2008 - 2013 TRANSIT DEVELOPMENT PLAN

and 10-Year Vision Plan



Prepared for:

Space Coast Area Transit and the Brevard Metropolitan Planning Organization

Prepared by:



September 2007



TABLE OF CONTENTS

INTRODUCTION	1
REVIEW OF PLANS AND PROGRAMS	2
New Transit Development Plan Rule	2
Senate Bill 360	2
SAFETEA-LU	3
Existing Transit Development Plan	3
Existing Transportation Disadvantage Service Plan	4
SCAT Fare Study	4
SCAT Market Study	5
Brevard County Long Range Transportation Plan	5
Regional ITS Architecture	6
Local Government Comprehensive Plans	6
Developments of Regional Impact	10
EXISTING CONDITIONS ANALYSIS	14
Socioeconomic Data	14
Major Trip Generators	27
Existing Service Providers	34
Peer Comparison	41
Route Structure Evaluation	51
Transit Quality of Service Evaluation	56
Rolling Stock and Capital facilities	57
CUSTOMER AND COMMUNITY INPUT	61
Key Leader Interviews	61
Rider Survey	62
Marketing Study	64
Workshop	66
Summary	66
TRANSIT NEEDS	67





Transportation Disadvantaged	67
Projected Overall Ridership	69
GOALS AND OBJECTIVES	71
SCAT Vision / Mission Statement:	71
Goals and Objectives	71
FUTURE TRANSIT ALTERNATIVES ANALYSIS	74
Introduction	74
Broad Public Transportation Policy Alternatives	74
T-Best Modeling Process	77
FIVE-YEAR BUDGET	96
POTENTIAL FINANCIAL RESOURCES FOR SCAT'S TRANSIT DEVELOPMENT PROGR	2AM 98
FDOT Funding	98
Federal Funding	100
Local Sources	104
VISION AND IMPLEMENTATION PLAN	106
Ongoing Actions	106
Actions to Be Initiated Over the Next One to Three Years	107
Actions to Be Initiated Over the Next Four to Five Years	111
Actions to Be Implemented in the Long Term (Next 10 Years)	111
SUMMARY	114



LIST OF TABLES

Table 1 - Brevard County Development of Regional Impact (DRIs) 2007	11
Table 2 – 2000-2005 Population Distribution	14
Table 3 - Major Trip Generators	28
Table 4 - Public Transportation by SCAT in Brevard County	37
Table 5 - Private Shuttle Transportation Providers in Brevard County	39
Table 6 - Peer Review Data 2005	42
Table 7 - Peer Review Data 2004	43
Table 8 - Peer Review Data 2003	44
Table 9 - Passengers Per Revenue Hour Per Route	51
Table 10 - Passengers Per Revenue Mile Per Route	52
Table 11 - Route Deviation Index	53
Table 12 - Vehicle Inventory (FY 2006-07)	59
Table 13 - Forecast of Brevard County Transportation Disadvantaged Population	68
Table 14 - SCAT Monthly Operating Report (as of July 2006)	68
Table 15 - Projected Ridership Increase (5 year)	69
Table 16 - Near-term Improvements 2010	79
Table 17 - Mid-term Improvements 2012	80
Table 18 - Ridership Estimates	83
Table 19 - Riders / Revenue Mile	86
Table 20 - Riders / Revenue Hour	88
Table 21 - Additional Operating Cost Per Rider – 2010 (Near-term)	91
Table 22 - Additional Operating Cost Per Rider – 2012 (Mid-term)	92
Table 23 - Additional Operating Cost Per Rider (Sorted by Route)	94
Table 24 – SCAT Five-Year Budget	97



LIST OF FIGURES

Figure 1 - Total Passenger Miles Per Company (2005)	45
Figure 2 - Total Passenger Trips Per Company (2005)	46
Figure 3 - Passenger Trips Per Capita (2003-2005)	47
Figure 4 - Local Contribution Per Capita (2003-2005)	48
Figure 5 - Passenger Miles Per Local Dollars (2005)	49
Figure 6 - Passenger Miles Per Revenue Mile	50
Figure 7 - What is Your Annual Household Income?	62
Figure 8 - If SCAT Could Change Only One Thing About Its Service, What ONE Ch Make?	•
Figure 9 - How Could Schedules Be More Helpful?	64
Figure 10 - Bus Pass Program	65
Figure 11 - Where Have You Seen Bus Service Advertised?	65
LIST OF MAPS	
Map 1 – Development of Regional Impacts (DRIs)	13
Map 2 - Dwelling Units per Acre by Block Group	17
Map 3 - Median Age by Block Group	18
Map 4 - Percent Population 65 and Older	19
Map 5 - Percent Population Under 18	20
Map 6 - Employees per Acre by TAZ	21
Map 7 - Hotel/Motel Rooms per Square Mile by Zip Code	22
Map 8 - 1999 Median Household Income by Block Group	25
Map 9 - Major Trip Generators (North)	31
Map 10 - Major Trip Generator (Central)	32
Map 11 - Major Trip Generator (South)	33
Map 12 - Transit-supportive TAZs	55
Man 13 – Service Improvements Modeled Using T-Rest	78



INTRODUCTION

The Transit Development Plan (TDP) is the formal means by which Brevard County and Space Coast Area Transit (SCAT) articulate the plan and priorities for transit within the County's transit service area. The TDP is updated every five years to reflect public input, local plans and development patterns, and other issues affecting the provision of public transportation in Brevard County. The plan covers the existing conditions and context for transit and presents a summary of relevant plans and programs at the state and local levels that provide a backdrop for the delivery of transit services in the County. In addition, the TDP contains a transit needs assessment and estimation of demand for transit within the County. Most importantly, the plan outlines a 10-year vision for transit expansion in the County as well as a five-year implementation plan.

To assess transit needs the TDP planning process included public outreach, the analysis of key socioeconomic data, evaluation of existing transit service provision, and review of system characteristics to help frame the issues of transit service delivery and availability within the County. Once needs and priorities for potential transit market areas were identified, the plan evaluated options and opportunities using cost and revenue estimates as well as an analysis of the cost and benefits of alternatives. The vision and implementation plan established by the 2007 TDP is to maintain the cost-effective and productive system operated by SCAT, with gradual increases in service provision as the Brevard County's population increases.

The Florida Legislature recently updated Rule No. 14-73.001 of the Florida Administrative Code, which sets forth TDP requirements for all transit systems that receive Public Transit Block Grant funding from the Florida Department of Transportation (FDOT). The key changes from the new rule reflected in the 2007 TDP are as follows:

- An extended 10-year planning horizon, including recommended service strategies and anticipated funding sources;
- An estimation of the transit demand of various service strategies using an FDOTapproved tool (TBEST) that takes into account demographic, land use and transit data, and
- Consideration of the transit compatibility with land use patterns



REVIEW OF PLANS AND PROGRAMS

The TDP process included the following review of relevant plans, studies, programs and changes in legislation concerning public transit. Each of these either plays a major role in the transit planning for Brevard County, or else has an impact on the development of SCAT's five and 10-year planning horizon.

NEW TRANSIT DEVELOPMENT PLAN RULE

Earlier this year, the Florida Legislature updated Rule No. 14-73.001 of the Florida Administrative Code, which sets forth TDP requirements for all transit systems that receive Public Transit Block Grant funding from the Florida Department of Transportation (FDOT). Key provisions of the new TDP rule include:

- An extended 10-year planning horizon, including recommended service strategies and anticipated funding sources (recommended service strategies are divided into two categories, Near and Mid-Term);
- The Transit Development Plan shall be updated every five (5) years;
- An estimation of the transit demand of various service strategies using an FDOTapproved tool that takes into account demographic, land use and transit data;
- Consideration of the transit compatibility with land use patterns, and
- A public involvement process that is based on the MPO's public participation plan or another approved process (Space Coast Area Transit has attached its Federal Transit Administration approved Public participation Plan as Attachment A).

This TDP has been prepared consistent with the new TDP rule.

SENATE BILL 360

The 2005 Florida Legislature passed SB 360, which ushered in several major reforms in Florida's Growth Management Act. Among the changes most relevant to transportation planning and transit service was the requirement that local government comprehensive plans be financially feasible. The effect of this law is that local governments must now demonstrate, through the Capital Improvements Element of the Comprehensive Plan and the annual update of the five-year Capital Improvements Program (CIP) for implementation, that it has the revenues to support infrastructure required by future growth and redevelopment.

SB 360 created the proportionate fair share requirement, which states that a local government must adopt an ordinance to enable developers to pay a pro-rata share of the cost to mitigate their transportation impacts on roadways with a failing level of service and move forward with their development plans. This requires the local government to place the improvement project in its five-year CIP; otherwise, it is something the developer can negotiate with the local government. The legislation allows transit projects to be used for this mitigation, but the formula



used to calculate proportionate fair share improvement allocations is roadway-based and difficult to apply to the on-going operating cost for improved transit services. The FDOT and local government agencies are working to devise an appropriate methodology to address this challenge.

In addition, the law expanded funding for transportation projects that provide both a regional benefit and a linkage to the local government's comprehensive plan. The Transportation Regional Incentive Program (TRIP) was created with funding for each FDOT District for projects that provide a level of service benefit to regionally significant roadways. Transit projects are eligible for funding under this program, which requires a 50 percent local government match, if the project is regionally significant and a level of service benefit can be defined. This is a potential transit funding option for service operating within or parallel to congested and constrained state roadways.

The main impact of SB 360 from a transportation perspective has been to force state and local governments to come to grips with transportation concurrency from a more monetary and practical implementation aspect. Given the rising costs of providing additional capacity, there is an incentive to become more creative and flexible in using transit as a mechanism to meet concurrency with the necessary funding.

SAFETEA-LU

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: a Legacy for Users, better known as SAFETEA-LU, was signed into law in August 2005. This legislation authorizes all federal program funding for roads and transit. SAFETEA-LU includes formula-based allocations (based on population and passenger miles) for capital transit projects, as well as discretionary funds for new rail and a busway systems and facilities. However, what is significant about SAFETEA-LU and its predecessors is the flexibility that it provides for states: approximately \$0.76 of every dollar allocated to core federal highway programs is eligible to be transferred to transit projects. This is an important source of funding that SCAT can potentially tap into.

Another notable provision of SAFETEA-LU is the Jobs Access and Reverse Commute (JARC) program, which provides funding to expand transit services so that transportation disadvantaged individuals located in traditional city centers can reach new job opportunities in suburban locations. While the JARC program has historically been allocated through Congressional earmark, it is now distributed through a population-based formula directly to transit providers in areas over 200,000 people (including Brevard County).

EXISTING TRANSIT DEVELOPMENT PLAN

An updated to the 1997 TDP was completed in the spring of 2004 to identify and evaluate various service alternatives, and to come up with recommendations for SCAT over the next five years. Options and recommendation were broadly defined to indicate possible directions and timeframes for the transit agency as it considered ways to meet mobility needs over the next five years. Some of the immediate actions to be taken after the completion of the TDP were the



establishment of superstop/transfer centers at major locations, an increase in bus size to match ridership patterns, and a formalized internal performance plan to measure the success of individual routes. Some actions the TDP identified that should be initiated over the near term (one to three years) were the extension and frequency of service in the morning, evening and weekend hours on select routes, education on the half-price bus pass program and how to use the fixed-route bus system, and to develop an incentive program for developers to promote public transportation and ridesharing. Actions to be considered over the subsequent four to five years were whether there is potential for coordination of taxis in Brevard County with SCAT's services, the feasibility of implementing an intracounty express bus service, and whether neighboring counties would be interested in working together on new express service. Another action that was to be examined is alternative methods of funding for transit capital needs. This TDP estimated that about \$230,000 to \$265,000 of additional funding would be needed each year to allow for SCAT to operate with the recommendations given in this study.

EXISTING TRANSPORTATION DISADVANTAGE SERVICE PLAN

An update of the 1997 Transportation Disadvantage Service Plan (TDSP) was done in 2003, and it is used as a way to ensure that the TDSP is consistent with locally adopted comprehensive plans and transportation plans. This plan served as a basis for the Transit Development Plan (TDP); therefore it is consistent with the TDP for SCAT that was conducted in spring 2004. The TDSP presents the forecasts of demand for transportation disadvantaged services, costs for meeting that demand, and forecasts future funding for transportation disadvantaged services. Some of the actions recommended in the 2004 TDP for the transportation disadvantaged are the consideration of expanding agency-sponsored vanpool programs so that more agencies can take advantage of this service, the continued coordination with the Work and Gain Economic Self-Sufficiency program (WAGES) to provide transportation for work trips, and the possibility of exploring an expanded role for the Commuter Assistance Program (CAP). The TDP also recommends that an expansion of the *Volunteers in Motion* (VIM) program be considered through partnerships with other Brevard County volunteer programs. In relation to improving paratransit trips, the plan calls for increased trips, the reduction of cancellations and no shows, and the possibility of adding standing orders to the medical service of paratransit services.

SCAT FARE STUDY

A SCAT Fare Study analysis was conducted in the fall of 2004 and the winter/spring of 2005. This study was conducted to determine a comprehensive assessment of the current fare structure, payment methods and technology aspects that might lead to opportunities for streamlining fare structure and collection as well as whether there was a justification to adjust the current fare. At the time, the base fare for fixed route service within Brevard County was \$1.00 per one-way trip, and had been the same for 15 years. After a review of peer agencies within Florida, it was determined that the farebox recovery ratio (at this time about six percent) is comparable to other peer transit systems.



TRANSIT DEVELOPMENT PLAN

While there might be justification for raising fares based on rising operating costs and greater demands on the system from increased ridership, this study's first recommendation was that the base fare remain the same. Keeping the base fare the same avoids a potential backlash for little gain in additional revenues. Other recommendations that might have better potential in gaining additional revenues is to eliminate the free transfers in favor of day passes and to institute targeted discount pass programs. Although SCAT has the ability to incorporate electronic/magnetic payment options with their new fare machines, it was recommended that this not be done now but be periodically re-evaluated due to difficulty and expense of implementing such a strategy for an agency of SCAT's size.

SCAT MARKET STUDY

A SCAT Market Study was completed in December 2004 to provide a comprehensive, objective analysis of SCAT's current fixed route marketing efforts. This study was done by assessing SCAT's current marketing efforts and influence on fixed route ridership, and provided recommendations for improvement to SCAT's marketing efforts. This study included telephone and stakeholder interviews, focus group discussions, and a rider survey to help to determine the effectiveness of current marketing efforts of SCAT.

The study determined that SCAT's overall marketing program works well and is generally effective at targeting the core constituencies comprising SCAT's fixed route ridership profile. The study also recommended that several changes be done to enhance marketing efforts and products. Improving the appearance and usefulness of the route schedules, increasing the availability of bus passes, improving the website and other general marketing efforts to increase SCAT's overall community visibility are the four key strategies that guided the recommendations.

BREVARD COUNTY LONG RANGE TRANSPORTATION PLAN

The Metropolitan Planning Organization's 2025 Long Range Transportation Plan (LRTP) was adopted in 2005 and the 2030 LRTP is scheduled to start in 2008. The 2025 LRTP outlines substantially more needed transportation projects than there are anticipated revenues to pay for them. One critical factor is the rapidly escalating costs for materials, right-of-way and labor related to road construction. Working through the public involvement process, the MPO prioritized critical transportation needs for funding and continues to explore policy changes and other strategies to address congestion and expand mobility throughout the County over the next 20 years. Priority issues expressed by the public were identified through LRTP surveys and The top concern was to improve traffic flow, followed by transit and workshops. bicycle/pedestrian improvements. A global concern in Brevard County is the need to make transportation safer and more accessible for senior citizens and people with disabilities. Residents also showed the desire for new transit routes and more frequent weekday service, especially in areas with long north-south routes that require several transfers. Another concern of residents was that those with limited mobility who live in neighborhoods off the main bus routes need ways to reach these trunk routes, such as paratransit services or feeder routes.



FLORIDA STATEWIDE TRANSPORTATION PLAN

The Florida Statewide Transportation Plan was reviewed during the development of the SCAT Transit Development Plan. The FTP examines trends that are expected to influence what Florida will look like in 2025 and implications of these trends for transportation. Long range goals, objectives, and implementation guidance identify how the state can achieve the desired results and monitor progress. This FTP differs from previous plans by focusing on transportation's role in supporting economic competitiveness, community building, and conservation planning and by giving greater attention to financing needed transportation improvements. The FTP focuses on achieving identified goals and strategies by clearly defining roles, responsibilities, and accountability for implementing the FTP, with greater emphasis on regional transportation planning. The FTP has established the following goals: Safety and Security, Quality of Life and Environmental Stewardship, Maintenance and Preservation, Mobility and Economic Competitiveness, and Sustainable Investments. SCAT's Transit Development Plan embodies all of these goals.

REGIONAL ITS ARCHITECTURE

Intelligent Transportation Systems (ITS) are created by integrating advanced information, electronic, communications, and other technologies to address surface transportation problems. ITS applications help states, MPOs and localities operate a fiscally sustainable transportation network that encourages efficient and effective use of scarce resources, advocates cooperation and partnering, and works within the existing transportation system. As with adding highway capacity, ITS solutions can make the existing service more efficient and responsive to customer needs. One of the recommend priorities of the regional ITS that SCAT is considering is the incorporation of ITS into planning efforts with strategies such as electronic fare card payment systems and signal prioritization at congested intersections. The recommendations call for the MPO to work with SCAT to plan and program ITS strategies to address operational needs such as faster passenger transfers, more efficient dispatching systems, and seamless coordination with paratransit services.

LOCAL GOVERNMENT COMPREHENSIVE PLANS

A selection of local government comprehensive plans based on population was reviewed for all references to transit. The review was made to ensure the TDP's consistency with plans in the region as well as to inform SCAT on ways to expand and improve transit service throughout Brevard County.

Brevard County Comprehensive Plan (1998)

The 1998 Brevard County Comprehensive Plan replaced the County Comprehensive Plan that was adopted in July of 1991. The County's Comprehensive Plan has been regularly amended, with the last updates occurring when the Evaluation and Appraisal Report (EAR) was adopted in July of 2006. The EAR notes the need in the Housing Element for affordable housing to be encouraged near employment centers, and mass transit corridors. It also encourages the



redevelopment of vacant non-residential properties particularly in proximity to transit corridors to expand the inventory of housing options. In the Transportation Element of the EAR, Brevard County encourages multi-model transportation alternatives that accommodate existing and proposed major trip generators and attractors. They also encourage public involvement in the transportation planning process.

Transportation Element

The first goal of the Comprehensive Plan establishes the aim of "reducing reliance on the automobile." The performance of transit facilities is to be monitored, especially on arterial and collector roadways. SCAT is required to be part of the Congestion Management System (CMS) process, as the CMS addresses non-automobile modes as well. All transportation projects considered in the comprehensive plan are required to meet specific criteria, including the following areas relevant to transit: considering other modes, impacts on the economy and job creation, and limiting sprawl. The plan recognizes that land use changes may need to be made in lieu of transportation improvements in order to maintain the desired level of service of the transportation network. The County encourages major employers to stagger work times as well as SCAT to provide carpooling, park and ride, and vanpooling programs. Transit is required to be considered as an alternative to roadway widening. The land development regulations are required to be reviewed every one to three years to ensure they encourage accessibility to transit. Park and ride facilities are encouraged. The plan requires that the County continue to provide services for the transportation disadvantaged as well as for welfare-to-work families. The County is required to pursue land use policies that promote transit use.

Future Land Use Element

The Future Land Use Element requires that public transit be included as part of certain kinds of development patterns. These include residential developments constructed within commercial zoning areas, new towns, and redevelopment areas. Policy 1.13 allows residential uses within the future land use categories of Neighborhood Commercial and Community Commercial; however, these uses are subject to various requirements including the following: "Residential uses within Neighborhood Commercial and Community Commercial designations shall be encouraged to utilize neo-traditional neighborhood development techniques, such as narrower road rights-of-way, mid-block pedestrian pass-throughs, alleys, smaller lot sizes, on-street parking, reduced lot line setbacks and <u>public transit facilities</u>." New town overlay districts are large, master planned communities developed by a single entity. The only new town currently recognized on the future land use map is that of Viera. If these new towns include village centers, they must connect with a new transit corridor. Areas within the County may be designated as redevelopment areas by a redevelopment study. These areas are required to address mass transit as part of the redevelopment study. Any areas that are designated by an area redevelopment plan are encouraged to promote alternative forms of transportation including mass transit within the area plan and any site plans.



Cocoa Comprehensive Plan (2007)

The City of Cocoa is to hold annual coordination meetings with SCAT to identify new trip generators and establish new transit routes and solutions to improve mobility. The City will encourage land uses that promote transit in corridors where it is provided. Coordination with other municipalities and SCAT is required. The needs of the transportation disadvantaged population are to be considered. Transit improvements are to be routinely considered in place of roadway widenings. The plan states that land use regulations should be periodically reviewed to see that they promote transit. Transportation and mobility should be monitored by measurable indicators such as modal split, etc. The City will pursue the establishment of a future passenger terminal on the Florida East Coast Railroad line. Cocoa is in the process of drafting its Evaluation and Appraisal Report, which is due to Department of Community Affairs in September of 2008.

Cocoa Beach Comprehensive Plan (2000)

The primary transportation concern for the City of Cocoa Beach is that nearly all traffic uses A1A at some point for each trip. The plan states that the City must pursue alternative modes of transportation such as transit, bicycles, and pedestrian. By 2010, Cocoa Beach aims to have a two percent modal split with increased transit, bicycle and pedestrian activity. New development must provide transit amenities, such as stops, shelters and the like. The City desires SCAT to provide buses in case of an emergency hurricane evacuation. Currently, Cocoa Beach is in the process of updating its comprehensive plan though their Evaluation and Appraisal Report (EAR), which they are drafting for submittal to the Department of Community Affairs in October of 2007.

Melbourne Comprehensive Plan (2006)

Melbourne residents are able to ride two SCAT routes for free (Routes 1 and 21) through a contract between the City and SCAT. The plan describes the services offered by SCAT as well as the major trip generators in the City. The plan also recommends a new multi-modal transit terminal for Melbourne. Expanded transit service is encouraged on roadways that are at capacity as well as in those areas that have higher transit-dependent populations. New services are recommended, including Dial-A-Ride, jitneys and express buses. The plan also calls for the region to move toward inter-city bus, rail and taxi service. The plan encourages the County to ensure that future major trip generators be located along major transit lines. All new development has to provide a transit shelter and a sign, execute an agreement to provide these, or pay a transit impact fee. Finally, the plan calls for new transit facilities not to adversely impact the surrounding natural environment. Updates to the Melbourne comprehensive plan last occurred in May 2007, and will be updated again when the city's Evaluation and Appraisal Report is due to the Department of Community Affairs in February of 2008.

Palm Bay Comprehensive Plan (2004)

In the Future Land Use Element of this rapidly growing platted community, the plan requires "mass transit stops" at each major traffic generator proposed for the Town Centre of the Bayside



Lakes property. Objective 1.5 of the Transportation Element states that the City shall work toward increasing ridership of mass transit and paratransit in the City. Policies under this objective include incorporating bus facilities in design plans for major trip generators and attractors, and the continued promotion of a high speed rail stop for the City. The City also requests SCAT to provide service to all major traffic generators and attractors within the City. The Transportation Element requires that Palm Bay create land use and design guidelines upon the designation of an "exclusive public transit corridor." This was created with high speed rail or other transit improvements in mind. Palm Bay is in the process of drafting its Evaluation and Appraisal Report, which is due to Department of Community Affairs in May of 2008.

Rockledge Comprehensive Plan (2006)

In the Transportation Element, Rockledge states that at this time five bus routes were operated by Space Coast Area Transit (SCAT). Objective 2.5 of the Transportation Element states that development of the transportation system shall consider methods to encourage, expand, and enhance safe and secure transit service to the general public and to mobility-limited persons. Routes serving the city are routes 5, 6, 10, 11, and 14. Routes 5 and 11 provide express service along Fiske Boulevard from the City of Cocoa, with Route 5 stopping at the Government Center and Route 11 stopping at the Brevard County Health facility. Routes 6 and 10 provide service to commercial centers in the city along Barton Blvd. and U.S.1 before continuing on to commercial centers on Merritt Island along SR 520. The final route, 14, runs along Pluckebaum Road, then north on Clearlake Road to the City of Cocoa. The Transportation Element also identifies Weusthoff Hospital, Barton Commons Shopping Center, Rockledge Square Shopping Center, and Hydro-Aluminum of Rockledge as local major trip generators, and encourages bus routes to serve these areas. Located in the Air Quality Element of the plan, Rockledge requires that new development, whether public or private, be designed to accommodate and encourage alternative modes of transportation to the maximum extent practical. Appropriate measures that relate to transit are the provision of passenger shelters for users of mass transit. Rockledge is currently is the process of updating its EAR, which is due to the Department of Community Affairs in July 2008.

