20,000 passengers for bus and demand response, respectively. Total average annual operating cost (bus + demand response) for these ten systems is approximately $1,800,000; Danville has the lowest annual cost at approximately $800,00 and Monroe has the highest annual cost at approximately $2,900,000. The peer systems provide an average of about 34,000 revenue vehicle-hours and 472,500 revenue vehicle-miles of bus service and an average of about 7,300 revenue vehicle-hours and 76,900 revenue vehicle-miles of demand response service.

As additional comparative information, Table 1-1 also profiles four transit agencies that provide service to major military installations: Fort Walton Beach, Florida – Eglin Air Force Base; Fayetteville, North Carolina – Fort Bragg; Sumter, South Carolina – Shaw Air Force Base; and Clarksville, Tennessee – Fort Campbell. These agencies were not included in the peer group due to the larger size of either the urbanized area or service area population.

Table 1-2 profiles seven peer demand response systems in Alabama, Florida, Indiana, North Dakota, South Carolina, and Texas. The FY 2002 service area population ranges from 56,168 (Sherman, Texas) to 145,058 (Spartanburg Co., South Carolina). The geographic area served, ranging from 34 to 600 square miles, is in the range of Hinesville and Liberty County at 27 and 519 square miles, respectively. The range of population densities served is also generally comparable. The number of peak vehicles in these seven agencies ranges from 12 to 58, with an average of 25.

Table 1-2 also profiles four key operating characteristics of the peer demand response transit systems – annual passenger trips, annual operating cost, revenue vehicle-hours, and revenue vehicle-miles. Average annual passenger trips (ridership) are about 143,800 passengers. Average annual operating cost for these seven systems is about $1,113,000. The peer systems provide an average of about 33,600 revenue vehicle-hours and 506,100 revenue vehicle-miles of demand response service.

TABLE 1-1
SYSTEM CHARACTERISTICS
BUS AND DEMAND RESPONSE AGENCIES, FY 2002

	2000 Census Urbanized Area			FY 2002 Service Area			Peak Vehicles		Annual Passenger Trips		Annual Operating Cost		Annual Revenue Vehicle-Hours		Annual Revenue Vehicle-Miles	
Peer Agency	**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	613,585	30,897	$1,224,584	$459,887	37,036	14,331	508,076	178,890
Ocala, FL	106,542	89	1,197	67,908	47	1,445	5	2	204,466	10,056	$862,355	$127,795	19,408	6,604	320,822	51,871
Alexandria, LA	78,504	58	1,354	78,504	58	1,354	8	2	670,622	13,272	$1,768,766	$342,703	29,294	5,781	405,355	96,081
Monroe, LA	113,818	237	480	55,000	13	4,231	15	2	667,192	6,392	$2,593,288	$280,065	47,288	4,216	632,924	27,955
High Point, NC	132,844	94	1,413	90,000	52	1,731	11	6	649,584	38,748	$1,247,542	$332,165	28,349	12,978	391,271	116,214
Williamsport, PA	58,693	27	2,174	69,764	82	851	17	2	1,113,983	3,485	$2,598,502	$30,201	49,543	1,072	747,381	17,746
Johnson City, TN	102,456	91	1,126	49,381	33	1,496	6	8	322,576	62,642	$930,627	$519,060	20,110	16,336	286,142	158,063
Danville, VA	50,902	33	1,542	50,902	33	1,542	7	4	208,974	16,652	$630,807	$171,756	17,372	4,152	247,920	59,348
Parkersburg, WV	85,605	50	1,712	49,910	14	3,565	9	2	288,414	12,722	$1,287,433	$198,314	33,448	5,266	445,097	38,476
Wheeling, WV	87,613	54	1,622	61,725	27	2,286	14	2	366,761	5,219	$2,198,651	$222,512	58,171	1,790	740,045	24,456
Peer System:																
Low	**50,902**	**27**	**480**	**49,381**	**13**	**851**	**5**	**2**	**204,466**	**3,485**	**$630,807**	**$30,201**	**17,372**	**1,072**	**247,920**	**17,746**
High	**132,844**	**237**	**2,174**	**90,000**	**82**	**4,466**	**17**	**8**	**1,113,983**	**62,642**	**$2,598,502**	**$519,060**	**58,171**	**16,336**	**747,381**	**178,890**
Average	**91,243**	**80**	**1,407**	**64,902**	**38**	**2,297**	**10**	**3**	**510,616**	**20,009**	**$1,534,256**	**$268,446**	**34,002**	**7,253**	**472,503**	**76,910**
Hinesville Urbanized Area	**50,360**	**27**	**1,865**													
Liberty County	**61,610**	**519**	**119**													
Agency Serving Military Installation																
Ft. Walton Beach, FL	152,741	97	1,575	170,498	200	852	9	39	64,870	127,126	$412,976	$1,123,567	18,714	50,034	201,237	799,000
Fayetteville, NC	276,368	167	1,655	124,319	62	2,005	16	14	1,130,327	62,793	$2,778,885	$1,081,012	55,973	28,596	725,094	626,845
Sumter, SC	64,320	45	1,429	209,919	2,408	87	15	59	137,205	136,724	$473,993	$2,297,672	18,933	98,527	365,013	1,427,290
Clarksville, TN	121,775	79	1,541	121,775	79	1,541	11	6	499,649	33,086	$1,759,663	$582,018	44,775	15,601	699,547	248,993

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

Prepared by Manuel Padron & Associates

28-Jun-04

TABLE 1-2
PEER SYSTEM CHARACTERISTICS
DEMAND RESPONSE AGENCIES, FY 2002

	Service Area Statistics			Operating Statistics				
Agency	**Population**	**Square Miles**	**Population Density**	**Peak Vehicles**	**Annual Passenger Trips**	**Annual Operating Cost**	**Annual Rev. Veh-Hours**	**Annual Rev. Veh-Miles**
Houston Co. (Dothan), AL	90,000	600	150	15	157,261	$955,367	19,631	463,517
Florence, AL	71,117	112	635	58	204,199	$854,744	45,457	552,704
Charlotte Co. (Punta Gorda), FL	122,421	359	341	12	60,532	$1,041,442	24,412	374,677
Kokomo, IN	69,682	35	1,991	27	94,126	$896,822	22,154	311,852
Bismarck, ND	94,719	137	691	23	186,918	$1,570,320	52,410	715,831
Spartanburg Co., SC	145,058	137	1,059	26	160,224	$1,591,232	50,035	714,776
Sherman, TX	56,168	34	1,652	15	136,985	$883,329	21,259	409,000
Peer System:								
Low	**56,168**	**34**	**150**	**12**	**60,532**	**$854,744**	**19,631**	**311,852**
High	**145,058**	**600**	**1,991**	**58**	**204,199**	**$1,591,232**	**52,410**	**715,831**
Average	**92,738**	**202**	**931**	**25**	**142,892**	**$1,113,322**	**33,623**	**506,051**
Hinesville Urbanized Area	**50,360**	**27**	**1,865**					
Liberty County	**61,610**	**519**	**119**					

Notes:
Peer agency statistics are from FY 2002 National Transit Database transit agency profiles.
Hinesville U.A. and Liberty County statistics are from 2000 Census.

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1.1.1.2 System Performance Measures

Table 1-3 and Table 1-4 compare the performance of the transit systems in the peer areas in FY 2002 in terms of service efficiency, cost effectiveness, and service effectiveness. In Table 1-3, the measures available by mode are shown for bus operations and demand response separately. However, fare subsidy data is not available by mode, and therefore is for overall operations.

- ⇨ **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. The lower the cost, the better performing the system.

- ⇨ **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, the higher the percentage, the better performing the system. For cost per passenger trip and subsidy per passenger trip, the lower the cost, the better.

- ⇨ **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, passenger trips per revenue vehicle-hour. The higher the number, the better performing the system.

While some peer systems perform better than others, this section is primarily intended to provide a sense of the range of performance these systems are experiencing. If the Hinesville and Liberty County area moves forward towards implementation of a transit system in the future, the performance of a small number of carefully selected peer systems should be more fully explored.

Looking first at bus operations performance in Table 1-3: For service efficiency, the Albany system has the lowest cost per revenue vehicle-mile ($2.41) and per revenue vehicle-hour ($33.06). For cost effectiveness and service effectiveness, High Point's bus operations system performed best overall and was only bested by Danville in one category: farebox recovery (29% to 26%). Looking at system-wide (bus operations and demand response combined) subsidy per passenger trip, the average subsidy required by all funding sources is $3.28 with the highest at $5.73; the average subsidy required by only local funds is $1.35 with the highest at $2.59.

TABLE 1-3
SYSTEM PEFORMANCE MEASURES
BUS AND DEMAND RESPONSE AGENCIES, FY 2002

	Service Efficiency				Cost Effectiveness						Service Effectiveness			
	Cost per Rev. Veh-Mile		Cost per Rev. Veh-Hour		Cost per Pass. Trip		Farebox Recovery (2)		Subsidy per Pass. Trip		Pass. Trips per Rev. Veh-Mile		Pass. Trips per Rev. Veh-Hour	
Peer Agency	**Bus Operations**	**Demand Response**	**Bus Operations**	**Demand Response**	**Bus Operations**	**Demand Response**	**Bus Operations**	**Demand Response**	**All Funding (3)**	**Local Funding**	**Bus Operations**	**Demand Response**	**Bus Operations**	**Demand Response**
Albany, GA	$2.41	$2.57	$33.06	$32.09	$2.00	$14.88	25%	9%	$2.14	$1.74	1.21	0.17	16.57	2.16
Ocala, FL	$2.69	$2.46	$44.43	$19.35	$4.22	$12.71	15%	8%	$4.01	$0.77	0.64	0.19	10.54	1.52
Alexandria, LA	$4.36	$3.57	$60.38	$59.28	$2.64	$25.82	13%	0%	$2.76	$1.71	1.65	0.14	22.89	2.30
Monroe, LA	$4.10	$10.02	$54.84	$66.43	$3.89	$43.81	15%	1%	$3.69	$2.59	1.05	0.23	14.11	1.52
High Point, NC	$3.19	$2.86	$44.01	$25.59	$1.92	$8.57	26%	18%	$1.82	$0.48	1.66	0.33	22.91	2.99
Williamsport, PA	$3.48	$1.70	$52.45	$28.17	$2.33	$8.67	19%	24%	$1.91	$0.19	1.49	0.20	22.49	3.25
Johnson City, TN	$3.25	$3.28	$46.28	$31.77	$2.88	$8.29	13%	13%	$3.46	$0.84	1.13	0.40	16.04	3.83
Danville, VA	$2.54	$2.89	$36.31	$41.37	$3.02	$10.31	29%	24%	$2.75	$0.79	0.84	0.28	12.03	4.01
Parkersburg, WV	$2.89	$5.15	$38.49	$37.66	$4.46	$15.59	10%	3%	$4.50	$2.23	0.65	0.33	8.62	2.42
Wheeling, WV	$2.97	$9.10	$37.80	$124.31	$5.99	$42.63	13%	3%	$5.73	$2.21	0.50	0.21	6.30	2.92
Peer System:														
Low	**$2.41**	**$1.70**	**$33.06**	**$19.35**	**$1.92**	**$8.29**	**10%**	**0%**	**$1.82**	**$0.19**	**0.50**	**0.14**	**6.30**	**1.52**
High	**$4.36**	**$10.02**	**$60.38**	**$124.31**	**$5.99**	**$43.81**	**29%**	**24%**	**$5.73**	**$2.59**	**1.66**	**0.40**	**22.91**	**4.01**
Average	**$3.19**	**$4.36**	**$44.80**	**$46.60**	**$3.34**	**$19.13**	**18%**	**10%**	**$3.28**	**$1.35**	**1.08**	**0.25**	**15.25**	**2.69**
Agency Serving Military Installation														
Ft. Walton Beach, FL	$2.05	$1.41	$22.07	$22.46	$6.37	$8.84	3%	50%	$7.94	$1.48	0.32	0.16	3.47	2.54
Fayetteville, NC	$3.83	$1.72	$49.65	$37.80	$2.46	$17.22	18%	2%	$2.81	$1.09	1.56	0.10	20.19	2.20
Sumter, SC	$1.30	$1.61	$25.04	$23.32	$3.45	$16.81	22%	1%	$9.73	$0.22	0.38	0.10	7.25	1.39
Clarksville, TN	$2.52	$2.34	$39.30	$37.31	$3.52	$17.59	14%	10%	$3.92	$1.33	0.71	0.13	11.16	2.12
Average	**$2.42**	**$1.77**	**$34.01**	**$30.22**	**$3.95**	**$15.11**	**14%**	**15%**	**$6.10**	**$1.03**	**0.74**	**0.12**	**10.52**	**2.06**

Notes:
(1) Statistics are from FY 2002 National Transit Database transit agency profiles.
(2) Farebox Recovery reflects portion of operating expenses recovered from fare revenues. Fare revenues may include local service contracts with area organizations, in addition to farebox revenue.
(3) All Funding Subsidy per Passenger Trip includes federal, state, local, and other miscellaneous funding sources, excluding fare revenue.

