APPENDIX A:

Transit Development Plan

2020

Transit Development Plan

Capital Region Transportation Planning Agency

A-2

April 2011

Contents

1.0 Introduction

The Transit Development Plan (TDP), required by the Florida Department of Transportation (FDOT), provides a 10-year guide and planning tool for the transit agency to provide consumers with the most effective and efficient transit service. The TDP process includes a major update accomplished every five years, as well as annual updates to address changing conditions. This major update was conducted as part of the Regional Mobility Plan (RMP) for the Tallahassee region, an update of the Long Range Transportation Plan. This coordinated effort resulted in the inclusion of TDP strategies in the RMP Cost Feasible Plan and consideration of regional strategies into the TDP process. Through coordination with the RMP, the TDP planning effort also included an extended horizon year beyond the required ten years. The TDP also benefited from an extensive public involvement campaign as part of the RMP.

In 2007, Rule 14-73.001 was established by FDOT which updated the specific requirements for the TDP. The following list details those requirements and includes the indication of whether each requirement is met within this TDP.

- √ Public Involvement Plan (PIP) Drafted
- √ PIP approved by FDOT
- √ TDP includes description of public involvement process
- √ Provide notification to FDOT
- √ Provide notification to Regional Workforce Board
- √ Provide notification to MPO

- √ Land Use
- √ State and local transportation plans
- √ Other governmental actions and policies
- √ Socioeconomic trends
- √ Organizational issues
- √ Technology
- √ 10-Year annual projections of transit ridership using approved model
- √ Do land uses and urban design patterns support/hinder transit service provision
- √ Calculate farebox recovery

- √ Provider's vision
- √ Provider's mission
- √ Provider's goals
- √ Provider's objectives

- √ Develop and evaluate alternative strategies and actions
- √ Benefits and costs of each alternative
- √ Financial alternative examined

- √ 10-year implementation program
- √ Maps indicating areas to be served
- √ Maps indicating types and levels of service
- √ Monitoring program to track performance measures
- √ 10-Year financial plan listing oeprating and capital expenses
- √ Capital acquistion of construction schedule
- √ Anticipated revenues by sources

- √ TDP shall be consistent with Florida Transportation Plan
- √ TDP shall be consistent with Local Government Comprehensive Plan
- √ TDP shall be consistent with MPO Long Range Transportation Plan
- √ TDP shall be consistent with regional transportation goals and objectives

2.0 Public Involvement Process

The most effective transportation plans are driven by the needs and input of the community, and have broad buy-in by all segments of the population. Throughout the development of the Transit Development Plan and the associated Regional Mobility Plan for the CRTPA region, public involvement and stakeholder outreach played a significant role. The study team consulted extensively with local stakeholders and members of the general public during the development of the Plan. The following sections discuss the public outreach activities as well as the results of these efforts.

2.1 CRTPA Public Involvement Process Plan

Much of the public involvement for this Transit Development Plan has been completed as part of the *Regional Mobility Plan* process, which is consistent with the CRTPA Public Involvement Process Plan (PIPP). The CRTPA has developed this PIPP to aid in effective communication and education with the public. It sets the framework for obtaining citizen participation throughout the CRTPA's transportation planning activities, so that citizens can be informed about ongoing planning efforts and their voices can be heard throughout the process. It is crucial not only to notify people about the planning process, but also incorporate their opinions and understandings of regional transportation needs. This manual is used so a consistent public outreach approach is used for all of CRTPA's activities, including the *Regional Mobility Plan*, and so this public outreach can be effectively recorded to meet federal guidelines. In addition to citizen input, the PIPP establishes a framework for the CRTPA also to receive input from four committees: the Technical Advisory Committee (TAC), the Citizens Advisory Committee (CAC), the Multimodal Advisory Committee (MAC), and the Transportation Disadvantaged Coordinating Board (TDCB).

The PIPP serves as an informational manual for citizens in the region, providing information about the various planning requirements and documents produced throughout the planning process, as well as details for how the public can get involved in each of these activities. The PIPP presents multiple methods for increasing citizen involvement, including those listed below. These methods are to be used to share information, provide education and outreach, and promote involvement in the planning process.

- Publication of CRTPA meeting agendas on website and sent via email and US Mail
- Distribution of CRTPA Semiannual Newsletter to citizens, municipalities, the media, interested individuals, and other interested parties
- Workshops and transportation fairs to educate citizens about the process
- Publication of plans and reports at various times through phases of adoption
- Use of alternative media, such as Facebook and Twitter, to disseminate information
- Distribution of informational pamphlets detailing CRTPA purpose and current planning efforts
- News releases for local newspapers, television and radio
- Use of CRTPA website to provide access to transportation planning process information
- Reach out to educational institutions to include school- and college-age people in the planning process

- Production of technical memos for long-term projects concerning technical or policy information

- CRTPA Citizens Advisory Committee to serve as the citizens' voice in the planning process

An important component of the public involvement process is to evaluate the outreach methods. The PIPP makes clear that through the course of planning efforts, staff will determine to what degree the following basic goals are met through public outreach:

- Equitable opportunities for participation in transportation planning are provided to all interested citizens in the region;

- The public is routinely informed and educated about the transportation planning process early, clearly, and continuously;

- A variety of methods are utilized to most effectively inform and engage the public; and

- Public input is carefully considered in transportation decision-making.

2.2 Stakeholder Outreach

Two advisory committees were formed to receive a wide variety of perspectives on the region. The first committee was comprised of individuals who are directly involved in transportation and transportation planning throughout the region. This committee consisted of representatives from the following groups:

- County and city administrations
- County and city planning departments
- Facilities planning
    - Florida State University
    - Florida A&M University
    - Tallahassee Community College
- Public works departments
- BluePrint 2000
- Commuter Services of North Florida
- Apalachee Regional Planning Commission
- Florida Department of Transportation
- Federal Highway Administration
- Federal Transit Administration
- Federal Department of Management Services

The second advisory committee, the Project Advisory Committee, is made up of a representative from each of 13 technical subcommittees, consisting of the following focus areas:

- Environmental
- First responders
- Health
- Education/school access
- Economic development
- Neighborhoods/community
- Underserved populations
- Intermodal/freight
- Bicycle/pedestrian
- Transit providers
- Land use
- Peer review

These technical subcommittees and the Project Advisory Committee provide a range of perspectives with regard to transportation and transportation issues that assists the project team in identifying areas for improvement.

In addition, the regional workforce board, Workforce Plus, was included on the public involvement stakeholder list and was notified of all public and stakeholder input opportunities. The TDP was provided to the board for comment

Additionally, local focus groups were formed to aid further in identifying community values and priorities.

2.3 Public Workshops

Public workshops were held in April, 2009 in each of the four counties in the capital region-Gadsden, Jefferson, Leon, and Wakulla. Participants in these workshops engaged in exercises to identify transportation issues, took part in a survey that helped them choose what types of community features appeal to them, were given an update on the Regional Transit Study, and prioritized issues of importance to them. In these workshops, multiple issues were raised regarding transit. Citizens were asked to identify key issues with regard to transportation and then prioritize their top three issues. The following table highlights the issues identified regarding transit in the region.

Table 3. Transit Issues Identification at April 2009 Public Workshops

Issue	Identified by County
Need park-and-ride lots and other connections to StarMetro, with regularly scheduled transit service	Gadsden
Need better intra- and inter-county transportation, with regularly scheduled transit service	Gadsden
There is a lack of viable alternative modes, including transit, bicycle, pedestrian and rail	Gadsden, Jefferson, Leon
Lack of commuter options to Tallahassee/Leon County	Jefferson, Wakulla
Lack of transit services	Wakulla

In September, 2009, further public workshops were held in each of the four counties in the capital region. Citizens participated in discussions in which they were told goals of the Regional Mobility Plan and asked, "What do these goals mean to you?" These goals included connectivity, safety, land use, multimodalism, economic development, natural resource protection, accessibility, and coordination. The table below lists how participants responded to this question in relation to transit.

Table 4. September 2009 Public Workshops Goals Discussion

Goal	Workshop Response	Meeting Location
Connectivity	Connect home to destinations, with modes other than cars	Wakulla
	Provide safe, viable modes for non-drivers	Leon
	Be able to travel safely from one side of town to another using various modes	Leon
	Need multiple, cross-modal connections	Leon
	Need to implement a finely-grained network for all modes, which includes more direct routes to activity centers and other places of interest	Leon
Land Use	Need population densities to support local transit	Wakulla
	Need mixed uses and higher densities to support transit	Leon
Multimodalism	Concentrations of population are needed to make transit work	Wakulla
	Add additional bus routes to attract ridership	Wakulla
	Examine a train system from Sopchoppy to Tallahassee	Wakulla
	Look at all modal options and approaches (i.e. zip cars, express vans, commuter service, etc.)	Wakulla
	Implement transit services to places such as state office complex, university and Tallahassee	Wakulla

Goal	Workshop Response	Meeting Location
	Hubs for regional transit at nodes; need to include amenities such as bike lockers	Wakulla
	At the airport, need to develop ways for pilots and passengers to get around once they land	Wakulla
	Improve transit stops and stop amenities	Leon
	Include fans at bus stops to make using transit more comfortable	Leon
	Include bike racks on buses, including cross town routes	Leon
	Increase transit from outlying counties	Leon
	Combine/coordinate StarMetro routes with Leon County school bus routes	Leon
	Need more transit stops	Leon
	Create options for aging in place, including land use, transit and walkability	Leon
	Need regional bus service	Jefferson
	Passenger rail with nodal development utilizing existing freight rail line, if feasible	Jefferson
	Provide better connections to Leon and Wakulla counties, including bicycle and pedestrian connections	Jefferson
Economic Development	Need intermodal hub/center	Wakulla
	Transit System helps employ people	Wakulla
	Need bus service to the airport	Leon
	Examine other cities, such as Boulder, CO, where half of transportation budget is allocated to non-motorized uses	Leon
Accessibility	Ensure that non-drivers have access to activities and services	Wakulla
	Provide access for children to get to after-school activities without drivers. Schools need partnerships to get these students to activities.	Wakulla
Accessibility	Make it easier and provide more accessibility for seniors to become less car-dependant	Wakulla
	Airport accessible by other modes	Leon
	Need to improve accessibility to activity centers and to services	Jefferson
	Need expanded regional transit (Big Bend)	Jefferson
Coordination	Shuttle dollars for Wakulla Transit applied for and turned down for the last 5 years	Wakulla
	Coordinate transit authority and transportation agencies	Wakulla
	Need outreach on buses	Leon

Goal	Workshop Response	Meeting Location
	Need to change the philosophy to encourage modal shifts and include design features that encourage/invite multimodal uses	Leon
	Commuters need alternatives that are viable and convenient	Leon

Additionally, citizens participated in an exercise in which they were given eight Regional Mobility Plan "bucks" that they used to vote on the types of projects that should receive funding. The project categories consisted of construct/improve sidewalks, bicycle lanes, trails and greenways; implement complete streets; improve transit service; improve safety; widen existing roadways, transportation maintenance; improve traffic operations; and construct new roadways. The following table shows how participants allocated their "bucks" in each county.

Table 5. Results of "CRTPA Bucks" Exercise

Category	Region	Jefferson	Leon	Wakulla
Construct/improve sidewalks, bicycle lanes, trails and greenways	106 (27%)	9 (16%)	69 (31%)	28 (26%)
Implement complete streets	94 (24%)	16 (29%)	59 ((26%)	19 17%)
Improve transit service	61 (16%)	8 (15%)	39 (17%)	14 (13%)
Improve safety	41 (11%)	8 (15%)	24 (11%)	9 (8%)
Widen existing roadways	35 (9%)	0 (0%)	4 2%)	31 (29%)
Transportation maintenance	28 (7%)	10 (18%)	16 7%)	2 (2%)
Improve traffic operations	15 (4%)	0 (0%)	12 (5%)	3 (3%)
Construct new roadways	7 (2%)	4 (7%)	1 (1%)	2 (2%)

Note that Gadsden County did not participate in the "CRTPA Bucks" exercise.

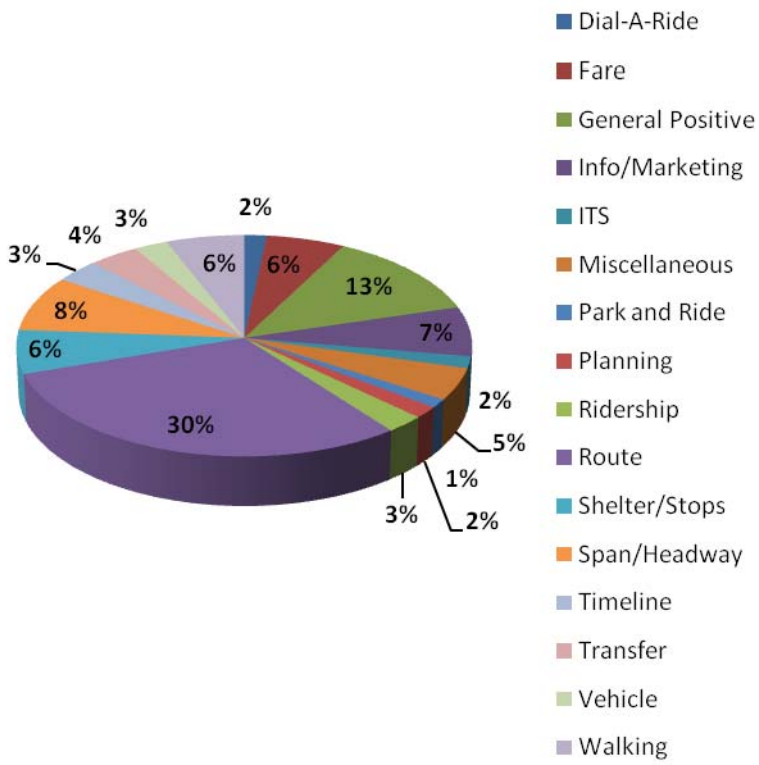
Participants also were engaged in an exercise in which they reviewed and gave input on potential future growth scenarios for the region.

2.4 nova2010 Public Involvement

Through the course of the development of nova2010 (described in detail in Section 0), nearly 100 public participation meetings/listening sessions were held in August, September, October, and November of 2009, where details of this StarMetro decentralization study were presented.

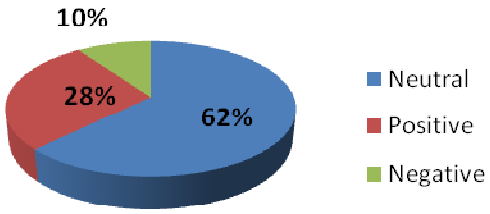
At each of these listening sessions, one staff member presented the nova2010 concept and answered questions, while a second recorded comments and feedback. There were a total of 235 comments specifically related to nova2010 recorded, and they are classified in two ways: by a general category that describes the comment (16 total categories), and by the nature of the comment, i.e. positive, neutral, or negative. The majority of comments fell into the Route category, at 30% of the total. The graph below shows the distribution of categories into which the various comments fall.

Figure 1. nova2010 Public Comment Categories



Additionally, the distribution of positive, neutral, and negative comments is shown in the graph below. The majority of comments (62%) fell in the "neutral" category.

Figure 2. nova2010 Public Comment Type



nova2010 public outreach also included communications through social networking (such as Facebook), a hotline for comments and suggestions, and a City Talk episode on television. Multiple articles have been published in the Tallahassee Democrat, several radio interviews were conducted, and news packages and press releases were distributed to local news media to insure that the public is informed about the nova2010 Concept.

3.0 Situation Appraisal

StarMetro provides public transportation in Tallahassee and Leon County, including the Florida State University (FSU) and Florida Agricultural and Mechanical University (FAMU) campuses. Within Tallahassee, StarMetro operates fixed-route bus service and demand response Dial-A-Ride service for eligible customers. StarMetro also coordinates demand response service, known as Community Transportation Coordinator, for eligible passengers throughout Leon County.

StarMetro is a city department. Members of the City Commission, comprised of four elected commissioners and one elected mayor, serve as the StarMetro Board of Directors.
The following sections provide background on existing conditions in the StarMetro area. The assessment of the existing conditions will help identify current deficiencies and needs so that they can be addressed through the recommendations made by the Transit Development Plan. The next sections provide information on existing transportation plans and policies; current transit facilities and service; and a data inventory of land use and development, population characteristics and financial data.

3.1 Relationship to Other Plans

The following sections summarize various planning efforts recently completed or currently underway. Previous planning efforts shape the transportation planning environment of the region which in turn affects this plan and StarMetro operations.

3.1.1Multimodal Transportation District

Tallahassee and Leon County created a Multimodal Transportation District[14] (MMTD) for central Tallahassee with the Comprehensive Plan effective April 10, 2009. The MMTD is meant to deemphasize automobile mobility, create an appealing and safe environment for pedestrians and bicyclists, and to provide convenient access to transit. The MMTD promotes pedestrian-scale development, complementary mixes of land use, densities that support transit, mixed uses to encourage walking and cycling, and interconnected street networks. It includes the adoption of design standards making infill more compatible with the existing development. The MMTD will also feature a series of "Superstops" on certain transit routes at major activity

[14] A Multimodal District is created through adoption of an amendment to the Comprehensive Plan, and allows mitigation fees from development to go toward transit, bicycle, and pedestrian projects rather than road widening. According to the MMTD Plan, this is important in the core of Tallahassee because there isn't room to widen many roads, if any, without destroying parts of the community.

points. The Superstops will have enhanced shelters and bicycle parking. **Figure 3** displays the MMTD's boundaries.

The MMTD is approximately 18.2 square miles in area and is home to just under 70,000 people. The MMTD was created per FDOT recommendations at a scale appropriate to the area's population to effectively connect population centers with work centers, services, schools, and entertainment. The proposed MMTD includes Downtown, Midtown, FSU and its southwest facilities, FAMU, Tallahassee Community College (TCC), Governor's Square Mall, and Innovation Park. With the appropriate zoning standards in place, redevelopment within the District will occur in a more compact and efficient manner that supports walking, cycling, and transit.
Multimodal level of service standards are established by the Tallahassee-Leon County Comprehensive Plan at the following level of service for each mode:

- Pedestrian = C
- Transit = C
- Bicycle = D
- Automobile = E+50%

The Comprehensive Plan addresses modal split targets for trips within the MMTD and traveling into and out of the district. The targets are as follows:

- For trips originating and ending in the district:
    - 40% of trips via transit
    - 30% of trips via bike or pedestrian
    - 30% of trips via automobile
- For trips originating or ending outside the district:
    - 25% of trips via transit
    - 10% of trips via bike or pedestrian
    - 65% of trips via automobile

The Comprehensive Plan includes the following transit-related recommendations for the MTMD:

- All employees and dwelling units should be within ¼ mile of a transit stop
- 80% of transit routes should operate with a 20 minute headway, or lower
- 80% of employees and dwelling units should be served by transit routes that operate at least 16 hours a day
- 40% of transit stops should include benches, signage, lights, and covered or enclosed waiting areas
- 80% of employees and dwelling units should be within 1 mile of a transit Superstop

The MMTD is an important step in addressing transportation and land use challenges in Leon County. StarMetro is also working with several large developments in Leon County to provide regional transfer stations as part of their transportation mitigation for concurrency. The results from these efforts will help to guide land use decisions in conjunction with bicycle, pedestrian, transit, and roadway infrastructure.

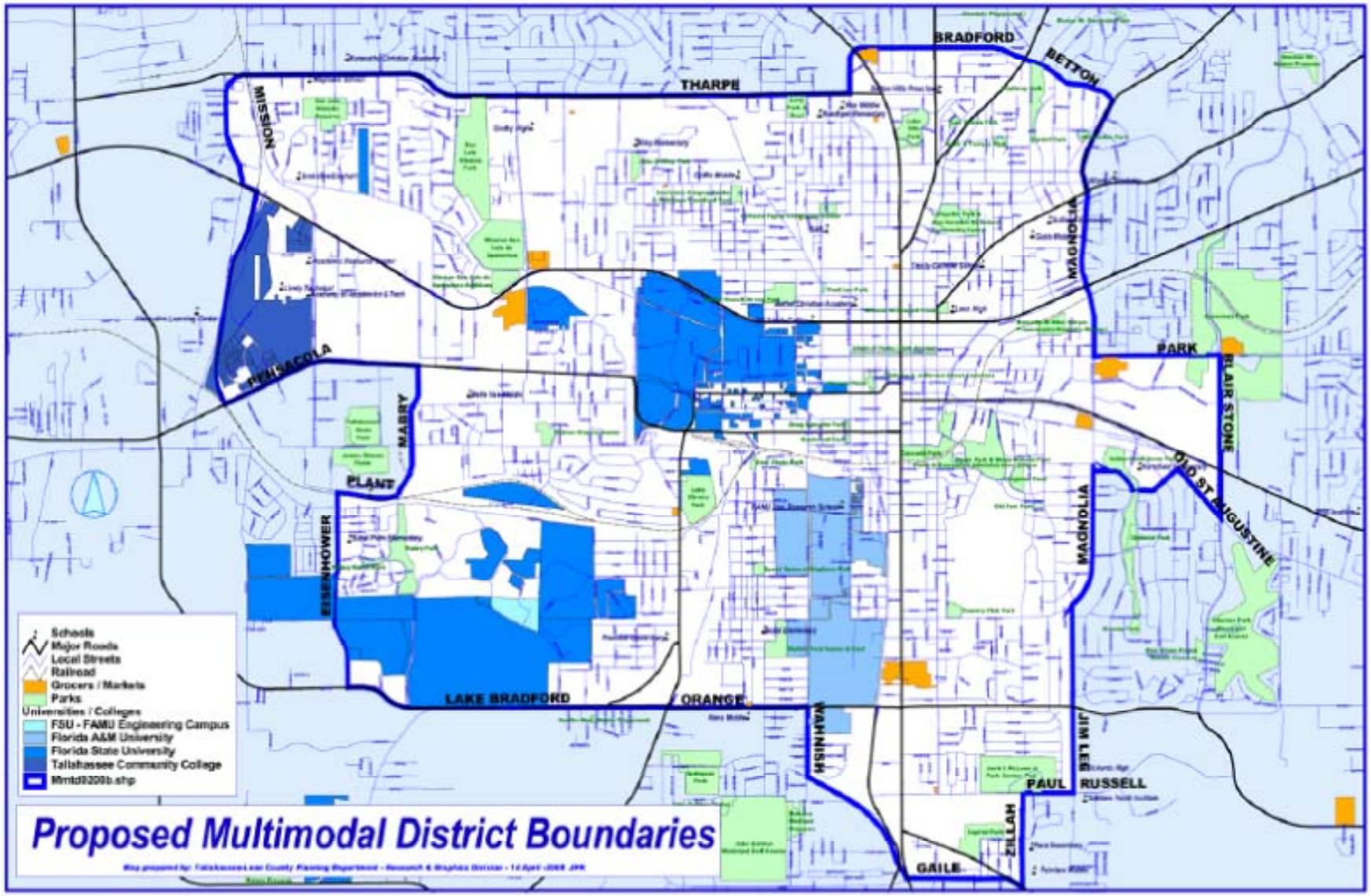


Figure 3. Proposed Multimodal Transportation District Boundaries

3.1.2 C.K. Steele Mixed-Use Transit Center Report

The C.K. Steele Plaza in downtown Tallahassee is StarMetro's primary transfer station. While the transfer station fulfills its basic purpose as a central transfer spot for several StarMetro bus routes, the plaza is in need of an overhaul both aesthetically and functionally. The *C.K. Steele Mixed-Use Transit Center Report* presents a conceptual possibility for redevelopment of this plaza as a mixed-use urban center, with transit, bicycle and pedestrian amenities. Ideally, the proposed C.K. Steele Mixed-Use Transit Center will serve not only as a transfer station, but also as a downtown landmark. The Report proposes a development concept for the C.K. Steele site and the surrounding blocks on Duval Street, Adams Street, and Monroe Street that includes a mix of retail, office, residences, and a hotel component. The concept includes recommendations for environmentally-friendly enhancements, including a green roof, sun shaded or louvered window openings, canopies along building fronts, and the use of harvested/recycled materials from the existing transit center.

3.1.3 nova2010

nova2010 is StarMetro's strategic plan to decentralize the transit system. While the existing routes serve the downtown area and travel along several neighborhood streets, the new routes would direct buses along major corridors throughout the city, several without approaching downtown at all. With the implementation of nova2010, StarMetro will be able to increase frequency at stops, reduce route redundancies, and provide greater coverage for riders throughout the city. Transfer stations will be added so patrons can transfer between bus routes without having to travel to the C.K. Steele Plaza. The nova2010 conceptual map is shown in **Figure 4**.

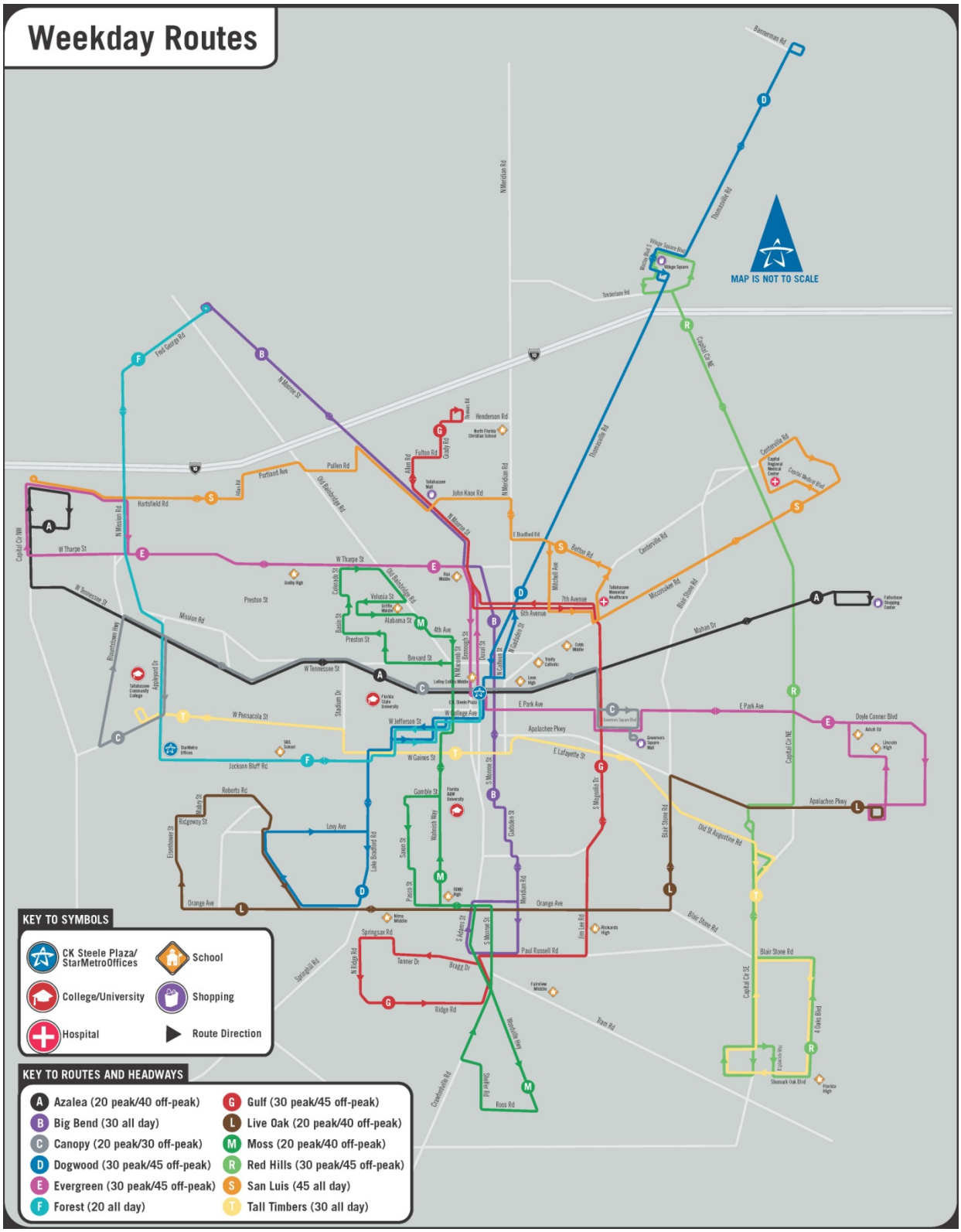


Figure 4. nova2010 Conceptual Map

3.1.4 Dedicated Transitway Study

The *Dedicated Transitway Study* for StarMetro, developed in November 2008, evaluates alternative transit concepts and opportunities for transit oriented development. Alternative modes studied include bus rapid transit (BRT), light rail, travelways, and streetcar. The study found a transit system with these premium modes could better serve Tallahassee's development patterns; BRT and light rail could access suburban reaches of the city; and streetcars or similar vehicles could serve the downtown core and university areas. The *Dedicated Transitway Study* proposes multiple new transit-oriented developments throughout the city to accommodate compact development and support new transfer stations. The Study examines various corridors and current development patterns and recommends strategies to set the stage for future transit improvements and transit oriented development in Tallahassee. Corridors identified for their high transit and development potential include the following:

- Tennessee Street West/US 90, from downtown to Capital Circle NW
- Tennessee Street East/Mahan Drive/US 90, from downtown to Capital Circle NE
- Mahan Drive/US 90, from Capital Circle NE to I-10
- North Monroe Street, from Capital Circle to downtown
- South Monroe Street, from downtown to Capital Circle
- Apalachee Parkway, from downtown to Capital Circe
- Thomasville Road, from downtown to I-10
- Thomasville Road, from I-10 to Bradfordville and the Urban Service Limit Line
- Capital Circle East, from I-10 to East Tennessee Street and Mahan Drive
- Capital Circle East, from Tennessee Street to Apalachee Parkway
- Capital Circle South, from Apalachee Parkway to South Monroe Street (Woodville Highway)
- Capital Circle South, from South Monroe Street to West Tennessee Street
- Capital Circle West, from West Tennessee Street to I-10
- Capital Circle West, from I-10 to North Monroe Street
- Tram Road, from South Monroe Street to Capital Circle East

Additionally, four sites were identified as case studies for potential development centers. These four locations are:

- Appleyard Drive at Tennessee Street
- Tennessee Street Downtown
- Tram Road
- Bradfordville

The sites were analyzed to illustrate how transit could encourage transit-oriented development. The sites will be further studied through Tallahassee's future planning efforts. *The Dedicated Transitway Study* is intended to be consulted as transit and land use decisions are made, as well as for long-range planning efforts.

3.1.5 StarMetro General Planning Consultant Planning Efforts

Effective April 2009, StarMetro's general planning consultant (GPC) is supporting the agency's technical and planning studies. The GPC provides assistance on a variety of transit-related projects for StarMetro, such as the nova2010 effort. This TDP will be coordinated with the ongoing GPC efforts.

3.1.6 Regional Transit Study

The Capital Region Transportation Planning Agency, in cooperation with StarMetro, conducted the *Regional Transit Study* to determine the feasibility of establishing a regional transit entity to oversee transit operations in the four-county Tallahassee region. Completed in March 2010, the study identified immediate and future needs, evaluated several funding and service strategies, and recommended additional efforts to pursue an organizational framework to provide transit in the region. Throughout the study, input was received from regional leadership, stakeholders, and the public.

3.1.7 Florida Transportation Plan

The *2025 Florida Transportation Plan* (FTP), developed by FDOT, allocates over $160 billion for transportation needs throughout the state between 2005 and 2025. The Plan's five (5) goals are (a) a safer and more secure transportation system for residents, businesses, and visitors; (b) an enriched quality of life and responsible environmental stewardship; (c) adequate and cost-efficient maintenance and preservation of Florida's transportation assets; (d) a stronger economy through enhanced mobility for people and freight; and (e) sustainable transportation investments for Florida's future.[15]

An update to the FTP, *Horizon 2060*, was under development during the TDP planning process. The 2060 FTP was finalized in December 2010.

3.2 Existing Conditions

An inventory of existing transit facilities and services, land use and development, population characteristics, and financial data is provided below.

3.2.1 StarMetro Service Trends

StarMetro's service area covers approximately 102 square miles in Leon County and serves a population of approximately 162,310. The current route structure is radial around the C.K. Steele Transit Center, as shown in the route map in **Figure 5.** There are 26 weekday routes, 21 Saturday routes, and six night and Sunday routes. Additionally, StarMetro offers the following services:

- Bike-on-Bus: A free bike rack system which allows people to load their bikes onto bike racks that are fixed to the fronts of buses (up to two per bus).