Satellite Beach Comprehensive Plan

Satellite Beach, though its Transportation Element, encourages the support of transportation forms which are alternatives to individualized vehicle use, such as pedestrian facilities, bicycle ways, car-pooling, and mass transit. These alternative transportation forms are also encouraged for new developments in the Conservation Management Element. Within the Future Land Use Element, the city requires that State Route A1A Beautification and Redevelopment Plan (B&R) be coordinated with transportation improvements including access management, improving existing roadway networks in the study area, reduction of access points, expanding parking, pedestrian and bicycle facilities, and mass transit. Satellite Beach is in the process of drafting its Evaluation and Appraisal Report, which is due to Department of Community Affairs in August of 2008.



Titusville Comprehensive Plan (2005)

There is no reference to transit within the future land use element; neither are there any requirements for providing transit facilities as part of development or site approvals. There is no land use or transportation requirements or incentives in place for transit. The Transportation Element identifies the two transit routes that SCAT operates serving the City's residents on part of the existing conditions map. This element also states that transit needs, generators and attractors shall be addressed by the plan. Generators and attractors are not specifically identified by the plan (with the exception of the Kennedy Space Center Visitor's Center); however, they are mentioned in broad terms (for example "employment areas"). The plan also contains a summary of the TDP.

DEVELOPMENTS OF REGIONAL IMPACT

A Development of Regional Impact (DRI) is defined by Chapter 380.06 (1), Florida Statures as any development that would have a substantial impact on the health, safety or welfare of citizens in more than one county. Specific thresholds for reaching DRI status are defined by law. Developments of Regional Impact are important in relation to transit since they are often prime locations for transit routes or stops because of their large nature and concentrated locations for employment, retail or both. Table 1 displays the status of DRIs in Brevard County based on data provided by the East Central Florida Regional Planning Council as of June 2007, while Map 1 shows their location within the county.



Table 1 - Brevard County Development of Regional Impact (DRIs) 2007

NAME OF DRI	STATUS	JURISDICTION	TYPE OF DEVELOPMENT
Great Outdoors	Approved	Brevard County	45,000 square feet of commercial, 1611 RV and resort home sites
Vector Space	Approved	Brevard County	221,000 square feet of commercial, 544,459 of office, 956,344 for industrial, and 500 hotel rooms
Pine Island	Withdrawn	Brevard County	9,046 dwelling units, 130,000 square feet of commercial, 85,000 of office, and 180 hotel rooms
Abby Marina	Approved	Brevard County	Marina with 30,000 square feet of commercial
Sand Hill Point	Withdrawn	Brevard County	3,900 dwelling units, 28,000 square feet of commercial, 118,500 of industrial, and 100 hotel rooms
Pine Hills	Approved	City of Melbourne	1,314 dwelling units and some commercial
Melbourne Regional Airport	Approved	City of Melbourne	Runway and taxiway
Melbourne Square Mall	Approved	City of Melbourne	1,286,789 square feet of retail and 150,000 of office
Oakwood Village	Approved	City of Palm Bay	2,525 dwelling units, 251,603 square feet of office and 379,995 of commercial and one school
Brevard Crossings	Approved	City of Cocoa	1,710,000 square feet of retail and 300 hotel rooms

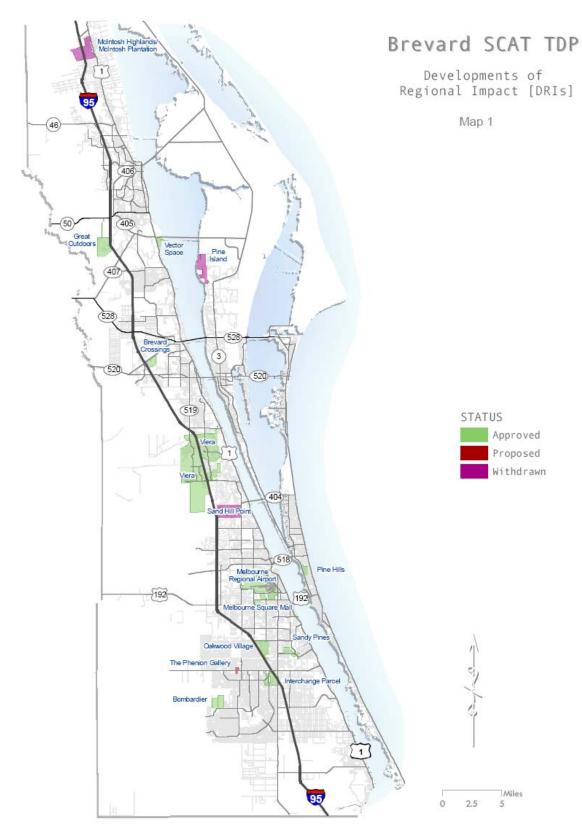


NAME OF DRI	STATUS	JURISDICTION	TYPE OF DEVELOPMENT
Bombardier	Approved	City of Palm Bay	71,000 square feet of industrial
Viera	Approved	City of Rockledge	18,945 dwelling units, 2,878,330 square feet of retail, 3,834,500 of office, 816,800 of industrial, one stadium, nursing home and 1250 hotel rooms
Interchange Parcel	Approved	City of Palm Bay	691 dwelling units, one school, 522,720 square feet of retail, 50,000 of office and 1,072,720 of industrial
Sandy Pines	Approved	Brevard County	937 dwelling units, 96,495 square feet of retail, and 189,612 of office
McIntosh Highlands/McIntosh Plantation	Withdrawn	Brevard County	11,699 dwelling units, 35,147 square feet of office, 157,523 of commercial and 23,430 of institutional.
Hammock Landing	Proposed	City of West Melbourne	750,000 square feet of commercial
The Phenion Gallery	Proposed	City of Palm Bay	425 multi-family dwelling units, 404,350 square feet of commercial, 1,600,500 square feet of office, and 400 hotel rooms

Source: East Central Florida Regional Planning Council



Map 1 - Development of Regional Impacts (DRIs)





EXISTING CONDITIONS ANALYSIS

SOCIOECONOMIC DATA

This section summarizes the demographic and economic characteristics of Brevard County. All data were obtained from the 2000 Census of Population and Housing and Bureau of Business and Economic Research's (BEBR) Florida Statistical Abstract. Brevard County has been growing steadily each year with a population change of 19.4 percent between 1990 and 2000. The 2005 population of Brevard County has seen continued growth, and is listed at 531,970 people. Currently, the majority of Brevard County's population is between the ages of 35 and 54. As the county ages, the median age of 43.6 in 2005 is projected to increase to 51 by 2030.

Population Density

Brevard County has a scattered population, with the largest segment of the population living in unincorporated parts of the county as seen in Table 2. The major population centers are in the cities of Titusville, located at the far north end of the county, Cocoa and Cocoa Beach in the central area of the county, and Melbourne and Palm Bay at the southern end of County.

Table 2 - 2000-2005 Population Distribution

	2000	2005	% CHANGE
Cape Canaveral	8,829	10,034	13.65%
Cocoa	16,412	17,606	7.28%
Cocoa Beach	12,482	12,880	3.19%
Indialantic	2,944	3,059	3.91%
Indian Harbor Beach	8,152	8,672	6.38%
Malabar	2,622	2,843	8.43%
Melbourne	71,382	75,060	5.15%
Melbourne Beach	3,335	3,405	2.10%
Melbourne Village	706	719	1.84%
Palm Bay	79,413	91,888	15.71%
Palm Shores	794	942	18.64%
Rockledge	20,170	24,587	21.90%
Satellite Beach	9,577	11,205	17.00%
Titusville	40,670	43,751	7.58%
West Melbourne	9,824	15,059	53.29%
Unincorporated Area	188,918	210,260	11.30%
Brevard County Total	476,230	531,970	11.70%

Source: BEBR



While Palm Bay is the largest city in Brevard County, areas of West Melbourne, Rockledge, and Palm Shores have seen the most growth since 2000. As shown in Map 2, higher densities in the form of number of dwelling units per acre by block group can be found at these major population centers. However, with the majority of Brevard County having few dwelling units per acre, the overall density of the county is relatively low to support fixed route transit service. This reflects relatively dispersed settlement patterns and population concentrations.

Age

With 14.61 percent of the population age 67 or older, there are distinct areas where the median age of the population varies greatly. Map 3 shows the median age per census block, allowing for the distribution of the elderly to be seen within the county. As shown in Map 4, the majority of the population over the age of 65 is located along I-95 in the southern part of Brevard County, with small pockets located near Cocoa on SR 520, near Titusville on SR 405, and near Viera between I-95 and US 1. In contrast, there are areas where more than 30 percent of the population is under the age of 18. Two of these areas are located near some of the areas that are comprised of large segments of the elderly population. These two areas can be seen in Map 5 and are prime locations for transit services because of the sizable number of people who likely have limited transportation options. One of the areas is located in the northern part of the county northwest of Cocoa, while the other is located west of Palm Bay in the southern part of the county. These areas have high concentration of young populations as reflected in the median age of the census blocks located in those areas.

Employment

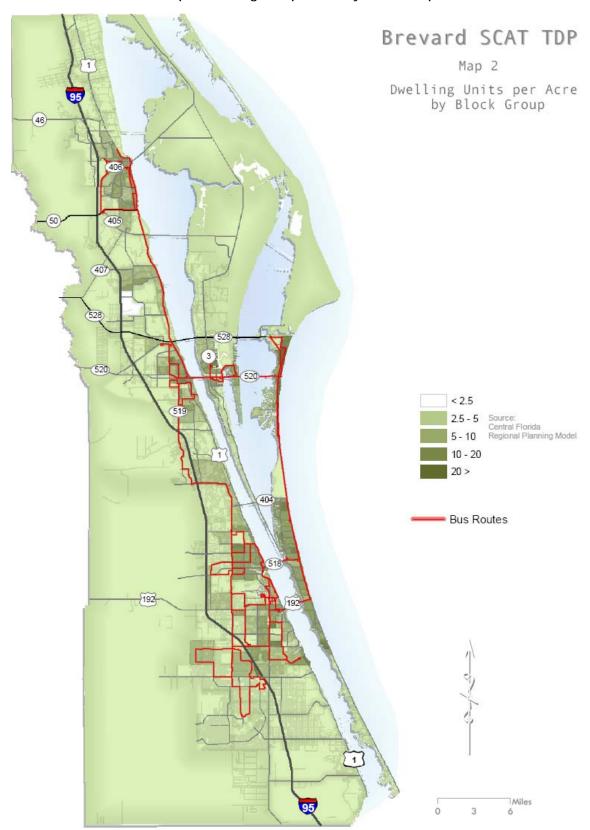
Although population is scattered throughout the County, areas with employment centers are relatively highly concentrated. Map 6 shows that the highly concentrated employment areas are those located near Melbourne, Cocoa, Merritt Island, and Cape Canaveral. The high concentration of jobs along the coast is due to the significant tourist industry located in Brevard County, making it better suited for transit because a large number of relatively lower income workers are traveling to one destination area. These areas that have high concentrations of jobs also have high concentrations of hotel rooms per square mile by zip code as shown in Map 7. High quantities of hotel rooms often mean high quantities of jobs for those of lower income who are more likely to use transit, which is currently served by a number of different transit routes.

Another reason for the high concentration of jobs along the coast is the existence of Port Canaveral. The facility is a cargo distribution center and cruise ship terminal that, according to an economic impact study conducted in 2003 by the port, generates an economic impact that creates up to 34,000 jobs Brevard County. The port is a major tourist destination due to the large number of cruise ships using its facilities. Patrick Air Force Base, located north of Satellite Beach along the coast, also provides a significant number of military-related jobs. A major employer that does not show up on the density map due to the size of its area is the National Aeronautics and Space Administration (NASA). NASA and the Kennedy Space Center not only employ a large number of people; they also receive a large number of tourists who visit throughout the year, as well as an even larger amount of tourists who visit during scheduled launches. These



locations are the best locations in the County for express bus service and other commuter-oriented programs such as vanpools and ridesharing because they generally are not served well by transit. Security presents a complication for transit service to these facilities; however, the opportunity exists to serve more commuter-oriented trips.





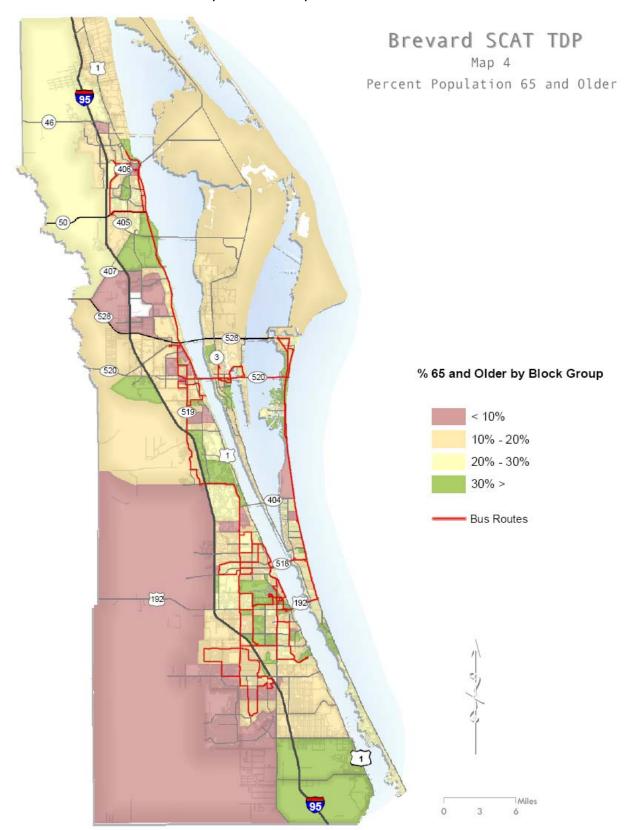
Map 2 - Dwelling Units per Acre by Block Group



Brevard SCAT TDP Median Age by Block Group 405 Median Age by Block Group 0 - 30 31 - 40 41 - 50 51 - 60 61 - 70 71 - 80 Bus Routes

Map 3 - Median Age by Block Group





Map 4 - Percent Population 65 and Older



Brevard SCAT TDP Map 5 Percent Population Under 18 % Under 18 by Block Group < 10% 10% - 20% 20% - 30% 30% > Bus Routes Miles

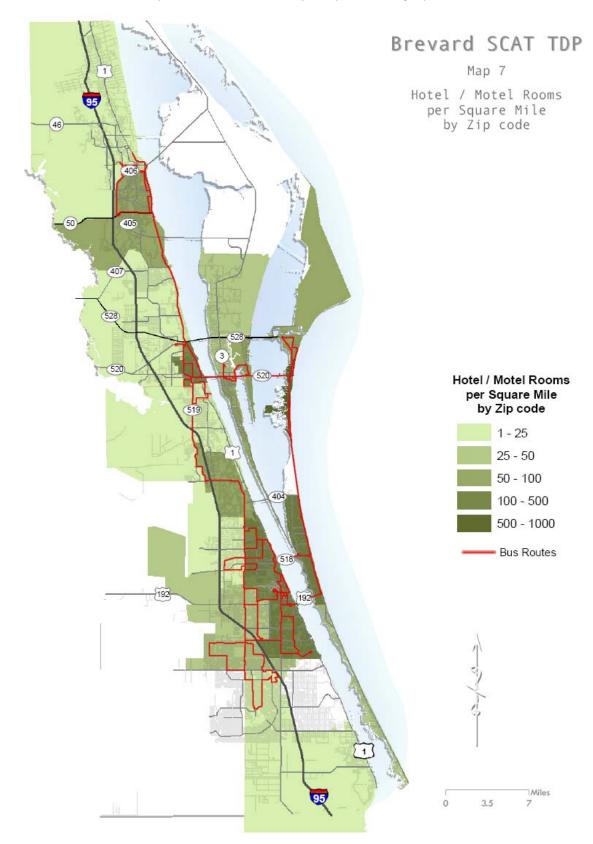
Map 5 - Percent Population Under 18



Brevard SCAT TDP Map 6 Employees Per Acre by TAZ **Employees Per Acre** by TAZ < 2.5 2.5 - 5 Source: Central Florida 5 - 10 Regional Planning Model 10 - 20 20 > Bus Routes Miles 0 3.75 7.5

Map 6 - Employees per Acre by TAZ





Map 7 - Hotel/Motel Rooms per Square Mile by Zip Code



Income

Higher Household income is concentrated mostly in Viera and on Merritt Island. Map 8 shows that the majority of the county has a median income of \$50,001 to \$75,000, while those areas located west of I-95 in the north near Titusville have a median income of \$35,001 to \$50,000 and are not well served by SCAT bus routes. The median income of those areas located where there is a large amount of elderly is relatively low probably reflecting the fact many elderly are living on fixed income retirement benefits. While there are only a small number of areas with a median income less than \$25,000, those areas are located between I-95 and US 1 near Melbourne, and are proximate to several SCAT bus routes.

Key Developments

Key developments within Brevard County that are transit generators are those that serve not only as destinations for tourists but those that serve as employment generators for the county. Some key developments within Brevard County are the county government center in Viera, NASA/ Port Canaveral, Brevard Community College, Florida Institute of Technology (FIT), and major shopping centers. Hospitals and medical complexes are also transit generators due to the large number of people these institutions serve and the number of employees who work there. These uses are addressed in a subsequent section of this document,

Government Centers

The local government not only employs a large number of people (over 20,000 according to the 2006 Florida Agency for Workforce Innovation, Labor Market Statistics), it is also visited by a large number of residents each year for various reasons, making government facilities key destinations for transit. Centrally located in Viera west of I-95, the County Government Center houses the various county government branches, including administration and judicial services. Some of the agencies and departments located in the Government Center are the Judicial Center, Juvenile Justice, Housing and Human Services, Public Safety, Public Works, and Solid Waste Management.

NASA/Port Canaveral

Port Canaveral and NASA are key development due not only to the large number of jobs that they support, but also to the amount of tourists that frequent these destinations. In 2003 according the Economic Impact Study for the port, more than 34,000 jobs were supported directly or indirectly in Brevard County though Port Canaveral. The port is comprised of three turning basins and facilities. These facilities are used by cruise ships, cargo vessels, and the US military due to the deep channels of the port. Cruise ships have almost 1.4 million passengers each year, accounting for a large amount of tourists that visit Brevard County. NASA, on the other hand, in 2006 had more 17,000 jobs, and 1.5 million tourists visit NASA facilities each year. Neither Port Canaveral, nor NASA is completely served by transit; however, Port Canaveral has Route 9, beach trolley, which serves the south port but not the north port.



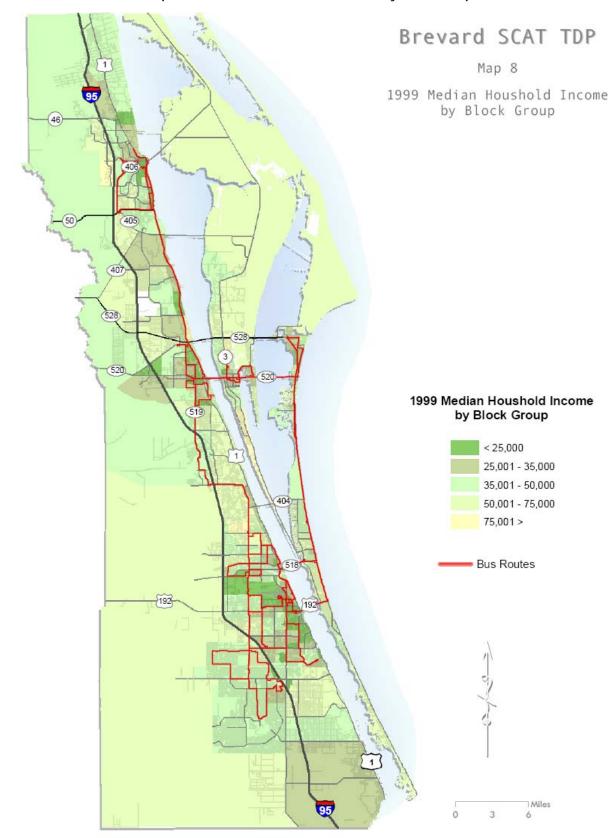
Brevard Community College and Florida Institute of Technology

With high numbers of students, staff and faculty at Brevard Community College, it serves as a key development and major transit destination. Currently, more than 25,000 students each year attend Brevard Community College. The college also employs nearly 2,300 faculty and staff members at campuses located in the municipalities of Cocoa, Melbourne, Titusville and Palm Bay. Workers and students are likely to use transit (more so than the general population), because they may have limited transportation options or earn lower wages. Route 6 serves the Cocoa Campus, while Routes 1 and 28 serve the Melbourne campus. The Palm Bay campus is served by Routes 1 and 28. In a partnership with Brevard Community College, the University of Central Florida has regional campuses located in Cocoa and Palm Bay. Both campuses are located jointly with Brevard Community College and serve nearly 400 students. Florida Institute of Technology (FIT) is also a transit destination. Served by Route 26, FIT employs 792 people and attracts more than 3,100 undergraduate and graduate students each fall. There are also more than 2,000 students who enroll each fall in their School of Extended Graduate Studies, comprising a student count of more than 5,000.

Shopping Centers and Other Key Developments

Other key developments are shopping centers that not only draw tourists but are frequented often by residents. Shopping centers typically function well as transit transfer points because of the relatively large parking areas, access to services and proximity to residential areas. One of the newest shopping centers, The Avenue at Viera, is served by route 1. The Avenue offers an outdoor shopping experience with major retailers such as Belk's Department Store, Kohl's, and Books-A-Million. The Avenue also includes multiple restaurants and a 16-screen theatre with stadium seats. Another mall that features a movie theatre is Merritt Square located in Merritt Island which is served by routes 3 and 4. This mall features over 80 specialty stores and restaurants as well as large retail stores such as Dillard's and Macy's. Melbourne Square Mall has more than 125 specialty retailers and has recently added a special kids feature. The kids special feature of this mall is a custom-designed 1,500-square-foot children's play area called Simon Kidget's Korner. Melbourne Square Mall is also a major transfer point in Brevard County and is served by routes 21, 23, 24 and 28.





Map 8 - 1999 Median Household Income by Block Group



Unique Market Areas

Based on a review of existing socioeconomic conditions, community plans and key developments within the county, SCAT has several opportunities to serve unique markets in the future. Beyond the horizon of this TDP, there are emerging regional transit opportunities that could link Port Canaveral and perhaps other Brevard locations with the Orlando International Airport, the University of Central Florida and the Innovation Way technology corridor. Within the 10 year horizon, however, the most logical unique market areas for Brevard County consist primarily of transit services tied to the following:

- Tourism-related travel. SCAT currently operates several routes that serve the beach communities. Some routes operate year-round, while Route 34 only operates during the summer months. The tourism market includes both visitors and employees working in the tourist industry (hotels, restaurants, the port, etc.). During the spring and summer months, the market includes high school and college students working at or visiting the beach. The key to successfully tapping in to the tourism market is to operate a longer span of service (currently, only the Beach Trolley, Route 9, and the 520 Connector, Route 4, run late together) with higher frequencies of service to ensure good accessibility for patrons and workers at tourism-related establishments. Additional potential markets include the Kennedy Space Center and tailoring service to Port Canaveral.
- **Commuter travel.** Brevard is home to several major employers or employment centers, such as NASA, Port Canaveral, and the Viera county government center / town center. There is also a potential market for Brevard to initiate commuter express service to major employers in Orange County, in conjunction with Lynx, via SR 528 (the Beachline Expressway). Commuter service is concentrated in the peak periods, and often consists of linear routes with limited stops, perhaps including a park and ride lot. Because of its highly educated work force, Brevard will likely continue to attract technology and government-sector jobs over the planning horizon. These are often shift or fixed schedule jobs, so it is imperative that service be tailored to the timing of work shifts. The other considerations include relatively faster travel times, including perhaps preferential treatments like signal system priority along certain corridors, and parking. If preferential parking can be provided for carpool/vanpool users, or limits on automobile parking can be established in certain mixed use employment centers, then forms of commuteroriented transit have a better chance at success. SCAT can work with human resource managers at larger employers to define transit needs and develop appropriate marketing materials and perhaps expand service options.
- Community-focused service. The growing communities of Palm Bay, Viera, West Melbourne and Cocoa Beach have continued to develop a mix of land uses that include retail, residential, office and institutional establishments (churches, government buildings, etc.). As more residents arrive and more services are provided locally within these communities, circulator service becomes more feasible. The key is to define community focal points that can serve as effective stop locations and/or appropriate



- transfer points to the larger SCAT system. Service should be frequent and connect logical origins with destinations.
- Students. Brevard is home to several college campuses, with both daytime and evening classes, which in some cases are focused on specialty classes for retirees and people who are professionals seeking career advancement. High schools also can provide a valuable service market for transit, as these individuals often have limited mobility options. SCAT can examine its route structure and operating characteristics to adjust schedules, as necessary, to continue serving the student market. SCAT can market its services through direct outreach to campus administration and/or student organizations. Discount passes, using student fees to enhance service and direct e-mail correspondence with students are options for addressing this market area.