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TABLE 1-4
PEER SYSTEM PEFORMANCE MEASURES (1)
DEMAND RESPONSE AGENCIES, FY 2002

	Service Efficiency		Cost Effectiveness				Service Effectiveness	
					Subsidy per Pass. Trip			
Agency	**Cost per Rev. Veh-Mile**	**Cost per Rev. Veh-Hour**	**Cost per Pass. Trip**	**Farebox Recovery (2)**	**All Funding (3)**	**Local Funding**	**Pass. Trips per Rev. Veh-Mile**	**Pass. Trips per Rev. Veh-Hour**
Houston Co. (Dothan), AL	$2.06	$48.67	$6.08	38%	$3.74	$1.02	0.34	8.01
Florence, AL	$1.55	$18.80	$4.19	4%	$4.00	$0.07	0.37	4.49
Charlotte Co. (Punta Gorda), FL	$2.78	$42.66	$17.20	9%	$15.67	$2.42	0.16	2.48
Kokomo, IN	$2.88	$40.48	$9.53	15%	$8.12	$1.99	0.30	4.25
Bismarck, ND	$2.19	$29.96	$8.40	20%	$6.72	$3.33	0.26	3.57
Spartanburg Co., SC	$2.23	$31.80	$9.93	38%	$6.15	$0.35	0.22	3.20
Sherman, TX	$2.16	$41.55	$6.45	3%	$6.25	$1.55	0.33	6.44
Peer System:								
Low	**$1.55**	**$18.80**	**$4.19**	**3%**	**$3.74**	**$0.07**	**0.16**	**2.48**
High	**$2.88**	**$48.67**	**$17.20**	**38%**	**$15.67**	**$3.33**	**0.37**	**8.01**
Average	**$2.26**	**$36.28**	**$8.82**	**18%**	**$7.23**	**$1.53**	**0.28**	**4.63**

Notes:
(1) Statistics are from FY 2002 National Transit Database transit agency profiles.
(2) Farebox Recovery reflects portion of operating expenses recovered from fare revenues. Fare revenues may include local service contracts with area organizations, in addition to farebox revenue.
(3) Subsidy per Passenger Trip from all funding sources includes federal, state, local, and other miscellaneous funding sources, excluding fare revenue.

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Looking at demand response performance in Table 1-3: First, the best operational performance is shared by several agencies. For service efficiency, the Williamsport system has the lowest cost per revenue vehicle-mile ($1.70) and Ocala has the lowest cost per revenue vehicle-hour ($19.35). For cost effectiveness, Johnson City has the lowest cost per passenger trip ($1.92) and in terms of farebox recovery is tied for best with Danville (24%). In terms of service effectiveness, the number of passenger trips per revenue vehicle-mile ranges from 0.14 to 0.40 with an average of 0.25; the number of passenger trips per revenue vehicle-hour ranges from 1.5 to 4.0 with an average of 2.7.

Finally in Table 1-3, looking at the agencies that provide some service to adjacent military installations: The average performance measures for these four agencies are within the range of values observed for the ten peer agencies except for - all funding subsidy per passenger trip. In this case the average subsidy is almost double for the military serving agencies ($6.10 versus $3.28) and is caused by the high subsidies observed for Ft. Walton Beach and Sumter. The service efficiency values are generally better than the peer system average (that is, lower cost). In terms of service effectiveness, the observed values are generally worse than the peer system average except for Fayetteville. The Fayetteville system yields 1.6 and 20.2 passenger trips per revenue vehicle-mile and revenue vehicle-hour, respectively, placing it among the most productive agencies.

Looking at Table 1-4 for service efficiency, the average costs per revenue vehicle-mile and per revenue vehicle-hour are $2.26 and $36.28, respectively. It is important to note that in terms of the most comparable county density (Houston County, Alabama), the cost for a demand response service agency in Liberty County could approach $50 per revenue vehicle-hour. In terms of cost effectiveness, there is a wide range of experience with cost per passenger trip, farebox recovery and subsidy that is due primarily to the wide range of ridership yield. Also, it is important to note that contracts for service with local organizations (e.g., rehabilitation centers, senior centers, and after-school programs) contribute significantly to total fare revenues for these systems. In terms of service effectiveness, the number of passenger trips per revenue vehicle-mile ranges from 0.16 to 0.37 with an average of 0.28; the number of passenger trips per revenue vehicle-hour ranges from 2.5 to 8.0 with an average of 4.6.

1.1.2 Military Installation Transit Services

A number of communities with adjacent military installations were also reviewed to get an understanding of the types of services being offered. The amount of service being provided (operating hours, number of daily trips, frequency, etc.) was examined, and whether the service was being provided by the local community, private initiatives, or the military installation. The great majority of military installations are not served by public transit. This circumstance appears to be somewhat due to historical mission (the installation being more self-contained without a large civilian workforce) and/or lack of proximity to a local population base that would generate enough trip interactions. However, there also appears to be an emerging trend for communities to serve adjacent military installations, possibly brought on by the Base Realignment and Closure Commission (BRACC) rounds whereby communities are competing to

provide quality of life services and/or by some installations having a higher need for civilian employees. Ten military installations with transit services were selected for review.

In all ten cases, the military installation is served by the local public transit agency. In most cases, the installations are served by local transit routes, often due to the proximity of the installation to the community. Others are served by express commuter routes or by demand response service.

In a few cases, a fuller range of transit services is provided, such as shuttles on the installation complementing local transit routes. For example, Fort Hood in Killeen, Texas has been operating on-post shuttle services for approximately 15 years. Fort Hood is the largest active duty armored post in the U.S., and the only one in the U.S. capable of supporting two full armored divisions (1st Cavalry Division and 4th Infantry Division). Total post population is estimated at about 71,000, of which almost 42,000 are soldiers. Fort Hood operates three shuttle routes on weekdays, from 0700 to 1700, using 15-passenger vans. Each route operates in a loop every 60 minutes. In the core area of the post, one route operates clockwise, another counterclockwise (for a combined frequency of 30 minutes). The other connects the core area of the post to outlying family housing areas, and provides the only connections to local transit routes. Operation of the system is contracted out, and funded through the Directorate of Logistics.

Following is a summary of the selected examples of military base transit services including days of operation, span of service (in military time), and number of trips or service frequency.

- Hunter Army Airfield, Savannah, Georgia
  - Served by Chatham Area Transit
  - Weekday & Saturday service: 0640 - 2215 / 30 min. frequency
  - Sunday service: 0830 - 1850 / 45 min. frequency

- Fort Benning, Columbus, Georgia
  - Served by Columbus METRA
  - Weekday service: 0500 - 2000 / 30-60 min. frequency
  - Saturday service: 0500 - 2000 / 90 min. frequency

❖ Fort Bragg, Fayetteville, North Carolina
- Served by Fayetteville Area System of Transit (FAST)
- Weekday service: 0730 – 1130 and 1330 - 1930 /
  60 min. frequency
- Fort Bragg service supporting mobilizations:
  - On-post shuttle service: 1030 – 2100 /
    30-45 min. frequency
  - Saturday express shuttle service to Fayetteville mall: 1030 – 2130 /
    60 min. frequency

❖ Fort Hood, Killeen, Texas
- Served by Hill County Transit System (the HOP)
- Weekday service: 0600 – 1700 /
  30 min. frequency
- Saturday service: 1000 - 1700 /
  60 min. frequency
- Fort Hood service:
  - Weekday on-post shuttle service: 0700 – 1700 /
    30-60 min. frequency
  - Weekday official use taxi service: 0700 – 1700

❖ Fort Campbell, Clarksville, Tennessee
- Served by Clarksville Transit
- Weekday service: 0440 - 2100 /
  30-60 min. frequency
- Saturday service: 0630 - 2100 /
  60 min. frequency

❖ Mayport Naval Station (Carrier Basin), Jacksonville, Florida
- Served by Jacksonville Transportation Authority
- Weekday service: 0530 - 2000 /
  60 min. frequency
- Weekend service: 0630 - 2000 /
  60 min. frequency

❖ Eglin Air Force Base, Fort Walton Beach, Florida
- Served by Okaloosa County Transit
- Demand response service to base: weekdays and Saturdays
- Fixed route service in adjacent community

❖ Maxwell Air Force Base, Montgomery, Alabama
- Served by Montgomery Transit
- Weekday service: 0600 - 1800 /
  40 min. frequency

❖ Wright Patterson Air Force Base, Dayton, Ohio
- Served by Greater Dayton RTA
- Weekday express service: 3 routes (6 daily trips)

❖ Naval Station Norfolk, Norfolk, Virginia
- Served by Hampton Roads Transit (Norfolk)
- Weekday express: 2 routes/ 30 daily trips
- Vanpool program (weekdays)
- Daily local service: 3 routes / 0500 - 0200 /
  30 min. base (peak & midday) and 60 min. evening frequencies

1.2 Develop Initial Transit Service Options

This section documents the development of initial transit service options designed to meet the needs of the Hinesville and Liberty County area. The process of defining transit options began with field work examining land uses and access conditions, with an eye toward developing preliminary bus route corridors and service areas for more detailed service planning and analysis.

A broad range of options was identified that would provide public transit service to Hinesville and Liberty County and on-post circulators serving Fort Stewart, with connections between the services, as well as with Long County Transit. The options include alternative service areas, alternative routes, and varying funding levels for consideration by the Steering Committee and the public.

1.2.1 Introduction to Transit Service Types

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 1-5 below shows various types of transit according to whether they are fixed or flexible in routing and scheduling. Service types applicable to small urbanized and rural areas such as the Hinesville and Liberty County area are described below.

TABLE 1-5
Range of Service Types

	Fixed-Route	Flexible-Route
Fixed-Schedule	• Local Bus • Express Bus	• Route Deviation • Point Deviation • Carpools/Vanpools
Flexible-Schedule	• Jitneys	• Demand Response

- Local bus service is fixed-route, fixed-schedule service. It operates along a defined route and reaches certain points at set times. Express bus service is a variation where buses make very limited stops, and service is provided from a single origin—usually a park & ride lot—to a single destination, or limited numbers of each. These types of service work best where densities (population and employment) are higher and people are likely to walk to and from the bus stops to their destinations.

- Deviation service (route or point) is fixed-schedule, but flexible-route. It allows buses the flexibility to deviate a limited distance from the basic route to pick up passengers who call ahead for service. With route deviation service, vehicles travel along a fixed route and maintain 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 their 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. 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 & ride lot), and are dropped off at or near their jobs.

- 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.

  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 among 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 the report.

1.2.2 Local Fixed-Route Service

Local fixed-route service is proposed serving two key areas: Hinesville/Liberty County and Fort Stewart. Primarily due to Fort Stewart security clearance considerations to travel on-post, Hinesville/Liberty County routes and internal Fort Stewart routes would cover two distinct service areas (on-post and off-post). However, the services would be interconnected and well coordinated, with timed transfers between the two. In addition, there would be two types of routes serving Hinesville and Liberty County: local routes with frequent stops serving the areas of highest densities (population and employment) in Hinesville, and connector routes between downtown Hinesville and key locations in the east end of Liberty County and the southern portion of Hinesville. For each type of service, sections follow describing the routes and their operating characteristics.

Timed transfers would be an integral part of the system design, whereby vehicles would be scheduled to meet at a transit center at or near the Fort Stewart Education Center (Liberty Center), so passengers could transfer from route to route with no or minimal delay. Transfers between the various county routes and vehicles could be made at this location, as well between Liberty County and Long County transit vehicles. A second smaller transit center at Savannah Technical College would also facilitate transfers between Liberty County and Long County transit vehicles. Transit centers at these locations would have limited passenger amenities (e.g., shelters with passenger information) and spaces for buses to temporarily stop.

To facilitate transfers between off-post Hinesville/Liberty County routes and on-post Fort Stewart routes, it is recommended that the transit center be located at Liberty Center, on-post but just outside the Main Gate. Ideally, passengers with security clearance disembarking from an off-post vehicle at the transit center would proceed on a short pedestrian way through the Gate House without delay. Those without security clearance would stop at the Gate House to receive clearance before being allowed through the Gate. Once passengers clear the Gate, they would either walk to their destinations or proceed to bus stops just inside the Gate to transfer to one of the two on-post circulators.

