TRANSIT DEVELOPMENT AND IMPLEMENTATION PLAN FOR THE VALDOSTA URBANIZED AREA

Service Plan

Prepared for the: Southern Georgia Regional Commission PO Box 1223 327 West Savannah Avenue Valodosta, Georgia 31603



Prepared by:



In association with: GRICE & ASSOCIATES

SEPTEMBER 2009

| Table of | of Contents | | |
|---------------------------------|--|----------------|--|
| TABLE | OF CONTENTS | I | |
| LIST O | F TABLES | I | |
| LIST O | F FIGURES | I | |
| 1.0 | INTRODUCTION | 3 | |
| 2.0 | COMMUNITY BENEFITS OF TRANSIT | 3 | |
| 2.2 F 2.3 (2.4 F | Reduced Infrastructure and Congestion Costs Reduced Environmental Costs Community Development Mproved Mobility Market Analysis | 4 4 4 | |
| 3.0 | FIELDWORK OBSERVATIONS | 17 | |
| 4.0 | SERVICE DESIGN STANDARDS | 18 | |
| 5.0 | SERVICE DESIGN OPTIONS | 18 | |
| 5.1 5.2 | Fixed Route Service with Transit Center Located on Pendleton Drive Fixed Route Service with Transit Center Located at DFCS / DOL | | |
| 6.0 | VALDOSTA STATE UNIVERSITY SERVICE | 52 | |
| 7.0 | SUMMARY | 52 | |
| 8.0 | STREET-READY OPERATING PLAN – PENDLETON DRIVE AREA OPTION | 54 | |
| 8.1 8.2 8.3 8.4 8.5 | Passenger Amenities Schedules Recommended Bus Stop Locations Detailed Routing Vehicles | 65 65 66 | |
| 8.5 8.6 | Potential Transit Center Locations Operating Facility | 67 | |
| APPEN | IDIX A – ROUTE SCHEDULES | 71 | |
| APPEN | APPENDIX B – BUS STOPS | | |
| APPEN | IDIX C – "TURN-BY-TURN" | 77 | |

List of Tables

| TABLE 1: SUMMARY OF SERVICE WITH PENDLETON DRIVE TRANSIT CENTER | 36 |
|--|----|
| TABLE 2: SUMMARY OF SERVICE WITH DOWNTOWN TRANSIT CENTER | 50 |
| TABLE 3: SUMMARY OF OPERATING COSTS FOR PENDLETON DRIVE TRANSIT CENTER CONCEPT | 53 |
| TABLE 4: SUMMARY OF OPERATING COSTS FOR DOWNTOWN TRANSIT CENTER CONCEPT | 53 |

List of Figures

| FIGURE 1: 2003 POPULATION DENSITY | 6 |
|--|---|
| FIGURE 2: AGE DISTRIBUTION FOR THE VALDOSTA URBANIZED AREA | |
| Figure 3: 2003 Household Densities | 8 |



| for the Valdosta Urbanized Area: | C | |
|----------------------------------|-----------------------------|----|
| Service Plan | September 2009 | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | ENDLETON EXPRESS | |
| | T CENTER AT PENDLETON DRIVE | |
| | | |
| | | |
| | Route | |
| | ROUTE | |
| | SIT CENTER AT DFCS/DOL | |
| | T CENTER AT DECS/DOL | |
| | JLATION DENSITY | |
| | OYMENT DENSITY | |
| | EHOLD DENSITY | |
| | EHOLD DENSITY | |
| | DR POPULATION | |
| | H (10-14) YEARS OLD | |
| | Income Population | |
| | | |
| | | |
| | | |
| 63 | | |
| | | 65 |
| | S | |
| | | |
| | | |
| | -10NS | |
| | /OUT | |
| | | |



EXECUTIVE SUMMARY

Introduction

This document outlines the proposed transit service options and concepts for the Valdosta Urbanize area transit implementation. This memorandum first presents some observations from demographic analysis, fieldwork, service design guidelines and then presents concept plans for two service designs. The concept plans include route descriptions and maps, number of vehicles, an estimate of ridership, revenue hours, and preliminary estimated annual operating costs.

Community Benefits

Transit can deliver key benefits to the community including:

- · Reducing infrastructure and congestion costs;
- · Reducing environmental costs;
- Support for community development
- Improving mobility and accessibility for all residents.

Market Analysis

The Service Plan identifies a number of key market characteristics affecting future needs for transit in the Valdosta Urbanized area.

- The region has experienced moderate population growth, with a 9% increase over the last five years. This moderate growth is forecast to continue over the next ten years.
- The Valdosta region is relatively low density, The Valdosta population is comparable to the state average. Older seniors a key transit market are the one of fastest growing group.

Service Plan and Concept

Two options of service concepts with five routes each were developed to become the building blocks for the Valdosta Urbanzed Area transit service proposal.

- Downtown Option
- Pendleton Drive Area Option

These two options were presented to the Transit Steering Committee and the general public for input and comments. The Pendleton Drive Area Option was recommended by the Transit Steering Committee based on the input from the public outreach.

The basic elements of the plan are:

- The basic urbanized area-wide system would consist of five routes. This service would primarily be funded by local, state, and federal funds.
- The service would serve key activity generators within the Valdosta Urbanized Area including: South Georgia Medical Center, Valdosta Technical College, Valdosta State University, Valdosta Mall, Wal-Mart, Downtown Valdosta, Senior Center, Moody Air Force Base, and others.

"Street-Ready" Plan – Pendleton Drive Area Service Option

The option that has been recommended by the Steering Committee is the Pendleton Drive Area option.

The basic elements of the Plan include:

- A fixed route system consisting of five routes with a hub/transit center in the Pendleton Drive area.
- Paratransit operations provided in compliance with the ADA
- Operations six days per week with the exception of the Valdosta Technical College and Moody Air Force Base service that would only operate on weekdays



Several factors were taken into account and led to the recommendation of the Pendleton Drive option. This option provided the following strengths compared to the Downtown based Service Plan.

- Service to Smith Northview Hospital, Hudson Dockett Homes and along Oak Street Extension.
- Transit center located near South Georgia Medical Center, one of the largest employers in Valdosta and a place where residents travel to for services.
- Opportunities to interface with current VSU service

Additionally, the Pendleton Drive Area Option meets all of the demographic and socioeconomic indicators that support transit.

- Serves locations with the highest population density to support transit
- Serves locations with the highest percentage of senior population
- Serves locations with the highest percentage of youth between the ages of 10-14
- Serves locations with the highest employment density
- Serves locations with highest percentage of households with no vehicles
- Serves locations with the highest concentration of low income populations

The Steering Committee also made the below recommendations for the delivery of service.

- Service Delivery Governance
 - Recommendation: MPO/RDC Department, with the understanding that the creation of an authority of other entity must be explored within three years, the transit steering committee would be transformed into an advisory committee to the MPO and RDC Boards
- Service Delivery Operations
 - Lead Agency Recommendation: Valdosta-Lowndes Metropolitan Planning Organization
 - Operations Model Recommendation: Turnkey, at least one staff person should be hired to provide oversight of the contracted operations
- Implementation
 - Recommendation: Full Implementation, however phasing could occur if public/private partnership funding is not readily available for start-up

The Street-Ready Operating Plan consists of sufficient detail to allow for actual implementation of the services. To develop these elements, additional fieldwork was conducted to refine the routings as requested by the Steering Committee, establish the running times for the buses, and identify recommended bus stop locations. The components of the Street-Ready Operating Plan are:

- Passenger amenities
 - Shelters, benches, information devices
- Schedules (Weekday and Saturday)
- Bus stop locations
- Detailed routing
- Vehicles
- Operating facility



1.0 Introduction

This document outlines the proposed transit service options and concepts for the Valdosta Urbanize area transit implementation. This memorandum first presents some observations from demographic analysis, fieldwork, service design guidelines and then presents concept plans for two service designs. The concept plans include route descriptions and maps, number of vehicles, an estimate of ridership, revenue hours, and preliminary estimated annual operating costs.

Two options of service concepts with five routes were developed to become the building blocks for the Valdosta Urbanzed Area transit service proposal.

- Downtown Option
- Pendleton Drive Area Option

These two options were presented to the Transit Steering Committee and the general public for input and comments.

Presented is a description of services, detailed routes and schedules, a discussion vehicle type, as well as a description of facilities needed.

The basic elements of the plan are:

- The basic urbanized area-wide system would consist of five routes. This service would primarily be funded by local, state, and federal funds.
- The service would serve key activity generators within the Valdosta Urbanized Area including: South Georgia Medical Center, Valdosta Technical College, Valdosta State University, Valdosta Mall, Wal-Mart, Downtown Valdosta, Senior Centers, Moody Air Force Base, and others.

2.0 COMMUNITY BENEFITS OF TRANSIT

Why should the provision of transit service be supported, given the limited resources faced by all levels of government? As outlined below, transit provides a number of benefits to the communities it serves. It provides mobility to those segments of the population which have no alternative means of transportation, while it provides additional transportation options for other groups. When all costs are considered, transit is a very efficient mode of transportation compared with the automobile, in terms of energy consumed, space required, and the amount of pollution produced. From a fiscal perspective, one of the key overall benefits of increased transit use is the reduction in other public and private costs that results from reduced automobile traffic. While issues such as traffic congestion and air pollution may not yet have reached a critical stage in the Valdosta region, it is still important to plan now. The region is growing and as this growth continues, transit will play an increasing role in the overall transportation system. Some of the key benefits of public transit are discussed below.

2.1 Reduced Infrastructure and Congestion Costs

As the Valdosta region continues to grow, it faces major infrastructure and congestion costs associated with rapidly increasing automobile use. Infrastructure costs include land, construction, and maintenance costs for expanded roadways and parking facilities, as well as traffic control and enforcement costs. Congestion costs relate to lost time and productivity which results from longer travel times due to delays. If some of the growth in automobile traffic can be diverted to transit, significant savings could be realized. The greatest impact would result from traffic diverted at peak travel times, since capacity requirements for the transportation system are based on these times of peak demand. As the transit system grows over the next ten years, there could be a significant reduction in automobile traffic resulting from people that are being carried on



transit. Carrying these same people in single occupancy vehicles (which take up roughly 20 times as much road space) would result in much greater traffic congestion and would require significant investment in roads, parking facilities, and other infrastructure.'

2.2 Reduced Environmental Costs

An average transit trip requires less than one quarter of the energy use per person than the same trip made in a single occupancy private vehicle. The transit trip also results in a 65% reduction in greenhouse gases produced, and a 20-90% reduction in other pollutants. Transit trips also require less land consumption, as the same number of people can be carried on less road space and there are reduced parking requirements. Indirectly, transit can also encourage more efficient land use patterns that further reduce land consumption, the total amount of travel in a region, and thus, the total amount of energy that is consumed.

2.3 Community Development

As transit plays an increasingly important role in the transportation system, it can be a very effective means of shaping community development. For example, transit could play a key role in encouraging the development of town centers in the Valdosta region. By reducing reliance on the automobile, transit can also help the community to develop in a more pedestrian-friendly manner.

2.4 Improved Mobility

For many people who do not have access to other modes of transportation due to age, disability, or income, transit provides mobility and freedom to travel without relying on others. Increasingly, this includes the growing elderly population for whom driving may pose a safety problem for themselves and for others. For the elderly, students, persons with disabilities, and single parents caring for children, transit often provides the only viable access to health and social services and to work and recreational opportunities. Transit may also allow people wider access to jobs and for employer's broader access to the regional labor force, providing important economic benefits for both groups. Custom transit in particular, provides increased mobility that permits the elderly and persons with disabilities to live independently and still have good access to essential activities (such as employment, health care, education and shopping) as well as discretionary activities (such as social events and recreation). If transit service were not available, the costs of providing alternative services might be very high. Many people would be forced to live in institutions at a far higher public cost than provision of the transit service.

2.5 Market Analysis

Population and employment densities along with other socio-economic characteristics are often used as indicators for the need for public transportation. Market characteristics that typically generate public transportation ridership are:

- The *Transit Capacity and Quality of Service Manual* considers 3 households per square acre to be the minimum acceptable to support fixed route transit service.
- The *Transit Capacity and Quality of Service Manual* states 4 jobs per square acre will contribute to the success of fixed route transit service.
- Population density and Age distribution
- Socio- economic issues such as income and car ownership are key characteristics that key indicators for public transportation need.

Examining population trends is a key factor in determining the future demand for transit. Two key population trends used to assess the demand for transit in the Valdosta Urbanized Area are population density and age distribution.



Population density

Population density has a significant impact on transit usage and performance. Areas with higher density have a significant impact on transit usage and performance. Areas with higher density can better support transit service since there are more residents within walking distance of a given transit route. Medium and higher density neighborhoods also tend to be more pedestrian friendly, and this also encourages more transit use.

Overall, the Valdosta Urbanized area is a low-density community. As a very general guideline, a gross density of 1000 residents per square mile is considered the minimum to support local transit service with a 60- minute service frequency, while 2000 residents per square mile is considered to be sufficient to support 30-minute local transit service.

Generally areas with mixed housing stock, including townhouses and apartments along with single-family homes, have greater densities that can better support transit.

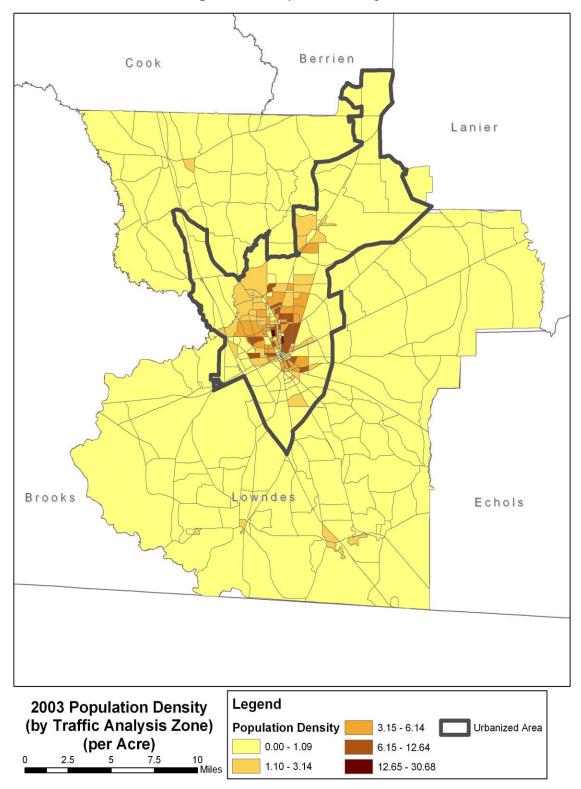
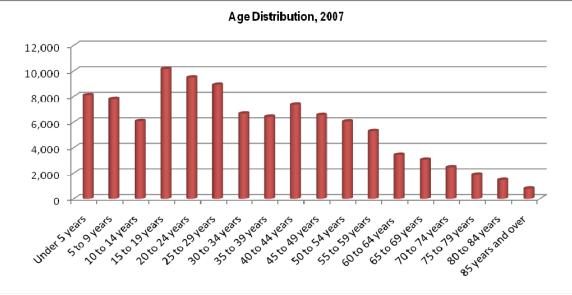


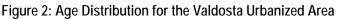
Figure 1: 2003 Population Density

Age Distribution

Different age groups have different transit needs. The propensity to use transit varies significantly by age, therefore, examining the current and future age distribution in the Valdosta Urbanized Area can help project ridership. Figure 2 shows the age distribution for the Valdosta Urbanized Area. Two age groups form key transit markets, while transit use is lower for other groups:

- Students & young adults (aged 15-24) This group has the highest rate of transit use among all
 age groups. This group tends to be very mobile they make a lot of trips but many are either
 too young to drive or they do not own a car. Children between the ages of 10 and 14 who are old
 enough to travel alone, but not yet old enough to drive can also be a good market for transit
 services, particularly if parents are not available to drive them to activities because of work
 obligations. Encouraging transit among this group can help to develop lifelong transit use.
- Seniors Seniors can often be a good market for transit because as the population age, there are more people who are no longer able to drive for various reasons, including for health or physical capability reasons.
- Older seniors (aged 80 & over) This group also has a high rate of transit use. While older seniors don't make as many trips overall as other age groups, they tend to be very dependent on transit. A high proportion of this group has mobility difficulties, so this group has high demand for paratransit and accessible fixed route transit.
- Working age (25-64) and young seniors (65-79) Transit use tends to gradually decline with age from when people are in their mid-twenties until they are in their sixties or seventies. People that are working and raising children are often more reliant on driving. As incomes increase with age, car availability also tends to increase.





Source: US Census, 2007



Household Density

An examination of each of the household density maps shown in Figures 3 and 4, there will be no significant change in the household density in the Valdosta Urbanized Area between 2003 and 2030 projected densities. The areas with higher densities of households are between Forrest Street and Oak Street, with pockets located on the south and west sides of the city.