MAJOR TRIP GENERATORS

Major trip generators in Brevard County are places that attract residents on a daily basis for employment, education, health care and social services. Table 3 below identifies the major trip generators that residents frequent. Medical and social service destinations are generally served by fixed route transit and by paratransit, depending on the user. The table also lists higher educational facilities that are frequented in large numbers by residents. Maps 9, 10, and 11 show the locations of these major generators in Brevard County broken up by north, central, and south Brevard County.



Table 3 - Major Trip Generators

DESTINATION	ADDRESS	CITY
MEDICAL CENTER		
Cape Canaveral Hospital	701 W. Cocoa Beach Cswy.	Cocoa Beach
Holmes Regional Hospital	1350 South Hickory Street	Melbourne
Hospital Wuestoff Melbourne	250 North Wickham Road	Melbourne
Hospital Wuestoff Rockledge	110 Longwood Avenue	Rockledge
Palm Bay Community Hospital	1425 Malabar Road NE	Palm Bay
Parrish Medical Center Hospital	951 North Washington Avenue	Titusville
Veteran's Hospital	2900 Veteran's Way	Melbourne
Quest Diagnostics	335 Pineda Ct	Melbourne
Brevard Vision Care	7905 Wickham Rd	Melbourne
Melbourne Kidney Center	1400 Apollo Blvd S	Melbourne
Brevard Vision Care Eye Clinic	2420 Babcock St	Melbourne
Healthsouth Sea Pines Rehab Hospital	101 Florida Ave E	Melbourne
Brevard County Dialysis Center, LLC	4940 Stack Rd, Suite C 3-7	Melbourne
Space Coast Neurology	4961 Babcock St, #7	Palm Bay
Titusville Rehabilitation & Nursing Center	1705 Jess Parrish Court	Titusville
Neovision Laser Center	7000 Spyglass Court	Melbourne
Digestive and Liver Center of Melbourne	25 E. Silver Palm Ave	Melbourne
Dialysis & Kidney Center of North Brevard Inc.	830 Century Medical Dr	Titusville
Titusville Dialysis & Kidney Center	801 Garden St	Titusville
SOCIAL SERVICE	•	
Center For Drug Free Living	1770 Cedar Street	Rockledge
Halfway House (Formerly Brevard Halfway House)	5332 Riveredge Drive	Titusville
Titusville Learning Center	3155 South Street	Titusville
North Area Adult Education	2940 Columbia Blvd.	Titusville
Herzing Institute	1270 North Wickham Road	Melbourne
Institute of Legal and Medical Professions	3494 N. Harbor City Boulevard	Melbourne
Brevard Community College - District Office	1519 Clearlake Road	Cocoa
South Area Arc Center	1362 South Babcock Street	Melbourne
American Red Cross - Brevard County Chapter	625 East New Haven	Melbourne



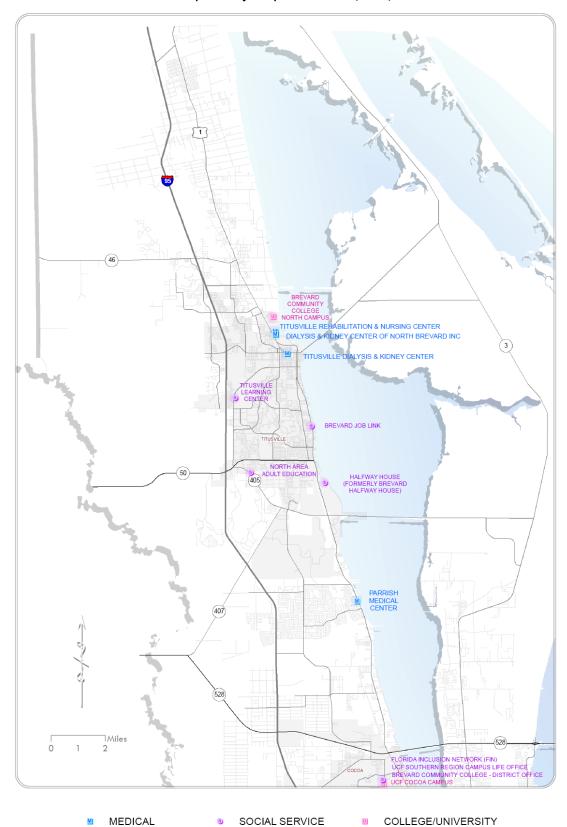
DESTINATION	ADDRESS	CITY
	Avenue	
UCF Southern Region Campus Life Office	1519 Clearlake Road, Bldg 3, Room 231	Cocoa
Agency For Persons With Disabilities, Inc. (APD)	1592 Robert Conlan Blvd, Suite 110	Palm Bay
Florida Inclusion Network (Fin)	1519 Clearlake Road, Bldg 3	Cocoa
Bridges Inc.	1694 Cedar Street	Rockledge
Space Coast Center For Independent Living (SCCIL)	803 N. Fiske Blvd	Cocoa
Brevard Job Link	3550 S Washington Av, Suite26	Titusville
Florida Diagnostic & Learning Resources System (FDLRS/East)	2700 Judge Fran Jamieson Way	Viera
Division Of Blind Services (DBS)	571 Haverty Ct, Suite O	Rockledge
Center For The Visually Impaired, Inc (CVE)	571 Haverty Ct, Suite O	Rockledge
Community Legal Services Of Mid-Florida, Inc. (CLSMF)	803 North Fiske Blvd	Cocoa
Social Security Administration (SSA)	2301 West Eau Gallie Blvd	Melbourne
Vocational Rehabilitation Services, (VR, Dept. Of Education) North-Central	840 N Us 1, Suite C	Cocoa
Recording for the Blind & Dyslexic (RFB & D)	1901 Harbor City Blvd, Suite 609	Melbourne
Crosswinds Youth Services, Inc.	1407 Dixon Blvd	Cocoa
Vocational Rehabilitation Services, (VR, Department Of Education) South	2300 Commerce Park Dr, NE, Suite 4	Palm Bay
Brevard Achievement Center (BAC)	1845 Cogswell St	Rockledge
COLLEGE/UNIVERSITY		
Florida Institute of Technology	150 West University Boulevard	Melbourne
Brevard Community College - Cocoa Campus	1519 Clearlake Road	Cocoa
Brevard Community College - Melbourne Campus	3865 N. Wickham Road	Melbourne
Brevard Community College- Palm Bay Campus	37 San Filippo Dr	Palm Bay
UCF Cocoa Campus	1519 Clearlake Rd	Cocoa Beach
UCF Melbourne Campus	3865 N Wickham Rd	Melbourne
UCF Palm Bay Campus	250 Community College	Palm Bay





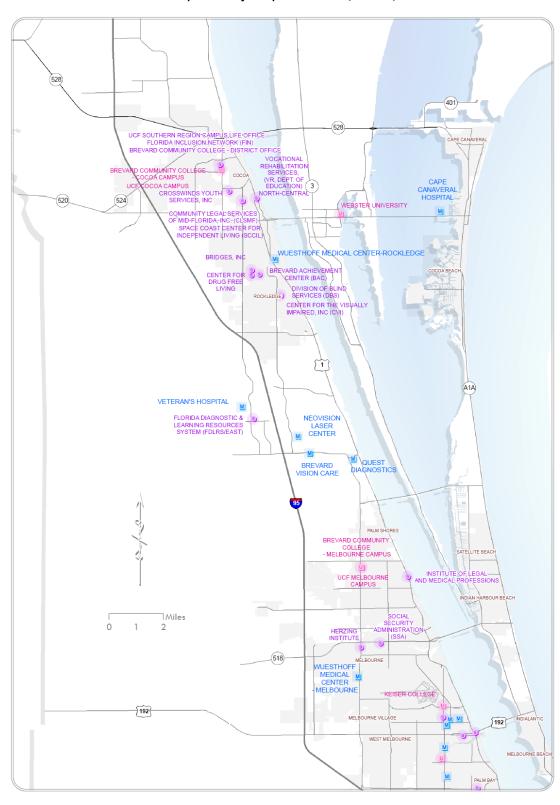
DESTINATION	ADDRESS	CITY
	Pkwy	
Brevard Community College North Campus	1311 N Us Highway 1	Titusville
Keiser College	900 Babcock St	Melbourne
Webster University	150 N Sykes Creek Pkwy	Merritt Island





Map 9 - Major Trip Generators (North)





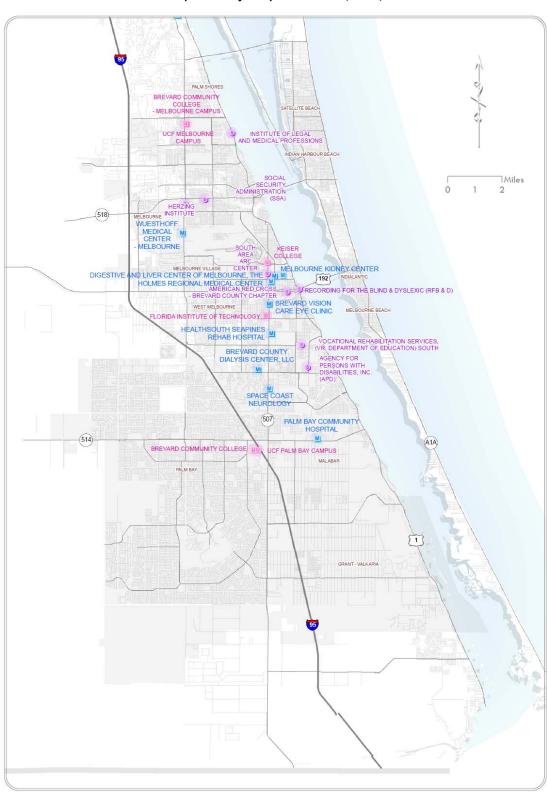
SOCIAL SERVICE

MEDICAL

Map 10 - Major Trip Generator (Central)

COLLEGE/UNIVERSITY





SOCIAL SERVICE

COLLEGE/UNIVERSITY

MEDICAL

Map 11 - Major Trip Generator (South)



EXISTING SERVICE PROVIDERS

This section provides information on relevant transit service characteristics such as service area, fleet size and fare structure for existing service providers in Brevard County. Existing service providers in Brevard County are broken down into two categories: public and private. Public service providers consist of those services provided by Space Coast Area Transit, including vanpool services and those that are provide transportation disadvantaged (TD) service to the elderly and people with disabilities. Private service providers consist of transportation provided by for-profit cabs and shuttles, for example.

Public Transportation Providers in Brevard County

The majority of public transportation in Brevard is provided by Space Coast Area Transit (SCAT). SCAT is the designated public transit provider in the County, and provides its services not only to the general public but to those who meet the mobility needs and eligibility requirements comprising the potential TD population, TD Population and the ADA-eligible population in Brevard County. The following are services that are offered to the public (1) traditional fixed route transit, (2) paratransit service, (3) ADA paratransit, (4) *Volunteers in Motion* (5) vanpool transportation, (6) contracted routes and (7) school bus utilization. Information about the services available to the public is listed below and in Table 4.

Fixed Route Service

Space Coast Area Transit currently offers 13 routes that operate throughout the County and generally provide county-wide coverage. The fixed-route service focuses on the urbanized area east of I-95 in the county. In general, fixed routes in Brevard County operate Monday through Friday from 6:00am to 8:50pm. However, there are several routes that provide evening transportation until 11:00pm. All routes operate on Saturdays from 8:00am to 5:00pm. A Sunday route runs from 11:00am to 4:00pm in Melbourne. The full fare for fixed-route bus service is \$1.25 and 60 cents for half fare riders, which include seniors, people with disabilities, and students. SCAT also offers 10 ride passes for \$10.00 to full fare riders and \$5.00 for half fare riders. Monthly passes are also available at \$35.00 full fare riders and \$17.00 for half fare riders. Information on a specific route and schedule can be found on SCAT's website at www.ridescat.com or by calling (321) 633-1878.

Paratransit Services

Paratransit Services are provided by SCAT to serve the mobility needs of those who are unable to utilize fixed routes. Wheelchair accessible paratransit vehicles are available to carry passengers throughout Brevard County when reserved on trip to trip bases. These trips generally provide curb-to-curb service and are often used for medical trips.

ADA Paratransit

The Americans with Disabilities Act (ADA) provides complementary paratransit service that is provided to those individuals who apply and become certified by SCAT to use ADA Paratransit.



This service is provided to make sure all regular bus systems are completely accessible for use by people with disabilities. ADA Paratransit service is only for pickups and destinations with ¾ mile of SCAT fixed route. Hours for operations correspond with the fixed route service area. ADA-eligible persons must request door-to-door service at least 24 hours in advance by calling SCAT at (321) 633-1878. Rides can also be requested up to 14 days in advance and trips that occur on a regular basis do not need to be reserved each time. The fare for ADA-paratransit service cannot be more than twice the amount of the regular bus fare and can be used for any purpose. Because such door-to-door service is expensive to operate, SCAT has been working on various efforts to encourage ADA-eligible patrons to use the fixed route system to the extent practical. This approach can save SCAT money in the long run; however, any time SCAT extends a route or expands service with new routes, it must provide this complementary ADA Paratransit service.

Volunteers in Motion Program

The *Volunteers in motion (VIM)* program is coordinated by Space Coast Area Transit, the Senior Resource Alliance and the Community Care for the Elderly program. This program was created to provide reliable transportation to elderly citizens in Brevard County who are unable to use the fixed route system and paratransit provided by SCAT. *Volunteers in Motion* program not only provides transportation to and from grocery stores, but also assist passengers with shopping and unpacking groceries in their homes. Volunteer assistance is used in all aspects of the program including dispatchers, schedulers, drivers, and escorts.

Agency-Sponsored Vanpool

Brevard County currently has the largest public/private sponsored vanpool program in the State of Florida. The program is a transportation service option that is aimed at commuters. Vans may be leased though the vanpool program to transport groups of employees to work, thereby reducing the number of automobiles on the roads. Drivers and passengers decide on a flexible route and schedule. For convenience, passengers meet at centralized park-n-ride locations. The program is flexible enough that commuters can car or vanpool every day, once or twice a week or once or twice a month.

As of September 2007, there were 111 vans that were used –an enormous increase from the 6 vans that originally comprised the program. Advantages of the vanpooling program are numerous with the high prices of gas and wear and tear on a car. A recent study by the American Automobile Association (AAA) found that it costs \$0.562 per mile to own and operate an automobile. For commuters who drive daily in a single occupant vehicle with an average round trip of 44 miles, it costs approximately \$24.73 per day or \$6,183.00 per year. As it takes between eight and 15 passengers to fill up a vehicle, and with fewer stops and direct door-to-door trips, this service tends to be more convenient than using fixed-route bus service to get to work.

Space Coast Area Transit's Vanpool Program is operated to provide assistance to groups of commuters and various social service agencies. Commuters that live in the same area and work



in the same location form vanpools of 7 -15 people in a van provided through this program. The vanpool provider for SCAT is VPSI, Inc. Since vanpooling in Brevard County is a form of mass transit, vans, which are purchased by the County Commission with Federal capital grants, are provided to VPSI who administers SCAT's vanpool program. VPSI then provides vans to both commuters and human service agencies. The vans are leased to commuters and social service agencies at a rate that includes all maintenance, insurance and administration. The vanpool leasing program complements SCAT's fixed route and paratransit service.

Vanpooling has proved to be an extremely attractive to employees at the Kennedy Space Center, as many have a significant commute of over 100 miles per day. Various types of vehicles are used to support the various needs of a specific group. Seven passenger "mini-vans", eight passenger "mini commuter" vans, eleven passenger "executive" vans (individual seats), and fifteen passenger split bench "maxi-vans" are offered to commuters. The above vehicles, along with wheelchair lift equipped and raised roof vans, are available to meet an individual group's specific need. VPSI Commuter Bucks Voucher Coupons give employers an easy way to encourage their employees to vanpool. In mid 2007 Brevard County vanpools were traveling 175,000 miles per month, carrying approximately 30,000 passengers and logging more than 1,000,000 passenger miles per month.

Contracted Routes

SCAT's contracted routes serve not-for-profit agencies with demand/response service. The agencies that SCAT serves within Brevard County are Achievement Center, Bridges BTC Inc., Easter Seals, and Seniors at Lunch. These agencies work with SCAT to transport agency clients to centers in the morning and return clients in the afternoon.

School Bus Utilization

In addition to the transportation options described above, SCAT and the Brevard County School District work together to coordinate and provide group trips for youth activities sponsored by various Brevard County Parks and Recreation Departments during the summer months.



Table 4 - Public Transportation by SCAT in Brevard County

TRANSPORTATION PROVIDER	WHO CAN RIDE?	VEHICLES	AREA SERVICED	TYPE OF SERVICE	COST	HRS OF OPERATION
Fixed Route	General public	Bus	all of Brevard County	all	Fixed Service:\$1.25 full fare, \$0.60 half fare, 10 rides: \$10.00 full fare, \$5.00 half fare, Monthly \$35.00 full fare, \$17.00 half fare	Monday- Saturday 6:00AM to 9:00PM
Paratransit	Transportation Disadvantaged Individuals	Bus, and mini-bus	all of Brevard County	all	\$2.50, \$1.25 for elderly and disabled	Monday- Saturday 8:00AM- 5:00PM
ADA Paratransit	aratransit ADA-eligible riders		Within ¾ of a mile of a fixed route	all no more than double of ful rate		Monday- Saturday 6:00AM to 9:00PM
Volunteers in Motion	Elderly	ambulatory van, wheelchair van with ramp	all of Brevard County	all	free	Monday- Friday 8:00AM- 5:00PM
Vanpooling	Commuters	mini, mini- commuter, executive, maxi- vans including wheelchair lift equipped	all of Brevard County	commuter service to and from work	\$490 per month for commuters and \$645 per month for human service agency	
Contracted Route	Not-for-profit agencies	bus	all of Brevard County	to and from not- for-profit agencies	negotiated in contract	Monday- Friday 6:30AM to 6:00PM
School Bus Utilization	Youth	bus	all of Brevard County	summer events		



Private Transportation Providers in Brevard County

Private transportation providers in Brevard County are made up of cabs, taxis, and shuttles. The majority of these private providers consist of transportation for tourists and visitors to and from their destinations. A sample of shuttles that are available for hire by tourists and residents is located in Table 5. This table provides a sample of service routes, number of passengers and rates for shuttles that service Brevard County. It should also be noted that there are numerous taxis and cabs that provide on call service for tourists and residents in the area.



Table 5 - Private Shuttle Transportation Providers in Brevard County

NAME	CITY	PHONE NUMBER	SERVICE AREA	# OF PASSENGERS	RATES
1-888-MCO- SHUTTLE	Orlando	407-996- 7979	to and from Port Canaveral & Area Hotels	up to 57	Range from \$55 to \$280 depending on location, number of people and if one way or two way
American Luxury Transportation	Orlando	407-857- 6060	Door-to-door transportation service to all areas airports, hotels, attractions, cruise, terminals, Kennedy Space Center, and other popular destinations	up to 10	Range from \$55 to \$240 depending on location, number of people and if one way or two way
Art's Transportation "Wheelchair Service"	Port Canaveral	321-783- 2112	Door-to-door transportation service to all areas airports, hotels, attractions, cruise, terminals, Kennedy Space Center, and other popular destinations	up to 30	Range from \$70 to \$130 depending on location, number of people and if one way or two way
Berkley Edwards Transportation	Orlando	321-624- 4840	to and from Disney properties, Port Canaveral or to any destination from the Orlando Airport	up to 10	Range from \$35 to \$200 depending on location, number of people and if one way or two way
Brian Lourie Driving Service	Vero Beach	321-626- 7185	to and from shopping or doctors visits, Disney properties, Port Canaveral or to any destination from the Orlando, Ft Lauderdale and Miami Airports	up tp 12	Range from \$50 To \$150 depending on location, number of people and if one way or two way
Executive Shuttle Service	Brevard County	321-453- 4044	door-to-door shuttle and/or private services to and from your location and the Orlando Airport, Amtrak, Port Canaveral, attractions, hotels and other destinations.	up to 14	Range from \$20 To \$200 depending on location, number of people and if one way or two way



NAME	CITY	PHONE NUMBER	SERVICE AREA	# OF PASSENGERS	RATES
MCO Express	Celebration	321-939- 7585	to and from Shopping, Disney properties, Port Canaveral or to any destination from the Orlando Airport	up to 56	Range from \$25 to \$1,525 depending on location, number of people and if one way or two way
Michael Daley Destinations	Orlando	407-361- 3333	to and from Orlando Airport & Port Canaveral Cruise Transfers, and all transportation request in Orlando	up to 14	Range from \$40 to \$190 depending on location, number of people and if one way or two way
Premier Exotic Limousine	Orlando	321-206- 3308	to and from Orlando Airport & Port Canaveral Cruise Transfers, and all transportation request in Orlando	up to 55	Range from \$55 to \$2,500 depending on location, number of people and if one way or two way
Spaceport Transport	Brevard County	321-986- 8026	to and from Disney properties, Port Canaveral or to any destination from the Orlando Airport	up to 14	Range from \$75 to \$140 depending on location, number of people and if one way or two way
Travelynx	Cocoa	321-631- 7796	Provides airport shuttle services for the Orlando, Melbourne, and Daytona Areas	up to 55	Range from \$50 To \$250 depending on location, number of people and if one way or two way
Tropicana Transportation	Orlando	407-301- 7390	to and from Disney properties, Port Canaveral or to any destination from the Orlando Airport	up to 14	Range from \$80 to \$140 depending on location, number of people and if one way or two way



PEER COMPARISON

A peer review analysis was conducted to gain a better understanding and evaluation of SCAT's transit performance as compared to other comparable systems in Florida. These agencies were chosen due to their similar service area populations, geographic proximity, and operating characteristics. The peer review analysis group consisted of eight agencies, including SCAT, which are located within Florida. Data from 2003, 2004, and 2005 were collected on the eight agencies from the National Transit Database and Bureau of Economic and Business Research to conduct the peer review. The data that were collected and the analysis are presented in Table 6.

Of the systems selected, fixed route service is the major focus of service provided by all of these agencies. Of the peer group, SCAT operates the largest demand responsive system, in addition, only two other agencies operate a vanpool program. SCAT also operates the largest fleet of vehicles out of all peer agencies, with only Votran coming close to the number of vehicles. It should also be noted that Brevard County has the second lowest median household income out of all peer agencies behind Polk County making, its residents perhaps more dependent on transit services.