[15] 2025 Florida Transportation Plan. Florida Department of Transportation. http://www.dot.state.fl.us/planning/FTP/

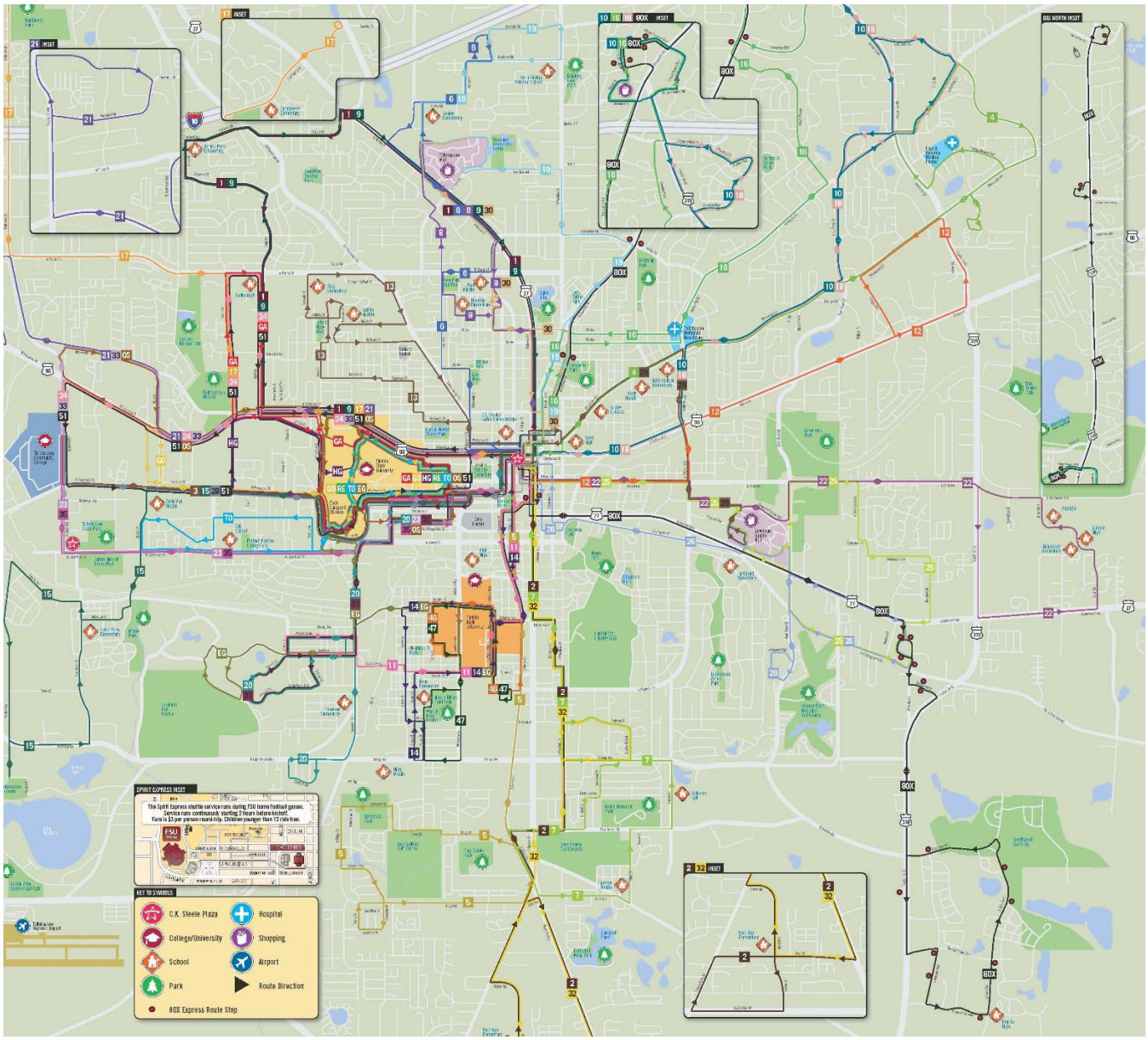
- Community Transportation Coordinator (CTC): Offers countywide transportation services for those who qualify through Medicaid, Developmental Disabilities, or the Transportation Disadvantaged program.

- Dial-a-Ride: A service for seniors 60 years and older, or those disabled with the eligibility guidelines established by the Americans with Disabilities (ADA) Act. Dial-a-Ride provides transportation throughout the city with night and Sunday services.

- Campus Routes: FSU's Seminole Express service has 6 routes that operate off- and on-campus, one campus only circulator, and a late-night route. FAMU's Venom Express has two off- and on-campus routes and one campus only circulator. Both universities use transportation fee funded contracts to pay for these service and all campus routes are open to the public

- C-Pass Service: fare free transit service to TCC students with valid identification on all StarMetro routes. TCC student identification cards are accepted as fare media on StarMetro vehicles. The college pays a fixed monthly fee for each annual enrollment credit hour. The agency and college market the C-Pass program jointly.

This situational appraisal represents StarMetro's existing radial service. The map below shows the base year fixed routes, which will be replaced by the nova2010 route decentralization within the year. StarMetro recognizes the radial system forces passengers to transfer at C.K. Steele Plaza for most trips. The discussion of nova2010 below provides more detail regarding the change in service structure. In addition to the fixed routes below, StarMetro coordinates demand response paratransit service for all of Leon County.



Source: StarMetro

Figure 5. StarMetro Route Map, October, 2009

Table 6 below shows the vehicles operated and available in the years 2005, 2006, and 2007. In 2005, 49 of the 64 operated vehicles were standard buses, 13 were utilized for demand response service, and two were purchased for demand response trips. In 2006, 56 of the 69 vehicles were buses, and 13 were utilized for demand response trips. In 2007, 56 of the 71 vehicles were buses and 15 were utilized for demand response trips.

Table 6. StarMetro Bus Operation

Year	Vehicles Operated for Maximum Service	Vehicles Available for Maximum Service
2005	64	85
2006	69	83
2007	71	83

Source: National Transit Database

The tables below show indicators of StarMetro's performance over time. Table 5 depicts general indicators for the system. The population of the area served by the system was stable from 2004 to 2009 with a zero percent increase or decrease. The service area also remained stable at 102 square miles. The passenger trips reflected a slight decrease from 2005 to 2009 (4%), but increased 4.64% from 2008 to 2009. The passenger miles increased from 2005 to 2009, showing a 20.95% increase over that timeframe. Vehicle and revenue miles also increased from 2005 to 2009 by 11.94% and 12.52% respectively. Vehicle and revenue hours exhibited the same trend, increasing by 24.21% and 27.81% respectively from 2005 - 2009. Operating and maintenance costs escalated from 2005 to 2009, ranging from a 19.18% to 31.89% increase, although from 2008 to 2009, operating expenses decreased by 8.99% and maintenance expenses increased at a much smaller rate of 5.31%. Vehicles available for maximum service decreased from 85 in 2005 to 83 in 2009 and vehicles operated for maximum service increased from 64 in 2005 to 78 in 2009.

Table 7 General Indicators for Total System

	2005	2006	2007	2008	2009	% Change 2005-2009	% Change 2008-2009	% Change 1984-2009	% Change 1984-2009
Service Area Population	162,310	162,310	162,310	162,310	162,310	0%	0%	n/a	n/a
Service Area Size (square miles)	102	102	102	102	102	0%	0%	n/a	n/a
Passenger Trips	4,665,608	4,386,967	4,192,952	4,275,268	4,473,821	-4.11%	4.64%	37.72%	37.72%
Passenger Miles	11,000,927		12,077,890	12,265,111	13,306,133	20.95%	8.49%	62.46%	62.46%
Vehicle Miles	2,254,901	2,204,123	2,130,169	2,397,787	2,524,042	11.94%	5.27%	79.87%	79.87%
Revenue Miles	2,141,072	2,097,628	2,011,644	2,265,060	2,409,151	12.52%	6.36%	84.83%	84.83%
Vehicle Hours	177,599	179,819	173,730	195,639	220,587	24.21%	12.75%	88.30%	88.30%
Revenue Hours	168,308	175,639	167,218	187,877	215,117	27.81%	14.50%	98.66%	98.66%
Route Miles	210	216	233	243	233	10.95%	-4.12%	n/a	n/a
Total Operating Expense	$10,163,137	$10,549,162	$12,016,041	$13,309,279	$12,112,380	19.18%	-8.99%	329.04%	329.04%
Total Operating Expense (of 1984 $)	$5,183,020	$5,211,755	$5,772,070	$6,156,870	$5,623,091	8.49%	-8.99%	329.04%	329.04%
Total Maintenance Expense	$2,139,440	$2,449,027	$2,608,323	$2,679,426	$2,821,632	31.89%	5.31%	314.91%	314.91%
Total Maintenance Expense (of 1984 $)	$1,091,077	$1,209,928	$1,252,944	$1,239,502	$1,309,924	20.06%	5.31%	314.91%	314.91%
Total Capital Expense	$2,476,232	$450,518	$2,805,802	$2,022,697	$3,751,533	51.50%	85.47%	27.36%	27.36%
Federal Contribution	n/a	n/a	$905,294	$500,800	$1,309,790	n/a	161.54%	62.56%	62.56%
State Contribution	$906,432	$958,517	$986,840	$963,930	$969,684	6.98%	0.60%	2779.28%	2779.28%
Total Local Revenue	$8,171,427	$7,900,308	$10,120,157	$11,844,549	$9,909,811	21.27%	-16.33%	805.37%	805.37%
Local Contribution	$4,949,577	$4,877,002	$6,670,616	$7,821,954	$5,902,687	19.26%	-24.54%	509.87%	509.87%
Directly-Generated Non-Fare Rev	$134,576	$94,801	$231,250	$111,029	$59,729	-55.62%	-46.20%	-52.86%	-52.86%
Passenger Fare Revenues	$3,087,274	$2,928,505	$3,218,291	$3,911,566	$3,947,395	27.86%	0.92%	n/a	n/a
Total Employee FTEs	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Employee Operating FTEs	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Maintenance Employee FTEs	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Administrative Employee FTEs	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Vehicles Available for Maximum Service	85	83	83	83	83	-2.35%	0%	31.75%	31.75%
Vehicles Operated in Maximum Service	64	69	71	78	78	21.88%	0%	77.27%	77.27%
Spare Ratio (%)	32.81	20.29	16.9	6.41	6.41	-80.46%	0%	-85.16%	-85.16%
Total Gallons Consumed	633,096	640,410	618,156	638,409	633,852	0.12%	-0.71%	55.07%	55.07%
Total Energy Consumed (KW-Hours)						n/a	n/a	n/a	n/a

Source: National Transit Database, Florida Transit Information System

Table 6, shown below, depicts indicators identified to measure the effectiveness of the system. These indicators are focused on service supply, service consumption, quality of service and availability. Service supply, measured in Vehicle Miles per Capita experienced an increase of 11.95% from 2005 to 2009. Service consumption, measured in Passenger Trips per Capita, showed a slight decrease of 4.14%; Passenger Trips per Revenue Mile showed a decrease of 14.68%; and Passenger Trips per Revenue Hour showed a decrease of 24.96%. Quality of service, measured in average speed showed a decrease of 11.95% from 2005 to 2009 and average headway showed an increase of 12%. Average age of fleet in years decreased from 6.68 in 2005 to 6.26 in 2009. The number of vehicle system failures showed a decrease from 2005 to 2009 of 31.72%. A 69.53% decrease was seen from 2005 to 2009 in revenue miles between failures. Availability, measured in revenue miles per route mile showed a slight decrease from 2005 to 2009 of 1.46%; weekday span of service showed a decrease of 6.15% and route miles per square mile of service area showed an increase of 10.68%. The state-wide average for passenger trips per revenue mile ranged from 1.28 to 1.35 over the same time period, and the state-wide average for passenger trips per revenue hour ranged from 18.57 to 19.88. These measures show that StarMetro generally carries more passengers for similar levels of service provided, which indicates that the system is effective.

Table 8 Effectiveness Measures for the System

							% Change	% Change	% Change
		2005	2006	2007	2008	2009	2005-2009	2008-2009	1984-2009
SERVICE SUPPLY									
	Vehicle Miles Per Capita	13.89	13.58	13.12	14.77	15.55	11.95%	5.27%	n/a
SERVICE CONSUMPTION									
	Passenger Trips Per Capita	28.75	27.03	25.83	26.34	27.56	-4.14%	4.64%	n/a
	Passenger Trips Per Revenue Mile	2.18	2.09	2.08	1.89	1.86	-14.68%	-1.61%	-25.49%
	Passenger Trips Per Revenue Hour	27.72	24.98	25.07	22.76	20.8	-24.96%	-8.61%	-30.68%
QUALITY OF SERVICE									
	Average Speed (RM/RH)	12.72	11.94	12.03	12.06	11.2	-11.95%	-7.11%	-6.96%
	Average Headway (in minutes)	20.56	19.57	21.1	21.99	23.08	12.26%	4.95%	n/a
	Average Age of Fleet (in years)	6.68	6.96	7	6.69	6.26	-6.29%	-6.41%	25.24%
	Number of Incidents	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Number of Vehicle System Failures	227	192	171	161	155	-31.72%	-3.73%	-50.16%
	Revenue Miles Between Incidents	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Revenue Miles Between Failures	9,168.02	10,925.15	11,764.00	14,068.70	15,542.91	69.53%	10.48%	270.84%
AVAILABILITY									
	Revenue Miles Per Route Mile	8,319.60	8,101.67	7,079.67	7,677.09	8,441.06	1.46%	9.95%	n/a
	Weekday Span of Service (in hours)	13.5	14.5	12.67	12.67	12.67	-6.15%	0%	n/a
	Route Miles Per Square Mile of Service Area	2.06	2.12	2.28	2.38	2.28	10.68%	-4.12%	n/a

Source: National Transit Database, Florida Transit Information System

Table 7 depicts the indicators identified to measure the efficiency of the system. These measures focus on cost efficiency, operating ratios, vehicle utilization, labor productivity, energy utilization, and fare. The cost efficiency measures focused on operating and maintenance expenses and showed an increase from 2005 to 2009 ranging from 19.16% in operating expense per capita to a decrease of 6.74% in operating expense per revenue hour. Operating ratios, measured through farebox recovery, shown in percent, increased 7.27% from 2005 to 2009. When reviewing farebox recovery ratios, three factors should be considered. The system had a fare increase in 2006, along with a change in fare media, and new farebox equipment and reporting software. Therefore, the decreased farebox recovery ratio in 2006 and 2007 reflects these conditions.

The state-wide average farebox recovery ratio ranged from 4.96% to 17.59%, compared to a range of 26.78 to 32.59 for StarMetro over the same time period. Similarly, the state-wide average operating revenue to operating expense ratio ranged from 20.91 to 24.86 compared to a range of 28.66 to 33.08 for StarMetro. These measures show that StarMetro generally earns a higher revenue to cost ratio than other systems.

Indicators to measure vehicle utilization include vehicle miles and hours per peak vehicle, revenue miles per vehicle mile, revenue miles per total vehicle and revenue hours per total vehicles. These measures ranged from a 8.16% decrease in vehicle miles per peak vehicle to an increase of 30.89% in revenue hours per total vehicles from 2005 to 2009.

Table 9 Efficiency Measures for the System

							% Change	% Change	% Change
		2005	2006	2007	2008	2009	2005-2009	2008-2009	1984-2009
COST EFFICIENCY									
	Operating Expense Per Capita	$62.62	$64.99	$74.03	$82.00	$74.62	19.16%	-8.99%	n/a
	Operating Expense Per Peak Vehicle	$158,799.02	$152,886.41	$169,240.01	$170,631.78	$155,286.92	-2.21%	-8.99%	142.02%
	Operating Expense Per Passenger Trip	$2.18	$2.40	$2.87	$3.11	$2.71	24.31%	-13.03%	211.55%
	Operating Expense Per Passenger Mile	$0.92	n/a	$0.99	$1.09	$0.91	-1.09%	-16.11%	164.08%
	Operating Expense Per Revenue Mile	$4.75	$5.03	$5.97	$5.88	$5.03	5.89%	-14.44%	132.14%
	Operating Expense Per Revenue Hour	$60.38	$60.06	$71.86	$70.84	$56.31	-6.74%	-20.52%	115.97%
	Maintenance Expense Per Revenue Mile	$1.00	$1.17	$1.30	$1.18	$1.17	17.00%	-0.99%	n/a
	Maintenance Expense Per Operating Exp	21.05	23.22	21.71	20.13	23.3	10.69%	15.71%	-3.29%
OPERATING RATIOS									
	Farebox Recovery (%)	30.38	27.76	26.78	29.39	32.59	7.27%	10.89%	n/a
	Local Revenue Per Operating Expense (%)	80.4	74.89	84.22	n/a	81.82	1.77%	n/a	n/a
	Operating Revenue Per Operating Expense	31.7	28.66	28.71	30.22	33.08	4.35%	9.46%	637.13%
VEHICLE UTILIZATION									
	Vehicle Miles Per Peak Vehicle	35,232.83	31,943.81	30,002.38	30,740.86	32,359.51	-8.16%	5.27%	1.47%
	Vehicle Hours Per Peak Vehicle	2,774.98	2,606.07	2,446.90	2,508.19	2,828.04	1.91%	12.75%	6.22%
	Revenue Miles Per Vehicle Mile	0.95	0.95	0.94	0.94	0.95	0.00%	1.04%	2.75%
	Revenue Mile Per Total Vehicle	25,189.08	25,272.63	24,236.67	27,289.88	29,025.92	15.23%	6.36%	40.29%
	Renenue Hours Per Total Vehicles	1,980.09	2,116.13	2,014.67	2,263.58	2,591.77	30.89%	14.50%	50.79%
LABOR PRODUCTIVITY									
	Revenue Hours Per Employee FTE	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Revenue Mile Per Total Vehicle	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
ENERGY UTILIZATION									
	Revenue Hours Per Employee FTE	3.46	3.44	3.45	3.76	3.98	15.03%	6.02%	15.99%
	Revenue Mile Per Kilowatt-Hour	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
FARE									
	Average Fare	$0.66	$0.67	$0.77	$0.91	$0.88	33.33%	-3.56%	n/a

Source: National Transit Database, Florida Transit Information System

Table 8, shown below, includes the general indicators for fixed route system. These indicators include service area population, service area, employees and vehicles which were discussed above. Also included are passenger trips and passenger miles. Passenger trips remained relatively stable, showing a 4.42% decrease from 2005 to 2009 and passenger miles showed a 21.75% increase over the same time period. Vehicle and revenue miles and vehicle and revenue hours show increases from 2005 to 2009, ranging from 12.15% to 30.19%. The route miles increased from 210 in 2005 to 233 in 2009. Operating and maintenance expenses are also general indicators and these measures showed increases from 2005 to 2009. Total gallons of fuel consumed showed a slight increase of 2.46% from 2005 to 2009.

Table 10 General Indicators for Fixed Route System

	2005	2006	2007	2008	2009	% Change 2005-2009	% Change 2008-2009	% Change 1984-2009
Service Area Population	162,310	162,310	162,310	162,310	162,310	0%	0%	n/a
Service Area Size (square miles)	102	102	102	102	102	0%	0%	n/a
Passenger Trips	4,612,725	4,333,213	4,136,790	4,212,710	4,409,041	-4.42%	4.66%	36.91%
Passenger Miles	10,609,267		11,736,502	11,921,813	12,916,425	21.75%	8.34%	59.80%
Vehicle Miles	1,815,281	1,814,915	1,712,528	1,940,896	2,035,927	12.15%	4.90%	64.11%
Revenue Miles	1,747,116	1,749,960	1,649,564	1,865,534	1,966,766	12.57%	5.43%	70.16%
Vehicle Hours	146,123	150,574	141,842	161,111	185,332	26.83%	15.03%	74.91%
Revenue Hours	139,690	147,986	139,419	157,600	181,869	30.19%	15.40%	85.01%
Route Miles	210	216	233	243	233	10.95%	-4.12%	n/a
Total Operating Expense	$9,105,669	$9,518,814	$10,787,717	$11,634,373	$10,439,600	14.65%	-10.27%	n/a
Total Operating Expense (of 1984 $)	$4,643,730	$4,702,717	$5,182,027	$5,382,059	$4,846,514	4.37%	-10.27%	n/a
Total Maintenance Expense	$2,007,062	$2,327,572	$2,490,199	$2,342,003	$2,466,289	22.88%	5.31%	n/a
Total Maintenance Expense (of 1984 $)	$1,023,566	$1,149,924	$1,196,201	$1,083,410	$1,144,958	11.86%	5.31%	n/a
Total Capital Expense	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Federal Contribution	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
State Contribution	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total Local Revenue	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local Contribution	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Directly-Generated Non-Fare Rev	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Passenger Fare Revenues	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total Employee FTEs	123.64	123.64	119	152.97	150.04	21.35%	-1.92%	n/a
Employee Operating FTEs	92.11	92.11	80.75	115.14	116.64	26.63%	1.31%	n/a
Maintenance Employee FTEs	21.03	21.03	22.45	25.67	26.16	24.39%	1.91%	n/a
Administrative Employee FTEs	10.5	10.5	15.8	12.16	7.23	-31.14%	-40.51%	n/a
Vehicles Available for Maximum Service	59	67	67	66	66	11.86%	0%	34.69%
Vehicles Operated in Maximum Service	49	56	56	63	63	28.57%	0%	75%
Spare Ratio (%) [1]	20.41%	19.64%	19.64%	4.76%	4.76%	-76.67%	0%	-86.81%
Total Gallons Consumed	559,982	576,033	560,354	578,848	573,753	2.46%	-0.88%	55.58%
Total Energy Consumed (KW-Hours)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Note:
1. StarMetro staff has indicated that the historic spare ratios reported to the NTD are in error; therefore, this table includes estimates of the actual spare ratios for years 2005-2007.

Source: StarMetro estimates, National Transit Database, Florida Transit Information System

Table 9, shown below, provides the indicators identified for the demand response system, which are similar to the fixed service indicators. The passenger trips and passenger miles show significant increases between 2005 and 2009, as do the vehicle and revenue miles and vehicle and revenue hours. Total operating expense shows an increase of 58.2% from 2005 to 2009, with

maintenance expense increasing over the same period by 168.4%. Total employees increased by 25.6%, although administrative employees decreased by 39.7%. Vehicles available for maximum service decreased from 20 vehicles in 2005 to 17 vehicles in 2009. Vehicles operated in maximum service remained at 15 vehicles in 2005 and 15 vehicles in 2009. Total gallons consumed decreased by 17.8% from 2005 to 2009.

Table 11 Indicators for Demand Response System

						% Change	% Change	% Change
	2005	2006	2007	2008	2009	2005-2009	2008-2009	1984-2009
Service Area Population	162,310	162,310	162,310	162,310	162,310	0.0%	0	n/a
Service Area Size (square miles)	102	102	102	102	102	0.0%	0	n/a
Passenger Trips	52,883	53,754	56,162	62,558	64,780	22.5%	3.6%	129.5%
Passenger Miles	391,660		341,388	343,298	389,708	-0.5%	13.5%	263.3%
Vehicle Miles	439,620	389,208	417,641	456,891	488,115	11.0%	6.8%	200.1%
Revenue Miles	393,956	347,668	362,080	399,526	442,385	12.3%	10.7%	199.7%
Vehicle Hours	31,476	29,245	31,888	34,528	35,255	12.0%	2.1%	215.0%
Revenue Hours	28,618	27,653	27,799	30,277	33,248	16.2%	9.8%	233.1%
Route Miles	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total Operating Expense	$ 1,057,468	$ 1,030,348	$ 1,228,324	$ 1,674,906	$ 1,672,780	58.2%	-0.1%	n/a
Total Operating Expense (of 1984 $)	$ 539,290	$ 509,038	$ 590,042	$ 774,811	$ 776,577	44.0%	-0.1%	n/a
Total Maintenance Expense	$ 132,378	$ 121,455	$ 118,124	$ 337,423	$ 355,343	168.4%	5.3%	n/a
Total Maintenance Expense (of 1984	$ 67,511	$ 60,004	$ 56,742	$ 156,092	$ 164,966	144.4%	5.3%	n/a
Total Capital Expense	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Federal Contribution	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
State Contribution	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total Local Revenue	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local Contribution	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Directly-Generated Non-Fare Rev	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Passenger Fare Revenues	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total Employee FTEs	18.22	19.41	22.96	24.05	22.89	25.6%	-4.8%	n/a
Employee Operating FTEs	13	14.08	17.12	16.68	17.56	35.1%	5.3%	n/a
Maintenance Employee FTEs	2.22	2.33	2.33	3.56	3.52	58.6%	-1.2%	n/a
Administrative Employee FTEs	3	3	3.51	3.81	1.81	-39.7%	-52.6%	n/a
Vehicles Available for Maximum Ser	20	17	17	17	17	-15.0%	0.0%	21.4%
Vehicles Operated in Maximum Serv	15	13	15	15	15	0.0%	0.0%	87.5%
Spare Ratio (%)	80.77	30.77	13.33	13.33	13.33	n/a	0.0%	-82.2%
Total Gallons Consumed	73114	64377	57802	59561	60099	-17.8%	0.9%	50.4%
Total Energy Consumed (KW-Hours)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Source: National Transit Database, Florida Transit Information System

The tables below show StarMetro's historic financial performance indicators. Table 10 shows the fixed-route bus system consistently has a farebox recovery ratio of about 30%, indicating an efficient service provision compared to industry averages. Peer systems over the same time period had farebox recovery ratios ranging from 6% to 40%.

Table 12 Fixed Route System Farebox Recovery Ratio over Time

Year	Farebox Recovery Ratio
2005	32.67%
2006	29.39%
2007	28.51%
2008	32.59%
2009	36.34%

Source: National Transit Database, Florida Transit Information System

The table below shows revenue sources for operating the system and capital purchases. Local funds typically account for the largest share of operating funds. As a large urbanized area, Tallahassee has been unable to use Federal Section 5307 program funds for transit operations since 2006. The Capital Funds section shows StarMetro has taken advantage of Florida's transportation development credits (a.k.a. toll revenue credits) program to match capital transit funds from the Federal government, resulting in a 100% federally funded capital purchases for the previous six years.

Table 13 Historic Revenue Sources

Historic Financial Information for StarMetro										
	2005		2006		2007		2008		2009	
Fare Revenues Earned		**$3,087,274**		**$2,928,505**		**$ 3,218,291**		**$ 3,911,566**		**$ 3,947,395**
Sources of Operating Funds Expended										
Fare Revenues	30%	$ 3,087,274	28%	$ 2,928,505	27%	$ 3,218,291	29%	$ 3,911,566	32%	$ 3,947,395
Local Funds	49%	$ 4,949,577	46%	$ 4,877,002	56%	$ 6,670,616	59%	$ 7,821,954	48%	$ 5,902,687
State Funds	9%	$ 906,432	9%	$ 958,517	8%	$ 986,840	7%	$ 963,930	8%	$ 969,684
Federal Assistance	11%	$ 1,073,933	16%	$ 1,679,689	8%	$ 905,294	4%	$ 500,800	11%	$ 1,309,790
Other Funds	1%	$ 145,921	1%	$ 105,449	2%	$ 235,000	1%	$ 111,029	0%	$ 59,729
Total Operating Funds Expended	**100%**	**$ 10,163,137**	**100%**	**$ 10,549,162**	**100%**	**$ 12,016,041**	**100%**	**$ 13,309,279**	**100%**	**$ 12,189,285**
Sources of Capital Funds Expended										
Local funds	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
State Funds	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Federal Assistance	100%	$ 2,476,232	100%	$ 450,518	100%	$ 2,805,802	100%	$ 2,022,697	100%	$ 3,751,533
Other Funds	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Total Capital Funds Expended	**100%**	**$ 2,476,232**	**100%**	**$ 450,518**	**100%**	**$ 2,805,802**	**100%**	**$ 2,022,697**	**100%**	**$ 3,751,533**

Source: National Transit Database

3.2.2 Peer Review Analysis

These two tables are from across the US and show Florida standard variables from the period 2003-2008, for the FTIS top five peers for StarMetro.

Table 14 Six Year Peer Review System Summary, Top Five Peer Systems

NTD ID	Company Name	Admin-istrative Employee FTEs	Maintenance Employee FTEs	Number of Vehicle System Failures	Operating Employee FTEs	Passenger Miles	Passenger Trips	Revenue Hours	Revenue Miles	Route Miles	Route Miles Per Square Mile of Service Area
4036	City of Tallahassee	245	440	2,865	1,917.20	167,606,673	79,064,443	2,920,689	35,901,936	3,912	38.34
4015	City of Jackson Transit System	158	445	7,139	952.7	30,028,283	13,632,933	1,333,757	20,858,917	4,827	42.36
4030	Gainesville Regional Transit System	254	622	13,607	3,043.38	499,880,443	152,578,827	4,432,351	50,923,332	3,628	48.99
5051	Greater Lafayette Public Transportation Corp	143	257	1,589	1,496.21	208,056,058	79,244,487	2,236,707	26,271,084	1,738	54.3
5052	South Bend Public Transportation Corp	87	316	1,766	1,467.78	184,741,893	53,999,571	2,300,442	32,268,242	4,782	70.32
6010	City Transit Management Company, Inc.	142	395	2,758	1,789.20	214,492,778	73,065,394	2,457,281	34,104,507	2,859	44.7

Table 15 Six Year Peer Review Summary, Top Five Peer Systems, continued

NTD ID	Company Name	Service Area Population	Service Area Size (square miles)	Total Employee FTEs	Total Energy Consumed (KW-Hours)	Total Gallons Consumed	Total Maintenance Expense	Total Operating Expense	Vehicle Hours	Vehicle Miles	Vehicles Operated in Maximum Service	Weekday Span of Service (in hours)
4036	City of Tallahassee	4,869,300	3,060	2,602		10,948,985	$42,412,614	$194,904,327	3,056,415	37,902,806	1,159	456
4015	City of Jackson Transit System	4,704,000	2,736	1,555		5,269,652	$25,964,734	$100,609,009	1,399,625	22,248,175	594	328
4030	Gainesville Regional Transit System	4,400,055	2,220	3,920	32,919	15,550,059	$65,978,935	$259,293,613	4,641,292	53,898,913	1,690	556
5051	Greater Lafayette Public Transportation Corp	2,604,000	768	1,897		7,098,132	$21,792,681	$132,072,814	2,435,781	29,744,896	1,035	396
5052	South Bend Public Transportation Corp	3,704,304	1,632	1,871	130,980	7,856,340	$26,515,031	$153,406,909	2,485,525	34,075,975	954	401
6010	City Transit Management Company, Inc.	4,800,180	1,536	2,326		8,632,845	$32,875,228	$134,764,821	2,546,208	35,115,351	1,212	330

The tables below show operating and service characteristics for peer systems in the southern US from the period 2003-2008. The comparison indicators include:

- Service Area,
- Staffing Statistics,
- Revenue Service,
- Operating Service,
- Service Consumed,
- Cost of Service, and
- Performance

The peer analyses for these indicators are found in the following tables.

Table 16 Six Year Peer Review Staffing and Service Area

		Service Area		Staffing Statistics			
NTD ID	Company Name	Service Area Population	Service Area Size (square miles)	Administrative Employee FTEs	Maintenance Employee FTEs	Operating Employee FTEs	Total Employee FTEs
4036	City of Tallahassee	4,869,300	3,060	245	440	1,917	2,602
4015	City of Jackson Transit System	4,704,000	2,736	158	445	953	1,555
4023	Augusta Richmond County Transit Department	5,040,000	600	73	254	683	1,010
4024	Metra Transit System	5,573,456	3,168	32	306	853	1,191
4025	Chatham Area Transit Authority	8,353,728	15,768	291	513	2,064	2,868
4030	Gainesville Regional Transit System	4,400,055	2,220	254	622	3,043	3,920
4031	Lakeland Area Mass Transit District	2,640,000	1,848	198	314	1,537	2,049
4038	Escambia County Area Transit	9,088,500	4,800	119	379	1,129	1,627
4043	Metro Transit	6,527,864	2,580	209	335	1,347	1,891
4044	Montgomery Area Transit System	5,643,904	3,780	147	235	1,141	1,522
4047	Athens Transit System	2,424,000	1,056	34	158	840	1,033
4130	Macon-Bibb County Transit Authority	2,579,675	1,558	112	177	690	978
6010	City Transit Management Company, Inc.	4,800,180	1,536	142	395	1,789	2,326

Table 17 Six Year Peer Review Service Provided

	Revenue Service Provided		Operating Service						
Company Name	Revenue Hours	Revenue Miles	Route Miles	Vehicle Hours	Vehicle Miles	Vehicles Available for Maximum Service	Vehicles Operated in Maximum Service	Weekday Span of Service (in hours)	Number of Vehicle System Failures
City of Tallahassee	2,920,689	35,901,936	3,912	3,056,415	37,902,806	1,383	1,159	456	2,865
City of Jackson Transit System	1,333,757	20,858,917	4,827	1,399,625	22,248,175	802	594	328	7,139
Augusta Richmond County Transit	1,012,802	12,526,826	3,544	1,058,960	13,163,137	496	362	340	4,284
Metra Transit System	1,285,691	18,821,788	3,252	1,291,265	18,891,167	682	356	362	6,772
Chatham Area Transit Authority	3,896,842	50,764,078	4,209	4,084,781	53,313,237	1,218	1,074	581	14,634
Gainesville Regional Transit System	4,432,351	50,923,332	3,628	4,641,292	53,898,913	2,277	1,690	556	13,607
Lakeland Area Mass Transit District	1,950,758	30,964,251	4,691	2,020,402	31,907,049	844	639	316	6,547
Escambia County Area Transit	2,056,562	30,969,515	5,577	2,112,634	31,836,029	936	768	471	2,769
Metro Transit	2,321,290	31,137,849	4,077	2,456,691	33,403,071	926	731	449	8,045
Montgomery Area Transit System	1,444,494	22,614,603	5,204	1,483,961	23,248,554	788	584	382	2,128
Athens Transit System	1,131,405	14,271,662	2,549	1,171,953	14,812,077	507	390	357	2,772
Macon-Bibb County Transit Authority	1,541,769	20,486,378	2,649	1,554,460	20,623,268	500	357	370	4,317
City Transit Management	2,457,281	34,104,507	2,859	2,546,208	35,115,351	1,416	1,212	330	2,758

Table 18 Six Year Peer Review Service Statistics

	Service Consumed		Cost of Service			Performance	
Company Name	Passenger Miles	Passenger Trips	Total Gallons Consumed	Total Maintenance Expense	Total Operating Expense	Average O&M Expense per Passenger Trip	Passenger Trip per Service Area Population
City of Tallahassee	167,606,673	79,064,443	10,948,985	$42,412,614	$194,904,327	$3	16.2
City of Jackson Transit System	30,028,283	13,632,933	5,269,652	$25,964,734	$100,609,009	$9	2.9
Augusta Richmond County Transit	86,788,953	16,626,995	2,842,413	$15,168,264	$58,199,098	$4	3.3
Metra Transit System	72,613,256	19,816,207	4,808,087	$15,576,998	$62,231,117	$4	3.6
Chatham Area Transit Authority	227,828,204	71,331,320	10,973,358	$49,518,046	$232,567,644	$4	8.5
Gainesville Regional Transit System	499,880,443	152,578,827	15,550,059	$65,978,935	$259,293,613	$2	34.7
Lakeland Area Mass Transit District	140,452,234	29,119,839	8,569,673	$24,359,042	$122,875,984	$5	11.0
Escambia County Area Transit	114,675,087	24,062,893	6,427,015	$28,603,727	$129,376,171	$7	2.6
Metro Transit	110,583,820	18,051,056	6,406,419	$24,516,613	$112,912,124	$8	2.8
Montgomery Area Transit System	76,006,707	15,219,038	3,383,773	$14,410,585	$77,356,060	$6	2.7
Athens Transit System	89,699,042	27,269,432	4,188,212	$9,052,301	$54,491,046	$2	11.2
Macon-Bibb County Transit Authority	92,317,824	19,629,878	4,620,883	$11,816,854	$71,258,843	$4	7.6
City Transit Management Company,	214,492,778	73,065,394	8,632,845	$32,875,228	$134,764,821	$2	15.2

The table on the following page shows the summary of the peer analysis, including a comparison of route miles per square miles of service, revenue hours per vehicle hour, operating and maintenance costs per revenue mile, maintenance cost per revenue mile, operating and maintenance costs per revenue hour, and vehicle miles per gallon consumed.