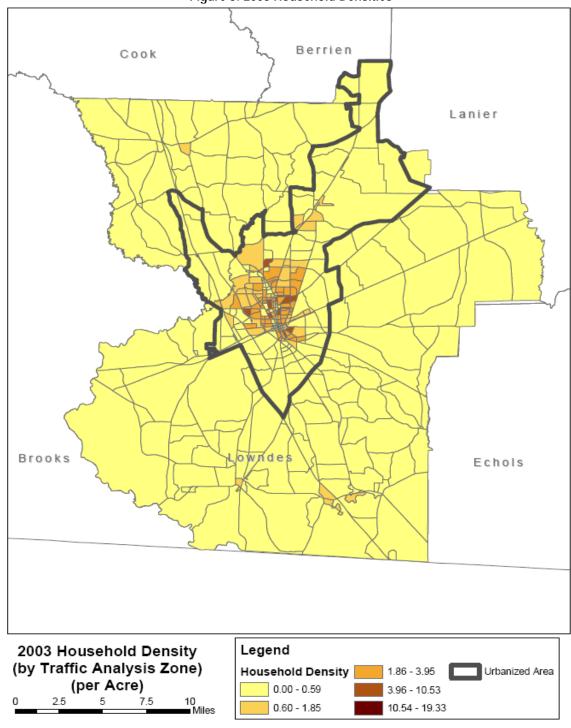
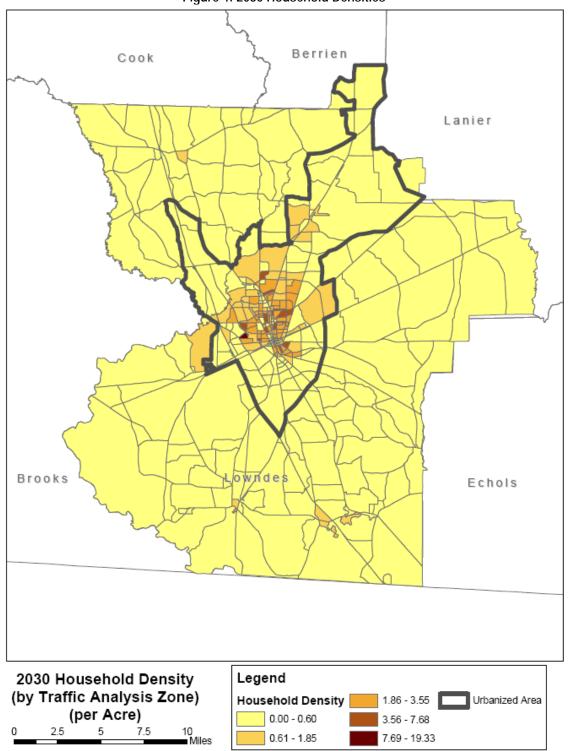


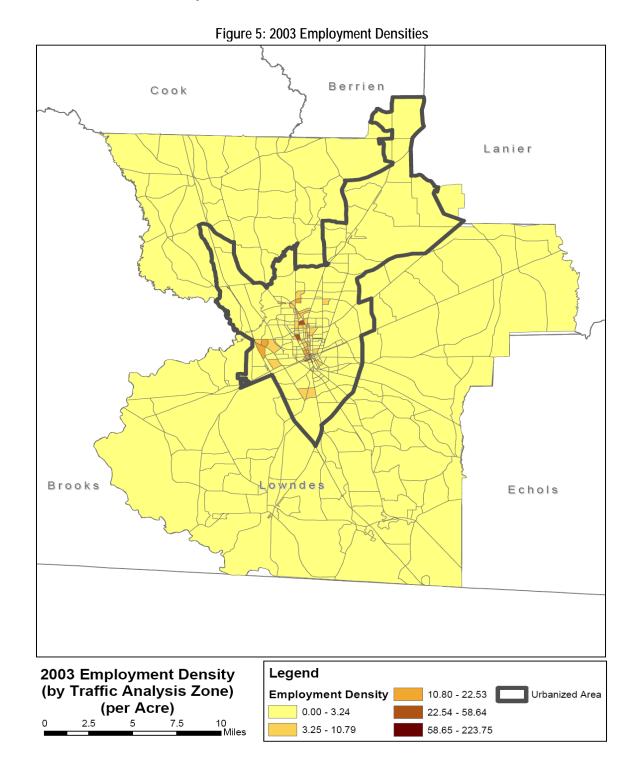
Figure 3: 2003 Household Densities





Employment Density

Similar to household density, employment density for the Valdosta Urbanized Area as illustrated in Figure 5 and 6 will not experience significant change in 2030 compared to 2003. Most of the transit supportive employment density is located between Ashley Street and Patterson Street with pockets located near Valdosta Mall and South Georgia Medical Center.





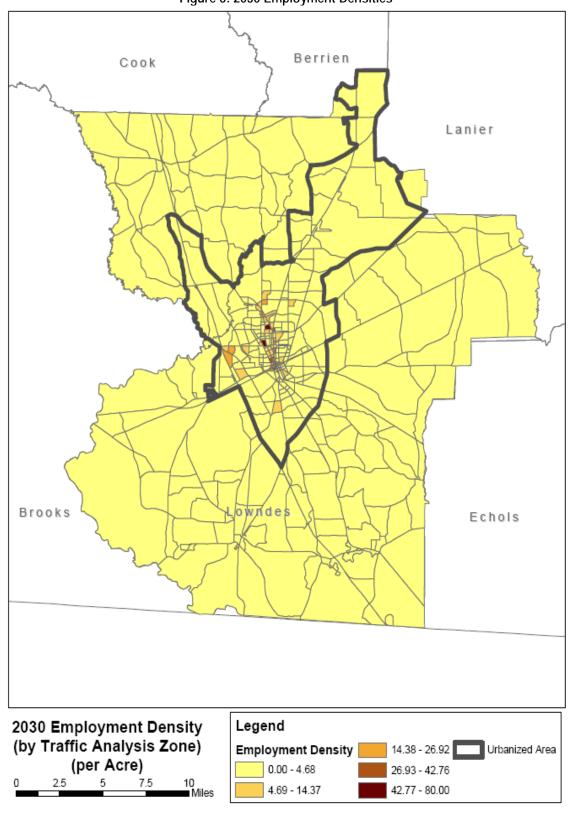


Figure 6: 2030 Employment Densities

There are only a few areas of the Urbanize Area with household and employment densities that can support fixed-route service. Therefore, fixed-route service for the Valdosta Urbanize Area should be targeted to serve and connect these areas for the service to be successful.

Senior Population

As illustrated in Figure 7, the census block groups with the largest percentage of seniors can be found in the northwest portion of the city (Baytree Road on the south and Patterson Street on the east

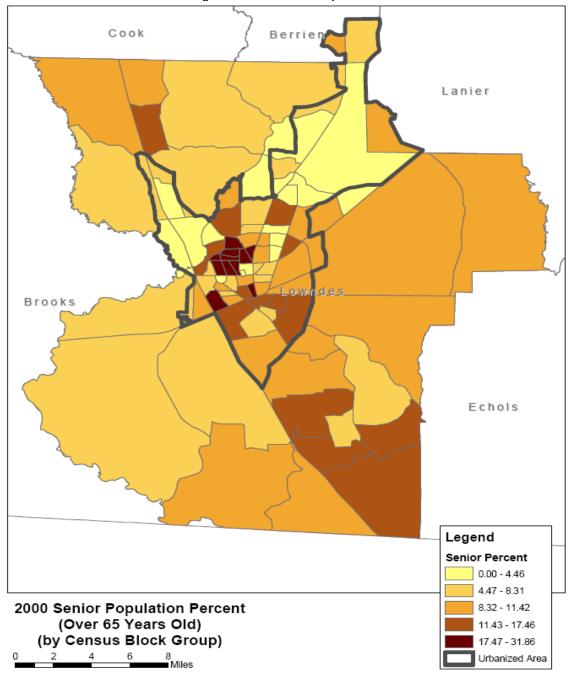


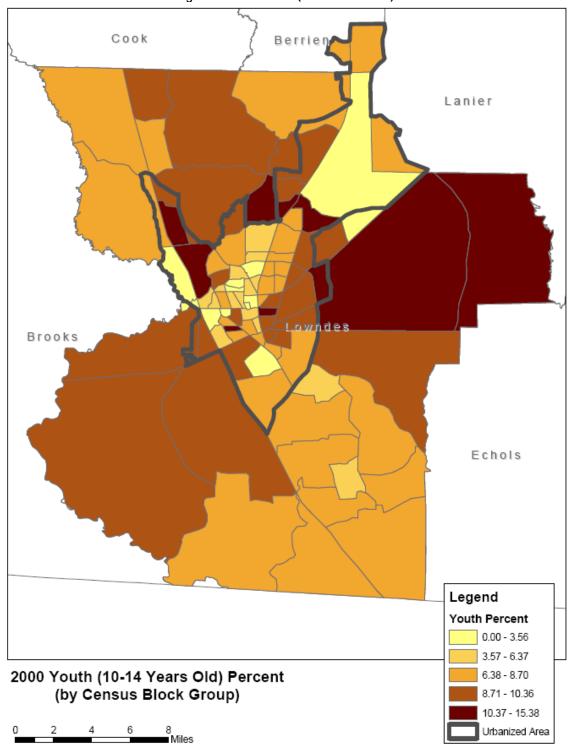
Figure 7: 2000 Senior Population



Youth Population

Tran Systems

The largest percentage of youth is randomly spread out over the census block groups.



1

Figure 8: 2000 Youth (10-14 Years Old)

Low Income Population

Low income populations (annual income less than \$10,000) also tend to be a good indicator of propensity to ride transit since the cost to own and operate a vehicle may exceed the amount available to spend on a vehicle. Within the Valdosta Urbanized Area, the highest concentration of low income populations is found in the City of Valdosta and some pockets on the west and south of the Urbanized Area.

Low income and households with limited access to a vehicle can be found in the census block groups in downtown, on the south side of the city and the Remerton area

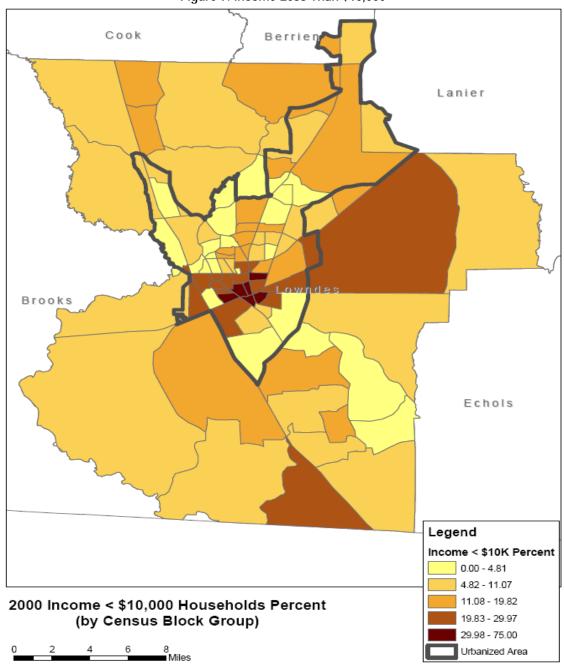


Figure 9: Income Less Than \$10,000



Households with No Vehicles

Households with limited access to a vehicle are also key target markets for transit services. Limited access to a vehicle may mean that either the household does not own a vehicle at all, or that the number of vehicles owned by the household is not sufficient to meet transportation needs.

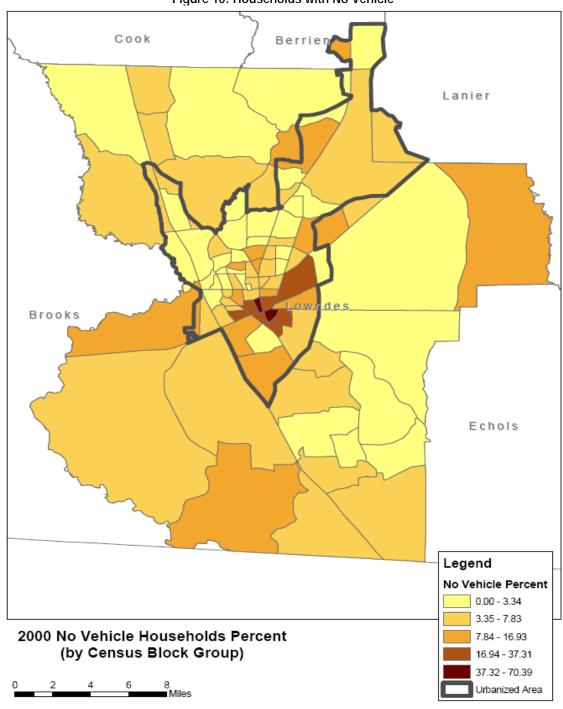


Figure 10: Households with No Vehicle



3.0 Fieldwork Observations

Field work was conducted in mid-April of 2009. During this time the consultant staff met with South Georgia Regional Development Center (SGRDC)¹ staff and toured the City of Valdosta and the surrounding area. Observations included:

- The Valdosta-Lowndes MPO is concerned that the sample routes from the 2006 feasibility study² failed to serve some key portions of the City. These areas include: the area of Valdosta south of Savannah Avenue, Lee Street (especially the Ora Lee West Neighborhood) and Park Ave.
- Valdosta lacks sidewalks. This will make transit less appealing, as it will make it difficult for
 passengers to access the bus service and creates a need for service very close to where
 customers are starting or ending their trips. The lack of sidewalks also means that few of the bus
 stops will be accessible to persons with disabilities. Previously the consultant has been advised
 that the lack of an accessible path to a bus stop is a violation of civil rights. This will create
 additional demand for ADA complementary service as the disabled community will have no option
 but to use this service. The City's Transportation Master Plan does address the lack of sidewalks
 and the City is actively installing sidewalks.
- While there are few sidewalks, footpaths have been worn into the grass along roads, indicating that there is a significant amount of pedestrian activity. People were observed walking along roadways and public transportation may benefit them.
- There are some potential locations for a transit center in downtown Valdosta at the new judicial center, the existing Greyhound Station, or near the DFCS / Lowndes County Department of Health building. Another, maybe more suitable location is on Pendleton between South Georgia Medical Center and Valdosta State University's north campus. This location is between two major ridership generators and is more centrally located. This location would also reflect that most transit trips in other small urban systems are not destined to the central business district. A transit center would be a location for two or more potential bus routes to meet to allow for schedule recovery as well as facilitate transfers.
- The use of larger vehicles may limit the ability to provide service to some areas of Valdosta and enter private property due to canopy overhangs and roadway geometries. Sometimes it is desirable to enter private properties where the customers have mobility constraints (such as a hospital or medical center) or a potentially long, often pedestrian unfriendly walk to street (such as an office complex, retail center, or housing complex). Constrained access was observed at Blanton Commons Apartments and the senior center on Park Avenue.
- VSU has expressed a desire for its transit service to be provided by the same operator of the
 community service so that both services can be better coordinated. The university prefers that
 service provided by the operator meet or exceed the current level of service provided by the
 university. Once the community transit service is implemented, it is likely the university will no
 longer need to serve the mall or Wal-Mart anymore since the community transit service will provide
 an improved level of service to these locations. VSU service is also discussed in Section 6.0.
- Valdosta Technical College is interested in contributing towards the cost of service to its campus. This may be in the form of an express type service.
- There have been requests during the public input process and stakeholder interviews for a park-nride lot to be located in the near-vacant shopping center at Five Points. The market that this parkn-ride lot would serve needs to be identified.
- The City has been targeting retirees to encourage them to move to Valdosta due to its location, quality of life, and low property taxes.

² Valdosta-Lowndes MPO Transit Feasibility Study, Draft Report, URS Corporation, September 2006 (<u>http://www.valdostacity.com/Modules/ShowDocument.aspx?documentid=1424</u>)



¹ The SGRDC is the MPO for the Valdosta-Lowndes area.

• There are proposed developments that could be built in the next 10-15 years that may affect the demand for transit. Housing is being planned and developed along Forrest Road and a new retail complex is being planned on the west side of I-75.

4.0 Service Design Standards

Industry design standards are used when developing concept service plans. Service design standards make sure the amount of proposed service is appropriate for the area. These design standards are based on service measures found in the *Transportation Research Board Transit Capacity and Quality of Service Manual* – 2^{nd} *Edition (2003)*.

- *Frequency of service* is defined as the amount of time spent waiting between buses. The frequency standard establishes a maximum waiting time between buses. The plan assumes the minimum frequency for transit service in Valdosta is 60 minutes. Service available once an hour is considered to be the minimum service frequency that is attractive to transit dependent riders and somewhat attractive to some choice riders. Riders must consult a timetable and arrange their travel around the transit service. Service more frequent than this design standard can be very attractive to both transit dependent and choice riders and will be recommended for service in markets that may be able to support more frequent ridership.
- Span of service standard identifies the times that service is provided on each day of the week. This standard is often adopted as a minimum policy standard for all routes in a system, while individual routes may exceed the minimum based on demand. The minimum weekday span of service for this study is 6:00am-7:00pm. This span of service meets the needs of workers who do not have to stay late and provides midday service for other non-work trips (for example medical or shopping trips). However without late-evening service the ability to serve workers who work other than traditional 8 to 5 jobs or those making medical or shopping trips after work is limited. The minimum Saturday span of service for this study is 8:00am -7:00pm. This span of service reflects that most weekend trips are for other purposes than work (for example shopping or entertainment). Earlier or later service can be provide where appropriate, such as to provide access to jobs or education. Sunday service is not recommended at implementation since the survey analysis in the Feasibility Study revealed that respondents were unlikely to use Sunday service.
- Service coverage relates to the geographic availability of bus service. No service coverage
 standard for this study was established. Instead, when designing service delivery options, service
 to desired destinations from the survey conducted as part of the feasibility study was a priority.
 However, the trade-off between the travel time to reach and destination and its potential to
 generate ridership must be considered when deciding if a destination should be served.

