VOTRAN
TRANSIT DEVELOPMENT PLAN
FY 2012-2021 MAJOR UPDATE

FINAL REPORT

Prepared for:

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SECTION 1: INTRODUCTION

The Transit Development Plan (TDP) will serve as the vision for transit in Volusia County over the next 10 years. Investment in the provision of public transportation services and transit infrastructure is vital to the implementation of the vision that was created through the activities completed as part of this important planning effort. In addition, federal, state, and local investments in public transportation services can result in a significant return in community benefits. The Florida Public Transportation Association (FPTA) has published several fact sheets to document some of the economic and environmental benefits resulting from transit investments, including:

- For every $1 invested in public transportation, $4 is generated in economic returns.
- Businesses located next to public transit ways have a more reliable employee base and better access to labor pools.
- Every $10 million in capital investment in public transportation yields $30 million in increased business sales, and every $10 million in operating investment in public transportation yields $32 million in increased business sales.
- Public transportation in the U.S. reduces carbon dioxide emissions by 37 million metric tons annually.
- Using public transit rather than an automobile for a 20-mile round trip commute will decrease an individual's annual carbon dioxide emissions by 4,800 pounds per year.

BACKGROUND

The State of Florida Public Transit Block Grant Program was enacted by the Florida Legislature to provide a stable source of State funding for public transportation. The Block Grant Program requires public transit service providers to develop and adopt a 10-year TDP. Major updates must be submitted to the Florida Department of Transportation (FDOT) by September 1 of the year they are due. The Votran FY 2012-2021 TDP is a major update, which is required every five years. Each interim year, public transit providers report TDP achievements to FDOT through the submittal of annual progress reports. Votran uses Block Grant funds received from FDOT for operating expenses.

The TDP is the source for determining the types of projects and their priority in the public transportation component of the Transportation Improvement Plan (TIP). The plan also must be consistent with the approved Local Government Comprehensive Plans and the Transportation Planning Organization's (TPO) Long Range Transportation Plan (LRTP). Volusia County's Public Transit System (Votran) is responsible for ensuring completion of the TDP.

The TDP will meet the requirements for a major TDP update in accordance with Rule Chapter 14-73, Florida Administrative Code (FAC).

OVERVIEW OF TRANSIT DEVELOPMENT (TDP) REQUIREMENTS

The purpose of this study is to undertake a major update of the Votran TDP, as required by State law. The update will result in a 10-year plan addressing transit and mobility needs, cost and revenue projections, and community transit goals, objectives, and policies.

Florida Statutes (F.S.) mandate the preparation of the TDP for all transit systems that receive Block Grants from the State of Florida. Relevant sections in the F.S. are provided below.

> *(1) There is created a public transit block grant program which shall be administered by the department. Eligible providers must establish public transportation development plans consistent, to the maximum extent feasible, with approved local government comprehensive plans of the units of local government in which the provider is located.*
>
> ***Section 341.052***

> *(2) Where there is an approved local government comprehensive plan in the political subdivision or political subdivisions in which the public transportation system is located, each public transit provider shall establish public transportation development plans consistent with approved local government comprehensive plans.*
>
> ***Section 341.071***

On February 20, 2007, FDOT promulgated Rule 14-73.001, which substantially changed the TDP requirements. The changes include:

- Extended the planning horizon from 5 years to 10 years.
- Required updates every 5 years instead of 3 years.
- Made the annual report, public involvement, and demand estimation requirements more explicit.
- Required plan approval.
- Established a deadline for said approval to qualify for funding.

Key requirements in the TDP Rule, as outlined in the draft report "Guidance for Producing a Transit Development Plan," prepared by the University of South Florida (USF) Center for Urban Transportation Research (CUTR) with Tindale-Oliver & Associates and Dan Boyle & Associates in 2008 for FDOT are summarized below.

Key TDP Requirements

Who: TDPs are required from all entities who apply for State Transit Grant Funds (Section 341.052, F.S.).

When: TDPs must be developed, adopted, and submitted on or before September 1st of the fiscal year for which funding is being sought, unless FDOT approval is provided for a time extension. A major update is required every five years and an annual update/progress report is required for all other years.

Where: Plans must be submitted to and on file with the appropriate FDOT District Office.

Time Period: Plans must cover the fiscal year for which funds are being sought and the subsequent nine years. Plan submittal is a prerequisite to fund receipt.

TDP Contents: Compliance will be evaluated by FDOT District staff based on major elements outlined below.

- Specification of an approved public participation process and documentation of its use.
- A situational appraisal that includes at least:
    - Effects of land use, state and local transportation plans, and other governmental actions and policies, socio-economic trends, organizational issues, and technology.
    - Estimation of the community's demand for transit service using an approved technique.
    - Performance evaluation of service provided in the community.
- The agency's vision, mission, and goals.
- Consideration of alternative courses of action.
- Ten-year implementation plan including:
    - Ten-year program of strategies and policies.
    - Maps indicating areas to be served and types and levels of service.
    - Monitoring program to track performance.
    - Ten-year financial plan noting sources and expenditures of funds.
- Relationship to other plans and policies.

TDP Annual Update Contents: Annual updates must be in the form of a progress report on the 10-year implementation program and must include:

- Past year's accomplishments compared to the original implementation program.
- Analysis of any discrepancies between the plan and its implementation for the past year and steps that will be taken to attain the original goals and objectives.
- Any revision to the implementation program for the coming year.
- Revised implementation program for the tenth year of the updated plan.
- A revised financial plan.

- A revised list of projects or services needed to meet the goals and objectives.

FDOT Review: Within 60 days of receipt, FDOT will notify the applicant regarding compliance and eligibility status.

TDP Checklist:

Table 1-1 is a list of TDP requirements from Rule 14-73.001. The table also indicates whether or not the item was accomplished in this TDP

REPORT ORGANIZATION

This Technical Memorandum, which is compiled to support the Votran 10-year TDP Major Update, is composed of ten major sections, including this Introduction. Each section is briefly described below.

Section 2 provides a review of the study area population, demographics, travel behavior, commuting patterns, demographic activities, land use, and roadway considerations for Volusia County.

Section 3 provides an overview of the existing fixed-route transit services in Volusia County, including summaries and descriptions of operating characteristics, capital equipment, and other operational features such as Americans with Disabilities (ADA) complementary paratransit service. This section also presents the performance assessment conducted for fixed-route services.

Section 4 summarizes the public involvement activities that were undertaken as part of the TDP development process. Public involvement activities discussed and/or summarized in this section include the on-board transit survey distributed to Votran riders in March/April 2011 and other activities that were completed as part of the TDP

Section 5 presents the review of relevant plans, studies, and policies. The purpose of this effort is to provide information to support an understanding of transit planning issues in Volusia County and support the performance of a situation appraisal, which is an assessment of the operating environment for the transit system.

Section 6 presents the situation appraisal for the TDP. The requirements for a major update of a TDP include the need for a situation appraisal of the environment in which the transit agency operates. The purpose of this appraisal is to help develop an understanding of the Votran operating environment in the context of specific elements, including regional issues, socioeconomics, travel behavior, existing and future land use, service and operational trends, and revenue and policy environment.

Section 7 presents a review and evaluation of transit demand and mobility needs regarding transit services in Volusia County. The evaluation was completed by reviewing ridership forecasting and a transit market assessment.

Section 8 provides the transit mission for Volusia County and the goals, objectives, and initiatives to accomplish the transit mission. The mission, goals, objectives, and initiatives were developed based on Votran's current mission, goals, and objectives and discussions with the TDP Review Committee, input through the public involvement process, and the results of the technical evaluations.

Section 9 summarizes the potential future transit services developed as part of the 10-year planning horizon of this TDP Major Update using public, Review Committee, and Votran staff input and the results of various demand analyses.

Section 10 presents the 10-year TDP for Volusia County, developed based on coordination with Votran staff, public involvement, transit demand analysis, and other recent assessment and evaluation studies conducted for the Volusia County area.

Table 1-1
TDP Checklist

Public Involvement Process	
☑	Public Involvement Plan (PIP)
☑	PIP approved by FDOT
☑	TDP includes description of public involvement process
☑	Provide notification to FDOT
☑	Provide notification to Regional Workforce Board
☑	Provide notification to TPO
Situational Appraisal	
☑	Land use
☑	State and local Transportation Plans
☑	Other governmental actions and policies
☑	Socioeconomic trends
☑	Organizational issues
☑	Technology
☑	10-year annual projections of transit ridership using approved model
☑	Do land uses and urban design patterns support/hinder transit service provision?
☑	Calculate farebox recovery
Mission and Goals	
☑	Provider's vision
☑	Provider's mission
☑	Provider's goals
☑	Provider's objectives
Alternative Courses of Action	
☑	Development and evaluation of alternative strategies and actions
☑	Benefits and costs of each alternative
☑	Examination of financial alternatives
Implementation Program	
☑	10-year implementation program
☑	Maps indicating areas to be served
☑	Maps indicating types and levels of service
☑	Monitoring program to track performance measures
☑	10-year financial plan listing operating and capital expenses
☑	Capital acquisition or construction schedule
☑	Anticipated revenues by source
Relationship to Other Plans	
☑	TDP consistent with Florida Transportation Plan
☑	TDP consistent with Local Government Comprehensive Plan
☑	TDP consistent with TPO Long-Range Transportation Plan
☑	TDP consistent with Regional Transportation Goals and Objectives
Submission	
☐	Adopted by County Council
☐	Submitted by September 1, 2011 or at a later date with FDOT approval

SECTION 2: STUDY AREA CONDITIONS AND DEMOGRAPHIC CHARACTERISTICS

This section summarizes the existing conditions and demographic characteristics within Votran's service area. A service area description, demographic characteristics, land use information, commuting patterns data, and roadway conditions are included. Information and data presented reflect the most recent data available. This review provides the background information needed to help understand Votran's operating environment and the characteristics of the service area population.

SERVICE AREA DESCRIPTION

Volusia County is located on central Florida's east coast and is bordered on the north by Flagler County and Putnam County, on the south by Seminole County, Orange County, and Brevard County, on the east by the Atlantic Ocean, and on the west by Marion and Lake Counties. The county has approximately 1,101 square miles of land area. Map 2-1 presents a physical representation of the county and its municipal areas.