Table 6 - Peer Review Data 2005

YEAR	COMPANY NAME	LOCATION	STATE	FLEET SIZE	AVERAGE AGE OF POPULATION	MEDIAN HH INCOME	LOCAL CONTRIBUTION	REVENUE MILES	SERVICE AREA POPULATION	PASSENGER TRIPS	PASSENGER MILES	LOCAL CONTRIBUTION PER REVENUE MILES	LOCAL CONTRIBUTION PER CAPITA
2005	Okaloosa County Board of County Commissioners	Fort Walton Beach	FL	62	37.3	\$61,363	\$211,557	1,255,640	170,498	204,732	1,327,517	\$0.17	\$ 1.24
2005	Polk County Transit Services Divisn Polk County Board of County Commissioners	Bartow	FL	84	38.5	\$39,124	\$1,506,029	2,114,422	153,924	558,804	2,205,109	\$ 0.71	\$ 9.78
2005	Pasco County Public Transportation	New Port Richey	FL	100	42.2	\$47,159	\$930,790	1,463,918	406,857	830,947	5,372,642	\$ 0.64	\$ 2.29
2005	Space Coast Area Transit	Melbourne	FL	176	43.1	\$43,281	\$983,850	3,987,745	504,891	1,458,383	21,683,130	\$ 0.25	\$ 1.95
2005	Sarasota County Transportation Authority	Sarasota	FL	115	49.4	\$55,891	\$5,924,542	3,133,883	337,473	2,081,993	10,934,144	\$ 1.89	\$17.56
2005	County of Volusia dba: VOTRAN	South Daytona	FL	172	42.7	\$47,568	\$7,399,431	5,846,491	468,670	3,769,985	23,503,961	\$ 1.27	\$15.79
2005	Lakeland Area Mass Transit District Citrus Connection	Lakeland	FL	61	38.5	\$39,124	\$2,925,090	1,904,013	110,000	1,669,848	7,348,866	\$ 1.54	\$ 26.59
2005	Manatee County Area Transit	Bradenton	FL	55	42.8	\$52,303	\$3,433,715	1,693,208	296,385	1,405,209	2,287,452	\$ 2.03	\$ 11.59



Table 7 - Peer Review Data 2004

		LOCATION										LOCAL	LOCAL
YEAR	COMPANY NAME		STATE	FLEET SIZE	AVERAGE AGE	MEDIAN HH INCOME	LOCAL CONTRIBUTION	REVENUE MILES	SERVICE AREA POPULATION (*)	PASSENGER TRIPS	PASSENGER MILES	CONTRIBUTION PER REVENUE MILES	LOCAL CONTRIBUTION PER CAPITA
2004	Okaloosa County Board of County Commissioners	Fort Walton Beach	FL	59	37.1		\$255,272	1,229,398	170,498	234,911	1,491,435	\$ 0.21	\$ 1.50
2004	Polk County Transit Services Division Polk County Board of County Commissioners	Bartow	FL	84	39.5		\$2,387,199	2,014,985	153,924	482,620	2,015,753	\$ 1.18	\$ 15.51
2004	Pasco County Public Transportation	New Port Richey	FL	76	44.9		\$852,779	1,409,839	388,906	656,652	4,182,884	\$ 0.60	\$ 2.19
2004	Space Coast Area Transit	Melbourne	FL	200	43.3		\$1,173,746	4,020,903	499,360	1,428,647	20,674,327	\$ 0.29	\$ 2.35
2004	Sarasota County Transportation Authority	Sarasota	FL	113	51.5		\$4,782,203	3,202,074	310,714	1,975,048	11,398,549	\$ 1.49	\$ 15.39
2004	County of Volusia dba: VOTRAN	South Daytona	FL	175	43.6		\$5,952,363	5,513,700	468,663	3,296,723	22,956,790	\$ 1.08	\$ 12.70
2004	Lakeland Area Mass Transit District Citrus Connection	Lakeland	FL	44	39.5		\$2,093,719	1,907,765	110,000	1,638,878	7,348,866	\$ 1.10	\$ 19.03
2004	Manatee County Area Transit	Bradenton	FL	55	44		\$2,445,391	1,580,315	231,450	1,332,410	2,201,450	\$ 1.55	\$ 10.57



Table 8 - Peer Review Data 2003

YEAR	COMPANY NAME	LOCATION	STATE	FLEET SIZE	AVERAGE AGE	MEDIAN HH INCOME	LOCAL CONTRIBUTION	REVENUE MILES	SERVICE AREA POPULATION (*)	PASSENGER TRIPS	PASSENGER MILES	LOCAL CONTRIBUTION PER REVENUE MILES	LOCAL CONTRIBUTION PER CAPITA
2003	Okaloosa County Board of County Commissioners	Fort Walton Beach	FL	58	36.8	\$43,139	\$142,120	1,112,548	170,498	228,447	1,507,108	\$ 0.13	\$ 0.83
2003	Polk County Transit Services Divisn Polk County Board of County Commissioners	Bartow	FL	84	39.2	\$35,069	\$1,214,539	2,384,307	153,924	448,281	2,446,362	\$ 0.51	\$ 7.89
2003	Pasco County Public Transportation	New Port Richey	FL	81	45.1	\$35,349	\$686,224	1,478,214	371,245	588,007	3,994,259	\$ 0.46	\$ 1.85
2003	Space Coast Area Transit	Melbourne	FL	190	43	\$42,157	\$1,172,641	4,405,581	499,360	1,296,400	21,139,925	\$ 0.27	\$ 2.35
2003	Sarasota County Transportation Authority	Sarasota	FL	107	51.3	\$42,306	\$2,066,776	2,950,048	308,043	1,936,966	11,551,702	\$ 0.70	\$ 6.71
2003	County of Volusia dba: VOTRAN	South Daytona	FL	152	43.6	\$36,038	\$5,729,766	5,173,257	454,581	3,200,576	20,394,242	\$ 1.11	\$ 12.60
2003	Lakeland Area Mass Transit District Citrus Connection	Lakeland	FL	40	39.2	\$35,069	\$1,346,176	1,846,672	110,000	1,632,368	6,635,011	\$ 0.73	\$ 12.24
2003	Manatee County Area Transit	Bradenton	FL	48	44.5	\$39,683	\$1,873,196	1,508,890	285,486	1,288,471	5,477,332	\$ 1.24	\$ 6.56



As shown in Figure 1, SCAT's total passenger miles are the second largest of the peer group with only Votran ahead of SCAT. SCAT's total passenger miles are high because the transit system covers the northern, central, and southern parts of the county, with relatively few unserved areas and the commuter vanpools.

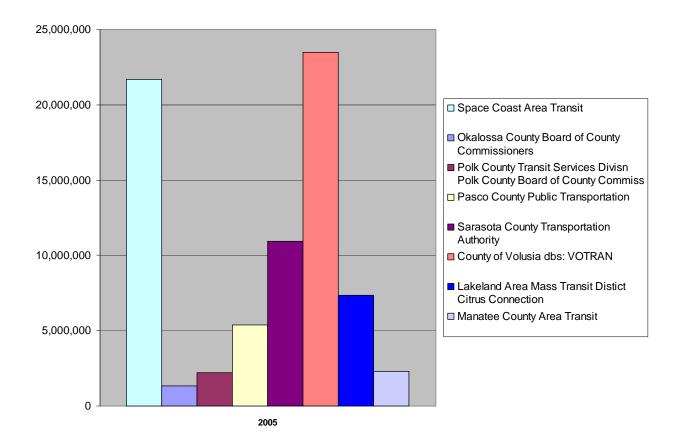
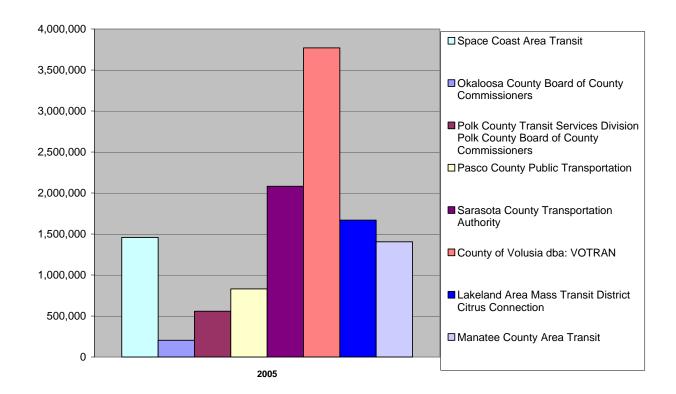


Figure 1 - Total Passenger Miles Per Company (2005)



When looking at total passenger trips per agency for SCAT in Figure 2, in relation to the total passenger miles, it is evident that passengers on SCAT ride for significant amounts of time. This long travel time is probably due to the long and narrow nature of Brevard County and dispersed nature of origins and destinations.

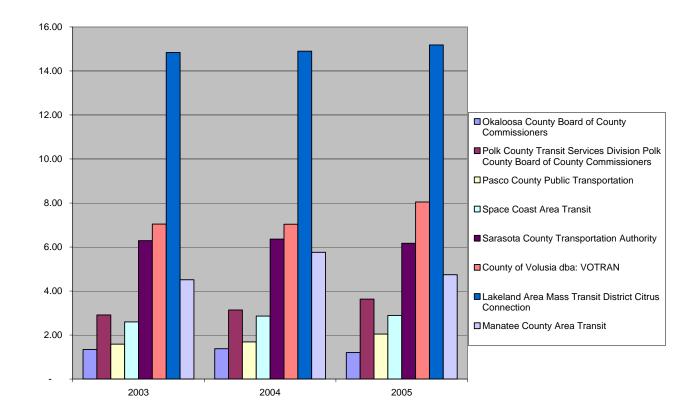
Figure 2 - Total Passenger Trips Per Company (2005)





Service effectiveness can be measured by passenger trips per capita for service supply and service consumption for SCAT and its peers. As shown in Figure 3, SCAT's passenger trips per capita are relatively low compared to the peer agencies, meaning consumption of service by residents in low.

Figure 3 - Passenger Trips Per Capita (2003-2005)





As shown in Figure 4 and 5, SCAT receives relatively little local funding per capita compared to other peer agencies, resulting in a high performance based on the productivity derived from every dollar of local funds.

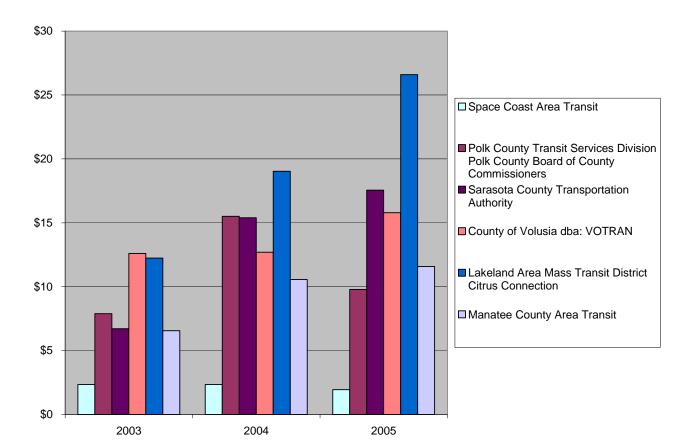


Figure 4 - Local Contribution Per Capita (2003-2005)



25.00
20.00

| Space Coast Area Transit |
| Sarasota County Transportation Authority |
| County of Volusia dba: VOTRAN |
| Lakeland Area Mass Transit District Citrus Connection |
| Manatee County Area Transit |

Figure 5 - Passenger Miles Per Local Dollars (2005)

When looking at passenger miles per revenue miles in Figure 6, SCAT is the largest due to the large number of passengers that it carries for a long periods of time, reflecting dispersed origins and destinations.

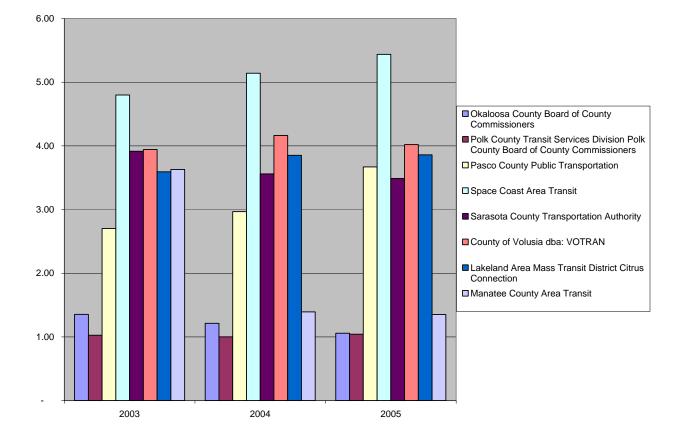


Figure 6 - Passenger Miles Per Revenue Mile

Overall the peer review tells us that while SCAT receives the second lowest amount of money from the local sources per capita as reflected in Table 8, it achieves the most passengers per revenue mile due to the relatively large number of passengers that it carries, as shown in Figure 6.



ROUTE STRUCTURE EVALUATION

Passengers Per Revenue Hour

In order to improve operating conditions and reduce system costs, this analysis includes an evaluation of the performance level and efficiency of current routes to identify any opportunities to refine the route structure based on data from 2005-06. On average, the SCAT system carried 17 passengers per revenue hour of service, with a median for all routes of 12 passengers per revenue hour. The peer average for similarly-sized Florida transit providers in 2005 was 18.8 passengers per hour. Routes 4, 6, and 9 (Trolley), are the three most productive routes as measured by the number of passengers per revenue hour, while routes 2, 22, 24, 26, and 34 all carry fewer than 10 passengers per revenue hour. Low ridership per hour is likely a result of an excessive number of deviations from a route, less than desirable operating characteristics, and/or a lack of transit-supportive origins and destinations along these routes.

Table 9 - Passengers Per Revenue Hour Per Route

ROUTE	PASSENGERS	REVENUE HOURS	PASSENGERS/ REVENUE HOUR	RANK
1	58,681	5,549	10.6	8
2	16,033	2,054	7.8	11
3	29,473	2,279	12.9	7
4	190,051	6,660	28.5	1
6	72,269	2,740	26.4	3
9 (Trolley)	189,175	7,036	26.9	2
21	81,393	3,986	20.4	4
22	15,748	2,147	7.3	12
23	35,598	2,307	15.4	5
24	13,501	2,261	6.0	13
26	12,660	2,370	5.3	14
27	33,808	2,466	13.7	6
28	23,736	2,261	10.5	9
34*	3,291	390	8.4	10
Total	898,067	51,447	17.5	

*Route 34 operates only from May to August Data is for one year from June 2005 to May 2006



Passengers Per Revenue Mile

A second measure of route productivity, passengers per revenue mile, was also calculated. Based on data from 2005-06, on average, the SCAT system carries 0.9 passengers per revenue mile, with a median for all routes of 0.5 passengers per revenue mile. The peer average for similarly-sized Florida transit providers in 2005 was 0.6 passengers per mile. Route 4 is by far the most productive route by this measure, with routes 9 (Trolley) and 21 also carrying a higher number of passengers per revenue mile than the system average. Routes 22, 24, and 26 carried the fewest passengers per revenue mile. A low number of passengers per mile typically indicates a lack of transit-supportive origins and destinations along these routes or that the transit-supportive origins and destinations are spread out too far from one another on a long, circuitous route.

Table 10 - Passengers Per Revenue Mile Per Route

ROUTE	PASSENGERS	REVENUE MILES	PASSENGERS/ REVENUE MILE	RANK
1	58,681	145,829	0.4	11
2	16,033	37,444	0.4	10
3	29,473	35,258	0.8	4
4	190,051	70,587	2.7	1
6	72,269	103,920	0.7	5
9 (Trolley)	189,175	144,210	1.3	3
21	81,393	53,130	1.5	2
22	15,748	47,311	0.3	12
23	35,598	64,464	0.6	7
24	13,501	62,162	0.2	13
26	12,660	133,888	0.1	14
27	33,808	61,024	0.6	6
28	23,736	54,926	0.4	9
34*	3,291	7,270	0.5	8
Total	898,067	1,021,423	0.9	

*Route 34 operates only from May to August Data is for one year from June 2005 to May 2006



Route Deviation Index

The route deviation index, a measure of how directly a route serves an origin and destination pair, is calculated by dividing the route's travel distance by the shortest path available between the same origin and destination. For a route that travels back and forth along a relatively similar path between two endpoints, the calculation is straightforward. However, calculating route deviation is less straightforward for circulator routes, as these routes are circuitous by nature and are not designed to take the absolute most direct path between two major points. In these cases, the most logical start and endpoint pair were chosen for the measure. For example on Route 23, the shortest path from Melbourne Square Mall to Palm Bay West was chosen for comparison to the actual path traveled by Route 23.

With a perfectly linear route being a 1.0, a route deviation index of 1.2 or below is typically indicative of an efficient route, with only about 20 percent out of direction travel. There tends to be a correlation between a low route deviation index and high ridership per revenue hour. A route deviation index higher than 1.2 is acceptable in cases where the deviations are justified by the inclusion of significant origins or destinations into the route, such as employment destinations or major transfer points. Three routes currently have a route deviation index under 1.2: Routes 1, 4, and 9 (Trolley). Those with the highest route deviation index are Route 27 (1.7) and Route 34 (1.9). The median route deviation index for all SCAT routes is 1.3.

Table 11 - Route Deviation Index

ROUTE	ROUTE LENGTH (MI)	DIRECT LENGTH (MI)	ROUTE DEVIATION INDEX	RANK
1	104.8	91.2	1.1	2
2	14.8	11.6	1.3	6
3	13.4	8.6	1.6	11
4	18.6	17.4	1.1	1
6	15.5	12.2	1.3	5
9 (Trolley)	19.0	16.4	1.2	3
21	10.5	6.4	1.6	12
22	17.0	13.6	1.3	4
23	19.6	13.6	1.4	9
24	18.9	13.0	1.5	10
26	44.1	34.4	1.3	7
27	20.1	11.6	1.7	13
28	16.7	12.2	1.4	8
34	46.6	24.4	1.9	14
Total	379.6	286.6	1.3	



Service Gaps

Map 12 indicates transit-supportive traffic analysis zones (TAZs) (defined as having a job density greater than four jobs per acre or a housing density greater than three homes per acre) that are served by existing transit service. This measure is used to determine whether the route is productive. Transit-supportive TAZs within ¼ of a mile of a transit route are indicated in dark red, with light red indicating transit-supportive TAZs not currently served by transit. Transit service is provided to nearly all transit-supportive TAZs, with the only exceptions being north of Route 3 in Merritt Island and south of Route 26 in Melbourne Beach. Some routes appear to be dominated by TAZs that are not transit-supportive, leading to low rankings in the route productivity analysis, such as Route 22 (Palm Bay South).



Brevard SCAT TDP Map 12 Existing Transit and Service Coverage Transit Supportive TAZ (Greater than 4 jobs per acre or 3 units per acre) Transit Supportive & Inside Transit Coverage Transit Coverage (1/4 mile from Transit Route) Transit Routes Beach Plus Bus Route
- Summer only Miles

Map 12 - Transit-supportive TAZs



TRANSIT QUALITY OF SERVICE EVALUATION

The Brevard Transit Quality of Service (TQOS) Evaluation is a set of measures for the County's fixed-route public transit system. The outcome of this evaluation is a benchmark of transit performance that can be communicated to local officials, the state legislature and other decision makers. To achieve this initiative, FDOT requires all MPOs with fixed-route transit systems in their jurisdictions to perform an annual evaluation of transit service. Information provided in this section reflects the recently completed 2007 Transit Quality Service Evaluation. Summaries of the four key performance measures service frequency, hours of service, service coverage, and transit vs. auto travel time are provided below.

Service Frequency Level of Service

The number of travel opportunities every hour between a given origin and destination are measured when looking at service frequency. Level of Service (LOS) scores range from "A" for greater than six buses per hour to "F" for less than one bus per hour. In the 2007 TQOS, the most recent published SCAT schedules were used to determine mobility measures. A total of 90 origin-destination pairs were looked in the service frequency LOS. Most routes in the SCAT system received a LOS score of "E" due to SCAT system operating on one hour headways. Routes such as Route 4 connecting Cocoa with the beaches, Route 9 serving the beaches and Route 21 serving Melbourne received a LOS score of "D" because these routes operate on half hour headways.

Hours of Service Level of Service

Hours of Service LOS is a measure of the total number of hours each day that transit service is available between a given origin-destination (O-D) pair. Scores range from "A" for 19 or more hours of daily service to "F" for less than four hours of daily service. The majority of the O-D pairs received an LOS score of "E" since; however, a number of routes have seen increased frequencies increasing their LOS score to "D" or "C" as SCAT improved hours of service this past year.

Service Coverage Level of Service

Using the number of people in transit supportive areas that have access to transit is how service coverage LOS is measured. As defined by TAZs, a 'transit supportive area' is that which has at least four dwelling units or employees per gross acre while 'access to transit' is defined as areas within one quarter mile of a transit route. Results of the service coverage analysis using 2000 population and employment data developed for the Brevard Long Range Transportation Plan showed that about 59 percent of transit-supportive areas in the county have access to transit resulting in a LOS score of "E."



Transit vs. Auto Travel Time

Transit versus auto travel time scores a given O-D pair based on the comparative travel time advantage (or disadvantage) of riding transit versus driving. LOS scores range from "A" for trips that are faster via transit to "F" for trips that take an hour or longer via transit. Transit travel times were determined through an analysis of SCAT route schedules, while auto travel times were estimated using output of the Central Florida Regional Planning Model 2000 Base Year FSUTMS network. A wide range of LOS scores were received for each of the O-D pairs after conducting the travel time analysis. The LOS scores were distributed as follows:

- Two O-D pairs received an A
- 7 O-D pairs received a B
- 14 O-D pairs received a C
- 9 O-D pairs received a D
- 11 O-D pairs received an E
- 47 O-D pairs received an F.

ROLLING STOCK AND CAPITAL FACILITIES

Vehicle Inventory

SCAT provides public transportation services to a population of 521,226 in the Brevard County area. Annually, SCAT provides approximately 913,132 passenger trips on its fixed routes as well as 430,896 passenger trips on its paratransit system. The service is provided with a fleet of 55 fixed-route buses and 68 paratransit vans. The vanpool program also provides 142,650 passenger trips annually though SCAT on its 111 vans (Data is taken from the 2006 National Transit Database, with the exception of the number of vans operated by VPSI. This number was obtained directly from VPSI). Detailed characteristics of the vehicle inventory of SCAT are provided in Table 12.

Capital Facilities

SCAT has two garage terminals; one located at the central area of Brevard in Cocoa and one located at the south area in Melbourne. The north garage terminal is located off a major street on a street that is residential in character. This terminal has two bus stops located out in front of the main building to serve the residents surrounding the terminal. One stop is located on the side with a covered shelter while the other is located in front of the parking lot with an open roofed shelter. Benches, route signs and maps are located at both shelters. The north garage terminal



Maintenance bay at the north terminal.



also has two lane maintenance bays, with doors located at each end where buses are cleaned and repaired. All maintenance for buses at both terminals is contracted though Ryder Truck, and is conducted on site. There is also a two lane covered washing and gas facility located at the back of the terminal. Also located on site are 30 bus parking spaces, six *Volunteer in Motion* parking spaces and numerous other areas where vans can be parked along the edges of the site. Along with all the maintenance areas and parking there is a portable located at the back of the maintenance bay that is used by drivers of Volunteers in Motion. The main building on site houses the offices of SCAT as well as information about the routes, and is a location where bus passes can be purchased.

Located right off US 1 in Melbourne, the south garage terminal also has a two lane maintenance bay with doors located at each end. Also located on site in two separate areas is a one lane washing facility and a two lane covered fuel area. A tire shed is also located at the back of the site to house tires that are used on the buses. The main building on site houses the operation manager for the south garage terminal and also serves as a rest area for bus drivers. There are also numerous parking spaces located on site to houses vans and buses when not in use.



Main building at the south terminal.

Park-N-Ride

With the growing number of commuters using public transportation, carpool, or vanpool to get to work, SCAT has provided two Park-N-Ride facilities. Park-N-Ride lots provide a common location where commuters can park their cars and easily transfer to public transit, a carpool or vanpool to complete their ride to work. These lots are offered free of charge to encourage the use of shared transportation. One lot is located at exit 183, 1/8 mile west of I-95 on Eau Gallie Blvd. The Eau Gallie Park-N-Ride lot has 148 parking spaces, six handicapped spaces, shelter, benches, lighting, and security fencing. There are also accommodations for bicycle and pedestrian traffic as well as designated parking spaces for car and vanpools. The other lot is located at Emerson Road NW, west of Minton Road in Palm Bay. This lot has 100 parking spaces, five handicapped spaces, two shelters with benches and is a designated bus stop for Route 23, connecting with other routes at the Melbourne Square Mall. Both lots discourage overnight parking with the Emerson lot discouraging parking after 6pm.