5.0 Service Design Options

The feasibility study recommended beginning with a fixed route transit service using a center and spoke service design. It is recommended that the Valdosta Urbanized Area begin with a fixed route transit system for the following reasons:

- Valdosta contains household and employment densities that contribute to the success of fixed route service.
- Valdosta contains significant ridership generators: South Georgia Medical Center, VSU, and regional shopping.
- Other communities of similar size have demonstrated they are able to support fixed route transit service.



The sample routes in the feasibility study did a good job of connecting typical ridership generators: retail, medical and housing centers. However, there are gaps in service of the two sample routes in the feasibility study. These gaps include:

- Azalea City Industrial Park / Azalea West Business Park
- Valdosta Housing Authority's Ora Lee West Neighborhood
- Senior Center on Park Avenue

In this study, two service designs were created with the intention of overcoming some of these gaps in service. They are presented in the remainder of this section. The two alternative service designs are:

- 1. Fixed route service with a transit center located on Pendleton Drive
- 2. Fixed route service with a transit center located near Department of Family and Children Services / Department of Labor

Definitions of terms used in each description of service are as follows:

- Hours of Service: The time during the day that service is available to residents. The hours of service are established by the service design standards.
- **One-way Running Time:** The amount of time it takes the bus to travel from the start point to the end point of a route in one direction.
- **Frequency of Service:** How often the bus passes a point on the street. The frequency of service is established by the service design standards.
- Vehicles: The number of vehicles needed to maintain the frequency of service given the one-way running time.
- **Revenue Hours:** The total number of hours that vehicles operate during service hours. For this estimate, it is equal to the hours of service multiplied by the number of vehicles.
- Estimated Ridership: The number of revenue hours times multiplied by the productivity. Productivity is the average number of passengers per revenue hour. After reviewing similar size transit systems the following productivity ranges were adopted:
 - Weekday Fixed Route: 8 12 passengers per revenue hour
 - Saturday Fixed Route: 6 10 passengers per revenue hour
 - Weekday Paratransit: 2 3 Passengers per revenue hour
 - Saturday Paratransit: 2 3 passengers per revenue hour
- Estimated Annual Cost: Includes two steps:
 - The total estimated revenue hours multiplied by the estimated cost per hour.
 - Low cost per revenue hour equals the average cost per revenue hour for peer agencies (Albany, Athens, Augusta, and Rome). The low cost per revenue hour for fixed route is \$60 and \$42.50 for demand response.
 - High cost per revenue hour equals the highest cost per revenue hour of the peer agencies (Augusta for fixed route service and Albany for ADA demand response service). The high cost per revenue hour for fixed route is \$72 and \$58 for demand response.
 - The estimated daily cost multiplied by 255 weekdays (365 days minus 52 Saturdays minus 52 Sundays minus the six major holidays per year) to determine the annual weekday cost. The estimated daily cost is multiplied by 52 Saturdays to determine the annual Saturday cost.

5.1 Fixed Route Service with Transit Center Located on Pendleton Drive

The following recommended five routes will use a proposed transit center located along Pendleton Drive between Valdosta State University's north campus and South Georgia Medical Center. Establishing a transit center in this location recognizes that people often do not need to travel to downtown as much as in the past.

Westside Route

Service Design

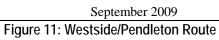
The Westside Route serves Valdosta Mall, Wal-Mart (Norman Drive), Blanton Commons, Valdosta State University, and the Pendleton Drive transit center. Since many customers are expected to use this service to access jobs or classes at VSU, more frequent and later service than design standards is recommended. Service should operate every 30 minutes between 8:00am and 6:00pm when many students are traveling to and from class. (This service will operate in addition to the VSU service.) Service should also be provided until 10:00pm to allow people to return home from their jobs or students to return from campus.

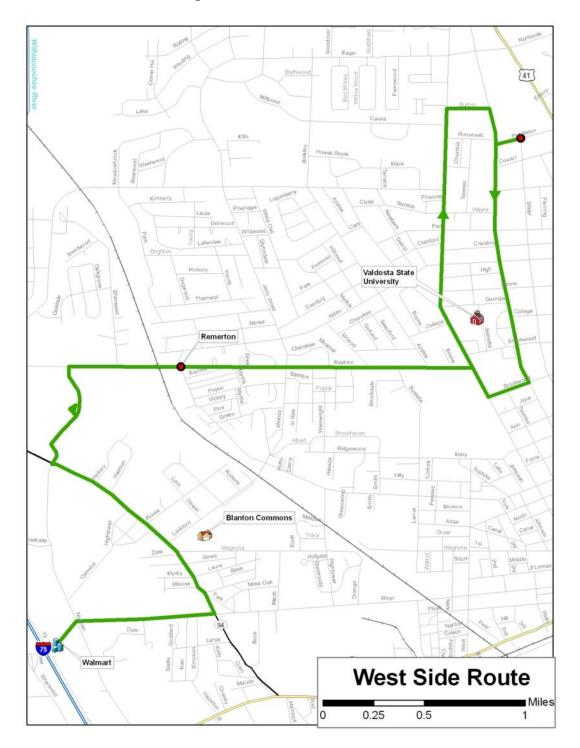
This routing attempts to balance the desire to serve both Remerton and Blanton Commons.

Buses will start at Wal-Mart – River Road – St. Augustine Road – Norman Road - enter Valdosta Mall (at stoplight) – Valdosta Mall roadway – Norman Road - Baytree Road – Oak Street – Burton Street – Patterson Street – Pendleton Drive – transit center. Return trip buses will start at the transit center – Pendleton Drive – Patterson Street – Brookwood Drive – Oak Street – Baytree Road – Norman Road – enter Valdosta Mall (at stoplight) – Valdosta Mall roadway – Norman Road – St. Augustine Road – River Road – end at Wal-Mart.

See. Figure 11







Tran Systems

Hours of Service

Weekdays: 6:00am – 10:00pm Saturdays: 8:00am – 7:00pm

One-Way Running Time

Weekdays: 27 minutes Saturdays: 27 minutes

Frequency of Service

Weekdays: 8:00am – 6:00pm every 30 minutes / All other times: every 60 minutes Saturdays: Every 60 minutes

Vehicles

Two transit vehicles

Revenue Hours

Weekdays: One vehicle operates 16 hours per day, One vehicle operates 10 hours per day (26 total hours) Saturdays: One vehicle operates 11 hours per day

Estimated Ridership

Weekdays: 310 (79,050 annual) Saturdays: 110 (5,700 annual)

Estimated Annual Cost

Weekdays: \$398,000 - \$477,600 Saturdays: \$34,320 - \$41,200



Strengths

- Provides service to major retail areas of Valdosta including Valdosta Mall and Wal-Mart.
- Provides direct service to the west side of VSU.
- Provides frequent service to attract students who are choice riders.
- Provides later service for employees and students.
- Serves the City of Remerton.
- This route can be interlined with the Eastside route, providing a one-seat ride from between the eastside and westside of Valdosta.

Weaknesses/Issues

- Route does not serve the northwest portion of Valdosta. The feasibility study recommended service along Eager Road and Jerry Jones Drive. However, a review of the demographic data shows that this area's demographics are not those of typical transit riders.
- Residents of Blanton Commons would have to walk to a stop established at Lankford Drive. Sidewalks would need to be improved since they end just short of the intersection. It would be helpful if an opening in the fence around Blanton Commons could be provided.
- Direct service from Blanton Commons to VSU is not provided in order to serve Remerton. Serving Baytree Road in Remerton requires an indirect routing for students traveling to VSU. This indirect service may be less attractive service for students traveling to VSU.
- The Publix on the west side of Valdosta Mall cannot be directly served since the additional running time required to operate along Gornto would compromise the reliability of the route.

Five Points/Downtown/Southside Route

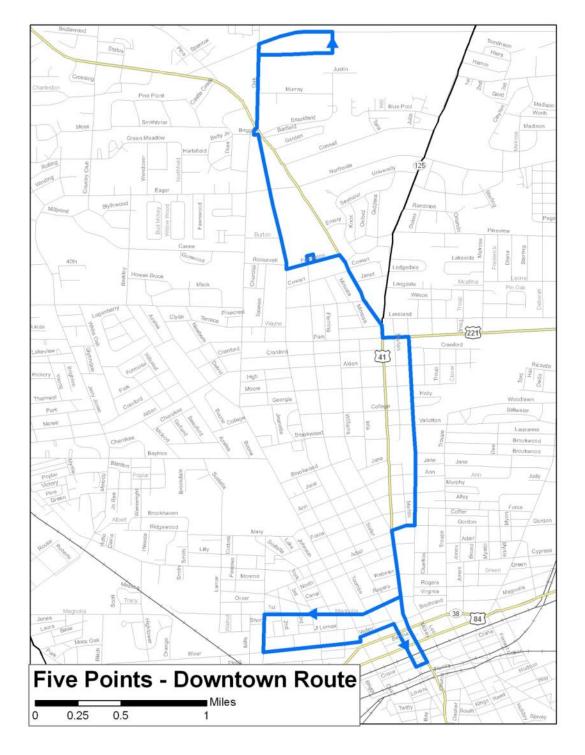
Service Design

This route serves Wal-Mart (Inner Perimeter Road), Winn Dixie, the Pendleton Drive transit center, Ora Lee West, downtown Valdosta, Department of Family and Children Services, Lowndes County Health Department, and Department of Labor. Service will operate according to the design standards.

Buses will start at the Wal-Mart on Inner Perimeter Road – Brookfield Road – Inner Perimeter Road – Oak Street – enter Winn Dixie – Ashley Street – Patterson Street – Pendleton Drive to/from transit center – Ashley Street – Park Avenue – Lee Street – Gordon Street – Ashley Street – Magnolia Street – Mill Street – West Street – Valley Street – Patterson Street – North Underpass Road – Ashley Street – Gordon Street – Lee Street – Park Avenue – Ashley Street – Pendleton Drive to/from transit center – Patterson Street – Smithbriar Drive – enter Winn Dixie – Oak Street – Wal-Mart roadway – Road – Wal-Mart.

See Figure 12.







Transit Development and Implementation Plan for the Valdosta Urbanized Area: Service Plan

Hours of Service

September 2009

Weekdays: 6:00am – 7:00pm Saturdays: 8:00am – 7:00pm

One-Way Running Time

Weekdays: 28 minutes Saturdays: 28 minutes

Frequency of Service

Évery 60 minutes

Vehicles

One transit vehicle

Revenue Hours

Weekdays: One vehicle operates 13 hours per day Saturdays: One vehicle operates 11 hours per day

Estimated Ridership

Weekdays: 130 (33,150 annual) Saturdays: 70 (17,850 annual)

Estimated Annual Cost

Weekdays: \$198,900 - \$238,700 Saturdays: \$34,320 - \$41,200

Strengths

- Provides service to locations not served in the feasibility study:
 - Ora Lee Homes
 - DFCS/Lowndes Co. Health Department and Department of Labor.

Weaknesses/Issues

- A loop is used to serve River Street, Department of Family and Child Services, and the Department of Labor. Direct service through downtown is not provided.
- Northbound trips on this route will pass through the Pendleton transit center at different times then
 the other routes. Passengers wishing to transfer between this route and other routes will have to
 wait approximately 15 minutes. While this design is not optimal, it is necessary to serve
 destinations both north and south of the transit center. As ridership grows and additional resources
 are secured, splitting this route in two should be considered. Southbound trips pass through the
 Pendleton transit center at same time as the other routes.
- The right turn only entrance into Wal-Mart from Oak Street may need to be modified slightly to accommodate the turning radius of bus.



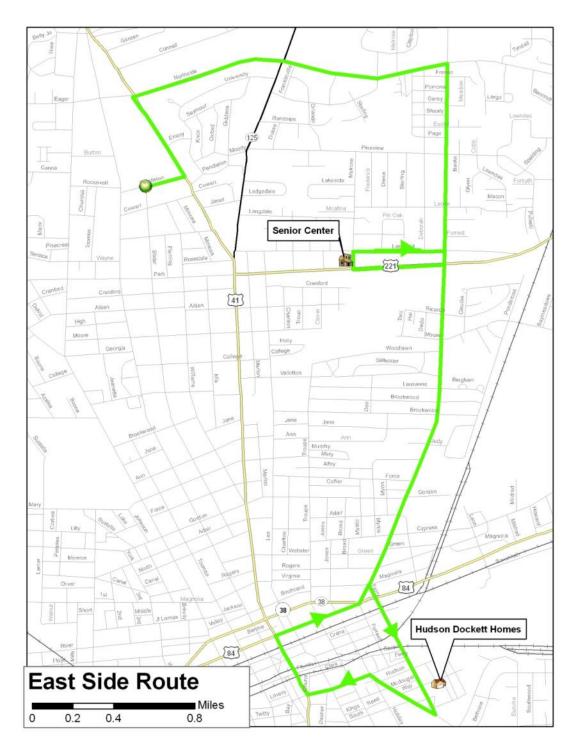
Service Design

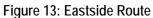
This route serves the Pendleton Drive transit center, retail along Northside Drive, the senior center, Hudson – Dockett Homes, Department of Labor, and downtown Valdosta. Service will operate according to the design standards.

Buses will start at the transit center and operate via Ashley Street – Northside Drive – Forrest Street – Park Avenue – Senior Center Driveway – Lakeland Avenue – Forrest Street – Fry Street – Lake Park Road – Martin Luther King Jr. Drive - Ashley Street – Hill Avenue – Forrest Street – Park Avenue – Senior Center Driveway – Lakeland Avenue – Forrest Street – Northside Drive – Ashley – end at transit center.

See Figure 13.







Transit Development and Implementation Plan for the Valdosta Urbanized Area: Service Plan

Hours of Service

September 2009

Weekdays: 6:00am – 7:00pm Saturdays: 8:00am – 7:00pm

One-Way Running Time

Weekdays: 26 minutes Saturdays: 26 minutes

Frequency of Service

Évery 60 minutes

Vehicles

One transit vehicle

Estimated Ridership

Weekdays: 100 (25,500 annual) Saturdays: 70 (17,850 annual)

Revenue Hours

Weekdays: One vehicle operates 13 hours per day Saturdays: One vehicle operates 11 hours per day

Estimated Annual Cost

Weekdays: \$198,900 - \$238,700 Saturdays: \$34,320 - \$41,200



Strengths

- Provides service to locations not served in the feasibility study:
 - Senior Center
 - Service is provided along River Street, an area with socio-economic characteristics that typically generate transit ridership.

Weaknesses/Issues

- No service is provided to the high school. While the service to the high school is desired by some, high schools only generate ridership during small timeframes before and after school. Service to the High School would add an additional 5 8 minutes, reducing the ability of the service to operate on-time and would not serve any other significant ridership generators. Considering these issues, the resources could be better utilized elsewhere. Eventually, service to the High School could be established as tripper service. This is shorter short trips scheduled around the start and end times of school are operated³.
- Extending service along Park Avenue to Lee Street was requested. This extension may improve some passenger trips since they can transfer between the Eastside and Five Points Downtown routes at the intersection of Park Avenue and Lee Street. The additional running time required by this extension would negatively affect on-time performance and the extension is not recommended at this time. A timed connection between these two routes can be made at the Department of Labor.
- No service is provided to Azalea City Industrial Park. Industrial parks developments rarely
 generate enough ridership to justify the route extensions in the consultant team's experience. A
 possible solution would be to offer subscription service for employees at Azalea City Industrial
 Park. Subscription service is a commuter service where a schedule and route is tailored to the
 subscribers' needs with a guaranteed seat for each rider. They are applicable for situations where
 there are a number of individuals with common origins and destinations that have common hours
 of travel. Often there is an organization (private or public) willing to sponsor the service and a
 higher fare is charged so that the service recovers most of its operating cost.

³ Due to Federal regulations this service must be open to the public (not just students) and essentially follow the routing of one of the regularly scheduled routes. It can operate only on days when school is in session.



Moody Air Force Base Express Route

Service Design

This route will provide limited stop service between the Pendleton Drive transit center and Moody AFB during the rush hours. The route will serve apartment complexes along Oak Street Extension where airmen reside. A stop will also be made at Georgia Military College.

Bus will start at the transit center and operate via Ashley Street – Oak Street – Oak Street Extension – Forrest Street Extension – Bemiss Road – Entrance of Moody AFB.

See Figure 14.