1.2.2.1 Hinesville Local Routes

Description of Routes

Five local routes would serve the heart of Hinesville, including two midday circulator routes and three morning and afternoon peak routes. Each midday circulator would be paired with one or two peak period routes to serve two transit markets: midday lunch and shopping trips and peak period work trips between key residential areas and downtown Hinesville/Fort Stewart. Using rubber-tired replica trolleys on these routes could offer an attractive nostalgic design, making riding the system an attraction unto it itself.

The two midday circulator routes would serve the employment areas in and around downtown Hinesville. Weekday service would be provided on each route every 20 minutes, from 9:30 a.m. to 2:30 p.m. The circulator routes would serve several transit markets, including Fort Stewart personnel leaving the post during their lunch hour, downtown employees going to lunch or shop, and military dependents leaving the post to conduct personal business downtown or to shop. These routes are projected to attract an average of 15 to 17 passenger trips per vehicle hour. Figure 1-1 shows the proposed alignments of the Hinesville midday circulator routes.

- **Circulator A** would provide service from Liberty Center/Fort Stewart to the downtown and core commercial area of Hinesville, including the restaurants, retail establishments, and the Bradwell Institute along General Screven Way, particularly at its intersection with E.G. Miles Parkway/Hendry Street, government buildings and offices along Main Street, and Memorial Drive, which is a key corridor in the City's redevelopment plans. It would also serve the apartment complexes west of Gause Street. The circulator would operate with one vehicle every 20 minutes in a counter-clockwise direction. Vehicles would lay-over at the transit center at Liberty Center.

- **Circulator B** would provide service from Liberty Center/Fort Stewart along the Memorial Drive corridor and Main Street in the opposite direction from Circulator A. As a complementary route to Circulator A, it would then serve the other major corridors surrounding downtown Hinesville. From Hendry Street, it would continue east along General Screven Way, north on Oglethorpe Highway, and west on General Stewart Way back to the transit center. It would serve the newer restaurant and retail shopping center at the intersection of General Screven Way and Oglethorpe Highway, and, northwards along Oglethorpe Highway, smaller commercial establishments, hotels/motels, the Liberty County Health Department, Recreation Department, and Liberty Independent Troop Park behind it. The route would also support the redevelopment of the old hospital site. Along General Stewart Way, existing land uses are predominantly single-family. However, the route would serve several high density, lower-income apartment complexes and schools, as well as support future revitalization and redevelopment efforts south of General Stewart Way. The circulator would operate with two vehicles every 20 minutes in a counter-clockwise direction. Vehicles would lay-over at the transit center at Liberty Center.

The three peak period routes would be paired with the circulator routes and use the same vehicles. The proposed routes are designed to link the most transit supportive residential areas to the downtown core and Fort Stewart. In the core area, they would serve the same corridors as the circulator routes, providing continuous coverage throughout the day. Weekday service would be provided on each route every 40 minutes in two peak periods, from 4:30 to 9:30 a.m. and from 2:30 to 7:30 p.m.

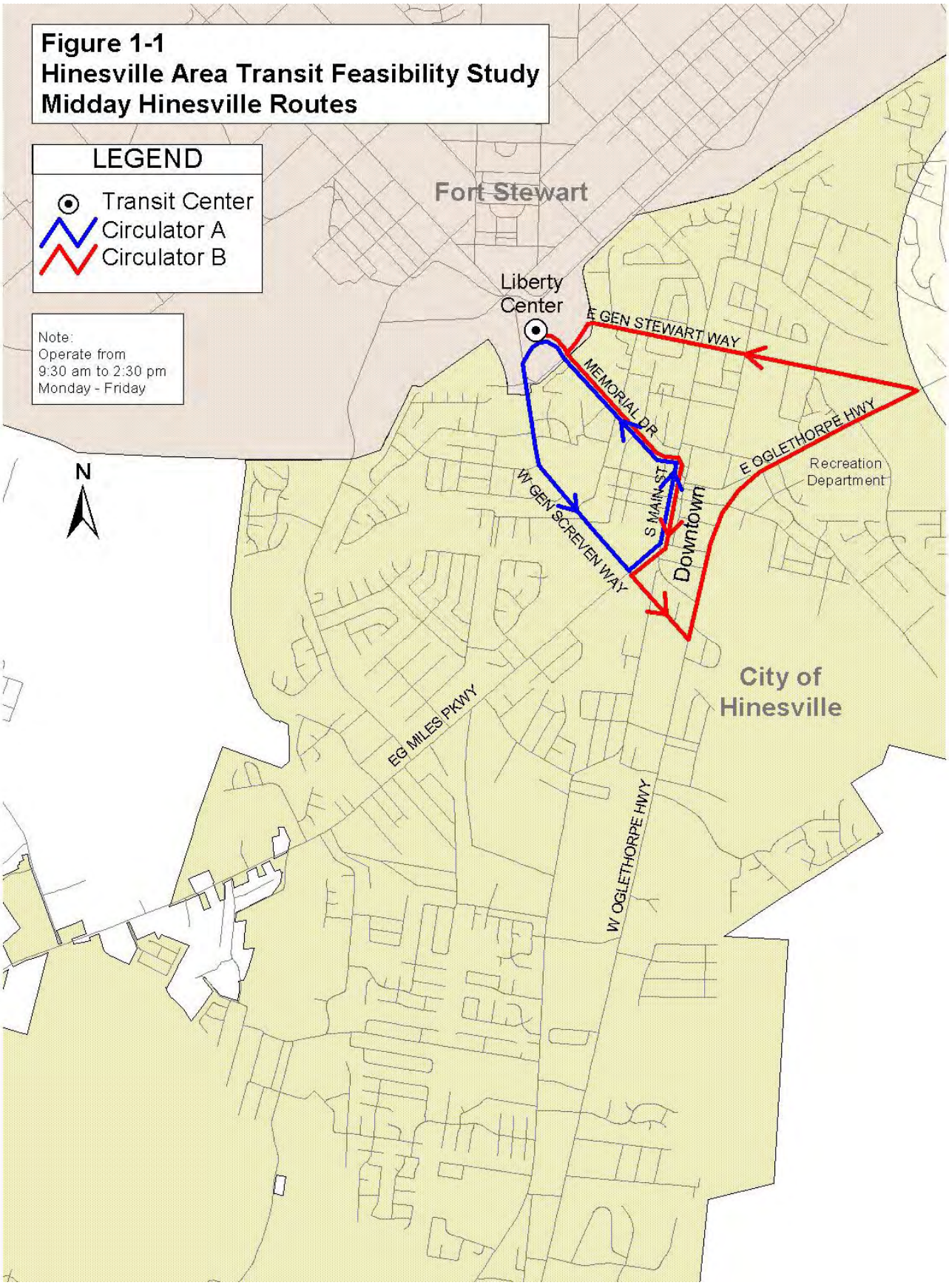
Figure 1-1
Hinesville Area Transit Feasibility Study
Midday Hinesville Routes
LEGEND
Transit Center
Circulator A
Circulator B
Note:
Operate from
9:30 am to 2:30 pm
Monday - Friday
N
Fort Stewart
Liberty
Center
E GEN STEWART WAY
MEMORIAL DR
E OGLETHORPE HWY
Recreation
Department
W GEN SCREVEN WAY
S MAIN ST
Downtown
City of
Hinesville
EG MILES PKWY
W OGLETHORPE HWY

To encourage use of the transit system by off-post military and civilian Fort Stewart personnel, these hours of operation coincide with peak home to work travel times on and off post through the Main Gate, including military personnel arriving as early as 5:00 a.m. for physical training. These routes are projected to attract an average of 11 to 13 passenger trips per vehicle hour. Figure 1-2 shows the proposed alignments of the peak period routes.

- The **South Main** route would provide service from the densely populated residential areas along South Main Street to downtown Hinesville and Liberty Center/Fort Stewart. This route would be paired with Circulator A, making the same loop as the midday circulator in the Hinesville core area. On the southern end of the route, it would serve the residential area roughly bounded by South Main Street, Glenn Bryant Road, Pineland Avenue, and Eunice Road. According to data provided by Hinesville Area MPO, this area has population densities up to 15 persons per acre, among the highest in the urbanized area. It includes several apartment and condominium developments, as well as single-family subdivisions. Continuing north on South Main Street, the route serves several mobile home parks, apartments, and the Herbert Heights subdivision, as well as serving the South Main entrance to the Liberty Regional Medical Center before continuing via the Circulator A routing. The route would operate with one vehicle every 40 minutes. One-way travel time on the route between the residential loop and the Liberty Center transit center would be 20 minutes, including layover time.

- The **Sandy Run/North Main** route would be one of two routes paired with Circulator B. It would provide service from the residential areas east of Oglethorpe Highway, including the Regency Park Apartments on Sandy Run Drive, condominiums, and single-family subdivisions along Forest and Fraser streets. This terminal loop would also provide service to several recreational facilities, including the Recreation Department, Liberty Independent Troop Park, the Senior Citizens Center, YMCA, and James Brown Park. From there, the route would mirror the northern part of Circulator B, continuing along Oglethorpe Highway to General Stewart Way. At Bradwell Street, it would deviate north to serve the residential subdivisions along Bradwell, Winchester, Olmstead, and North Main, and returning to General Stewart Way to serve the Stewart Way, Treetop, and Northridge apartments, an area with densities approaching 10 persons per acre. The route would terminate at the transit center at Liberty Center, and would operate with one vehicle every 40 minutes. One-way travel time on the route between the residential loop and the transit center would be 20 minutes, including layover time.

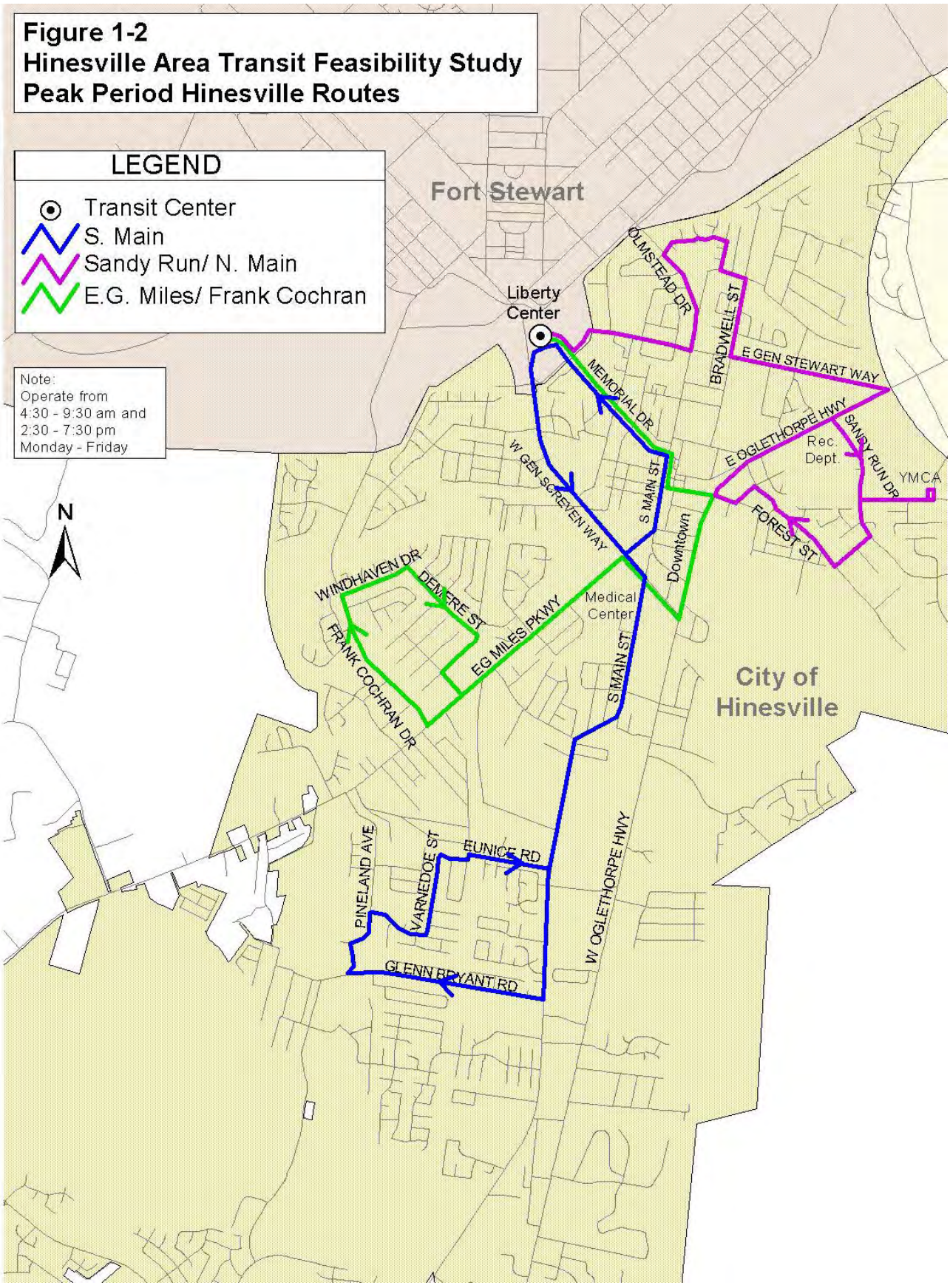
Figure 1-2
Hinesville Area Transit Feasibility Study
Peak Period Hinesville Routes
LEGEND
Transit Center
S. Main
Sandy Run/ N. Main
E.G. Miles/ Frank Cochran
Note:
Operate from
4:30 - 9:30 am and
2:30 - 7:30 pm
Monday - Friday
N
Fort Stewart
Liberty Center
OLMSTEAD DR
BRADWELL ST
E GEN STEWART WAY
MEMORIAL DR
E OGLETHORPE HWY
SANDY RUN DR
Rec. Dept.
YMCA
FOREST ST
W GEN SCREVEN WAY
S MAIN ST
Downtown
Medical Center
WINDHAVEN DR
DEMERE ST
EG MILES PKWY
FRANK COCHRAN DR
City of Hinesville
PINELAND AVE
VARNEDOE ST
EUNICE RD
GLENN BRYANT RD
W OGLETHORPE HWY