Table 12 - Vehicle Inventory (FY 2006-07)

ТҮРЕ	# OF VEHICLES IN TOTAL FLEET	YEAR OF MANUFACTURE	# OF ADA ACCESSIBLE VEHICLES WITH LIFTS OR RAMPS	SEATING CAPACITY	TOTAL MILES ON ACTIVE VEHICLES	AVG. LIFETIME MILES PER ACTIVE VEHICLES
Motorbus						
	2	1989	0	30	64,065	351,953
	3	1992	0	32	86,921	409,530
	14	1994	14	14	264,903	297,707
	1	1996	1	14	27,978	152,117
	8	1996	8	14	227,636	296,467
	3	1997	3	30	36,720	242,931
	4	2001	4	35	125,884	194,577
	4	2002	4	35	203,274	244,347
	16	2003	16	30	901,573	125,402
	2	2005	2	14	70,994	42,938
Para Transit	t/ Contract					
	2	1989	0	30	64,065	351,953
	3	1992	0	32	86,921	409,530
	14	1994	14	14	264,903	297,707
	1	1996	1	14	27,978	152,117
	8	1996	8	14	227,636	296,467
	2	1997	0	7	81,545	133,187
	3	1997	3	30	36,720	242,931
	5	1999	5	7	42,533	65,382
	2	2000	0	7	9,624	151,742
	4	2001	4	35	125,884	194,577
	4	2002	4	35	203,274	244,347
	16	2003	16	30	901,573	125,402
	2	2005	2	14	70,994	42,938
Private Var	pools with V	PSI				
	2	2000	0	8	39,534	68,758
	1	2000	0	7	7,476	98,722
	6	2001	0	15	110,706	68,879
	1	2001	0	11	18,422	101,292
	2	2003	1	7	32,885	41,554



TYPE	# OF VEHICLES IN TOTAL FLEET	YEAR OF MANUFACTURE	# OF ADA ACCESSIBLE VEHICLES WITH LIFTS OR RAMPS	SEATING CAPACITY	TOTAL MILES ON ACTIVE VEHICLES	AVG. LIFETIME MILES PER ACTIVE VEHICLES
	1	2003	0	11	9,682	38,459
	8	2003	2	11	208,183	76,196
	1	2006	1	7	9,934	9,934
	14	2006	0	11	405,617	28,958
	14	2006	8	15	27,802	1,985
	13	2006	4	11	41,216	3,165
	5	20006	0	15	103,173	20,634
Private Age	ency Transpo	rtation with VPSI				
	5	2000	0	15	34,666	47,082
	7	2000	0	7	76,111	68,000
	2	2000	0	8	7,447	64,327
	11	2001	0	15	239,701	62,871
	4	2001	0	14	36,711	51,755
	1	2001	10	11	9,878	49,914
	8	2003	8	11	160,500	69,447
	1	2003	0	7	25,640	70,660
	2	2006	0	13	9,916	4,958
	3	2006	0	15	33,579	11,193
	4	2006	4	11	400	100
	9	2006	0	11	37,738	15,304
	3	2006	0	7	12,826	4,275



CUSTOMER AND COMMUNITY INPUT

This section reflects public outreach activities undertaken for this TDP to gain insights into SCAT service and market areas. Notice was provided to the Florida Department of Transportation, Brevard Workforce Development Board, Brevard County Metropolitan Planning Organization and additional stakeholders regarding all public meetings and discussions. Public participation was conducted throughout the development of this plan. The public was given opportunity to participate in the development of the plan's goals and objectives, as well as its alternatives and implementation strategies. Through he use of workshops and public meetings opportunities were provided for the review and comment of this plan by all stakeholders, citizens, and interested parties. This section also summarizes market research findings and rider survey results conducted by SCAT in the previous two years. The following highlight the key findings from these activities to provide a foundation for evaluation of transit needs and service delivery options.

KEY LEADER INTERVIEWS

In spring and summer of 2006, interviews were conducted with key leaders in the community to determine common issues and opportunities related to SCAT service and operations. The following is a summary of information gathered from those interviews broken into categories based upon common issues and opportunities.

Key leaders of the community felt that one of the common issues with SCAT revolved around the need for bus service to be extended. A common sentiment that was felt by those interviewed was best said by Wendy Ellis, from Space Coast Area Transit marketing, who said "workers can get to work but they can't get home." Extending service past 5 PM would not only be beneficial to those who need to get home but to those who work alternative shifts and need to get to work. Another way to extend service that was suggested would be to offer a mid-day service, as it would be beneficial for second shift workers to get to work and to allow for workers to take the bus for lunch. Another issue dealt with the location and access to stops. With many routes still operating on "flag down" or route deviated service, there is a need for these routes to transition to dedicated stops. Information gathered also determined that shelters were not ADA accessible and that stops were not always in the best place for those who were riding the bus. It was also thought by many of those interviewed that the transit service is viewed by government officials as a social service not as a need. With "mobility being the biggest obstacle to independence," Thomas Hargrave from Center for Independent Living felt that this issue needs to be addressed. Other common issues expressed were that there is limited transit potential due to current design of fixed service routes, that buses were unable to maintain on-time performance, that there were not enough buses on routes 4, 6, and 9, and that there was not service outside of a certain area.

Suggestions or opportunities for service enhancement that were given by those interviewed dealt with a number of areas. One of the areas that they felt could be an opportunity was tourism. Participants felt that if the trolley was operated later in the evening and on weekends



that tourist ridership might increase. They also suggested placing stops at hotels to encourage visitors to ride the trolley to destinations such as the beach. Seasonal routes could also be used to allow for tourist to travel by bus or to capture the teenagers who travel more in the summer. To increase on-time performance it was suggested that dedicated travel lanes or prioritization with signals for buses be created as an alternative to increasing the number of buses. Another opportunity that was brought up in the interviews was the terminal expansion. Currently, the terminal expansion is on the five year priority list and once it is complete it could allow for more routes to be created serving the new communities that are growing each day.

RIDER SURVEY

In 2004, a SCAT Rider Survey was conducted over a three day period to update a previous survey conducted in 1999. This survey collected information on rider demographics, trip characteristics and preferences, as well as gauging customer satisfaction with SCAT service.

This survey determined that those that ride SCAT did so since it was an affordable way to travel and need it to stay that way. Figure 7 illustrates that while there are SCAT riders in each annual household income class, a majority of the riders have an annual household income of \$25,000 or less. This survey also determined that the majority of the riders were between the ages of 19 and 59, which is primarily due to the need to travel to and from work.



Figure 7 - What is Your Annual Household Income?



When looking at trip characteristics, the survey determined that while 13 percent take the bus due to convenience, for one out of five riders SCAT is their only option when making a trip. With three out of four SCAT riders walking to the bus, accessibility is a key objective. The survey also concluded that while the majority of SCAT riders have only been riding the bus for 6 months to 2 years that over 85 percent of SCAT riders ride the bus each week.

As identified in Figure 8, later and more frequent bus services are the most pressing needs for SCAT riders when it comes to their preferences for service enhancement. Those riders identified above that are solely dependent on SCAT are those who are most likely to request later services so that they have a means of travel at night while those who choose to ride will express a preference of express service.

5% 10% 15% 25% Express (limited stop service) 5.8% Improve bus comfort 7.0% More frequent service on existing routes 17.1% Later service on existing routes Improve or construct new bus shelters Running extra buses for special events NA 2.1% Ability to purchase bus passes at major transfer points Add a new route 18.6% Weekend service 0.0% NA 18.1% Service (other) 0.0% NA 15.5% Nothing 0.0%_{NA} **1999 2004** Other

Figure 8 - If SCAT Could Change Only One Thing About Its Service, What ONE Change Should It Make?

NA - not included in the survey.

Overall, the survey determined that SCAT continues to receive generally high marks from its riders, with the highest rating categories being safety, comfort, cleanliness, usefulness, availability of information and driver courtesy. Categories that were said to need improvements were frequency and hours of service, which were consistent with the findings from previous surveys on rider preference.



MARKETING STUDY

In the fall of 2003 and the winter/spring of 2004, a SCAT Marketing Study was conducted. The objective of this study was to assess SCAT's current marketing efforts and influence on fixed route ridership, and to recommend suggestions for improvement. Information for this study was collected from interviews, focus groups of riders and non-riders, surveys and other methods allowing for recommendations to be made to enhance marketing efforts and products. The study determined that SCAT's overall marketing program works well and is generally effective at targeting the core constituencies comprising SCAT's current fixed route ridership profile. The study also recommends that several changes be made to enhance marketing efforts and products.

One of the recommendations from this study showed that while many respondents felt the schedules and maps were sufficient and helpful, others thought they were difficult to read because the route maps were too conceptual and that it was difficult to discern where the routes traveled. Results of how information on schedules and route service areas could be improved as shown in Figure 9. SCAT has since taken the information provided by respondents to produce a color-coded system map showing all routes and key transfer points. It is recommended that this be continued and improved upon so as to ensure that those materials remain widely and conveniently available.

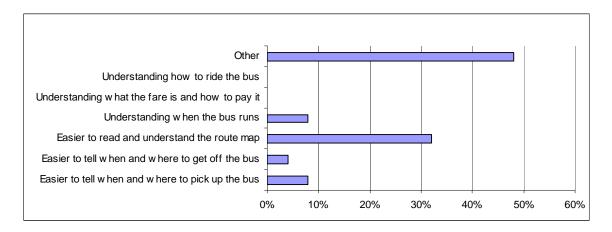


Figure 9 - How Could Schedules Be More Helpful?



Another recommendation from the study is that SCAT should look into the feasibility of making bus passes more widely available, such as through grocery stores, drug stores, other appropriate retail outlets and the Internet. This recommendation was based on the information collected from respondents as shown in Figure 10. The data indicated that while they ride the bus at least once a week, they did not take advantage of the bus pass program or that they were not aware of how to get passes.

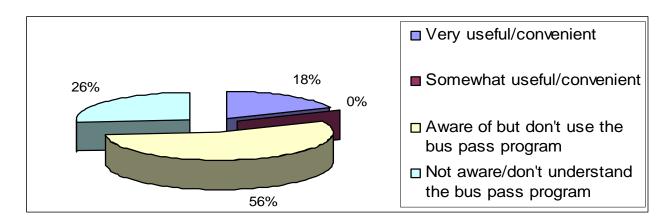


Figure 10 - Bus Pass Program

The third recommendation coming out from the study was that SCAT should continue to advertise, improve and add functionality to it's website so riders are able to plan a trip if needed on the Internet. The last recommendation calls for SCAT to continue its general community involvement activities and to look for new opportunities as they arise. This was discovered to be an effective way of advertising to the greater community. This recommendation is based on the information shown in Figure 11, indicating that wrapped buses with colorful advertising received the greatest support on how they had seen bus service advertised, making it about the same as all other methods of advertising combined.

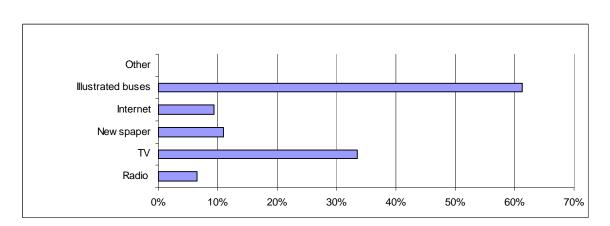


Figure 11 - Where Have You Seen Bus Service Advertised?



WORKSHOP

On April 17, 2006, a presentation was given by Renaissance Planning Group to the Local Coordinating Board on the Transit Development Plan and Transportation Disadvantage Service Plan to solicit input on issues, needs and opportunities. Comments received from members of the Local Coordinating Board and the public were noted and reviewed by Renaissance Planning Group for incorporation into this TDP and TDSP.

SUMMARY

Outreach efforts with the public, riders and key stakeholders to better understand preferences and perceptions of SCAT service indicate that more frequency, longer hours of operation and stop amenities are the most needed improvements in system operations. Riders have a positive opinion of SCAT service overall, but recognize the limitations of using the service when routes do not operate consistently late into the evenings or with sufficient frequency. Tourism and commuter markets provide opportunities for service expansion if route characteristics and marketing materials are developed to properly promote these services, and partnerships are nurtured with tourism and economic development representatives.



TRANSIT NEEDS

TRANSPORTATION DISADVANTAGED

Forecasts of TD Population: 2005-2010

Brevard County provides trips for two population groups that are classified as Transportation Disadvantaged (TD). The first group includes all persons who are elderly, disabled, low-income, or children who are considered "high risk" or "at-risk." These persons, known as the Potential TD Population (also known as Category I), are eligible for specified trips purchased by social service agencies. The second population group, the TD Population (also known as Category II), includes persons who are unable to transport themselves or to purchase transportation, and children who are "high-risk" or "at-risk." These persons are eligible for trips purchased through the Transportation Disadvantaged Trust Fund, as well as for trips purchased by social service agencies. The TD Population is a subset of the Potential TD Population.

Countywide population totals for 2000 and forecasts for 2006-2011 and 2025 were obtained from the US Census and the BEBR. Interim year population forecasts (2010 through 2025) in five year increments were obtained from BEBR (using "mid-range" forecasts), while a trend line methodology was used to estimate population totals for the other interim years.

The methodology used to develop the Potential TD Population and the TD Population forecasts relies on the Methodology Guidelines for Forecasting TD Transportation Demand at the County Level (Center for Urban Transportation Research (CUTR), 1993) which is the official methodology of the Florida CTD. While the methodology has not been updated since 1993, this analysis does reflect the use of 2000 Census data, when available, rather than older data sources cited in the CUTR methodology. In some cases, however, more recent data is not available for certain statistics used in the CUTR methodology. To the extent that additional planning funds or resources become available, revising older data would improve the accuracy and meaningfulness of the calculations and projection in the TDSP.

The total population of the County increased from 476,230 in 2000 to 542,336 in 2006. By 2011, the countywide population is forecast to expand to 593,460 and 717,300 by 2025. The total population forecasts were used in the development of forecasts of the Potential TD Population and the TD Population. Those forecasts and a description of the methodology used to derive them are presented in the following pages.



Table 13 - Forecast of Brevard County Transportation Disadvantaged Population

	YEAR									
SEGMENT	2006	2007	2008	2009	2010	2011	2025			
Disabled, Non-Elderly, Low Income	778	793	808	823	838	854	1,030			
Disabled, Non-Elderly, Non-Low Income	7,326	7,464	7,603	7,746	7,892	8,040	9,697			
Disabled, Elderly, Low Income	1,774	1,807	1,841	1,876	1,911	1,947	2,348			
Disabled, Elderly, Non- Low Income	21,881	22,292	22,710	23,136	23,570	24,013	28,960			
Non-Disabled, Low Income, No Auto, No Fixed-Route	4,109	4,187	4,265	4,345	4,427	4,510	5,439			
Total	35,868	36,543	37,227	37,926	38,638	39,364	47,474			

Relative to demand for TD trips, SCAT provided 82,001 trips (as of July 2006), according to the SCAT Paratransit and Fixed Route Ridership Report. Of those trips, 34,257 had an identified purpose, the majority of which were for medical related trips (45.8%). Trips provided for work purposes were 14.9 percent of total trips. These figures are comparable to those of 2005, with 46.6 percent for medically-related trips and 13.1 percent for work-related trips (shown in Table 14).

Table 14 - SCAT Monthly Operating Report (as of July 2006)

PURPOSE	# TRIPS	% TRIPS	PURPOSE	# TRIPS	% TRIPS
Total trips	34,257	100%	Meeting	2,667	7.8%
Medical	5,673	16.6%	Recreational	1,297	3.8%
Medical Dialysis	8,946	26.1%	School	686	2.0%
Medical Prescription	89	0.26%	Social Services	613	1.8%
Medical Therapy	967	2.8%	Center Clients	3,768	11.0%
Food Shopping	672	1.9%	Work	5,105	14.9%
Shopping for Other	957	2.8%	Other	2,817	8.2%



The County consists of specific service areas that would most likely be frequented by TD riders. In addition to county landmark destinations (e.g. NASA, Kennedy Space Center, beaches), areas with high employment (especially service sector employment) would benefit greatly from improved TD services. Service industry jobs are likely to be low-paying (relative to other industries) and thus employed by lower-income workers. In addition, high employment areas are likely to have high numbers of hotel rooms, also employed by lower-income workers (shown in Map 7). High employment areas are located throughout the County, but predominantly exist in Melbourne, Cocoa, Merritt Island and Cape Canaveral.

PROJECTED OVERALL RIDERSHIP

Average overall increase

Using the T-Best modeling software provided by FDOT, ridership demand on existing routes was projected through 2012. The resulting increases and overall ridership is presented in Table 15.

PROJECTED 5 YEAR RIDERSHIP DEMAND 2006 2012 **PERCENT ON EXISTING ROUTES RIDERSHIP RIDERSHIP INCREASE** Melbourne/Titusville Connector 4.77% 1 232 243 2 Titusville 63 70 10.12% 3 Merritt Island 20.51% 116 140 4 748 520 Connector 819 9.47% 6 Cocoa/Rockledge 286 308 7.91% 9 **Beach Trolley** 745 878 17.89% 21 354 Melbourne 322 10.12% 22 62 9.09% Palm Bay South 68 23 West Palm Bay 141 157 11.37% 24 9.47% West Melbourne 53 58 26 South Beach Connector 104 122 17.70% 27 East Palm Bay 134 179 33.60% 28 North Melbourne 94 101 7.59% 34 Beach Plus Bus (Summertime) 63 71 12.40% 3,163 3,569 13.00%

Table 15 - Projected Ridership Increase (5 year)

Note: The above ridership demand projections are based on linear increments in daily ridership calculated in the T-Best model, using existing routes and service without any improvements or new routes. T-Best modeling results have a +/- 40% standard deviation, which has not been applied here.

While merely an estimate of future ridership numbers, the T-Best analysis provides a ballpark estimate for future expansion of services. It is clear from the numbers given in Table 15 that most



SCAT routes will see steady increases over the next five years, with significant increases in ridership demand in Merritt Island, the Beaches, and in the South County area –including Palm Bay and Melbourne. Based on these demand estimates, a 10-year vision for service expansion and a corresponding five year budget are outlined in following sections. A more detailed analysis of individual route expansion alternatives is given in Future Transit Alternatives Section of this plan.



GOALS AND OBJECTIVES

SCAT VISION / MISSION STATEMENT:

The 10-year vision for Brevard's Space Coast Area Transit is to maintain the current level of transit service in the county and gradually enhance existing fixed route service to extend hours of operation and increase service frequency in the most productive corridors. SCAT will continue to provide accessible and affordable transportation options to Brevard County residents of all ages and abilities. Over time, SCAT will expand service to better respond to the key emerging service market needs of students, commuters and the tourism industry (including both workers and visitors) by developing new routes and/or service enhancements that target these unique markets and connect with transit providers in adjacent counties for improved regional accessibility.

GOALS AND OBJECTIVES

GOAL 1: IMPLEMENT A TRANSIT SYSTEM FULLY INTEGRATED WITH OTHER TRANSPORTATION MODES AND WITH LAND USES IN BREVARD COUNTY

- Objective 1.1: Maximize coordination with public and private agencies and other transportation operators in Brevard County.
- Objective 1.2: Coordinate with the Brevard Metropolitan Planning Organization (MPO) in the utilization of transit planning funds to support and improve transit service.
- Objective 1.3: Communicate and coordinate with other counties and agencies such as Lynx, Votran, and Indian River Transit to promote ride-sharing practices and transportation arrangements.
- Objective 1.4: Maintain existing coordination contracts and execute new ones, where feasible, needed and cost effective.
- Objective 1.5: Encourage the connection between transit and land uses through coordination with the MPO, Brevard County, and municipalities in the growth management process including comprehensive plans, land development codes, corridor studies, and site review of development.

GOAL 2: ENHANCE CITIZEN MOBILITY BY INCREASING AVAILABILITY OF PUBLIC TRANSPORTATION SERVICE

- Objective 2.1: Ensure that the fixed route, vanpools and paratransit systems continue to remain responsive to the needs of the transportation disadvantaged.
- Objective 2.2: Continue the implementation of expanded evening and weekend fixed route service.



- Objective 2.3: Continue maximizing the use of the fixed route bus service for the transportation disadvantaged.
- Objective 2.4: Implement increased paratransit service and expanded fixed route service as outlined by the 10-year vision and five-year implementation plan.

GOAL 3: IMPROVE THE EXPERIENCE OF THOSE RIDING SPACE COAST AREA TRANSIT

- Objective 3.1: Review, revise and adopt updated No-Show Policy for transportation disadvantaged riders.
- Objective 3.2: Research new methods to improve and streamline passenger fare collection.
- Objective 3.3: Investigate Intelligent Transportation Systems (ITS) technologies to improve customer experience and scheduling.

GOAL 4: ENSURE PROGRAM ACCOUNTABILITY

- Objective 4.1: Adhere to the procedures, rules and regulations established by the Commission for the Transportation Disadvantaged, Florida Department of Transportation, State of Florida, Federal Transit Administration and Brevard County.
- Objective 4.2: Collect and compile the data necessary for the evaluation of service including rider surveys. This data will be repeated in the Annual Operating Report, National Transit Database and the Annual Community Transportation Coordinator evaluation.
- Objective 4.3: Continue to provide and review performance reports at the Local Coordinating Board meetings.
- Objective 4.4: Conduct annual Transit Quality of Service (TQOS) evaluation as required by FDOT in conjunction with the annual State of the System (SOS) report compiled by the MPO.

GOAL 5: SECURE THE FUNDING NECESSARY TO MEET SERVICE NEEDS

- Objective 5.1: Continue to pursue local government and private sector funding partnerships (such as those identified in the financial resources portion of this TDP) to provide operating assistance to maintain existing service levels and expand service to meet future needs.
- Objective 5.1: Investigate alternative funding sources to provide continuing operating revenue for services currently funded through FDOT Transit Corridor Grants and the FDOT Transportation Regional Incentive Program (TRIP)
- Objective 5.2: Work with the Commission for the Transportation Disadvantaged, Florida Department of Transportation and the Federal Transit Administration to continue to obtain funding necessary to meet service demands of transportation disadvantaged citizens.



- Objective 5.3: Work with local and state agencies to secure sufficient funding to provide trips in coordination with social service agencies and organizations.
- GOAL 6: BUILD ON SCAT'S AWARD-WINNING MARKETING AND OUTREACH STRATEGIES TO INCREASE RIDERSHIP, USE OF PARK AND RIDE LOTS, THE VANPOOL PROGRAM, AND PARTICIPATION IN THE VOLUNTEERS IN MOTION PROGRAM
- Objective 6.1: Maximize availability of service information; ensure that material is available in accessible formats including print, radio and video media.
- Objective 6.2: Actively engage the community in promoting transit by calling attention to SCAT services through sponsorships, editorials, advertisements, and the like.
- Objective 6.3: Participate in community events and meetings where information can be distributed to potential participants.
- Objective 6.4: Develop a core group of transit advocates including elected officials, community advocates, agency heads, education leaders, and business leaders from the Economic Development Council of Florida's Space Coast, Florida's Space Coast Office of Tourism, and the Space Coast Economic Development Commission.



FUTURE TRANSIT ALTERNATIVES ANALYSIS

INTRODUCTION

The following section identifies and evaluates various service enhancement alternatives for SCAT over the next five to 10 years. In keeping with the strategic nature of the Transit Development Plan, options are first broadly defined to indicate possible directions for the transit agency as it considers how best to meet Brevard's growing mobility needs. These alternatives are not necessarily mutually exclusive and could be pursued simultaneously. Many transit systems have discovered over the years that they cannot serve all demands, but must select the most promising markets or the areas where the need for transit service is greatest. This is especially true in times of limited budgets. After a presentation of these broad policy alternatives, key service improvements are presented in the vision map. Based on public input, staff recommendations, and technical analysis, the vision map presents a variety of service improvements that SCAT may pursue over the next five to 10 years. Each of these improvements is evaluated for effectiveness using a transit modeling software developed by FDOT.

BROAD PUBLIC TRANSPORTATION POLICY ALTERNATIVES

Broad alternatives for the future direction of SCAT are presented in the following paragraphs. These alternatives reflect overall policy decisions regarding the markets served by public transportation, the extent of service, and the emphasis of service.

Serve New Rider Markets

Many comments were received through the public involvement process identifying public transportation needs of groups that are likely to support SCAT service expansion. These groups include young people and blue collar workers. While SCAT has recently expanded the days and hours of service that its fixed-routes operate, many origins and destinations of service industry workers and youth are not currently served. SCAT has made an effort to reach out to area employers and the two human resources organizations to address these needs; however, more can be done to tailor service with earlier or later hours to better reach these new rider groups.

Focus on Key Corridors

As transit agencies in Florida face stagnant or reduced operating budgets, several have begun to focus on providing high quality transit service along key corridors, rather than expanding a lower level of fixed route transit service to the entire service area. One such transit agency that is currently focusing its resources on corridors is the Lynx system in the Orlando Metropolitan Area. Increasing frequencies, extending service hours, and perhaps moving toward express or premium transit services can be a catalyst for economic development and redevelopment of existing urban areas, and generally provides for more cost-effective service delivery. An initial list of eligible corridors in Brevard County would include Grissom Parkway, SR 528, Minton/Wickham, A1A, US 192, Palm Bay Road, Malabar Road, and Babcock Street.



Expand Area of Service

Another major question for the future of SCAT is the geographic area for which it provides service. SCAT currently focuses services in the most densely populated areas of Brevard County. SCAT could expand the service area to include less dense areas such as Mims or South County. In addition, SCAT could coordinate or provide services outside of Brevard County to Indian River County, the Orlando Metropolitan Area, or north to destinations in Volusia County.

Expand Extent of Fixed-Route Service

SCAT has concentrated its resources on meeting the need for more frequent service, more days of service, and more hours of service on the existing fixed routes. Continuing this focus would expand service to provide more trips for current riders as well as open up service to new markets. Enhanced and wider coverage of fixed route service would also assist in meeting more paratransit needs through complementary ADA service required within 3/4 mile of fixed routes.

More Emphasis on Fixed-Route Services

Perhaps the most fundamental question facing SCAT regards the prioritization of its various types of transit services. This question is more directly relevant to SCAT than to other transit agencies in Florida because of the diverse types of public transportation currently offered. Along with operating the fixed-route bus system, SCAT has the most active and successful vanpool program in the state, and is the local Community Transportation Coordinator for TD service. It is the exception rather than the rule in Florida that the same agency is responsible for and operates both fixed-route and TD service. Thus, SCAT has to make choices with regards types of service provision. The agency continually sets the relative priorities among the fixed-route, subscription, demand responsive, and vanpool mode.