Hours of Service

Weekdays: 6:30am - 8:30am & 4:00pm - 6:00pm

One-Way Running Time Weekdays: 30 minutes

Frequency of Service

Weekdays: Every 60 minutes

Vehicles

One vehicle

Revenue Hours

One vehicle operates 4 hours per day

Estimated Ridership Weekdays: 60 (15,300 annual)

Estimated Annual Cost Weekdays: \$61,200 – \$73,400

Weaknesses/Issues

- Logistics of access to Moody AFB need to be determined. Public transportation vehicles typically
 are not allowed on military bases without potentially time consuming security procedures. Two
 procedures are often used for allowing public transportation on a military base:
 - Establish a stop is near base entrance and military personnel transfer to a base shuttle. Moody AFB is investigating starting a base shuttle.
 - A military police officer boards the bus and checks the military IDs of any passengers desiring to get off the bus. If anyone without proper ID attempts to get off the bus, they are intercepted by military police and removed from the base.
- Route will provide limited stop service. While sidewalks are present along the entire length of Bemiss Road, the lack of signalized intersections with crosswalks will make this service difficult to us by residents along Bemiss Road.
- Georgia Military College classes start later than personnel do at Moody AFB. Short trips to Georgia Military College may be required to meet the needs of students.



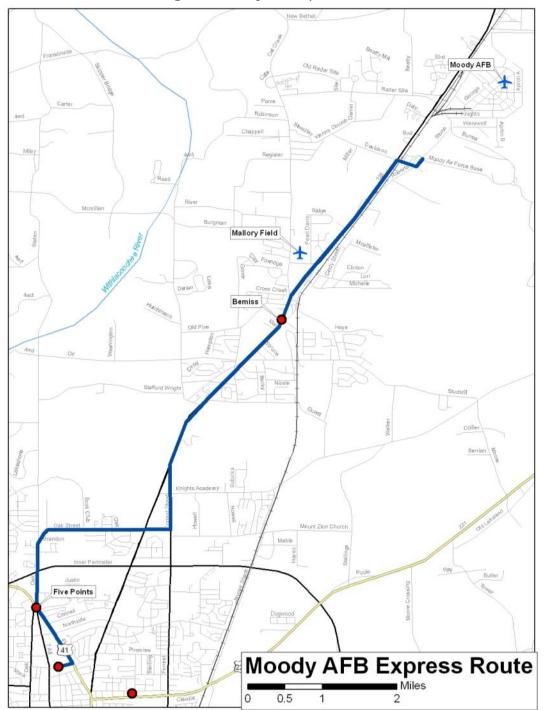


Figure 14: Moody AFB Express Route

Valdosta Technical College Express Route

Service Design

This route will operate express between the Pendleton Drive transit center and Valdosta Technical College with a stop at Smith Northview Hospital.

Buses will start at the transit center and operate via Ashley Street – North Valdosta Road to Valdosta Technical College

See Figure 15.

Hours of Service

Weekdays:

- 7:30-8:00 AM: A trip coming in
- Around Noon: One trip coming in and one trip going out
- 3:00 PM: One trip coming in and one trip going out
- 6:00 PM: One trip coming in and one trip going out
- 10:30 PM: One trip going out

One-Way Running Time

Weekdays: 20 minutes

Frequency of Service See above

Vehicles

One vehicle

Revenue Hours

One vehicle operates 5 hours per day

Estimated Ridership

Weekdays: 75 (19,125 annual)

Estimated Annual Cost

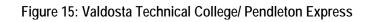
Weekdays: \$76,500 - \$91,800

Issues

• The last two trip from Valdosta Technical College will limited or no connections to other routes since most service ends at 7:00pm.



Smith Northview Hospital E Valdosta Tech College [41] **Five Points** 84



September 2009

Complementary ADA Demand Response Service

The American with Disability Act of 1990 (ADA) requires providers of certain kinds of public transit to operate a complementary paratransit series. Paratransit is typically a demand responsive system. Unlike the fixed-route system where riders are pick up at a designated bus stop, paratransit riders are picked up at or near their home or other origin and taken to their work or other destination. This service is required if a person, because of their disability, is unable to use the fixed route system.

Several disability conditions typically warrant the use of a complementary paratransit system:

- Unable to access the fixed route bus even if the vehicle is wheelchair lifted equipped.
- Unable to board a vehicle without a wheelchair lift or kneeling feature.
- Unable to access a bus stop.

These apply to permanently disabled persons as well as visitors and people temporarily disabled.

Complementary parantransit service must be provided at least with three-quarters mile of a bus route. Exceptions apply only to commuter express routes where complementary paratransit services are not required.

Other Requirements

- Fares charged to paratransit riders cannot be more than twice charged to fixed route riders. Thus, if it costs \$0.75 for a person to ride the fixed route, then the ADA fare cannot be more than \$1.50.
- No restriction on trip purpose.
- Allow reservation up to 14 days in advance
- Limit to 50 percent subscription or standing reservations unless there is non-subscription capacity
- Cannot limit availability due to system capacity limitations
- Cannot have operating practices that effectively limit system usage.

Eligibility Process

While the criteria by which a person is considered eligible to use paratransit seems straightforward, its application can be challenging. The decision to allow a person to use complementary paratransit can be costly overtime. The basic process should include:

- Eligibility should be limited to ADA requirements only
- Eligibility information should be supplied in accessible formats
- Time limit of 21 days in acting upon a certification application
- Transit provider can establish penalties for abuse of system policies by riders.

Hours of Service

Weekdays: 6:00am – 10:00pm Saturdays: 8:00am – 7:00pm

Frequency of Service Not applicable

Vehicles

Total of two vans or small body on chassis vehicles

Revenue Hours

Weekdays: One vehicle operates 13 hours per day / One vehicle operates 16 hours (29 hours total)

Saturdays: two vehicles operates 11 hours per day (22 hours total)

Svstems

Estimated Ridership

Weekdays: 60 (15,300 annual) Saturdays: 45 (2,340 annual)

Estimated Annual Cost

Weekdays: \$314,000 - \$429,000 Saturdays: \$48,600 - \$66,350



Table 1 summarizes the hours of service, frequency, vehicles, ridership, revenue hours and annual operating cost for the Pendleton Drive transit center option. A system map of these routes is shown in Figure 16.

| | | Frequenc | | IT Periore D | | |
|-----------|---------------|-----------|---------|--------------|----------|-------------------------|
| | Hours of | y (Peak/ | Vehicle | Estimated | Revenue | Annual Operating |
| Service | Service | Off Peak) | S | Ridership | Hours | Cost |
| Eastside | Wkdy: 6am- | 30 | 2 | Wkdy: 310 | Wkdy: 26 | Wkdy: \$398,000- |
| | 10pm | minutes / | | Sat: 110 | Sat: 11 | \$477,000 |
| | Sat: 8am-7pm | 60 | | | | Sat: \$34,320-\$41,200 |
| | | minutes | | | | |
| Downtow | Wkdy: 6am- | 60 | 1 | Wkdy: 130 | Wkdy: 13 | Wkdy: \$198,000- |
| n/ | 7pm | minutes | | Sat: 70 | Sat: 11 | \$238,700 |
| Southside | Sat: 8am-7pm | | | | | Sat: \$34,320-\$41,200 |
| Westside | Wkdy: 6am- | 60 | 1 | Wkdy: 100 | Wkdy: 13 | Wkdy: \$198,000- |
| | 7pm | minutes | | Sat: 70 | Sat: 11 | \$238,700 |
| | Sat: 8am-7pm | | | | | Sat: \$34,320-\$41,200 |
| Moody | Wkdy: | 60 | 1 | Wkdy: 60 | Wkdy: 4 | Wkdy: \$61,200 - |
| AFB | 6:30a-8:30a & | minutes | | | | \$73,400 |
| Express | 4:00p-6:00p | | | | | |
| Valdosta | Wkdy: 7:30a- | Trips | 1 | Wkdy: 75 | Wkdy: 5 | Wkdy: \$76,500-\$91,800 |
| Tech | 10p | timed to | | | | |
| Express | | class | | | | |
| | | schedule | | | | |
| Demand | Wkdy: 6am- | N/A | 2 | Wkdy: 60 | Wkdy: 29 | Wkdy: \$314,000- |
| Respons | 10pm | | | Sat: 45 | Sat: 11 | \$429,000 |
| e | Sat: 8am-7pm | | | | | Sat: \$48,600- \$66,350 |
| Totals | | | 8 | Wkdy: 735 | Wkdy: 61 | Wkdy:\$1,250K - |
| | | | | Sat: 295 | Sat: 33 | \$1,549K |
| | | | | | | Sat: \$152K - \$190K |
| | | | | | | Total: \$1,402K - |
| | | | | | | \$1,739K |

|--|

Table 1 shows that six vehicles will be needed to operate the proposed fixed route service. Allowing for two spare vehicles, a total of eight vehicles will be needed for this fixed route service. Two vehicles will be needed to operate demand response service. Allowing for one spare vehicle, a total of three vehicles will be needed for demand response service.

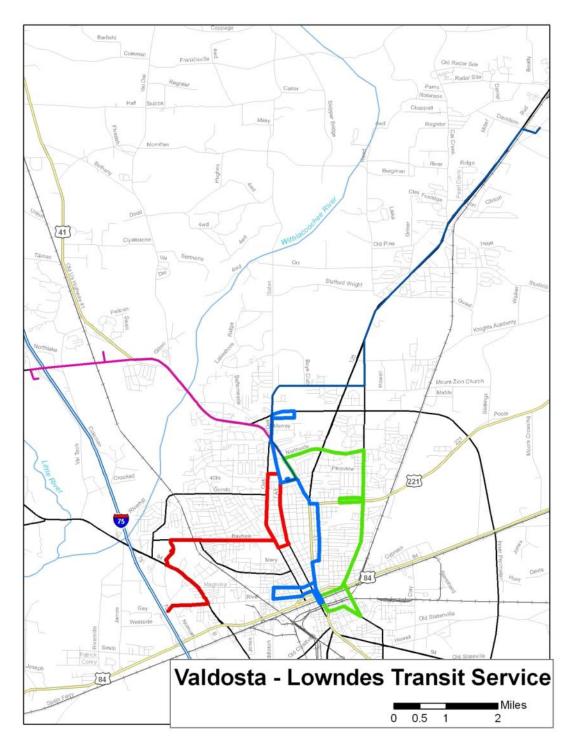


Figure 16: Fixed Route System with Transit Center at Pendleton Drive

5.2 Fixed Route Service with Transit Center Located at DFCS / DOL

This second alternate plan recommends using five routes will use a proposed downtown transit center located near the Lowndes County Department of Family and Children Services / Lowndes County Health Services and Department of Labor buildings.

Westside Route

Service Design

This route serves Valdosta Mall, Wal-Mart (Norman Drive), Blanton Commons, Valdosta State University, and the downtown transit center. Since many customers are expected to use this service to access jobs or classes at VSU more frequent and later service than design standards is recommended. Service should operate every 30 minutes between 8:00am and 6:00pm when many students are traveling to and from class. Service should be provided until 10:00pm to allow people to return home from their jobs or students to return from campus.

A key service design element is providing direct service from Blanton Commons to VSU. This is one reason why more of Remerton is not served. Serving more of Baytree Road in Remerton would require an indirect routing for students traveling to VSU. Direct routing creates an attractive service for students.

Buses will start at the downtown transit center – Ashley Street – Central Street – Oak Street – Baytree Road – Melody Lane – Lankford Drive – St. Augustine Road – River Road – Wal-Mart – Norman Drive – Valdosta Mall. Return trips will follow the same route to Oak Street – Savannah Avenue – Patterson Street – downtown transit center.

See Figure 17.

Hours of Service

Weekdays: 6:00am – 10:00pm Saturdays: 8:00am – 7:00pm

One-Way Running Time

Weekdays: 27 minutes Saturdays: 27 minutes

Frequency of Service

Weekdays: 8:00am – 6:00pm every 30 minutes / All other times: every 60 minutes Saturdays: Every 60 minutes

Vehicles

Two transit vehicle

Revenue Hours

Weekdays: One vehicle operates 16 hours per day, One vehicle operates 10 hours per day (26 total hours)

Saturdays: One vehicle operates 11 hours per day

Estimated Ridership

Weekdays: 310 (79,050 annual)

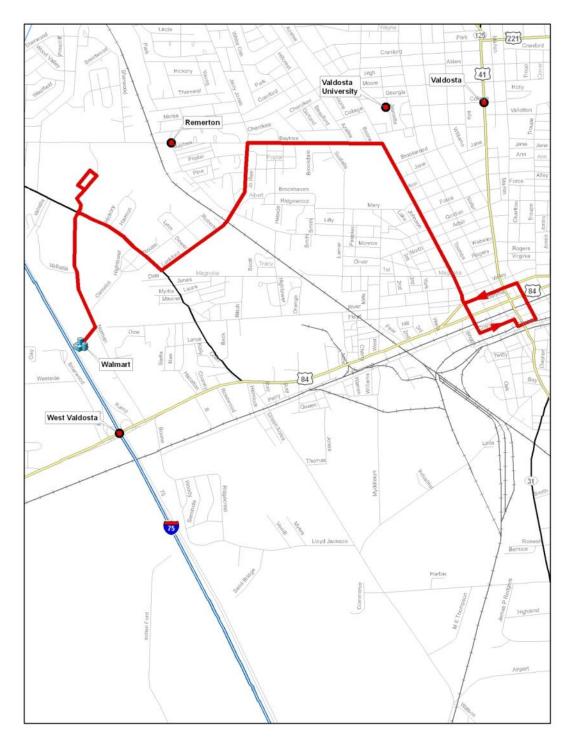


Saturdays: 110 (5,700 annual)

Estimated Annual Cost

Weekdays: \$398,900 – \$477,600 Saturdays: \$34,320 - \$41,200

Figure 17: Westside/Downtown Route



Strengths

- Provides service to major retail areas of Valdosta including Valdosta Mall and Wal-Mart.
- Provides direct service to the west side of VSU.
- Provides frequent service to attract students who are choice riders.
- Provides later service for employees and students.
- The bus operating this route can alternate operating trips on the Westside route and trips on the Five Points/Downtown route. This allows customers a one seat ride without having to transfer buses.

September 2009

Weaknesses/Issues

- Route does not serve the northwest portion of Valdosta. The feasibility study recommended service along Eager Road and Jerry Jones Drive. However, a review of the demographic data shows that this area's demographics are not those of typical transit riders since the area is populated with people of higher income that own vehicles.
- The roadway design of Blanton Commons may make it difficult for a transit vehicle to enter the property. A travel time competitive to the automobile is necessary for ridership to be generated from Blanton Commons. Minimizing walking time for the residents should be perused.

Five Points/Downtown

Service Design

This route serves Wal-Mart (Inner Perimeter Road), Five Points area, the mixture of commercial and residential properties along Northside, VSU north campus, South Georgia Medical Center, the Ora Lee West Neighborhood homes, downtown Valdosta, DFCS, and DOL. Service will operate according to the design standards.

Buses will start at the downtown transit center – Ashley Street – Gordon Street – Lee Street- Park Avenue – Ashley Street – Pendleton Drive – Ashley Street – Oak Road – Inner Perimeter Road – Wal-Mart – Bemiss Road – Northside Drive – Ashley Street – Park Avenue – Lee Street – Gordon Street – Ashley Street – Magnolia Street – Patterson St – downtown transit center

See Figure 18.

Hours of Service

Weekdays: 6:00am – 7:00pm Saturdays: 8:00am – 7:00pm

One-Way Running Time Weekdays: 25 minutes

Saturdays: 25 minutes

Frequency of Service Every 60 minutes

Vehicles

One transit vehicle

Revenue Hours

Weekdays: One vehicle operates 13 hours per day Saturdays: One vehicle operates 11 hours per day



Estimated Ridership

Weekdays: 130 (33,150 annual) Saturdays: 70 (3,640 annual)

Estimated Annual Cost

Weekdays: \$198,900 - \$238,700 Saturdays: \$34,320 - \$41,200

Strengths

• Provides bi-directional service to Ora Lee West Neighborhood Homes. Allows residents connections to several generators: Wal-Mart, South Georgia Medical Center, and government services.

Weaknesses/Issues

- Service design for the northern portion is a loop, meaning that service is only provided in one direction on most streets.
- Establishing service to a requested park-n-ride at Five Points may require eliminating service along Northside Drive since additional running time would require cuts elsewhere to maintain a 60 minute frequency.