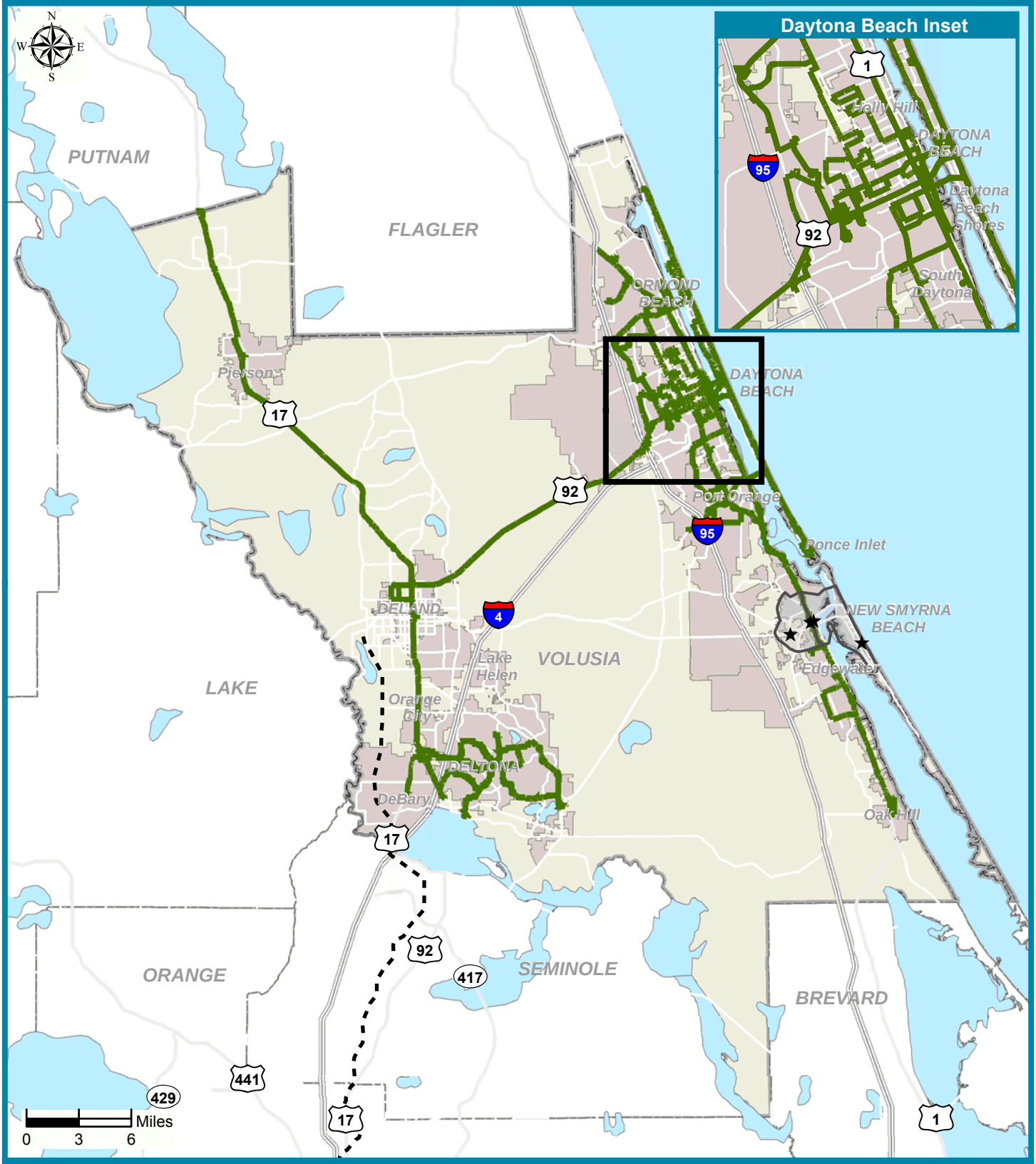
Volusia County's location provides a vast number of recreational opportunities to its residents and visitors. In addition, the county is home to several annual events that bring crowds of visitors, including the Daytona 500, Bike Week, Spring Break, and Biketoberfest. The county's attractions present an opportunity to link transit with economic development and recreational opportunities.

To better understand the study area conditions and demographic characteristics of Volusia County, a review of pertinent information was conducted as part of the TDP development process. The sources for this information include the U.S. Census Bureau, University of Florida Bureau of Economic and Business Research (BEBR), Volusia TPO 2035 Long Range Transportation Plan, local government comprehensive plans, Central Florida Geographic Information Systems, and ESRI data.

POPULATION PROFILE

Volusia County has a population of approximately 494,593 based on the 2010 Census. As shown in Table 2-1, the estimated 2009 BEBR population of Volusia County was 496,456. The 2010 Census information compared to the 2009 BEBR estimates show a slight decrease in the county's population. However, the 2010 Census compared to the 2000 Census shows an increase in population of approximately 12 percent. Volusia County is ranked as the 11th highest county for population size in Florida.

Votran Transit Development Plan



Map 2-1: Study Area and Existing Bus Routes

Legend

- ★ Flex Route Timepoints
- Votran Routes
- SunRail Alignment
- Flex Routes
- City Limits

Maps 2-2 through 2-7 illustrate the projected population, employment, and dwelling unit densities for 2011 and 2021 by Census block groups. Existing population densities are highest in the block groups located within Daytona Beach, Port Orange, Ponce Inlet, Edgewater, Deltona, DeBary, and DeLand. Based on the 2021 population projections, densities are expected to increase in South Daytona, Deltona, DeBary, and Orange City. Existing employment densities are highest in Daytona Beach, South Daytona, Port Orange, Edgewater, DeLand, and DeBary. The highest growth in employment density between 2012 and 2021 is expected to occur in the areas of Daytona Beach, Orange City, and DeBary. Existing dwelling unit densities are highest in the block groups located in Volusia County's east coast municipalities (Ormond Beach, Holly Hill, Daytona Beach, Daytona Beach Shores, Port Orange, Ponce Inlet, New Smyrna Beach, and Edgewater) as well as the municipalities located in the western portion of the county that border Interstate-4 (I-4), including DeBary, Deltona, Orange City, and DeLand. Over the 10-year planning period, dwelling unit densities are expected to increase in South Daytona and Oak Hill. Block groups located in north Volusia County at the Putnam County line and south of DeLand and DeBary are also expected to experience slight increases in dwelling units.

Table 2-1
Population Characteristics

Population Data	2000 Census		2009 BEBR		2010 Census		% Change (2000-2009/2010)	
	Volusia County	Florida	Volusia County	Florida	Volusia County	Florida	Volusia County	Florida
Persons	443,343	15,982,378	496,456	18,687,425	494,593	18,801,310	11.6%	17.6%
Households	184,723	6,337,929	215,513	6,987,647	208,236		12.7%	10.3%
Number of Workers	201,913	7,471,977	253,875	9,197,000			25.7%	23.1%
Land Area (square miles)	1,103	53,927	1,103	53,927	1,101	53,625	-0.2%	-0.6%
Water Area (square miles)	329	11,828						
Persons per Household	2.4	2.5	2.3	2.7	2.4		-1.0%	6.1%
Workers per Household	1.1	1.2	1.2	1.3			7.8%	11.6%
Persons per Sq. Mile of Land Area	401.9	296.4	450.1	346.5	449.2	350.6	11.8%	18.3%
Workers per Sq. Mile of Land Area	183.1	138.6	230.2	170.5			25.7%	23.1%

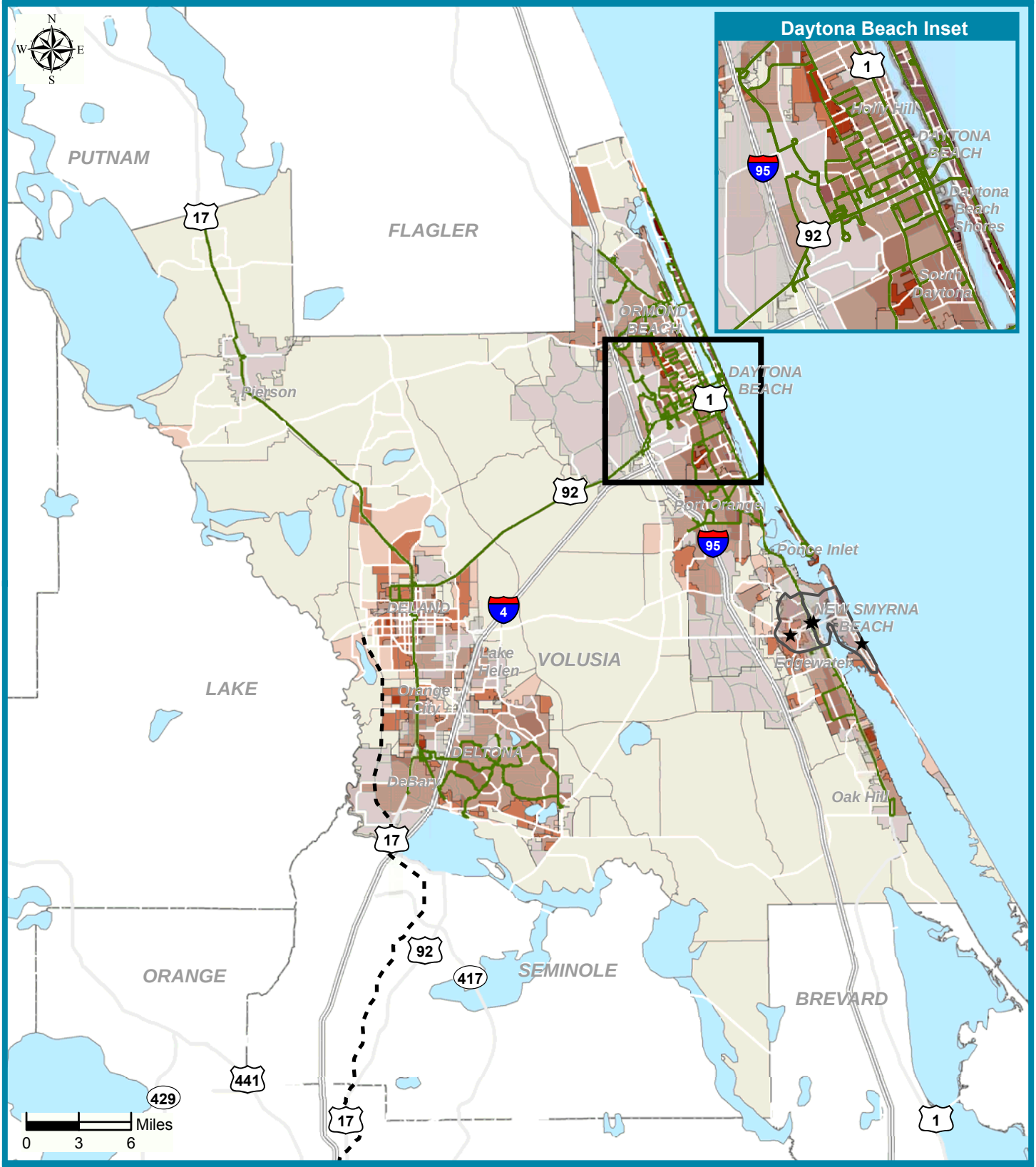
Source: 2000 Census, 2009 BEBR, and 2010 Census.
Note: Where 2010 Census data were not available, 2009 BEBR data were used for comparison purposes.