Vision Map for Service Improvements

Synthesizing public input, SCAT staff recommendations, and technical analysis, the TDP process developed a vision for improvements to transit service. These improvements are identified on the service improvement map in Map 13. The map establishes both a short-term and long-term vision for service improvements and expansions within Brevard County. The types of improvements include circulator systems, new and improved services along busy corridors, extended hours of service, increased frequencies, and a premium transit or express route. The technical analysis that follows analyzes the relative cost and benefits of each service improvement. The results of this analysis were used to inform the five year implementation plan as well as the 10-year vision outlined later in this plan.

A description of each project identified for the 10-year vision follows:

40 - Minton/Wickham Corridor: This near-term, radial route runs north and south along Minton and Wickham Roads. The terminus on the north end is route 4. The terminus on the south end is Malabar Road. The proposed span of service is from 7:30am-7:30pm, with 60 minute headways.



- 41 Port St. John Circulator: This near-term, circulator route runs along US Highway 1 on the east, Fay Boulevard on the south, Grissom Parkway on the west and Kings Highway on the north. The proposed span of service is from 7:30am-7:30pm, with 60 minute headways.
- 42 Viera: This near-term, circulator route runs along US Highway 1 on the east, Route 509 (Wickham Rd. North) on the south, Stadium Parkway on the west, and 502 (Barnes Rd.) on the North. The proposed span of service is from 7:30am-7:30pm, with 60 minute headways.
- 43 Minuteman Causeway: This near-term, radial route runs east and west along Minuteman Causeway between A1A on the east and Fairway Drive (Cocoa Beach Country Club) on the west. The proposed span of service is from 7:30am-7:30pm, with 60 minute headway. The proposed span of service is from 7:30am-7:30pm, with 60 minute headways.
- 44 Grissom Parkway: This mid-term, radial route runs north and south, terminating at Route 406 in the north, and Route 520 in the south. The proposed span of service is from 7:30am-7:30pm, with 60 minute headways.
- 45 US 192: This mid-term, radial route runs east and west along US Highway 192, starting at Route A1A in the east, crossing Melbourne Causeway and extending approximately two miles beyond I-95. The western terminus would be at the location of the proposed St. Johns Heritage Parkway (new route 49). The proposed span of service is from 7:30am-7:30pm, with 60 minute headways.
- 46 Palm Bay Road: This mid-term, radial route runs east and west along Palm Bay Road, starting at US Highway 1 (Dixie Highway) in the east and terminating at its intersection with the proposed St. Johns Heritage Parkway in the west. The proposed span of service is from 7:30am-7:30pm, with 60 minute headways.
- 47- Malabar Road: This mid-term, radial route runs east and west along Malabar Road, starting at US Highway 1 (Dixie Highway) in the east and terminating at its intersection with the proposed St. Johns Heritage Parkway in the west. The proposed span of service is from 7:30am-7:30pm, with 60 minute headways.
- 48 Babcock Road: This mid-term, radial route runs north and south along Babcock Road, terminating in the north at US Highway 192 and in the south at Micco Road. The proposed span of service is from 7:30am-7:30pm, with 60 minute headways.
- 49 St. Johns Heritage Parkway: This mid-term, radial route runs north and south approximately two to three miles west of the current developed areas of Palm Bay and Melbourne. Its northern terminus is along Eau Gallie Boulevard West, head west approximately two miles then bear south and then returns back east at the alignment of Appaloosa Street and terminates at Babcock Street. The proposed span of service is from 7:30am-7:30pm, with 60 minute headways.
- 52 Palm Bay Circulator: This mid-term, circulator route runs along San Filippo Drive in the east and south, De Groodt Road/Jupiter Boulevard in the west and Malabar Road in the north. The proposed span of service is from 7:30am-7:30pm, with 60 minute headways.

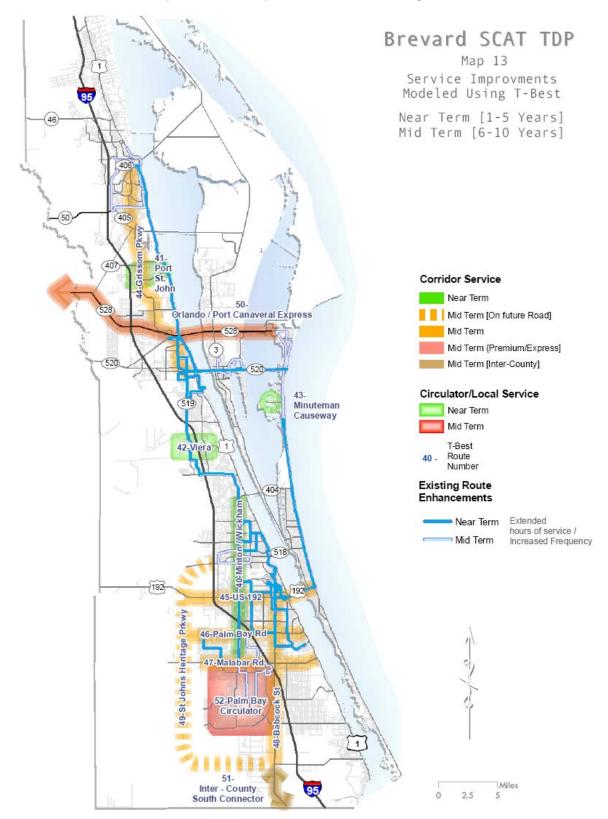


T-BEST MODELING PROCESS

T-Best (Transit Boardings Estimation and Simulation Tool) version 3.0.19 software developed by FDOT was used to model transit operations and develop future year ridership projections. The analysis required the following steps:

- 1. **Building the base year transit network.** Using current route maps and schedules, the existing system was replicated in T-Best.
- 2. Calibrating the base year transit network. Using the latest ridership data from SCAT, model ridership was compared to actual ridership. The equations used by SCAT to model ridership are based on highly detailed data collected and analyzed in Jacksonville, Florida. Because such detailed data are not readily available for Brevard County, using the Jacksonville equations are the only viable option, although this results in a higher level of error than may be expected with any modeling effort. In general, the model ridership for Brevard County came out much lower than the actual ridership. The Jacksonville equations were adjusted to account for these low projections, such that after adjusting, the total model ridership for the entire SCAT system matched the total actual ridership. While the total ridership for the system as a whole is calibrated, there is variation between the model ridership and actual ridership for the individual routes. For all but a few outliers, this variation was +/- 40 percent. This variation is not surprising for individual route simulation and still provides a useful frame of reference for ridership growth.
- 3. Building the near-term (2010) and mid-term (2012) transit networks. Based on transit improvements identified for the TDP by SCAT staff in 2006, new routes and enhancements to existing routes were added to the base network. For most new routes, the assumption was made that hourly service would be provided between 7am and 7pm. For existing routes, service frequencies were improved or the span of service expanded such that there was generally a 50 percent increase in total transit trips during the day per route. The 2010 network includes only near-term improvements, while the 2012 network includes both near-term and mid-term improvements. For comparison purposes, a second set of 2010 and 2012 networks were built that assumed that no improvements would be made to the transit network. Map 13 and Tables 16 and 17 illustrate the existing route enhancements and new routes.





Map 13 - Service Improvements Modeled Using T-Best



Table 16 - Near-term Improvements 2010

NEAI	R-TERM IMPROVEMENTS 2010		20	10 ARRIV	ALS / HE	ADWAY (MINUTES)	ı			2007 ARRIVALS / HEADWAY (MINUTES)								
Route	Name	Span	am pea	ak	off-pea	ak	pm pe	ak	night		Span	am pe	ak	off-pea	ak	pm pe	ak	night	
1	Melbourne/Titusville Connector	6:10am-6:40pm	2	60	4	110	2	60	0		6:10am-6:40pm	1	120	3	150	1	120	0	
4	520 Connector	6:00am-11:30pm	8	23	16	23	8	23	6	40	6:00am-11:30pm	6	30	12	30	6	30	4	60
6	Cocoa/Rockledge	5:45am-9:00pm	8	23	16	23	8	23	4	40	5:45am-8:10pm	6	30	12	30	6	30	2	60
21	Melbourne	7:15am-9:20pm	5	24	12	30	6	30	5	36	7:15am-8:20pm	3	40	10	36	5	36	2	60
23	West Palm Bay	6:45am-8:50pm	5	36	8	45	5	36	3	40	6:45am-8:50pm	3	60	5	72	3	60	2	60
26	South Beach Connector	7:00am-9:25pm	5	36	8	45	5	36	2	45	7:00am-8:55pm	3	60	5	72	3	60	1	60
27	East Palm Bay	7:40am-9:20pm	2	40	6	60	5	36	5	40	8:00am-9:00pm	1	60	5	72	3	60	3	60
28	North Melbourne	6:55am-8:50pm	5	36	8	45	5	36	3	40	6:55am-8:50pm	3	60	5	72	3	60	2	60
New - 40	Minton/Wickham Corridor	7:30am-7:30pm	2	60	6	60	3	60	1	60									
New - 41	Port St John Circulator	7:30am-7:30pm	2	60	6	60	3	60	1	60									
New - 42	Viera Circulator	7:30am-7:30pm	2	60	6	60	3	60	1	60									
New - 43	Minuteman Causeway	7:30am-7:30pm	2	60	6	60	3	60	1	60									

An arrival is the number of times a bus would come by a stop during a given period.

Periods were defined as follows: AM Peak = 6-9 am; Off-peak = 9 am- 3 pm; PM Peak 3-6 pm; Night = 9pm onwards.



Table 17 - Mid-term Improvements 2012

MID-	TERM IMPROVEMENTS 2012		20	12 ARRIV	ALS / HE	ADWAY	(MINUTES)				2007 ARRIVALS / HEADWAY (MINUTES)								
Route	Name	Span	am pe	ak	off-pea	ık	pm pe	ak	night		Span	am pe	ak	off-pea	ık	pm pea	ak	night	
2	Titusville	7:30am-6:20pm	3	40	8	45	3	60	1	60	7:30am-5:20pm	2	60	6	60	2	60	0	
3	Merritt Island	7:50am-7:00pm	3	40	8	45	3	60	1	60	7:50am-6:00pm	2	60	6	60	2	60	0	
9	Beach Trolley	6:15am-11:30pm	8	23	16	23	8	23	7	45	6:15am-11:10pm	6	30	12	30	6	30	5	60
22	Palm Bay South	7:35am-9:00pm	3	40	6	60	4	45	3	45	7:55am-8:45pm	2	60	4	90	3	60	2	60
24	West Melbourne	6:55am-8:50pm	5	36	8	45	5	36	3	40	6:55am-8:50pm	3	60	5	72	3	60	2	60
34	Beach Plus Bus (summertime)	8:00am-6:00pm	2	60	3	120	2	60	0		9:00am-4:00pm	1	120	2	180	0		0	
New - 44	Grissom Parkway	7:30am-7:30pm	2	60	6	60	3	60	1	60									
New - 45	US 192	7:30am-7:30pm	2	60	6	60	3	60	1	60									
New - 46	Palm Bay Road	7:30am-7:30pm	2	60	6	60	3	60	1	60									
New - 47	Malabar Road	7:30am-7:30pm	2	60	6	60	3	60	1	60									
New - 48	Babcock Road	7:30am-7:30pm	2	60	6	60	3	60	1	60									
New - 49	St. Johns Heritage Parkway	7:30am-7:30pm	2	60	6	60	3	60	1	60									
New - 50	Orlando/Canaveral Express	7:30am-7:30pm	2	60	6	60	3	60	1	60									
New - 51	Inter-county South Connector	7:30am-7:30pm	2	60	6	60	3	60	1	60									
New - 52	Palm Bay Circulator	7:30am-7:30pm	2	60	6	60	3	60	1	60									

An arrival is the number of times a bus would come by a stop during a given period.

Periods were defined as follows: AM Peak = 6-9 am; Off-peak = 9 am- 3 pm; PM Peak 3-6 pm; Night = 9pm onwards.



- 4. Calibrating the future year transit networks. For all existing routes, future year ridership was adjusted based on the differences noted in the base year between the model ridership and actual ridership. For example, the model overestimates ridership on Route 27 by 12 percent in the base year. Assuming that this overestimation will also be the case in the future year, we can reduce the model ridership by 12 percent in 2010 and 2012 to account for the T-Best tendency to overestimate for this route. For existing and new routes, the ridership results from T-Best are assumed to only be accurate within a margin of error, earlier defined as +/- 40 percent.
- 5. Analyzing the results and prioritization. T-Best provides future year ridership, revenue miles, and revenue hours, from which most of the analysis of future routes is based. Operating costs for additional service is based on the 2005 National Transit Database, which indicates a cost of \$68.36 per hour of service. For existing routes where service is enhanced in the near-term or mid-term, "additional riders" are defined as the difference between number of riders projected in the future year scenarios with near and mid-term improvements and the number of riders projected in the future year scenarios with no improvements. For new routes, all projected riders are "additional riders." Similarly, the "additional operating cost" for future years is only the cost needed to increase service hours and frequency for existing routes. For new routes, the entire cost for operating the new route is the "additional" operating cost. The final data provided for each route includes:
 - a. Ridership estimate
 - b. Riders/revenue mile
 - c. Riders/revenue hour
 - d. Additional riders/additional operating cost
 - e. Additional buses needed

Due to limitations with the T-Best software, not all of the conceptual new routes could be modeled appropriately. T-Best is designed to model ridership based on the socioeconomic and employment characteristics of the Census blocks surrounding each transit route. For cross-county and express routes, a different type of modeling is needed. For example, ridership on the inter-county connector to Indian River County is largely dependent on the ridership on Indian River County routes, and the demand for north-south travel across the county boundary. The only accurate way to model this ridership would be to build and calibrate the Indian River transit network, which is beyond the scope of this project. Similarly, to accurately model the express route between Orlando and Cape Canaveral, we would need to build and calibrate the Lynx network. Express routes of this type typically draw riders from a larger market area, many of which may drive to use park-and-ride facilities. T-Best is also limited in its ability of modeling this type of market area.

The St. Johns Heritage Parkway corridor was also modeled, but due to additional T-Best limitation, the results are highly inaccurate and thus are not included in this report. To project future socioeconomic and employment characteristics, T-Best uses base data and simply



increase population and employment by a user-input growth rate, and adjusts economic conditions based on an inflation factor. For a location where there is minimal development today, such as along the St. Johns Heritage Parkway, T-Best is unable to account for the additional growth that would be expected along this corridor after construction of the Beltway. For this reason, T-Best is unable to identify much population or employment along this corridor, resulting in an unrealistically low ridership projection. For T-Best purposes, route numbers were assigned to the new routes and reflected in subsequent tables.

Results

The results of the 2010 and 2012 T-Best models are shown in Table 18 below. The 2006 actual ridership is provided for comparison. The low and high range indicated for the 2010 and 2012 scenarios represent the +/- 40 percent range of error for the modeling results. All existing routes demonstrate significant gains in ridership, particularly after increasing the number of transit trips. For the new 2010 routes, Route 40 (Minton/Wickham Corridor) performed especially well, with minimal ridership on the remaining routes. For the new 2012 routes, all are projected to carry a significant number of riders.



Table 18 - Ridership Estimates

		2006 RIDERSHIP	2010 R	IDERSHIP		2012 F	RIDERSHIP	
	ROUTE		Low	High	Rank	Low	High	Rank
Existir	g Routes							
1	Melbourne/Titusville Connector	231.94	344.43	803.66	3	352.48	822.46	4
2	Titusville	63.37	41.70	97.29	14	77.15	180.03	20
3	Merritt Island	116.49	82.24	191.90	11	119.96	279.92	16
4	520 Connector	748.23	672.99	1,570.32	1	697.07	1,626.50	2
6	Cocoa/Rockledge	285.65	312.61	729.43	5	362.17	845.06	3
9	Beach Trolley	744.78	498.58	1,163.36	2	875.40	2,042.61	1
21	Melbourne	321.71	318.44	743.03	4	337.41	787.29	5
22	Palm Bay South	62.25	42.92	100.14	12	88.62	206.79	19
23	West Palm Bay	140.70	214.56	500.63	6	266.96	622.90	6
24	West Melbourne	53.36	38.65	90.18	15	91.88	214.39	17
26 *	South Beach Connector	103.77	154.02	359.38	10	180.09	420.20	11
27	East Palm Bay	133.63	185.10	431.90	8	222.04	518.09	8
28	North Melbourne	93.82	163.53	381.57	9	171.07	399.16	12
34	Beach Plus Bus (Summertime)	63.29	42.19	98.45	13	137.76	321.45	13
Near-	Term (2010) Improvements							
40	Minton/Wickham Corridor		187	435	7	207	483	9
41	Port St John		12	29	17	16	37	23
42	Viera		35	82	16	36	84	22
43	Minuteman Causeway		11	26	18	12	28	24
Mid-T	erm (2012) Improvements							



		2006 RIDERSHIP	2010 R	IDERSHIP	2012 RIDERSHIP					
	ROUTE		Low	High	Rank	Low	High	Rank		
44	Grissom Parkway					198	463	10		
45	US 192					251	585	7		
46	Palm Bay Road					92	214	18		
47	Malabar Road					123	288	15		
48	Babcock Road					132	307	14		
52	Palm Bay Circulator					71	165	21		

Note: Ridership is presented as a range of +/- 40 percent of the T-Best model results.

^{*} Current Route 26 operated as Routes 19 and 26 in 2006.



More importantly, the following two tables illustrate the efficiency of each route as measured by the number of riders per revenue mile and per revenue hour. Table 19 indicates increases in ridership per revenue mile for all existing routes. Routes 9, 4, and 21 are projected to carry the highest number of riders per revenue mile in 2012 when considering only existing routes. Route 45 (US 192) carries the most riders per revenue mile when considering only the new routes, and this indicator is comparable to the most productive of the existing routes. Route 40 also performs well compared to existing routes, with Routes 44, 46, 47, 48, and 52 all performing slightly below average when compared to existing routes. Routes 41, 42, and 43 perform comparably to the worst performing existing routes (2, 24, and 26).



Table 19 - Riders / Revenue Mile

	ROUTE	RIDERS / REVENUE MILE	RIDERS	/ REVEN	JE MILE	RIDERS	/ REVEN	JE MILE
	ROOTE	REVEROE MILE	Low	High	Rank	Low	High	Rank
Existin	ng Routes							
1	Melbourne/Titusville	0.49	0.46	1.07	9	0.47	1.10	10
2	Titusville	0.32	0.21	0.49	14	0.26	0.61	20
3	Merritt Island	0.82	0.58	1.36	4	0.62	1.45	5
4	520 Connector	1.49	0.99	2.30	1	1.02	2.39	3
6	Cocoa/Rockledge	0.60	0.48	1.11	8	0.55	1.28	9
9	Beach Trolley	1.41	0.94	2.20	2	1.23	2.87	1
21	Melbourne	1.32	0.94	2.18	3	0.99	2.31	4
22	Palm Bay South	0.35	0.24	0.56	12	0.36	0.84	17
23	West Palm Bay	0.53	0.50	1.16	6	0.62	1.44	6
24	West Melbourne	0.25	0.18	0.42	16	0.26	0.62	19
26 *	South Beach	0.20	0.18	0.42	17	0.21	0.49	22
27	East Palm Bay	0.52	0.48	1.12	7	0.58	1.35	8
28	North Melbourne	0.36	0.39	0.91	10	0.41	0.95	15
34	Beach Plus Bus	0.46	0.30	0.71	11	0.43	0.99	12
Near-	Term (2010) Improvemen	nts						
40	Minton/Wickham	-	0.55	1.27	5	0.60	1.41	7
41	Port St. John	-	0.16	0.36	18	0.20	0.47	23
42	Viera	-	0.19	0.45	15	0.20	0.46	24
43	Minuteman Cswy	-	0.22	0.52	13	0.24	0.56	21
Mid-T	erm (2012) Improvement	s					!	
44	Grissom Parkway	-				0.41	0.96	14
45	US 192	-				1.06	2.47	2
46	Palm Bay Road	-				0.40	0.93	16
47	Malabar Road	-				0.45	1.05	11
48	Babcock Road	-				0.41	0.96	13
52	Palm Bay Circulator	-				0.35	0.81	18
Note:	Ridership is presented as a	range of +/- 40 pe	ercent of t	he T-Best	model res	ults.	•	ı
* Curre	ent Route 26 operated as R	outes 19 and 26 in	2006.					

86



Table 20 indicates improvements in ridership per revenue hour for all existing routes. Routes 9 and 4 are projected to carry the highest number of riders per revenue hour in 2012 when considering only existing routes. Route 45 (US 192) carries the most riders per revenue hour when considering only the new routes, and this indicator is comparable to the most productive of the existing routes. Route 40 also performs well compared to existing routes, with Routes 44, 46, 47, 48, and 52 all performing slightly below average when compared to existing routes. Routes 41, 42, and 43 perform comparably to the worst performing existing routes (2, 24, and 26).



Table 20 - Riders / Revenue Hour

	ROUTE	2006 RIDERS /	2010	RIDERS / RE	VENUE HOUR	2012 RII	DERS / REVENU	E HOUR
		REVENUE HOUR	Low	High	Rank	Low	High	Rank
1	Melbourne/Titusville	10.96	10.17	23.73	7	10.41	24.29	8
2	Titusville	6.34	4.17	9.73	13	5.14	12.00	19
3	Merritt Island	10.59	7.48	17.45	10	8.00	18.66	15
4	520 Connector	26.72	17.71	41.32	1	18.34	42.80	3
6	Cocoa/Rockledge	10.99	8.68	20.26	8	10.06	23.47	9
9	Beach Trolley	25.68	17.19	40.12	2	22.45	52.37	1
21	Melbourne	16.09	11.37	26.54	3	12.05	28.12	7
22	Palm Bay South	5.66	3.90	9.10	15	5.91	13.79	18
23	West Palm Bay	10.82	10.22	23.84	6	12.71	29.66	4
24	West Melbourne	4.10	2.97	6.94	18	4.38	10.21	22
26 *	South Beach	4.51	4.02	9.38	14	4.70	10.96	21
27	East Palm Bay	11.14	10.28	23.99	5	12.34	28.78	5
28	North Melbourne	7.22	7.79	18.17	9	8.15	19.01	14
34	Beach Plus Bus	10.55	7.03	16.41	11	9.84	22.96	10
Near-	Term (2010) Improvements				•			
40	Minton/Wickham		10.90	25.44	4	12.08	28.19	6
41	Port St. John		3.11	7.25	17	4.01	9.35	23
42	Viera		3.86	9.00	16	3.93	9.17	24
43	Minuteman Cswy		4.44	10.35	12	4.82	11.26	20
Mid-To	erm (2012) Improvements		· 	'		'	,	<u> </u>
44	Grissom Parkway					8.21	19.15	13
45	US 192					21.16	49.37	2



	ROUTE	2006 RIDERS /	2010	RIDERS / RE	VENUE HOUR	2012 RIDERS / REVENUE HOUR					
		REVENUE HOUR	Low	High	Rank	Low	High	Rank			
46	Palm Bay Road					7.98	18.61	16			
47	Malabar Road					8.99	20.99	11			
48	Babcock Road					8.22	19.17	12			
52	Palm Bay Circulator					6.91	16.13	17			

Note: Ridership is presented as a range of +/- 40 percent of the T-Best model results.

^{*} Current Route 26 operated as Routes 19 and 26 in 2006.



Tables 21, 22, and 23 indicate the additional operating cost per rider to improve existing service or add new service. The additional operating cost per rider provides an indication of how beneficial an investment in enhanced or new transit service will be. The cost is calculated as only the cost per new hours of service in addition to the existing hours of service. For example, Route 4 operates for 24 hours per day currently, but the proposed improvement adds 10 new hours of service, for a total of 38 hours of service. The new operating cost is 10 hours multiplied by the hourly operating cost of \$79.97 (inflated to reflect 2010 dollars). To calculate the number of new riders that have started riding due to the improvement in service, two scenarios were run for each model year. One scenario assumes that no improvements have been made, whereas the second scenario assumes that existing routes have been enhanced and new routes have been added. The difference in ridership per route between these two scenarios can be attributed to the service improvement. Adding service will require additional capital investment as well, with each new or enhanced route requiring either one or two new buses as indicated in the tables.

The tables indicate that the best return on investment is to enhance service on Route 9 as the first priority. Enhancing service on Routes 23, 4, 27, and 6 also rank as high priorities. Route 45 easily ranks as the first priority for adding new routes, with Route 40 as a second priority. The high cost for increasing ridership on existing Routes 24, 2, and 26 revealed these as the lowest priorities for improving existing service, whereas the new Routes 43, 41, 42, and 52 ranked as the lowest overall priorities. Route 52 in particular provides very low return on the investment, most likely due to the long distance of this route and overlap with several existing routes. One pattern that emerges is that the proposed corridor routes consistently outperform the proposed circulator routes. The tables also indicate that the near-term and mid-term prioritization may need to be reconsidered, given that several improvements designated as mid-term (Routes 9 and 45 in particular) outperform improvements designated as near-term (Routes 26, 44, 41, and 42 in particular).