Table 19 Six Year Peer Review Summary

Summary						
Company Name	Route Miles Per Square Mile of Service Area	Revenue Hour per Vehicle Hour	O&M Cost per Revenue Mile	Maintenance Cost per Revenue Mile	O&M Cost per Revenue Hour	Vehicle Miles per Gallon Consumed
City of Tallahassee	38.34	0.956	$ 6.61	$ 1.18	$ 81.25	3.46
City of Jackson Transit System	42.36	0.953	$ 6.07	$ 1.24	$ 94.90	4.22
Augusta Richmond County Transit	141.78	0.956	$ 5.86	$ 1.21	$ 72.44	4.63
Metra Transit System	24.6	0.996	$ 4.13	$ 0.83	$ 60.52	3.93
Chatham Area Transit Authority	9.59	0.954	$ 5.56	$ 0.98	$ 72.39	4.86
Gainesville Regional Transit System	48.99	0.955	$ 6.39	$ 1.30	$ 73.39	3.47
Lakeland Area Mass Transit District	60.93	0.966	$ 4.76	$ 0.79	$ 75.48	3.72
Escambia County Area Transit	34.89	0.973	$ 5.10	$ 0.92	$ 76.82	4.95
Metro Transit	44.1	0.945	$ 4.41	$ 0.79	$ 59.20	5.21
Montgomery Area Transit System	38.55	0.973	$ 4.06	$ 0.64	$ 63.53	6.87
Athens Transit System	57.99	0.965	$ 4.45	$ 0.63	$ 56.16	3.54
Macon-Bibb County Transit Authority	36.09	0.992	$ 4.06	$ 0.58	$ 53.88	4.46
City Transit Management Company, Inc.	44.7	0.965	$ 4.92	$ 0.96	$ 68.22	4.07

3.2.3 Land Use and Development

The following section discusses several aspects of land use and development in Leon County, including development patterns, land development controls, planned developments, and ongoing plans.

Development Patterns

Leon County has an Urban Service Area (USA) to minimize urban sprawl and to ensure that the county's future population will have adequate infrastructure and services and that development will not spread beyond the service capacity of local government. The USA has been a successful growth management tool for Leon County by fostering growth in the central core. The USA encourages infill development around existing transit routes and increases the intensity of currently developed areas. Between 2002 and 2005, 88 percent of all new residential units have been constructed within the USA boundary. Likewise, 99 percent of all new commercial development was built within the USA.[16]

Existing Land Use

Leon County is the most intensely developed county in the region; however, a significant amount of vacant land and open space remains in the county. Vacant land comprises almost half, or 47.5 percent, of total land area. (This designation, however, also includes single-family residential development on parcels ten acres or greater in area.) Open space comprises another third, or 31.2 percent, of total land area in the county. Residential land uses account for 13.4 percent of total land area, and government operations account for 2.2 percent. Commercial land use (motel/hospital/clinic, retail, office, and warehouse) make up 1.6 percent of total land area. Approximately three-fourths of this development is located in the northern half of Leon County.[17] Existing land use in Leon County is displayed in **Figure 6.** .

Future Land Use

Leon County and Tallahassee have adopted a growth management strategy for the county to minimize sprawl. The goal is to accommodate 90 percent of new development through 2030 within the urban service area (USA). This will be largely accomplished through the "Southern Strategy," an effort to concentrate new development in southern Tallahassee, which is close to downtown Tallahassee where infrastructure is already in place. The north side of Tallahassee is currently developed at a relatively low density which strains public services. To support the Southern Strategy, Leon County and Tallahassee have amended development regulations to allow a maximum density of 150 units per acre in downtown Tallahassee. In addition, a new "University Transition" zoning district has been added to promote higher densities near the major universities. The city and county would also like to revitalize and redevelop Tallahassee's

[16] Evaluation and Appraisal Report of the 2010 Tallahassee-Leon County Comprehensive Plan. Tallahassee-Leon County Comprehensive Planning Division. May 2007.
[17] Evaluation and Appraisal Report of the 2010 Tallahassee-Leon County Comprehensive Plan. Tallahassee-Leon County Comprehensive Planning Division. May 2007.

central core, which includes downtown, universities, and older neighborhoods. [18] This development strategy increases the effectiveness of transit service in Tallahassee-Leon County because development is more centralized around the transit system.

Potential Land Use Conflicts and Mitigation

During the development of the *Evaluation and Appraisal Report (EAR) of the 2010 Tallahassee-Leon County Comprehensive Plan*, public workshops were held to gather input on issues in the community. A major focus of these discussions was how conflicting land uses have damaged, or have the potential to damage, the community. One example of a land use conflict cited is the conversion of homes in older, historic neighborhoods to non-residential uses. While non-residential uses have their place in revitalizing Tallahassee, the local government wants to ensure the fabric and identity of historic neighborhoods in the inner core are protected. To protect these communities while proceeding with revitalization and infill goals, Tallahassee-Leon County has adopted a "Residential Preservation" category on its future land use map. This designation protects older, established neighborhoods in Tallahassee from redevelopment by small- or large-scale non-residential uses, such as offices or retail. Another situation of conflicting land uses in Leon County is the expansion of university campuses (Florida State University and Florida A&M University) within close proximity of new development. The scale of proposed new developments is sometimes perceived as incompatible with compact campus land uses. In addition, the expansion of universities onto adjacent property has limited the amount of land available in downtown for residential and non-residential development. As the universities continue to increase enrollment, the development pressures upon Tallahassee's inner core are likely to escalate. [19]

In light of existing and anticipated development patterns, as well as land use issues emerging in the community, the EAR presents recommendations to amend the *Tallahassee-Leon County Comprehensive Plan's* Future Land Use Element and Land Use Conflicts. The major themes of these recommendations are presented in the following lists.

Future Land Use Element Recommendations:

1. Foster more true mixed-use development through the Land Development Code and planned unit development (PUD) processes;

2. Limit increases to the USA to accommodate anticipated development during the planning horizon while maintaining a reasonable allocation ratio;

3. Increase future land use map (FLUM) densities in the urban core to encourage infill, but incorporate design standards to ensure compatibility and palatability.

[18] Evaluation and Appraisal Report of the 2010 Tallahassee-Leon County Comprehensive Plan. Tallahassee-Leon County Comprehensive Planning Division. May 2007.
[19] Evaluation and Appraisal Report of the 2010 Tallahassee-Leon County Comprehensive Plan. Tallahassee-Leon County Comprehensive Planning Division. May 2007.

Land Use Conflict Recommendations:

1. For the Residential Preservation district, require long-term occupancy by homeowners or tenants as criteria for designation; establish policies on re-subdivision of land, clearing land, buffer standards, and densities compatible with existing development; require design standards; require buffers of at least 50 feet between residential and non-residential uses;

2. Work with the universities to mitigate the effects of expanding student enrollment on historic neighborhoods;

3. Promote redevelopment compatible with the universities and the Capital Circle Office Center employment center;

4. During revitalization efforts, ensure non-residential uses are not replacing residential uses to a significant degree. [20]

Land Development Controls

The following section discusses land development controls in Leon County, which include the *Leon County Land Development Code* and Tallahassee *Land Development Code*

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Leon County Land Development Code

Leon County has a *Land Development Code* that discusses concurrency management, environmental management, impact fees, zoning, subdivision and site development regulations, floodplain management, signs, aquifer/wellhead protection, and stormwater system management.

Concurrency management regulations require that developments must meet concurrency criteria for public facilities, including water and sewer, solid waste, stormwater management, roadways, and mass transit. Similarly, environmental management regulations require permits prior to engaging in activity that impacts the natural environment, such as tree removal. In addition, environmental analysis reviews are required for a variety of projects, such as PUDs, projects in conservation or preservation overlay districts, and for roadway projects. The *Land Development Code* also establishes impact fees for roadways to be used for the construction or improvement of designated state roads.

The zoning regulations in the *Land Development Code* establish zoning districts as well as development standards in the districts. In addition to traditional districts, Leon County has a variety of zoning designations to guide development for specific character areas in the county. These include lake protection, urban fringe, medical arts commercial district, urban pedestrian

[20] Evaluation and Appraisal Report of the 2010 Tallahassee-Leon County Comprehensive Plan. Tallahassee-Leon County Comprehensive Planning Division. May 2007.

district, critical planning area, target planning area, PUD, open space district, Bradford commercial district, and Mahan residential corridor. In addition, the zoning regulations establish numerous overlay zones for canopy roads, conservation, preservation, special development, historic preservation, and mixed land uses.

Tallahassee Land Development Code

The *Tallahassee Land Development Code* regulates the city with similar elements as the *Leon County Land Development Code*. Elements such as concurrency management and environmental management are identical. The zoning regulations for Tallahassee establish additional zoning districts, such as a variety of central urban districts, institutional/cultural/university transition, special character district, targeted retail/office growth area, and a variety of downtown zoning districts. In addition, Tallahassee features design review districts; these districts were established to ensure that infill development and redevelopment are consistent with the character of local neighborhoods. The City has established specific design standards for these districts.

Planned Developments

The following sections describe the planned major developments in the Tallahassee area.

Developments of Regional Impact

Developments of Regional Impact (DRI) are proposed developments that are of a certain size or intensity to require review by a regional planning agency. For Leon County, this agency is the Apalachee Regional Planning Council (ARPC). Recently submitted DRIs are listed below.

Tallahassee Regional Airport DRI

In January 2008, the Tallahassee Regional Airport submitted an application to the appropriate review agencies for expansion of airport facilities. The expansions include 26,500 square feet of general aviation office space, 100 hotel rooms, and a 6,800-square foot maintenance building. To compensate for the proposed regional impact, the airport has proposed decreasing other planned development that has been formerly approved. The airport expansion plan was approved in February 2009.[21]

Southside DRI

In August 2006, a developer submitted an application to the appropriate review agencies for a new mixed-use development in Tallahassee. The Southside DRI encompasses 1,600 acres and includes 1,800 single-family residential units, 1,000 dwelling units, 1.04 million square feet of commercial space, 150,000 square feet of office space, a 100-bed hospital, and a 300-room hotel. The ARPC is currently working with the City of Tallahassee and Blueprint 2000 on infrastructure and planning issues for the proposed development. [22]

[21] Development of Regional Impact (DRI) Update. Apalachee Regional Planning Council.
[22] Development of Regional Impact (DRI) Update. Apalachee Regional Planning Council.

Pinnacle at Cross Creek DRI

In July 2007, a developer submitted an application to the appropriate review agencies for a new mixed-use development in Leon County. The Pinnacle at Cross Creek development encompasses 176 acres and includes 400 multi-family units, a 1.2 million-square foot shopping center, 300,000 square feet of office space, and a 200-room hotel. The proposed development is still in the approval process. [23]

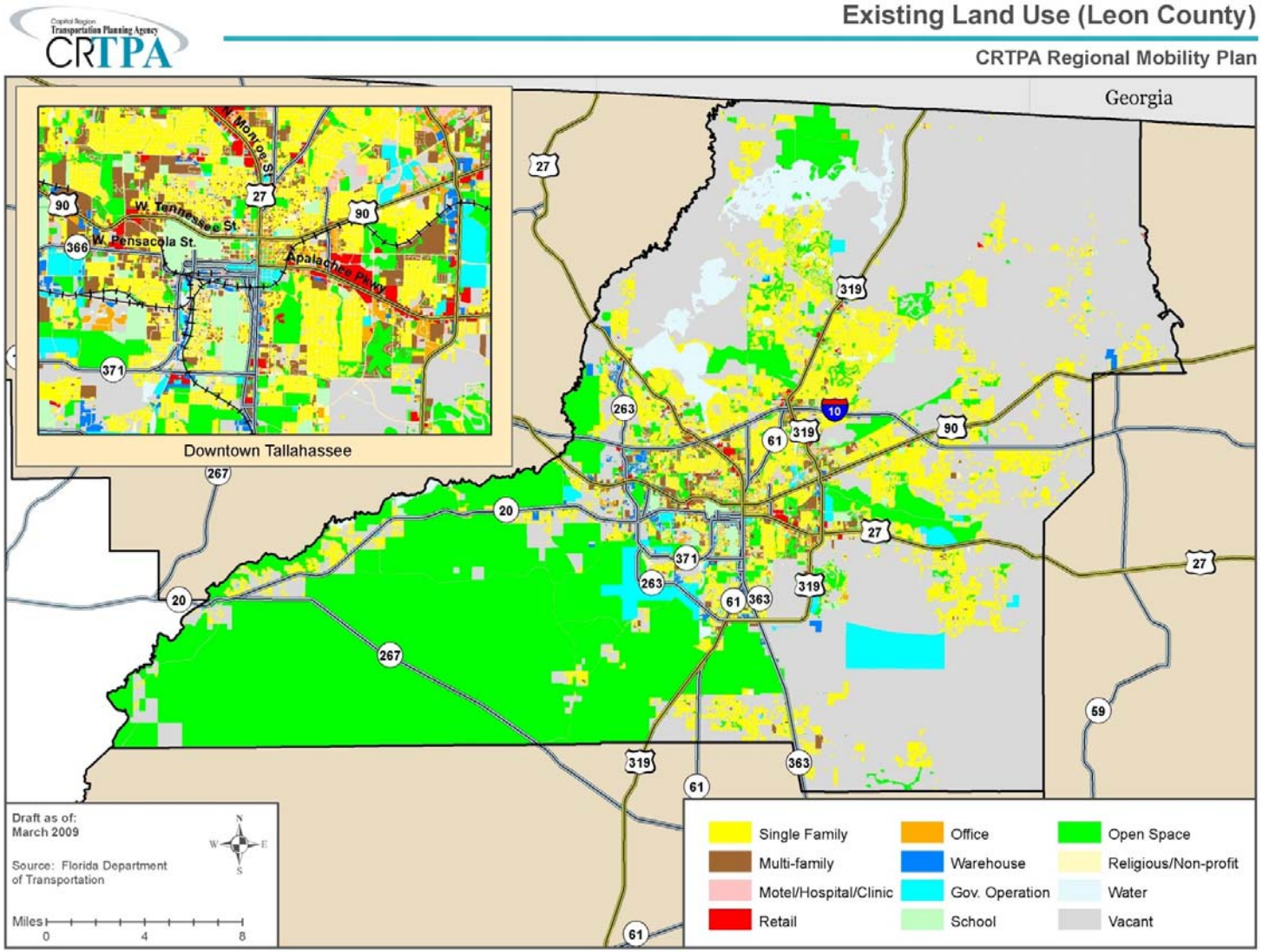
Other Planned Developments

Leon County has several additional major ongoing and proposed developments. The Tallahassee-Leon County Planning Department defines major developments as those consisting of 40 or more units of residential development or 25,000 or greater square feet of non-residential development. These developments include projects in the pre-submittal/pre-application stage of review for one year (at the most) or in site plan review (two years at the most). New facilities that are anticipated to have a significant impact of traffic are also included. As of March 2009, major ongoing and proposed developments include 52 residential projects, 24 commercial projects, 18 mixed-use projects, and 2 public facilities.[24]

[23] Development of Regional Impact (DRI) Update. Apalachee Regional Planning Council.

[24] Major Ongoing and Proposed Developments in Tallahassee and Leon County. Tallahassee-Leon County Planning Department. March 2009. http://www.talgov.com/planning/pdf/support/mopd_mar09_report.pdf

Figure 6. Existing Land Use (Leon County)



3.2.4 Population Characteristics

Leon County serves as a major population center and continues to grow; however data from the US Census Bureau indicate the county's growth is slowing. As shown in **Table 20** below, from 1970 to 1980 Leon County grew at an annual average rate of 3.73 percent. This was slightly higher than Florida's growth rate for the same period (3.68 percent). From 1980 to 2008, both Leon County and Florida have grown less rapidly. During this time, Leon County's annual growth rate has remained below that of Florida. Overall, Leon County's population has increased by 167 percent between 1970 and 2008.[25]

Table 20. Population Growth in Leon County and Florida, 1970-2008

Year	Leon County		Florida	
	Population	Average Annual Growth Rate from 1970	Population	Average Annual Growth Rate from 1970
1970	103,047	NA	6,789,447	NA
1980	148,655	3.73%	9,746,961	3.68%
1990	192,493	3.20%	12,938,071	3.23%
2000	239,452	2.85%	15,982,824	2.89%
2008	274,892	2.62%	18,851,975	2.72%

Sources: U.S. Census; University of Florida, Bureau of Economic and Business Research, 11/3/08.
Note: Data from years 1970-2000 are from U.S. Census. Year 2008 data is from University of Florida, Bureau of Economic and Business Research, 11/3/08.

Leon County population density is shown in **Figure 7.** Most of Leon County's residents reside in the unincorporated portion of the County. Between 1997 and 2005, the percentage of the county's population in unincorporated Leon County has ranged from 62.9 percent to 63.5 percent. While Tallahassee has less overall population than unincorporated Leon County, it is more densely populated and has grown at a faster rate. Since 1990, population growth in the city has accounted for approximately two-thirds of the county's growth. Several annexations by Tallahassee have expanded the City from 62.2 square miles (8 percent of total County acreage) in 1990 to 102 square miles (13 percent of total County acreage) by 2005.[26]

The presence of the many institutions of higher learning in Leon County, as well as employment opportunities, has given Leon County the distinction of being one of the most educated counties in Florida. **Table 21** shows that for the population aged 25 and above, a greater proportion of Leon County residents have college degrees than state-wide. Nearly a quarter of

[25] U.S. Census Bureau
[26] Evaluation and Appraisal Report of the 2010 Tallahassee-Leon County Comprehensive Plan. Tallahassee-Leon County Comprehensive Planning Division. May 2007.

people age 25 and above in Leon County have a Bachelor's degree, compared to only 14.3 percent throughout Florida. 11.1 percent of Leon County residents age 25 and above have master's degrees, compared to 5.0 percent throughout Florida. Leon County residents are more likely to have professional and doctorate degrees, and are less likely to have only high school degrees or no schooling at all.[27] **Figure 8** shows the percentage of the population in the labor force, and **Figure 9** shows the mean travel time to work for those living in Leon County.

Table 21. Educational Attainment for Population Age 25 and Above in Leon County and Florida (2000)

	Leon County		Florida	
Educational Attainment	**Population Age 25 and Above**	**Percent of Population Age 25 and Above**	**Population Age 25 and Above**	**Percent of Population Age 25 and Above**
No Schooling Completed	663	0.5%	133,288	1.2%
High School Graduate	25,963	18.9%	3,165,748	28.7%
Some College	27,956	20.3%	2,403,135	21.8%
Bachelor's Degree	33,040	24.0%	1,573,121	14.3%
Master's Degree	15,198	11.1%	549,046	5.0%
Professional School Degree	4,757	3.5%	251,471	2.3%
Doctorate Degree	4,401	3.2%	88,690	0.8%

Source: U.S. Census Bureau, Census 2000, SF3, Table P37.

Environmental Justice

According to the US Department of Transportation (USDOT), there are three (3) fundamental environmental justice principles associated with the expenditure of federal funds for construction of transportation improvement projects:[28]

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

Federal environmental justice requirements are set forth in Presidential Executive Order 12898 (1994), which states, "Each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse

[27] U.S. Census Bureau, Census 2000, SF3, Table P37.
[28] "An Overview of Transportation and Environmental Justice." Publication No. FHWA-EP-00-013. US DOT FHWA.

human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." The following terms are defined as presented in the FHWA Order 6640.23 *FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations:*

- Low-income: A household income at or below the Department of Health and Human Services poverty guidelines (According to the 2000 guidelines, the threshold was $8,350 for one person, and $17,050 for a family of four);
- Minority: A person who is black (having origins in any of the black racial groups of Africa), Hispanic (of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish Culture or origin, regardless of race), Asian American (having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands); or American Indian and Alaskan Native (having origins in any of the original people from North America and who maintains cultural identification through tribal affiliation or community recognition).

Data from the U.S. Census Bureau's Census 2000 determines areas of low-income and minority population. These areas are noted to ensure equitable participation in the planning process, and to avoid disproportionately affecting these communities in the recommendations of the transit development plan.

Within Leon County, the highest incidence of individuals who live below poverty level are in Tallahassee, particularly west and immediately south of SR 363/Woodville Highway/S Adams Street, which runs north-south through the center of the city. There is also a significant population living below poverty level in an area between I-10, SR 263/Capital Circle NW, and US 90/SR 10/W Tennessee Street. In these areas, 40.1 to 100 percent of the population lives below poverty level. This area also has a high concentration of college students from all three colleges in the area. Elsewhere in Leon County, the percentage of population living below poverty ranges from 0 to 10 percent (in northern and eastern Leon County) to 10.1 to 30 percent (in the corners of the county). The presence of population living below poverty level in Leon County is shown in **Figure 10**.

There is a significant minority population in Leon County. In southern Tallahassee, south of US 90/Tennessee Street and within the US 319/SR 263/Capital Circle perimeter, as well as between US 319/Crawfordville Road and SR 363/Woodville Highway south of Capital Circle, 40.1 to 100 percent of the population belongs to a minority group. There are also significant pockets of minority groups in northeast and northwest Leon County, where 40.1 to 100 percent and 30.1 to 40 percent of the population, respectively, belongs to a minority group. The least incidence of minority population is located in areas just north of I-10 as well as southwest Leon County. The presence of minority population in Leon County is shown in **Figure 11**.

Transportation Disadvantaged Population

Chapter 427 of the Florida Statutes defines transportation disadvantaged (TD) persons as:

> *"…those persons who because of physical or mental disability, income status, or age are unable to transport themselves or to purchase transportation and are, therefore, dependent upon others to obtain access to health care, employment, education, shopping, social activities, or other life-sustaining activities, or children who are handicapped or high-risk or at risk as defined in [section] 411.202."*

The Florida Coordinated Transportation Systems exist for "promoting mobility for Florida's Transportation Disadvantaged"[29]. In Leon County, this coordinated transportation operates through StarMetro and serves two population groups. The "Category I" group includes persons who are disabled, elderly, or low-income, and children who are "high-risk" or "at-risk". This group is eligible for trips sponsored by social service or governmental agencies. The "Category II" group includes those who are unable to transport themselves or to purchase transportation. This group is eligible to receive the same subsidies as those in Category I, in addition to trips subsidized by monies allocated to local community transportation coordinators through the TC Trust Fund, as funding permits. **Table 22** presents a forecast of the Potential TD Population (Category II) and the TD Population (Category I) in Leon County. The population forecast can be used to estimate for demand for both programs.

Table 22. Forecasts of Category I and II Populations in Leon County

Year	TD Population Category I	TD Population Category II
2005	76,068	14,179
2006	77,350	14,432
2007	78,657	14,689
2008	81,347	15,302
2009	84,192	15,951
2010	90,583	17,501
2011	94,018	18,296
2012	97,657	19,140
2013	101,517	20,038
2014	105,610	20,993
2015	109,954	22,010

Source: City of Tallahassee Transit Development Plan Update, 2006

Travel Trends

According to the 2000 US Census, 95.0 percent of Leon County residents commute within Leon County for employment. Another 1.6 percent travel to Gadsden County for employment, 0.65 percent to Wakulla County, and 0.29 percent to Jefferson County. The remaining employed Leon County residents travel to other areas in Florida, Georgia, and Alabama for work.[30]

[29] Florida Association of Coordinated Transportation Systems, Inc., www.flafacts.com
[30] County-to-County Worker Flow Files. Residence County to Workplace County Flows for Florida. Census 2000. U.S. Bureau of the Census. http://www.census.gov/population/www/cen2000/commuting/index.html

In unincorporated Leon County, the majority of households have vehicles. In Tallahassee, however, a significant number of households, particularly in the central city, do not have vehicles. This is most prevalent in the downtown area and near the universities, where 14.8 to 46.9 percent of households do not have vehicles. These residents, including a large population of university students, likely travel by walking, biking, or transit. The percent of households that do not have vehicles is shown in **Figure 12**. Correspondingly, **Figure 13.** shows that residents in the central city are the most likely to use public transportation to get to work in the County. In central Tallahassee, many areas of town have 11.6 to 38.8 percent of the population commuting via StarMetro. In unincorporated Leon County, however, most residents do not commute by public transit, likely due to a lack of access to the system.

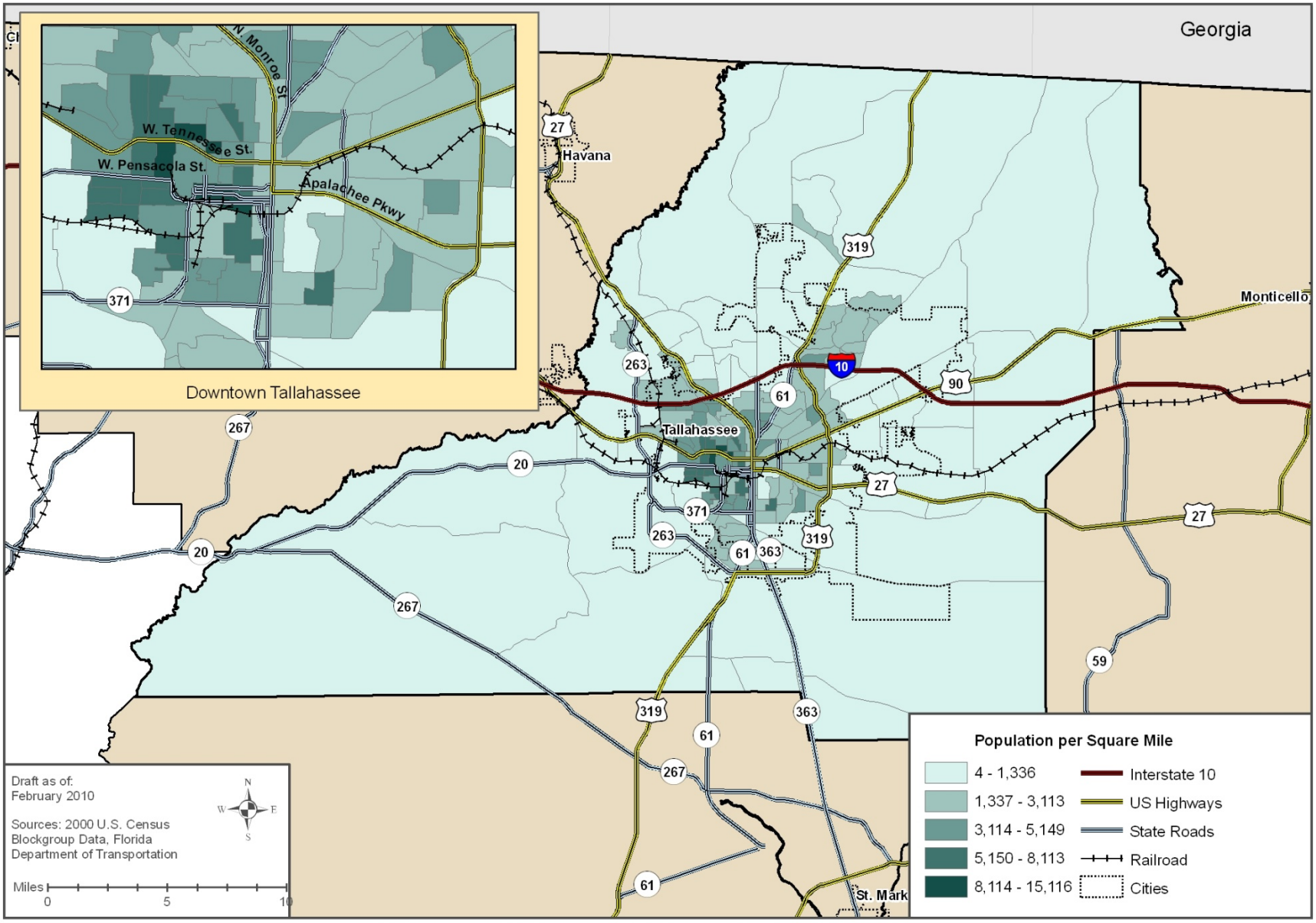


Figure 7. Population Density (Leon County)

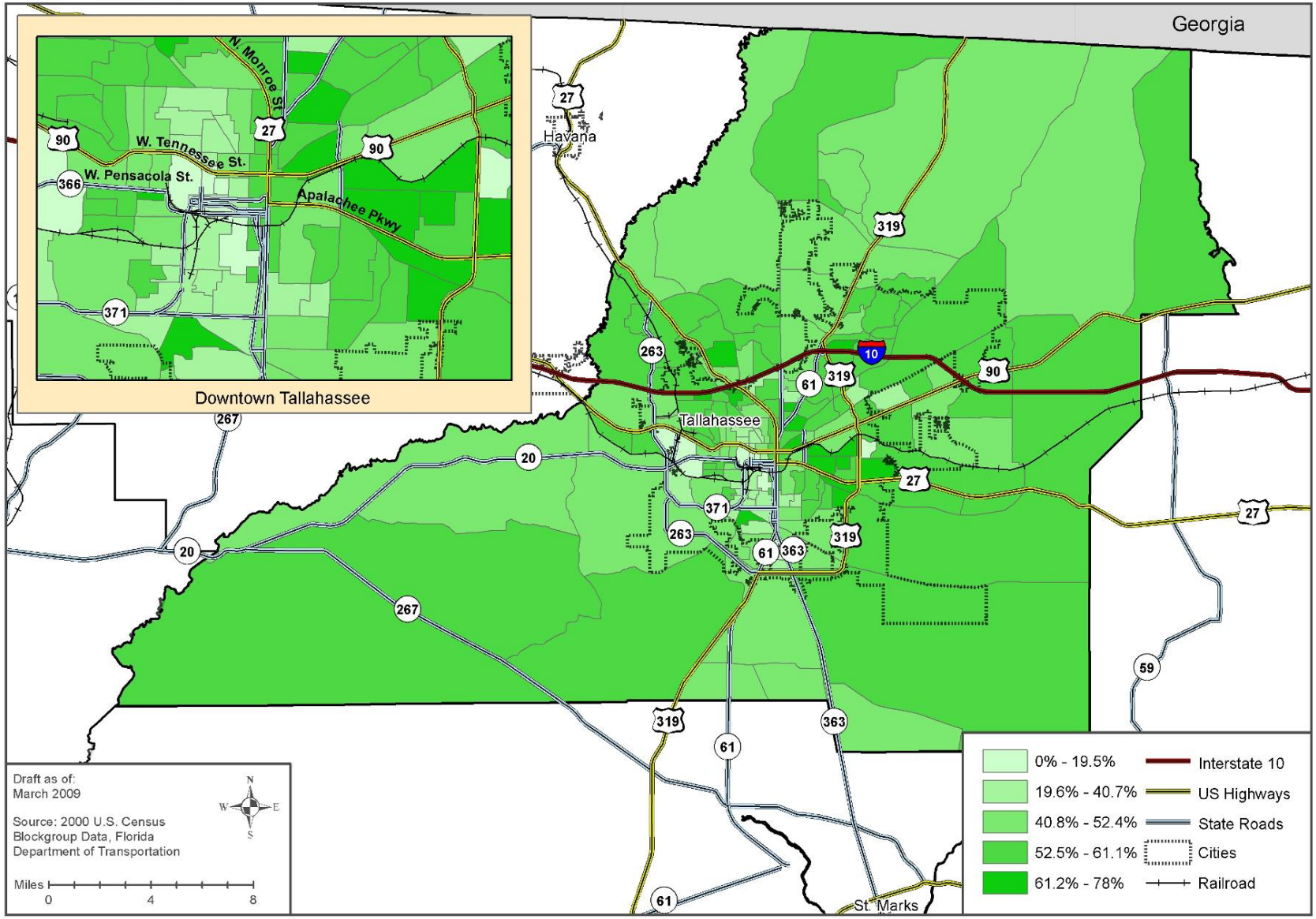


Figure 8. Percentage of Population in the Labor Force (Leon County)

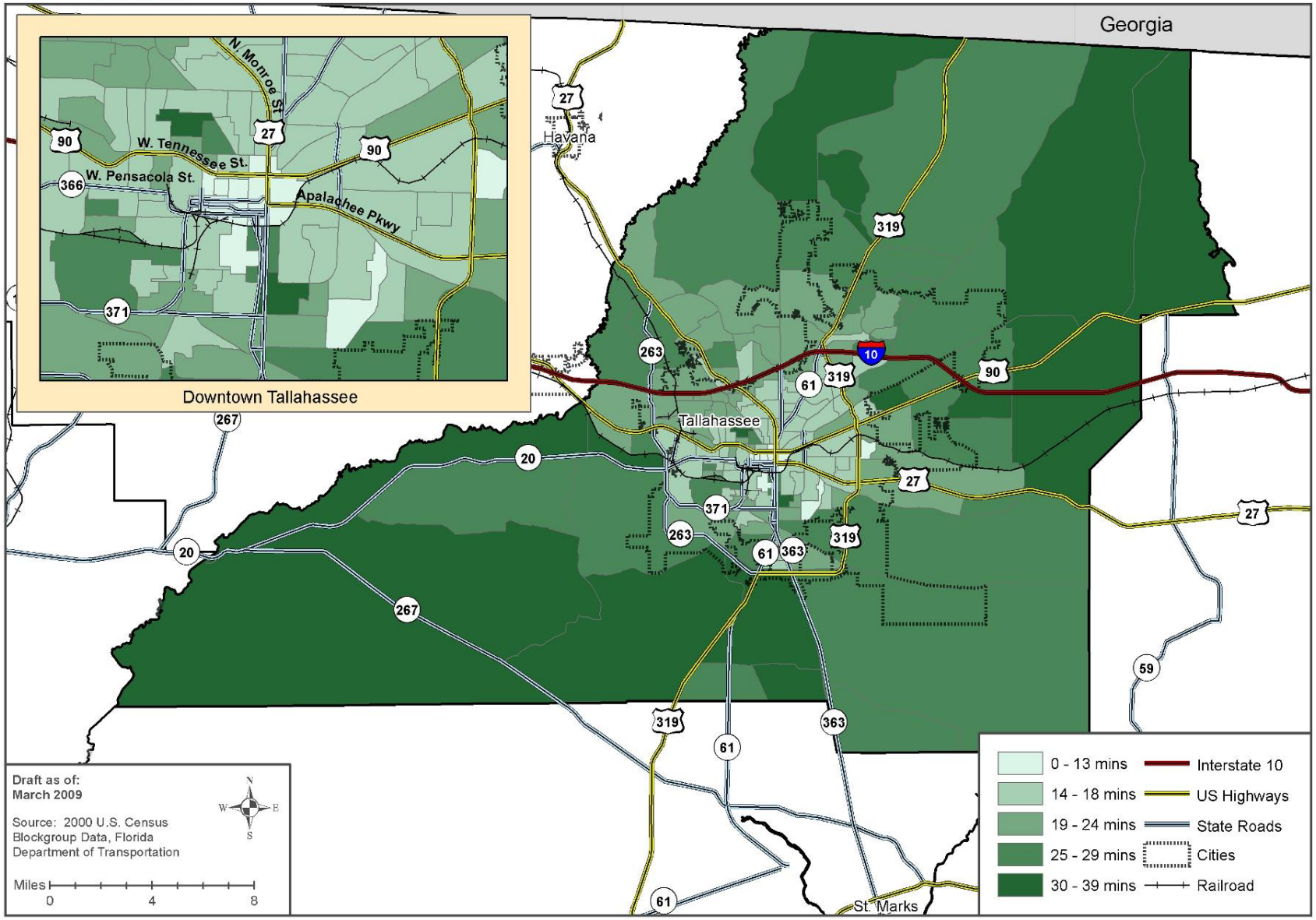


Figure 9. Mean Travel Time to Work (Leon County)