There are 16 municipalities in Volusia County, including Daytona Beach, Daytona Beach Shores, DeBary, DeLand, Deltona, Edgewater, Holly Hill, Lake Helen, New Smyrna Beach, Oak Hill, Orange City, Ormond Beach, Pierson, Ponce Inlet, Port Orange, and South Daytona. In addition, a portion of Flagler Beach is located within Volusia County.

Table 2-2 presents the population trends for the municipalities in Volusia County. The unincorporated area has the highest population, followed by Deltona, Daytona Beach, and Port Orange. The percent change from 2000 to 2010 indicates that Orange City had the highest percentage of population growth at nearly 61 percent. From 2000 to 2010, the population decreased by slightly more than 33 percent in the Town of Pierson. Over the past 10 years, the cities and towns located on the west side of Volusia

have experienced a combined total growth of 24 percent, compared to a combined growth of 6 percent on the east side. Due to the growth on the west side of Volusia County, the area may have a population of 200,000, tripping the threshold to be classified as an urbanized area. While some Census data has been released at the county level, Volusia County is awaiting release of the 2010 Census data related to urbanized area designations to determine the status of the west side of the county. It is anticipated that the full release of 2010 Census data covering all areas will be available in 2013. Designation as an urbanized area is important to Votran because it impacts the overall administration of the surface transportation program. In addition, urbanized areas cannot use Federal 5307 grant funding for operating, while rural areas can.

Votran Transit Development Plan



Map 2-2: Existing Population Density (2011)

Legend

Population Per Acre

- 0.00 - 0.50
- 0.51 - 1.00
- 1.01 - 5.00
- 5.01 - 10.00
- More Than 10.00

- ★ Flex Route Timepoints
- Votran Routes
- SunRail Alignment
- Flex Routes
- City Limits

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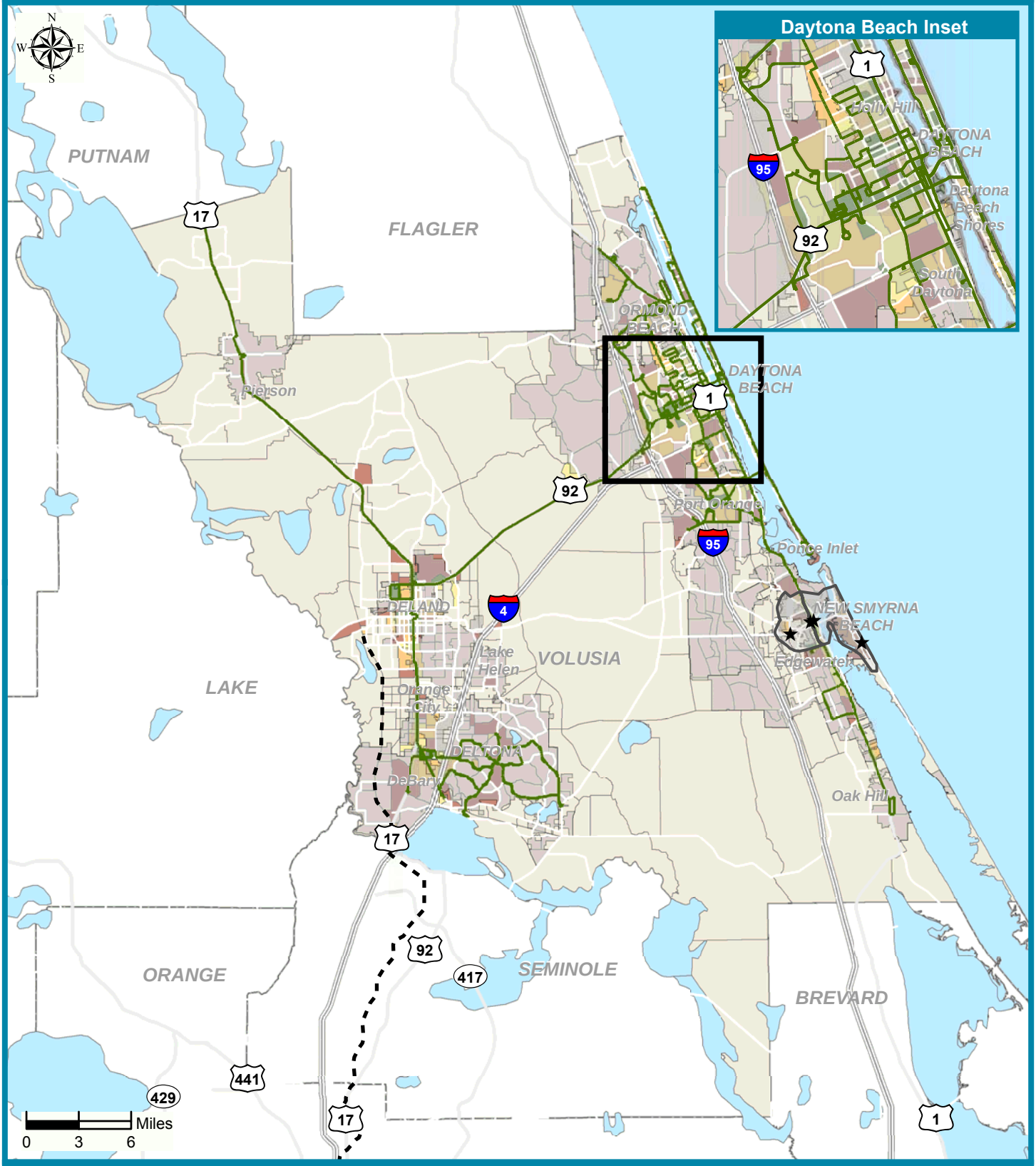
Tindale-Oliver & Associates, Inc. — Planning and Engineering

Source: Volusia County

Votran Transit Development Plan



Map 2-3: Existing Employment Density (2011)

Legend

Employees Per Acre

- 0.00 - 0.500
- 0.51 - 1.00
- 1.01 - 2.00
- 2.01 - 5.00
- More Than 5.00

- ★ Flex Route Timepoints
- Votran Routes
- SunRail Alignment
- Flex Routes
- City Limits

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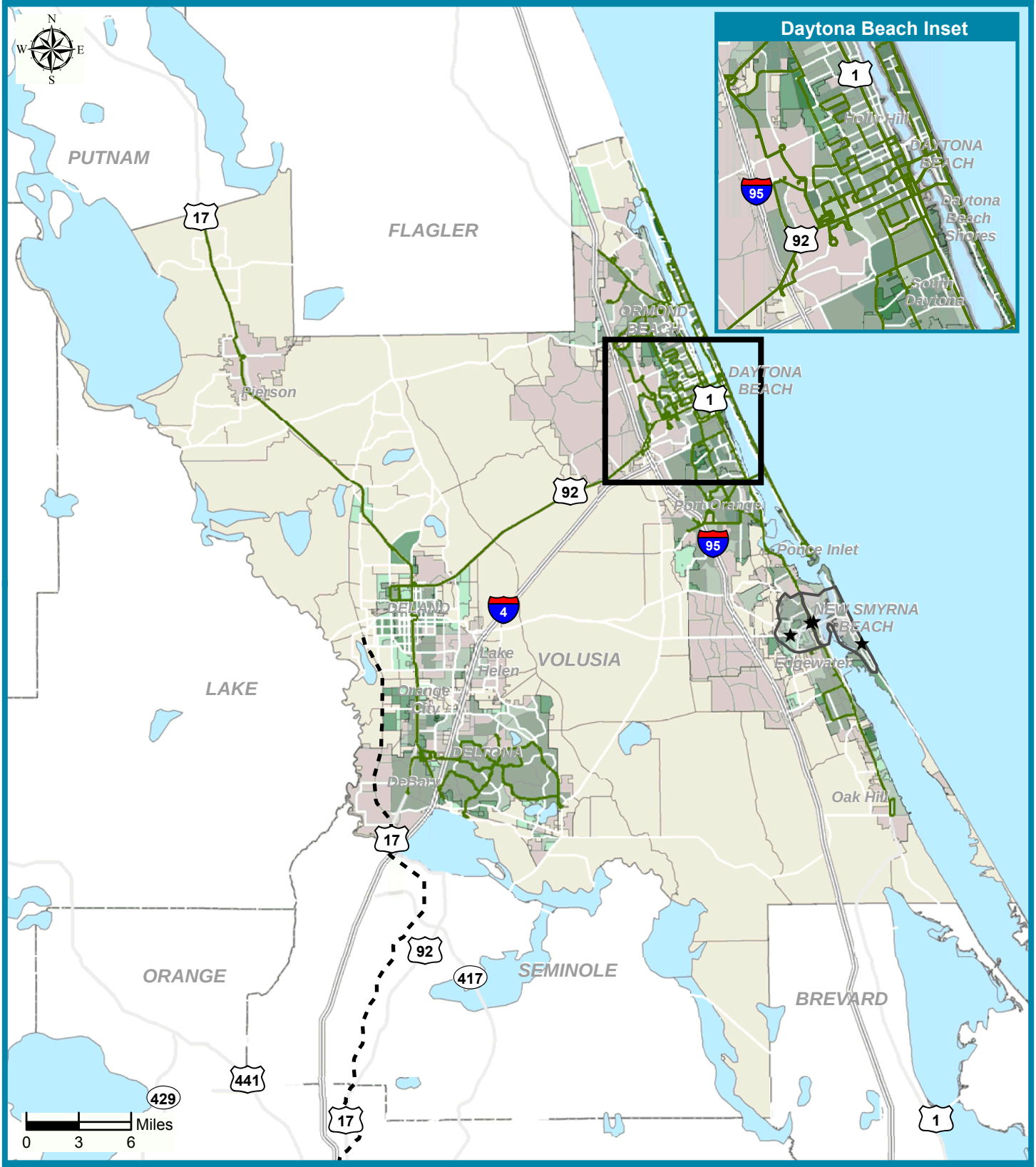
Source: Volusia County