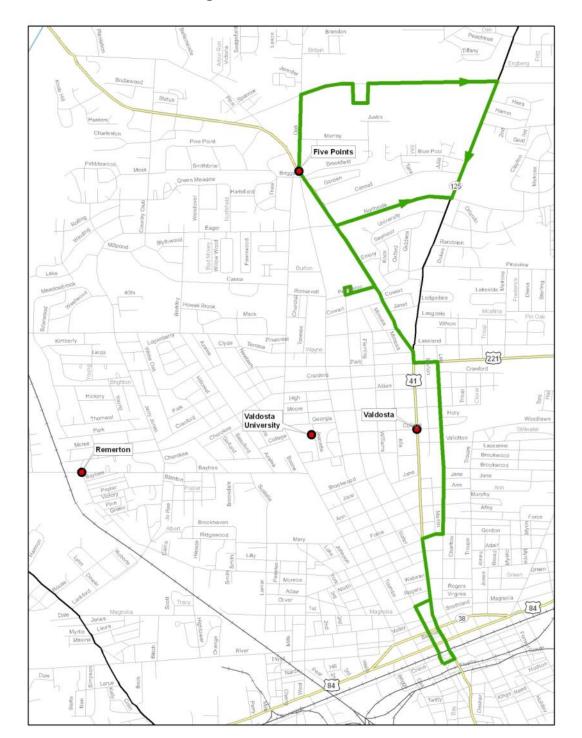


Figure 18: Five Points/Downtown

Eastside/Southside Route

Service Design

This route serves the Senior Center, residential properties along Forrest Street, downtown Valdosta, and Azalea City Industrial Park. Service will operate according to the design standards.

Buses will start at the transit center and operate via Ashley Street – Hill Avenue – Forrest Street – Park Avenue to Senior Center – Park Avenue – Forrest Street – Central Avenue – Patterson Street – North Underpass – Ashley Street – South Underpass – Patterson Street – Madison Highway – Gil Harbin Industrial Drive – Commerce – Gil Harbin Industrial Drive – Patterson Street – Ashley Street – transit center.

See Figure 19.

Hours of Service

Weekdays: 6:00am – 7:00pm Saturdays: 8:00am – 7:00pm

One-Way Running Time Weekdays: 26 minutes Saturdays: 26 minutes

Frequency of Service

Every 60 minutes

Vehicles

One transit vehicle

Revenue Hours

Weekdays: One vehicle operates 13 hours per day Saturdays: One vehicle operates 11 hours per day

Estimated Ridership

Weekdays: 130 (33,150 annual) Saturdays: 70 (3,640 annual)

Estimated Annual Cost

Weekdays: \$198,900 - \$238,700 Saturdays: \$34,320 - \$41,200

Strengths

• Provides service to the Senior Center and Azalea City Industrial Park

Weaknesses/Issues

- Forrest Street north of Park Avenue will not be served due to running time constraints. Destinations not receiving service include the Valdosta High School and Georgia Military College. These locations would not be served in this service design option.
- Providing service to Azalea City Industrial Park requires crossing the railroad tracks instead of using grade-separated roadway. This may result in delays to the service.

Tran Systems

• Since the route does not end at the downtown transit center, customers may have to wait when transferring to/from other routes.

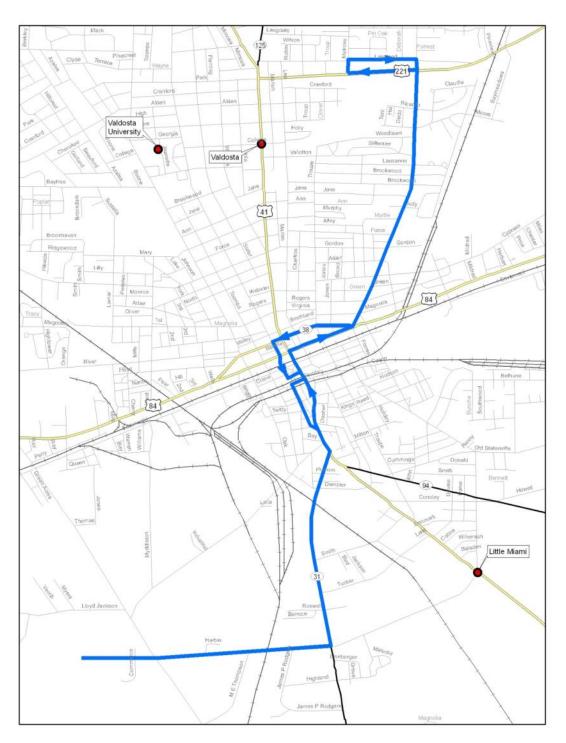


Figure 19: Eastside/Southside Route

Transit Development and Implementation Plan for the Valdosta Urbanized Area: Service Plan

September 2009

Moody Air Force Base/Downtown Express Route

Service Design

This route will provide limited stop service between the Pendleton Drive transit center and Moody AFB during the rush hours.

Bus will start at the transit center and operate via Ashley Street – Northside Drive – Bemiss Road – Entrance of Moody AFB.

See Figure 20.

Hours of Service

Weekdays: 6:30am - 8:30am & 4:30pm - 6:30pm

One-Way Running Time Weekdays: 30 minutes

Frequency of Service

Weekdays: Every 60 minutes

Vehicles

One vehicle

Revenue Hours

One vehicle operates 4 hours per day

Estimated Ridership

Weekdays: 50 (12,750 annual)

Estimated Annual Cost

Weekdays: \$61,200 - \$73,400

Weaknesses/Issues

- Logistics of access to Moody AFB need to be determined. Public transportation vehicles typically are not allowed on military bases without potentially time consuming security procedures. Two procedures are often used for allowing public transportation on a military base:
 - Establish a stop is near base entrance and military personnel transfer to a base shuttle. Moody AFB is investigating starting a base shuttle.
 - A military police officer boards the bus and checks the military IDs of any passengers desiring to get off the bus. If anyone without proper ID attempts to get off the bus, they are intercepted by military police and removed from the base.
- Route will provide limited stop service. While sidewalks are present along the entire length of Bemiss Road, the lack of signalized intersections with crosswalks will make this service difficult to us by residents along Bemiss Road.



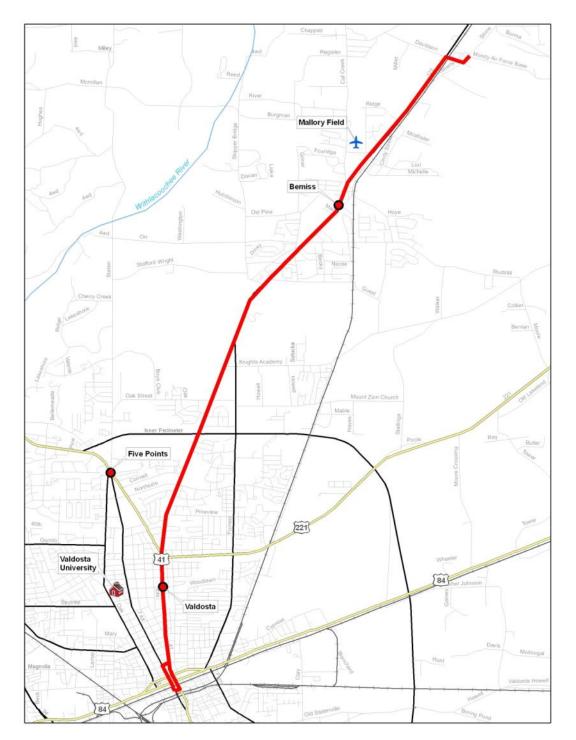


Figure 20: Moody AFB/Downtown Express Route

Valdosta Technical College Express Route

Service Design

This route will operate express between the downtown transit center and Valdosta Technical College.

Bus will start at the transit center and operate via Central Avenue – Hill Avenue – I-75 – Shiloh Road – Val Tech Road to Valdosta Technical College

Refer to Figure 21.

Hours of Service

Weekdays:

- 7:30-8:00 AM: A trip coming in
- Around Noon: One trip coming in and one trip going out
- 3:00 PM: One trip coming in and one trip going out
- 6:00 PM: One trip coming in and one trip going out
- 10:30 PM: One trip going out

Frequency of Service

See above

One-Way Running Time Weekdays: 17 minutes

Vehicles

One vehicle

Revenue Hours

One vehicle operates 5 hours per day

Estimated Ridership

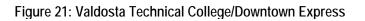
Weekdays: 75 (19,125 annual)

Estimated Annual Cost

Weekdays: \$76,500 - \$91,800



Valdosta Tech College **Five Points** (41) (221) Troupville Valdosta University ŝ Remerton Valdosta e Rive [84] Walmart Dean Mack Hill 84



Complementary ADA Demand Response Service

Service Design

Complementary ADA demand response service is required to be provided for those individuals that, because of their disability, cannot use fixed-route service. Passengers must register to use the service. It must operate within a three-quarter mile buffer of any fixed route service during the same hours of operation as the fixed routes. Passengers call in advance to arrange a curb to curb trip within the three-quarter mile buffer.

It is estimated that two vehicles will be needed to provide complementary ADA demand response service.

Hours of Service

Weekdays: 6:00am – 7:00pm Saturdays: 8:00am – 7:00pm

Frequency of Service

Not applicable

Vehicles

Total of two vans or small body on chassis vehicles

Revenue Hours

Weekdays: One vehicle operates 13 hours per day / One vehicle operates 16 hours (29 hours total)

Saturdays: two vehicles operates 11 hours per day (22 hours total)

Estimated Ridership

Weekdays: 60 (15,300 annual) Saturdays: 45 (2,340 annual)

Estimated Annual Cost

Weekdays: \$314,000 - \$429,000 Saturdays: \$48,600 - \$66,350

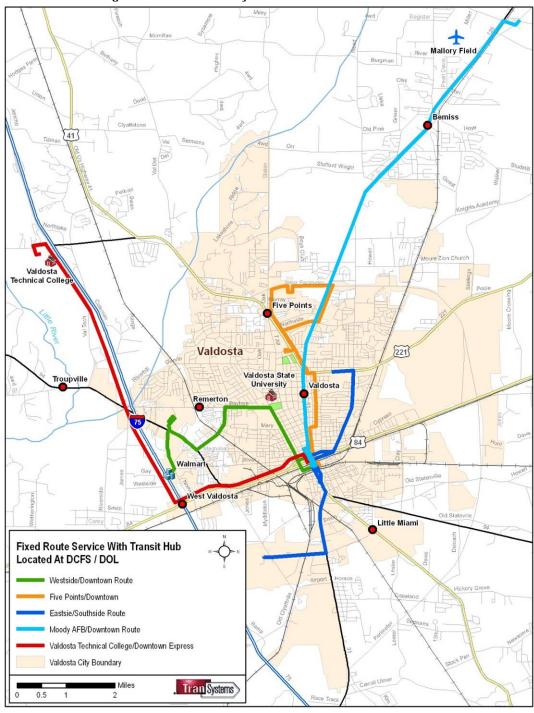


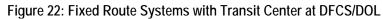
Summary of Service with Downtown Transit Center

Table 2 summarizes the hours of service, frequency, vehicles, ridership, revenue hours and annual operating cost for the downtown transit center option. A system map of these routes is shown in Figure 22.

| Table 2: Summary of Service with Downtown Transit Center | | | | | | iter |
|--|--|-------------------------------------|----------|--------------------------|---------------------|--|
| Service | Hours of Service | Frequency (Peak/ Off Peak) | Vehicles | Ridership | Revenue Hours | Annual Operating Cost |
| Eastside | Wkdy: 6am- | 30 minutes | 2 | Wkdy: 310 | Wkdy: 26 | Wkdy: \$398,000- |
| | 10pm Sat: 8am- 7pm | / 60 minutes | Ζ | Sat: 110 | Sat: 11 | \$477,000 Sat: \$34,320-\$41,200 |
| Downtown/ Southside | Wkdy: 6am- 7pm Sat: 8am- 7pm | 60 minutes | 1 | Wkdy: 130 Sat: 70 | Wkdy: 13 Sat: 11 | Wkdy: \$198,000- \$238,700 Sat: \$34,320-\$41,200 |
| Westside | Wkdy: 6am- 7pm Sat: 8am- 7pm | 60 minutes | 1 | Wkdy: 130 Sat: 70 | Wkdy: 13 Sat: 11 | Wkdy: \$198,000- \$238,700 Sat: \$34,320-\$41,200 |
| Moody AFB Express | Wkdy: 6:30a-8:30a & 4:30p-6:30p | 60 minutes | 1 | Wkdy: 50 | Wkdy: 4 | Wkdy: \$61,200 - \$73,400 |
| Valdosta Tech Express | Wkdy: 7:30a-10p | Trips timed to class schedule | 1 | Wkdy: 75 | Wkdy: 5 | Wkdy: \$76,500- \$91,800 |
| Demand Response | Wkdy: 6am- 10pm Sat: 8am- 7pm | N/A | 2 | Wkdy: 60 Sat: 45 | Wkdy: 29 Sat: 11 | Wkdy: \$314,000- \$429,000 Sat: \$48,600-\$66,350 |
| Totals | | | 8 | Wkdy: 755 Sat: 295 | Wkdy: 90 Sat: 44 | Wkdy: \$1,250K- \$1,549K Sat: \$152K-\$190K Total: \$1,400-\$1,739K |

As can be seen in Table 2, six vehicles will be needed to operate the fixed route service. Allowing for two spare vehicles, a total of eight vehicles will be needed for this fixed route service. Further, two vehicles are needed for Demand Response service. Adding one spare brings the paratransit fleet total to three.





6.0 Valdosta State University Service

Valdosta State University has expressed a desire for its transit service to be provided by the same operator of the community service so that both services can have closer coordination and integration. The university prefers that service provided by the operator meet or exceed the current level of service provided by the university. Since a final decision on the operation VSU service has not been made, the following steps toward integration are recommended:

- Develop a fare instrument that allows all university students to ride the city service for free. Many cities have a "U-Card" that allows students to use the transit service without paying a fare. Typically, a nominal transportation fee is paid by the student when registering for classes or as part of their student activity fee.
- Allow community fixed route service customers to transfer to the university service.
- Begin tracking usage of the community fixed route service by university students.
- After the community fixed route service has been operating for approximately a year, conduct a study to determine how best to integrate the service. It is possible that university or community routes will need to be restructured to provide optimal service.

7.0 Summary

Both of the proposed route concepts attempt to overcome some of the gaps in service of the sample routes presented in the feasibility study routes. This is accomplished by using is a more traditional linear routing instead of a loop. However a weakness of linear routing is that not all destinations in the Valdosta urbanized area can be served without sacrificing frequency or creating very long trips for customers. Linear service was focused on destinations with the highest ridership potential. Sub-optimal service design should be avoided in order for the transit system to have a good chance of being successful.

The major difference between the two service concepts outlined in the previous chapter is the location of the transit center. The first service concept placed the transit center on the north side of town between VSU's north campus and South Georgia Medical Center. This placement recognizes that people often do not need to travel to downtown as much as in the past. Table 3 summarizes the cost of this option. Strengths and weakness of this service design include:

Strengths

- Service to Smith Northview Hospital, Hudson Dockett Homes, and along Oak Street Extension.
- Service to most of the areas of Valdosta with socio economic characteristics typical of transit usage.
- Transit center located near South Georgia Medical Center, one of the largest employers in Valdosta. This location also allows for a potential interface with VSU service

<u>Weakness</u>

• No service to Azalea Industrial Park. This location is likely to be better served by subscription transit service.



Transit Development and Implementation Plan for the Valdosta Urbanized Area: Service Plan

| Service Fian September 2009 | | | | | | |
|--|-------------|------------|-------------|---------------|------------|-------------|
| Table 3: Summary of Operating Costs for Pendleton Drive Transit Center Concept | | | | | | |
| PENDLETON DRIVE TRANSIT CENTER | | | | | | |
| | L | ow Estimat | e | High Estimate | | |
| | Weekday | Saturday | Total | Weekday | Saturday | Total |
| | Annual | Annual | Annual | Annual | Annual | Annual |
| Route | Cost | Cost | Cost | Cost | Cost | Cost |
| Westside | \$398,000 | \$34,320 | \$432,320 | \$477,000 | \$41,200 | \$518,184 |
| Downtown/Southside | \$198,900 | \$34,320 | \$233,220 | \$238,680 | \$41,200 | \$279,880 |
| Eastside | \$198,900 | \$34,320 | \$233,220 | \$238,680 | \$41,200 | \$279,880 |
| Moody AFB Express | \$61,200 | \$0 | \$61,200 | \$73,440 | \$0 | \$73,440 |
| Valdosta Tech | \$76,500 | \$0 | \$76,500 | \$91,800 | \$0 | \$91,800 |
| Express | | | | | | |
| ADA Service | \$314,000 | \$48,620 | \$362,620 | \$429,000 | \$66,500 | \$495,500 |
| Total | \$1,247,500 | \$151,580 | \$1,399,080 | \$1,548,600 | \$190,1004 | \$1,738,700 |

September 2009

The second concept places the transit center in the more traditional downtown location. Valdosta downtown is fairly vibrant compared to similar size downtowns. The recommended downtown location is between the Department of Family and Children Services / Lowndes County Health Depart and Department of Labor buildings. Both of these buildings are typically ridership generators for small urban systems. Table 4 summarizes the costs of this second service option. The estimated annual cost is the same since both options contain the same number of revenue hours. The strengths and weakness of this service design include:

Strengths

- Each route connects residential and employment areas.
- All routes serve downtown Valdosta
- Transit Center near typical ridership generators.