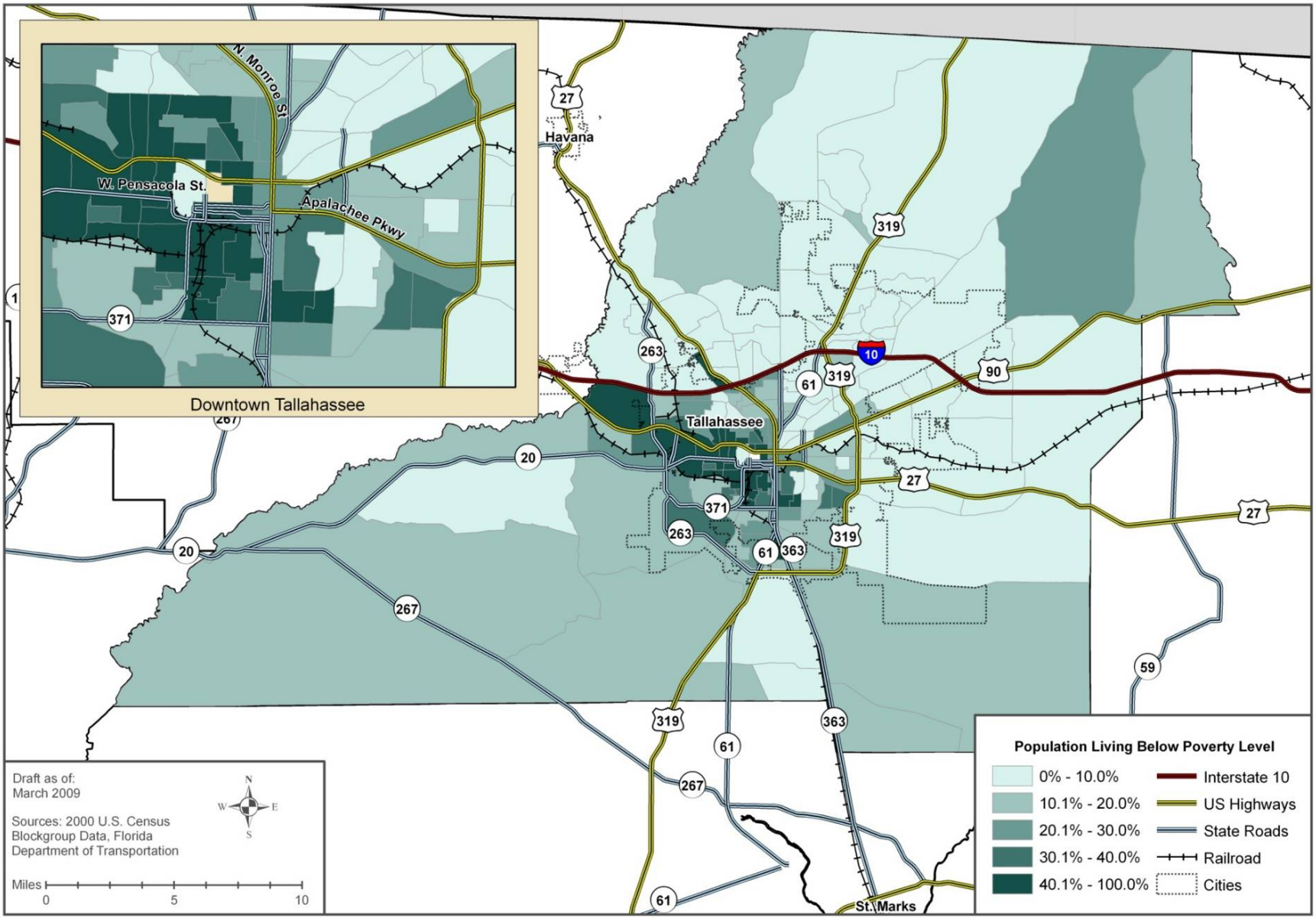


Figure 10. Environmental Justice: Population below Poverty Level (Leon County)

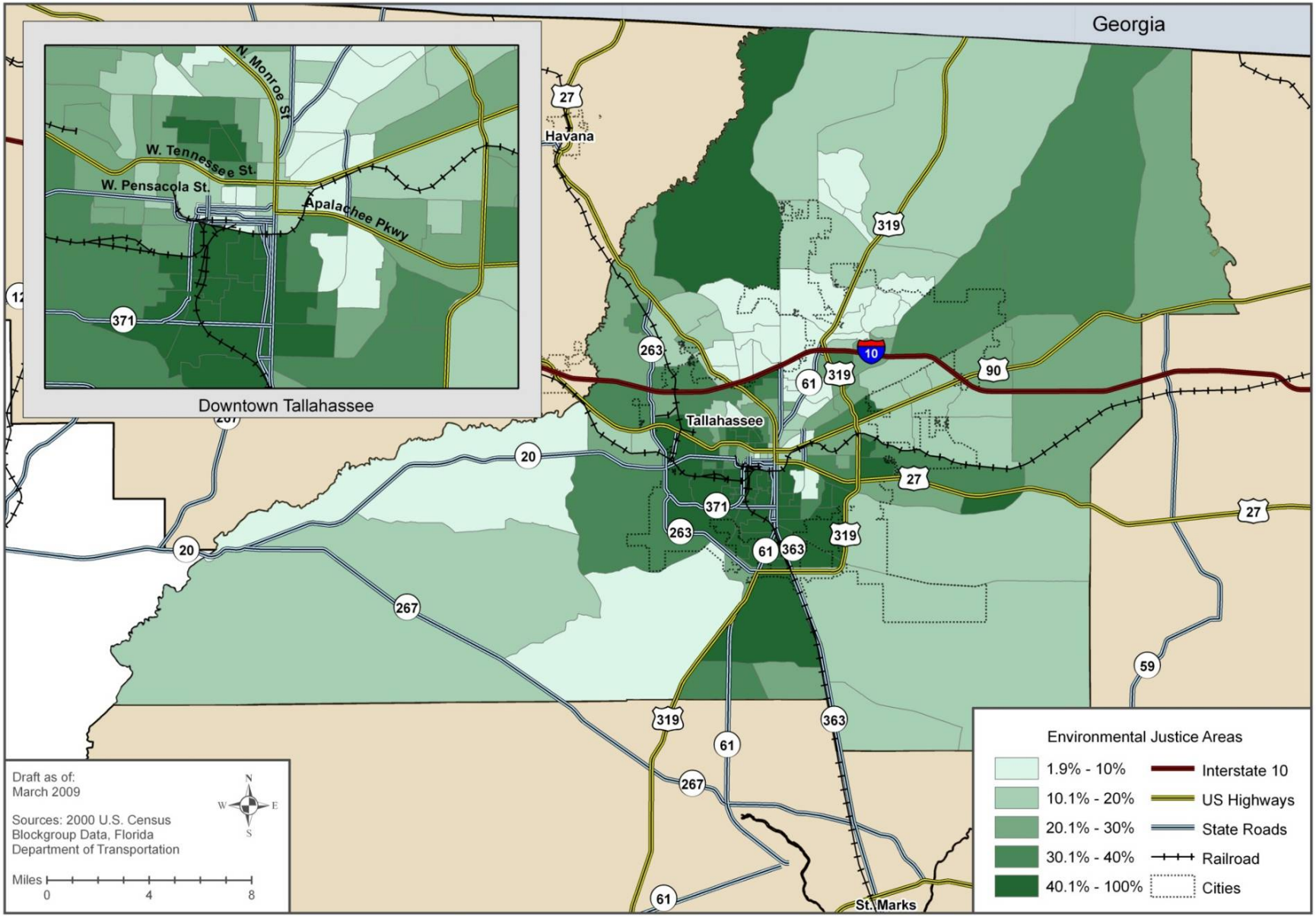


Figure 11. Environmental Justice Areas: Percentage Minority Population (Leon County)

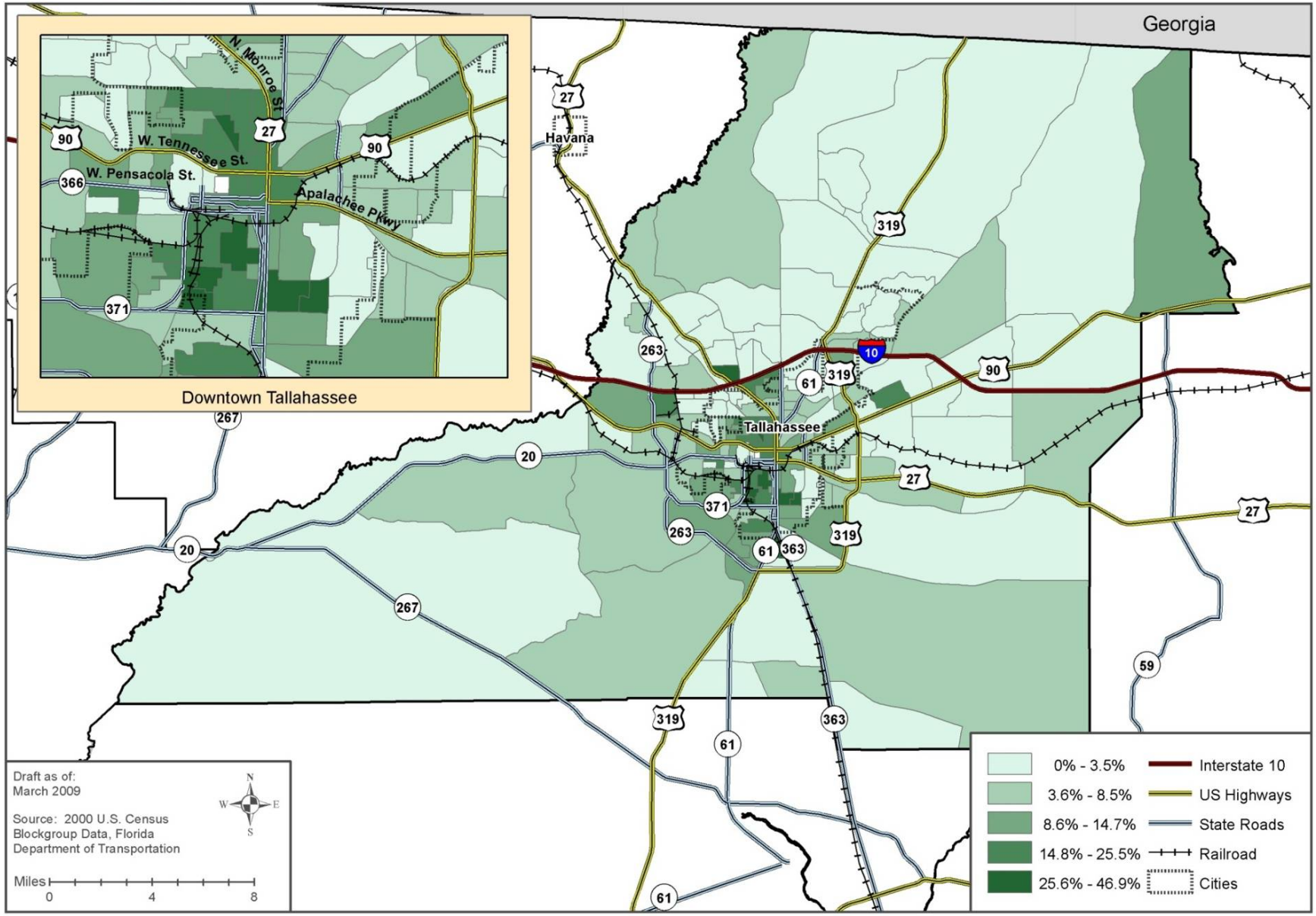


Figure 12. Percentage of Households with No Vehicles (Leon County)

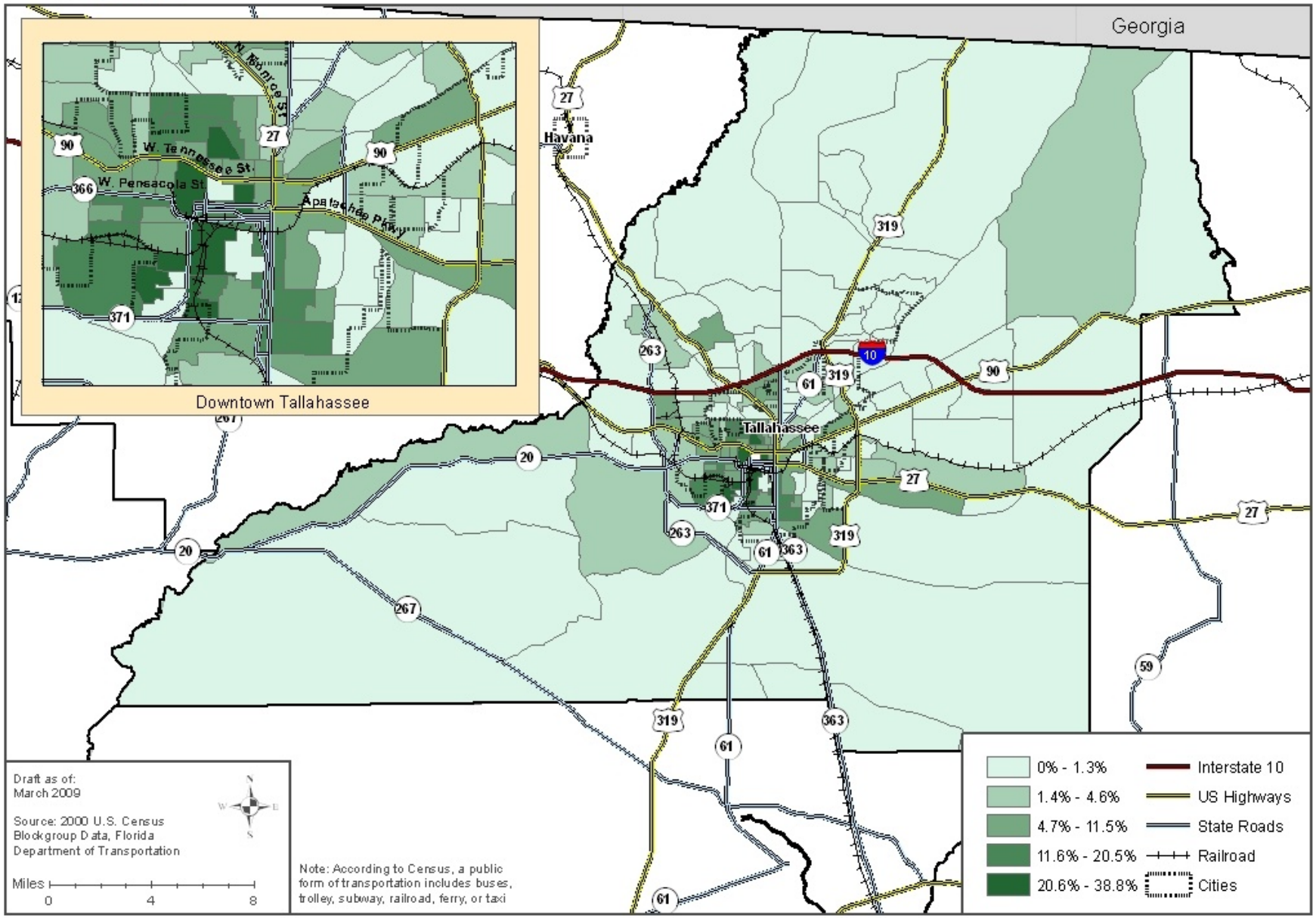


Figure 13. Population Using Public Transportation to Work (Leon County)

4.0 StarMetro Mission and Goals

StarMetro's mission statement is: "As a community service, StarMetro provides alternative and specialized transportation services for residents, partners and visitors of the Tallahassee community." In support of the overall agency mission, the planning department's mission statement is: "The StarMetro Planning Division seeks to improve the quality and quantity of transit service by creatively searching for new opportunities and technologies in a fiscally responsible manner."

The horizon year for this Transit Development Plan (TDP) is 2020, but the study is a component of the 2035 Regional Mobility Plan, the current update of the capital region's long range transportation plan. The goals of this TDP are included in the broader goals of the Regional Mobility Plan. These goals and objectives are divided into eleven categories, shown in the table below.

Table 23. CRTPA Regional Mobility Plan Goals and Objectives

Goal		Objectives
Access	Provide residents and visitors with access to a multi-modal transportation system and to goods and services throughout the region.	Locate and provide a range of transportation alternatives to improve public access to work, school, jobs, health services, and commercial needs throughout the region.
		Provide affordable and equitable access to travel choices for the elderly, people with disabilities, and people who do not or cannot drive.
		Support compact, walkable, mixed use, infill development and redevelopment with compatible transportation options to improve public access to goods and services.
		Provide safe pedestrian, bicycle, and vehicular routes to and from schools and surrounding residential and mixed use areas.
Connectivity	Enhance local and regional connectivity to effectively and safely move people and goods using multiple modes of transportation.	Maximize the interconnectivity of streets, sidewalks, trails, and transit to provide safe and convenient pedestrian, bicycle, transit, and motor vehicle mobility.
		Enhance regional connectivity to employment, education, and activity centers.
		Enhance local connectivity by supporting new and existing compact, mixed use, walkable infill development and the redevelopment of existing employment and activity centers, underutilized commercial lands, and transit corridors.

Goal		Objectives
		Develop context sensitive design standards for transportation facilities to protect community character, provide for "complete streets", enhance connectivity, and encourage the use of multiple modes of transportation.
Coordination	To promote efficient and thorough implementation of the regional mobility plan by ensuring broad buy-in and stakeholder support for the regional mobility planning process, the plan itself, and its constituent projects.	Prepare and maintain a stakeholder list of public sector regional mobility partners, including local governments, state agencies with offices in the region, local school boards, the universities, and public commuter services.
		Use agreements among parties with respect to levels of service, timing of implementation, and funding for construction and operations.
		Conduct biennial reviews (separate from mobility plan updates) to evaluate compliance with terms of agreements and stakeholder satisfaction with implementation of the regional mobility plan.
		Include within the Regional Mobility Plan a process to identify and evaluate the implementation and effectiveness of the plan, including its impacts on land use, redevelopment, and related initiatives and actions.
		Provide status reports about the Regional Mobility Plan to the Florida Department of Transportation and the Florida Department of Community Affairs.
Economic Development	Create and maintain a transportation infrastructure that provides energy- and time-efficient intermodal movement of goods, services, and labor to and within urban areas in the region.	Increase pedestrian, bicycle, transit, and shared transportation modes within and among urban areas, including emphasizing options and mobility for the elderly, handicapped, and school-aged people.
		Increase multimodal transportation choice and capacity to provide access options, reduce trip lengths and frequencies, and reduce transportation costs by providing choice in travel mode and movement of goods and services.
		Lower vulnerability of business and households to rapid changes in transportation costs by providing choice in travel mode and movement of goods and services.

Goal		Objectives
		Support development of compact growth, urban infill and redevelopment of existing commercial, office, residential, and other transportation-dependent land uses.
		Maximize transportation continuity between transportation uses and modes. Reduce and minimize conflict between transportation system uses including freight transport.
		Expand and enhance transportation mode alternatives and services for work commuters, focusing on access to activity centers throughout the region.
		Provide continuous and complete options in transportation modes for visitor and tourist activity centers and destinations.
		Support the improvements of the region's information and technology infrastructure in order to mitigate regional transportation demands and impacts by enhancing the electronic transfer of goods and services and increasing the opportunity for telework and distance learning.
		Locate, design, and build transportation facilities which minimize impacts on the natural environment, improve the treatment and management of stormwater, and protect adjacent land values.
Financial Feasibility	To ensure that the funding for the desired regional mobility projects is met and that necessary revenues are made available timely for the successful implementation of priority projects that promote sustainability, more efficient use of resources, and regional	Incorporate costs and benefits measures that reflect environmental and public health considerations, such as reduced greenhouse gases and the reduced need for land and associated stormwater treatment.
		Include anticipated operations and maintenance costs within calculations for feasibility.
		Local revenues dedicated to implementation of the regional mobility plan shall be used for state and federal matching resources wherever possible.

Goal		Objectives
	connectivity.	To leverage state funding for regional mobility projects in Gadsden, Jefferson, and Wakulla Counties, apply regularly for funding through OTTED, Enterprise Florida, and the various initiatives for rural counties.
Land Use	Coordinate transportation and land use systems to foster vibrant communities with compact urban forms throughout the region.	Provide for the development of compact, mixed use, walkable neighborhoods and neighborhood centers to minimize travel distances and enhance pedestrian and bicycle mobility and transit accessibility.
		Support compatible infill development and the redevelopment of existing employment and activity centers, under-utilized commercial lands, and transit corridors to efficiently use existing infrastructure, enhance accessibility, and support transit services.
		Improve the interconnectivity of streets, sidewalks, trails, and other transportation system components to enhance the grid network and provide safe and convenient pedestrian, bicycle, and motor vehicle mobility.
		Develop context sensitive design standards for transportation facilities to protect and enhance community character, contribute to attractive and safe "complete streets," and encourage the use of multiple modes of transportation.
		Minimize the amount of land devoted to automobile parking.
		Work with local governments to develop comprehensive plans that support compact, mixed use development and enable the use of multiple modes of transportation including walking, biking, and transit.
		Establish performance standards and report on the coordination of transportation and land use systems.
Multimodalism	There are many forms of transportation in the region, some untapped and	Minimize congestion on roadways and at intersections through increased mode split.
		Provide more sidewalks and bicycle facilities.

Goal		Objectives
	to be utilized in the future. The Regional Mobility Plan must create and maintain opportunities to facilitate the movement of and connections among people, jobs, goods and services.	Provide infrastructure to facilitate and support transit riders, pedestrians, bicyclists, carpools and vanpools.
		Improve intermodal connectivity and access to intermodal facilities and activity centers.
		Provide efficient, frequent, reliable and convenient transit service that is easy to use and understand.
		Maximize the consistency and logical progression of transportation facilities and services.
		Identify safe and efficient truck routes.
		Maintain consistency with county and municipal comprehensive plans.
Natural Resource Protection/ Conservation	A transportation system that provides access and mobility, supports compact growth, and protects the region's natural environment.	Design all transportation facilities to avoid or minimize the impact to natural resources.
		Locate new transportation projects to avoid fragmenting and degrading regionally significant: natural resources, wildlife corridors, greenways, and aquifers.
		Give priority to public transit, bicycling, pedestrian facilities, and other transportation demand management strategies as a means of maximizing existing roadway capacity and reducing demand and need for new roadway construction or expansion.
		Coordinate with local, state, and federal and not-for-profit natural resource agencies, wildlife agencies, and land management agencies to ensure impacts from transportation projects are avoided or minimized.
		Design and build transportation facilities that incorporate low impact development strategies that minimize stormwater runoff.
		Develop, implement, and support a multimodal transportation system that reduces the rate of growth in annual vehicle miles traveled and reduces greenhouse gas emissions and other environmentally damaging pollutants.
		Establish performance standards and report on transportation impacts to the natural environment.

Goal		Objectives
Public Participation	The Regional Mobility Plan must have a strong Public Involvement Plan to ensure that all citizens of the regional have the opportunity to provide input in the transportation planning process.	Provide participation opportunities for any interested citizen to learn about and help shape policies and strategies through an active engagement process that is open, inclusive, and accessible and recognizes all citizen perspectives.
		Develop partnerships and build credibility and trust amongst all participants.
		Provide clear, accurate, timely, and useful information which can be transmitted through a variety of ways, including a website, fact sheets, presentation materials at public meetings, electronic mail inquiries, and other methods to reach and exchange information with all citizens.
		Provide convenient and full public access and timely public notice of dates, times and places for public meetings.
		Find opportunities to reach out and obtain input from a broad and diverse spectrum of stakeholders, including the traditionally underserved populations that may not consistently participate in planning processes.
		Use methodology consistent with state strategies for satisfying public involvement under Title VI of the Civil Rights Act of 1964.
		Update the Capital Region Transportation Planning Agency Board and committees throughout the process.
Safety & Public Health	Improve public health by increasing choice, safety, and access of transportation facilities for all segments of the population.	Build compact, walkable communities that support active living, improve mental health, reduce obesity and promote physical activity by providing access to a variety of active modes of transportation.
		Reduce transportation-related vehicle emissions to improve air quality and reduce greenhouse gas emissions.
		Direct transportation funding and programs to minimize the frequency and severity of transportation-related accidents using smart growth principles and design.

Goal		Objectives
		Support and promote safe and secure walking and bicycling routes for people of all ages and abilities.
		Build sufficient, connected pedestrian and bicycle facilities to enable safe access to educational and other high need facilities from adjacent residential land uses.
		Revise road, parking, and sign design requirements to reduce speeds and conflicts among pedestrian, bicycles and vehicles, and provide a "complete streets" approach for safe pedestrian and bicycle access.
		Increase pedestrian, bicycle, transit and shared transportation modes within and among urban areas, including emphasizing options and mobility for the elderly, handicapped, and school-aged people.
		Coordinate with the Florida Department of Health, Department of Transportation Safety Office, the State Highway Safety Plan, and the Department of Elder Affairs to increase the application and consistency of safety and public health objectives for a rapidly increasing elderly population.
		Balance the needs of first responders with regard to transportation improvements and facility design in order for those agencies to meet their established response time requirements while promoting compact, mixed-use growth and redevelopment.
		Balance the needs of evacuation route hazard mitigation objectives and initiatives into major roadway and intersection improvements with the need for multimodal active communities.
Security	Promote and implement transportation system improvements for all modes maximizing security of the transportation system.	Develop a transportation plan giving priority consideration to security improvements particularly concerning vulnerable areas or modes.
		Support programs which ensure safe and secure operation of the transportation system for both motorized and non-motorized users.

Goal		Objectives
		Improve disaster, emergency and incident response preparedness and recovery by coordinating with local and state emergency management agencies.
		Continue to improve and protect the capacity of Evacuation Routes (i.e., power for signals).

5.0 Alternatives Analysis

5.1 nova2010

This Transit Development Plan includes StarMetro's route decentralization plan, nova2010, and minor service improvements to complement the route decentralization. nova2010 is the result of years of planning and public and stakeholder outreach.

The decentralization plan resulted from a comprehensive planning analysis and public outreach effort. The planning effort began in 2009 and extended into 2010 and was led by StarMetro staff and supported by their general planning consultant. The plan was refined based on additional analysis accomplished during the development of the TDP and from the input received from the public.

The planning process incorporated an extensive and intensive public involvement process. StarMetro conducted over 70 listening sessions and public meetings held at locations throughout the service area. These efforts were designed to solicit input from the general public regarding the proposed system. In addition, specific outreach efforts were implemented to ensure traditionally underserved populations, such as the transportation disadvantaged and the elderly, had the opportunity for input. Other outreach efforts include the maintenance of a website and informational hotline, utilization of social networking media, as well as the more traditional outreach tools, such as press releases and mailings. The full details of the outreach efforts are provided in the Appendix.

5.2 Future Scenarios

As mentioned above, this plan was developed in coordination with the 2035 LRTP, the Regional Mobility Plan (RMP). The TDP future scenarios include transit service from both the RMP Tier 1 (2016-2020) and the region's Transportation Improvement Program for 2011-2015. The TDP assumes regional routes will begin as planned in the RMP; StarMetro will continue to coordinate with regional service providers and agency partners during planning and implementation of regional service. Regional routes included in the RMP for implementation by 2020 are:

- Crawfordville Highway Express Bus
- Havana Express Bus with stops in Havana

- Monticello Express Bus
- Continued Gadsden Express Bus service with service to a planned park and ride lot in Midway near the intersection of Jefferson and Monroe

The regional service is included here for information and was included in the TBEST analysis, but is not included in the financial balancing of the TDP.

In addition to the regional service planned, the TDP team assessed improvements to local service, including:

- Infrastructure and facilities
  - Satellite transfer facilities at various locations throughout the city
  - Park-and-ride lots at various locations
  - Shelters and pedestrian amenities
  - Bicycle racks at shelters
  - CK Steele redevelopment and renovation
  - Art at transfer centers
- Service
  - Expand Saturday and Sunday service hours; for Saturday service Dogwood stops at Village Square; Tall Timbers and Red Hills stop at the Koger Center. Sunday service runs for six hours.
  - Improve headways on all routes to 30 minutes maximum; this impacts the San Luis Route
  - Expand weekday service to 10 pm on all routes, replacing the nova 2010 night routes
  - Placemaking circulators to entertainment destinations
  - University circulator from the mall
  - Southwood circulator service
  - Big Bend route extension to Monroe Street at Old Bainbridge/Capital Circle
  - Tram Road service to CK Steele or to Capital Circle at Monroe Street
  - Blair Stone Road service from Southwood to Welaunee
  - Mahan Drive service expansion (incorporated into nova2010 Azalea Route)
  - Airport Express Bus (as included in RMP Tier 1)

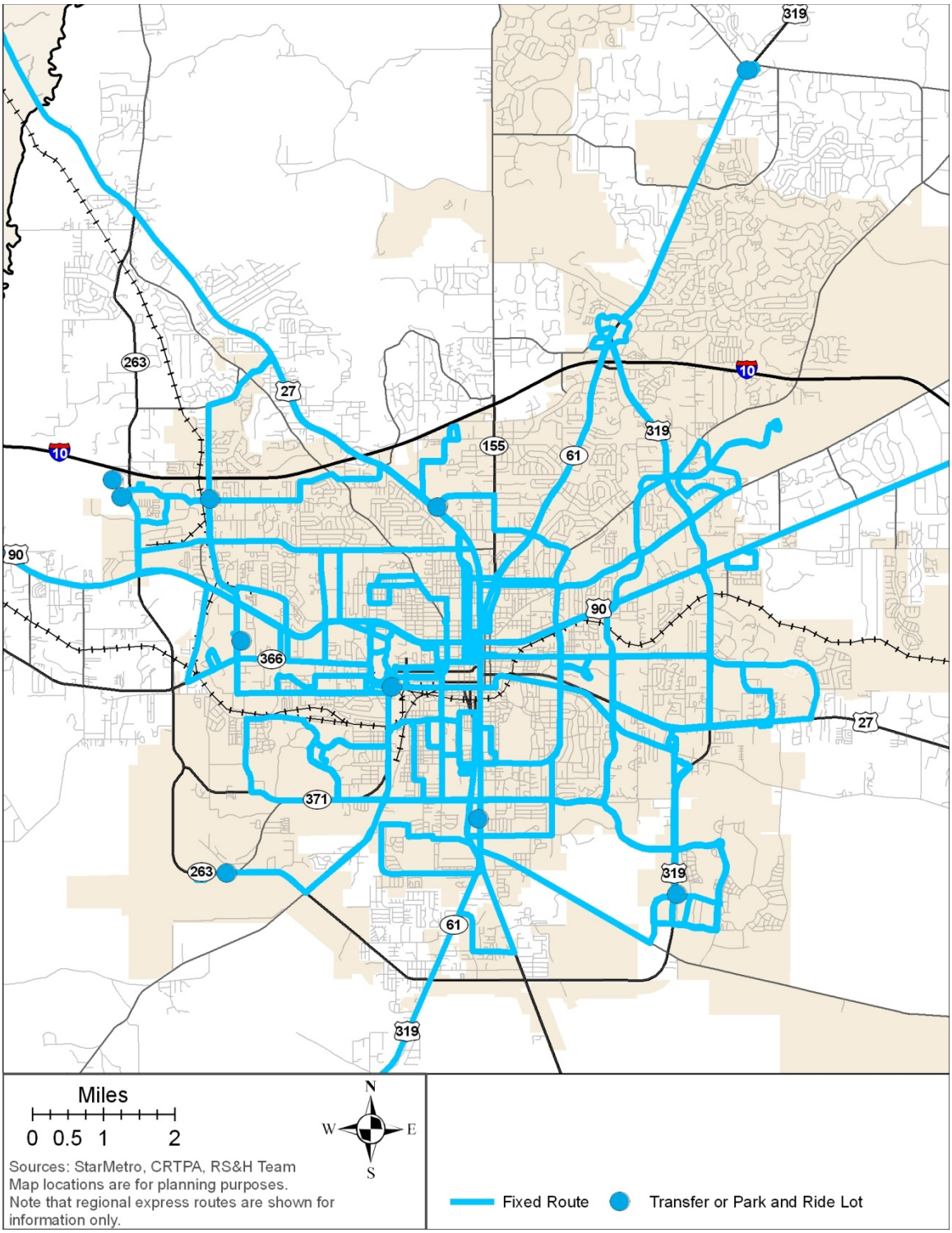


Figure 14. Fixed Route Service Alternatives

The study team defined alternative 2020 scenarios based on the service improvements listed above. These scenarios are:

nova2020. This scenario includes nova2010 routes only, representing the existing plus committed alternative. The agency is committed to the route decentralization concept as a base alternative for planning analysis.

Alternative A. nova2010 with new fixed routes on Blair Stone Road and Tram Road, and Airport Express Bus service

Alternative B. Alternative A service plus an east-west university circulator route and extensions to the Tram Road and Big Bend routes

Alternative C. Alternative A service plus extensions to the Tram Road and Big Bend routes and additional service on nights and weekends. This includes six hours of service on Sundays with one-hour headways; the Sunday service routes are similar to Saturday service. Saturday service is the same as weekday service with the exception of Dogwood which stops at Village Square, and Tall Timbers and Red Hills which stop at Koger Center.