Votran Transit Development Plan



Map 2-4: Existing Dwelling Unit Density (2011)

Legend

Dwelling Units Per Acre

- 0.00 - 0.50
- 0.51 - 1.00
- 1.01 - 3.00
- 3.01 - 5.00
- More Than 5.00

- ★ Flex Route Timepoints
- Votran Routes
- SunRail Alignment
- Flex Routes
- City Limits

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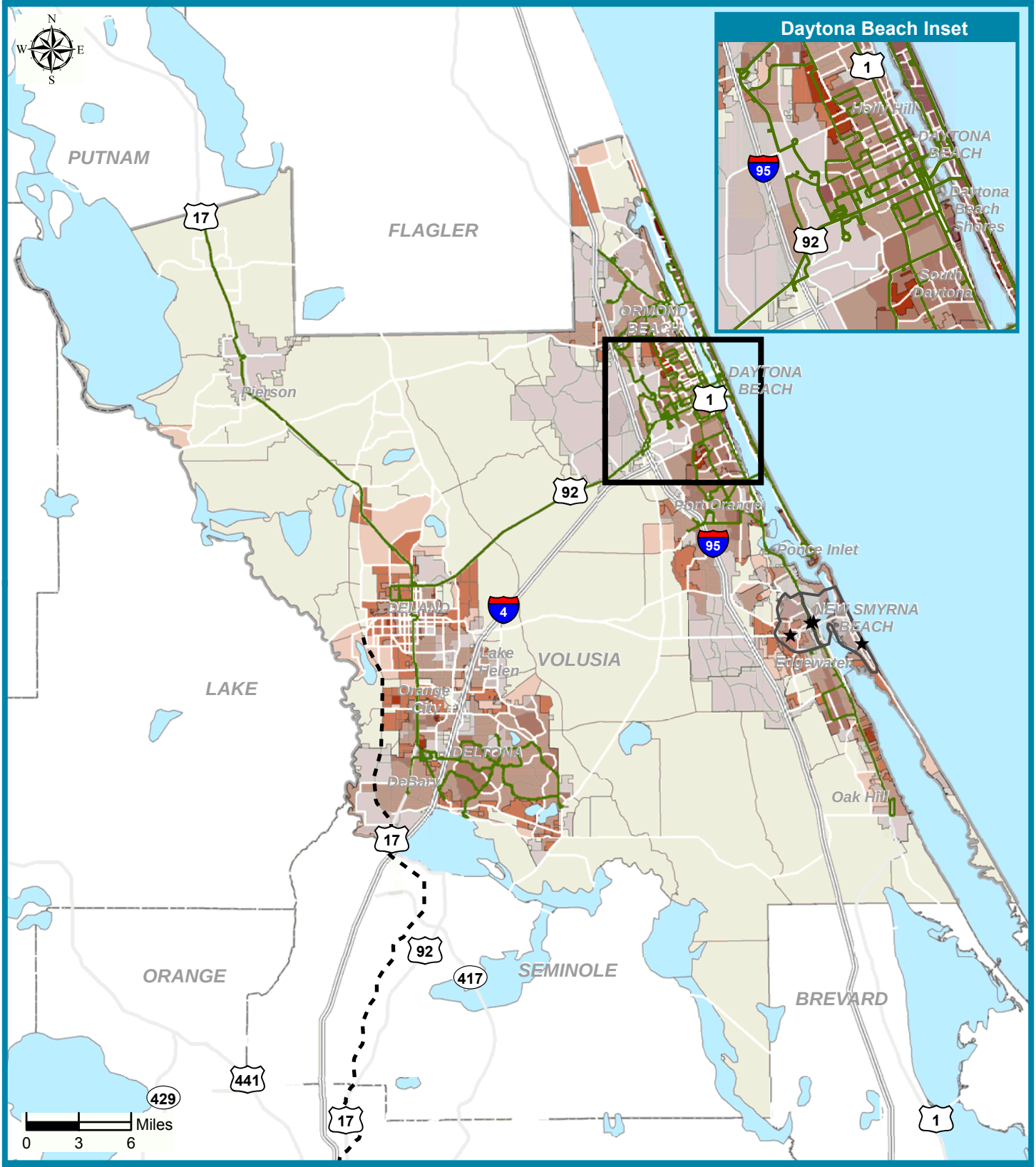
Tindale-Oliver & Associates, Inc. — Planning and Engineering

Source: Volusia County

Votran Transit Development Plan



Map 2-5: Future Population Density (2021)

Legend

Population Per Acre

- 0.00 - 0.50
- 0.51 - 1.00
- 1.01 - 5.00
- 5.01 - 10.00
- More Than 10.00

- ★ Flex Route Timepoints
- Votran Routes
- SunRail Alignment
- Flex Routes
- City Limits

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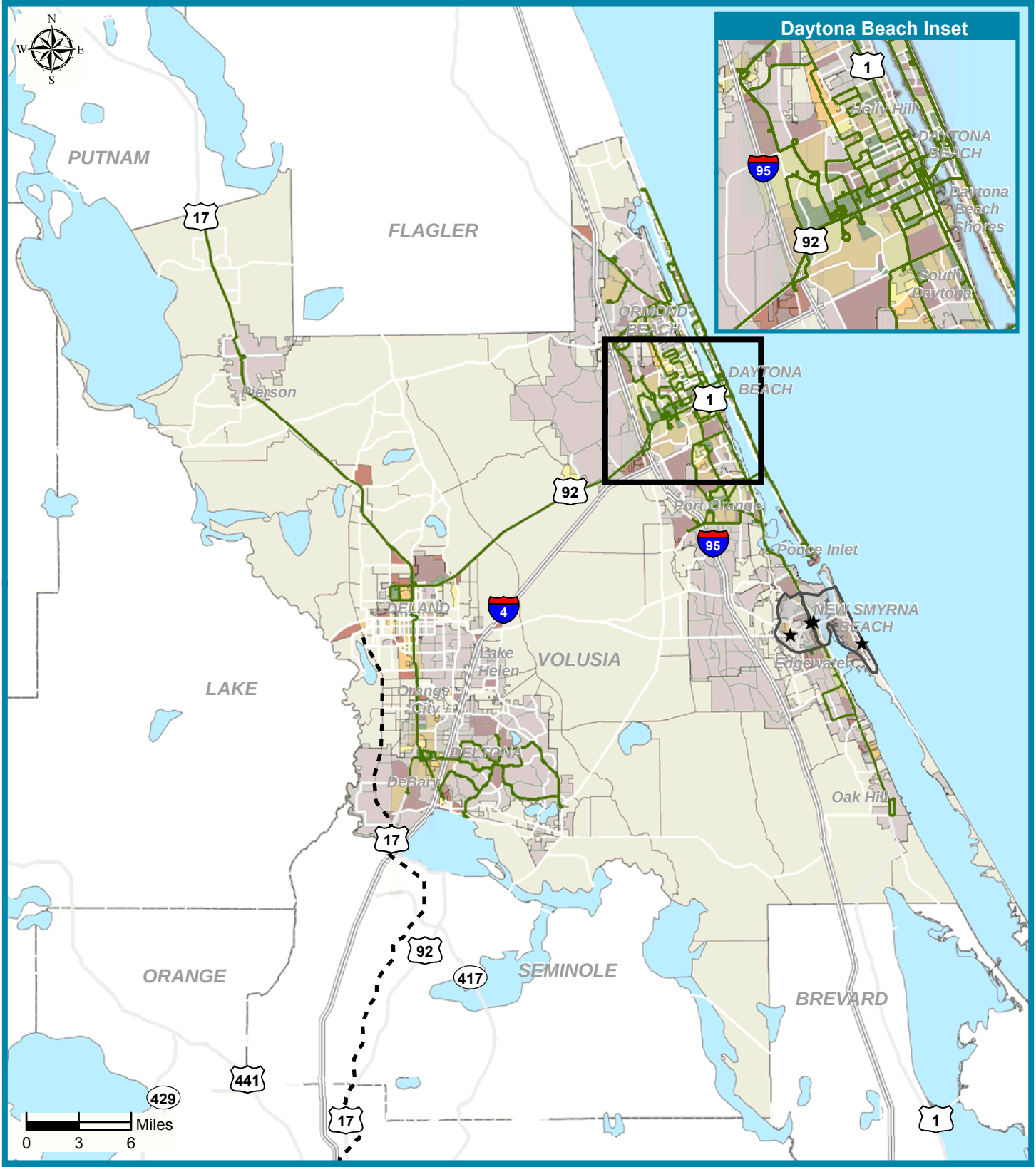
Source: Volusia County

Votran Transit Development Plan



Map 2-6: Future Employment Density (2021)

Legend

Employees Per Acre

- 0.00 - 0.50
- 0.51 - 1.00
- 1.01 - 2.00
- 2.01 - 5.00
- More Than 5.00

- ★ Flex Route Timepoints
- Votran Routes
- SunRail Alignment
- City Limits
- Flex Routes