Table 21 - Additional Operating Cost Per Rider - 2010 (Near-term)

	ROUTE	OPERATIONAL COST OF IMPROVEMENTS	NEW BUSES REQUIRED	ADDITIONAL RIDERSHIP LOW WITH IMPROVEMENTS	ADDITIONAL RIDERSHIP HIGH WITH IMPROVEMENTS	COST PER ADDITIONAL RIDER, LOW	COST PER ADDITIONAL RIDER, HIGH	PRIORITY			
4	520 Connector	\$799.72	1	192	448	\$1.78	\$4.16	1			
1	Melbourne/Titusville	\$1,015.64	1	201	469	\$2.17	\$5.06	2			
23	West Palm Bay	\$639.77	1	124	290	\$2.21	\$5.16	3			
27	East Palm Bay	\$479.83	1	88	205	\$2.34	\$5.47	4			
21	Melbourne	\$639.77	1	113	264	\$2.42	\$5.65	5			
6	Cocoa/Rockledge	\$799.72	1	132	309	\$2.59	\$6.04	6			
28	North Melbourne	\$639.77	1	105	244	\$2.62	\$6.12	7			
40	Minton/Wickham	\$1,368.79	2	187	435	\$3.14	\$7.34	8			
26 *	South Beach	\$1,226.23	1	83	195	\$6.29	\$14.69	9			
43	Minuteman Cswy	\$197.93	1	11	26	\$7.73	\$18.03	10			
42	Viera	\$730.14	1	35	82	\$8.88	\$20.73	11			
41	Port St. John	\$314.93	1	12	29	\$11.03	\$25.73	12			
Cost P	er Operational Hour (Source:	2005 Natl .Transit Dat	abase, SCAT):	\$68.36							
2010 C	perational Hour Cost (4% infl	ation)		\$79.97							
2012 C	perational Hour Cost (4% infl	ation)		\$86.50							
Note: H	igh/low range of ridership calcu	lated on +/- 40% standa	ard deviation in th	ne model				_			
* Currei	nt Route 26 operated as Routes	19 and 26 in 2006.									



Table 22 - Additional Operating Cost Per Rider - 2012 (Mid-term)

	ROUTE	OPERATIONAL COST OF IMPROVEMENTS	NEW BUSES REQUIRED	ADDITIONAL RIDERSHIP LOW WITH IMPROVEMENTS	ADDITIONAL RIDERSHIP HIGH WITH IMPROVEMENTS	COST PER ADDITIONAL RIDER, LOW	COST PER ADDITIONAL RIDER, HIGH	PRIORITY
9	Beach Trolley	\$864.97	1	349	813	\$1.06	\$2.48	1
23	West Palm Bay	\$691.98	1	173	404	\$1.71	\$4.00	2
45	US 192	\$1,024.73	1	251	585	\$1.75	\$4.09	3
4	520 Connector	\$864.97	1	206	480	\$1.80	\$4.21	4
27	East Palm Bay	\$518.98	1	115	268	\$1.94	\$4.52	5
6	Cocoa/Rockledge	\$864.97	1	177	414	\$2.09	\$4.88	6
1	Melbourne/Titusville	\$1,098.51	1	207	482	\$2.28	\$5.32	7
21	Melbourne	\$691.98	1	125	291	\$2.38	\$5.54	8
28	North Melbourne	\$691.98	1	111	258	\$2.68	\$6.26	9
40	Minton/Wickham	\$1,480.49	2	207	483	\$3.07	\$7.16	10
22	Palm Bay South	\$345.99	1	48	112	\$3.10	\$7.23	11
34	Beach Plus Bus	\$691.98	0	95	222	\$3.12	\$7.28	12
47	Malabar Road	\$1,187.43	2	123	288	\$4.12	\$9.62	13
3	Merritt Island	\$345.99	1	36	83	\$4.15	\$9.68	14
48	Babcock Road	\$1,387.24	2	132	307	\$4.51	\$10.53	15
44	Grissom Parkway	\$2,089.43	2	198	463	\$4.52	\$10.54	16
46	Palm Bay Road	\$996.19	1	92	214	\$4.65	\$10.84	17
24	West Melbourne	\$691.98	1	57	133	\$5.22	\$12.18	18
2	Titusville	\$432.49	1	35	82	\$5.25	\$12.26	19
26 *	South Beach	\$1,326.29	1	107	249	\$5.32	\$12.42	20
52	Palm Bay Circulator	\$885.82	1	71	165	\$5.36	\$12.51	21



	ROUTE	OPERATIONAL COST OF IMPROVEMENTS	NEW BUSES REQUIRED	ADDITION RIDERSH LOW WIT	IIP TH	ADDITIONAL RIDERSHIP HIGH WITH IMPROVEMENTS	COST PER ADDITIONAL RIDER, LOW	COST PER ADDITIONAL RIDER, HIGH	PRIORITY
43	Minuteman Cswy	\$214.08	1	12		28	\$7.68	\$17.93	22
41	Port St. John	\$340.63	1	16		37	\$9.25	\$21.59	23
42	Viera	\$789.72	1	36		84	\$9.43	\$22.01	24
Cost	Per Operational Hour (S	Source: 2005 Natl .1	ransit Databa	ase, SCAT):	\$68.3	36			
2010	Operational Hour Cost	(4% inflation)			\$79.9	97			
2012	Operational Hour Cost	(4% inflation)			\$86.5	50			
Note:	High/low range of ridershi	ip calculated on +/-	40% standard c	deviation in th	ne mod	lel			
* Curr	ent Route 26 operated as	Routes 19 and 26 in .	2006.						



Table 23 - Additional Operating Cost Per Rider (Sorted by Route)

	2010							2012						
ROUTE	OPERATIONAL COST OF IMPROVEMENTS	NEW BUSES REQUIRED	NEW RIDERSHIP, LOW WITH IMPROVEMENTS	NEW RIDERSHIP, HIGH WITH IMPROVEMENTS	COST PER NEW RIDER, LOW	COST PER NEW RIDER, HIGH	PRIORITY	OPERATIONAL COST OF IMPROVEMENTS	NEW BUSES REQUIRED	NEW RIDERSHIP, LOW WITH IMPROVEMENTS	NEW RIDERSHIP, HIGH WITH IMPROVEMENTS	COST PER NEW RIDER, LOW	COST PER NEW RIDER, HIGH	PRIORITY
Existing	Routes													
1	\$1,015.64	1	201	469	\$2.17	\$5.06	2	\$1,098.51	1	207	482	\$2.28	\$5.32	7
2	\$0.00	-	1	3	\$0.00	\$0.00	-	\$432.49	1	35	82	\$5.25	\$12.26	19
3	\$0.00	-	1	2	\$0.00	\$0.00	-	\$345.99	1	36	83	\$4.15	\$9.68	14
4	\$799.72	1	192	448	\$1.78	\$4.16	1	\$864.97	1	206	480	\$1.80	\$4.21	4
6	\$799.72	1	132	309	\$2.59	\$6.04	6	\$864.97	1	177	414	\$2.09	\$4.88	6
9	\$0.00	-	2	6	\$0.00	\$0.00	-	\$864.97	1	349	813	\$1.06	\$2.48	1
21	\$639.77	1	113	264	\$2.42	\$5.65	5	\$691.98	1	125	291	\$2.38	\$5.54	8
22	\$0.00	-	4	8	\$0.00	\$0.00	-	\$345.99	1	48	112	\$3.10	\$7.23	11
23	\$639.77	1	124	290	\$2.21	\$5.16	3	\$691.98	1	173	404	\$1.71	\$4.00	2
24	\$0.00	-	5	11	\$0.00	\$0.00	-	\$691.98	1	57	133	\$5.22	\$12.18	18
26 *	\$1,226.23	1	83	195	\$6.29	\$14.69	4	\$1,326.29	1	107	249	\$5.32	\$12.42	20
27	\$479.83	1	88	205	\$2.34	\$5.47	4	\$518.98	1	115	268	\$1.94	\$4.52	5
28	\$639.77	1	105	244	\$2.62	\$6.12	7	\$691.98	1	111	258	\$2.68	\$6.26	9
34	\$0.00	-	1	3	\$0.00	\$0.00	-	\$691.98	0	95	222	\$3.12	\$7.28	12
Near-Te	erm (2010) Impro	vements							1					•
40	\$1,368.79	2	187	435	\$3.14	\$7.34	8	\$1,480.49	2	207	483	\$3.07	\$7.16	10
41	\$314.93	1	12	29	\$11.03	\$25.73	11	\$340.63	1	16	37	\$9.25	\$21.59	23
42	\$730.14	1	35	82	\$8.88	\$20.73	10	\$789.72	1	36	84	\$9.43	\$22.01	24
43	\$197.93	1	11	26	\$7.73	\$18.03	9	\$214.08	1	12	28	\$7.68	\$17.93	22
Mid-Te	rm (2012) Improv	ements												
44		-						\$2,089.43	2	198	463	\$4.52	\$10.54	16
45		-						\$1,024.73	1	251	585	\$1.75	\$4.09	3
46		-						\$996.19	1	92	214	\$4.65	\$10.84	17
47		-						\$1,187.43	2	123	288	\$4.12	\$9.62	13
48		-						\$1,387.24	2	132	307	\$4.51	\$10.53	15
52		-						\$885.82	1	71	165	\$5.36	\$12.51	21
Cost Per Operational Hour (Source: 2005 Natl .Transit Database, SCAT): \$68.36					Note: Ridership is presented as a range of +/- 40 percent of the T-Best model results									
2010 Operational Hour Cost (4% inflation) \$79.			\$79.97	* Current Route 26 operated as Routes 19 and 26 in 2006.										
2012 O	2012 Operational Hour Cost (4% inflation)				\$86.50			•						



As mentioned earlier, T-Best did not prove to be well suited to model Routes 49 (St. Johns Heritage Parkway), 50 (Orlando-Canaveral Express), or Route 51 (Inter-county Connector with Indian River County). Route 49 should be re-analyzed as the corridor develops to determine if it is developing at a density and mix of uses that would be supportive of transit service; or more proactively, the County could specifically plan for this corridor to be developed with transit-oriented land uses at transit-supportive densities. For Routes 50 and 51, rider surveys and more detailed technical modeling will be required to accurately project the potential ridership. Detailed feasibility studies should be conducted for both of these routes to determine their likelihood of success.



FIVE-YEAR BUDGET

The five-year budget shown in Table 24 has been developed based on the available funding sources identified in the previous section. It represents a trend-line budget estimation for the five year planning horizon. As SCAT pursues additional grants to implement the action items outlined in the five-year implementation plan and the 10-year vision, additional costs and revenues will be added annual to these budget estimations. At the time this plan was developed SCTA had no active Joint Participation Agreements established with the Florida Department of Transportation.



Table 24 - SCAT Five-Year Budget

	FY2008	FY2009	FY2010	FY2011	FY2012
		EXPENSES			
Labor and Fringe	\$4,911,042	\$5,058,373	\$5,210,124	\$5,366,428	\$5,527,421
Operations and Maintenance	\$5,616,055	\$5,784,537	\$5,958,073	\$6,136,815	\$6,320,919
Capital Expenses	\$5,592,160	\$10,229,925	\$8,432,723	\$8,685,705	\$8,946,276
Total Expenses	\$16,119,257	\$21,072,835	\$19,600,920	\$20,188,948	\$20,794,616
		REVENUES			
Farebox	\$392,000	\$403,760	\$415,873	\$428,349	\$441,199
Special Fares	\$334,738	\$344,780	\$355,124	\$365,777	\$376,751
Medicaid Waiver	\$260,000	\$267,800	\$275,834	\$284,109	\$292,632
Local Operating Assistance	\$1,875,501	\$1,875,501	\$1,875,501	\$1,875,501	\$1,875,501
FDOT Block Grant	\$1,213,212	\$1,220,455	\$1,269,029	\$1,307,100	\$1,346,313
FDOT Commuter Assistance Grant	\$176,125	\$75,000	\$75,000	\$75,000	\$75,000
FDOT A1A	\$350,000	\$350,000	\$393,586	\$130,000	\$0
FDOT 520 Corridor	\$350,000	\$350,000	\$393,586	\$130,000	\$0
FDOT Weekend bus service	\$91,000	\$91,000	\$0	\$0	\$0
FDOT Extended evening bus service	\$169,274	\$169,274	\$0	\$0	\$0
FDOT New South Terminal Building	\$0	\$500,000	\$500,000	\$0	\$0
TDC-TD Trip and equipment grant	\$1,080,540	\$1,112,956	\$1,146,345	\$1,180,735	\$1,216,157
TDC-TD Planning Grant	\$28,332	\$29,182	\$30,057	\$30,959	\$31,888
Sub-total Operating:	\$6,320,722	\$6,789,708	\$6,729,935	\$5,807,530	\$5,655,441
Federal Operating Assistance	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
Federal Capital Assistance	\$9,561,834	\$9,848,689	\$10,144,150	\$10,448,474	\$10,761,928
Federal (new south terminal building)	\$0	\$4,000,000	\$2,000,000	\$2,000,000	\$2,000,000
Federal Job Access reverse		\$162,591	\$162,591	\$162,591	\$162,591
Federal New Freedom Program	\$0	\$104,491	\$104,491	\$104,491	\$104,491
Sub-total Capital:	\$9,761,834	\$14,315,771	\$12,611,232	\$12,915,556	\$13,229,010
Total Revenues	\$16,082,556	\$21,105,479	\$19,341,166	\$18,723,087	\$18,884,452



POTENTIAL FINANCIAL RESOURCES FOR SCAT'S TRANSIT DEVELOPMENT PROGRAM¹

FDOT FUNDING

The Florida Department of Transportation has established several funding sources for public transit. Those available for Space Coast Area Transit are listed. Some funding sources are for special projects or other earmarked items, while some are for general operations or capital improvements.

General Funding Programs

Public Transit Block Grant Program

This program was set up to provide supplemental funding to public transit agencies. The program may cover capital or operating costs. In the case of capital projects, FDOT and/or the Florida Commission for the Transportation Disadvantaged will only fund 50 percent of the portion of projects not covered by federal funding. For operating costs, the program will cover up to 50 percent of eligible costs or, if it is less, a matching amount to that of the total revenue "excluding farebox, charter, and advertising revenue, and federal funds." Maintaining an updated Transit Development Plan is a requirement to receive public transit block grant funding. SCAT currently draws these funds.

SCAT projects eligible: Regular transit operations

Commuter Assistance Program

The program provides funding for public/private partnerships that create alternatives to single occupancy commuting such as carpools, vanpools, and shared ride programs that comprise Transportation Demand Management (TDM) strategies. Each FDOT District Office is allocated

Program information from <u>FDOT Resource Guide for Transit and Transit-Related Programs</u>, October 2005. Information for federal funding found in <u>From the Margins to the Mainstream: A Guide to Transportation Opportunities in Your Community</u>, <u>Surface Transportation Policy Project</u>, January 2006. All additional funding information compiled by Renaissance Planning Group.



funds based on a statewide assessment of commuter need. All requests must first be in the annual District Work Program. Complete funding for regional commuter assistance programs is offered through the program. SCAT currently draws these funds.

SCAT projects eligible: Carpool/vanpool, park and ride

Regional Transit Programs

Intermodal Development Program

For those communities that are pursuing major capital expenditures for fixed-guideway systems, other intermodal or multimodal terminals or infrastructure improving access to major ports or airports, this program offers funding to municipalities, counties, transit providers and other organizations.

SCAT projects eligible: Intermodal and multimodal centers, rail, BRT, and intercity bus service.

Transportation Regional Incentive Program (TRIP)

TRIP will fund regional transportation improvements. These projects must be consistent with the Strategic Intermodal System (SIS) and must address a concurrency management problem in the region. The recipient is also required to work with other governments and organizations in its region to identify regional transportation priorities eligible for TRIP funding. Projects identified are eligible to receive up to 50 percent of the project costs with local governments responsible for the remaining portion. TRIP is aimed at production-ready capital projects, but transit service is eligible. It is likely that transit projects would only be applicable in designated constrained corridors.

SCAT projects eligible: The project must be in the Regional LRTP, local government CIP and MPO TIP.

County Incentive Grant Program

This program was created to improve the Florida State Highway System; however, transit projects that relieve congestion on these facilities are eligible. Funds are available to counties of up to 50 percent of the project. Each District Office determines the funding priorities within its area. Eligible projects may include local facilities parallel to state roads.

SCAT projects eligible: See District 5 current priorities.

Earmark Funding Programs

Transit Corridor Program

The primary purpose of the program is to fund transit service expansion projects in corridors where the service will improve the roadway level of service. The project must be part of a TDP, CMS, or other special plan created by the transit agency. Priority is given to existing projects that need to meet specified goals and objectives. Additional funds are allocated based on an urbanized population formula. Any projects require a 50 percent local match. SCAT currently draws these funds.



SCAT projects eligible: New routes, extended hours for routes, projects along US 1 or I-95, others.

Public Transit Service Development Program

Also created for special projects, this funding source is targeted for those that make use of new technologies, techniques in operations, routes, frequency of service enhancements or marketing. These projects must have a specified duration (three years or less) after which they will need to be funded by the local government. Special projects must be submitted to FDOT Central Office by each District Office by July of each year. SCAT currently draws these funds.

SCAT projects eligible: Innovative projects, new routes or programs to enhance service.

State Park and Ride Lot Program

State funds are available for establishing, promoting, and monitoring of park and ride lots. Lots must follow state specifications and have an estimated average occupancy of at least 60 percent. Funding may be provided up to 50 percent of costs with a local match.

SCAT projects eligible: Park and ride lots only

New Starts Transit Program

The funding source was created as a way to utilize state funds to get Federal Transit Administration Funding for New Starts transit projects. These must be either bus rapid transit or fixed guideway projects such as rail. According to FDOT, eligible projects must have "political support, be included in local plans, and have a dedicated funding commitment." The state will match up to 50 percent of the project. However, those that do not have federal funding can only receive 12.5 percent of the total costs of right-of-way, acquisition, construction, and final design. No other state funds may be used in lieu of the local match.

SCAT projects eligible: None currently, however, most BRT or light rail projects would be eligible.

Other State Funding Options

- Local match options: additional opportunities exist to help governments and agencies to provide the local match needed for many funding sources
- Toll Revenue Credit Program: Contact the State Public Transportation and Modal Administrator each year for the availability of these credits.
- Rural Economic Development Initiative Waiver: communities that meet the requirements for being rural and in economic distress may be eligible for funding match waivers.
- In-kind and other soft match options.

FEDERAL FUNDING

A variety of federal funding sources are available for transit. Some of these sources are available for any transportation improvement projects, while others are specific to transit. Sixty percent of federal funding for transportation is extremely flexible in nature. The best option for transit



agencies is to use federal funding for those priority projects least likely to receive full state or local funding. Nearly all federal funding requires some sort of local match, however.

General Funding Sources

Metropolitan Planning Program

Funding is available to Metropolitan Planning Organizations for funding transit programs. The amount available depends on population and revenue miles traveled among other factors.

SCAT projects eligible: Any SCAT project determined eligible by the Brevard MPO.

Urbanized Area Formula Program

Funds are available for capital improvements and operating transit within urbanized areas. Those areas with more than 200,000 people have funds apportioned, while those with less population receive funding at the governor's discretion. SCAT currently draws these funds.

SCAT projects eligible: The amount is a determined lump sum.

Growing States Program

The US Congress has designated additional transportation funding to those states with significantly larger populations in 2015. Florida will receive a total of \$46.1 million through 2009 from this act. These funds are dispersed through the Federal Transit Administration and amounts are already determined by formula.

SCAT projects eligible: Funding could be used for any project depending on coordination with FDOT and approval by the MPO.

Flexible Funding Programs

SAFETEA-LU continues the option originally provided in ISTEA of allowing a local area to use certain federal transportation surface funds for transit related projects. The funds that are flexible for this purpose include FHWA Surface Transportation Program (STP), Congestion Mitigation and Air Quality Improvement Program (CMAQ), and FTA Urban Formula Funds. (SCAT is not eligible for any funding through the CMAQ) The decision to transfer these funds is made by the MPO.

SCAT projects eligible: Any SCAT project could be eligible depending on approval by the MPO

Infrastructure Bank Program

The federal government makes available to FDOT to create financial programs that leverage federal dollars for enhancing credit for transit agencies. Specifics may be obtained from FDOT Central Office.

SCAT projects eligible: Any capital transit program approved by FDOT

Transportation Infrastructure Finance and Innovation Act (TIFIA)

TIFIA gives assistance to states or localities for national or regionally significant transit and rail projects. The act provides federal credit for critical projects to make them financially feasible.



SCAT projects eligible: projects regional in scope, such as regional rail, BRT or commuter assistance.

Earmarked Funding Sources

Bus and Bus Related Facilities Program

This funding program was established under the FTA's Transit Capital Investment Program to assist public bodies and agencies in improving their bus fleets and equipment. Funding is available for capital expenses on a discretionary basis. Eligible costs include bus fleet expansion, improvement, maintenance, or improvement of bus or bus-related facilities. Additional funding has also been set aside for intermodal facilities. Intercity bus service facilities that are housed in intermodal facilities are eligible for this funding. SCAT has received these funds in the past.

SCAT projects eligible: Any SCAT bus capital project that improves the system, and intermodal facilities.

New Starts Program

The FTA has established this discretionary funding program to assist communities in building and operating fixed-guideway systems with costs of over \$75 million. These may include light or heavy rail, commuter rail, bus rapid transit, and the like. All projects must go through an extensive application and evaluation process, competing with other projects around the nation. This requires at least a 50 percent state or local match and a dedicated funding source.

SCAT projects eligible: Any fixed-quideway system (none currently identified).

Small Starts Program

Similar to the New Starts Program, Small Starts funds fixed-guideway systems, with lower costs than rail, such as bus rapid transit. The program only funds those with costs under \$75 million. Projects also must go through an extensive application and evaluation process, competing for \$200 million in annual funding nationwide.

SCAT projects eligible: Any fixed-guideway system (none currently identified).

New Freedom Program

The program was designed in SAFETEA-LU to assist communities to provide additional services to those with disabilities. These services must be above and beyond those mandated by ADA. Sixty percent of the funding has been allocated to urbanized areas over 200,000 people. FDOT is administering this program.

SCAT projects eligible Increased service target to those with disabilities.

Job Access and Reverse Commute Program (JARC)

JARC was created by Congress to assist low income workers and welfare recipients as well as to develop transportation improvements from urban centers to jobs in suburban communities. The State has \$8.4 million in available funding. Projects eligible for funding include capital, operating,



and promotion expenditures. The program has recently been changed to make this funding source formula-based.

SCAT projects eligible: Projects aimed at low income populations or those with a reverse commute.

Alternative Transportation in Parks and Public Lands Program

Funding for this program comes from the Department of the Interior. The program aims to improve transportation options within parks and public lands to reduce pollution, improve visitor experience, improve parking, increase economic development for neighboring communities, and preserve natural resources.

SCAT projects eligible: Projects that target parks and recreation areas such as Merritt Island Wildlife Refuge.

Clean Fuels Grant Program

The grant aims to increase reliance on cleaner fuels and creating markets for alternative fuels.

SCAT projects eligible: May be used to purchase transit vehicles that use an alternative fuel.

Federal Lands Highways (FLH)

Funding may be used for both road and transit facilities projects on federal lands such as national parks, wildlife refuges, monuments, preserves, and the like.

SCAT projects eligible: Projects that target parks and recreation areas such as Merritt Island Wildlife Refuge.

Ferry Boats and Terminals

The program may be used for any ferry boat or facility construction program; however, limited funding is available each year from the federal government (approximately \$2 million annually nationwide).

SCAT projects eligible: Any ferry boat program or improvement.

Transit Technical Assistance Opportunities

Quite a number of technical assistance and training programs are available either through FDOT or FTA. Some of these are listed below.

Florida Bus Operator Trainer Program (FBOT)

The program trains bus operator trainers in the State of Florida through the Center for Urban Transportation Research (CUTR). All trainers are then certified as Florida Bus Operator Trainers.

Bus Transit Safety and Technical Assistance Program

FDOT has established minimum safety standards for transit operators. The Department provides technical assistance for meeting these standards as well as training.

Fixed Guideway Transportation Safety and Security Program



Safety training for fixed guideway systems is provided by FDOT to comply with national requirements. Technical assistance is also provided at the request of the transit agency.