- The **E.G. Miles/Frank Cochran** route would also be paired with Circulator B, covering the remainder of the circulator route through downtown Hinesville. On the southern end of the route, it would serve the residential area roughly bounded by E.G. Miles Parkway, Frank Cochran Drive, Windhaven Drive, and DeMere Street. It includes apartment complexes on Frank Cochran Drive, as well as single-family subdivisions (e.g., Sherwood Forest, Garden Acres). Continuing north on E.G. Miles Parkway, it serves the commercial uses at the Frank Cochran intersection, adjacent residential areas along the roadway, and the E.G. Miles entrance to the Liberty Regional Medical Center. From the E.G. Miles/General Screven intersection, the route roughly mirrors the southern half of Circulator B, continuing on General Screven Way, Oglethorpe Highway, to Main Street downtown via MLK Jr. Drive, and to Liberty Center/Fort Stewart via Memorial Drive. The route would operate with one vehicle every 40 minutes. One-way travel time on the route between the residential loop and the Liberty Center transit center would be 20 minutes, including layover time.

Operating Characteristics

As described above, Circulator A would be paired with the South Main route. One peak vehicle would be required, and used in the midday period for Circulator A and for the peak periods for the South Main route. Circulator B would be paired with the Sandy Run/North Main route and the E.G. Miles/Frank Cochran route. Two peak vehicles would be required for Circulator B. During the peak periods, one would be used on the Sandy Run/North Main route and the other on the E.G. Miles/Frank Cochran route. The operating characteristics are summarized in Table 1-6.

1.2.2.2 Hinesville/Liberty County Connector Routes

Description of Routes

Two routes would provide connections between downtown Hinesville and key locations in the east end of Liberty County and the southern portion of Hinesville. Weekday service would be provided on each route every 40 minutes during peak periods and every 80 minutes during off-peak periods, as detailed in the route descriptions below. These routes are projected to attract an average of 10 to 12 passenger trips per vehicle hour, with the Savannah Tech/Oglethorpe Highway route performing at the higher side of the range. Figure 1-3 shows the proposed alignments of the connector routes.

TABLE 1-6
Hinesville Route Operating Characteristics

Midday Service				Peak Period Service				Total	
Routes	**Frequency**	**Peak Vehicles**	**Annual Vehicle Hours**	**Routes**	**Frequency**	**Peak Vehicles**	**Annual Vehicle Hours**	**Peak Vehicles**	**Annual Vehicle Hours**
Circulator A	20 mins.	1	1,300	S. Main	40 mins.	N/A	2,600	1	3,900
Circulator B	20 mins.	2	2,600	Sandy Run/N. Main & EG Miles/F. Cochran	40 mins.	N/A	5,200	2	7,800

- The **Savannah Tech/Oglethorpe Highway** route would provide service from the transit center at Liberty Center (and the center itself) to the recently opened Savannah Technical College (Savannah Tech) campus on Airport Road at Technology Drive, via General Screven Way, Oglethorpe Highway, and Airport Road. The route would end at a small transit center near the main building, providing a connection point for Long County Transit vehicles. In the core Hinesville area, it would follow the routing of Circulator A. In addition to providing a connection between Liberty Center and Savannah Tech, this route would also serve Hinesville's key commercial corridors of General Screven Way and Oglethorpe Highway. It would serve the Wal-Mart Supercenter and Lowe's on Oglethorpe Highway, as well as several mobile home parks, apartment complexes, and lower income single-family subdivisions in southern Hinesville, Allenhurst, and Walthourville. The route would also support the planned redevelopment of the Liberty County Airport.

  Bus stops along the route would be placed at key locations, but generally spaced further apart than in the core Hinesville area, consistent with the lower density character of Oglethorpe Highway, allowing for faster speeds and travel times along the route. The route would operate on weekdays between 7:30 a.m. and 10:30 p.m., with two vehicles every 40 minutes during peak periods (7:30 to 9:30 a.m. and 3:30 to 6:30 p.m.) and with one vehicle every 80 minutes during off-peak periods. These service hours would cover the majority of class times at Savannah Tech, as well as most retail and service industry hours of operation. One-way travel time on the route between the Liberty Center transit center and Savannah Tech would be 35 minutes, including layover time.

- The **Midway** route provides an important connection between Midway and Hinesville, serving the needs of both east end and Hinesville residents who need to travel between the two. Midway Industrial Park, including many of the county's largest employers (e.g., The Gift Wrap Company, Zodiac Pools, Elan Technologies, Mainship Corporation, and Hugo Boss), is a key destination for transit service. Many of the employees are low income or temporary residents with no personal means of transportation.

  The Midway route would be operated as a limited stop route, providing frequent stops in Midway at low travel speeds, but stopping only at key locations between Midway and Hinesville. In Midway, the route would operate via Industrial Boulevard to serve the industrial park, Martin Road serving Midway's densest residential neighborhood, US 17 (Coastal Highway), and US 84. Service could be provided to the Midway Health Care Center on Coastal Highway, as warranted.

  West of Midway, the route would make limited stops (e.g., Lewis Fraiser Road, Holmestown Road, the mobile home park at SR 196, and Brewton Parker College and/or Liberty County High School in Flemington). Once in the city limits of Hinesville, no stops would be made until reaching the transit center at Liberty Center, via General Stewart Way.

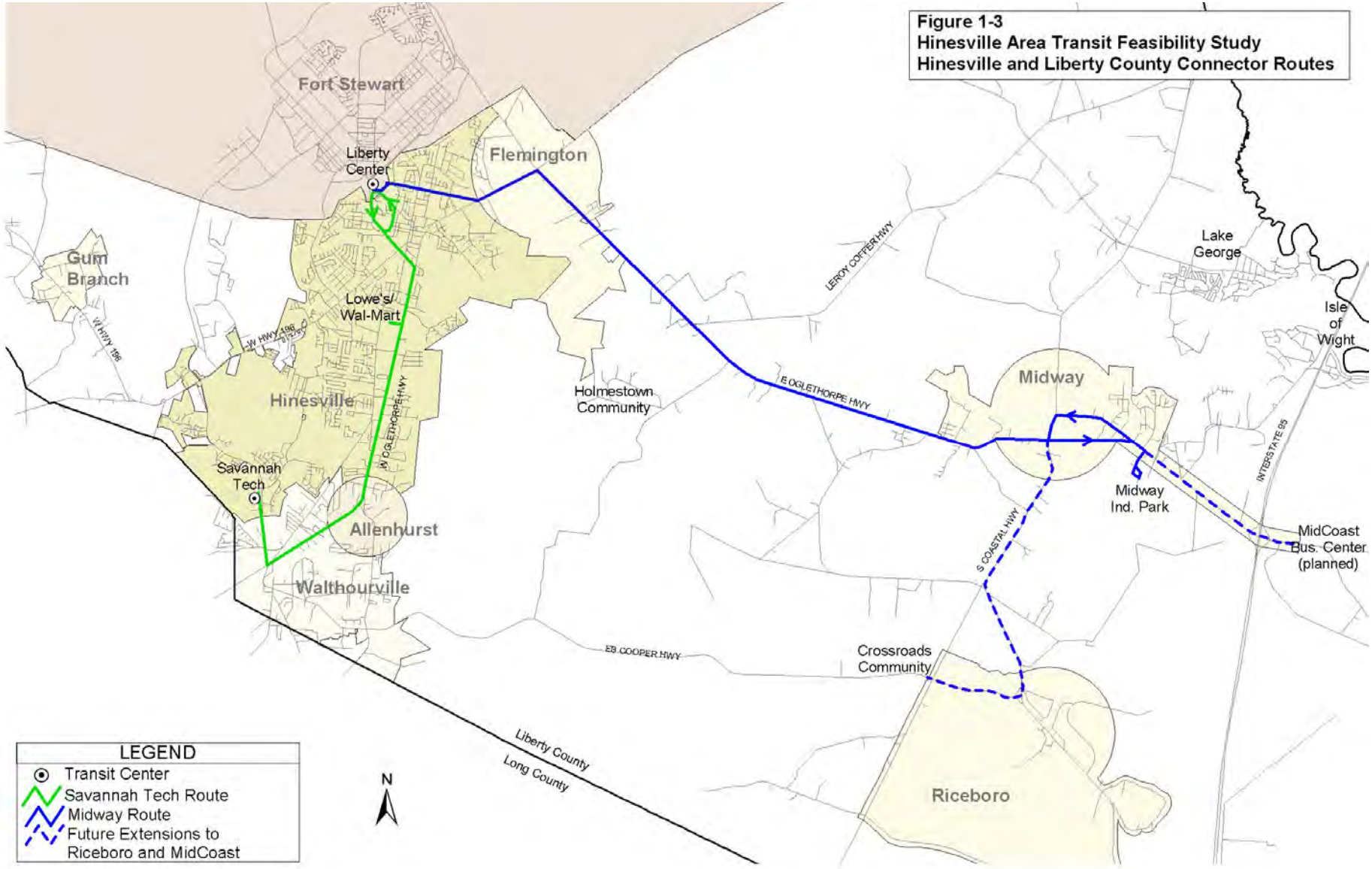
Figure 1-3
Hinesville Area Transit Feasibility Study
Hinesville and Liberty County Connector Routes
Fort Stewart
Liberty Center
Flemington
Gum Branch
Lowe's/ Wal-Mart
Hinesville
Savannah Tech
Allenhurst
Walthourville
Holmestown Community
LEROY COFFER HWY
E OGLETHORPE HWY
W OGLETHORPE HWY
W HWY 196
Lake George
Isle of Wight
Midway
Midway Ind. Park
INTERSTATE 95
MidCoast Bus. Center (planned)
S COASTAL HWY
EB COOPER HWY
Crossroads Community
Riceboro
Liberty County
Long County
LEGEND
Transit Center
Savannah Tech Route
Midway Route
Future Extensions to Riceboro and MidCoast
N

The route is proposed to operate on weekdays between 6:30 a.m. and 5:30 p.m., with two vehicles every 40 minutes during peak periods (6:30 to 8:30 a.m. and 2:30 to 5:30 p.m.) and with one vehicle every 80 minutes during off-peak periods. One-way travel time on the route between the Liberty Center transit center and Midway would be 36 minutes, including layover time.

It should be noted that, due to shift changes at Midway Industrial Park, service to Midway would need to be operated over an extended span of service (i.e., 6:00 a.m. to 1:00 a.m.) to fully meet the travel needs of its employees, as many operate 24-hours a day. However, the proposed 11-hour span of service would cover all but the late night shift change (e.g., 11:00 p.m.). The span of service would also serve most traditional work hour employees (i.e., 8:00 a.m. to 5:00 p.m.), such as east end residents who work at Fort Stewart or in downtown Hinesville.