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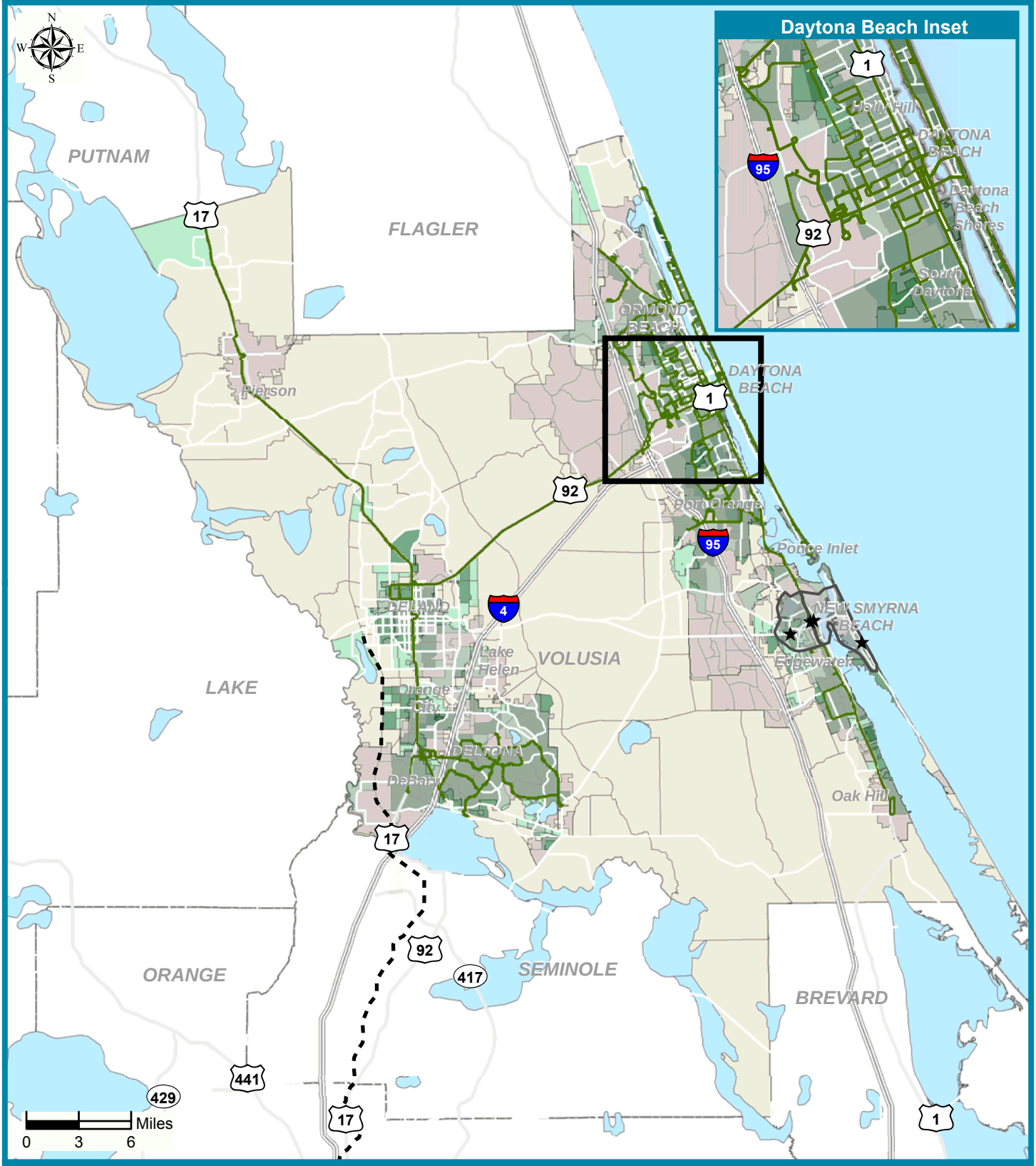
Source: Volusia County

Votran Transit Development Plan



Map 2-7: Future Dwelling Unit Density (2021)

Legend

Dwelling Units Per Acre

- 0.00 - 0.50
- 0.51 - 1.00
- 1.01 - 3.00
- 3.01 - 5.00
- More Than 5.00

- ★ Flex Route Timepoints
- Votran Routes
- SunRail Alignment
- Flex Routes
- City Limits

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Source: Volusia County

Table 2-2
Population for Cities, Towns, and Unincorporated Areas

County and City	April 1, 2010	April 1, 2000	Total Change	Percent Change
Volusia	494,593	443,343	51,250	11.6%
Daytona Beach	61,005	64,112	-3,107	-4.8%
Daytona Beach Shores	4,247	4,299	-52	-1.2%
DeBary	19,320	15,559	3,761	24.2%
DeLand	27,031	20,904	6,127	29.3%
Deltona	85,182	69,543	15,639	22.5%
Edgewater	20,750	18,668	2,082	11.2%
Flagler Beach (part)	60	76	-16	-21.1%
Holly Hill	11,659	12,119	-460	-3.8%
Lake Helen	2,624	2,743	-119	-4.3%
New Smyrna Beach	22,464	20,048	2,416	12.1%
Oak Hill	1,792	1,378	414	30.0%
Orange City	10,599	6,604	3,995	60.5%
Ormond Beach	38,137	36,301	1,836	5.1%
Pierson	1,736	2,596	-860	-33.1%
Ponce Inlet	3,032	2,513	519	20.7%
Port Orange	56,048	45,823	10,225	22.3%
South Daytona	12,252	13,177	-925	-7.0%
UNINCORPORATED	116,655	106,880	9,775	9.1%

Source: 2000 and 2010 Census

City of Daytona Beach

Daytona Beach is located near I-4 and I-95 and serves as part of the I-4 high-tech corridor with industries in aerospace, automotive, and manufacturing. In addition, many major corporations are located in Daytona Beach, including NASCAR and International Speedway Corporation; the Ladies Professional Golf Association; Gambro-Renal Products, Enrichment Industries, Crane Cam, Advanced Ordinance, X1R, Embry-Riddle Aeronautical University, Halifax Community Health Systems, Consolidated Tomoka Land Co., Ocean Design, Brown & Brown, Inc., and Piedmont Plastics, Inc. In addition to the economic opportunities in Daytona Beach, the city is also home to beaches that attract millions of tourists each year.

Daytona Beach Shores

Daytona Beach Shores is a 5.5-mile long area located between the Atlantic Ocean and the Halifax River. While the city's population is under 5,000, during major events the daily population increases to more than 30,000. The majority of the city's residents live in condominiums. Daytona Beach Shores also is characterized by its primarily service industry employment opportunities.

DeBary

DeBary is located between Orlando and Daytona Beach and serves as a bedroom community for commuters to Orange and Seminole counties. Some of the major corporations located in DeBary include Florida Power & Light, Progress Energy, Florida Public Utilities, Browning Press, Seminole Precast, Sunshine One-Call, Ranger Construction, and Conrad Yelvington Distributors. In addition to its central location and economic opportunities, the City also has a number of recreational opportunities that attract tourists. DeBary is situated along the St. Johns River and Lake Monroe, and is also home to Gemini Springs. It will be home to one of two SunRail stations in Volusia County. Located near Fort Florida, the SunRail station is anticipated to be operational in 2014, allowing for commuter rail travel to the Orlando area.

DeLand

DeLand was founded in 1876 by Henry DeLand while traveling the St. Johns River. He set out to build the "Athens of the South" along the St. Johns. DeLand continues to preserve its past and has three neighborhoods on the National Register of Historic Places. It is home to the historic Volusia County courthouse and serves as the County Seat. In addition, DeLand is home to Stetson University, Florida's first private university. Some of the corporations located within DeLand include Country Pure Foods, Aluma Shield, Sky Dive DeLand, DaVita Labs, Intellitec, FloMet, Tyco Kendall, etc. DeLand will be the northern terminus point for SunRail service during the planned second phase of the project and is expected to be operational in 2016.

Deltona

In 1962 the Mackle brothers purchased land in Deltona for the development of 35,143 lots. Deltona incorporated in 1995 and is now the largest city in Volusia County, with more than 85,000 residents. The typical Deltona residents are younger families with children who commute to employment in Orange and Seminole counties; however, there is also an elderly population dispersed throughout the city. Deltona's position along I-4 and S.R. 472 has the potential to spur commercial and industrial development within west Volusia County.

Edgewater

Edgewater is an intercoastal waterfront city located along the Indian River. Some of the popular attractors to Edgewater include its scenic river walk and waterside festivals. The city has a small-town charm and rural character. Some of the corporations located within Edgewater include Boston Whaler Commercial and Government Products, Coronado Paint, Tropical Blossom, Porta Products Corporation, Edgewater Powerboats, etc.

Holly Hill

Holly Hill is located along the Halifax River and offers an abundance of recreational opportunities. In addition to the recreational and cultural opportunities, Holly Hill became Florida's first certified city for business development resulting in its reputation for having a stable and successful business climate. Some of the businesses located in Holly Hill include Metra Electronics, Product Quest, Florida Health Care, Angelica Health Care, and Tropical Seas, Inc.

Lake Helen

Lake Helen is located near I-4 in southwest Volusia County. The city is known for its recreational opportunities and the surrounding fishing lakes near Lake Helen. Lake Helen is particularly well known for its bass fishing. Currently, Lake Helen is the only city within Volusia County not serviced by Votran.

New Smyrna Beach

New Smyrna Beach is located approximately 10 miles south of Daytona Beach and is home to a nationally-recognized cultural center for performing and visual arts. The small-town ambience of New Smyrna Beach includes a beach-side boutique shopping district, historic downtown and antique district, restaurants, parks, and an eight-mile stretch of Atlantic beach. Some of the corporate partners that call New Smyrna Beach home are Bert Fish Medical Center, General Electric Sealants, Adhesives, TimeMed Labeling Systems, and Brintech, Inc.

Oak Hill

Oak Hill is located along the Indian River just south of New Smyrna Beach and Edgewater. The city resulted from a timber expedition in which a good stand of live oaks were discovered along a shore dotted with shell mounds. Oak Hill is known as one of Volusia County's small quiet communities.

Orange City

Orange City is a historic city with 65 acres of parks and the 518-acre manatee refuge, Blue Spring State Park. It has experienced new development and emerged as a regional marketplace for shopping and dining. The city's affordable housing and low taxes has made it a desirable bedroom community of commuters to various high-tech industries in Orange and Seminole counties. A new corridor of viable commercial property and an I-4/SR 472 interchange activity center make it a prime location for corporate headquarters, regional offices, professional buildings, and high-tech industry. Some of the corporations located in Orange City include Florida Hospital-Fish Memorial, Wal-Mart Supercenter, Lowe's, Ripp Restraints, TG Lee Foods, and Target Stores. Orange City has also expressed desire to have a future SunRail stop within its jurisdiction.