<u>Weakness</u>

• No service to Smith Northview Hospital or along Forrest north of Park Avenue.

| DOWNTOWN TRANSIT CENTER | | | | | | |
|-------------------------|-------------|-------------|-------------|---------------|------------|-------------|
| | L | ow Estimat. | е | High Estimate | | |
| | Weekday | Saturday | Total | Weekday | Saturday | Total |
| | Annual | Annual | Annual | Annual | Annual | Annual |
| Route | Cost | Cost | Cost | Cost | Cost | Cost |
| Westside | \$398,000 | \$34,320 | \$432,320 | \$477,000 | \$41,200 | \$518,184 |
| Downtown/Southside | \$198,900 | \$34,320 | \$233,220 | \$238,680 | \$41,200 | \$279,880 |
| Eastside | \$198,900 | \$34,320 | \$233,220 | \$238,680 | \$41,200 | \$279,880 |
| Moody AFB Express | \$61,200 | \$0 | \$61,200 | \$73,440 | \$0 | \$73,440 |
| Valdosta Tech | \$76,500 | \$0 | \$76,500 | \$91,800 | \$0 | \$91,800 |
| Express | | | | | | |
| ADA Service | \$314,000 | \$48,620 | \$362,620 | \$429,000 | \$66,500 | \$495,500 |
| Total | \$1,247,500 | \$151,580 | \$1,399,080 | \$1,548,600 | \$190,1004 | \$1,738,700 |

 Table 4: Summary of Operating Costs for Downtown Transit Center Concept



8.0 Street-Ready Operating Plan – Pendleton Drive Area Option

A Street-Ready Operating Plan is the next step in implementation of transit service in the Valdosta Urbanized Area. In Section 5, two options were developed. One option had the transit system centered on a transit hub located in downtown Valdosta. The second option had the transit hub located in the Pendleton Drive area. Both options had five proposed routes. The option that has been recommended by the Steering Committee is the Pendleton Drive Area option. Figure 23 shows the system map that the Steering Committee recommended.

The basic elements of the Plan include:

- A fixed route system consisting of five routes with a hub/transit center in the Pendleton Drive area.
- Paratransit operations provided in compliance with the ADA
- Operations six days per week with the exception of the Valdosta Technical College and Moody Air Force Base service that would only operate on weekdays

Option Selection

On June 16, 2009, the Steering Committee met to discuss the proposed service plan and to make a recommendation of the preferred option. After a presentation and discussion on the implementation process the Steering Committee unanimously recommended the Pendleton Drive Area Option. It has since been presented to the City of Valdosta Council, the Lowndes County Commissioners, and the VLMPO Policy Committee.

Several factors were taken into account and led to the recommendation of the Pendleton Drive option. This option provided the following strengths compared to the downtown based service plan.

- Service to Smith Northview Hospital, Hudson Dockett Homes and along Oak Street Extension.
- Transit center located near South Georgia Medical Center, one of the largest employers in Valdosta and a place where residents travel to for services.
- Opportunities to interface with current VSU service

Additionally, the Pendleton Drive Area Option meets all of the demographic and socioeconomic indicators that support transit.

- Serves locations with the highest population density to support transit
- Serves locations with the highest percentage of senior population
- Serves locations with the highest percentage of youth between the ages of 10-14
- Serves locations with the highest employment density
- Serves locations with highest percentage of households with no vehicles
- Serves locations with the highest concentration of low income populations

Figures 24 through 30 illustrate the relationship/correlation between the proposed five bus routes and the six demographic and socio economic indicators for the Valdosta Urbanized Area.

The Steering Committee also made the below recommendations for the delivery of service.

- Service Delivery Governance
 - Recommendation: MPO/RDC Department, with the understanding that the creation of an authority of other entity must be explored within three years, the transit steering committee would be transformed into an advisory committee to the MPO and RDC Boards
- Service Delivery Operations

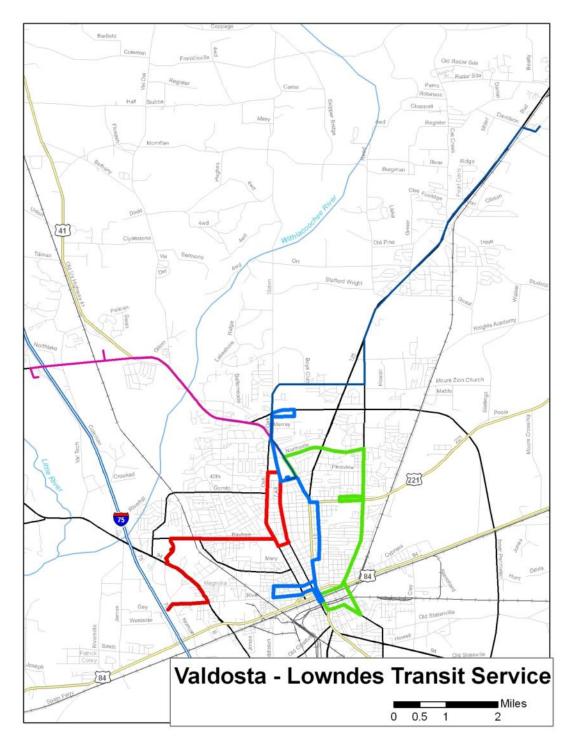
Svstems

- o Lead Agency Recommendation: Valdosta-Lowndes Metropolitan Planning Organization
- Operations Model Recommendation: Turnkey, at least one staff person should be hired to provide oversight of the contracted operations

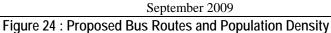
5

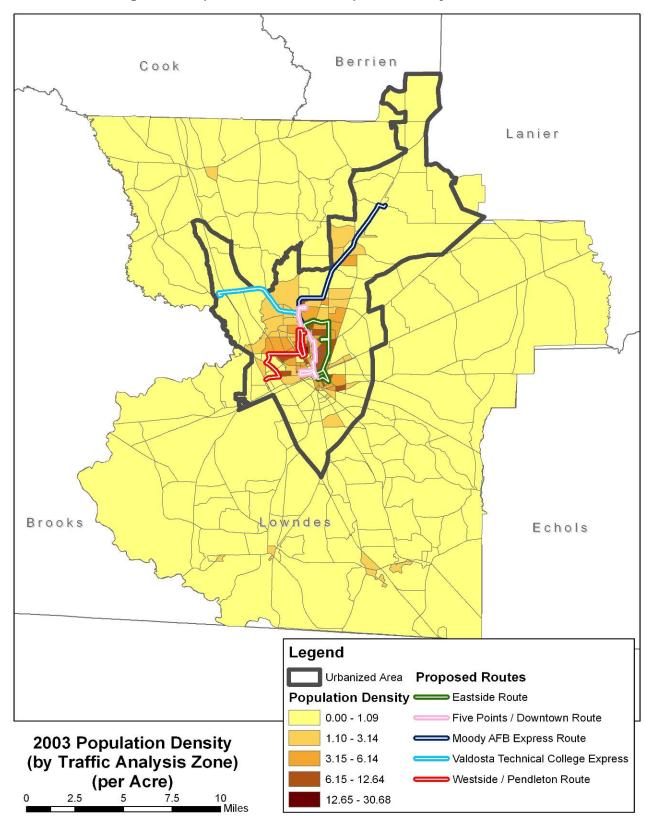
- Implementation
 - Recommendation: Full Implementation, however phasing could occur if public/private partnership funding is not readily available for start-up



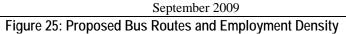


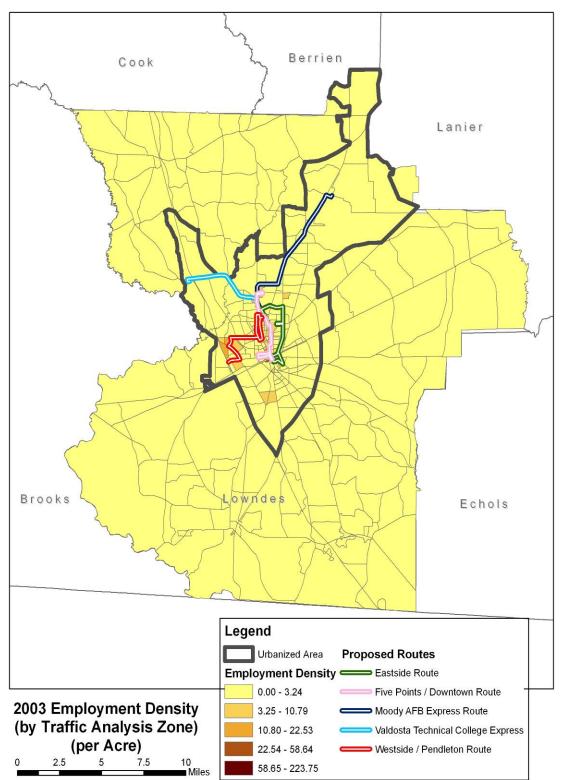
Tran Systems

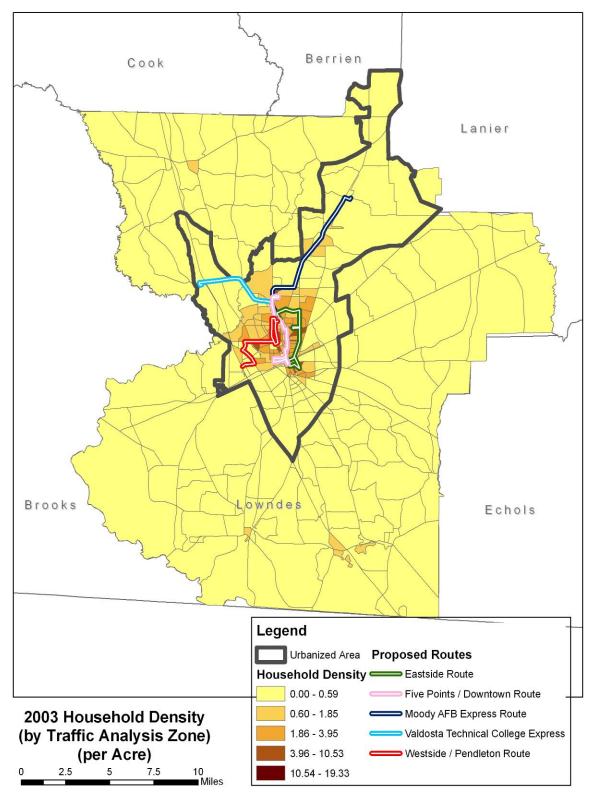




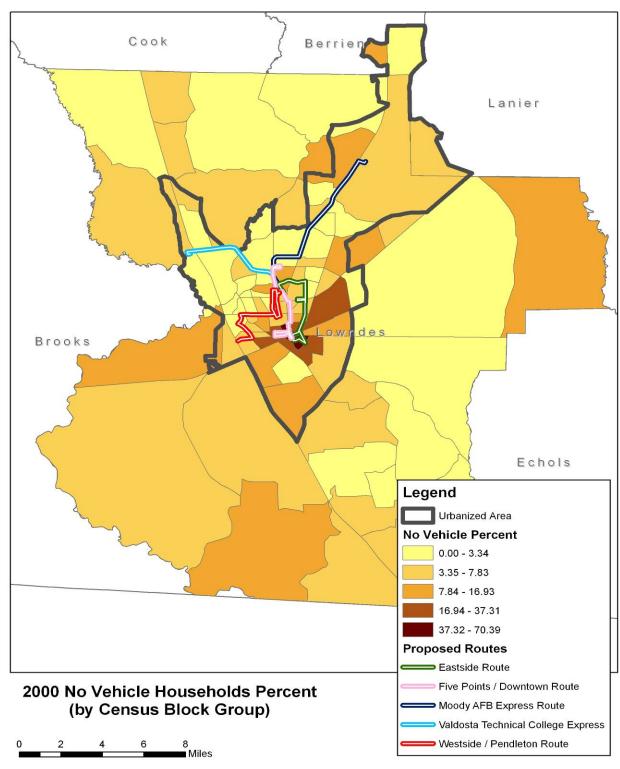
5

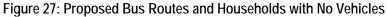








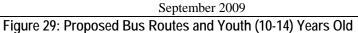


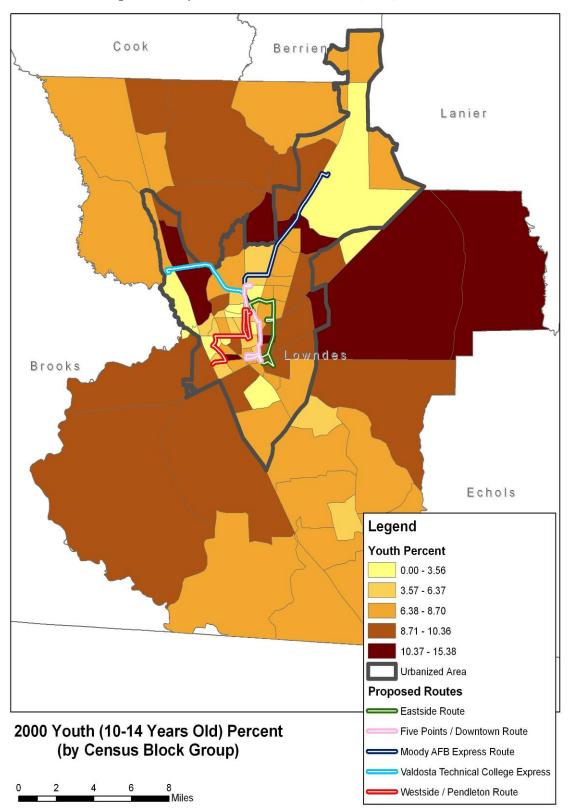




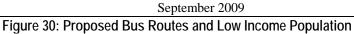
Cook Berrier Lanier Brooks Echols Legend Senior Percent **Proposed Routes** 0.00 - 4.46 Eastside Route C 4.47 - 8.31 Five Points / Downtown Route **2000 Senior Population Percent** 8.32 - 11.42 Moody AFB Express Route C (Over 65 Years Old) 11.43 - 17.46 Valdosta Technical College Express (by Census Block Group) 17.47 - 31.86 Westside / Pendleton Route 8 Miles 6 Urbanized Area

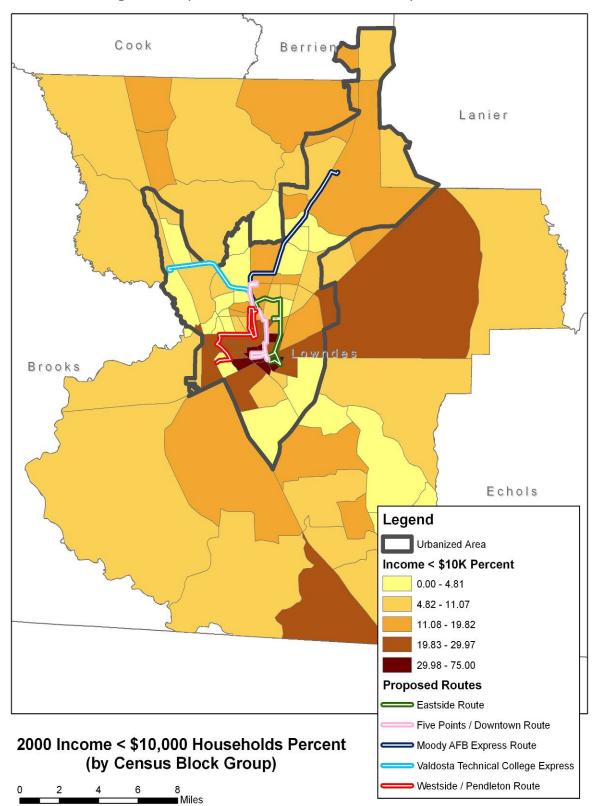
Figure 28: Proposed Bus Routes and Senior Population





Tran Systems







Street-Ready Operating Plan

The Street-Ready Operating Plan consists of sufficient detail to allow for actual implementation of the services. To develop these elements, additional fieldwork was conducted to refine the routings as requested by the Steering Committee, establish the running times for the buses, and identify recommended bus stop locations. The components of the Street-Ready Operating Plan are:

- Passenger amenities
 - Shelters, benches, information devices
- Schedules (Weekday and Saturday)
- Bus stop locations
- Detailed routing
- Vehicles
- Operating facility

8.1 Passenger Amenities

There are three types of amenities: passenger waiting shelters, benches, and information devices. The purpose of these amenities is to make the experience of using the bus service "user friendly". Bus stops with shelter and benches increase the comfort of waiting for the bus. Information devices such as kiosks and information signposts give the rider knowledge in how and where to use the system making the experience less intimidating.

Shelters and Benches

Shelters come in a variety of sizes and designs. Shelters can range from simple pre-fabrication units (Figure 31) to more custom built units (Figure 32). All shelters require concrete or other hard surfaces. A hard surface from the shelter to the curb and from the shelter to a sidewalk is also recommended.

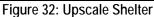


Figure 31: Basic Shelter



Transit Development and Implementation Plan for the Valdosta Urbanized Area: Service Plan

September 2009





Shelters are commonly placed at bus stops with high levels of passengers getting on and off the bus or at locations where passengers are transferring between routes. Possible shelter and bench locations include:

- Valdosta Technical College
- South Georgia Medical Center
- Valdosta State University
- Wal-Mart
- Valdosta Mall
- Valdosta City Hall
- Department of Labor
- Hudson Docket Homes
- Ora Lee West Homes
- Blanton Commons

In some nicer climates, such as Valdosta, some agencies may chose to install only benches at some bus stops. A concrete pad is also required for a bench.