To supplement the fixed-route service after 5:30 p.m., more cost-effective options, such as contracting with local taxi companies to provide rides at a discounted fare, could be explored. Such an arrangement is becoming more and more common among smaller transit agencies across the country.

Future route extensions could be made to serve two areas: south to Riceboro, including the Crossroads Community, and the planned Mid-Coast Business Center just east of I-95. During peak periods, these two areas could be served every 80 minutes by alternating trips.

Another alternative for this route was examined following the public meetings in early December 2004. To provide service to Riceboro as well as connect the route to Walthourville, the route could be modified to operate as a large loop, via US 17 from Midway to Riceboro, SR 119 to Walthourville, Oglethorpe Highway and General Screven to the transit center at Liberty Center, and completing the loop to Midway as initially defined. If this alternative were pursued, service would need to be provided in both directions (clockwise and counterclockwise), to serve the directional travel needs of passengers. With the same span of service as the initial routing, peak service could operate every 45 minutes in each direction with four vehicles and every 90 minutes with two vehicles during the midday. Annual vehicle hours would be approximately 9,200 for bi-directional service on the loop. Thus, this alternative would require twice as many vehicles operating more than twice the annual vehicle hours of the initial routing.

Operating Characteristics

Two vehicles in the peak periods and one in the off-peak periods would be required for each of the Hinesville/Liberty County connector routes. The operating characteristics are summarized in Table 1-7.

TABLE 1-7
Hinesville/Liberty County Connector Route Operating Characteristics

Routes	Frequency		Peak Vehicles	Annual Vehicle Hours
	Peak	Base		
Savannah Tech/ Oglethorpe Hwy.	40 mins.	80 mins.	2	5,100
Midway	40 mins.	80 mins.	2	4,100

1.2.2.3 Fort Stewart Circulator Routes

Description of Routes

As discussed above, Hinesville/Liberty County routes and internal Fort Stewart routes would cover two distinct service areas (on-post and off-post). However, the services would be interconnected and well coordinated, with timed transfers between the two. For the on-post service, two internal circulators routes are proposed that would serve the existing major residential and employment areas, and provide access to the Hinesville/Liberty County routes via the transit center at or near Liberty Center. Future expansions of the on-post service would be required to serve new housing and employment areas once they are completed and occupied.

The two circulator routes would serve west and east sides of cantonment area, each ending at bus stops just inside the Main Gate. Passengers wishing to transfer to a Hinesville/Liberty County route would pass through the gate to the transit center. To facilitate on-post movement from one side of the cantonment area to the other, the two routes would be interlined at the Main Gate stops. This means that circulator vehicles arrive at the Main Gate stop as one route, and continue to the other side as the other route, allowing passengers to travel from east to west without transferring.

Weekday service would be provided every 40 minutes during the same span of service as the peak and midday Hinesville routes, from 4:30 a.m. to 7:30 p.m. (Option 1). As warranted by demand, frequencies could be improved to 20 minutes during the midday period (from 9:30 a.m. to 2:30 p.m.), consistent with the Hinesville midday routes (Option 2).

The circulator routes would serve several transit markets, including on-post trips of all types (work, shop, etc.) by military personnel and dependents, off-post personnel transferring from a Hinesville peak period route to complete their trips to work or physical training, personnel leaving the post during their lunch hour, and military dependents leaving the post to travel to work, shop, etc.

Figure 1-4 shows the proposed alignments of the Fort Stewart circulator routes. The routes would provide access to the existing family housing areas, main activity center area (Post Headquarters, PX, Commissary, etc.), motor pools and company offices along William Wilson and MacFarland avenues, and destinations along Harmon Avenue (e.g., Winn Army Community Hospital, National Guard facilities, and parade grounds).

Operating Characteristics

For Option 1, two vehicles would be required for each route all day (peak periods and midday). For Option 2, two vehicles per route would be required in the peak periods and four would be required in the midday period. The operating characteristics are summarized in Table 1-8.

TABLE 1-8
Fort Stewart Circulator Route Operating Characteristics

Routes	Frequency		Peak Vehicles	Annual Vehicle Hours
	Peak	Midday		
Option 1: East Circulator West Circulator	40 mins.	40 mins.	2	7,600
Option 2: East Circulator West Circulator	40 mins.	20 mins.	4	10,200

1.2.3 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 systems must be in full compliance with ADA requirements; no phase-in period is permitted for new systems.

1.2.3.1 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.

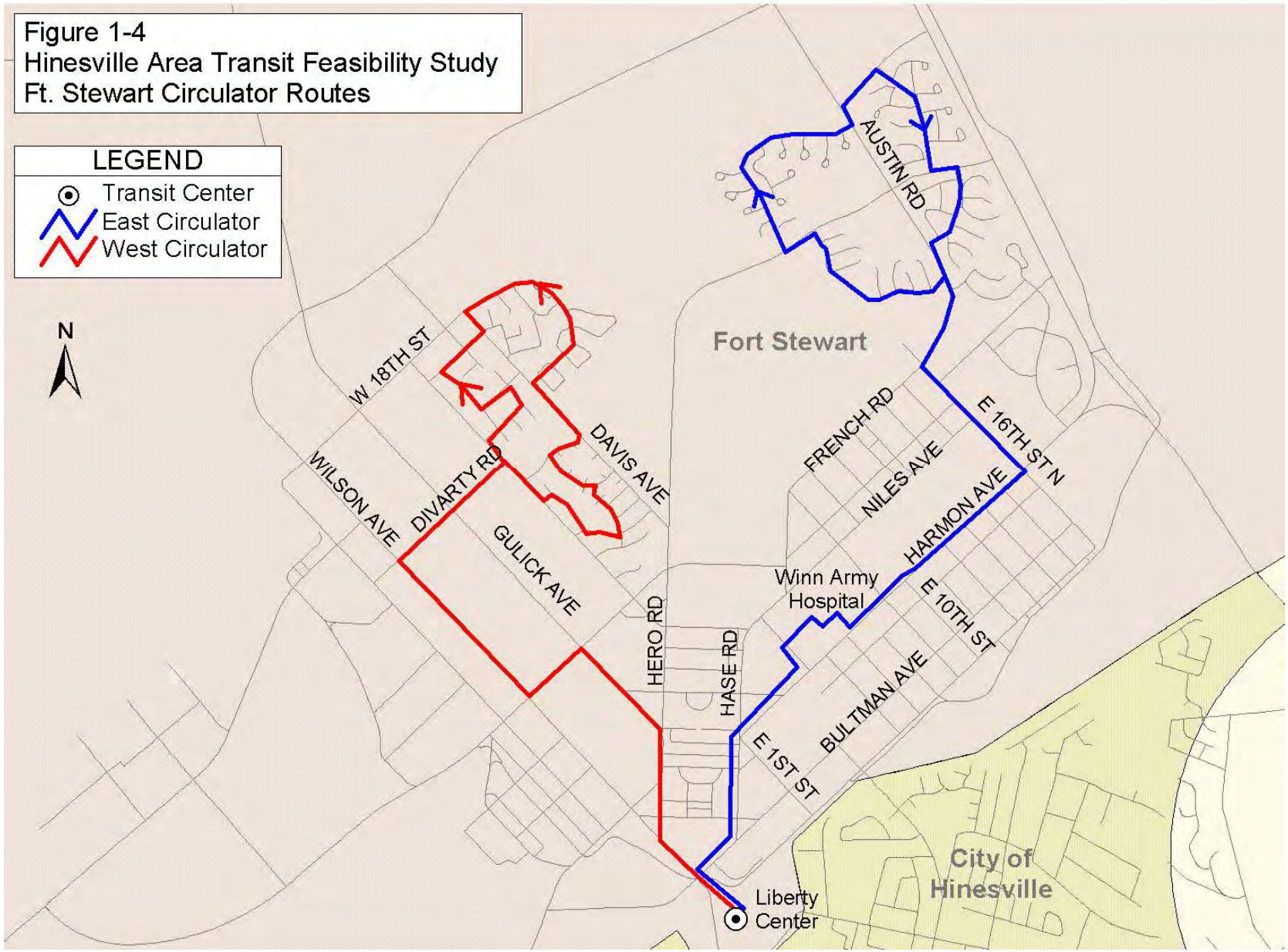
Figure 1-4
Hinesville Area Transit Feasibility Study
Ft. Stewart Circulator Routes
LEGEND
Transit Center
East Circulator
West Circulator
N
Fort Stewart
AUSTIN RD
W 18TH ST
DAVIS AVE
WILSON AVE
DIVARTY RD
GULICK AVE
FRENCH RD
E 16TH ST N
NILES AVE
HARMON AVE
Winn Army Hospital
E 10TH ST
HERO RD
HASE RD
BULTMAN AVE
E 1ST ST
City of Hinesville
Liberty Center

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 ¾ 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. In simple terms, this means that the vehicles must have wheelchair positions and lifts or ramps.

1.2.3.2 Service Options

By federal law, any transit system providing local fixed-route service is required to provide complementary paratransit service for disabled citizens. 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 3/4 mile buffer area 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 the and out of the buffer area.*

If <u>no</u> 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 *<u>not</u>* 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.

1.2.3.3 Description of Paratransit Options

As described above, any transit system providing local fixed-route service is required, at a minimum, to provide complementary paratransit service for eligible persons within ¾ 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. Accessible paratransit service would be provided within ¾ 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 any of the local fixed routes chosen for implementation. It is assumed that only this minimum level of service would be provided for routes wholly within the Hinesville urbanized area, including the Hinesville peak and midday routes and the Savannah Tech/Oglethorpe Highway route. The complementary paratransit service is projected to attract an average of 2 passenger trips per vehicle hour. Complementary paratransit would also be required for the Fort Stewart circulator routes, although given the demographics of the installation (e.g., military personnel and their dependents), the demand for paratransit service may be significantly lower than in other areas.

However, in the rural area of Liberty County, two options for meeting the complementary paratransit service requirements are proposed. If the Midway route is chosen for implementation, the minimum level of service defined above would be provided. That is, complementary paratransit service would be provided within ¾ of a mile, during the same operating hours as the local service (i.e., weekdays between 6:30 a.m. and 5:30 p.m.). An important implication of this option is that portions of the rural area outside the ¾ of a mile buffer would not be directly served by transit, including Riceboro and other east end communities, as well as Gum Branch west of Hinesville.

The second proposed option is to provide demand response for both the general public and the disabled covering the entire rural area, in lieu of the Midway local route. This option is described in the Rural Demand Response Service section below.

1.2.4 Rural Demand Response Service

As discussed above, in lieu of the Midway local fixed route described earlier, rural demand response service to the general public covering the entire rural area could be provided as an alternative. As proposed, rural demand response service would be available for any trip with at least one trip end in the rural area. That is, service beginning and ending in the rural area, or service between the rural area and the Hinesville urbanized area, would be available. Thus, service would be available to all residents in the rural area, including those living in Gum Branch, Midway, Riceboro, the Crossroads Community, Lake George, Isle of Wight, etc.

As discussed in a previous section, passengers would be picked up and dropped off either at the closest curb location along the road or at the door. Service would most likely be operated as advanced reservation service, with passengers required to call ahead and reserve a ride for a particular date and time in the future, for every trip they make. Some level of subscription service may be possible, particularly if some regularity to ridership patterns emerges. These trips are scheduled on a subscription or "standing order" basis.

Two potential spans of service would be weekdays between 8:00 a.m. and 4:00 p.m. (8 hours) or between 7:30 a.m. and 5:30 p.m. (10 hours). These are common spans of service provided by peer demand response systems in Georgia and the rest of the U.S. The rural demand response service is projected to attract an average of 4 to 5 passenger trips per vehicle hour.

As noted in the description of the Midway local route, however, these spans of service would be limited in their ability to meet the full mobility needs of rural area residents, particularly those working in the manufacturing industry (industrial parks) or in the service industry (restaurants, retail stores, hotels, etc.). The 10-hour span of service, however, would be sufficient to serve most traditional work hour employees (i.e., 8:00 a.m. to 5:00 p.m.). To supplement the fixed-route service after 5:30 p.m., more cost-effective options, such as contracting with local taxi companies to provide rides at a discounted fare, could be explored.

1.3 Transit Service Scenarios

From the potential local fixed routes, complementary paratransit, and rural demand response options, a set of eight most promising scenarios comprised of combinations of service was developed. These service option scenarios, described below, were intended to encompass a broad range of possible service levels (from low to high) and a corresponding range of funding commitments for review by the Steering Committee and the public.