Alternative D. Alternative A service plus an east-west university circulator route

Alternative E. Alternative D service plus additional service on nights and weekends. This includes six hours of service on Sundays with one-hour headways; the Sunday service routes are similar to Saturday service. Saturday service is the same as weekday service with the exception of Dogwood which stops at Village Square, and Tall Timbers and Red Hills which stop at Koger Center.

Alternative F. Alternative A service plus extensions to the Tram Road and Big Bend routes

Proposed improvements were refined based on TBEST demand analysis results as well as feedback from the public, StarMetro staff, and planning partners. For example, the nova2010 Red Hills route was adjusted to include the proposed Southwood Circulator service, and the Tram Road route was shifted from a north-south route to an east-west route with service to the airport.

5.3 Demand Analysis

The TDP team used TBEST to evaluate the service alternatives described above. TBEST was validated to a 2007 base year, with adjustments by Gannett Fleming developers to account for Tallahassee's large university student population and ridership. StarMetro is the first agency to take advantage of TBEST 3.1's added capacity to project ridership using input from traffic analysis zones in addition to census geography. The socioeconomic data used to estimate 2007 base year and 2020 performance is the same data used for the Regional Mobility Plan travel demand model. The TBEST model area

was expanded to include the four CRTPA counties, Leon, Gadsden, Wakulla, and Jefferson.

The table below summarizes the scenarios tested and the recommended constrained plan. Figure 14 and Figure 15 show the route locations. Route alignments are for planning purposes and may be refined as conditions change.

Table 24 Scenario Summary Description

Scenario	Service included in scenario				
	nova 2010 routes	Blair Stone Rd, Tram Road, Airport Express	University/TIGGER II Circulator	Big Bend extension and Tram Road extension	Regular routes on nights and weekends
nova2020	X				
2020 A	X	X			
2020 B	X	X	X	X	
2020 C	X	X		X	X
2020 D	X	X	X		
2020 E	X	X	X		X
2020 F	X	X		X	
2020 TDP (Constrained)	X	X			X

Note that the constrained alternative includes the TIGGER II funded vehicles running existing university route(s), rather than a new University Circulator route.

The following tables show the performance of all 2020 scenarios. The percentages indicate the change from the 2007 base year estimated performance of the nova2010 routes. The nova2020 alternative shows the change in ridership resulting from the projected growth in population and employment in the area without any service changes.

In the projections below for weekday service, the university routes are shown in the row labeled "University" and other routes are shown in the row labeled "Regular". Note that route performance measures are affected by assumptions inherent in TBEST software. For example, university route ridership projected by TBEST is lower than the actual ridership in the base year. In all model runs, there are fewer transfer boardings in the nova2010 system because of the change to a less centralized structure. TBEST also

doesn't directly address fare media or recognize that a student takes a free trip with their university ID. While this is a limitation worth noting, the model is validated to observed ridership and the system-wide measures are suitable for planning purposes. As shown on the second page of the table, the TDP system in 2020 is projected to have a 25% increase in boardings over the nova2010 system.

The 2020 TDP alternative at the end of the table is the recommended, fiscally constrained, service alternative. The Financial Plan section, beginning on page 70, represents the projected costs and revenue from this recommended alternative.

Table 25 Scenario Summary Results

		TOTAL BOARDINGS	REVENUE SERVICE TRIPS	ROUTE MILES	REVENUE SERVICE MILES	REVENUE SERVICE HOURS	BOARDINGS PER SERVICE MILE	BOARDINGS PER SERVICE HOUR	BOARDINGS PER SERVICE TRIP	Percent Change from nova2010 Boardings
nova2020	Weekday Annualized									
	University	725,279	78,533	11,918	404,457	34,957	2	21	9	2%
	Regular	4,673,148	186,774	90,812	1,846,516	108,798	3	43	25	5%
	Total Weekday	5,398,427	265,307	102,729	2,250,973	143,755	2	38	20	5%
	Saturday	169,655	22,660	9,891	206,534	12,260	1	14	7	7%
	Sunday and Holidays	55,823	6,065	4,190	45,091	2,012	1	28	9	32%
	Annualized total*	**5,623,905**	**294,033**	**116,810**	**2,502,597**	**158,026**	**2**	**36**	**19**	5%
	Percent Change from nova2010	5%	0%	0%	0%	-1%	6%	7%	5%	

		TOTAL BOARDINGS	REVENUE SERVICE TRIPS	ROUTE MILES	REVENUE SERVICE MILES	REVENUE SERVICE HOURS	BOARDINGS PER SERVICE MILE	BOARDINGS PER SERVICE HOUR	BOARDINGS PER SERVICE TRIP	Percent Change from nova2010 Boardings
2020 A	Weekday Annualized									
	University	720,516	78,533	11,918	404,457	34,957	2	21	9	2%
	Regular	5,719,869	216,593	104,393	2,110,331	123,138	3	46	26	29%
	Total Weekday	6,440,386	295,126	116,310	2,514,788	158,095	3	41	22	25%
	Saturday	216,571	25,160	11,696	229,854	13,665	1	16	9	37%
	Sunday and Holidays	69,414	6,739	5,043	50,218	2,349	1	30	10	64%
	Annualized total*	**6,726,371**	**327,025**	**133,050**	**2,794,860**	**174,108**	**2**	**39**	**21**	26%
	Percent Change from nova2010	26%	11%	14%	11%	9%	13%	16%	13%	

		TOTAL BOARDINGS	REVENUE SERVICE TRIPS	ROUTE MILES	REVENUE SERVICE MILES	REVENUE SERVICE HOURS	BOARDINGS PER SERVICE MILE	BOARDINGS PER SERVICE HOUR	BOARDINGS PER SERVICE TRIP	Percent Change from nova2010 Boardings
2020 B	Weekday Annualized									
	University	1,022,711	89,541	14,500	471,327	40,461	2	25	11	44%
	Regular	5,827,380	216,593	110,519	2,265,470	124,277	3	47	27	31%
	Total Weekday	6,850,090	306,134	125,019	2,736,796	164,737	3	42	22	33%
	Saturday	218,626	25,160	12,826	242,919	13,671	1	16	9	38%
	Sunday and Holidays	70,200	6,739	5,987	55,879	2,349	1	30	10	66%
	Annualized total*	**7,138,917**	**338,033**	**143,832**	**3,035,594**	**180,757**	**2**	**39**	**21**	34%
	Percent Change from nova2010	34%	15%	23%	21%	13%	11%	18%	16%	

		TOTAL BOARDINGS	REVENUE SERVICE TRIPS	ROUTE MILES	REVENUE SERVICE MILES	REVENUE SERVICE HOURS	BOARDINGS PER SERVICE MILE	BOARDINGS PER SERVICE HOUR	BOARDINGS PER SERVICE TRIP	Percent Change from nova2010 Boardings
2020 C	Weekday Annualized									
	University	729,576	79,168	11,918	408,691	35,359	2	21	9	3%
	Regular	6,206,106	240,177	90,297	2,581,549	160,008	2	39	26	40%
	Total Weekday	6,935,682	319,345	102,214	2,990,240	195,367	2	36	22	35%
	Saturday	234,088	23,260	14,651	225,689	14,376	1	16	10	48%
	Sunday and Holidays	105,637	9,435	17,651	105,895	6,519	1	16	11	150%
	Annualized total*	**7,275,407**	**352,040**	**134,517**	**3,321,824**	**216,261**	**2**	**34**	**21**	36%
	Percent Change from nova2010	36%	20%	15%	32%	35%	3%	1%	14%	

Table continued on next page.

		TOTAL BOARDINGS	REVENUE SERVICE TRIPS	ROUTE MILES	REVENUE SERVICE MILES	REVENUE SERVICE HOURS	BOARDINGS PER SERVICE MILE	BOARDINGS PER SERVICE HOUR	BOARDINGS PER SERVICE TRIP	Percent Change from nova2010 Boardings
2020 D	Weekday Annualized									
	University	1,022,901	89,541	14,500	471,327	40,461	2	25	11	44%
	Regular	5,736,514	216,593	104,393	2,110,331	123,138	3	47	26	29%
	Total Weekday	6,759,415	306,134	118,893	2,581,657	163,599	3	41	22	31%
	Saturday	216,571	25,160	11,696	229,854	13,665	1	16	9	37%
	Sunday and Holidays	69,414	6,739	5,043	50,218	2,349	1	30	10	64%
	Annualized total*	**7,045,400**	**338,033**	**135,632**	**2,861,729**	**179,612**	**2**	**39**	**21**	32%
	Percent Change from nova2010	32%	15%	16%	14%	12%	16%	17%	15%	

		TOTAL BOARDINGS	REVENUE SERVICE TRIPS	ROUTE MILES	REVENUE SERVICE MILES	REVENUE SERVICE HOURS	BOARDINGS PER SERVICE MILE	BOARDINGS PER SERVICE HOUR	BOARDINGS PER SERVICE TRIP	Percent Change from nova2010 Boardings
2020 E	Weekday Annualized									
	University	1,033,379	90,176	14,500	475,560	40,863	2	25	11	46%
	Regular	5,947,414	240,177	84,170	2,419,958	150,319	2	40	25	34%
	Total Weekday	6,980,793	330,353	98,670	2,895,519	191,182	2	37	21	36%
	Saturday	225,223	23,260	13,521	212,614	13,543	1	17	10	42%
	Sunday and Holidays	94,461	9,435	16,376	98,269	5,964	1	16	10	124%
	Annualized total*	**7,300,478**	**363,047**	**128,568**	**3,206,401**	**210,689**	**2**	**35**	**20**	37%
	Percent Change from nova2010	37%	23%	10%	28%	32%	7%	4%	11%	

		TOTAL BOARDINGS	REVENUE SERVICE TRIPS	ROUTE MILES	REVENUE SERVICE MILES	REVENUE SERVICE HOURS	BOARDINGS PER SERVICE MILE	BOARDINGS PER SERVICE HOUR	BOARDINGS PER SERVICE TRIP	Percent Change from nova2010 Boardings
2020 F	Weekday Annualized									
	University	720,326	78,533	11,918	404,457	34,957	2	21	9	2%
	Regular	5,810,708	216,593	110,519	2,265,470	124,277	3	47	27	31%
	Total Weekday	6,531,034	295,126	122,437	2,669,927	159,233	2	41	22	27%
	Saturday	195,466	21,860	11,931	213,454	12,159	1	16	9	23%
	Sunday and Holidays	70,200	6,739	5,987	55,879	2,349	1	30	10	66%
	Annualized total*	**6,796,701**	**323,725**	**140,355**	**2,939,260**	**173,741**	**2**	**39**	**21**	27%
	Percent Change from nova2010	27%	10%	20%	17%	9%	9%	17%	16%	

		TOTAL BOARDINGS	REVENUE SERVICE TRIPS	ROUTE MILES	REVENUE SERVICE MILES	REVENUE SERVICE HOURS	BOARDINGS PER SERVICE MILE	BOARDINGS PER SERVICE HOUR	BOARDINGS PER SERVICE TRIP	Percent Change from nova2010 Boardings
2020 TDP	Weekday Annualized									
	University	730,402	78,533	11,918	404,457	34,957	2	21	9	3%
	Regular	5,676,524	216,593	110,519	2,265,470	124,277	3	46	26	28%
	Total Weekday	6,406,925	295,126	122,437	2,669,927	159,233	2	40	22	25%
	Saturday	205,954	22,460	13,501	210,914	13,168	1	16	9	30%
	Sunday and Holidays	80,084	9,435	16,629	99,763	5,945	1	13	8	90%
	Annualized total*	**6,692,964**	**327,021**	**152,567**	**2,980,603**	**178,346**	**2**	**38**	**20**	25%
	Percent Change from nova2010	25%	11%	31%	19%	11%	6%	12%	13%	

** The annual total ridership of the modeled base year was 3% below that reported by StarMetro as ridership in 2007. This is within an acceptable range of error.*

5.4 Alternatives Cost Analysis

The study team used FDOT's Financial Planning Tool to estimate annual capital and operating costs for each alternative. The table below shows total expenses by plan year for each alternative.

Table 26 Total Annual Expenses by Alternative

Alternative	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
nova2020	$ 40,515,613	$35,882,732	$38,032,053	$38,796,827	$36,512,616	$22,377,449	$29,591,903	$27,022,736	$31,065,146	$25,463,730	$325,260,807
Alternative A	$ 40,515,613	$36,443,817	$38,609,970	$39,392,082	$37,125,728	$23,008,955	$30,242,354	$28,131,643	$32,207,320	$26,939,181	$332,616,664
Alternative B	$ 40,515,613	$36,443,817	$39,808,836	$40,626,913	$38,721,693	$24,652,799	$31,935,513	$29,875,597	$34,003,592	$28,789,342	$345,373,714
Alternative C	$ 40,515,613	$37,436,067	$39,680,150	$41,041,344	$38,585,170	$24,512,180	$31,790,676	$29,726,414	$33,849,934	$28,631,074	$345,768,622
Alternative D	$ 40,515,613	$36,443,817	$39,064,333	$39,860,075	$37,607,762	$23,505,449	$30,753,743	$28,658,374	$32,749,852	$27,497,990	$336,657,009
Alternative E	$ 40,515,613	$37,877,196	$39,390,009	$40,742,500	$37,953,272	$23,861,325	$31,120,295	$29,035,922	$33,138,727	$27,898,531	$341,533,389
Alternative F	$ 40,515,613	$36,443,817	$39,354,473	$40,158,920	$38,239,660	$24,156,304	$31,424,124	$29,348,866	$33,461,059	$28,230,533	$341,333,370
2020 Constrained TDP	$ 40,515,613	$37,436,067	$38,935,647	$40,274,506	$37,471,239	$23,364,830	$30,608,906	$28,509,191	$32,596,194	$27,339,722	$337,051,916

5.5 Evaluation of Alternatives

The assessment of alternatives was iterative in nature, with refinements based on demand estimates, alternative costs and revenues, updated grant awards, and feedback from the public, City officials, and StarMetro staff. In general, the fiscally constrained 2020 TDP was recommended after the other alternatives were eliminated based on the following:

- The nova2020 alternative was included as a base alternative for costs, revenues, and demand estimates. This alternative was eliminated in favor of alternatives that improve upon the nova2010 service as funds become available and as future development warrants additional service.

- Alternative 2020A service is included in the 2020 constrained TDP, but Alternative 2020A was eliminated in favor of alternatives that include additional cost-effective improvements to night and weekend service.

- Alternatives 2020B, 2020D, and 2020E all include separate university circulator service with a new vehicle purchased with TIGGER II funds. While university service is a key component of the fixed route system, a separate circulator route was found to be redundant. For this reason and the cost constraints described next, those three alternatives were eliminated.

- Alternatives 2020B, 2020C, and 2020F include route extensions on Big Bend and Tram Road routes which result in costs exceeding revenues in the plan

timeframe. In order to recommend fiscally constrained service improvements, these alternatives were eliminated.

- Alternative 2020F includes route extensions on Big Bend and Tram Road routes rather than service improvements on nights and weekends. In eliminating Alternative 2020F, the study team recommended that regular service be extended to nights and weekends in order to offer a more simplified service structure, provide improved service to the transit dependent during off-peak times, and replace the weekend service hours that are reduced in the transition to nova2010.

The recommended 2020 TDP service includes the nova2010 decentralized route structure, additional service on Blair Stone Road and Tram Road as development warrants, and an Airport Express Route which will provide transit service to airline passengers and airport employees. The Airport Express Route is recommended in both the RMP and the TDP to improve system connectivity and provide fixed route service to southwest Tallahassee. The recommended 2020 TDP service also includes additional service on nights and weekends. As nova2010 is implemented, service hours on weekends are reduced compared to the former centralized system; the TDP addresses this by extending regular service to weekends.

6.0 Ten Year Implementation Program

6.1 Recommendations

This section includes management, operations, and planning recommendations for the 2010-2020 period. Specific service recommendations are included in the financial plan section below.

- Continue to cooperatively plan for and implement regional transit service with StarMetro's planning partners. StarMetro currently serves the city of Tallahassee and provides marketing and management support for Gadsden Express service to Quincy and Midway. There are plans for expanded public transportation in Leon, Gadsden, Jefferson, and Wakulla counties. As the largest provider in the region, StarMetro should be represented in efforts to plan and implement regional service.
- Continue to work with CRTPA, the City of Tallahassee, and other partners to enhance the accessibility of transit routes to pedestrians, bicyclists, and human services populations. The latest long range transportation plan, the Regional Mobility Plan, included 228 projects specifically intended to improve access to bus stops in the service area. This represents a hugely successful coordination of transit service and pedestrian investments.

- Maintain StarMetro's involvement in the regional transportation planning process. The Regional Mobility Plan and the TDP were developed cooperatively and concurrently. This level of coordination is a major achievement and should be continued. Additionally, StarMetro staff participation in the CRTPA regional planning process should continue.
- Complete Alternatives Analysis for Tennessee Street future transit service in cooperation with CRTPA and Florida State University (FSU). The City of Tallahassee received a $400,000 grant for the corridor that runs along Tennessee Street/Mahan Drive between Capital Circle East and West, through FSU, Tallahassee Community College and downtown. The project team will evaluate transit-supportive changes to city plans and codes as part of the work plan.
- Continue to track the performance of individual stops and routes, and the system as a whole. Incorporate passenger counting technology into Trapeze software so that boarding counts at the stop level are more accurate.
- Continue to work with universities to provide campus public transportation that is integrated into the StarMetro system. The performance of nova2010 routes and campus routes should be assessed in the first year of service to identify service gaps or redundancies and propose changes to campus routes as appropriate.
- Continue to encourage public input with regular listening sessions and interaction with local advisory and advocacy groups. The listening sessions that StarMetro conducts to obtain feedback on service and planned service changes provide a significant opportunity for passengers, the transportation disadvantaged, and the general public to comment on service. For example, nearly 100 listening sessions and public meetings were held to educate the public and receive feedback on nova2010 proposed service, and the comments resulted in changes to the route decentralization concept.
- Continue agency role as Community Transportation Coordinator (CTC). As the Leon County CTC, StarMetro receives block grants from the Florida Commission for the Transportation Disadvantaged pursuant to Section 341.053, Florida Statutes. StarMetro is projected to receive $4.6 million in block grants over the life of the TDP.
- Implement nova2010 route decentralization. Establish additional retail locations for fare media. Identify locations for midday relief for drivers. Implement satellite transfer centers and park-and-ride locations as defined in the TDP. Figure 15 shows the fixed-route service area and potential transit center locations.
- Pursue discretionary funds for specific projects, including capital improvements funded under the Section 5309 program. These include C.K. Steele Plaza redevelopment and renovation, vehicle purchases, park-and-ride facilities, satellite transfer centers, the traffic signal preemption/prioritization project, as well as benches, shelters, bicycle racks, and other amenities.

- Continue to pursue FDOT capital funds for a maintenance training facility. StarMetro is pursuing a regional training center for maintenance and operations personnel that will support training for other public transportation agencies. Two simulators have been purchased. Furthermore, as staff members continue to achieve Commercial Drivers License (CDL) Examiner certification, certified staff may provide CDL testing for the larger community.
- Implement Trapeze route scheduling software with expanded vehicle locator capabilities and automated passenger counts. Use Trapeze to define 40-hour week driver shifts.
- Continue to provide adequate infrastructure to operate fixed-route and ADA service. Purchase, construct, renovate, or upgrade facilities and passenger amenities consistent with the TDP.
- Continue vehicle replacement program per schedule and purchase new vehicles for service expansion as detailed in the capital purchases component of the TDP.
- Continue to provide adequate facilities to operate, maintain, and repair the fleet. The capacity of StarMetro's maintenance facility limits the bus fleet size to 77 vehicles; this TDP shows the operations planned through 2020 can be accommodated with the current maintenance facility and a fleet of 76 vehicles. However, the capacity for maintenance and repairs remains an important consideration. For example, if bus rapid transit vehicles that are larger than the current fixed route buses are purchased, expanded maintenance facilities will be needed. Additionally, current space for employee parking is an issue. One option is to pursue a separate facility for paratransit operations to free up space at the existing Appleyard Drive facility.

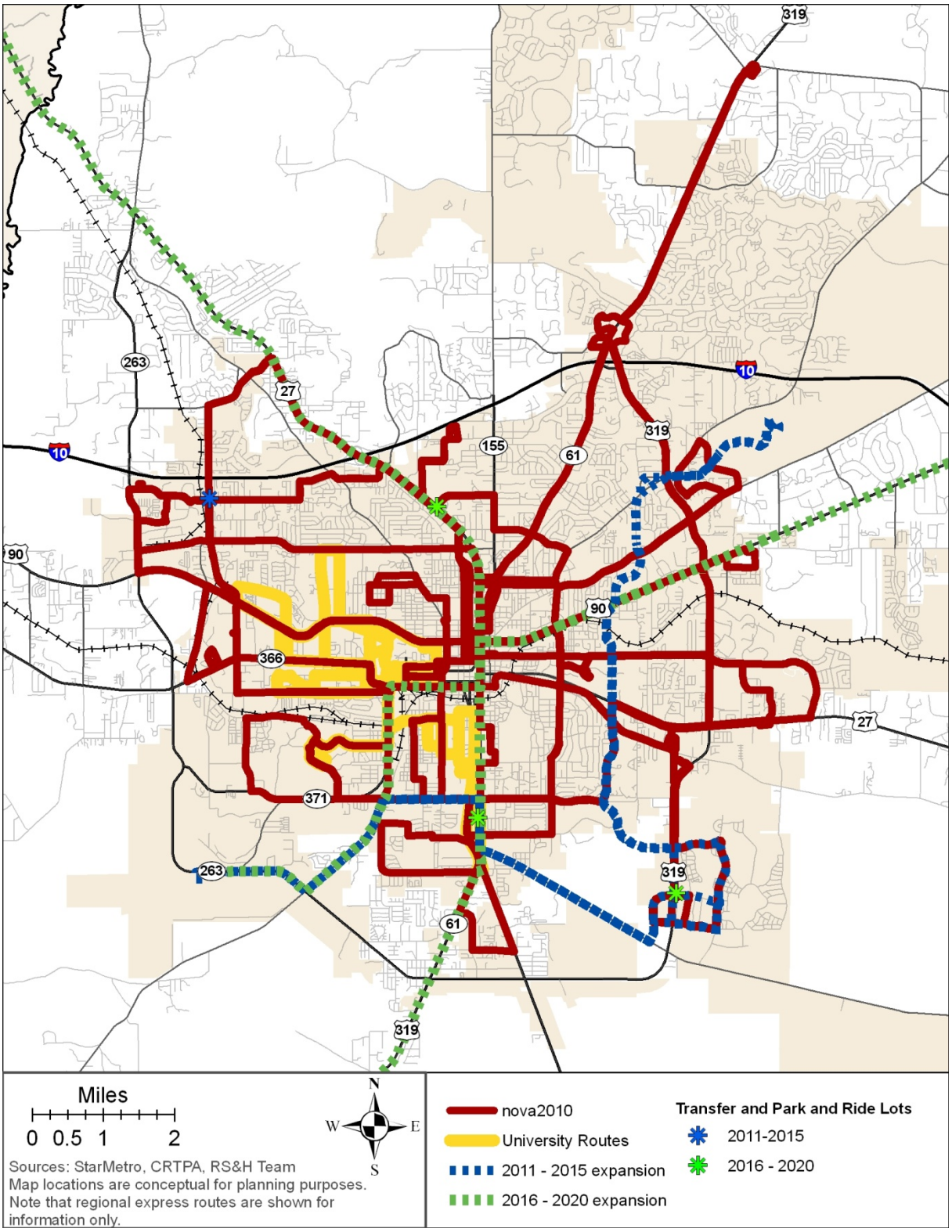


Figure 15. Recommended Service Improvements

6.2 TDP Financial Plan

The projects that are included in the constrained TDP are summarized below, with the initial operating year in parentheses:

- Continue university routes[31] and ADA complementary service (2010)
- nova2010 route decentralization[32] (2010)
- Mahan Drive service on Azalea Route segment (2010)
- Blair Stone Road route to Welaunee (2012 or as development merits)
- nova2010 expanded night service to regular off-peak service[33] (2013)
- Satellite Transfer facilities and super stops (2014 three sites open; additional sites or expansions open in 2016, 2018, and 2020)
- Park–and-ride facility (2013)
- Tram Road local service expansion (2018)
- Airport Express Bus service (2020)
- Electric Bus replacement funded by a TIGGER II grant (2011)
- Vehicle replacement and purchases as indicated in the detailed capital financial plan

The transit development plan team used FDOT's Financial Planning Tool to account for each proposed service improvement and the associated capital and operating costs. Service improvements recommended in the nova2010 decentralization plan, Regional Transit Study, CRTPA Transportation Improvement Program, Priority Project List, 2035 Regional Mobility Plan, and specific grant applications were included in the financial tool as part of the alternatives assessment. The tool estimates operating costs based on StarMetro's system-wide costs per service hour and service mile. The tool also inflates costs and revenues based on assumed annual inflation rates of 3% for operating costs and 5% for capital costs.

The following tables show the summary of funded service improvements and revenue sources included in the TDP. Table 27 shows the combined capital and operating expenses for each funded improvement.

Table 28 shows the combined capital and operating revenues by source. The appendix contains detailed financial tables from the FDOT tool which show capital and operating expenses as separate tables.

[31] Includes the university circulator service that will use new vehicles funded by a TIGGER II grant
[32] Includes Southwood circulator service that will use fuel cell vehicle from the NFCBP grant by private consortium.
[33] Night service will have abbreviated routes where practical.

Table 27 Ten-Year TDP Cost Summary

Alternatives	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Maintain existing non-nova2010 service (ADA service and campus routes)	$ 3,896,234	$ 4,505,346	$ 5,688,392	$ 4,792,444	$ 4,368,930	$ 4,496,098	$ 6,526,666	$ 5,426,848	$ 4,900,953	$ 5,044,081	$ 49,645,992
nova2010 fixed routes	$ 12,674,827	$ 13,083,422	$ 17,152,211	$ 13,942,119	$ 13,818,875	$ 13,050,328	$ 17,241,009	$ 16,504,513	$ 21,241,423	$ 14,688,259	$ 153,396,985
Other Transit Infrastructure	$ 16,451,925	$ 17,160,413	$ 15,153,890	$ 18,755,869	$ 18,206,156	$ 4,607,919	$ 4,242,408	$ 4,358,494	$ 4,700,524	$ 3,990,792	$ 107,628,390
Support Vehicles	$ 47,250	$ 115,763	$ -	$ -	$ -	$ 60,304	$ 147,746	$ -	$ -	$ -	$ 371,062
Other Revenue Vehicles	$ 220,500	$ -	$ -	$ 1,191,196	$ -	$ -	$ -	$ 517,109	$ -	$ -	$ 1,928,806
Univ Circltr - Electric Bus replacement TIGGERII	$ 7,200,081	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 7,200,081
Mahan Drive service	$ 24,795	$ 25,539	$ 26,305	$ 27,094	$ 27,907	$ 28,744	$ 29,607	$ 30,495	$ 31,410	$ 32,352	$ 284,249
Blairstone Rd	$ -	$ 1,553,335	$ 577,917	$ 595,255	$ 613,112	$ 631,506	$ 650,451	$ 669,965	$ 690,063	$ 710,765	$ 6,692,369
Expand nova routes to night and improve headway	$ -	$ 992,250	$ 325,676	$ 882,424	$ 345,510	$ 355,875	$ 366,552	$ 377,548	$ 388,875	$ 400,541	$ 4,435,252
Park and Ride Facility	$ -	$ -	$ 11,255	$ 11,593	$ 11,941	$ 12,299	$ 12,668	$ 13,048	$ 13,439	$ 13,842	$ 100,084
Satellite Transfer/Intermodal Facilities	$ -	$ -	$ -	$ 76,512	$ 78,807	$ 121,758	$ 125,410	$ 172,230	$ 177,397	$ 228,399	$ 980,513
Tram Road Local Bus Service	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,266,390	$ 438,942	$ 452,111	$ 465,674	$ 2,623,117
Airport Express	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,765,017	$ 1,765,017
TOTAL EXPENSES	**$ 40,515,613**	**$37,436,067**	**$38,935,647**	**$40,274,506**	**$37,471,239**	**$23,364,830**	**$30,608,906**	**$28,509,191**	**$32,596,194**	**$27,339,722**	**$337,051,916**

Source: FDOT Financial Planning Tool Table 6 updated for StarMetro 2010-2020 TDP; see detailed tables in the appendix.
Note: This chart combines capital and operating costs per the FDOT Financial Planning Tool. Separate tables for capital and operating costs are included in the appendix.

Table 28 Ten-Year TDP Revenue Summary

Revenue Sources	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Federal											
FTA 5307	$ 1,463,540	$ 3,328,086	$ 3,697,775	$ 2,948,914	$ 1,402,892	$ 459,875	$ 4,776,399	$ 3,649,646	$ 6,287,086	$ 1,721,325	$ 29,735,539
FTA 5309	$ 13,000,000	$ 13,650,000	$ 14,332,500	$ 14,496,992	$ 14,406,400	$ 3,000,000	$ 4,410,881	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 86,296,773
FTA 5311	$ 235,870	$ 242,946	$ 250,234	$ 257,742	$ 265,474	$ 273,438	$ 281,641	$ 290,090	$ 298,793	$ 307,757	$ 2,703,985
JARC (5316)	$ 183,039	$ 188,530	$ 194,186	$ 200,012	$ 206,012	$ 212,192	$ 218,558	$ 225,115	$ 231,868	$ 238,824	$ 2,098,337
New Freedom (5317)	$ 54,845	$ 56,216	$ 57,622	$ 59,062	$ 60,539	$ 62,052	$ 63,603	$ 65,193	$ 66,823	$ 68,494	$ 614,449
TIGGER II	$ 6,466,003	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,466,003
State of Good Repair (pending)	$ 900,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 900,000
Discretionary Livability (pending)	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 500,000
State											
State Block Grant	$ 980,362	$ 1,009,714	$ 1,060,263	$ 1,060,263	$ 1,060,263	$ 1,092,071	$ 1,124,833	$ 1,158,578	$ 1,193,335	$ 1,229,135	$ 10,968,818
FDOT Intermodal	$ -	$ -	$ -	$ 1,450,000	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,450,000
FDOT Service Development	$ 24,795	$ 225,539	$ 226,305	$ 233,094	$ 27,907	$ 28,744	$ 29,607	$ 262,350	$ 270,220	$ 278,327	$ 1,606,889
TD Commission	$ 429,615	$ 465,685	$ 465,685	$ 465,685	$ 465,685	$ 465,685	$ 465,685	$ 465,685	$ 465,685	$ 465,685	$ 4,620,780
Transportation Development Credits	$ 3,617,111	$ 3,482,138	$ 3,630,942	$ 3,509,251	$ 3,171,980	$ 640,458	$ 1,864,480	$ 1,289,345	$ 1,827,224	$ 889,679	$ 23,922,607
Concurrency (MMTD) Capital Funds	$ 859,468	$ 885,252	$ 911,809	$ 939,163	$ 967,338	$ 996,358	$ 1,026,249	$ 1,057,037	$ 1,088,748	$ 1,121,410	$ 9,852,832
Local											
MPO Flex Funds	$ -	$ -	$ 377,917	$ 430,989	$ 477,986	$ 582,311	$ 698,411	$ 863,822	$ 863,397	$ 1,238,176	$ 5,533,008
Farebox Revenue	$ 3,210,510	$ 3,306,825	$ 3,406,030	$ 3,508,211	$ 3,613,457	$ 3,721,861	$ 3,833,517	$ 3,948,522	$ 4,066,978	$ 4,188,987	$ 36,804,899
Directly-Generated (non-fare)	$ 261,620	$ 269,469	$ 277,553	$ 285,879	$ 294,456	$ 303,289	$ 312,388	$ 321,760	$ 331,412	$ 341,355	$ 2,999,180
National Fuel Cell Bus Program	$ -	$ -	$ 48,200	$ 48,200	$ -	$ -	$ -	$ -	$ -	$ -	$ 96,399
Local General Revenue	$ 7,002,667	$ 7,573,821	$ 7,266,201	$ 7,565,746	$ 8,065,818	$ 8,332,238	$ 8,582,756	$ 8,807,303	$ 9,111,427	$ 9,394,157	$ 81,702,133
Local Socl Serv Groups 5311 Matching funds	$ 235,870	$ 242,946	$ 250,234	$ 257,742	$ 265,474	$ 273,438	$ 281,641	$ 290,090	$ 298,793	$ 307,757	$ 2,703,985
University contracts	$ 2,543,070	$ 2,619,362	$ 2,697,943	$ 2,778,881	$ 2,862,248	$ 2,948,115	$ 3,036,559	$ 3,127,655	$ 3,221,485	$ 3,318,130	$ 29,153,448
Private	$ 40,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 40,000
TOTAL REVENUE	**$42,008,384**	**$37,546,530**	**$39,151,400**	**$40,495,824**	**$37,613,928**	**$23,392,127**	**$31,007,208**	**$28,822,192**	**$32,623,274**	**$28,109,197**	**$340,770,064**
TOTAL COST	**$40,515,613**	**$37,436,067**	**$38,935,647**	**$40,274,506**	**$37,471,239**	**$23,364,830**	**$30,608,906**	**$28,509,191**	**$32,596,194**	**$27,339,722**	**$337,051,916**
BALANCE	**$1,492,771**	**$110,462**	**$215,753**	**$221,318**	**$142,689**	**$27,296**	**$398,302**	**$313,001**	**$27,080**	**$769,475**	**$3,718,148**

Note that the 2011 surplus is due to pending grant revenue. Other surpluses are negligible capital surpluses from 5307 and 5309 discretionary grant requests.

Source: FDOT Financial Planning Tool Table 7 updated for StarMetro 2010-2020 TDP; see detailed tables in the appendix.

Appendix: nova2010 Public Participation

The Transit Development Plan includes implementation of the nova2010 route decentralization. Refinements to the proposed nova2010 routes have been made during the TDP development process. However, the routes and service hours were largely planned in 2009 and 2010 by StarMetro staff and their general planning consultant. While developing the nova2010 concept, StarMetro implemented a full public and stakeholder outreach campaign. The following list shows many of the listening sessions and public meetings held to obtain feedback on the nova2010 route decentralization concept. Several events were focused on specific interest groups such as the elderly or other transportation disadvantaged group; these included Ability First, Tallahassee Council of the Blind, Lighthouse for the Big Bend, and Council on Neighborhood Affairs. In addition to the meetings and listening sessions, StarMetro issued regular press releases, maintained a website, nova2010 hotline, and social networking site, issued utility bill inserts, aired a promo on WCOT TV, and emailed updates to a list of interested parties.