Ormond Beach

Ormond Beach is a community with an active commercial and residential market. The community offers parks, award-winning schools, a state-of-the-art hospital system, and competitive housing costs. In addition, the Ormond Beach Business Park and Airpark is home to 29 companies that provide more than 2,000 jobs. Some of the corporations in Ormond Beach include Hawaiian Tropic-Tanning Research Laboratories, Florida Production Engineering, Homac Manufacturing Company, Command Medical Products, Florida Hospital-Ormond Memorial, and Microflex, Inc.

Pierson

The rural community of Pierson is located on U.S. 17 in northwest Volusia County. Pierson was first founded in the 1800s and was known as Piersonville. The town is best known for the ferns grown and exported worldwide for use in floral arrangements and other decorations. Many of today's residents of Pierson are direct descendants of the town's founders.

Ponce Inlet

Ponce Inlet is located on the south of Daytona Beach and Daytona Beach Shores on the southern tip of the peninsula. It is known for its 100-year old historic lighthouse and marinas. Maintaining the small-town-like atmosphere with a focus on the natural environment, Ponce Inlet is primarily residential and is committed to beautification and preservation of the community appearance.

Port Orange

Port Orange is located south of Daytona Beach in east Volusia County. It has a historic town center along the riverfront that will be used as a river walk and natural park area. Port Orange offers a strong residential and commercial market. Some of the corporations located in Port Orange include Halifax Community Health System, U.S. Food Service, Thompson Pump, Don Bell Industries, Meypack Packing Systems USA, Raydon, Sun Coast Imaging, and La-Man, Inc.

South Daytona

South Daytona borders the west side of the Halifax River and is located only a few minutes from the Atlantic Ocean. It is primarily a residential community with a number of recreational opportunities. Some of the corporations and businesses located in South Daytona include CSR Rinker, Premier Bathrooms, National Association for Public Safety Communications Officers, Coast Designs, John's Appliance City, Giles Electric, and Volusia Construction. Votran's administration and main operating base is located in South Daytona.

DEMOGRAPHIC AND JOURNEY-TO-WORK CHARACTERISTICS

Volusia County's demographic characteristics were compiled from the 2000 Census, the 2009 American Community Survey (ACS), and preliminary 2010 Census data currently available. The 2010 Census data that have been released to date do not encompass the entire demographic profile statistics, and BEBR does not include many of the demographic statistics at the county level; therefore, the demographic analysis was completed by comparing 2000 Census data to 2010 Census data for the categories that have been released, and comparing 2000 Census data to 2009 ACS data for the remaining categories. The Census bases journey-to-work estimates on a sampling of the total population. Journey-to-work information is not projected by BEBR in the 2009 Florida Statistical Abstract (FSA) and has not been released as part of the preliminary 2010 Census data; therefore, 2000 Census and 2009 ACS data were used to illustrate the journey-to-work characteristics.

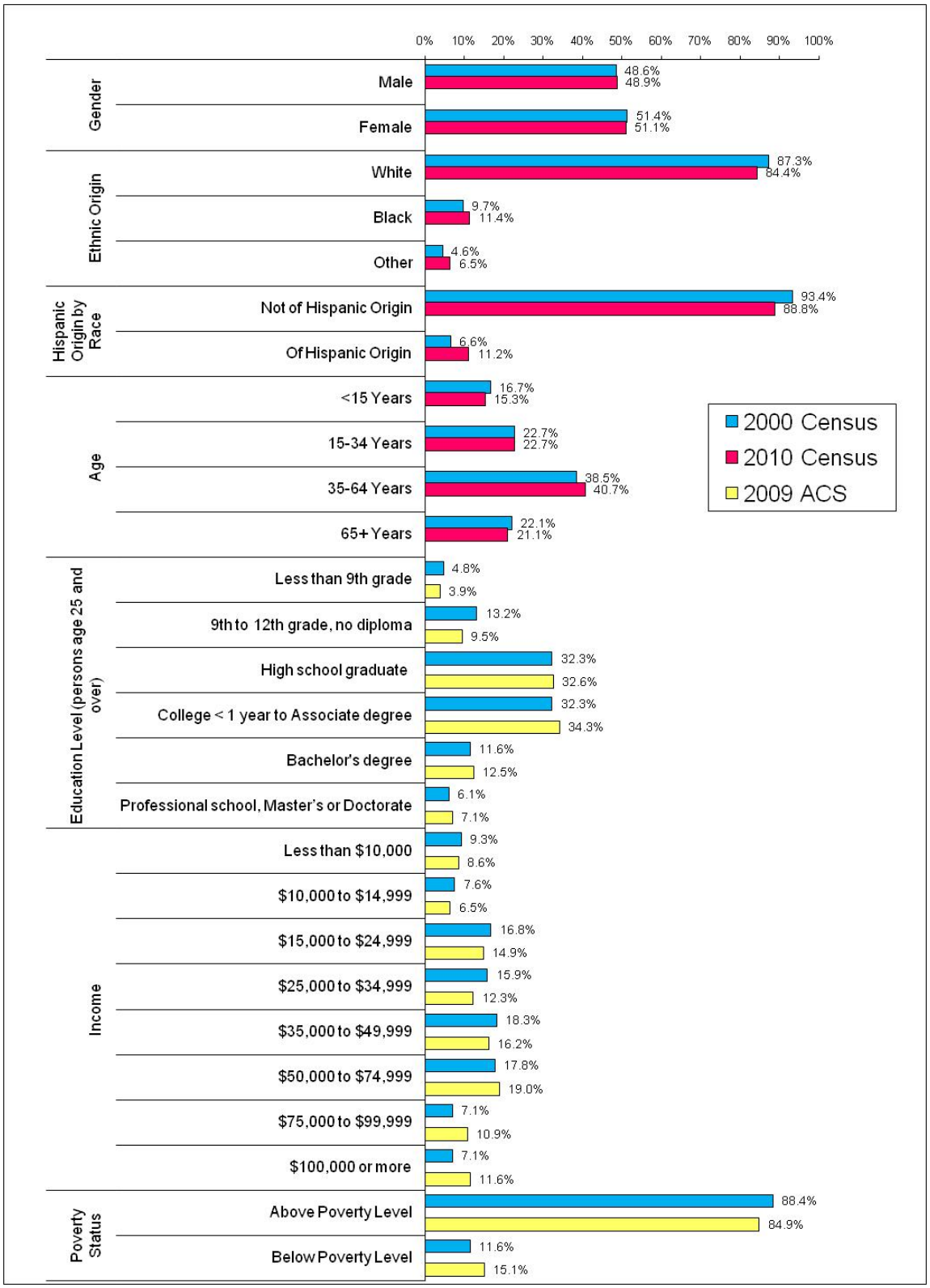
Figure 2-1 provides selected demographic data for Volusia County, and Figure 2-2 illustrates journey-to-work characteristics for Volusia County. Many of the characteristics provided in Figures 2-1 and 2-2 were chosen because of their known influence on transit use.

Figure 2-1 shows that Volusia County's demographics have not changed significantly from 2000 to 2009/2010 in terms of gender, education, and age. The percentage of persons completing 9^{th} to 12^{th} grade with no diploma has decreased slightly from 13.2 percent in 2000 to 9.5 percent in 2009. The percent of residents with incomes greater than $100,000 also increased; in 2000, 7.1 percent of residents earned greater than $100,000, and in 2009 11.6 percent of the population was in this category. Persons living below the poverty level increased from 11.6 percent in 2000 to 15.1 percent in 2009, while the median household income increased 18 percent from 35,219 in 2000 to 41,459 in 2009. The income statistics are based on information reported for the 2000 and 2010 Census, and reflect actual income levels at that time without applying potential impacts of inflation.

Figure 2-2 shows that public transit mode share has remained almost the same with 1.0 percent of the population using public transit in 2000 to 1.1 percent using public transit in 2009. The number of persons driving alone has increased from 78.7 percent in 2000 to 82.3 percent in 2009. Carpooling, walking, and bicycling slightly decreased; however, other means and working at home slightly increased. The category "Other Means" includes workers who used a mode of travel that is not identified separately. Travel times have increased, with 34.6 percent of people traveling 30 or more minutes in 2009 compared to 20.4 percent in 2000.

Figure 2-1

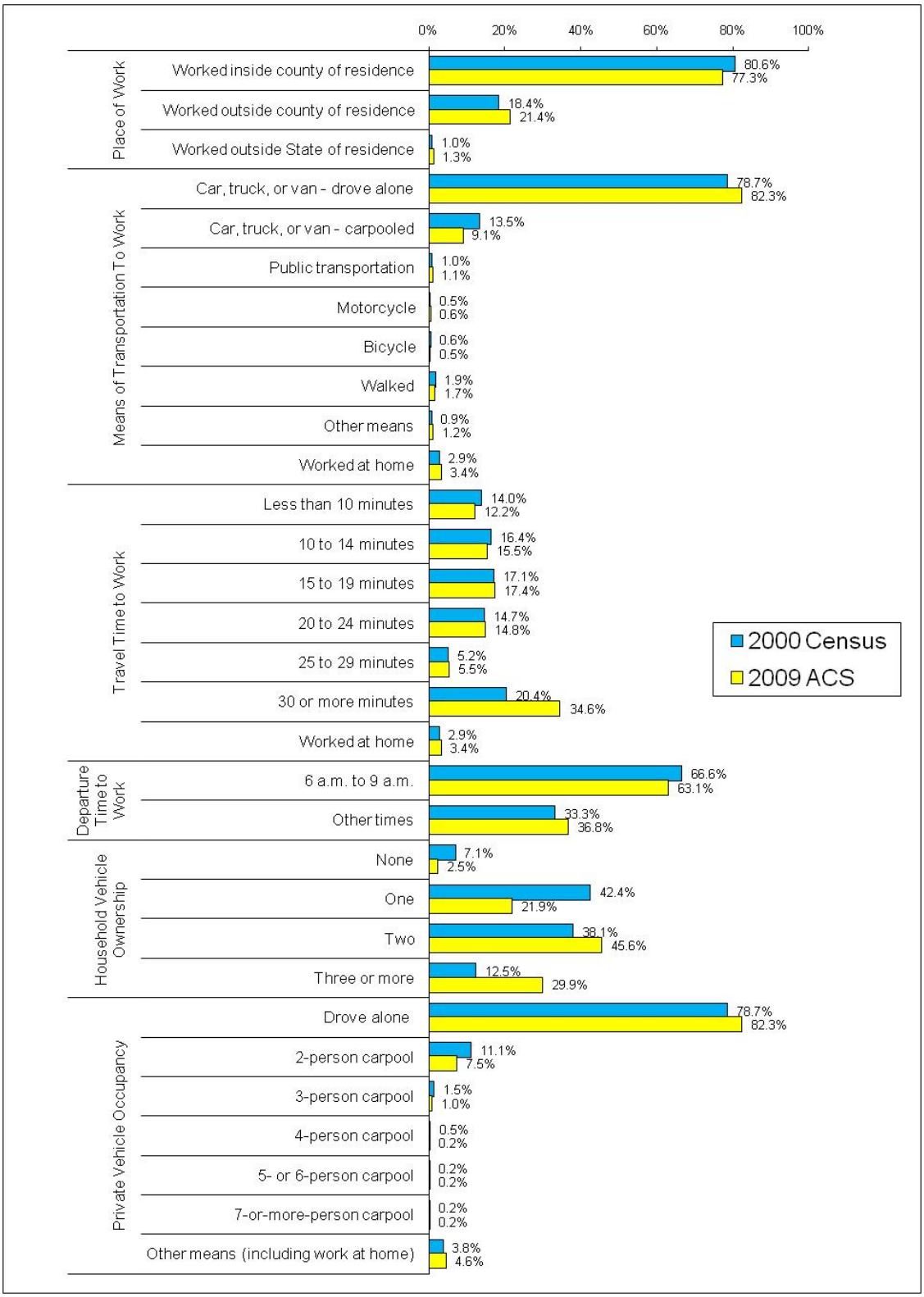
Demographic Characteristics, Volusia County (2000 and 2009)