The eight transit service scenarios were presented on December 7, 2004 at a Hinesville Area Metropolitan Planning Organization (HAMPO) joint committee meeting, attended by members of the Policy, Technical, and Citizens Advisory committees. A number of the committee members are also project Steering Committee members. The scenarios were also presented at two public meetings held December 7, 2004 at Hinesville City Hall and December 8, 2004 at Midway City Hall. Appendix A contains summaries of the two public meetings.

The number of required peak vehicles and the estimated annual operating costs are discussed for each scenario. The initial eight service scenarios and the number of peak vehicles required for each are summarized in a matrix format in Table 1-9, following the descriptions.

Table 1-10 presents the estimated annual operating costs for the eight scenarios. Annual operating costs for the three types of service (local bus, complementary paratransit, and rural demand response service) were estimated based on unit costs per revenue vehicle-hour derived from peer transit systems discussed in Section 1.1, additional peer systems in Georgia, and national transit research on rural demand response systems, and inflated to FY 2004 dollars. The three unit costs per revenue vehicle-hour are as follows: $36 per hour for local fixed-route bus service (including Fort Stewart on-post circulators), $38 per hour for complementary paratransit service, and $29 per hour for rural demand response service. These unit costs assume that the transit services would be operated by a private sector provider(s) under contract to the implementing public agencies (City of Hinesville, Liberty County, and/or Fort Stewart).

Table 1-11 presents the estimated revenue vehicle costs for the eight scenarios. A 20% maintenance spare ratio has been assumed (e.g., two additional spare vehicles will be needed for every 10 peak vehicles required), consistent with transit industry standards. For the Hinesville midday circulators and peak routes, rubber-tired trolleys were assumed, at a unit cost in FY 2004 dollars of $203,700. This unit cost was derived from the 2000 Transit Vehicle Data Book published by the American Public Transportation Association (APTA). The APTA source provides actual bid costs for recent U.S. transit agency vehicle orders from a robust sample of manufacturers and various vehicle specifications. The bid costs were inflated to FY 2004 dollars

and rounded up to the nearest hundred dollars. For all other transit services, diesel engine shuttle buses with lifts are assumed. These can be procured through the Georgia Department of Administrative Services' statewide vehicle procurement contract. The price for a diesel shuttle bus with communications equipments was inflated to FY 2004 dollars and rounded up to the nearest hundred, for a unit cost of $56,100.

Facility costs are not included in this report, as facility needs will be determined once a start-up system has been defined. These could include transit centers, bus stop signage and shelters, and an operations and maintenance (O&M) facility.

Scenario	**Description**
1A	Scenario 1A would include the Hinesville midday and peak period routes, and associated paratransit service only. It would allow the introduction of transit service to the areas of Hinesville where it is most feasible, providing service connecting the densely populated residential areas and core area destinations (government services downtown, the surrounding commercial areas, and recreational opportunities, etc.), provide service connecting to Fort Stewart, and support redevelopment plans for the core area of Hinesville. On-post service would continue to be provided by Fort Stewart using leased vans, with a connection provided to the Main Gate area for transfers to/from the Hinesville routes. This option would require three local route vehicles and one complementary paratransit vehicle for the Hinesville routes in maximum (peak) service, at an estimated annual operating cost of about $566,600.
1B	This scenario would include Hinesville local routes in Scenario 1A and add the Fort Stewart on-post circulator service at the Option 1 level (40 minute frequencies all day). Marketing efforts would include encouraging the use of the coordinated systems by military personnel (particularly those residing off-post) and their dependents. The Fort Stewart on-post service would add two circulator vehicles and one complementary paratransit vehicle at an estimated annual operating cost of $419,000. In total, this scenario would require seven peak vehicles, and the estimated annual operating cost would be about $985,600.
1C	Scenario 1C would include the same service as Scenario 1B, except that the Fort Stewart on-post service frequencies would be improved in the midday to 20 minutes. Frequencies of the Hinesville and Fort Stewart routes would therefore be consistent in both the midday and peak periods, providing quick transfers between the two systems and encouraging midday use of transit by military personnel. The improved Fort Stewart frequencies would add two circulator vehicles during the midday. In total, this scenario would require nine peak vehicles, and the estimated annual operating cost would be about $1,079,200.

Scenario	Description
2A	Scenario 2A would begin to address transit needs in the rural area of the county by adding limited demand response outside the urbanized area to Scenario 1C. Demand response service wholly within the rural area would be provided door to door or curb to curb. Demand response service between the rural area and the urbanized area service would be provided either with or without a transfer to Hinesville or Fort Stewart routes, depending on the origin and destination. An eight-hour span of rural demand response service would be provided with four peak vehicles, at an estimated annual cost of $169,700. In total, this scenario would require 13 peak vehicles, and the estimated annual operating cost would be about $1,248,900.
2B	Compared with Scenario 2A, this scenario expands the rural demand response span of service to 10 hours. No additional peak vehicles would be required, but the total estimated annual operating cost would increase to about $1,275,000.
2C	Scenario 2C provides the same service as Scenario 2B, but adds the final urbanized area route (Savannah Tech/Oglethorpe Highway). This route and its complementary paratransit service would add three peak vehicles at an incremental annual cost of approximately $328,900. In total, this scenario would require 16 peak vehicles, and the estimated annual operating cost would be about $1,603,900.
3A	Scenario 3A offers an alternative to Scenario 2A for addressing rural transit needs by implementing the Midway route, rather than providing rural demand response service. This route and its complementary paratransit service would require three peak vehicles at an annual cost of approximately $254,200. In total, this scenario would require 12 peak vehicles, and the estimated annual operating cost would be about $1,333,400.
3B	Scenario 3B provides the same service as Scenario 3A, but adds the Savannah Tech/Oglethorpe Highway route and its complementary paratransit service. In total, this scenario would require 15 peak vehicles, and the estimated annual operating cost would be about $1,587,600.

TABLE 1-9
Summary of Transit Service Scenarios

Service Scenario	Hinesville/Liberty County Service							Fort Stewart On-Post Service				
	Local Bus Service		ADA Paratransit Service		Demand Response Service		Total Peak Vehicles	Circulator Service		ADA Paratransit Service		Total Peak Vehicles
	Routes	Peak Vehicles	Area	Peak Vehicles	Area	Peak Vehicles		Routes	Peak Vehicles	Area	Peak Vehicles	
1A	2 Circulators + 3 Peak Routes	3	3/4 mile	1	None	None	4	None	None	None	None	None
1B	2 Circulators + 3 Peak Routes	3	3/4 mile	1	None	None	4	Option 1: East Circulator West Circulator	2	3/4 mile	1	3
1C	2 Circulators + 3 Peak Routes	3	3/4 mile	1	None	None	4	Option 2: East Circulator West Circulator	4	3/4 mile	1	5
2A	2 Circulators + 3 Peak Routes	3	3/4 mile	1	Rural Area (8 hours)	4	8	Option 2: East Circulator West Circulator	4	3/4 mile	1	5
2B	2 Circulators + 3 Peak Routes	3	3/4 mile	1	Rural Area (10 hours)	4	8	Option 2: East Circulator West Circulator	4	3/4 mile	1	5
2C	2 Circulators + 3 Peak Routes + Sav. Tech.	5	3/4 mile	2	Rural Area (10 hours)	4	11	Option 2: East Circulator West Circulator	4	3/4 mile	1	5
3A	2 Circulators + 3 Peak Routes + Midway	5	3/4 mile	2	None	None	7	Option 2: East Circulator West Circulator	4	3/4 mile	1	5
3B	2 Circulators + 3 Peak Routes + Sav. Tech. + Midway	7	3/4 mile	3	None	None	10	Option 2: East Circulator West Circulator	4	3/4 mile	1	5

TABLE 1-10
Estimated Annual Operating Costs of Transit Service Scenarios

Service Scenario	Hinesville/Liberty County Service				Fort Stewart On-Post Service			Grand Total
	Local Bus Service	ADA Paratransit Service	Demand Response Service	Total	Circulator Service	ADA Paratransit Service	Total	
1A	$421,200	$145,400	None	$566,600	None	None	None	$566,600
1B	$421,200	$145,400	None	$566,600	$273,600	$145,400	$419,000	$985,600
1C	$421,200	$145,400	None	$566,600	$367,200	$145,400	$512,600	$1,079,200
2A	$421,200	$145,400	$169,700	$736,300	$367,200	$145,400	$512,600	$1,248,900
2B	$421,200	$145,400	$195,800	$762,400	$367,200	$145,400	$512,600	$1,275,000
2C	$604,800	$290,700	$195,800	$1,091,300	$367,200	$145,400	$512,600	$1,603,900
3A	$568,800	$252,000	None	$820,800	$367,200	$145,400	$512,600	$1,333,400
3B	$716,400	$358,600	None	$1,075,000	$367,200	$145,400	$512,600	$1,587,600

Notes:

1. Costs are in FY 2004 dollars.
2. Estimated unit costs of revenue service are: $36 per hour for local bus and on-post circulator service, $38 per hour for ADA paratransit service and $29 per hour for demand response service.

TABLE 1-11
Estimated Revenue Vehicle Costs of Transit Service Scenarios

Service Scenario	Hinesville/Liberty County Service				Fort Stewart On-Post Service			Grand Total
	Local Bus Service	ADA Paratransit Service	Demand Response Service	Total	Circulator Service	ADA Paratransit Service	Total	
1A	$814,800	$112,200	None	$927,000	None	None	None	$927,000
1B	$814,800	$112,200	None	$927,000	$168,300	$56,100	$224,400	$1,151,400
1C	$814,800	$112,200	None	$927,000	$280,500	$56,100	$336,600	$1,263,600
2A	$814,800	$112,200	$280,700	$1,207,700	$280,500	$56,100	$336,600	$1,544,300
2B	$814,800	$112,200	$280,700	$1,207,700	$280,700	$56,100	$336,800	$1,544,500
2C	$927,000	$168,300	$280,700	$1,376,000	$280,700	$56,100	$336,800	$1,712,800
3A	$927,000	$168,300	None	$1,095,300	$280,700	$56,100	$336,800	$1,432,100
3B	$1,095,300	$224,400	None	$1,319,700	$280,700	$56,100	$336,800	$1,656,500

Notes:

1. Costs are in FY 2004 dollars.
2. Vehicle costs estimated at $203,700 per vehicle for rubber-tired trolleys and $56,100 for diesel shuttle buses with lifts.

Appendix A

Summary of Public Meetings

December 7, 2004 Public Meeting—Hinesville City Hall

- The meeting was attended by one Hinesville resident (see sign-in sheet). The Mayor of Hinesville and Brandon Westcott with the Hinesville Area Metropolitan Planning Organization (HAMPO) were also present.

- Mr. Westcott thanked the attendee for coming and introduced Milbrey Heard, Consultant Team member.

- Ms. Heard gave a Power Point presentation on the preliminary findings and recommendations of the Transit Feasibility Study. Public opinion survey results and a summary of the transit service scenarios were also provided as a handout.

- The public transit services presented were generally positively received, particularly as an alternative to limited and expensive taxi service for those without a means of personal transportation.

December 8, 2004 Public Meeting—Midway City Hall

- There were ten people present, including the Mayor of Midway and two members of the Midway City Council (see sign-in sheet). A reporter for the *Coastal Courier* was also present. (There was a violent thunderstorm just prior to the start of the meeting, and it was speculated that because of this reason many people were discouraged from attending. The Council Members were expecting a large turn-out.)

- The meeting was opened by Sonny Timmerman, Director of the Hinesville Area Metropolitan Planning Organization (HAMPO). After thanking Midway officials for hosting the meeting, he introduced the Consultant Team members present (Milbrey Heard, Morris Dillard, and Karimah Dillard).

- Ms. Heard gave a Power Point presentation on the preliminary findings and recommendations of the Transit Feasibility Study. Public opinion survey results and a summary of the transit service scenarios were also in the handouts distributed to attendees.

- A lively discussion followed the presentation with most of the questions and comments focused on the proposed fixed route between Hinesville and Midway that would serve the City of Midway and the Midway Industrial Park. One suggestion was made to loop this route so it would also serve Riceboro and Walthourville. Some felt that this would add too much time to the trip between Midway and Hinesville and thus discourage ridership. There was not a consensus. Sonny Timmerman suggested that the operating characteristics and cost of looping the route be estimated.

- There were questions about whether the bus between Hinesville and Midway would circulate through the subdivisions along US 84 or stay on US 84, thus requiring riders to get to the bus on their own. It was explained that the route would provide service with frequent stops to key employment and residential areas (such as Martin Road) in Midway, but would only make limited stops on US 84 between Midway and Hinesville, providing shorter travel times between the two areas than traditional local route service. Attendees generally agreed that there should be a few stops along US 84, and recognized the negative impact of additional stops on travel times.