Information Devices

Ideally, a bus stop sign should be placed at each stop. Bus stop signs are important since they are the "on the street" marketing tool for the service and often the first point of contact for the public. Bus stop signs can range from a simple sign that only identifies the spot as a bus stop (Figure 33) to signs that relay additional information about the service: transit system name, transit system logo, information phone number, website, route number, route name, destination, and/or service information (days of operation, span of service, frequency) (Figure 34).





Figure 33: Basic Bus Stop Sign

Figure 34: Bus Stop Sign with Information

Some transit agencies chose to install supplemental information holders at bus stops that provide additional information, including trip times, fare, area map, route map, service span, website, hotline number, and trip planner information. See Figure 35.



Figure 35: Supplemental Information Signs

8.2 Schedules

The operating schedules show each scheduled trip as well as time points along the trip. A time point is a location used by drivers and riders to estimate the arrival of the bus at any point along the route. It is not the only point where the bus can stop. All routes except for the Westside and Valdosta Technical College routes operate once an hour. The Westside route operates every 30 minutes and the Valdosta Technical College route is timed to the class schedule. Weekday and Saturday schedules appear in Appendix A.

8.3 Recommended Bus Stop Locations

It is important to consider the spacing between stops when determining bus stop locations. If stops are spaced too far apart, passengers will have a longer walk to the bus stop, which can discourage use. If stops are spaced too close together, the frequent stops may cause the bus to operate slowly and affect on-time performance. In general, it is recommended that stops be placed at two-tenths of a mile interval.

In addition to having established bus stops, many transit agencies allow flag stops. A flag stop is where the bus operator will stop the bus at an intersection where it is safe to do so upon notice from the passenger.

Transit Development and Implementation Plan for the Valdosta Urbanized Area: Service Plan

September 2009

Considering the lack of sidewalks in portions of Valdosta, allowing flag stops will likely make the service easier to use. Flag stops could be established along any street where the speed limit is 35 mph or less. Appendix B outlines the recommended bus stop locations for the Valdosta Urbanized Area proposed transit system.

8.4 Detailed Routing

Routing for each of the five fixed route services are described in Section 5. Additionally, Appendix C contains 'turn-by-turn' descriptions of the routes.

8.5 Vehicles

Having the right vehicle that fits both the character of Valdosta and the level of predicted ridership is important to a successful implementation. There are two types of vehicles that are recommended:

- Body on Chassis Vehicle
- Medium Duty Trolley

8.5.1 Body on Chassis Vehicle

A body on chassis vehicle is where the passenger component is mounted on a truck frame that only contains the driver controls, drive-train, and rolling stock. These are often referred to as cutaways. Many smaller urban systems start with using a cutaway. Smaller models are appropriate for ADA paratransit service. These vehicles often seat between 16 and 18 passengers plus two wheelchairs. Handholds for standees can be installed.



Figure 36: Body on Chassis Vehicle

<u>Advantages</u>

- Size fits projected initial ridership levels in Valdosta
- Very maneuverable can operate anywhere
- Very affordable approximately \$80,000
- Lowest annual maintenance expense approximately \$5,000 6,000 per year per vehicle
- Few specialty parts allow maintenance to be performed easier

<u>Disadvantages</u>

- Shorter life-span only 5 7 years
- As fixed route ridership grows, small vehicles may not be able to accommodate peak ridership



8.5.2 Medium Duty Trolley

These vehicles are often built on a truck frame and may have the engine in front or rear. The new buses owned by Valdosta State University are an example of a Medium Duty Trolley. These vehicles often seat between 22 and 27 passengers plus two wheelchairs with room for standees.



Figure 37: Medium Duty Bus

<u>Advantages</u>

- Able to accommodate initial ridership levels and future growth in Valdosta
- Same style as the vehicles used on Valdosta State University's shuttles. There may be opportunities for synergies related to vehicle maintenance.
- Longer life-span 10 years

Disadvantages

- More expensive approximately \$140,000 \$180,000
- Higher annual maintenance expense approximately \$15,000 \$20,000 per year per vehicle

8.5 Potential Transit Center Locations

It is recommended that the transit center be located along Pendleton Drive. This location is situated between major north / south streets (Ashley and Patterson) and is in close proximity to major generators (VSU North Campus and South Georgia Regional Medical Center). Three potential locations for a transit center along Pendleton Drive have been identified by the consultant team (Figure 38: Potential Transit Center Locations). The City has indicated that it will also identify available properties in the Pendleton Drive area.

- 1. The first potential location is using the horseshoe shaped driveway at VSU's North Campus. This allows buses to park-off street without building a new facility. However, all the buses may not fit along one section of the driveway and there are concerns that the driveway may become congested.
- 2. The second potential location is using an on-street center. Many small urban systems use an onstreet center since the capital costs are lower than building a new facility. Only minor upgrades such as widening sidewalks and the installation of shelters are required. This would require the elimination of parking along a portion of the street.
- 3. The third potential location is a new facility could be constructed next to the horse driveway and parking lot on VSU's property. This would require cooperation between VSU and the transit

operator. This could be a joint facility for the public transit service and university shuttle service, which would be a step towards integrating the services. Federal funds could be used for the construction of the facility with University providing the local match. The university would benefit from having its driveways and parking facilities upgraded as part of the project, while the public transit would benefit from having an off-street facility with upgraded facilities for its passengers.

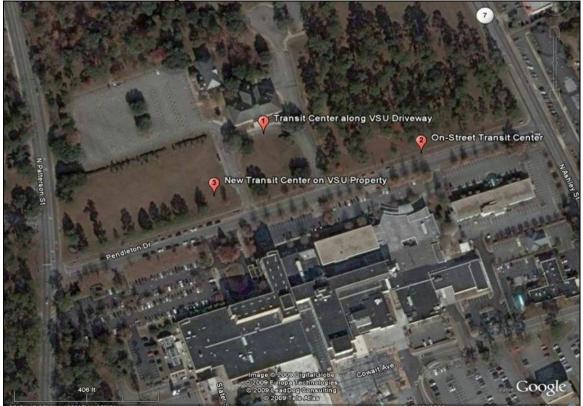


Figure 38: Potential Transit Center Locations

8.6 Operating Facility

This section describes the generalized requirements for an operating facility should the agency wish to operate services itself, supply a vendor with a facility or use this as basis for evaluating the adequacy of facilities proposed by prospective operators. An operating facility would include:

- Storage and maintenance of revenue vehicles
- Provide a location for dispatch and general offices for the operation
- Provide a location to train new drivers

Figure 39 shows an ideal site layout for a transit facility. To accommodate 15 vehicles, about two to four acres of space would be required. This operating facility would not only accommodate the proposed transit system operations, but also future expansions as the system matures and evolves. The combination of the administration/maintenance building and covered storage of vehicles would consist of about 13,000 square feet.

The Steering Committee has selected a "turn-key" operating model for transit service in Valdosta. Typically, in a "turn-key" scenario the private operate provides a facility for dispatching, maintenance, management, etc. The City of Valdosta has expressed an interest in having the transit operations co-located at one of its

Transit Development and Implementation Plan for the Valdosta Urbanized Area: Service Plan

September 2009

maintenance facilities. Prior to making a decision about locating maintenance with other city garage functions, it is recommended that advantages and disadvantages of co-location be explored in detail. There are many transit departments of city governments who opt for a dedicated/exclusive maintenance facility to guarantee priority of repairs to their vehicles. The blended maintenance can work, however structuring arrangements to ensure transit vehicle availability is essential. The following provides guidance on how much space would be required for the recommended Pendleton option.

| Main Building (offices and maintenance) | 4,000 Square Feet |
|---|-------------------|
| Fueling Facility | 2,100 Square Feet |
| Bus Storage Canopy | 6,000 Square Feet |
| Staff Parking – surface | 3,000 Square Feet |







Route 1: Westside Route - Weekday

| Westbound | | | Eastbound | | | | |
|-----------|------------|----------|-----------|----------|----------|------------|-----------|
| Pendleton | Valdosta | | | | | Valdosta | Pendleton |
| Transit | State | Colonial | | | Colonial | State | Transit |
| Center | University | Mall | Wal-Mart | Wal-Mart | Mall | University | Center |
| 6:00am | 6:07am | 6:15am | 6:27am | 6:30am | 6:42am | 6:50am | 6:57am |
| 7:00am | 7:07am | 7:15am | 7:27am | 7:30am | 7:42am | 7:50am | 7:57am |
| 8:00am | 8:07am | 8:15am | 8:27am | 8:30am | 8:42am | 8:50am | 8:57am |
| 8:30am | 8:37am | 8:45am | 8:57am | 9:00am | 9:12am | 9:20am | 9:27am |
| 9:00am | 9:07am | 9:15am | 9:27am | 9:30am | 9:42am | 9:50am | 9:57am |
| 9:30am | 9:37am | 9:45am | 9:57am | 10:00am | 10:12am | 10:20am | 10:27am |
| 10:00am | 10:07am | 10:15am | 10:27am | 10:30am | 10:42am | 10:50am | 10:57am |
| 10:30am | 10:37am | 10:45am | 10:57am | 11:00am | 11:12am | 11:20am | 11:27am |
| 11:00am | 11:07am | 11:15am | 11:27am | 11:30am | 11:42am | 11:50am | 11:57am |
| 11:30am | 11:37am | 11:45am | 11:57am | 12:00pm | 12:12pm | 12:20pm | 12:27pm |
| 12:00pm | 12:07pm | 12:15pm | 12:27pm | 12:30pm | 12:42pm | 12:50pm | 12:57pm |
| 12:30pm | 12:37pm | 12:45pm | 12:57pm | 1:00pm | 1:12pm | 1:20pm | 1:27pm |
| 1:00pm | 1:07pm | 1:15pm | 1:27pm | 1:30pm | 1:42pm | 1:50pm | 1:57pm |
| 1:30pm | 1:37pm | 1:45pm | 1:57pm | 2:00pm | 2:12pm | 2:20pm | 2:27pm |
| 2:00pm | 2:07pm | 2:15pm | 2:27pm | 2:30pm | 2:42pm | 2:50pm | 2:57pm |
| 2:30pm | 2:37pm | 2:45pm | 2:57pm | 3:00pm | 3:12pm | 3:20pm | 3:27pm |
| 3:00pm | 3:07pm | 3:15pm | 3:27pm | 3:30pm | 3:42pm | 3:50pm | 3:57pm |
| 3:30pm | 3:37pm | 3:45pm | 3:57pm | 4:00pm | 4:12pm | 4:20pm | 4:27pm |
| 4:00pm | 4:07pm | 4:15pm | 4:27pm | 4:30pm | 4:42pm | 4:50pm | 4:57pm |
| 4:30pm | 4:37pm | 4:45pm | 4:57pm | 5:00pm | 5:12pm | 5:20pm | 5:27pm |
| 5:00pm | 5:07pm | 5:15pm | 5:27pm | 5:30pm | 5:42pm | 5:50pm | 5:57pm |
| 5:30pm | 5:37pm | 5:45pm | 5:57pm | 6:00pm | 6:12pm | 6:20pm | 6:27pm |
| 6:00pm | 6:07pm | 6:15pm | 6:27pm | 6:30pm | 6:42pm | 6:50pm | 6:57pm |
| 7:00pm | 7:07pm | 7:15pm | 7:27pm | 7:30pm | 7:42pm | 7:50pm | 7:57pm |
| 8:00pm | 8:07pm | 8:15pm | 8:27pm | 8:30pm | 8:42pm | 8:50pm | 8:57pm |
| 9:00pm | 9:07pm | 8:15pm | 9:27pm | 9:30pm | 9:42pm | 9:50pm | 9:57pm |

Transit Development and Implementation Plan for the Valdosta Urbanized Area: Service Plan

September 2009

| Notie 1. Westside Notie - Saturday | | | | | | | | | |
|------------------------------------|------------|----------|----------|--|-----------|----------|------------|-----------|--|
| Westbound | | | | | Eastbound | | | | |
| Pendleton | Valdosta | | | | | | Valdosta | Pendleton | |
| Transit | State | Colonial | | | | Colonial | State | Transit | |
| Center | University | Mall | Wal-Mart | | Wal-Mart | Mall | University | Center | |
| 8:00am | 8:07am | 8:15am | 8:27am | | 8:30am | 8:42am | 8:50am | 8:57am | |
| 9:00am | 9:07am | 9:15am | 9:27am | | 9:30am | 9:42am | 9:50am | 9:57am | |
| 10:00am | 10:07am | 10:15am | 10:27am | | 10:30am | 10:42am | 10:50am | 10:57am | |
| 11:00am | 11:07am | 11:15am | 11:27am | | 11:30am | 11:42am | 11:50am | 11:57am | |
| 12:00pm | 12:07pm | 12:15pm | 12:27pm | | 12:30pm | 12:42pm | 12:50pm | 12:57pm | |
| 1:00pm | 1:07pm | 1:15pm | 1:27pm | | 1:30pm | 1:42pm | 1:50pm | 1:57pm | |
| 2:00pm | 2:07pm | 2:15pm | 2:27pm | | 2:30pm | 2:42pm | 2:50pm | 2:57pm | |
| 3:00pm | 3:07pm | 3:15pm | 3:27pm | | 3:30pm | 3:42pm | 3:50pm | 3:57pm | |
| 4:00pm | 4:07pm | 4:15pm | 4:27pm | | 4:30pm | 4:42pm | 4:50pm | 4:57pm | |
| 5:00pm | 5:07pm | 5:15pm | 5:27pm | | 5:30pm | 5:42pm | 5:50pm | 5:57pm | |
| 6:00pm | 6:07pm | 6:15pm | 6:27pm | | 6:30pm | 6:42pm | 6:50pm | 6:57pm | |

Route 2: Five Points/Downtown Route – Weekday

| | Pendleton | | | | | | Pendleton | |
|---------|-----------|---------|---------|----------|----------|---------|-----------|---------|
| | Transit | | West & | Dept. of | Dept. of | | Transit | |
| Wal- | Center | Ora Lee | River | Labor | Labor | Ora Lee | Center | Wal- |
| Mart | | | | | | | | Mart |
| - | 6:00am | 6:09am | 6:18am | 6:24am | 6:29am | 6:35am | 6:44am | 6:52am |
| 6:52am | 7:00am | 7:09am | 7:18am | 7:24am | 7:29am | 7:35am | 7:44am | 7:52am |
| 7:52am | 8:00am | 8:09am | 8:18am | 8:24am | 8:29am | 8:35am | 8:44am | 8:52am |
| 8:52am | 9:00am | 9:09am | 9:18am | 9:24am | 9:29am | 9:35am | 9:44am | 9:52am |
| 9:52am | 10:00am | 10:09am | 10:18am | 10:24am | 10:29am | 10:35am | 10:44am | 10:52am |
| 10:52am | 11:00am | 11:09am | 11:18am | 11:24am | 11:29am | 11:35am | 11:44am | 11:52am |
| 11:52am | 12:00pm | 12:09pm | 12:18pm | 12:24pm | 12:29pm | 12:35pm | 12:44pm | 12:52pm |
| 12:52pm | 1:00pm | 1:09pm | 1:18pm | 1:24pm | 1:29pm | 1:35pm | 1:44pm | 1:52pm |
| 1:52pm | 2:00pm | 2:09pm | 2:18pm | 2:24pm | 2:29pm | 2:35pm | 2:44pm | 2:52pm |
| 2:52pm | 3:00pm | 3:09pm | 3:18pm | 3:24pm | 3:29pm | 3:35pm | 3:44pm | 3:52pm |
| 3:32pm | 4:00pm | 4:09pm | 4:18pm | 4:24pm | 4:29pm | 4:35pm | 4:44pm | 4:52pm |
| 4:52pm | 5:00pm | 5:09pm | 5:18pm | 5:24pm | 5:29pm | 5:35pm | 5:44pm | 5:52pm |
| 5:52pm | 6:00pm | 6:09pm | 6:18pm | 6:24pm | 6:29pm | 6:35pm | 6:44pm | 6:52pm |
| 6:52pm | 7:00pm | - | - | - | - | - | - | - |