Source: 2000 Census, 2009 ACS, and 2010 Census.

Figure 2-2

Journey-to-Work Characteristics, Volusia County (2000 and 2009)



Source: 2000 Census and 2009 ACS.

Maps 2-8 through 2-13 provide selected characteristics for Volusia County that are particularly relevant to the TDP process. The maps display 2011 and 2021 low-income populations, population under age 15, and population over age 60 by block group. The 2011 block groups that contain low-income households below 150 percent of the poverty level threshold are located in the Daytona Beach area around I-4 and I-95, Edgewater, and DeLand. The block groups containing low-income households are not projected to change from 2011 to 2021. The highest percentage of the population below age 15 is located in the southern portion of Daytona Beach. The highest growth in the population under age 15 is expected to occur in Daytona Beach, Pierson, and the area south of Lake Helen and east of Deltona. Block groups containing the highest percentages of the population over age 60 are located in Ormond Beach, South Daytona, Port Orange, southwest Daytona Beach, New Smyrna Beach, Edgewater, Oak Hill, Lake Helen, Orange City, DeBary, the area north of DeLand, and the area south of Deltona. The population age 60 and above is expected to remain relatively consistent over the ten-year period, with the exception of the Pierson area.

LABOR FORCE AND EMPLOYMENT

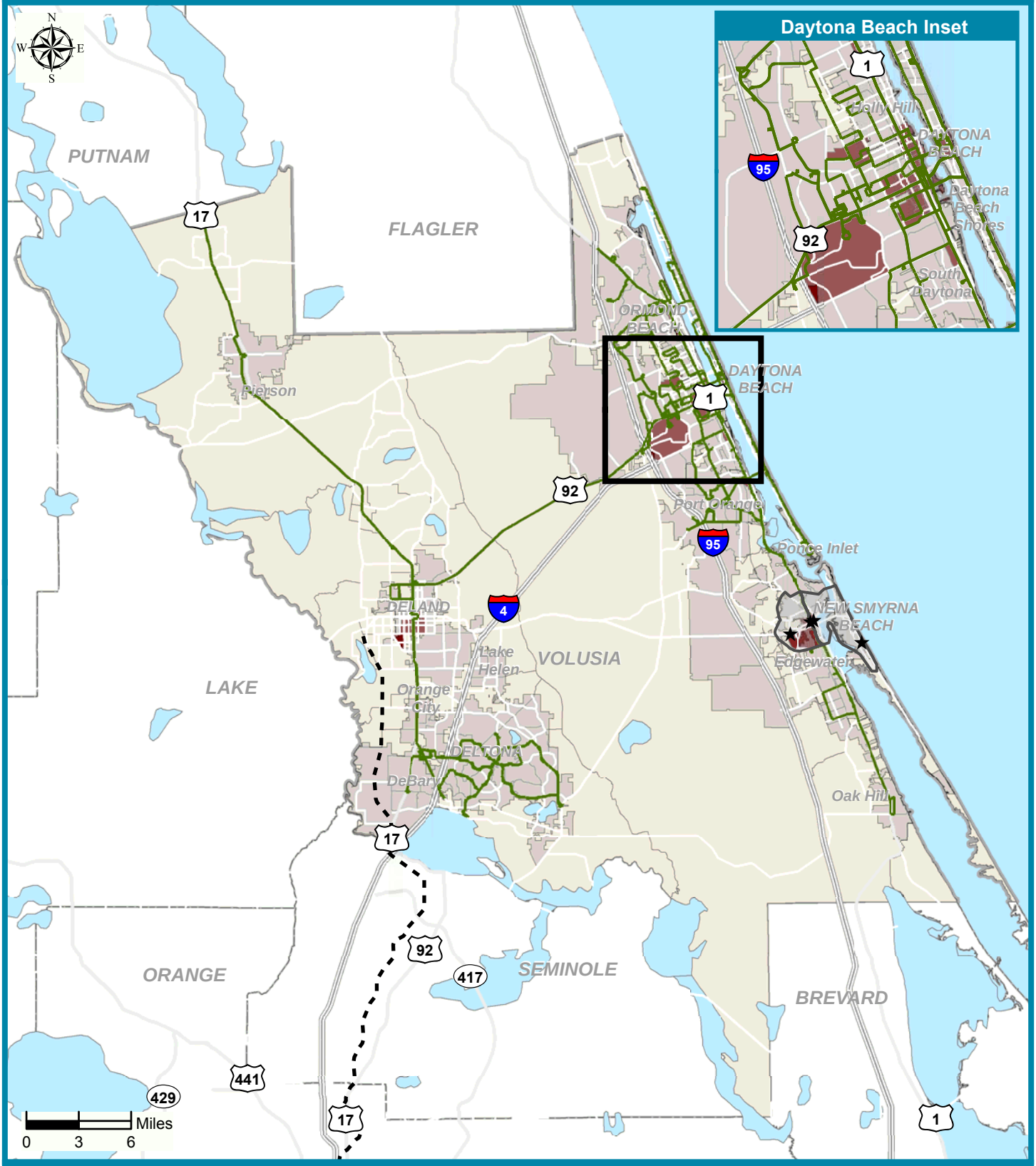
The current labor force, employment, and unemployment data also were analyzed for Volusia County, as shown in Table 2-3. The data provided in the table are a snapshot of the most recent month for which data are available. These figures, not seasonally adjusted, show that Volusia County has a slightly higher unemployment rate than the state as a whole. However, Volusia County's unemployment rate has decreased by 0.7 percent, from 11.3 percent in April 2010 to 10.6 percent in April 2011. The decrease in unemployed persons may be an indicator that the local economy is improving.

Table 2-3
Labor Force Statistics (April 2011)

Area	Civilian Labor Force	Number Employed	Number Unemployed	Unemployment Rate
Volusia County	251,391	224,733	26,658	10.6%
Florida	9,197,500	8,241,500	956,000	10.4%

Source: Labor Market Statistics, Local Area Unemployment Statistics Program.

Votran Transit Development Plan



Map 2-8: Low-Income Households (2011)

Legend

Above Average Low-Income Population

- Yes
- No

- ★ Flex Route Timepoints
- Votran Routes
- SunRail Alignment
- Flex Routes
- City Limits

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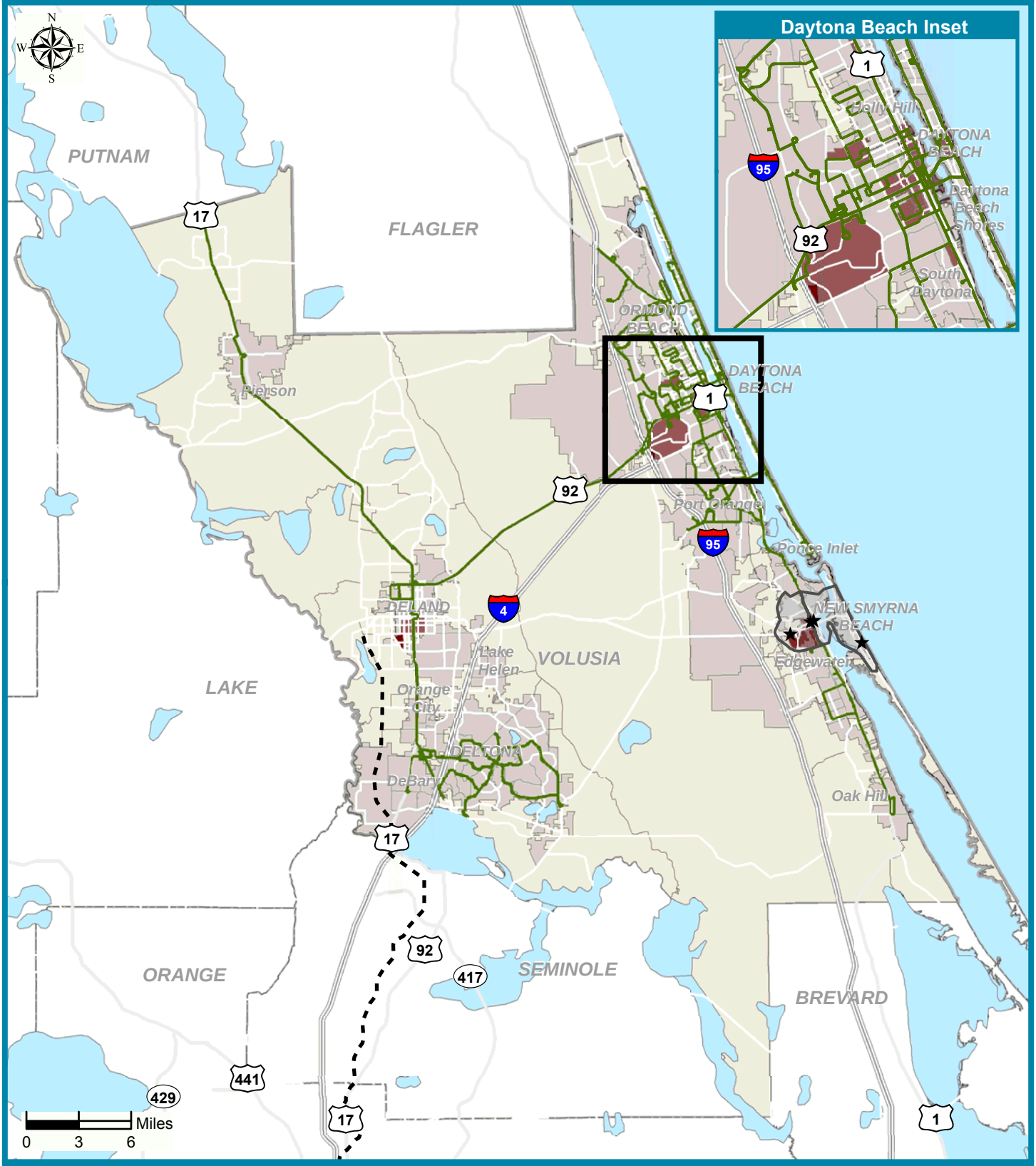
Source: ESRI