- There was some concern expressed about passenger safety because of the amount and speed of the traffic along US 84. It was noted that pedestrian improvements such as sidewalks, crosswalks, refuge islands, etc. as well as bus loading zones separated from traffic lanes can be incorporated into the roadway design to improve passenger safety.

- The concept of the transit center (at Liberty Center) as the system's central hub for transfers between routes and services was well received, particularly if the arrival and departure times of the routes are well-timed.

- There were questions about the operating hours of the proposed downtown Hinesville circulators. In addition, adequate service to the Liberty Regional Medical Center was emphasized, as well as to Wal-Mart for mid-morning shopping trips by seniors (avoiding midday and evening traffic congestion).

- There were questions about the estimated fare. The response was generally favorable.

- The response to demand response service in the rural areas of the county as an alternative to fixed route Hinesville to Midway service was less than enthusiastic. Some expressed the desire to have both. Three areas around Midway with significant numbers of residents that would benefit from transit were noted (Lake Gale, Isle of Wright, and Lake George). It was noted that rural demand response would be most appropriate service option for these areas.

HINESVILLE AREA TRANSIT FEASIBILITY STUDY

TECHNICAL MEMORANDUM #3

Prepared for:
HINESVILLE AREA METROPOLITAN PLANNING ORGANIZATION

Prepared by:
MANUEL PADRON & ASSOCIATES, INC.

In Association with:
DW & ASSOCIATES

December 30, 2004

Table of Contents

1.0 Public Involvement Process Summary

The Hinesville Area Transit Feasibility Study public involvement process commenced in May 2004. The purpose of this process was to gather input and feedback from key stakeholders and area residents regarding the potential for transit in Hinesville and Liberty County. The process sought to understand their perspectives on community goals and objectives, transit needs, potential markets, service options, and acceptable alternatives. Public feedback was solicited at key milestones during the study and served as input into the alternatives development process.

The public involvement program was designed to reach a wide range of participants including elected officials, agency representatives, employers, educators, the general public, and citizens typically underrepresented in the transportation planning process, such as low-income, disabled, and elderly residents. Efforts were made to reach this diversity of groups through a variety of involvement techniques. The main methods used to solicit input and facilitate project discussions throughout the process included Steering Committee meetings and public meetings. The program also utilized the Hinesville Area Metropolitan Planning Organization (HAMPO) Policy, Technical, and Citizens Advisory committees for additional feedback and guidance.

1.1 Steering Committee

A project Steering Committee comprised of 14 representatives from local governments and key stakeholder groups was formed to serve as a sounding board and advisory body throughout the study process. Representatives invited to serve on the committee were selected by local government administrators from Hinesville, Liberty County, and Long County, and are listed in Table 1-1. The Steering Committee was assembled at key milestones during the course of the study in order to provide feedback and reactions to elements of the study on behalf of their constituencies.

Table 1-1
Steering Committee Members

Paul Andreshak	Deputy to the Garrison Commander, Ft. Stewart
Allen Brown	Chair, Liberty County Development Authority
Joey Brown	County Administrator, Liberty County
Leonard Dawson	Executive Director, Coastal Georgia Area Community Action Authority
Richard Douglas	County Administrator, Long County
Billy Edwards	City Manager, City of Hinesville
Henry Frasier	Mayor, City of Walthourville
Thomas Hines	Mayor, City of Allenhurst
Sandra Martin	Mayor, City of Flemington
John McIver	Commission Chair, Liberty County
Thomas J. Ratcliffe, Jr.	Mayor, City of Hinesville
Sonny Timmerman	Director, Hinesville Area Metropolitan Planning Organization
Ron Tolley	CEO, Liberty County Development Authority
Randal Wilson	Commission Chair, Long County

1.1.1 Steering Committee Meeting #1

On May 18, 2004, the Consultant Team conducted the first meeting with the Steering Committee in order to introduce the project and its purpose, as well as gather the committee's input. A presentation was given to review the study approach and products and educate the committee on potential service options and other service issues. The committee was then asked to provide their perspectives on the potential role of transit in the Hinesville and Liberty County area. Participants were asked to respond to a series of questions regarding the desired role of transit, how transit could be an asset to the community, and specific opportunities and issues related to transit. Feedback from the committee contributed to the definition of the desired role for transit and corresponding community goals and objectives.

1.1.2 Steering Committee Meeting #2

A follow-up meeting with the Steering Committee conducted by the Consultant Team on August 19, 2004 highlighted the project work completed to date. The presentation included the results of the stakeholder interviews, socioeconomic/market data and transit propensity analysis, the peer review, and the assessment of funding sources. The committee provided feedback regarding the types of transit service that make the most sense for the area, and the amount of service that should be provided. Responses from the committee helped shape the transit options proposed for the area.

1.1.3 HAMPO Joint Committee Briefing

On December 7, 2004 the Consultant Team gave a presentation on the Transit Feasibility Study at a joint meeting of the HAMPO Policy, Technical, and Citizens Advisory committees. The meeting was well attended, with 25 committee members present. As attending committee members included eight of the project Steering Committee members, the briefing also served as the third and final Steering Committee meeting.

Because of the committees' roles in transportation decision making for the Hinesville Area MPO, the project team felt it was important to inform the group of the work to date on the study, hear and understand the preliminary study findings and recommendations, and have any questions answered. The presentation provided an overview of the study, the results of the public opinion survey, and the analysis of areas with high transit potential. Most of the presentation then focused on the components and specific routes/services included in the transit service scenarios, and concluded with a brief description of vehicle options and potential funding sources. Committee members raised questions regarding the viability of operating the off-post and on-post services as one system, state funding for transit operations, and Section 5307 and 5311 funding flexibility.

1.2 Public Meetings

Two rounds of public meetings were held during the course of the study, on August 18-19, 2004 and December 7-8, 2004. For each round of meetings, meetings were held in downtown Hinesville and in Midway. Meetings were publicized by HAMPO through articles and notices in

the *Coastal Courier*, meeting notices sent to HAMPO committee members, and Fort Stewart, City of Hinesville, and Liberty County staff. Consultant Team members also contacted stakeholders prior to the first round of meetings. Meeting details are provided in Table 1-2.

Table 1-2
Public Meeting Details

Date	Time	Meeting Location	Attendees
August 18, 2004	5:15 - 6:45 PM	Liberty County Courthouse Annex	9
August 19, 2004	5:15 - 6:45 PM	Midway City Hall	16
December 7, 2004	6:30 - 8:00 PM	Hinesville City Hall	3
December 8, 2004	6:30 - 8:00 PM	Midway City Hall	10
		Total	**39**

1.2.1 Round One of Public Meetings

The Consultant Team conducted the first round of public meetings on August 18-19, 2004. The purpose of the meetings was to introduce the study, and present the results of the stakeholder interviews, areas with high potential for transit based on socioeconomic and employment data, and potential service options. The meetings were conducted in an open house format that included a presentation and question and answer (Q&A) session. Following the Q&A session, participants were encouraged to ask one-on-one questions of staff. A reporter from the *Coastal Courier* was in attendance in Midway and wrote an article reporting on the meeting later that week.

Attendees expressed a strong desire for transit in the Hinesville and Liberty County area, particularly to address the needs of the transportation disadvantaged including low-income residents, military dependents, seniors, youth, and college students. They also emphasized the need for services in the rural areas of the county (particularly at the meeting in Midway), as well as Hinesville and Fort Stewart.

1.2.1.1 Public Opinion Survey

At the August 2004 public meetings, participants were asked to complete and submit a public opinion survey providing feedback on transit service in the Hinesville and Liberty County area. Ninety-one public opinion surveys were returned, including several submitted prior to or after the meetings. Full results of the public opinion survey are presented in Technical Memorandum #1, Appendix C.

In summary, 86% of respondents thought transit in the area is a very important need. More than 80% said they would use it, not just to go to work, but also to shop, go to medical appointments, or to school or job training. Over 55% said they would use transit five or more times a week, if it were available.

Respondents indicated that transit would most benefit residents without cars, such as low-income workers, military dependents, the elderly and disabled, and students. It would provide an affordable way to connect residents to jobs both in Hinesville and the east end,

to area colleges and job training, to shopping and recreational activities, and to medical and government services. Transit could also help reduce traffic congestion in Hinesville by providing an attractive option to driving alone and support the redevelopment of downtown Hinesville, as well as other economic development efforts in the County. The results of the survey served as important input into the development of recommended transit service scenarios for the study.

1.2.2 Round Two of Public Meetings

On December 7-8, 2004, the Consultant Team conducted the second round of public meetings. The purpose of the meetings was to present the results of the public opinion survey and to present the preliminary study findings and recommendations, including potential transit service scenarios. The meetings were conducted in an open house format, including a presentation and Q&A session. Display boards were arranged around the room to encourage one-on-one questions during the open house portion of the meetings. A reporter from the *Coastal Courier* was in attendance in Midway to report on the meeting.

Attendees at the Midway meeting were very responsive to the proposed transit services, asking many good questions and making a number of suggestions regarding the transit service scenarios. Most of their questions and comments centered on the proposed connector route between Midway and Hinesville, and the rural demand response service proposed as an alternative to the connector route. The needs of senior citizens for good service to Wal-Mart and the hospital in Hinesville were also expressed. Service to Wal-Mart and the lack of affordable transportation options were emphasized at the public meeting in Hinesville.

2.0 Implementation Plan

It is appropriate that the final chapter of the Hinesville Area Transit Feasibility Study deal with implementation, since this is the final step in any plan. Throughout the process of developing transit service options and scenarios, the Steering Committee focused on practical, readily implementable strategies for transit services within the Hinesville and Liberty County area.

The implementation phase will be critical to the overall success of the project. To that end, the Hinesville Area Metropolitan Planning Organization (HAMPO) has included a line item for transit implementation planning in its Unified Planning Work Program (UPWP). This planning effort will allow the area to take the next step towards providing public transit services that will help meet the mobility needs of area residents, workers, and employers.

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.

2.1 Financial Capacity Assessment of Transit Service Scenarios

An assessment of locally preferred transit service options relative to funding estimates will be a critical step in any future implementation planning efforts. This section presents a preliminary assessment of the transit service scenarios compared with funding levels. The funding assessment included in Technical Memorandum #1 provides estimates of federal transit funding potentially available to Hinesville and Liberty County.

The Federal Transit Administration (FTA) administers the Section 5307 Urbanized Area Formula Program, which would be the primary federal funding program applicable to the proposed off-post transit services in the urbanized area, as well as the Section 5311 Non-Urbanized Area Formula Program, which would provide funding for transit services in the rural area of Liberty County. Section 5311 funds are assumed for the rural demand response service and/or the Midway connector route. For Fort Stewart on-post services, Department of Defense (DOD) funding covering 100 percent of the costs is assumed, as further explained below.

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 Hinesville area and Liberty County, Table 2-1 shows a transit budget example over the course of three years, with two years worth of funding used for capital expenses (e.g., vehicle purchases) and operations beginning in year 3.

TABLE 2-1
Transit Budget Example Based on Estimated Federal Funds

Years 1 & 2 Total (Capital Budget)			Year 3 (1st Year of Operating Budget)		
Total Matched Amount	**$**	**1,350,000**	**Total Matched Amount**	**$**	**1,400,000**
A) Matched Sect. 5307	$	1,250,000	A) Matched Sect. 5307	$	1,250,000
B) Matched Sect. 5311	$	100,000	B) Matched Sect. 5311	$	150,000
A) Sect. 5307 (Urbanized)			**A) Sect. 5307 (Urbanized)**		
- Federal (80%)	$	1,000,000	- Farebox (20%)	$	250,000
- State (10%)	$	125,000	- Federal (40%)	$	500,000
- Local (10%)	$	125,000	- Local (40%)	$	500,000
B) Sect. 5311 (Rural)			**B) Sect. 5311 (Rural)**		
- Federal (80%)	$	80,000	- Farebox (20%)	$	30,000
- State (10%)	$	10,000	- Federal (40%)	$	60,000
- Local (10%)	$	10,000	- Local (40%)	$	60,000
Total local funding commitment for first two years (10% of total)	**$**	**135,000**	Total local funding commitment for third year (40% of total)	**$**	**560,000**

Comparing these funding estimates to the transit service scenarios defined in Technical Memorandum #2, some preliminary conclusions can be drawn regarding system size that could realistically be operated in Hinesville and Liberty County.