Table 29 Sample nova2010 Public Meetings and Listening Sessions

Place/Organization	Meeting Location
AbilityFirst	Ability First
Big Bend Mental Health Coalition	Leon County Public Library
Big Bend Transition Council	Leon County School Board
Bond Community Listening Sessions	Smith Williams Community Center
Builders Association	Builder's Assoc. Bldg.
Capital Circle Office Complex State Employees	CCOC
Capital City Chamber of Commerce	Capital City Chamber of Commerce
Capital Rotary	Civic Center
Chamber of Commerce Leads	Tallahassee Democrat
Charles Gainey (blind citizen/activist)	StarMetro
City Commission Target Issue	City Hall
CONA Board Meeting	Smith Williams Community Center
CRTPA Board	City Hall
CRTPA Citizens Advisory Cmte	Tallahassee City Hall
CRTPA Multimodal Advisory Cmte	Tallahassee City Hall
CRTPA Technical Advisory Cmte	Tallahassee City Hall
Department of Management Services	StarMetro
Downtown Business and Merchants Assoc.	Alliance Center
Downtown improvement authority	TCC downtown

Downtown Marketplace	Downtown
Fallschase Development Meeting	Virginia Street
FAMU	FAMU
Florida APA	Renaissance Center
Frenchtown Listening Sessions	Lawrence-Gregory Community Center/Griffin Chapel
FSU	FSU
General Public Listening Sessions	Tallahassee City Hall
Innovation Park/Mag Lab	High Magnetic Lab
Institute of Transportation Engineers	Capital City Country Club
Leadership Tallahassee	Tallahassee City Hall
Leon County Commissioners	Leon County Commission
Leon County Health Department	Leon County Health Department
Leon County School Board	Leon County School Board
Lighthouse of the Bend	Lighthouse of the Big Bend Office
Miccosukee Hills	Miccosukee Hills Clubhouse
Northside Rotary	Civic Center
Piney Z HOA	ACE
Regional Mobility Plan Public Meeting - Gadsden	Gadsden County Commission Chambers
Regional Mobility Plan Public Meeting - Jefferson	Jefferson County Courthouse Annex
Regional Mobility Plan Public Meeting - Leon	Leon County Public Library
Regional Mobility Plan Public Meeting - Wakulla	Wakulla County Commission Chambers
Rotary Club of Tallahassee	Civic Center
Route Committee Meeting (Bus Drivers)	StarMetro
Senior Citizens Listening Sessions	Senior Center
Southside Rotary	Hilton Garden Inn
Southwood	South Wood Community Center
State of Florida Chamber of Commerce	State of Florida Chamber of Commerce
Sunrise Rotary	Civic Center
Sunset Rotary	Civic Center
Sustainable Tallahassee Green Drinks	Waterworks (midtown)
Tallahassee Board of Realtors	Realtors Midtown Office
Tallahassee Council for the Blind	Koger Center
Tallahassee Democrat Editorial Board	Tallahassee Democrat
Tallahassee Leon County Planning and Growth Management	Renaissance Center

Tallahassee Visitors Bureau	Tallahassee Visitors Bureau
TCC	TCC
Transit Terminal Listening Sessions	C.K. Steele Plaza
Wakulla County BoCC	Crawfordville

Appendix: Financial Planning Tool

The following pages include the detailed information about proposed improvements that were considered for inclusion in the TDP. Potential improvements were gathered from several sources, as indicated in the legend at the bottom of Table 1.

Table 1
Fixed-Route / ADA / Other Service Characteristics
Florida Transit TDP Update

Service Type / Mode	Description	Headway (minutes)			Revenue Hours			Revenue Miles			Annual Days of Service			Annual Hours	Annual Miles	Annual Operating Cost 2010
		Weekday	Saturday	Sunday	Weekday	Saturday	Sunday	Weekday	Saturday	Sunday	Weekday	Saturday	Sunday			
Maintain Existing Fixed Route / Fixed Guideway																
Existing routes	Eliminate Service	0	0	0	-	0.00	0.00	0.00	0.00	0.00	251.00	50.00	51.00	0	0	$0
University Routes	Maintain Existing Fixed Route	0	0	0	0	0	0	1911	207	0	190	28	0	0	368,886	$2,198,856
Maintain Other Existing Services																
ADA Paratransit Service	Maintain Existing ADA				119	24	12	1,559	161	42	251.00	50.00	51.00	31,681	401,501	$1,438,265
Fixed Route / Fixed Guideway Improvements																
nova2010 fixed routes	Add New Service	NA	NA	NA	0.00	0.00	0.00	6394	3882	803	250	50	51	0	1,833,553	$10,929,444
Tram Road Local Bus Service	Add New Service	10	0	0	19	0	0	240	0	0	250	50	51	4,750	60,000	$346,505
Southwood Circulator	Maintain Existing Fixed Route	15	60	60	0	0	0	0	0	0	250	50	51	0	0	$0
North Leon Local Bus Service	Add New Service	15	60	60	42	17	12	0	0	0	250	50	51	11,830	0	$862,980
East Leon Local Bus Service	Add New Service	15	60	60	42	17	12	0	0	0	250	50	51	11,830	0	$862,980
Feeder Bus Service	Add New Service	15	60	60	42	17	12	0	0	0	250	50	51	11,830	0	$862,980
Capital Circle NE/SE Express	Add New Service	30	0	0	0	0	0	329	0	0	250	50	51	0	82,300	$490,574
Airport Express	Add New Service	30	0	0	12	0	0	171	0	0	250	50	51	3,050	42,700	$222,493
Capital Circle SW/SE Express	Add New Service	30	0	0	0	0	0	305	0	0	250	50	51	0	76,200	$454,213
Woodville Express	Add New Service	30	0	0	0	0	0	220	0	0	250	50	51	0	54,900	$327,248
Tennessee Ave West BRT Ph 1	Add New Service	10	30	30	36	17	12	0	0	0	250	50	51	10,310	0	$752,098
Tennessee Ave West BRT Ph 2	Add New Service	10	30	30	93	50	35	0	0	0	250	50	51	27,640	0	$2,016,295
Thomasville Rd BRT	Add New Service	10	30	30	87	50	35	0	0	0	250	50	51	26,110	0	$1,904,684
Apalachee Pkwy BRT	Add New Service	10	30	30	71	33	23	0	0	0	250	50	51	20,620	0	$1,504,197
Capital Circle NE/SE BRT	Add New Service	10	30	30	120	50	35	0	0	0	250	50	51	34,240	0	$2,497,754
Monroe St BRT	Add New Service	10	30	30	120	50	35	0	0	0	250	50	51	34,240	0	$2,497,754
Mahan St East BRT Ph 1	Add New Service	10	30	30	36	17	12	0	0	0	250	50	51	10,310	0	$752,098
Mahan Rd East BRT Ph 1 and 2	Add New Service	10	30	30	71	33	23	0	0	0	250	50	51	20,620	0	$1,504,197
Gaines Streetcar Line	Add New Service	10	30	30	65	33	23	462	216	151	250	50	51	19,100	134,100	$1,393,315
Campus Streetcar Line	Add New Service	10	30	30	71	33	23	534	250	175	250	50	51	20,620	154,800	$1,504,197
Blairstone Rd	Add New Service	30	45	0	26	15	0	525	315	0	250	50	51	7,250	147,000	$528,876
Expand nova routes to night and improve	Increase Hours of Service	0	0	0	0	0	0	200	0	0	250	50	51	0	50,000	$298,040
Midtown Circulator	Add New Service	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0
Mahan Drive service	Add New Service	0	0	0	1.23	0.45	0	208	160	0	250	50	51	330	60,000	$24,073
Satellite Transfer/Intermodal Facilities	Add New Service	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$30,900
Park and Ride Facility	Add New Service	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$10,300
Univ Circltr - Electric Bus replacement	Maintain Existing Fixed Route	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0
Extend Tram road Service to Cap Cir	Add New Service	0	0	0	0	0	0	403	168	101	250	50	51	0	114,301	$681,325
Extend Big Bend to Cap Circle	Add New Service	0	0	0	0	0	0	169	93	0	250	50	51	0	46,900	$279,562

Table 1 continued

Table 1

Fixed-Route / ADA / Other Service Characteristics

Florida Transit TDP Update

Service Type / Mode	Description	Headway (minutes)			Revenue Hours			Revenue Miles			Annual Days of Service			Annual Hours	Annual Miles	Annual Operating Cost 2010
		Weekday	Saturday	Sunday	Weekday	Saturday	Sunday	Weekday	Saturday	Sunday	Weekday	Saturday	Sunday			
Other Service Improvements																
ADA Paratransit Service	ADA Service for	60	60	60				0.00	0.00	0.00	0.00	0.00	0.00	0	0	$0
Van Pool Service	Increase Frequency							0.00	0.00	0.00	0.00	0.00	0.00	0	0	$0
Miscellaneous	Add New Service							0.00	0.00	0.00	0.00	0.00	0.00	0	0	$0

Notes

Existing service VRM and VRH estimated from 2007 NTD annual summary, TBEST base year weekday and weekend summaries, and ridership reporting from CY2007.

Nova2010 VRM and VRH estimated from TBEST service coded; night period goes to 6am the following day which may cause discrepancies with StarMetro figures.

Source Legend:

Regional Transit Study

TIP or PPL

SM staff input re:near term

TIGGER II or NFCBP grant

nova2010 service plan

Table 2
Fixed-Route/ADA/Other Service Implementation Plan
Florida Transit TDP Update

Service Type/Mode	Description	Implementation Year	Annual Operating Cost 2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Maintain Existing Fixed Route/Fixed Guideway													
Existing routes	Eliminate Service	2010	$0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
University Routes	Maintain Existing Fixed Route Service	2011	$2,198,856	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
0	Maintain Existing Fixed Route Service	2009	$0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
0	TEST	2009	$0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
0	TEST	2009	$0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Maintain Other Existing Services													
ADA Paratransit Service	Maintain Existing ADA Paratransit Service	2011	$1,438,265	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Van Pool Service	TEST	2011	$0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Miscellaneous	Description	2011	$0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Route/Fixed Guideway Improvements													
nova2010 fixed routes	Add New Service	2011	$10,929,444	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tram Road Local Bus Service	Add New Service	2018	$346,505	No	No	No	No	No	No	No	Yes	Yes	Yes
Southwood Circulator	Maintain Existing Fixed Route Service	2011	$0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
North Leon Local Bus Service	Add New Service	2030	$862,980	No	No	No	No	No	No	No	No	No	No
East Leon Local Bus Service	Add New Service	2030	$862,980	No	No	No	No	No	No	No	No	No	No
Feeder Bus Service	Add New Service	2040	$862,980	No	No	No	No	No	No	No	No	No	No
Capital Circle NE/SE Express	Add New Service	2040	$490,574	No	No	No	No	No	No	No	No	No	No
Airport Express	Add New Service	2020	$222,493	No	No	No	No	No	No	No	No	No	Yes
Capital Circle SW/SE Express	Add New Service	2030	$454,213	No	No	No	No	No	No	No	No	No	No
Woodville Express	Add New Service	2040	$327,248	No	No	No	No	No	No	No	No	No	No
Tennessee Ave West BRT Ph	Add New Service	2040	$752,098	No	No	No	No	No	No	No	No	No	No
Tennessee Ave West BRT Ph	Add New Service	2040	$2,016,295	No	No	No	No	No	No	No	No	No	No
Thomasville Rd BRT	Add New Service	2040	$1,904,684	No	No	No	No	No	No	No	No	No	No
Apalachee Pkwy BRT	Add New Service	2040	$1,504,197	No	No	No	No	No	No	No	No	No	No
Capital Circle NE/SE BRT	Add New Service	2040	$2,497,754	No	No	No	No	No	No	No	No	No	No
Monroe St BRT	Add New Service	2040	$2,497,754	No	No	No	No	No	No	No	No	No	No
Mahan St East BRT Ph 1	Add New Service	2040	$752,098	No	No	No	No	No	No	No	No	No	No
Mahan Rd East BRT Ph 1 and	Add New Service	2040	$1,504,197	No	No	No	No	No	No	No	No	No	No
Gaines Streetcar Line	Add New Service	2040	$1,393,315	No	No	No	No	No	No	No	No	No	No
Campus Streetcar Line	Add New Service	2040	$1,504,197	No	No	No	No	No	No	No	No	No	No
Blairstone Rd	Add New Service	2012	$528,876	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Expand nova routes to night	Increase Hours of Service	2013	$298,040	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Midtown Circulator	Add New Service	2030	$0	No	No	No	No	No	No	No	No	No	No
Mahan Drive service	Add New Service	2011	$24,073	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Satellite Transfer/Intermodal	Add New Service	2014	$30,900	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Park and Ride Facility	Add New Service	2013	$10,300	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Univ Circltr - Electric Bus	Maintain Existing Fixed Route Service	2011	$0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Extend Tram road Service to	Add New Service	2030	$681,325	No	No	No	No	No	No	No	No	No	No
Extend Big Bend to Cap Circle	Add New Service	2030	$279,562	No	No	No	No	No	No	No	No	No	No

Table 2 continued

Table 2 (continued)
Fixed-Route/ADA/Other Service Implementation Plan
Florida Transit TDP Update

Service Type/Mode	Description	Implementation Year	Annual Operating Cost 2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Other Existing Service Improvements													
ADA Paratransit Service	ADA Service for New/Expanded Service	2009	$0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Van Pool Service	Increase Frequency	2009	$0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Miscellaneous	Add New Service	2008	$0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Source: Indicate source/s.

Regional Transit Study
TIP or PPL
TIGGER II Grant
Regional Mobility Plan

Table 3
Annual Operating Costs for Transit Improvements
Florida Transit TDP Update

Service Type / Mode	Description	Annual Operating Cost 2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Maintain Existing Fixed Route / Fixed Guideway		**$3,637,121**	**$3,746,234**	**$3,858,621**	**$3,974,380**	**$4,093,611**	**$4,216,420**	**$4,342,912**	**$4,473,200**	**$4,607,396**	**$4,745,617**	**$4,887,986**	**$42,946,377**
Existing routes	Eliminate Service	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
University Routes	Maintain Existing Fixed Route Servi	$2,198,856	$2,264,822	$2,332,766	$2,402,749	$2,474,832	$2,549,077	$2,625,549	$2,704,315	$2,785,445	$2,869,008	$2,955,079	**$25,963,642**
Maintain Other Existing Services		**$1,438,265**	**$1,481,413**	**$1,525,855**	**$1,571,631**	**$1,618,780**	**$1,667,343**	**$1,717,363**	**$1,768,884**	**$1,821,951**	**$1,876,609**	**$1,932,907**	**$16,982,735**
ADA Paratransit Service	Maintain Existing ADA Paratransit S	$1,438,265	$1,481,413	$1,525,855	$1,571,631	$1,618,780	$1,667,343	$1,717,363	$1,768,884	$1,821,951	$1,876,609	$1,932,907	**$16,982,735**
Van Pool Service	TEST	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Miscellaneous	Description	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Fixed Route / Fixed Guideway Improvements		**$33,539,083**	**$11,282,123**	**$12,181,671**	**$12,884,053**	**$13,340,131**	**$13,740,335**	**$14,189,441**	**$14,615,124**	**$15,531,663**	**$15,997,613**	**$16,818,080**	**$140,580,232**
nova2010 fixed routes	Add New Service	$10,929,444	$11,257,327	$11,595,047	$11,942,899	$12,301,186	$12,670,221	$13,050,328	$13,441,838	$13,845,093	$14,260,446	$14,688,259	**$129,052,643**
Tram Road Local Bus Service	Add New Service	$346,505	$0	$0	$0	$0	$0	$0	$0	$438,942	$452,111	$465,674	**$1,356,727**
Southwood Circulator	Maintain Existing Fixed Route Servi	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
North Leon Local Bus Service	Add New Service	$862,980	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
East Leon Local Bus Service	Add New Service	$862,980	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Feeder Bus Service	Add New Service	$862,980	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Capital Circle NE/SE Express	Add New Service	$490,574	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Airport Express	Add New Service	$222,493	$0	$0	$0	$0	$0	$0	$0	$0	$0	$299,012	**$299,012**
Capital Circle SW/SE Express	Add New Service	$454,213	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Woodville Express	Add New Service	$327,248	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Tennessee Ave West BRT Ph 1	Add New Service	$752,098	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Tennessee Ave West BRT Ph 2	Add New Service	$2,016,295	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Thomasville Rd BRT	Add New Service	$1,904,684	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Apalachee Pkwy BRT	Add New Service	$1,504,197	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Capital Circle NE/SE BRT	Add New Service	$2,497,754	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Monroe St BRT	Add New Service	$2,497,754	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Mahan St East BRT Ph 1	Add New Service	$752,098	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Mahan Rd East BRT Ph 1 and 2	Add New Service	$1,504,197	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Gaines Streetcar Line	Add New Service	$1,393,315	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Campus Streetcar Line	Add New Service	$1,504,197	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Blairstone Rd	Add New Service	$528,876	$0	$561,085	$577,917	$595,255	$613,112	$631,506	$650,451	$669,965	$690,063	$710,765	**$5,700,119**
Expand nova routes to night and im	Increase Hours of Service	$298,040	$0	$0	$325,676	$335,447	$345,510	$355,875	$366,552	$377,548	$388,875	$400,541	**$2,896,024**
Midtown Circulator	Add New Service	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Mahan Drive service	Add New Service	$24,073	$24,795	$25,539	$26,305	$27,094	$27,907	$28,744	$29,607	$30,495	$31,410	$32,352	**$284,249**
Satellite Transfer/Intermodal Facilitie	Add New Service	$30,900	$0	$0	$0	$69,556	$71,643	$110,689	$114,009	$156,573	$161,270	$207,635	**$891,375**
Park and Ride Facility	Add New Service	$10,300	$0	$0	$11,255	$11,593	$11,941	$12,299	$12,668	$13,048	$13,439	$13,842	**$100,084**
Univ Circltr - Electric Bus replacemen	Maintain Existing Fixed Route Servi	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Extend Tram road Service to Cap Ci	Add New Service	$681,325	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Extend Big Bend to Cap Circle	Add New Service	$279,562	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Other Existing Service Improvements		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
ADA Paratransit Service	ADA Service for New/Expanded Se	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Van Pool Service	Increase Frequency	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Miscellaneous	Add New Service	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Projected Annual Operating Costs - Existing Service		**$3,637,121**	**$3,746,234**	**$3,858,621**	**$3,974,380**	**$4,093,611**	**$4,216,420**	**$4,342,912**	**$4,473,200**	**$4,607,396**	**$4,745,617**	**$4,887,986**	**$42,946,377**
Projected Annual Operating Costs - Additional New Service		**$33,539,083**	**$11,282,123**	**$12,181,671**	**$12,884,053**	**$13,340,131**	**$13,740,335**	**$14,189,441**	**$14,615,124**	**$15,531,663**	**$15,997,613**	**$16,818,080**	**$140,580,232**
Projected Annual Operating Costs		**$37,176,203**	**$15,028,357**	**$16,040,292**	**$16,858,432**	**$17,433,742**	**$17,956,754**	**$18,532,353**	**$19,088,324**	**$20,139,059**	**$20,743,231**	**$21,706,066**	**$183,526,609**

Table 4
Capital Needs & Costs for Fixed-Route/ADA Paratransit Services
Florida Transit TDP Update

Capital Needs	Unit Cost	10-Year Need	2011		2012		2013		2014		2015		2016		2017		2018		2019		2020	
Vehicle Requirements																						
Fixed-Route/Fixed Guideway																						
Replacement Buses - Maintain Existing Service	$450,000	9	0	$0	1	$496,125	3	$1,562,794	1	$546,978	0	$0	0	$0	3	$1,899,586	1	$664,855	0	$0	0	$0
nova2010 fixed routes	$450,000	41	3	$1,417,500	3	$1,488,375	10	$5,209,313	3	$1,640,933	2	$1,148,653	0	$0	6	$3,799,171	4	$2,659,420	10	$6,980,977	0	$0
Tram Road Local Bus Service	$450,000	6	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	2	$1,266,390	0	$0	0	$0	0	$0
Southwood Circulator	$0	0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
North Leon Local Bus Service	$300,000	0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
East Leon Local Bus Service	$300,000	0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Feeder Bus Service	$300,000	0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Capital Circle NE/SE Express	$300,000	0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Airport Express	$450,000	2	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	2	$1,466,005
Capital Circle SW/SE Express	$300,000	0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Woodville Express	$300,000	0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Tennessee Ave West BRT Ph 1	$300,000	0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Tennessee Ave West BRT Ph 2	$300,000	0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Thomasville Rd BRT	$300,000	0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Apalachee Pkwy BRT	$300,000	0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Capital Circle NE/SE BRT	$300,000	0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Monroe St BRT	$300,000	0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Mahan St East BRT Ph 1	$300,000	0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Mahan Rd East BRT Ph 1 and 2	$300,000	0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Gaines Streetcar Line	$3,000,000	0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Campus Streetcar Line	$3,000,000	0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Blairstone Rd	$450,000	2	0	$0	2	$992,250	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Expand nova routes to night and improve headway	$450,000	3	0	$0	2	$992,250	0	$0	1	$546,978	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Midtown Circulator	$300,000	0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Mahan Drive service	$450,000	0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Satellite Transfer/Intermodal Facilities	$0	0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Park and Ride Facility	$0	0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Univ Circltr - Electric Bus replacement TIGGERII	$1,800,020	4	4	$7,200,081	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Extend Tram road Service to Cap Cir	$0	0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Spare Buses	$0	0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Total		63	7	**$8,617,581**	8	**$3,969,000**	13	**$6,772,106**	5	**$2,734,889**	2	**$1,148,653**	0	**$0**	11	**$6,965,147**	5	**$3,324,275**	10	**$6,980,977**	2	**$1,466,005**
Other Revenue Vehicles																						
Replacement Vans - Maintain Existing Service	$70,000	22	3	$220,500	0	$0	0	$0	14	$1,191,196	0	$0	0	$0	0	$0	5	$517,109	0	$0	0	$0
Total		22	3	**$220,500**	0	**$0**	0	**$0**	14	**$1,191,196**	0	**$0**	0	**$0**	0	**$0**	5	**$517,109**	0	**$0**	0	**$0**
Support Vehicles																						
Replacement Cars - Maintain Existing Service	$15,000	6	3	$47,250	0	$0	0	$0	0	$0	0	$0	3	$60,304	0	$0	0	$0	0	$0	0	$0
Replacement Vans/Trucks - Maintain Existing Service	$35,000	6	0	$0	3	$115,763	0	$0	0	$0	0	$0	0	$0	3	$147,746	0	$0	0	$0	0	$0
Total		12	3	**$47,250**	3	**$115,763**	0	**$0**	0	**$0**	0	**$0**	3	**$60,304**	3	**$147,746**	0	**$0**	0	**$0**	0	**$0**

(continued on next page)

Table 4 continued

Table 4
Capital Needs & Costs for Fixed-Route/ADA Paratransit Services
Florida Transit TDP Update

Capital Needs	Unit Cost	10-Year Need	2011		2012		2013		2014		2015		2016		2017		2018		2019		2020
Other Transit Infrastructure																					
Stop Signs	$50	140	70	$3,675	0	$0	0	$0	0	$0	0	$0	70	$4,690	0	$0	0	$0	0	$0	0	$0
Benches	$500	100	100	$52,500	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Shelters	$10,000	35	35	$367,500	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Park-and-Ride Lots	$300,000	1	0	$0	1	$330,750	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Other Transit Infrastructure	$1,000,000	31	4	$4,200,000	4	$4,410,000	4	$4,630,500	4	$4,862,025	4	$5,105,126	2	$2,680,191	3	$4,221,301	1.5	$2,216,183	3	$4,653,985	1	$1,628,895
Super Stops	$500,000	1	0	$0	0	$0	1	$578,813	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Satellite Transfer Centers/Intermodal Facility	$1,420,000	5	0	$0	0	$0	0	$0	2	$3,452,038	0	$0	1	$1,902,936	0	$0	1	$2,097,987	0	$0	1	$2,313,030
ITS Project/AVL	$1,250,000	5	1	$1,312,500	1	$1,378,125	1	$1,447,031	1	$1,519,383	1	$1,595,352	0	$0	0	$0	0	$0	0	$0	0	$0
BRT Guideway	$2,082,828	0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
CK Steele Plaza Renovation/Redevelopment	$500,000	84	20	$10,500,000	20	$11,025,000	13	$7,524,563	13	$7,900,791	18	$11,486,534	0	$0	0	$0	0	$0	0	$0	0	$0
Bike Racks at shelters and transfer stations	$5,000	39	3	$15,750	3	$16,538	3	$17,364	3	$18,233	3	$19,144	3	$20,101	3	$21,107	6	$44,324	6	$46,540	6	$48,867
Traffic signal preemption/prioritization project	$1,651,000	1	0	$0	0	$0	0.5	$955,619	0.5	$1,003,400	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Total				**$16,451,925**		**$17,160,413**		**$15,153,890**		**$18,755,869**		**$18,206,156**		**$4,607,919**		**$4,242,408**		**$4,358,494**		**$4,700,524**		**$3,990,792**
Total Vehicle Cost - Maintain Existing				**$267,750**		**$611,888**		**$1,562,794**		**$1,738,174**		**$0**		**$60,304**		**$2,047,331**		**$1,181,964**		**$0**		**$0**
Total Other Transit Infrastructure Cost				**$16,451,925**		**$17,160,413**		**$15,153,890**		**$18,755,869**		**$18,206,156**		**$4,607,919**		**$4,242,408**		**$4,358,494**		**$4,700,524**		**$3,990,792**
Total Cost - Maintain Existing Veh/Other Infra.				**$16,719,675**		**$17,772,300**		**$16,716,684**		**$20,494,043**		**$18,206,156**		**$4,668,223**		**$6,289,739**		**$5,540,458**		**$4,700,524**		**$3,990,792**
Total Vehicle Cost - New Service				**$8,617,581**		**$3,472,875**		**$5,209,313**		**$2,187,911**		**$1,148,653**		**$0**		**$5,065,562**		**$2,659,420**		**$6,980,977**		**$1,466,005**
Total Capital Cost				**$25,337,256**		**$21,245,175**		**$21,925,996**		**$22,681,954**		**$19,354,810**		**$4,668,223**		**$11,355,300**		**$8,199,878**		**$11,681,501**		**$5,456,797**

Table 5
TDP Costs & Revenues by Source
Florida Transit TDP Update

Source	%	2011 Operating	2011 Planning	2011 Capital	2011 TOTAL	2012 Operating	2012 Planning	2012 Capital	2012 TOTAL	2013 Operating	2013 Planning	2013 Capital	2013 TOTAL
Maintain Existing Service (non-nova2010 existing service)		$3,746,234	$150,000	$0	$3,896,234	$3,858,621	$150,600	$496,125	$4,505,346	$3,974,380	$151,218	$1,562,794	$5,688,392
FTA 5307	5%	$0	$104,000	$0	$104,000	$0	$104,000	$391,600	$495,600	$0	$104,000	$337,124	$441,124
FTA 5309	5%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$939,746	$939,746
FTA 5311	5%	$235,870	$0	$0	$235,870	$242,946	$0	$0	$242,946	$250,234	$0	$0	$250,234
JARC (5316)	4%	$168,039	$15,000	$0	$183,039	$173,080	$15,450	$0	$188,530	$178,273	$15,914	$0	$194,186
New Freedom (5317)	1%	$49,845	$5,000	$0	$54,845	$51,066	$5,150	$0	$56,216	$52,317	$5,305	$0	$57,622
TIGGER II (pending)	0%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
State of Good Repair (pending)	2%	$0	$0	$900,000	$900,000	$0	$0	$0	$0	$0	$0	$0	$0
Transportation Development Credits	2%	$0	$26,000	$0	$26,000	$0	$26,000	$80,207	$106,207	$0	$26,000	$261,528	$287,528
Discretionary Livability (pending)	1%	$0	$0	$500,000	$500,000	$0	$0	$0	$0	$0	$0	$0	$0
State Block Grant	0%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
ARRA Stimulus Funding	0%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TD Commission	9%	$407,037	$0	$22,578	$429,615	$441,286	$0	$24,399	$465,685	$441,286	$0	$24,399	$465,685
FDOT Service Development	0%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Farebox Revenue	0%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
University contracts	57%	$2,543,070	$0	$0	$2,543,070	$2,619,362	$0	$0	$2,619,362	$2,697,943	$0	$0	$2,697,943
Directly-Generated (non-fare)	0%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Local Socl Serv Groups 5311 Matching funds	5%	$235,870	$0	$0	$235,870	$242,946	$0	$0	$242,946	$250,234	$0	$0	$250,234
Local General Revenue	3%	$106,503	$0	$0	$106,503	$87,935	$0	$0	$87,935	$104,092	$0	$0	$104,092
Total Revenues	100%	$3,746,234	$150,000	$1,422,578	$5,318,812	$3,858,621	$150,600	$496,206	$4,505,427	$3,974,380	$151,218	$1,562,797	$5,688,394
Surplus /Shortfall		**$0**	**$0**	**$1,422,578**	**$1,422,578**	**$0**	**$0**	**$81**	**$81**	**$0**	**$0**	**$3**	**$3**
nova2010 fixed routes		$11,257,327	$0	$1,417,500	$12,674,827	$11,595,047	$0	$1,488,375	$13,083,422	$11,942,899	$0	$5,209,313	$17,152,211
State Block Grant	7%	$980,362	$0	$0	$980,362	$1,009,714	$0	$0	$1,009,714	$1,060,263	$0	$0	$1,060,263
Farebox Revenue	24%	$3,210,510	$0	$0	$3,210,510	$3,306,825	$0	$0	$3,306,825	$3,406,030	$0	$0	$3,406,030
FTA 5307	12%	$0	$0	$1,176,525	$1,176,525	$0	$0	$1,235,351	$1,235,351	$0	$0	$2,930,975	$2,930,975
FTA 5309	1%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,392,754	$1,392,754
Directly-Generated (non-fare)	2%	$261,620	$0	$0	$261,620	$269,469	$0	$0	$269,469	$277,553	$0	$0	$277,553
National Fuel Cell Bus Program					$0				$0	$48,200			$48,200
Transportation Development Credits	3%	$0	$0	$240,975	$240,975	$0	$0	$253,024	$253,024	$0	$0	$885,583	$885,583
Local General Revenue	51%	$6,804,835		$0	$6,804,835	$7,009,039		$0	$7,009,039	$7,150,853		$0	$7,150,853
Total Revenues	100%	$11,257,327		$1,417,500	$12,674,827	$11,595,047	$0	$1,488,375	$13,083,422	$11,942,899	$0	$5,209,313	$17,152,211
Surplus/Shortfall		**$0**		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Tram Road Local Bus Service		$0		$ -	$0	$0		$ -	$0	$0		$ -	$0
FDOT Service Development	27%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
FTA 5307	38%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Transportation Development Credits	10%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
MPO Flex Funds	0%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Local General Revenue	24%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Revenues	100%	$0		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus/Shortfall		**$0**		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Airport Express		0		0	$0	0		0	$0	0		0	$0
FTA 5307	69%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Transportation Development Credits	14%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Local General Revenue	0%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
MPO Flex Funds	17%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
STP	0%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Revenues	100%	$0		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus/Shortfall		**$0**		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Blairstone Rd		$0		$0	$0	$561,085		$992,250	$1,553,335	$577,917		$0	$577,917
FDOT Service Development	9%	$0	$0	$0	$0	$200,000		$0	$200,000	$200,000		$0	$200,000
FTA 5307	12%	$0	$0	$0	$0	$0		$823,568	$823,568	$0		$0	$0
Transportation Development Credits	3%	$0	$0	$0	$0	$0		$168,683	$168,683	$0		$0	$0
MPO Flex Funds	65%	$0	$0	$0	$0	$0		$0	$0	$377,917		$0	$377,917
Local General Revenue	11%	$0	$0	$0	$0	$361,085		$0	$361,085	$0		$0	$0
Project Subtotal	100%	$0	$0	$0	$0	$561,085	$0	$992,250	$1,553,335	$577,917	$0	$0	$577,917
Surplus/Shortfall		**$0**		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Expand nova routes to night and improve headway		$0		$0	$0	$0		$992,250	$992,250	$325,676		$0	$325,676
FTA 5307	83%	$0	$0	$0	$0	$0	$0	$773,568	$773,568	$325,676	$0	$0	$325,676
FTA 5309	11%	$0	$0	$0	$0	$0	$0	$50,000	$50,000	$0	$0	$0	$0
Transportation Development Credits	6%	$0	$0	$0	$0	$0	$0	$168,683	$168,683	$0	$0	$0	$0
FTA 5309	0%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
STP	0%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Project Subtotal	100%	$0		$0	$0	$0	$0	$992,250	$992,250	$325,676	$0	$0	$325,676
Surplus/Shortfall		**$0**		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