Substance Abuse Management Oversight and Technical Assistance Program (SAM)

CUTR assists all transit agencies that receive FTA funding with federal drug and alcohol testing compliance.

Florida Maintenance Training and Technical Assistance Program

This program was created by CUTR to assist maintenance technicians. The program offers courses and training modules to transit agencies in Florida.

Florida Transit Training and Technical Assistance Program

CUTR offers a wide range of courses and workshops through this program. These are tailored for transit planners, operation staff, managers, marketing staff, and administrators.

Florida Vehicle Procurement Program (FVPP)

Transit agencies can use the program to procure all additional transit vehicles. This program helps insure that vehicles purchased are up to required standards and at a reduced cost.

Florida Commuter Choice Certificate Program

The educational program is offered through the University of South Florida in conjunction with CUTR. It covers five key areas: Commuter Choice Tools, Planning, Applied Marketing, Program Management, and Public Policy.

Florida Commuter Choice Clearinghouse

The Clearinghouse is operated by CUTR and provides technical assistance to transportation demand management professionals.

Rural Transit Assistance Program (RTAP)

The program provides training and technical assistance to rural transit agencies and providers in the State of Florida.

FTA Grant Management Technical Assistance and Training Programs

In order to better understand the processes that are required to receive FTA grants, FTA offers training courses, online training sessions, and workshops (see www.fta.dot.gov).

LOCAL SOURCES

Charter County Transit Surtax

As Brevard is a charter county, it has the ability to pass up to a one cent sales tax for transit and transportation planning, capital improvements, operations or maintenance subject to voter referendum. In Florida, only Duval and Miami-Dade Counties have passed this tax.

Rental Car Surcharge



Rental car surcharge of \$2 per rental. Similar to the transit surtax, this could be passed by counties and pledged to RTAs through interlocal agreements or it could be passed by RTAs in the member jurisdictions and legislatively mandated to the RTAs. While it was vetoed in 2006 by the Governor, it had strong legislative support and appears to be well-positioned to pass next session. Dedication to a regional plan was instrumental to FDOT support.

Local Option Gas Tax

The local option gas tax remains a primary means of funding transportation projects within Florida counties. Increase of the tax requires a referendum. Allocation of the tax is up to the discretion of the Board of County Commissioners.

Local Government Infrastructure Surtax

This tax requires approval by the county governing body as well as a local referendum. It may be broadly used: "Generally, the proceeds must be expended to finance, plan, and construct infrastructure; to acquire land for public recreation or conservation or protection of natural resources; and to finance the closure of local government-owned solid waste landfills."

Toll Revenue Bonding

By raising tolls on certain roads within the County, excess revenue may be used to fund transit improvements within those corridors. These toll revenues may then be bonded to fund larger-scale transit improvements.



VISION AND IMPLEMENTATION PLAN

This section establishes the actions SCAT will need to undertake to implement its ten-year plan (Near and Mid-Term), leading to the eventual realization of the 10-year vision. Action items are prioritized by time frame for implementation. Most of the recommendations fall into the near-term time frames, and the Transit Development Plan will be updated annually to account for changing conditions in Brevard County and to track the progress in accomplishing these recommendations. Within each time frame the related actions are grouped as appropriate but are not necessarily listed in priority order.

Listed first are those actions that will be ongoing. The second set of action items are for implementation in the immediate future, meaning the next one to three years. The third set identifies those for the next four to five years. Finally, longer term action items have been listed. In their entirety the four sections of actions represent the 10-year vision for transit in Brevard County.

ONGOING ACTIONS

- Continue the employee input process. SCAT's employees gain important information about the operation of the service through input from the public as well as their own insights. This valuable resource should be tapped whenever possible. SCAT makes a tremendous effort to involve vehicle operators in procurement and service decisions through in-service meetings. SCAT should continue efforts at using employee-based teams to determine solutions to problems and increase SCAT's productivity. (Not Goal Specific)
- Improve coordination with cities in the county. As a county agency, SCAT should continue to keep the cities informed with regard to transit issues, and to enlist their cooperation in matters such as for installing signage, shelters and benches, and perhaps securing funding for the transit system general operations. (Goal 1)
- Emphasize the connection between transit and land use. SCAT should work with the MPO, the County, and municipalities to improve the connection between transit and land use. Through being involved directly in the review process, or providing the necessary information to these entities, SCAT should assert its role in technical reviews for state roadway plans, DRIs, and other development related plans the growth management process, particularly for impacts on constrained or congested corridors. (Goal 1)
- Continue to ensure that the fixed-route service is in compliance with the Americans with
 Disabilities Act (ADA). Besides providing lift-equipped fixed-route service, SCAT is
 required to provide other amenities for passengers with disabilities, such as announcing
 major stops and transfer points along routes, and making schedule information available
 in alternative formats. In addition, SCAT must continue to replace all vehicles with fully
 accessible buses. (Goal 4)



Continue to support the vanpool program. The vanpool program housed at Space
Coast Area Transit is viewed as a model for other Florida vanpool programs to emulate.
Locally, the program continues to provide a vital service to an important niche market
that would otherwise go unserved. Support for efforts in this area should be an integral
part of the Space Coast Area Transit service delivery program. (Goal 2 & 6)

ACTIONS TO BE INITIATED OVER THE NEXT ONE TO THREE YEARS

- Increase education about the half-price bus pass program. SCAT currently offers half-price (\$17.00) fixed-route monthly bus passes to seniors, people with disabilities, and youth in Brevard County. It appears that few governmental and social service agencies in Brevard County are taking advantage of this program. The existence of the half-price bus pass program needs to be advertised to the general public and agencies. (Goal 1 & 6)
- Reduce the number of paratransit cancellations and no-shows. Paratransit trip cancellations and no-shows hamper system efficiency and overall productivity by preventing full utilization of vehicle capacities. Currently, cancellations and no-shows at SCAT account for a significant percent of total paratransit trips. Although no statewide cancellation standard currently exists, nationally accepted industry norms suggest that a combined cancellation and no-show rate should not exceed 10 percent of total trips on average. SCAT should consider establishing a stricter cancellation and no-show policy with a goal of achieving a combined no-show and cancellation rate that does not exceed 10 percent of total trips. (Goal 3)
- Continue coordination with major employers to provide transportation for work trips. SCAT's services are very important to the economic health of Brevard County industries, directly impacting the overall economy. SCAT has been successful in working with companies to provide transportation for employees. SCAT should continue to pursue additional coordination efforts with potential employers throughout the County. The transit agency should also strengthen its connections with the two human resource agencies in Brevard County in order to assess service expansions for employees and to potentially pursue direct partnerships with area employers. SCAT should also periodically examine the public transportation needs of working people in the community through community outreach. (Goal 2 & 6)
- Pursue coordination efforts with Lynx to eliminate any overlapping services. Lynx is the transit provider for Orange, Seminole, and Osceola counties to the direct west of the SCAT service area. Lynx currently operates some services such as vanpools in Brevard County. An analysis of these services as well as the identification of any complementary services between the two agencies should be pursued. (Goal 1)
- Work with the Local Coordinating Board to review, discuss, and begin to establish a TD
 Eligibility Process. Currently, SCAT uses self-certification to determine eligibility for TD nonsponsored trips. The Florida Commission for the Transportation Disadvantaged has set
 forth criteria for local programs to use to determine eligibility for trips subsidized by TD



Trust Fund monies (i.e., general purpose trips). The eligibility elements set forth by the FCTD include criteria that must be implemented by all local TD programs, as well as elements that may be customized by each local program to reflect the unique situation in that locality. Although the eligibility criteria set forth by the FCTD will be phased into the Florida TD program, SCAT should begin working with the LCB to establish eligibility criteria that reflect the unique situation in Brevard County. In addition, SCAT and the LCB should consider a coordinated one-step process for all eligibility certifications including TD non-sponsored trips and ADA services. Administrative costs could be lowered if all certifications were performed together. (Goal 4)

- Continue to expand the park-and-ride lot program. The County's first park-and-ride lot opened at Eau Gallie and I-95 in July 1996. SCAT should develop a list of potential locations for additional park-and-ride lots and work towards developing these sites for the park-and-ride program. This lot is currently used by participants in the vanpool program. Ultimately, such lots could be a central point for TD shuttles operating to and from the passenger's home, and passengers who are able could transfer to fixed-route service. In addition, SCAT should investigate public/private partnerships (joint ventures) for park-and-ride lots and "mini" park-and-ride lots that may include supportive retail development. (Goal 6)
- Complete installation of bus stop signs. SCAT should continue to coordinate with appropriate state, county, and municipal governments in placing signs at bus stops. (Goal 6)
- Establish superstop/transfer centers at major locations where bus routes intersect. SCAT is currently considering establishment of the first of these centers at the Government Center. Once established, these centers should be the first to receive new signage; information displays on SCAT routes should also be provided at these locations. (Goal 2)
- Install bus shelters and benches at appropriate locations. The busiest bus stops should have bus shelters to protect waiting passengers from inclement weather, unless there is a sheltered area nearby (e.g., shopping centers) where passengers can see an approaching bus. SCAT should work to secure additional funding from municipalities and local business to sponsor these amenities. (Goal 2)
- Review the route numbering scheme used for bus routes. There may be a more logical scheme which makes it easier for potential riders to identify where a bus goes (e.g., routes starting with a certain number serve a particular part of the county, numbers ending in zero connect different parts of the county). (Goal 6)
- Fully implement the strategies and goals of the 2005 Marketing Plan developed for SCAT. Over the last few years, SCAT has won awards for its public outreach and marketing programs. These should be maintained to target first time riders through the effective use of various types of media. SCAT should also internally measure the effectiveness of these strategies. (Goal 6)



- Create a formal or informal board of community leaders that recognize the importance
 of transit in association with the economy of Brevard County. This group should include
 business leaders, human resource directors, elected officials, agency heads as well as
 community activists. (Goal 6)
- Pursue permanent funding options for extended hours and weekend service. Funding for
 these service extensions is scheduled to expire within three years. Analysis of the rate of
 success on these routes should be undertaken to pursue the needed funding. Based on
 ridership results and surveys, service should be modified as warranted. (Goal 5)
- Consider increasing frequency of service on selected routes as funds are made available. More frequent service in areas where demand is heaviest will enable transit-dependent passengers to travel more easily and will attract choice riders. Increasing the frequency to every 15 or 30 minutes would greatly improve the transit level of service on these routes, making them more competitive with other forms of transportation. This improvement in frequency should be tested on a couple routes on busy or congested corridors. Increased frequency has been requested by citizens participating in the public involvement portion of this plan. (Goal 2)
- Consider implementing a travel training program to assist seniors with the utilization of the fixed-route bus system. The ADA requirement that transit agencies provide complementary paratransit service for ADA-eligible individuals who cannot access the fixed-route system could have a significant impact on the demand for all paratransit services in Brevard County. However, many individuals can use the fixed-route system if they are assisted with learning to do so. SCAT should consider implementing a travel training program that focuses on how to access SCAT buses, use and understand route maps and route schedules, and how to transfer from one bus to another. This type of training will make it possible to move individuals from the more costly paratransit service to the less expensive fixed-route bus service. Travel training will also help seniors feel more comfortable while using the fixed-route bus system. (Goal 6)
- Consider the expansion of the agency-sponsored vanpool program in Brevard County so that more agencies are able to take advantage of this alternative to door-to-door transportation. The vanpool program that SCAT coordinates has proven to be an extremely successful transportation alternative that should be expanded to include more agency programs. The vanpool trips are much less expensive than traditional paratransit trips. In addition, vanpool services may also be a viable option for providing work transportation to former welfare recipients. (Goal 2)
- Continue to expand the role of the Commuter Assistance Program (CAP). The current program has been well marketed and run. The rise of telecommuting, other flexible work arrangements, a guaranteed ride home program, and preferential parking at the worksite could be further pursued. Additional funding may be pursued from federal or state sources. Most funding increases require a 50 percent local match. (Goal 2)
- Consider the expansion of Volunteers in Motion (VIM) program through partnerships with other Brevard County volunteer programs. The VIM program currently helps to meet the



specialized needs of transportation disadvantaged persons in Brevard County. In addition to providing transportation, this program addresses the specific needs of frail elderly persons. The VIM program uses volunteers in all aspects of the program including as dispatchers, schedulers, drivers, and escorts. The VIM program provides another low-cost alternative to traditional door-to-door paratransit service and expansion of this program would result in additional transportation needs being met in Brevard County. In addition to providing additional transportation resources, the expansion of the VIM program could result in freeing up capacity in the non-sponsored paratransit programs. As with many volunteer-based programs, the VIM program must have volunteers to provide additional trips. Partnerships with these groups could result in a larger volunteer-base for the VIM program. SCAT should actively pursue partnerships with these groups to enable VIM to provide additional mobility to residents in remote areas of Brevard County. (Goal 2)

- Investigate the ability of SCAT to provide additional standing orders on paratransit services to medical services for individuals with regular, recurring medical needs, such as dialysis. Standing orders for paratransit service to medical services allow individuals with regular, recurring medical needs, such as dialysis, to receive these trips without having to call to request a ride for each individual trip. Currently, SCAT cannot accept any additional medical standing orders due to the maintenance of trip priorities set by the TD Local Coordinating Board. Additional standing orders are needed to serve transportation disadvantaged individuals receiving radiation therapy. SCAT should work to increase capacity on the paratransit system to allow for additional standing orders. However, standing orders should not fill the system to capacity. Several of the recommendations already presented, if implemented, could result in additional capacity on the paratransit system. (Goal 4)
- Continue coordination with the Brevard MPO and local governments to consider transit opportunities in conjunction with corridor or area transportation studies and follow-up on transit-related recommendations resulting from corridor or area transportation studies. SCAT has worked with the Brevard MPO in of a number of corridors over the last decade. Additional studies are planned in the MPO work program. SCAT should also consider, where feasible, implementation of transit-related recommendations resulting from these studies. (Goal 1)
- Consider incorporating Intelligent Transportation Systems Technologies (ITS). SCAT should consider equipping all of its buses and paratransit vehicles with automatic vehicle location (AVL) units to facilitate dispatching and scheduling, and to improve accountability. If feasible, SCAT should acquire the hardware and software needed to link the AVL system to its paratransit scheduling program (PASS) to take advantage of potential productivity improvements gained by linking data collection with scheduling and dispatching. Further, the use of electronic fare collection and documentation would facilitate agency billing and reduce cash handling. In addition, SCAT, in coordination with local municipalities, should examine the feasibility of coordinating



- traffic control systems and private gated-entryways with public transportation. Brevard County is currently laying the groundwork for an ITS which may present increased opportunities for transit improvements over the next few years. (Goal 3)
- Develop an incentive program for developers to promote public transportation and ridesharing. SCAT should work with the County and municipalities to develop incentives for developers to provide transit-friendly infrastructure. (Goal 1)

ACTIONS TO BE INITIATED OVER THE NEXT FOUR TO FIVE YEARS

- Examine the potential coordination of taxis in Brevard County with SCAT's services (e.g., taxi trips to bus stops, using taxis to expand door-to-door paratransit). Private taxi services in Brevard County could be a valuable resource for meeting unmet demand for persons who cannot travel to the fixed-route bus stops or who cannot travel on the fixed-route buses. (Goal 2)
- Examine the feasibility of implementing an intracounty express bus service. SCAT should examine the feasibility of establishing an express bus service for trips within the county. Express buses could operate in conjunction with park-and-ride lots to serve longer-distance trips within the county. (Goal 2)
- Examine the expansion of park-and-ride services to coordinate with other public transportation services (e.g., transit routes, express routes, and Lynx). The park-and-ride lots in Brevard County are currently used by participants in SCAT's vanpool program. These lots should be coordinated with the local transit routes as well. In addition, in the event of the establishment of express routes in Brevard County, park-and ride lots should be used. (Goal 2)
- Examine the feasibility of coordinating express bus service with neighboring counties (e.g., Orange and Volusia) for work trips. Citizens have suggested that express service should be coordinated with other counties' public transportation networks in order to transport workers. SCAT should examine the potential demand and feasibility of this service. (Goal 1 & 2)

ACTIONS TO BE IMPLEMENTED IN THE LONG TERM (NEXT 10 YEARS)

- Initiate express bus service along identified corridors including Grissom Parkway, SR 528, Minton/Wickham, A1A, US 192, Palm Bay Road, Malabar Road, and Babcock Street as shown in the 10-year Vision Map. These routes are as follows:
- 40 Minton/Wickham Corridor: This near-term, radial route runs north and south along Minton and Wickham Roads. The terminus on the north end is route 4. The terminus on the south end is Malabar Road. The proposed span of service is from 7:30am-7:30pm, with 60 minute headways.
- 44 Grissom Parkway: This mid-term, radial route runs north and south, terminating at Route 406 in the north, and Route 520 in the south. The proposed span of service is from 7:30pm, with 60 minute headways.



- 45 US 192: This mid-term, radial route runs east and west along US Highway 192, starting at Route A1A in the east, crossing Melbourne Causeway and extending approximately two miles beyond I-95. The western terminus would be at the location of the proposed St. Johns Heritage Parkway (new route 49). The proposed span of service is from 7:30am-7:30pm, with 60 minute headways.
- 46 Palm Bay Road: This mid-term, radial route runs east and west along Palm Bay Road, starting at US Highway 1 (Dixie Highway) in the east and terminating at its intersection with the proposed St. Johns Heritage Parkway in the west. The proposed span of service is from 7:30am-7:30pm, with 60 minute headways.
- 47- Malabar Road: This mid-term, radial route runs east and west along Malabar Road, starting at US Highway 1 (Dixie Highway) in the east and terminating at its intersection with the proposed St. Johns Heritage Parkway in the west. The proposed span of service is from 7:30am-7:30pm, with 60 minute headways.
- 48 Babcock Road: This mid-term, radial route runs north and south along Babcock Road, terminating in the north at US Highway 192 and in the south at Micco Road. The proposed span of service is from 7:30am-7:30pm, with 60 minute headways.
- 49 St. Johns Heritage Parkway: This mid-term, radial route runs north and south approximately two to three miles west of the current developed areas of Palm Bay and Melbourne. Its northern terminus is along Eau Gallie Boulevard West, head west approximately two miles then bear south and then returns back east at the alignment of Appaloosa Street and terminates at Babcock Street. The proposed span of service is from 7:30am-7:30pm, with 60 minute headways. (Goal 2)
- Establish connections to Volusia, Orange, and Indian River Counties in collaboration with Votran, Lynx, and Indian River Transit. (Goal 2)
- Create increased frequencies and extended hours along primary corridors such as Fisk Blvd and Stadium Parking, A1A, Babcock, Street, Palm Bay Road, US 1, SR 520, and others as identified either through the vision map, or through corridor analysis. The Brevard MPO in its upcoming LRTP will likely address examination of these potential multimodal corridors. (Goal 2)
- Research and develop circulator bus systems in areas of need, for example St. John,
 Viera, Palm Bay, and along the beach communities served by A1A. (Goal 2)These routes are as follows:
- 41 Port St. John Circulator: This near-term, circulator route runs along US Highway 1 on the east, Fay Boulevard on the south, Grissom Parkway on the west and Kings Highway on the north. The proposed span of service is from 7:30am-7:30pm, with 60 minute headways.
- 42 Viera: This near-term, circulator route runs along US Highway 1 on the east, Route 509 (Wickham Rd. North) on the south, Stadium Parkway on the west, and 502 (Barnes Rd.) on the North. The proposed span of service is from 7:30am-7:30pm, with 60 minute headways.



- 43 Minuteman Causeway: This near-term, radial route runs east and west along Minuteman Causeway between A1A on the east and Fairway Drive (Cocoa Beach Country Club) on the west. The proposed span of service is from 7:30am-7:30pm, with 60 minute headway. The proposed span of service is from 7:30am-7:30pm, with 60 minute headways.
- 52 Palm Bay Circulator: This mid-term, circulator route runs along San Filippo Drive in the east and south, De Groodt Road/Jupiter Boulevard in the west and Malabar Road in the north. The proposed span of service is from 7:30am-7:30pm, with 60 minute headways.
- Pursue alternative funding options identified in the financial resources section of this plan in order to fund the improvements outlined above. Additional funding will need to be pursued either from local sources, FDOT, or the federal government in order to implement these additional services. (Goal 2)



SUMMARY

Space Coast Area Transit has continued to provide an excellent value to a long and narrow county with multiple population centers. Using limited resources, SCAT consistently ranks higher than peer transit agencies in provision of service. In addition, SCAT has set pushed to set industry standards with respect to safety and marketing of existing services, winning multiple awards in the process. Through its partnerships with area employers, SCAT has also succeeded in building the largest vanpool program in the State of Florida. The 10-year vision as outlined in this TDP is to maintain the effective and productive system SCAT has built. Additionally, as the County's population grows and funding is secured, SCAT will gradually expand its services to meet the needs of the citizens of Brevard County.



ATTACHMENT A

SCAT's FTA approved Public Participation Plan



ATTACHMENT B

Transit Development Plan FDOT Comments: Response

1) The Transit Development Plan's list of projects is divided into two groups: Near-Term (1 to 5 year projects) and Mid-Term (6 to 10 years). The SCAT TDP does include a long term planning horizon both in terms of considering a wide range of transit improvements for Brevard County and in terms of long term implementation of these improvements. The breadth of the improvements considered by the analysis using T-BEST modeling software necessitates a 10 year planning horizon, with some improvements having been found to be viable in the five year planning horizon and others being pushed to the 10 year planning horizon. 10 year planning horizon projects are identified on Page 77 and further discussed with references to tables 21, 22 and 23.

ACTION: Page #2 will be updated to reflect the separation of projects (Near and Mid-Term).

2) The 2nd sentence in the first paragraph of page 1 identifies this requirement.

ACTION: This information will be further identified as an additional bullet on the same page.

3a) SCAT has an FTA approved Public Involvement Plan (PIP).

ACTION: It will be included as an attachment and will be noted in the 4th bullet of page 2 under the "New Transit Development Rule" section. As well as identify in the public participation section starting on Page 60.

3b) A series of stakeholder interviews was conducted, an online survey for the business community was conducted, the plan was presented at least two, perhaps up to four LCB meetings, and public input from the MPO's LRTP process was considered during the development of the plan. Page 60 outlines the public involvement activities. It was interpreted that the new rule "authorized" the ability to set time limits, but not required. In addition, the MPO, Department and regional workforce were notified of the TDP and related presentations.

ACTION: Please advise if a notice should be published, or if the TDP should include no time limits were established. In addition, the MPO, Department and regional workforce notification will be further described in the TDP between pages 60 and 65.

4) Comment understood. The alternatives discussed on page 73 are entirely subject to funding realities. SCAT has made a concerted effort to identify a detailed set of alternative transit improvements, however, implementation specifics will have to be determined as additional funding becomes available. In the interim, SCAT is committed to maintaining its existing award-winning transit services.

ACTION: The TDP will be revised to link specific tasks with alternatives that are discussed on pages 73 & 74.



5) Tables 16 through 23 show all of the identified information required for 14-73.001(3)(d). Analysis of the alternatives is reviewed according to the aspect of review (specific improvement, ridership impact and cost). Please advise if the information should be presented and grouped by alternative and not the type of analysis. All dedicated revenue sources are identified in the plan. There are no additional sources of revenue expected.

ACTION: No action.

6a) The implementation plan is in essence the policies to meet the goals and objectives set in the plan. Previous TDPs as well as those of other transit agencies in the state are set up this way. There is no new requirement in the legislation requiring this structure. Renaissance feels that the Broad Public Transportation Policy Alternatives do support the Goals and Objectives stated. The alternative "Focus on Key Corridors" identifies how SCAT should consider focusing its resources on specific corridors as to improve service in a focused area vs. lower services spread throughout the community.

ACTION: Update TDP to match each alternative to the related goal and objective.

6b) The TDP does include information regarding the performance measurement of all services on page 55. Please advise if this does not meet the TDP requirements.

ACTION: no action

6c) The revenues on Page 97 are anticipated revenues per SCAT. No new revenues have been identified.

ACTION: no action

7) The Florida Transportation Plan was reviewed and will be included as a document reviewed and impacts considered. The TDP is also consistent with the ECFRPC's regional policy plan.

ACTION: information will be provided to identify the Florida Transportation Plan was reviewed and the TDP is consistent with the regional planning council's goals and objectives.

8) Clarity will be made to identify the Major and Minor update cycles. Previous recommendations will be identified, as well as indicators of new projects. The five year budget is the information used during the budgeting process for SCAT. It is revised annually. A ten year financial plan is not formally developed at the local level.

ACTION: Identified information will be included

9) The public involvement process did include opportunities for review and comment.

ACTION: This information will be included in the Public Involvement section

10) A discussion will be included in the financial section to identify any existing JPAs and future requests.

ACTION: Identified information will be included