- Section 5307 funds (matched) could reasonably support the operation of the urbanized area service in all of the service scenarios. Reiterating the discussion in the funding assessment in Technical Memorandum #1, Section 5307 federal funds are apportioned to urbanized areas by formula, with annual funding levels varying only by the level of the national appropriation.
- Two years worth of Section 5307 funds (matched) would be sufficient to purchase the vehicles required (including spares) to operate the Hinesville midday and peak routes (assuming rubber-tired trolleys) and the complementary paratransit service (using shuttle buses).
- The amount of Section 5311 funds required to support the operation of the rural demand response service in Scenario 2A is somewhat higher, but reasonably consistent with average project funding levels estimated in the funding assessment in Technical Memorandum #1. Reiterating the discussion in that report, the actual Section 5311 project funding levels approved for funding by the Georgia Department of Transportation (Georgia DOT) will depend on the needs and merits of the specific program. Approval of funding at the higher levels required to support the rural services in other scenarios may be more difficult to obtain.
- For Section 5311 capital costs, estimated average project funding levels for Section 5311 would not be adequate for the full vehicle costs required for the rural area service scenarios. However, if Georgia DOT supports the project (based on its needs and merits)

and the capital cost estimates, they would likely favorably consider the additional capital costs associated with the initial start-up of service.

- Department of Defense (DOD) monies are assumed available to fund the on-post Fort Stewart service (operating and capital), as FTA funds can only be used for services open to the public. In addition, FTA funds can only be used for capital expenses over which the FTA grantee maintains satisfactory continuing control. This has important implications regarding transit facilities (operations and maintenance facilities, transit centers, park and ride lots, etc.), and could restrict the use of FTA funds on-post for facilities.
- With proper structuring of funding and accurate reporting, it should be possible to operate on and off-post services as one system, if desired, using DOD funds for on-post services and matched FTA funds for off-post services.
- Local government financial capacity to consistently meet the local match requirements (capital and annual operating expenses) will be a driving factor in determining the level of service to be operated. It is important to note that DOD funds cannot be used to match FTA funds, for operations or for capital.

2.2 Management Structure

There are a number of potential management options available to local officials in the Hinesville and Liberty County area to implement and operate some level of public transit services as envisioned in Technical Memorandum #2. 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.

2.2.1 Potential Management Options

Many transit ownership and management options are available. Four management options were defined, representing different types of involvement by the City of Hinesville, Liberty County, Fort Stewart, 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 this 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 and/or Fort Stewart 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 limit 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.

A broad outline of potential management options for providing the public transit services is presented below. All of these options assume a primary role either by the City of Hinesville or Liberty County as the operator of the off-post services. An alternative not discussed below would be to establish a transit authority responsible for the system, with local funding provided from the city and/or county.

Fort Stewart would also have a key role for the on-post services, which must, at a minimum, be well coordinated with the off-post services (if operated independently). Option D offers the opportunity for Fort Stewart to partner with the local governments, and for the off-post and on-post services to be operated as one system. To a lesser degree, the other municipalities in the county would also likely have some level of involvement, particularly in the areas of planning and/or financing.

Option A – Local Government Owned & Operated. The City of Hinesville or Liberty 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. This is the manner in which Long County currently operates its Section 5311 and Georgia Department of Human Resources (DHR) Coordinated Transportation services.

Option B -- Contract Service. This option would involve the City of Hinesville or Liberty 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 direct 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, the Coastal Georgia Area Community Action Authority (CGACAA) or any one of the numerous companies providing contract transit services could propose and be selected to provide the services.

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 & 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 Hinesville, Liberty County, Fort Stewart, other municipalities, and/or Coastal Georgia Regional Development Center). The agreement would establish partner roles and responsibilities for administration, planning, financing, operating, and maintaining the various transit services. As an example, in Dothan, Alabama, the county-wide Wiregrass Transit Authority is operated by the Southeast Alabama Regional Planning and Development Commission, with local funding split between the county and the city.

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.

2.2.2 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 Hinesville, Liberty County, Fort Stewart, other municipalities, and the Georgia Department of Motor Vehicle Safety. 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 Hinesville City Council and/or Liberty County Board of Commissioners must approve the transit service and budgets. For the Fort Stewart on-post services and any other negotiated contributions to the system, DOD budget approval would be required. 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.

The Georgia Department of Motor Vehicle Safety (DMVS) has jurisdictional responsibility unless exempted by the Georgia Legislature in a transportation authority's enabling legislation. The DMVS regulates the service and fares of all motor common carriers. Every carrier under the jurisdiction of the DMVS must be granted a Certificate of Public Convenience and Necessity before operating a motor vehicle on public highways.

- ✓ Functional Criteria: The functional criteria for which the public entity operating the system desires to take responsibility are an important concern. With Option A, the City of Hinesville or Liberty 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 this knowledge can be procured from consultants (indeed, this project is an example). 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 vendor 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. To that extent, 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, Option D 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. A multi-agency operating agreement including local governments and Fort Stewart would provide an opportunity to operate all the transit services (on and off-post) as one fully coordinated system with multiple service areas, types, and funding sources. This option provides a means for the City of Hinesville, Liberty County, and Fort Stewart to offer new public services without significantly increasing the number of employees and having to become experts in the delivery and maintenance of local bus and/or demand response transit services.

  The decision as to what responsibilities to contract out would be largely dependent on the level of investment in services and anticipated timeframe for implementation that the public partners decide to pursue.

- ✓ Administration: 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 public entity the highest level of control. Option A would require the most additional staff, but even Option B and Option C would 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 (including Fort Stewart), 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 service 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 upon the service alternative selected, the degree of federal and state assistance, the level of funding participation by Fort Stewart, and 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 three-year time period after the City, County, and other public entities decide to do so and appropriate the required funds. An interagency agreement among the City, County, Fort Stewart, and/or other municipalities with all aspects of service contracted out provides the easiest way to move forward.

2.3 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 off-post transit services is based on the fares of other peer agencies in Georgia and those providing service to military installations, and is as presented in Table 2-2 on the following page. Fare structure for on-post services would be decided by Fort Stewart.

The full adult fare for all fixed-route local service, except the midday Hinesville circulators, 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. A lower fare of $0.75 is recommended for the midday Hinesville circulators, making this service more attractive to riders and taking into account the short distances covered by these routes. No discounted fare for the circulator routes would be offered, as half-fares are only required during peak periods.

TABLE 2-2
Fare Structure Assumptions

Local Service (except midday circulators)	**One-Way Fare**
Base adult cash fare	$1.25
Senior citizens & persons with disabilities	$0.60
Youth 18 years old and under	$0.60
Child under age 5	Free
Transfers	Free
Monthly passes or multi-ride tickets	Price and media to be determined

Midday Circulator Routes	**One-Way Fare**
Cash fare	$0.75

Rural Demand Response Service	**One-Way Fare**
Cash fare	$2.50

ADA Paratransit Service	**One-Way Fare**
Cash fare*	$2.50

* Personal care attendants (PCAs) may ride at no charge. Traveling companions may ride on a space available basis and must pay the applicable adult, senior, or youth fare.

The full fare for ADA paratransit service is assumed to be twice the full fare for local fixed-route service (or $2.50), consistent with what the ADA allows. The $2.50 fare was also assumed for the rural demand response service, 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

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.

2.4 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 service 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, and courteous drivers and customer service representatives.

- ✓ **Access to Service**. Access is treated 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 includes 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 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 fare 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., schedules 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, Fort Stewart and 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 opportunity for potential customers to access timely and accurate information about the services provided is 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 higher-income taxpayers, elected officials, young school children, and the media.

2.5 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 Hinesville and Liberty County area, as well as highlighting some general schedule considerations.

The transit service scenarios presented in Technical Memorandum #2 provide a wide range of service types and levels for consideration by area local governments and Fort Stewart. As outlined in an earlier section, an assessment of local financial capacity, anticipated levels of FTA and State funding, as well as DOD funding for on-post services will be critical as public partners wrestle with several key questions. These include how much transit service should be provided (initially and long-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).

Given the emphasis by the Steering Committee on starting small and growing the system over time, the development of an affordable and realistic phasing strategy is recommended as an early implementation planning task. This strategy would facilitate the phased implementation of transit service over a three to ten year period. 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 #2, performance varies significantly from system to system. Once an initial phasing strategy has been identified, we recommend identifying and visiting two to 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 phasing strategy or simply affirm and build confidence for the start-up.

Prior to making final decisions on moving forward with a phased 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 help 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 governments and Fort Stewart make final decisions on moving forward with a phased 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 was addressed earlier in this chapter. For discussion purposes, the Consultant Team has assumed "Option D – Multi-Agency Operating Agreement," with an interagency agreement between the local governments and Fort Stewart, would be the preferred way to move forward. Off-post and on-post services would be operated as one system and contracted out to a service provider (as described in "Option C – Local Government 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 interagency agreement; 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; requesting and securing DOD funds for on-post services and, perhaps, facilities; 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 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 Hinesville midday and peak period service (a rubber-tired trolley bus has been assumed). Lead time for procurement of ADA compliant shuttle buses for the complementary ADA paratransit service, the Fort Stewart on-post services, connector routes and/or rural demand response service would be much shorter, assuming they are purchased off 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. Development of the transit center at Liberty Center could require from 24 to 36 months for preliminary engineering, property acquisition, design, and construction. This timeframe could be shortened somewhat if property acquisition is not required, as could be the case if the transit center is located at Liberty Center on Fort Stewart property.

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 the drivers' room and lockers). Generally, transit agencies desire to 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.

During the interim years, the service provider can be required to furnish an operations, maintenance, and fueling garage as part of their contract, assuming an existing private maintenance facility is available. Another short-term solution would be to operate and maintain the vehicles out of an existing City of Hinesville, Liberty County, Fort Stewart, or Liberty County Board of Education garage.

We recommend that the schedule not be driven by the construction of proposed major new facilities. For the O&M facility, the local government operator potentially can save time and reduce costs by modifying an existing building, such as a property previously used as an auto dealership or truck service center. Opportunities may also exist to use Fort Stewart vehicle maintenance facilities.

Considering the above discussion, the implementation schedule for the first day of revenue service primarily will be driven by the 24 to 30 month time period required to secure funding, procure, manufacture, and receive delivery of the vehicles. Assuming a decision within the next four to five months by local governments and Fort Stewart to move forward with a phased start-up plan, we believe activities could be undertaken by the public partners to include transit projects in the TIP and STIP, apply for FTA funding through Georgia DOT, and have executed contract(s) with Georgia DOT in place by November 2005.

After the 12 to 18 months required to procure and manufacture vehicles (not on the statewide contract), we estimate that the initial start-up of revenue service could take place in Spring 2007.

In the near-term, the public partners should move expeditiously to begin time-critical steps in the implementation planning process, which will stretch over the next 24 to 30 months, beginning with the procurement of consultant assistance. The major tasks that will be required are interagency agreements, funding, staffing, vehicle specification development, procurements of vehicles and a service provider, administrative procedures, operations planning, and marketing. Typically, the start-up of new transit service requires several months to reach a stable period of operation. During the transitional period, the public partners will monitor sufficiency of the service, customer response, operations and maintenance performance, and vehicle performance and will make adjustments as required.

The list on the following page summarizes major tasks that are required for the initial year rollout of transit service.

Organization and Funding

- ✓Prepare Implementation Work Plan
- ✓Establish Committee for Guiding Service Start-Up
- ✓Develop and Execute Interagency Agreement(s)
- ✓Include Projects in the TIP and STIP
- ✓Continue Processes to Maximize Federal and State Funding
- ✓Apply for and Execute Funding Grants and Contracts

Policy Making and Operations

- ✓Select Transit Options and Develop Phasing Strategy
- ✓Establish Fare Policies
- ✓Coordinate with Other Agencies
- ✓Establish Final Operations Plan
- ✓Hire Local Government Staff for System Administration

Vehicle & Equipment Procurements

- ✓Prepare Vehicle & Related Equipment Specifications
- ✓Select Vehicle Procurement Option
- ✓Develop Procurement Process
- ✓Receive and Evaluate Proposals from Vendors
- ✓Negotiate and Award Contract(s)
- ✓Oversee Manufacture and Inspection of Vehicles
- ✓Receive and Test Vehicles and Equipment

Service Contractor Procurement

- ✓Prepare Service Contract Request for Proposals
- ✓Develop Procurement Process
- ✓Receive and Evaluate Proposals from Vendors
- ✓Negotiate and Award Contract
- ✓Monitor Contractor Start-up Activities

Marketing

- ✓Develop Marketing Concept, Scope of Work, and Schedule
- ✓Prepare Marketing Messages and Materials
- ✓Initiate Public Awareness and Education Campaigns