Table 5
TDP Costs & Revenues by Source
Florida Transit TDP Update

2014				2015				2016				2017			
Operating	Planning	Capital	TOTAL	Operating	Planning	Capital	TOTAL	Operating	Planning	Capital	TOTAL	Operating	Planning	Capital	TOTAL
$4,093,611	$151,855	$546,978	$4,792,444	$4,216,420	$152,510	$0	$4,368,930	$4,342,912	$153,185	$0	$4,496,098	$4,473,200	$153,881	$1,899,586	$6,526,666
$0	$104,000	$158,800	$262,800	$0	$104,000	$0	$104,000	$0	$104,000	$0	$104,000	$0	$104,000	$145,526	$249,526
$0	$0	$275,000	$275,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,410,881	$1,410,881
$257,742	$0	$0	$257,742	$265,474	$0	$0	$265,474	$273,438	$0	$0	$273,438	$281,641	$0	$0	$281,641
$183,621	$16,391	$0	$200,012	$189,129	$16,883	$0	$206,012	$194,803	$17,389	$0	$212,192	$200,647	$17,911	$0	$218,558
$53,598	$5,464	$0	$59,062	$54,911	$5,628	$0	$60,539	$56,256	$5,796	$0	$62,052	$57,633	$5,970	$0	$63,603
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
$0	$26,000	$88,851	$114,851	$0	$26,000	$0	$26,000	$0	$26,000	$0	$26,000	$0	$26,000	$318,782	$344,782
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
$0		$0	$0	$0		$0	$0	$0		$0	$0	$0		$0	$0
$441,286		$24,399	$465,685	$441,286		$24,399	$465,685	$441,286		$24,399	$465,685	$441,286		$24,399	$465,685
$0		$0	$0	$0		$0	$0	$0		$0	$0	$0		$0	$0
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
$2,778,881	$0	$0	$2,778,881	$2,862,248	$0	$0	$2,862,248	$2,948,115	$0	$0	$2,948,115	$3,036,559	$0	$0	$3,036,559
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
$257,742	$0	$0	$257,742	$265,474	$0	$0	$265,474	$273,438	$0	$0	$273,438	$281,641	$0	$0	$281,641
$120,742	$0	$0	$120,742	$137,898	$0	$0	$137,898	$155,576	$0	$0	$155,576	$173,792	$0	$0	$173,792
$4,093,611	$151,855	$547,050	$4,792,515	$4,216,420	$152,510	$24,399	$4,393,329	$4,342,912	$153,185	$24,399	$4,520,497	$4,473,200	$153,881	$1,899,588	$6,526,669
$0	**$0**	**$72**	**$72**	**$0**	**$0**	**$24,399**	**$24,399**	**$0**	**$0**	**$24,399**	**$24,399**	**$0**	**$0**	**$3**	**$3**
$12,301,186	$0	$1,640,933	$13,942,119	$12,670,221		$1,148,653	$13,818,875	$13,050,328		0	$13,050,328	$13,441,838		$3,799,171	$17,241,009
$1,060,263	$0	$0	$1,060,263	$1,060,263	$0	$0	$1,060,263	$1,092,071	$0	$0	$1,092,071	$1,124,833	$0	$0	$1,124,833
$3,508,211	$0	$0	$3,508,211	$3,613,457	$0	$0	$3,613,457	$3,721,861	$0	$0	$3,721,861	$3,833,517	$0	$0	$3,833,517
$0	$0	$1,361,975	$1,361,975	$0	$0	$953,382	$953,382	$0	$0	$0	$0	$0		$3,153,312	$3,153,312
$0	$0	$0	$0	$0		$0	$0	$0		$0	$0	$0		$0	$0
$285,879	$0	$0	$285,879	$294,456	$0	$0	$294,456	$303,289	$0	$0	$303,289	$312,388	$0	$0	$312,388
$48,200			$48,200				$0				$0				$0
$0	$0	$278,959	$278,959	$0		$195,271	$195,271	$0		$0	$0	$0		$645,859	$645,859
$7,398,633		$0	$7,398,633	$7,702,045		$0	$7,702,045	$7,933,107		$0	$7,933,107	$8,171,100		$0	$8,171,100
$12,301,186	$0	$1,640,933	$13,942,119	$12,670,221	$0	$1,148,653	$13,818,875	$13,050,328	$0	$0	$13,050,328	$13,441,838	$0	$3,799,171	$17,241,009
$0	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
$0		$ -	$0	$0		$ -	$0	$0		$ -	$0	$0		$ 1,266,390	$1,266,390
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,007,009	$1,007,009
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$259,381	$259,381
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,266,390	$1,266,390
$0	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
0		0	$0	0		0	$0	0		0	$0	0		0	$0
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
$0	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
$595,255		$0	$595,255	$613,112		$0	$613,112	$631,506		$0	$631,506	$650,451		$0	$650,451
$206,000		$0	$206,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
$0		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
$0		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
$389,255		$0	$389,255	$435,000	$0	$0	$435,000	$479,000	$0	$0	$479,000	$592,000	$0	$0	$592,000
$0		$0	$0	$178,112		$0	$178,112	$152,506	$0	$0	$152,506	$58,451	$0	$0	$58,451
$595,255	$0	$0	$595,255	$613,112	$0	$0	$613,112	$631,506	$0	$0	$631,506	$650,451	$0	$0	$650,451
$0	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
$335,447		$546,978	$882,424	$345,510			$345,510	$355,875			$355,875	$366,552			$366,552
$335,447	$0	$0	$335,447	$345,510	$0	$0	$345,510	$355,875	$0	$0	$355,875	$366,552	$0	$0	$366,552
$0	$0	$453,992	$453,992	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
$0	$0	$92,986	$92,986	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
$335,447	$0	$546,978	$882,424	$345,510	$0	$0	$345,510	$355,875	$0	$0	$355,875	$366,552	$0	$0	$366,552
$0	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

Table 5
TDP Costs & Revenues by Source
Florida Transit TDP Update

2018				2019				2020				10-Year Total			
Operating	Planning	Capital	TOTAL	Operating	Planning	Capital	TOTAL	Operating	Planning	Capital	TOTAL	Operating	Planning	Capital	TOTAL
$4,607,396	$154,597	$664,855	$5,426,848	$4,745,617	$155,335	$0	$4,900,953	$4,887,986	$156,095	$0	$5,044,081	**$42,946,377**	**$1,529,278**	**$5,170,337**	**$49,645,992**
$0	$104,000	$531,578	$635,578	$0	$104,000	$0	$104,000	$0	$104,000	$0	$104,000	**$0**	**$1,040,000**	**$1,564,628**	**$2,604,628**
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**	**$2,625,627**	**$2,625,627**
$290,090	$0	$0	$290,090	$298,793	$0	$0	$298,793	$307,757	$0	$0	$307,757	**$2,703,985**	**$0**	**$0**	**$2,703,985**
$206,667	$18,448	$0	$225,115	$212,867	$19,002	$0	$231,868	$219,253	$19,572	$0	$238,824	**$1,926,379**	**$171,958**	**$0**	**$2,098,337**
$59,044	$6,149	$0	$65,193	$60,489	$6,334	$0	$66,823	$61,970	$6,524	$0	$68,494	**$557,130**	**$57,319**	**$0**	**$614,449**
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**	**$0**	**$0**
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**	**$900,000**	**$900,000**
$0	$26,000	$108,878	$134,878	$0	$26,000	$0	$26,000	$0	$26,000	$0	$26,000	**$0**	**$260,000**	**$858,245**	**$1,118,245**
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**	**$500,000**	**$500,000**
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**	**$0**	**$0**
$0		$0	$0	$0		$0	$0	$0		$0	$0	**$0**	**$0**	**$0**	**$0**
$441,286		$24,399	$465,685	$441,286		$24,399	$465,685	$441,286		$24,399	$465,685	**$4,378,611**	**$0**	**$242,169**	**$4,620,780**
$0		$0	$0	$0		$0	$0	$0		$0	$0	**$0**	**$0**	**$0**	**$0**
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**	**$0**	**$0**
$3,127,655	$0	$0	$3,127,655	$3,221,485	$0	$0	$3,221,485	$3,318,130	$0	$0	$3,318,130	**$29,153,448**	**$0**	**$0**	**$29,153,448**
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**	**$0**	**$0**
$290,090	$0	$0	$290,090	$298,793	$0	$0	$298,793	$307,757	$0	$0	$307,757	**$2,703,985**	**$0**	**$0**	**$2,703,985**
$192,563	$0	$0	$192,563	$211,904	$0	$0	$211,904	$231,834	$0	$0	$231,834	**$1,522,839**	**$0**	**$0**	**$1,522,839**
$4,607,396	$154,597	$664,855	$5,426,848	$4,745,617	$155,335	$24,399	$4,925,352	$4,887,986	$156,095	$24,399	$5,068,480	$42,946,377	$1,529,278	$6,690,670	$51,166,324
$0	**$0**	**$0**	**$0**	**$0**	**$0**	**$24,399**	**$24,399**	**$0**	**$0**	**$24,399**	**$24,399**	**$0**	**$0**	**$1,520,332**	**$1,520,332**
$13,845,093		$2,659,420	$16,504,513	$14,260,446		$6,980,977	$21,241,423	$14,688,259		$0	$14,688,259	**$129,052,643**	**$0**	**$24,344,342**	**$153,396,985**
$1,158,578	$0	$0	$1,158,578	$1,193,335	$0	$0	$1,193,335	$1,229,135	$0	$0	$1,229,135	**$10,968,818**	**$0**	**$0**	**$10,968,818**
$3,948,522	$0	$0	$3,948,522	$4,066,978	$0	$0	$4,066,978	$4,188,987	$0	$0	$4,188,987	**$36,804,899**	**$0**	**$0**	**$36,804,899**
$0		$2,207,318	$2,207,318	$0		$5,794,211	$5,794,211	$0		$0	$0	**$0**	**$0**	**$18,813,050**	**$18,813,050**
$0	$0	$0	$0	$0		$0	$0	$0	$0	$0	$0	**$0**	**$0**	**$1,392,754**	**$1,392,754**
$321,760	$0	$0	$321,760	$331,412	$0	$0	$331,412	$341,355	$0	$0	$341,355	**$2,999,180**	**$0**	**$0**	**$2,999,180**
			$0				$0				$0	**$96,399**	**$0**	**$0**	**$96,399**
$0		$452,101	$452,101	$0		$1,186,766	$1,186,766	$0		$0	$0	**$0**	**$0**	**$4,138,538**	**$4,138,538**
$8,416,233		$0	$8,416,233	$8,668,720		$0	$8,668,720	$8,928,781		$0	$8,928,781	**$78,183,347**	**$0**	**$0**	**$78,183,347**
$13,845,093	$0	$2,659,420	$16,504,513	$14,260,446	$0	$6,980,977	$21,241,423	$14,688,259	$0	$0	$14,688,259	$129,052,643	$0	$24,344,342	$153,396,985
$0	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
$438,942		$0	$438,942	$452,111		$ -	$452,111	$465,674		$ -	$465,674	**$1,356,727**	**$0**	**$1,266,390**	**$2,623,117**
$231,855	$0	$0	$231,855	$238,810	$0	$0	$238,810	$245,975	$0	$0	$245,975	**$716,640**	$0	**$0**	**$716,640**
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	$0	**$1,007,009**	**$1,007,009**
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	$0	**$259,381**	**$259,381**
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	$0	**$0**	**$0**
$207,087	$0	$0	$207,087	$213,300	$0	$0	$213,300	$219,699	$0	$0	$219,699	**$640,087**	$0	**$0**	**$640,087**
$438,942	$0	$0	$438,942	$452,111	$0	$0	$452,111	$465,674	$0	$0	$465,674	**$1,356,727**	**$0**	**$1,266,390**	**$2,623,117**
$0	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
0		0	$0	0		0	$0	$ 299,012		$ 1,466,005	$1,765,017	**$299,012**	**$0**	**$1,466,005**	**$1,765,017**
$0	$0	$0	$0	$0	$0	$0	$0	$ -	$ -	$ 1,216,784	$1,216,784	**$0**		**$1,216,784**	**$1,216,784**
$0	$0	$0	$0	$0	$0	$0	$0	$ -	$ -	$ 249,221	$249,221	**$0**		**$249,221**	**$249,221**
$0	$0	$0	$0	$0	$0	$0	$0	$ -	$ -	$ -	$0	**$0**		**$0**	**$0**
$0	$0	$0	$0	$0	$0	$0	$0	$ 299,012	$ -	$ -	$299,012	**$299,012**		**$0**	**$299,012**
$0	$0	$0	$0	$0	$0	$0	$0	$ -	$ -	$ -	$0	**$0**		**$0**	**$0**
$0	$0	$0	$0	$0	$0	$0	$0	$299,012	$0	$1,466,005	$1,765,017	**$299,012**		**$1,466,005**	**$1,765,017**
$0	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**		**$0**	**$0**
$669,965		$0	$669,965	$690,063		$0	$690,063	$710,765		$0	$710,765	**$5,700,119**	**$0**	**$992,250**	**$6,692,369**
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$606,000**		**$0**	**$606,000**
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**		**$823,568**	**$823,568**
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**		**$168,683**	**$168,683**
$669,965	$0	$0	$669,965	$686,000	$0	$0	$686,000	$710,765	$0	$0	$710,765	**$4,339,902**		**$0**	**$4,339,902**
$0	$0	$0	$0	$4,063	$0	$0	$4,063	$0	$0	$0	$0	**$754,217**		**$0**	**$754,217**
$669,965	$0	$0	$669,965	$690,063	$0	$0	$690,063	$710,765	$0	$0	$710,765	**$5,700,119**	**$0**	**$992,250**	**$6,692,369**
$0	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
$377,548			$377,548	$388,875			$388,875	$400,541			$400,541	**$2,896,024**	**$0**	**$1,539,228**	**$4,435,252**
$377,548	$0	$0	$377,548	$388,875	$0	$0	$388,875	$400,541	$0	$0	$400,541	**$2,896,024**	**$0**	**$773,568**	**$3,669,591**
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**	**$503,992**	**$503,992**
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**	**$261,669**	**$261,669**
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**	**$0**	**$0**
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**	**$0**	**$0**
$377,548	$0	$0	$377,548	$388,875	$0	$0	$388,875	$400,541	$0	$0	$400,541	**$2,896,024**	**$0**	**$1,539,228**	**$4,435,252**
$0	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

Table 6
10-Year TDP Cost Summary
Florida Transit TDP Update

Alternatives	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Maintain Existing Service (non-nova2010 existing service)	$ 3,896,234	$ 4,505,346	$ 5,688,392	$ 4,792,444	$ 4,368,930	$ 4,496,098	$ 6,526,666	$ 5,426,848	$ 4,900,953	$ 5,044,081	$ 49,645,992
nova2010 fixed routes	$ 12,674,827	$ 13,083,422	$ 17,152,211	$ 13,942,119	$ 13,818,875	$ 13,050,328	$ 17,241,009	$ 16,504,513	$ 21,241,423	$ 14,688,259	$ 153,396,985
Tram Road Local Bus Service	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,266,390	$ 438,942	$ 452,111	$ 465,674	$ 2,623,117
Southwood Circulator	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
North Leon Local Bus Service	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
East Leon Local Bus Service	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Feeder Bus Service	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Capital Circle NE/SE Express	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Airport Express	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,765,017	$ 1,765,017
Capital Circle SW/SE Express	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Woodville Express	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tennessee Ave West BRT Ph 1	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tennessee Ave West BRT Ph 2	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Thomasville Rd BRT	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Apalachee Pkwy BRT	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Capital Circle NE/SE BRT	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Monroe St BRT	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Mahan St East BRT Ph 1	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Mahan Rd East BRT Ph 1 and 2	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Gaines Streetcar Line	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Campus Streetcar Line	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Blairstone Rd	$ -	$ 1,553,335	$ 577,917	$ 595,255	$ 613,112	$ 631,506	$ 650,451	$ 669,965	$ 690,063	$ 710,765	$ 6,692,369
Expand nova routes to night and improve headway	$ -	$ 992,250	$ 325,676	$ 882,424	$ 345,510	$ 355,875	$ 366,552	$ 377,548	$ 388,875	$ 400,541	$ 4,435,252
Midtown Circulator	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Mahan Drive service	$ 24,795	$ 25,539	$ 26,305	$ 27,094	$ 27,907	$ 28,744	$ 29,607	$ 30,495	$ 31,410	$ 32,352	$ 284,249
Satellite Transfer/Intermodal Facilities	$ -	$ -	$ -	$ 76,512	$ 78,807	$ 121,758	$ 125,410	$ 172,230	$ 177,397	$ 228,399	$ 980,513
Park and Ride Facility	$ -	$ -	$ 11,255	$ 11,593	$ 11,941	$ 12,299	$ 12,668	$ 13,048	$ 13,439	$ 13,842	$ 100,084
Univ Circltr - Electric Bus replacement TIGGERII	$ 7,200,081	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 7,200,081
Extend Tram road Service to Cap Cir	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Extend Big Bend to Cap Circle	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
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Other Revenue Vehicles	$ 220,500	$ -	$ -	$ 1,191,196	$ -	$ -	$ -	$ 517,109	$ -	$ -	$ 1,928,806
Support Vehicles	$ 47,250	$ 115,763	$ -	$ -	$ -	$ 60,304	$ 147,746	$ -	$ -	$ -	$ 371,062
Other Transit Infrastructure	$ 16,451,925	$ 17,160,413	$ 15,153,890	$ 18,755,869	$ 18,206,156	$ 4,607,919	$ 4,242,408	$ 4,358,494	$ 4,700,524	$ 3,990,792	$ 107,628,390
TOTAL EXPENSES	**$ 40,515,613**	**$37,436,067**	**$38,935,647**	**$40,274,506**	**$37,471,239**	**$23,364,830**	**$30,608,906**	**$28,509,191**	**$32,596,194**	**$27,339,722**	**$337,051,916**

Table 7
10-Year TDP Revenue Summary
Florida Transit TDP Update

Revenue Sources	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Federal											
FTA 5307	$ 1,463,540	$ 3,328,086	$ 3,697,775	$ 2,948,914	$ 1,402,892	$ 459,875	$ 4,776,399	$ 3,649,646	$ 6,287,086	$ 1,721,325	$ 29,735,539
FTA 5308	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
FTA 5309	$ 13,000,000	$ 13,650,000	$ 14,332,500	$ 14,496,992	$ 14,406,400	$ 3,000,000	$ 4,410,881	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 86,296,773
FTA 5311	$ 235,870	$ 242,946	$ 250,234	$ 257,742	$ 265,474	$ 273,438	$ 281,641	$ 290,090	$ 298,793	$ 307,757	$ 2,703,985
STP	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
CMAQ	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Enhancement Funds	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
JARC (5316)	$ 183,039	$ 188,530	$ 194,186	$ 200,012	$ 206,012	$ 212,192	$ 218,558	$ 225,115	$ 231,868	$ 238,824	$ 2,098,337
New Freedom (5317)	$ 54,845	$ 56,216	$ 57,622	$ 59,062	$ 60,539	$ 62,052	$ 63,603	$ 65,193	$ 66,823	$ 68,494	$ 614,449
ARRA Stimulus Funding	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
TIGGER II	$ 6,466,003	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,466,003
State of Good Repair (pending)	$ 900,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 900,000
Discretionary Livability (pending)	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 500,000
State											
State Block Grant	$ 980,362	$ 1,009,714	$ 1,060,263	$ 1,060,263	$ 1,060,263	$ 1,092,071	$ 1,124,833	$ 1,158,578	$ 1,193,335	$ 1,229,135	$ 10,968,818
FDOT Urban Corridor	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
FDOT Intermodal	$ -	$ -	$ -	$ 1,450,000	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,450,000
FDOT WAGES	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
FDOT Safety	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
FDOT Service Development	$ 24,795	$ 225,539	$ 226,305	$ 233,094	$ 27,907	$ 28,744	$ 29,607	$ 262,350	$ 270,220	$ 278,327	$ 1,606,889
FDOT Urban Transit Capital	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
TD Commission	$ 429,615	$ 465,685	$ 465,685	$ 465,685	$ 465,685	$ 465,685	$ 465,685	$ 465,685	$ 465,685	$ 465,685	$ 4,620,780
Transportation Development Credits	$ 3,617,111	$ 3,482,138	$ 3,630,942	$ 3,509,251	$ 3,171,980	$ 640,458	$ 1,864,480	$ 1,289,345	$ 1,827,224	$ 889,679	$ 23,922,607
Commuter Trans Assistance	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Concurrency (MMTD) Capital Funds	$ 859,468	$ 885,252	$ 911,809	$ 939,163	$ 967,338	$ 996,358	$ 1,026,249	$ 1,057,037	$ 1,088,748	$ 1,121,410	$ 9,852,832
Local											
MPO Flex Funds	$ -	$ -	$ 377,917	$ 430,989	$ 477,986	$ 582,311	$ 698,411	$ 863,822	$ 863,397	$ 1,238,176	$ 5,533,008
Farebox Revenue	$ 3,210,510	$ 3,306,825	$ 3,406,030	$ 3,508,211	$ 3,613,457	$ 3,721,861	$ 3,833,517	$ 3,948,522	$ 4,066,978	$ 4,188,987	$ 36,804,899
Directly-Generated (non-fare)	$ 261,620	$ 269,469	$ 277,553	$ 285,879	$ 294,456	$ 303,289	$ 312,388	$ 321,760	$ 331,412	$ 341,355	$ 2,999,180
Gas Tax	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
National Fuel Cell Bus Program	$ -	$ -	$ 48,200	$ 48,200	$ -	$ -	$ -	$ -	$ -	$ -	$ 96,399
Property Tax	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Local General Revenue	$ 7,002,667	$ 7,573,821	$ 7,266,201	$ 7,565,746	$ 8,065,818	$ 8,332,238	$ 8,582,756	$ 8,807,303	$ 9,111,427	$ 9,394,157	$ 81,702,133
Local Socl Serv Groups 5311 Matching funds	$ 235,870	$ 242,946	$ 250,234	$ 257,742	$ 265,474	$ 273,438	$ 281,641	$ 290,090	$ 298,793	$ 307,757	$ 2,703,985
University contracts	$ 2,543,070	$ 2,619,362	$ 2,697,943	$ 2,778,881	$ 2,862,248	$ 2,948,115	$ 3,036,559	$ 3,127,655	$ 3,221,485	$ 3,318,130	$ 29,153,448
Other	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Private	$ 40,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 40,000
TOTAL REVENUE	**$42,008,384**	**$37,546,530**	**$39,151,400**	**$40,495,824**	**$37,613,928**	**$23,392,127**	**$31,007,208**	**$28,822,192**	**$32,623,274**	**$28,109,197**	**$340,770,064**
TOTAL COST	**$40,515,613**	**$37,436,067**	**$38,935,647**	**$40,274,506**	**$37,471,239**	**$23,364,830**	**$30,608,906**	**$28,509,191**	**$32,596,194**	**$27,339,722**	**$337,051,916**
TOTAL UNFUNDED NEEDS	**$1,492,771**	**$110,462**	**$215,753**	**$221,318**	**$142,689**	**$27,296**	**$398,302**	**$313,001**	**$27,080**	**$769,475**	**$3,718,148**

Note that the 2011 surplus is due to pending grant revenue. Other surpluses are negligible capital surpluses from 5307 and 5309 grant requests that may not be awarded.

Appendix: StarMetro Garage Evaluation Study

StarMetro Garage Evaluation Study

Prepared for:

StarMetro

555 Appleyard Drive

Tallahassee, FL 32304

Prepared By:

Transit Resource Center

5840 Red Bug Lake Road

Winter Springs, FL 32708

November 1, 2010

Introduction

Transit Resource Center was hired by StarMetro in Tallahassee, Florida; to conduct a garage evaluation study to determine what effects a planned fleet expansion will have on the ability of its current maintenance facility and maintenance staff to handle the expanded fleet. StarMetro is planning to implement a new route structure that is the result of its Nova2010 Plan. This plan calls for the replacement of Tallahassee's current centralized route structure with a grid type network. Nova2010 is scheduled for implementation in July 2011. To fully implement the Nova2010 Plan StarMetro will need to add up to ten full size transit buses to its fleet.

In addition to the Nova 2010 Plan, StarMetro is planning a series of regional service improvements over the next decade that could increase its fleet size by nearly 30%. The current maintenance facility at 555 Appleyard Drive, which was built in 1983, was designed when the StarMetro fleet consisted of 50 full size transit buses. The current fleet is made up of 67 full size transit buses and 17 paratransit buses. StarMetro feels that the maintenance facility at 555 Appleyard Drive will not be able to handle the size of the fleet being projected by the current service improvement plans. Consequently, StarMetro decided to engage a consultant to evaluate the agency's maintenance facility and bus storage needs.

When the TRC study team performed it's on site visit on September 13 – 17, 2010, it learned through interviews with the StarMetro maintenance management and planning staffs, that the Nova2010 Plan was being implemented in July, 2011 without adding any buses to the fleet. A lack of capital funds is delaying the procurement of the buses required for fleet expansion. The current plan is to implement the new route structure by expanding some bus headways and reducing the number of spare buses available for maintenance. With this knowledge TRC expanded its work plan to first show the impact of implementing the Nova2010 Plan without fleet expansion and then to look at the effects of a slower fleet expansion phased in over a period of years.

Findings and Recommendations

Based on TRC's observations and analysis of the 555 Appleyard Drive facility, interviews with key StarMetro management staff and reviews of several service improvement plans for the Tallahassee area, TRC projects that it will be difficult for the current StarMetro bus maintenance and storage facilities to handle the fleet expansion predicted to occur within the next five years. TRC feels it is imperative that StarMetro develop a plan to expand its maintenance and storage facilities to accommodate a fleet of up to 100 full size transit buses. Such a plan should allow StarMetro to handle any fleet expansion plan that would be implemented over the next fifteen years.

Immediate Actions: While visiting the StarMetro facility TRC noted several issues with the current facility that should be addressed. TRC is recommending that StarMetro seek funding to perform the following improvements as soon as funding is available:

- Reconfigure the bus parking stalls in the East Storage Yard. The current parking arrangement in the East Yard allows for the parking of 34 full size transit buses. The yard can be re-striped to add 30 additional parking stalls. This would increase the parking capacity at 555 Appleyard Drive to 97 full size stalls. This will accommodate all fleet expansion planned for the next 10 to 15 years. TRC is recommending that additional lighting be installed in the East Yard when the parking stalls are reconfigured to improve the safety of the bus movements at night.
- Modify the fuel island to improve paratransit bus servicing. The current fuel island is configured with the diesel and gasoline dispensers on the same side of the island. Because the paratransit buses are fueled on the street side, opposite of the diesel buses, they must be driven against the flow of the diesel bus traffic to be serviced. Special servicing procedures are required to minimize the interruption of the flow of buses through the fuel island. This situation can be eliminated by moving the gasoline dispenser to the east side of the island. This will allow all buses to follow the same circulation flow when being cleaned and serviced, greatly improving these nightly operations. The uninterrupted flow of buses through the fuel lane will become more important as the size of the fleet increases.
- Redesign of the parts storage area. The StarMetro parts room staff identified several issues with the existing parts room that need to be addressed before it can efficiently service an expanded fleet. As the fleet expands the size of the parts inventory will also increase. The stock room needs to be redesigned to maximize its storage capacity and increase the efficiency of parts delivery to the bus maintenance staff. Once the redesign is completed, parts room capacity will have to be monitored to determine if an expansion will eventually be required.

Future Actions: TRC has identified two approaches for expanding the maintenance work area at 555 Appleyard Drive that will accommodate the expected growth of the fleet over the next fifteen years. TRC is recommending that StarMetro perform a more detailed cost and operational analysis of each scenario to determine which approach will best fit their needs.

- Purchase an adjoining facility to relocate the maintenance and storage of the paratransit fleet. TRC identified several industrial properties for sale in the vicinity of the 555 Appleyard Drive facility that could be converted into a paratransit fleet maintenance and storage facility. TRC selected the property at 3035 Jackson Bluff Road to analyze as it appears to be the one that is best suited to convert into a bus maintenance and storage facility. TRC estimated that it would cost around $1.5 million to purchase and modify this facility to meet StarMetro's needs. There may be other properties available in the area that would be a better choice. TRC is recommending that StarMetro do a thorough assessment of nearby properties on the market to find two or three that best meet the requirements for a new maintenance and storage facility for their paratransit fleet. An engineering consultant should than be hired to perform a complete building analysis and cost comparison for each property. With this additional information, StarMetro can then consider whether moving the paratransit maintenance operations is the most effective way to address the impending fleet expansion issues.
- Build an addition to the current facility. TRC performed a preliminary cost estimate for the building of an addition to the current facility that would give StarMetro the additional

workspace needed to adequately maintain an expanding fleet for at least the next 15 years. TRC analyzed a 6,400 sq. ft. building addition housing three 60 foot in-ground hoists, a new locker room and additional storage space. TRC's estimated cost for this size addition was $1.1 million. This estimate covers a typical automotive repair facility, constructed in the US and was determined using the RS Means construction estimating software. TRC recommends that StarMetro acquire the services of a qualified architectural consultant to perform a preliminary design and cost analysis for a building addition that is sized and configured to provide the workspace StarMetro will need to accommodate any fleet expansion anticipated over the next 15 years. StarMetro can then use this information to determine whether building an addition is the best course of action to follow to address the planned fleet expansion.

Study Activities

The following pages detail the observations and analyses performed by TRC to develop its recommendations for dealing with StarMetro's planned fleet expansion:

Task 1: Observations

Between September 13 and 17, 2010, TRC sent a team to the StarMetro facility at 555 Appleyard Drive to review the maintenance operations, evaluate the garage facilities, and interview key staff members. The information gathered was used to make recommendations for facility requirements to accommodate StarMetro's planned fleet expansion. The following details the observations of the TRC team members, Ralph Malec and Charles Walker.

Fleet Make-up – The StarMetro active fleet consists of sixty-seven (67) fixed route buses and 17 paratransit buses. In addition StarMetro keeps a small fleet of eight (8) contingency buses. The buses in the contingency fleet are the next buses to be retired and are only used when the active fleet is unable to provide all required service. StarMetro's fleet is relatively new. The average age of the 67 fixed route buses is 4.75 years and the average age of the paratransit fleet is 2.75 years. There are three sizes of buses used in the fixed route service: (24) forty foot, (28) thirty-five foot and (15) twenty-nine foot. All but twelve of these buses were manufactured by Gillig. The buses in the paratransit fleet are all manufactured by Champion and are all twenty-two foot long. All fixed route fleet buses are diesel powered and all paratransit buses have gasoline engines.

Inspection and Preventive Maintenance – StarMetro's fixed route buses are inspected every 6000 miles. This procedure is called an "A" inspection. Every second inspection, 12,000 miles, a "B" inspection is performed. The "B" inspection includes all items performed on the "A" inspection, plus cooling system service, filter changes and farebox maintenance. At 24,000 miles the differential lube is changed and the air dryer is serviced in addition to all "A" and "B" items, for a "C" level inspection. The paratransit buses have an "A" inspection performed every 5000 miles and a "B" inspection performed at 24,000

miles. There is no "C" inspection on the paratransit fleet. Engine oil is changed on the fixed route buses on a schedule independent of the inspection schedule at 15,000 miles. Transmission fluid is either changed at 73,000 miles for the buses equipped with the Voith transmission or 48,000 miles for those with Allison transmissions. The oil change on the paratransit buses is part of the "A" inspection, but the transmission oil is changed on a 50,000 mile interval.

Based on the average fleet miles run, the StarMetro maintenance staff performs an average of one PMI per day on the fixed fleet buses and two PMIs per week on the paratransit buses. An "A" inspection will take 4 to 4 ½ hours to complete. "B" inspections take 5 to 5 ½ hours, and the "C" inspections last about 6 ½ to 7 hours. Based on these numbers it can be assumed that the equivalent of one person on the maintenance staff is being used daily on PM inspections. Not all defects reported on inspection are repaired as part of the inspection activity. Some of this work is completed on the second shift and some repairs may be deferred until parts are obtained or manpower is available to do the work. TRC estimates the equivalent of one additional mechanic is needed to perform this follow-up work.

Running Repairs – The bulk of the daily repair work comes from defects reported by operators. There are very few road calls because it is standard StarMetro practice to have spare buses staged at the downtown transfer center (C.K. Steele Plaza) to trade for defective buses. When an operator has a non-safety related defect on the road, he is directed to drive it to the Plaza and exchange it with one of the staged buses. Out-of-service operators shuttle the defective buses back to the storage yard after their run is complete. No data is available to show the number of defects repaired daily, but the consensus among the staff was that it averaged about forty per day many of which were very minor i.e. burned out bulbs, mirrors broken, defective fareboxes.

Major Repairs – StarMetro averages 7 to 8 buses out of service for maintenance work each day. About half of that number is for repairs of a major nature. StarMetro does not have any data on the length of time buses are out of service or the reasons they are out of service. On the week TRC visited StarMetro three buses were out of service for longer than one week. One had major body damage, one was waiting on a new electrical component and the third bus had been out of service for over a month due to engine problems. The StarMetro maintenance staff has a goal of having 59 buses available for service each day, four more than required by the weekday schedule. This allows Operations to run some extra buses if conditions warrant it.

Body and Paint Shop Activity – StarMetro has a paint spray booth that can accommodate forty-foot buses. There are two body men on the maintenance staff, one on each shift. Much of the work is minor; broken windows, defective mirrors, damaged bike racks and missing or damaged decals. Much of the routine body work is performed outside except in inclement weather. In poor weather or for more extensive repairs buses are worked on in the spray booth or in one of the shop bays. The spray booth is used once or twice a month for touch up painting. We did not see any evidence of neglected body damage on any of the StarMetro buses in service.

Unit Rebuild Activity – StarMetro does not have any type of in-house unit rebuild program. The agency purchases rebuilt units from outside vendors on an exchange basis. They do some minor repairs of units, like changing out brake chamber diaphragms, when they feel the total unit replacement is not required.

Parts Storage and Distribution - The current estimated value of StarMetro's parts inventory is $750,000. There are 3,712 individual part numbers listed on the inventory report. TRC observes that this seems to be a large inventory for an operation of StarMetro's size. Most distribution of parts from the stockroom is done by the stockroom staff; there is no self-service by StarMetro's mechanics.

The StarMetro stockroom is currently staffed during both the first and second shifts. Staffing is by only one (1) person at a time, except when the first and second shifts overlap. A third person, a Maintenance Department employee, is available to staff the stockroom on the day shift when the regular staff person is on vacation or sick. If the second shift stockroom attendant is absent, the Maintenance Supervisor on duty will issue parts.

During the first shift, the stockroom is very active, as there are nine (9) mechanics on duty, repairing buses. During second shift, the stockroom has less activity, as there are six (6) mechanics on duty. The Chief Inventory specialist, Scott Wheeler recommended that a second person be added to the stockroom during the first shift. TRC suggests that this need be examined in more detail.

Inventory of the stock is done annually and is conducted exclusively by stockroom personnel. Transition to a barcode system is planned to facilitate future inventories, dependant on the availability of funding.

Mr. Wheeler has recommended several substantive changes in the handling of parts. Most notable is an expansion and redesign of the parts storage area to improve security, produce a more efficient workflow, and place the most-commonly requested parts in convenient locations for stockroom personnel. The proposed changes include an expansion of the loading dock area and the re-orientation of the shelving units. StarMetro is considering making these changes, but funding is not available at this time. Any future facility expansion plans need to include consideration for additional parts storage.

StarMetro has begun instituting some smaller-scale improvements in the parts room, including:

1. Shelf units are being re-labeled to facilitate the identification of parts locations.
2. An improved system for the classification and identification of parts.
3. The most active inventory items are being placed in the most accessible location to facilitate their issuance to the mechanics.
4. Obsolete parts are being identified by the date last requested/required. Part numbers with no activity in the past two (2) years are being reviewed. Those parts deemed to be obsolete will be boxed, palletized and offered for bid.