Route 2: Five Points/Downtown Route – Saturday



Transit Development and Implementation Plan for the Valdosta Urbanized Area: Service Plan

| Service Pl | an | izeu / iieu. | | Septem | ber 2 | 2009 | | | |
|--------------|--------------------------------|--------------|-----------------|-------------------|-------|-------------------|---------|--------------------------------|--------------|
| Wal- Mart | Pendleton Transit Center | Ora Lee | West & River | Dept. of Labor | | Dept. of Labor | Ora Lee | Pendleton Transit Center | Wal- Mart |
| - | 8:00am | 8:09am | 8:18am | 8:24am | | 8:29am | 8:35am | 8:44am | 8:52am |
| 8:52am | 9:00am | 9:09am | 9:18am | 9:24am | | 9:29am | 9:35am | 9:44am | 9:52am |
| 9:52am | 10:00am | 10:09am | 10:18am | 10:24am | | 10:29am | 10:35am | 10:44am | 10:52am |
| 10:52am | 11:00am | 11:09am | 11:18am | 11:24am | | 11:29am | 11:35am | 11:44am | 11:52am |
| 11:52am | 12:00pm | 12:09pm | 12:18pm | 12:24pm | | 12:29pm | 12:35pm | 12:44pm | 12:52pm |
| 12:52pm | 1:00pm | 1:09pm | 1:18pm | 1:24pm | | 1:29pm | 1:35pm | 1:44pm | 1:52pm |
| 1:52pm | 2:00pm | 2:09pm | 2:18pm | 2:24pm | | 2:29pm | 2:35pm | 2:44pm | 2:52pm |
| 2:52pm | 3:00pm | 3:09pm | 3:18pm | 3:24pm | | 3:29pm | 3:35pm | 3:44pm | 3:52pm |
| 3:32pm | 4:00pm | 4:09pm | 4:18pm | 4:24pm | | 4:29pm | 4:35pm | 4:44pm | 4:52pm |
| 4:52pm | 5:00pm | 5:09pm | 5:18pm | 5:24pm | | 5:29pm | 5:35pm | 5:44pm | 5:52pm |
| 5:52pm | 6:00pm | 6:09pm | 6:18pm | 6:24pm | | 6:29pm | 6:35pm | 6:44pm | 6:52pm |
| 6:52pm | 7:00pm | - | - | - | | - | - | - | - |

Route 3: Eastside Route – Weekday

| | East | bound | | | Westbound | |
|-----------|---------|---------|------------|------------|-----------|-----------|
| Pendleton | | | | | | Pendleton |
| Transit | Senior | Hudson | Department | Department | Senior | Transit |
| Center | Center | Dockett | of Labor | of Labor | Center | Center |
| 6:00am | 6:12am | 6:22am | 6:28am | 6:30am | 6:42am | 6:54am |
| 7:00am | 7:12am | 7:22am | 7:28am | 7:30am | 7:42am | 7:54am |
| 8:00am | 8:12am | 8:22am | 8:28am | 8:30am | 8:42am | 8:54am |
| 9:00am | 9:12am | 9:22am | 9:28am | 9:30am | 9:42am | 9:54am |
| 10:00am | 10:12am | 10:22am | 10:28am | 10:30am | 10:42am | 10:54am |
| 11:00am | 11:12am | 11:22am | 11:28am | 11:30am | 11:42am | 11:54am |
| 12:00pm | 12:12pm | 12:22pm | 12:28pm | 12:30pm | 12:42pm | 12:54pm |
| 1:00pm | 1:12pm | 1:22pm | 1:28pm | 1:30pm | 1:42pm | 1:54pm |
| 2:00pm | 2:12pm | 2:22pm | 2:28pm | 2:30pm | 2:42pm | 2:54pm |
| 3:00pm | 3:12pm | 3:22pm | 3:28pm | 3:30pm | 3:42pm | 3:54pm |
| 4:00pm | 4:12pm | 4:22pm | 4:28pm | 4:30pm | 4:42pm | 4:54pm |
| 5:00pm | 5:12pm | 5:22pm | 5:28pm | 5:30pm | 5:42pm | 5:54pm |
| 6:00pm | 6:12pm | 6:22pm | 6:28pm | 6:30pm | 6:42pm | 6:54pm |

Route 3: Eastside Route – Saturday

Transit Development and Implementation Plan for the Valdosta Urbanized Area: Service Plan

| Service Plan | | a mea. | Septe | ember 2009 |) | | |
|--------------|---------|---------|------------|------------|------------|---------|-----------|
| | East | bound | | | | | |
| Pendleton | | | | | | | Pendleton |
| Transit | Senior | Hudson | Department | | Department | Senior | Transit |
| Center | Center | Dockett | of Labor | | of Labor | Center | Center |
| 8:00am | 8:12am | 8:22am | 8:28am | | 8:30am | 8:42am | 8:54am |
| 9:00am | 9:12am | 9:22am | 9:28am | | 9:30am | 9:42am | 9:54am |
| 10:00am | 10:12am | 10:22am | 10:28am | | 10:30am | 10:42am | 10:54am |
| 11:00am | 11:12am | 11:22am | 11:28am | | 11:30am | 11:42am | 11:54am |
| 12:00pm | 12:12pm | 12:22pm | 12:28pm | | 12:30pm | 12:42pm | 12:54pm |
| 1:00pm | 1:12pm | 1:22pm | 1:28pm | | 1:30pm | 1:42pm | 1:54pm |
| 2:00pm | 2:12pm | 2:22pm | 2:28pm | | 2:30pm | 2:42pm | 2:54pm |
| 3:00pm | 3:12pm | 3:22pm | 3:28pm | | 3:30pm | 3:42pm | 3:54pm |
| 4:00pm | 4:12pm | 4:22pm | 4:28pm | | 4:30pm | 4:42pm | 4:54pm |
| 5:00pm | 5:12pm | 5:22pm | 5:28pm | | 5:30pm | 5:42pm | 5:54pm |
| 6:00pm | 6:12pm | 6:22pm | 6:28pm | | 6:30pm | 6:42pm | 6:54pm |

Route 4: Pendleton AFB Express – Weekday

| | Northbound | | | Southbound | |
|-----------|------------|-----------|-----------|------------|-----------|
| Pendleton | Georgia | Moody | Moody | Georgia | Pendleton |
| Transit | Military | Air Force | Air Force | Military | Transit |
| Center | Academy | Base | Base | Academy | Center |
| 6:30am | 6:40am | 6:55am | 7:00am | 7:15am | 7:25am |
| 7:30am | 7:40am | 7:55pm | 8:00 | 8:15am | 8:25am |
| 4:00pm | 4:40pm | 4:55pm | 4:30pm | 4:45pm | 4:55pm |
| 5:00pm | 5:40pm | 5:55pm | 5:30pm | 5:45pm | 5:55pm |

Route 5: Valdosta Tech Express – Weekday

| | Northbound | • | | Southbound | |
|-----------|------------|-----------|-----------|------------|-----------|
| Pendleton | Smith | Valdosta | Valdosta | Smith | Pendleton |
| Transit | Northview | Technical | Technical | Northview | Transit |
| Center | Hospital | College | College | Hospital | Center |
| 7:00am | 7:12am | 7:20am | - | - | - |
| 12:00pm | 12:12pm | 12:20pm | 12:30pm | 12:38pm | 12:50pm |
| 3:00pm | 3:12pm | 3:20pm | 3:30pm | 3:38pm | 3:50pm |
| 6:00pm | 6:12pm | 6:20pm | 6:30pm | 6:38pm | 6:50pm |
| | | | 10:30pm | 10:38pm | 10:50pm |



Appendix B – Bus Stops

Westside Route Westbound Pendleton Transit Center Patterson/Woodward Wilson Patterson/Park Patterson/Alden Patterson/Georgia Patterson/VSU Entrance Patterson/Brookwood Brookwood/Toombs Brookwood/Oak St. Oak St./Baytree Baytree/Azalea Baytree/Sustella Baytree/Mirimar Baytree/Jerry Jones Dr Baytree/Gordon Baytree/Sherwood Colonial Mall (entrance near Sears) St. Agustine/Norman St. Augustine/Hickory St. Augustine/Harmon St. Augustine/Lankford St. Augustine/Myrtle St. Augustine/River River/Nan **River/Enterprise** Wal-Mart

Eastbound Wal-Mart River/Enterprise River/Nan River/St. Augustine St. Augustine/Laura St. Augustine/Lankford St. Augustine/ Harmon St. Augustine/ Hickory St. Augustine/Norman Entrance to Promenade Plaza Entrance to Target Colonial Mall (entrance near Sears) Norman/Baytree Baytree/Sherwood Baytree/Gordon Baytree/Myrtle Baytree/Melody Baytree/Miramar Baytree/Sustella Baytree/Azalea Baytree/Oak Oak/VSU Shelter Oak/Georgia Oak/Alden Oak/Park Oak/Gornto Oak/Burton Burton (Mid-Block) Pendleton Transit Center

Italicized stops are on private property



Transit Development and Implementation Plan for the Valdosta Urbanized Area: Service Plan Five Points / Downtown

September 2009

<u>Southbound</u>

Wal-Mart Oak/Murray Winn Dixie Patterson/Northside Pendleton Transit Center Pendleton/Ashley Ashley/Cowart Ashley/Woodward Wilson Ashley/Rosedale Ashley/Park Park/Lee Lee/Moore Lee/Valloton IGA (at crosswalk) Lee/Ann Lee/Gordon Gordon/Ashley Ashley/Webster Ashley/Magnolia Magnolia/Toombs Magnolia/Oak St. Magnolia/York Magnolia/West West/River **River/Wells** River/Oak River/Toombs River/Patterson Patterson/Central Patterson/Hill County Health Department Department of Labor

Italicized stops are on private property

Northbound Department of Labor Ashley/Hill Ashley/Central Ashley/Valley Ashley/Magnolia Ashley/Webster Ashley/Gordon Gordon/Marion Gordon/Lee Lee/Ann IGA (at Crosswalk) Lee/Valloton Lee/Moore Lee/Park Park/Ashley Ashley/Bemiss Ashley/Woodward Wilson Ashley/Cowart Pendleton Transit Center Patterson/Northside Winn Dixie Oak/Murray Wal-Mart

| Service Plan | September 2009 |
|-------------------------------|--------------------------|
| Eastside Route | |
| Eastbound | Westbound |
| Pendleton Transit Center | Department of Labor |
| Pendleton/Ashley | Ashley/Hill |
| Ashley/Emory | Hill/Troupe |
| Ashley/Northside | Hill/Central |
| Northside Plaza (401) | Forrest/Rogers |
| Northside/Bemiss | Forrest/Cypress |
| Northside/Willacoochee | Forrest/Gordon |
| Northside/Melrose | Forrest/Judy |
| Northside/Deborah | Forrest/Brookwood |
| Northside/Forrest | Forrest/Woodlawn |
| Forrest/Pomona | Forrest/Ricardo |
| Forrest/Pineview | Forrest/Park |
| Forrest/Lexington | Senior Center |
| Forrest/Park | Lakeland/Deborah |
| Senior Center | Lakeland/Forrest |
| Lakeland/Deborah | Forrest/Lexington |
| Forrest/Ricardo | Forrest/Leone |
| Forrest/Woodlawn | Forrest/Pineview |
| Forrest/Broowood | Forrest/Euclid |
| Forrest/Judy | Forrest/Northside |
| Forrest/Gordon | Northside/Deborah |
| Forrest/Cypress | Northside/Melrose |
| Forrest/Rogers | Northside/Willacoochee |
| Fry/Hill | Northside/Bemis |
| Fry/Martin Luther King | Northside Mid-Block |
| Hudson Dockett Homes (at Way) | Northside/Ashley |
| Fry/Lake Park | Pendleton Transit Center |
| Lake Park/Way | |
| Lake Park/Martin Luther King | |
| Martin Luther King/Lee | |
| Martin Luther King/Ashley | |
| Department of Labor | |

Italicized stops are on private property

Tran Systems

Moody Air Force Base Express Northbound Pendleton Transit Center Ashley/Emory Ashley/Northside Ashley/Cornell Oak/Murray Oak Street Extension/Three Oaks Oak Street Extension/Oak Drive Oak Street Extension/Bemiss Oak Street Extension/Forrest Street Extension (Georgia Military College) Bemiss/Skipper Bridge **Bemiss/Guest Road** Bemiss/Mulligan Bemiss/Ashurst Bemiss/Wvnfield Bemiss/Old Bemiss Bemiss/North Ridge Bemiss/Davidson Moody AFB (location to be determined

Italicized stops are on private property

Valdosta Tech Express <u>Northbound</u> Pendleton Patterson/Northside Five Corners Valdosta/Country Club Drive Valdosta/Val Del Valdosta/Old Highway 41 *Smith Northview Hospital Valdosta Technical College*

Italicized stops are on private property

Southbound Moody AFB (location to be determined) Bemiss/Davidson Bemiss/North Ridge Bemiss/Old Bemiss Bemiss/Cat Creek Bemiss/Wynfield Bemiss/Mulligan Bemiss/Guest Road Bemiss/Skipper Bridge Oak Street Extension/Forrest Street Extension (Georgia Military College) Oak Street Extension/Bemiss Oak Street Extension/Oak Drive Oak/Murray Ashley/Cornell Ashley/Northside Pendleton Transit Center

Southbound Valdosta Technical College Smith Northview Hospital Valdosta/Old Highway 41 Valdosta/Val Del Valdosta/Country Club Drive Five Corners Patterson/Northside Pendleton

Appendix C – "Turn-by-Turn"

Westside Route <u>Eastbound</u> Start at Wal-Mart (north side of store facing east) Left on Wal-Mart roadway Right on River Road Left on St. Augustine Road Right on Norman Road – Left into Valdosta Mall (at stoplight) Follow Valdosta Mall roadway to entrance near Sears Left on Norman Road Right on Baytree Road Left on Oak Street Right on Burton Street Right on Patterson Street Left on Pendleton Drive to transit center

One way miles = 6.0 miles

Westbound Start at the transit center Pendleton Drive to Patterson Street **Right on Patterson Street** Right on Brookwood Drive Right on Oak Street Left on Baytree Road Left on Norman Road Right into Valdosta Mall (at stoplight) -Follow Valdosta Mall roadway to entrance near Sears Right on Norman Road Left on St. Augustine Road Right on River Road Enter Wal-Mart at far west entrance (truck delivery entrance) Left on Wal-Mart roadway End at Wal-Mart

One way mileage = 6.0 miles

Transit Development and Implementation Plan for the Valdosta Urbanized Area: Service Plan Five Points/Downtown Route Southbound Start on Wal-Mart roadway Left on Brookfield Road Right on Inner Perimeter Road Left on Oak Street Enter Winn Dixie Loop counterclockwise through lot to exit onto Ashley Street **Right on Ashley Street** Right on Patterson Street Left on Pendleton Drive to transit center Pendleton **Right on Ashley Street** Left on Park Avenue Right on Lee Street Right on Gordon Street Left on Ashley Street Right on Magnolia Street Left on West Street Left on River Street Slight left on Valley Street Right on Patterson Street Left on North Underpass Road Left Ashley Street End at Department of Labor

One way mileage = 6.7 miles

Northbound

Start at Department of Labor Via Ashley Street Right on Gordon Street Left on Lee Street Left on Park Avenue **Right on Ashley Street** Left on Pendleton Drive to transit center Via Pendleton Drive Patterson Street Left on Smithbriar Drive Right into Winn Dixie Exit straight onto Oak Street Right into Wal-Mart Follow Wal-Mart Roadway End at Wal-Mart.

One way mileage = 4.6 miles



September 2009

Transit Development and Implementation Plan for the Valdosta Urbanized Area: Service Plan Eastside Route Eastbound Start at the transit center Via Ashley Street Right on Northside Drive Right on Forrest Street Right on Park Avenue Right into Senior Center Right on Lakeland Avenue Right on Forrest Street Slight Left on Fry Street Right on Lake Park Road Left on Martin Luther King Jr. Drive **Right on Ashley Street** End at Department of Labor

One way mileage = 6.6 miles

Westbound

Start at Department of Labor Via Ashley Street Right on Hill Avenue Left on Forrest Street Left on Park Avenue Right into Senior Center Right on Lakeland Avenue Left on Forrest Street Left on Northside Drive Left on Ashley Right on Pendleton End at transit center

One way mileage = 5.5 miles





Transit Development and Implementation Plan for the Valdosta Urbanized Area: Service Plan Moody AFB Express <u>Northbound</u> Start at the transit center Via Pendleton Left on Ashley Street Right on Oak Street Right on Oak Street Extension Left on Forrest Street Extension Right on Bemiss Road Right at entrance of Moody AFB. One way Mileage = 10.1 miles

Southbound Start at Moody AFB Left on Bemiss Left on Forrest Street Extension Right on Oak Street Extension Left on Oak Street Left on Ashley Left on Pendleton End at transit center

One way mileage = 10.2 miles

September 2009

Transit Development and Implementation Plan for the Valdosta Urbanized Area: Service Plan Valdosta Technical College Express <u>Northbound</u>

September 2009

Valdosta Technical College Express Northbound Start at the transit center Via Pendleton Left on Ashley Street Continue on Valdosta Road Right into Smith Northview Hospital Turn around at entrance Right on Valdosta Road Left on Valdosta Technical Road Right at North Entrance Follow roadway Turn around in lot

One way mileage = 6.6 miles

Southbound Follow roadway Left on Valdosta Technical Road Right on Valdosta Road Left into Smith Northview Hospital Turn around at entrance Left on Valdosta Road Continue on Ashley Street Right on Pendleton Road End at Transit Center

One way mileage = 6.6 miles







1349 West Peachtree St, N.E. Suite 1290 Atlanta, GA 30309

> 404-577-6300 | O. 404-577-6310 | F.