Exterior Bus Washing - TRC observed the washing of buses during the evening shift. Routinely, each bus receives an exterior wash every evening. The only exception is when the wash unit is out of service. Exterior washing is normally done after the bus has been swept and the farebox canister has been emptied. Prior to the bus entering the wash bay, a service worker sprays the lower portion of the bus with a portable high-pressure washer. The rear of the bus is also sprayed and manually scrubbed with a brush.

The bus wash unit is a Rieskamp truck wash unit that was installed in 2001. The wash system is a high-pressure touchless model, equipped with two (2) rotating side brushes. The unit's pre-wash arch has been disabled by Star Metro.

TRC observed that buses are often driven into the wash bay slow enough, but that operators tend to increase their speed as the bus proceeds through the washer. Frequently, the bus exits the wash bay too quickly for the wash process to be fully effective, particularly at the rear of the bus. Once buses exit the wash bay, they make a 180-degree turn and proceed to the fuel island. Star Metro could improve the effectiveness of the exterior wash process by informing operators about how the wash unit works and instructing them to proceed slowly until the entire bus is clear of the wash unit.

Employee Facilities - There is currently a single Locker Room/Washroom for male employees located adjacent to the Maintenance Shop area. The Locker Room portion consists of a 12-foot by 6-foot 9-inch area. This area was designed to house a 12-foot row of eight (8) lockers along one wall. At present, there are two (2) 12-foot rows of lockers, located on opposite walls, for a total of sixteen (16) lockers. The lockers are 18 inches deep, leaving only a narrow 3 feet, 9 inch corridor for employees to use for changing. Maintenance Department employees were in agreement that the locker room area is overly cramped at the beginning and end of work shifts, when the largest numbers of employees are using the room to change.

The washroom facility, located next to the locker room area, consists of two (2) showers, two (2) toilet stalls, two (2) urinals, two (2) sinks and a large, semi-circular shop sink. The washroom is adequately sized for the current Maintenance staff. An additional restroom is located nearby, adjacent to the drivers' lounge; however, Maintenance personnel involved directly in repair work do not normally use it, as they make an effort not to enter other parts of the facility in their dirty work clothes and shoes.

TRC observed that the current locker and washroom facilities will become critically undersized should additional Maintenance Department personnel be added. Furthermore, there are no locker or washroom provisions for female mechanics/repair technicians, should any be hired in the future. Currently, there are two (2) female employees on the Maintenance Department staff; a clerk and a shop cleaner. Since these employees are not doing vehicle repairs, they use the ladies' washroom located adjacent to the drivers' lounge.

TRC also noted that the existing Maintenance Department washroom facility is not ADA-compliant, since it was constructed prior to the advent of ADA requirements. However, any modification to this washroom will necessitate its being made ADA-compliant, likely resulting in a reduction of the number of toilet stalls, urinals or both. Thus, the washroom would become undersized for the existing complement of employees, unless it were to be expanded. TRC noted that there was no adjacent space available for such expansion. Additionally, any new washroom facilities constructed, such as might be required for female employees, would also have to be ADA-compliant.

Interior Cleaning of Buses - All StarMetro buses returning from their daily work assignments are cleaned each evening. StarMetro employs an outside contractor to perform the nightly interior cleaning of its buses. The bus cleaning operation begins with each bus being driven up to the cleaning station. Three to four cleaning employees board the bus to perform the interior cleaning. Larger trash items such as newspapers, food wrappers, bottles and cans are picked up by the cleaning crew and deposited into trash bags. Windows, seats and stanchions are wiped clean, and the floor is swept. TRC noted that the cleaning proceeds efficiently, taking less than five (5) minutes per bus. Once the interior cleaning operation is completed, the bus is driven into the wash bay. Three (3) StarMetro bus drivers serve as hostlers each evening during cleaning/washing/fueling operations. The nightly interior cleaning does not include an interior wash.

StarMetro conducts a thorough interior wash of each bus approximately once per month. If a bus is especially in need of a wash, it is washed. Walter Kirkland, StarMetro's Evening Shift Supervisor, estimated that a thorough interior wash takes 1.2 hours per bus. Therefore, six (6) buses can be completed in an 8-hour shift. StarMetro does not have a workstation for the interior wash process; instead each bus is washed at its own designated parking spot.

Fueling and Servicing - During the second shift, StarMetro fuels its vehicles and checks the levels of motor oil and coolant. Typically, buses are fueled after they have exited the wash bay.

The fuel island/storage facility consists of three (3) double-walled, above-ground storage tanks, located adjacent to the fuel dispensing equipment. Two (2) tanks, each with a capacity of 12,500 gallons, are used for diesel fuel storage. The third storage tank, with a capacity of 10,000 gallons, is used for gasoline. Gasoline is used to fuel StarMetro's paratransit fleet. A small number of non-revenue support vehicles (service trucks and supervisor cars) are also fueled with gasoline. The fuel island is equipped with a single dispenser for diesel fuel and a single dispenser for gasoline, so only one bus may be fueled at a time. Smaller storage tanks and hose reels are used to dispense motor oil and coolant both of which are checked during the fueling operation and are topped off as needed.

StarMetro is investigating possible modifications to the fuel island to accommodate the future storage and dispensing of urea, or Diesel Emissions Fluid (DEF). DEF will be required to service 2010 emissions-compliant diesel buses once those begin to arrive on the property. StarMetro anticipates that it will take delivery on the first such buses in the second half of 2011.

StarMetro's transit buses are fueled on the curbside, as is standard for transit buses. The paratransit buses have the fuel fill location on the opposite (street) side, which requires them to approach the fuel island from the opposite direction as the transit buses. To accommodate this, the paratransit buses are fueled earlier in the shift, before the large transit buses return to the garage.

StarMetro's fuel storage tanks are internally monitored by a Veeder Root leak-detection system. In addition, a FuelMaster fluids monitoring system tracks diesel fuel usage by individual buses. Each bus is probed as it arrives at the fuel island and FuelMaster uses vehicle mileage data to calculate fuel consumption rates. Should fuel usage be out of the normal range, the system alerts supervisors to possible fuel-related maintenance issues. The FuelMaster system is capable of tracking other fluids as well, including motor oil, transmission fluid and coolant. At this time, StarMetro uses the system to only track diesel fuel usage.

Vaulting the Fareboxes - StarMetro buses are equipped with automatic registering "Voyager" fareboxes, supplied by Fare Logistics of Victoria, British Columbia, Canada. The fareboxes handle a wide variety of fare media, including smart cards, magnetic swipe cards, coins and paper currency. The Fare Logistics system has been in use since 2006.

Fareboxes are emptied nightly as the bus interiors are being cleaned and swept. When each bus pulls up to the interior cleaning station, the storage canister is removed from the farebox and dumped into the vault receptacle. The single vault receptacle is built into the wall of the adjacent StarMetro Operations Building. The vault itself is located inside the building, in a secure room. Only designated personnel are involved in emptying the fareboxes and handling farebox receipts.

Parking and Scheduling – The StarMetro pullout schedule for the fall of 2010 requires 55 transit buses. The daily bus assignments are performed by an Operations Supervisor. Some of the campus routes require smaller buses for maneuvering in tight spaces so either 29 foot buses or 35 foot buses are assigned to those routes. Otherwise scheduling is done according to the best judgment of the Operations supervisor, with all efforts being made to assign 40 foot buses to the heaviest traveled routes. Three or four buses are usually available as Extra Buses. While these buses do not have any assigned route, Operations will use some or all of them to help out on routes that have overcrowding conditions. There are only four buses considered as Trippers. The remaining scheduled buses stay in service all day. Because all the routes currently have the downtown transit center as a terminus, operators make their reliefs at that location.

The majority of the fleet returns to the yard after the PM rush is over. There are only eight buses assigned for nighttime service. The last pulls in about midnight. An additional route, named Night Nole, supplies special late night service to the Florida State Campus. Three buses are required for this route which runs from 10:00 pm until 3:00 am. StarMetro's weekend schedule requirements are light. Twenty-two buses pullout for Saturday service and only eight buses pull out on Sunday.

When the buses pull into the yard they are parked by the operator in a permanently assigned stall. The parking stalls are laid out at a 45 degree angle to the flow of traffic with the exception of 10 straight spaces on the NW corner of the property. There are actual two storage yards, one on the west side of the property and one the juts out like a peninsula to the east side of the property. The West Yard contains 34 angled stalls in addition to the 10 straight stalls previously mentioned. Eight of the angled stalls can only be used to park paratransit buses. The other 26 angled stalls and 10 straight stalls can accommodate 40 foot buses. The East Yard has 9 stalls for paratransit buses and 34 double stalls, eighty feet in length. StarMetro currently only parks a single bus in each double stall so that operators can pull forward out of the stall rather than backing up the bus. TRC notes that this parking procedure makes for a very safe pullout operation, but also feels that there are ways to park two buses in the 80 foot stalls and without requiring a backing move by an operator.

An additional observation made by TRC was that the lighting levels in the West Yard were not equal throughout. There were definite dark spots in the yard which could be considered a safety hazard. The lighting fixtures used are for spot lighting. TRC recommends that StarMetro have a lighting analysis performed and consider the use of flood type fixtures mounted on taller poles.

Facilities Maintenance – StarMetro has a staff of four full time employees assigned to facilities maintenance functions. These individuals are responsible for cleaning and maintaining the garage/office facility at 555 Appleyard Drive, the C.K. Steele downtown transit center and all the bus shelters in the system. Heavy repairs and those requiring trades, i.e. plumbers, electricians, HVAC techs, etc. are performed by the City of Tallahassee Public Works Department. The equipment of the facilities staff is stored throughout the garage complex and there was a large pile of bus shelter material occupying some of the outside bus storage locations. Any future building expansion plans should provide additional space for the facilities maintenance staff.

Maintenance Management System – StarMetro uses the Faster Asset Solutions software package to track and plan maintenance work. While the system does a fair job of collecting work order data, TRC found it lacking in several critical areas. The system generates few reports that are useful to the StarMetro management staff. Maintenance supervisors have to do a lot of manual data manipulation and transfer data to spread sheets to produce the type of data reporting they need. Much of the data that TRC was looking for could not be produced because the system could not generate a suitable report. Superintendent of Maintenance, Ralph Wilder advised that the current system is not very pro-active, lacking much in the way of work planning tools. The system lacks inventory control ability which made it impossible for us to query the numbers of buses held out of service due to parts shortages. TRC strongly recommends that StarMetro either seek to update their existing system or purchase a new system with greater functionality and a more user friendly interface.

Task 2: Current Problems

During its visit to the StarMetro facility, TRC interviewed several StarMetro staff members to determine the extent and nature of any problems with the facility that impact the efficiency or safety of the current operations.

Stockroom and Parts Inventory: StarMetro's Chief Inventory Specialist, Scott Wheeler, identified several issues with the current stockroom. As presently configured, the receiving dock/parts storage area is undersized and is poorly laid out for efficient operation. The present circumstance can be tolerated with the current size of the StarMetro bus fleet; however, if fleet expansion is undertaken, it will be imperative that the current deficiencies of the stockroom be addressed.

TRC recommends an expansion and redesign of the parts storage area. Such a project should incorporate changes to improve security, produce a more efficient workflow, and place the most-commonly requested parts in convenient locations for stockroom personnel. Construction of an extension of the loading dock area out into the bus storage yard can be accomplished without impeding the maneuvering of buses. Such an expansion should have sufficient overhead clearance to accommodate the unloading of trailers with a forklift and the ability to access the stockroom's upper floor for the storage and retrieval of less-frequently used bus parts.

TRC notes that there is presently no funding available for such a project. StarMetro's Superintendent of Transit Maintenance said that since StarMetro is a City agency, preliminary engineering could be carried out by the City's engineering staff, at little or no cost to StarMetro.

Shelving units are not presently oriented for efficient handling of parts. This problem may be addressed by simply re-orienting the shelves for easier access to parts by stockroom personnel. TRC noted that the Chief Inventory Specialist has already begun this and several other low-cost modifications to improve the efficiency of the Parts Room operation. These include the implementation of a more accurate parts identification system, relabeling of shelving units, the placement of the most-commonly used parts within easy reach of stockroom personnel and the identification of obsolete parts for their eventual removal from the inventory.

Employee Facilities: TRC interviewed Charles Whaley, StarMetro's Supervisor of Equipment Services, who oversees the day-shift activities of the Maintenance Department. As previously noted in Section I Observations, there is limited space available in the Maintenance Department's locker room. Given the layout of the Maintenance facility, expansion of this space is problematic, but will become necessary if additional Maintenance Technicians are required due to expansion of the bus fleet. Areas adjacent to the locker room are already in use and there is no opportunity to expand the area without making extensive changes to other parts of the facility.

TRC also notes that the current washroom facility will become undersized in the event of StarMetro's adding Maintenance Technicians due to fleet expansion. If renovations are made to the washroom, the Americans with Disabilities Act (ADA) requires that the washroom be made ADA-compliant. Such a change would, at a minimum, reduce the number of toilet stalls in the current washroom from two (2) to one (1) and could possibly reduce the number of sinks and/or urinals as well.

As with the locker room, expansion of the washroom is problematic due to the fact that there is no available space adjacent to it. Extensive changes to other parts of the facility would be necessary to provide the additional washroom facilities necessary to accommodate a larger workforce in the Maintenance Department.
Beyond this, StarMetro will need to provide locker room and washroom facilities for female Maintenance Technicians at some point in the future, even if the bus fleet size remains static. TRC recommends that StarMetro begin planning for such accommodations and the associated changes to the facility.

Fueling and Servicing: There is currently a single fuel/service island where buses are fueled and fluids (motor oil and coolant) are checked and topped off during the nightly servicing routine. This is sufficient with the fleet at its current size. However, there is an issue with the current fueling operations. The paratransit buses are fueled on the street side. Because of their fuel filler location, the paratransit buses travel through the fuel island in the opposite direction of fixed route buses. This does not seem to be a serious problem at this time as the cleaning crew attempts to service all the paratransit buses prior to the fixed route buses. TRC observed several paratransit buses being fueled at the same time as fixed route buses. When the fixed route fleet is expanded this issue will become more serious. One solution for this problem is to move the gasoline dispenser to the opposite side of the fuel island. There is a by-pass lane on the far side of the service island which would allow the paratransit buses to be fueled on the back side of the service island. The cost to relocate the gasoline dispenser will be minimal and TRC recommends that this work be made a priority.

Storage Yard Lighting: As TRC observed the nightly servicing procedure, it was noted that the lighting in the East Yard was not evenly distributed. All lighting fixtures are mounted on short poles placed along the fence line that surrounds the yard. The result is many dark, shadowy areas in the yard. This makes operating in the yard at night a safety issue. The installation of six or seven metal halide, flood light fixtures on higher poles should resolve lighting issues in the East Yard. TRC recommends that StarMetro proceed with a lighting improvement program as soon as funding is available.

Hoisting of Paratransit Buses: Most of the work performed on the paratransit buses is done on pits. There are two in-ground hoists but they cannot lift the paratransit buses because the hoists are designed for full size transit buses. Certain jobs are difficult to perform on the pits. TRC observed a StarMetro employee doing a rear brake job on a paratransit bus on a pit. To remove the wheels, the mechanic jacked the bus into the air using two hydraulic bottle jacks placed on a steel I-beam. Then to hold the bus in the air safely, he placed two jack stands under the bus on a second I-beam. This cumbersome process nearly doubles the time it would take to perform a brake job on a hoist. A similar jacking process is used for any job requiring the removal of the wheels. The use of portable hoists would greatly improve the jacking of paratransit buses. Unfortunately, portable hoists can't be used on the pit tracks and the two hoist tracks are needed for work on the full size buses. TRC feels that the space required for the proper repair of the paratransit fleet is the most important issue that StarMetro must address as they expand their fleet.

Task 3: Effect of Planned Fleet Expansion

When TRC was first engaged to perform the Garage Evaluation Study for StarMetro, the RFP indicated that the route changes being implemented as a part of the NOVA2010 plan would require the addition of ten new buses to the fleet by July, 2011. During the course of the TRC study team's interviews with the StarMetro management staff, it was learned that the planned fleet expansion will not occur as originally planned because of a lack of capital funds. Maintenance Superintendent, Ralph Wilder and Director of Planning, Brian Waterman both advised TRC that the decentralization of routes detailed in the NOVA2010 plan would still occur; however, some of the planned headways would be expanded, reducing the number of additional buses required to implement the service changes. StarMetro's planning staff also advised TRC that the fleet would still be expanding over the next 15 years, but at a slower pace of two to three buses per year.

With this knowledge, TRC expanded its work plan to first show the impact on maintenance of the implementation of the decentralized route structure without fleet expansion, and then to look at the effects of a slower fleet expansion over a period of years. With this approach, TRC is providing StarMetro with the information it needs to deal with its short-term fleet expansion issues and then the longer-term issues, regardless of the rate at which additional buses are added to the fleet.

Implementation of Nova2010 without Expanding the Fleet

With the current StarMetro route structure, all 26 bus routes connect at the downtown transit center located at C.K. Steele Plaza. Spare buses are staged at the Plaza. When a bus operator reports a non-safety related defect, the operator is directed to exchange the defective bus with a spare bus at the Plaza. Operators going off duty are available to drive the defective buses back to the garage. Under this arrangement Maintenance Department employees are rarely required to make a road call for a defective bus.

When the proposed new route structure is implemented next July, StarMetro's Maintenance Department will be impacted even though the fleet is not being expanded. The new route structure will decentralize the routes and many of them will no longer serve the downtown transit center. When a bus operator reports a defect, the bus will have to be replaced somewhere along its designated route. Many of the new routes never get closer than five miles to the garage. Maintenance Department employees will be required to make road calls to change out defective buses, taking them away from their regular duties at the garage. Depending on the number of defects that occur, StarMetro could lose up to the equivalent of one mechanic each day to make road calls.

While StarMetro is implementing the NOVA2010 plan without adding any buses to the fleet, it is likely that ridership issues will force the system to maximize the utilization of the existing fleet. This will mean that the number of maintenance spares will shrink. TRC estimates that StarMetro may have to lower its spare ratio to 10-12%. To work with this low spare ratio, StarMetro will likely have to explore doing all planned work on the second shift. It is very possible that StarMetro may have to add a third shift, plus schedule mechanics to work on the weekends. This may impact employee attitudes.

Fleet Expansion

Work Areas – Despite the slower than expected fleet expansion rate than originally anticipated, StarMetro still needs to evaluate the impact that adding buses to its fleet will have on its maintenance operations. Even at the rate of three or four additional buses per year, maintenance operations will begin to experience serious issues if nothing is done about the limited amount of working space at the Appleyard Drive garage. It is anticipated that all buses acquired for fleet expansion will be 35 or 40 feet in length. However, StarMetro's planning staff believes that a small number of 60-foot articulated buses will be added to the fleet in the next few years to alleviate overcrowding on the most heavily patronized campus routes. If articulated buses are added to the StarMetro fleet, only a limited number (5 or 6) could be accommodated by the current facility. Work on articulated buses could be performed on one of the hoist tracks, provided a set of six-position portable hoists are purchased.

Whether the fleet expansion consists of 40-foot or articulated buses, a need for additional work space within the facility will become increasingly evident. This is primarily due to the fact that StarMetro's paratransit buses are also maintained at this facility. There are only six pit/hoist positions in the garage, and each is designed to accommodate a 40-foot bus. When work is performed on a paratransit bus, it is done in one of these locations designed to accommodate a full size transit bus. TRC observed that there were usually at least two work locations occupied by the paratransit buses during each work shift. This left only four locations available to service the larger fleet of fixed route buses. As new fixed route buses are added to the fleet, StarMetro's management will need to evaluate its options for increasing the shop capacity. The addition of a third shift or the scheduling of weekend hours is potential near term solutions for this problem. If fleet expansion continues at the rate projected by StarMetro, TRC feels that within five years expansion of the maintenance facility will be necessary or the agency will face maintenance gridlock.

Inspections and Defect Work - As the StarMetro fleet is expanded and vehicle operating mileage increases, additional PM inspections will be required. For every 10 buses added to the fleet, one PM inspection will have to be added to the weekly work schedule. These additional PM inspections will have a minimal impact on the facility needs.

Running repairs will also increase proportionally to the number of buses added to the fleet. It is estimated that for every 10 buses added to the fleet, repairs on 5 or 6 additional defective buses will be added to the daily workload. Some of this work will involve major repairs. Depending on the type and the extent of the repair, each bus held in for major work will tie up a work bay for at least several days. Without adding space to perform this additional repair work StarMetro will again have to look at adding a third shift or moving work to the weekends. The expanded fleet will also generate an increase in body repairs and paint work. While the increase in body work will probably be minimal, any additional work will tie up already overcrowded work space. The current spray booth should be able to handle any additional paint work. All indications of the projected rate of fleet expansion point to a need for StarMetro to address facility crowding within the next five years.

Parts Room Activities – As already noted in TRC's observations, the current parts storage area is too small for the existing inventory. This situation reduces the efficiency of the parts distribution system. It is hard to predict what effect fleet expansion will have on the parts room operations, because there is no certainty as to the types of buses that will be purchased.

The current transit bus fleet is predominantly manufactured by Gillig. If StarMetro were to continue purchasing Gillig buses to expand the fleet, inventory growth could be held to a minimum. Normally a new model year bus does not have many new parts numbers. Because StarMetro must follow FTA procurement guidelines to procure new buses, the contract for new buses could be awarded to a different bus builder. If a different bus builder supplied StarMetro's new buses, additional parts storage space would be required to accommodate components that would be unique to the new bus model. Should StarMetro buy articulated buses, the amount of new parts in inventory would be increased substantially. Currently, Gillig does not build an articulated bus so any articulated buses would be purchased from a different manufacturer. Furthermore articulated buses have components not found on the standard transit buses. TRC recommends that StarMetro make the study of its parts storage needs a high priority, and evaluate its options for expanding this critical area.

Bus Cleaning and Servicing – As detailed in the observations section, StarMetro's contractor cleans one bus every five minutes. This works out to a throughput of 10-12 buses cleaned per hour. The current fleet can easily be serviced in one eight hour shift. The easiest way to handle any significant fleet expansion would be to expand the service contractor's hours. This most likely means the use of some part time service personnel.

It is TRC's observation that the existing facility should be able to handle the nightly cleaning and servicing of at least another fifty buses each night. This exceeds all of StarMetro's current expansion plans for the next 15 years. The only issue with the existing facility that should be addressed is the fueling of the paratransit fleet. As described in the observations, the gasoline-powered paratransit buses are fueled on the street side and therefore must drive through the fuel island against the circulation flow of the fixed route buses. TRC recommends that StarMetro move the gasoline dispenser to the east side of the fuel island. This change will allow all buses to follow the same circulation pattern when being cleaned and serviced. This will improve the efficiency of the nightly operations and prevent any traffic flow issues that could arise when servicing an expanded fleet.

Employee Facilities – TRC has previously noted that StarMetro's current maintenance employee locker room and washroom facilities are inadequate for the existing workforce. The men's locker room was designed for a smaller sized workforce. To accommodate the current workforce, an extra row of eight lockers was installed in a space designed for one row of lockers. As the fleet expands, it is anticipated that StarMetro will be adding one person to the maintenance staff for every five to six buses added to the fleet. In addition to improving the men's facilities, StarMetro should plan to provide locker room and washroom facilities for female employees, as no female facilities exist at this time. TRC recommends that StarMetro make improving locker room and washroom facilities a priority

Bus Parking Lot – StarMetro's current bus parking arrangement fills every marked parking stall each night. To accommodate the contingency fleet some of these buses are parked along the fence line in the West Yard. As previously described in the observations all 34 angled stalls in the East Yard are 80 feet long and are used to park only one full size bus. This allows an operator to always pull his assigned bus out of a stall, which eliminates any backing moves. StarMetro does this to provide for safer yard operation, but many transit operations in the US require backing out of parking stalls and do it without any safety problems. To accommodate fleet expansion, TRC is recommending that StarMetro utilize the full capacity of the West Yard. Initially, StarMetro should create three rows of 40 foot angled parking stalls. The only work required to accomplish this change is to remove the "island" at the end of the rows and re-stripe the storage yard. This change will give StarMetro parking spaces for 17 additional full size buses and still allow for the operators to always drive their buses forward. That should accommodate any short term fleet expansion. To accommodate further fleet expansion, StarMetro should consider having their operators back out of some of the parking stalls. The East Yard could then be set up with four angled rows placed in a herring bone pattern. This arrangement will allow StarMetro to park 91 full-size buses in its current storage yard, with virtually no construction costs.

Facilities Maintenance – The expansion of StarMetro's fleet will not have a significant effect on the StarMetro facilities maintenance staff. Aside from installing and maintaining some additional bus shelters, the impact on the facilities staff should be minimal. However, TRC feels it would be prudent for StarMetro to consider relocating the facilities staff, equipment and material. There is an abundance of vacant industrial buildings adjacent to the Appleyard Drive facility. StarMetro should either lease or purchase one these facilities to house the facilities maintenance operations. This will allow the facilities maintenance operations to be consolidated into a single building and free up needed room in the garage facility to expand the employee facilities as discussed previously.

Task 4: Alternative Solutions

It is TRC's strong opinion that the projected fleet expansion anticipated by StarMetro will soon overcrowd the Maintenance Department's limited work area in the garage facility at 555 Appleyard Drive. TRC has looked at several scenarios for StarMetro to consider for dealing with space issues that will likely occur from the planned fleet expansion.

Change Work Schedules: The simplest way for the Maintenance Department to accommodate the additional work generated by fleet expansion would be to move some amount of scheduled maintenance and defect repair work to a new night shift. Because StarMetro has very little scheduled service after the PM rush, nearly all of its buses are available for scheduled work during these hours. Expanding the work schedule to three shifts would allow StarMetro to perform its PM inspections on the night shift. If some defect work and major repairs are also performed during the night shift, at least two work bays would become available during the first and second shifts to accommodate the additional work that is expected as the fleet grows in size. To free up additional work area for the expanded fleet, StarMetro should consider scheduling the shop to operate seven days a week. Currently no

maintenance staff work on the weekends when only a small number of buses are scheduled to operate. The weekend hours would provide an excellent time for scheduling heavy repairs and body work.

Revise the East Yard Parking Configuration: As previously noted the current parking layout at the StarMetro facility is nearly at its capacity, because a single bus is parked in the stalls in the East Yard that are 80 feet in length. Simple changes can be made to the East Yard that would nearly double the number of buses that can be parked in that area. This would allow the current facility to store more buses than StarMetro expects to add to the fleet over the next ten to fifteen years. TRC also feels the current bus washing/servicing arrangement will handle a considerable number of additional buses by extending the shift hours of the servicing staff.

Modify Fuel Island for Paratransit Bus Fueling: The major concern with the current servicing operation is that the paratransit fleet must travel through the fueling lane against the flow of the standard transit buses. As the transit fleet grows, this operation will create a potential bottleneck. As a solution to this problem, TRC recommends that StarMetro relocate the gasoline dispenser to the east side of the fuel island. This change will allow all buses in the StarMetro fleet to follow the same circulation pattern for washing and servicing, significantly improving servicing times.

Purchase an Adjoining Facility to Expand Maintenance and Storage Operations: TRC noted that there were several commercial buildings with storage yards for sale in close proximity to the current facility at 555 Appleyard Drive. One building is located at 3035 Jackson Bluff Road directly south of the StarMetro garage. The 22,000 sq. ft. building previously served as a truck loading terminal and has five roll-up doors at grade level. TRC is recommending that StarMetro investigate the purchase of this property for use as a base for paratransit fleet maintenance operations and storage yard. The total parcel size is 5.17 acres, which is large enough to support up to 60 paratransit buses. In the event that StarMetro's paratransit bus maintenance and storage operations are relocated from the current facility, at least two maintenance bays will be freed up for work on the fixed route buses.

Build an Addition to the Existing Facility: TRC estimates that a building addition containing three hoist bays would be required to adequately service the expanded StarMetro fleet over the next 15 years. Because of the potential addition of articulated buses to the StarMetro fleet, TRC recommends that the three bays be sized to accommodate 60-foot articulated buses. Any building addition should also incorporate a new men's locker room and washroom facility, properly sized to handle the larger workforce that will be required to maintain the expanded fleet. The existing men's locker room and washroom could then be converted into a facility for female employees.

Build a New Facility: TRC has also considered whether StarMetro should plan on building a new facility. TRC does not feel that StarMetro's current fleet expansion plans justify the construction of a completely new facility. If StarMetro were to implement the above recommendations, the current facility at 555 Appleyard Drive will be capable of accommodating all projected transit fleet expansion for at least 15 years. If, during that time span StarMetro develops into a regional system, construction of an additional facility may be warranted. This additional facility would be smaller than the present facility and would be located to service the eastern half of the expanded regional service area, minimizing deadhead

mileage. The Appleyard Drive facility would remain to service buses operating within the City of Tallahassee and the western counties.

Task 5: Alternatives Analysis

This section examines the operational and cost impacts of implementing the fleet expansion scenarios detailed in Task 4.

Implementing Night and Weekend Work Shifts: StarMetro has the ability to add night and weekend shifts to their work schedule within a short period of time. If StarMetro were to expand their fleet size much quicker than currently expected, they will have to add a night shift to accommodate the increased maintenance work load. A third shift could be added within a month for a minimal cost.

There are several problems with this alternative. The most serious issue will result from forcing employees from the first and second shift to change their work hours. Most of the StarMetro maintenance employees have a substantial number of years of seniority. When employees change work hours it can have a significant effect on their personal lives. Some of the StarMetro maintenance employees may choose to resign rather than work hours that that requires them to alter their lifestyles. The loss of several experienced maintenance employees could reduce the quality and overall productivity of the StarMetro Maintenance Department. In addition StarMetro will still need to add to the bus storage area and expand its employee and parts storage facilities for it to properly handle any significant fleet expansion. TRC recommends that StarMetro only consider the addition of a third shift as a temporary measure.

New East Yard Parking Configuration: The changes to the East Yard parking configuration described previously will add over thirty parking stalls for full size transit buses. To create this new configuration in the East Yard, the four islands at the ends of the current parking stalls will have to be removed and paved with asphalt and the new lanes striped. TRC also recommends that StarMetro improve the lighting in the East Yard. Proper light level is important to keeping operations in the yard safe. TRC estimates that the costs for the changes to the East Yard including improved lighting will be around $50,000. The only negative impact from this new parking arrangement will be that the operators will now have to back out of parking stalls. Many transit systems around the country require their operators to back out of parking stalls. TRC feels that when trained the StarMetro operators will be able to safely make the backing moves necessary to clear their parking stalls.

Relocate the Gasoline Dispenser for Paratransit Vehicles: The current fuel island at the 555 Appleyard Drive facility is wide enough to allow for moving the gasoline dispenser to the east side of the island. The cost to move the gasoline dispenser and its associated piping and wiring should not exceed $10,000. TRC recommends that StarMetro proceed with this modification to the fuel island as soon as possible as it will significantly improve the bus circulation for the nightly washing and servicing operations.

Purchase Nearby Facility: As previously noted there are several industrial properties for sale near the StarMetro facility at 555 Appleyard Drive. TRC feels the property at 3035 Jackson Bluff Road would be the easiest to convert into a storage and maintenance facility for the StarMetro paratransit fleet. The main benefits of this former grocery warehouse are that it has five overhead doors at ground level and a large paved parking lot, and it is located directly across Jackson Bluff Road from the current StarMetro facility. TRC looked at some of the other properties on the market, but they all appeared to require significant modifications before they could be used as a maintenance/storage facility. The Jackson Bluff property has adequate space to also accommodate the StarMetro Facilities Maintenance Staff. This would allow the Vehicle Maintenance Staff to utilize the areas vacated by Facilities Maintenance in the 555 Appleyard Drive facility. The Jackson Bluff facility has enough storage space for all paratransit bus parts as well as many slow moving transit bus parts.

When TRC visited StarMetro during the week of September 13, the advertised price for the Jackson Bluff property was $1.2 million. TRC did not contact the listing company and did not inspect the building condition; consequently, TRC is not in a position to evaluate this listing price. As a point of note the listing indicated the property could be leased. To make this building into a fully functioning paratransit vehicle maintenance shop, at least four sets of portable hoists would need to be purchased in addition to benches, shelving and a full complement of maintenance shop equipment. TRC estimates that it would cost at least $250,000 to perform needed facility repairs and modifications and purchase the required shop equipment. TRC acknowledges that StarMetro may not be able to secure the funding to purchase, repair and equip this facility for at least the next several years.

As an option, StarMetro could consider the use of a private partner to acquire the property and provide a turnkey maintenance program for the paratransit fleet. StarMetro could have a built-in conversion option if funding becomes available to purchase the property.

Building Addition: The addition being suggested by TRC is sized to accommodate three in-ground, articulated bus hoists, a new ADA compliant men's locker room and washroom and a 1200 sq. ft. storage room. The total area of this building addition would be 6,400 sq. ft. TRC estimates an addition this size and equipped as described would cost about $1.1 million. The most logical location to construct this building addition is adjacent to the north wall of the 555 Appleyard Drive facility. This will require demolition of the small shed used to store some of the Facilities Maintenance wheeled equipment and removal of about 10 automobile parking spaces and four paratransit bus parking stalls. The new 1200 sq. ft. storage room in the addition should accommodate the facilities maintenance equipment displaced by the removal of the shed. Design and construction of the building addition will take approximately two years to complete from the time financing is secured.

All-Electric Buses

On October 28, 2010, StarMetro announced that it will receive a grant from the United States Department of Transportation for $5.2 million to purchase four zero emission, all-electric buses. The grant will include funding for the construction of a fast charging station. StarMetro is also hoping to add a fuel cell package onto one of the buses. This option would integrate both fast charge and fuel cell technologies onto one bus.

This announcement came after TRC had completed its evaluation of the StarMetro garage facility. The introduction of electric buses will likely require StarMetro to make some changes to its garage facility at 555 Appleyard Drive. TRC recommends that StarMetro thoroughly research modifications required for the garage to accommodate the new electric buses and the effects these building changes will have on the space issues expected from fleet expansion. This study should also include the examination of the requirements for a hydrogen fueling station and the safety issues involved with housing hydrogen fueled buses.

The purchase of these electric buses may require StarMetro to expedite the recommendations detailed in the TRC garage evaluation study. The all-electric bus is a new technology in the American transit industry, which will likely require more frequent maintenance. This additional maintenance work will likely add to the current overloaded conditions in the garage work areas.