Votran Transit Development Plan



Map 2-9: Low-Income Households (2021)

Legend

Above Average Low-Income Population

- Yes
- No

- ★ Flex Route Timepoints
- Votran Routes
- SunRail Alignment
- Flex Routes
- City Limits

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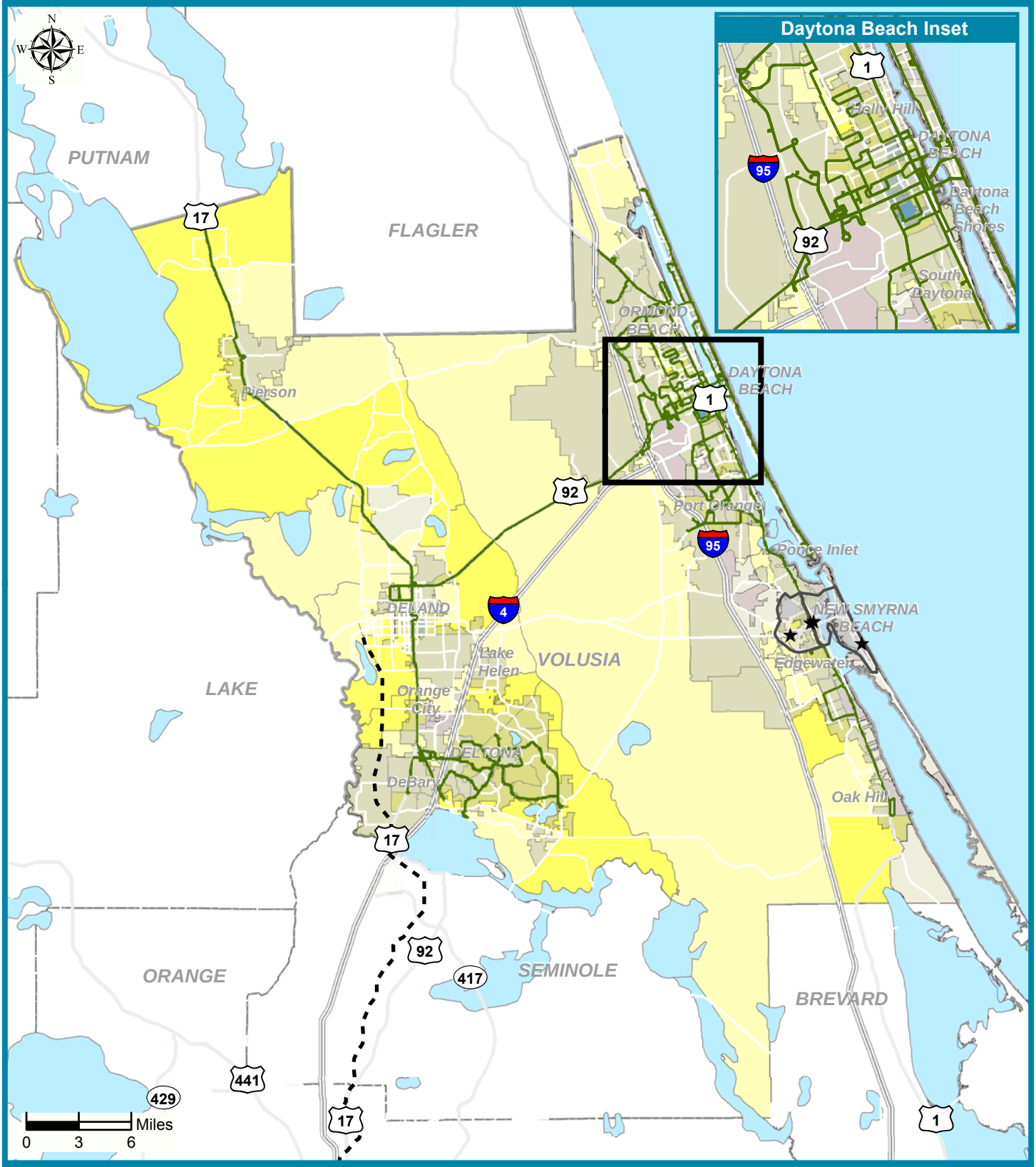
Source: ESRI

Votran Transit Development Plan



Map 2-10: Percent of Population Below Age 15 (2011)

Legend

Population Below Age 15

Percent of Total Population

- 0.00 - 9.00
- 9.01 - 18.00
- 18.01 - 27.00
- 27.01 - 35.00
- 35.01 - 40.00

- ★ Flex Route Timepoints
- Votran Routes
- SunRail Alignment
- Flex Routes
- City Limits

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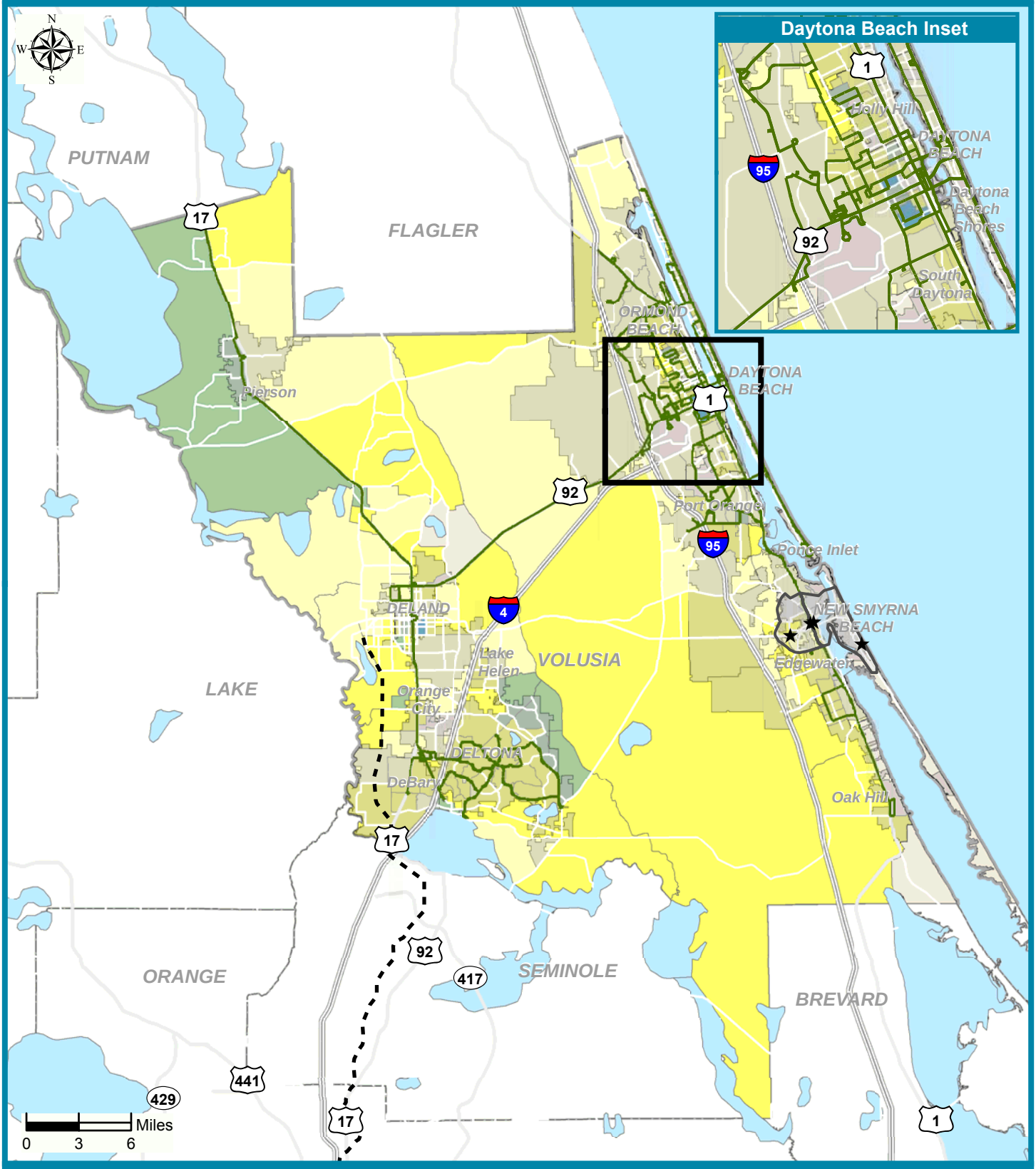
Source: ESRI

Votran Transit Development Plan



Map 2-11: Percent of Population Below Age 15 (2021)

Legend

Population Below Age 15

Percent of Total Population

- 0.00 - 9.00
- 9.01 - 18.00
- 18.01 - 27.00
- 27.01 - 35.00
- 35.01 - 47.00

- ★ Flex Route Timepoints
- Votran Routes
- SunRail Alignment
- Flex Routes
- City Limits

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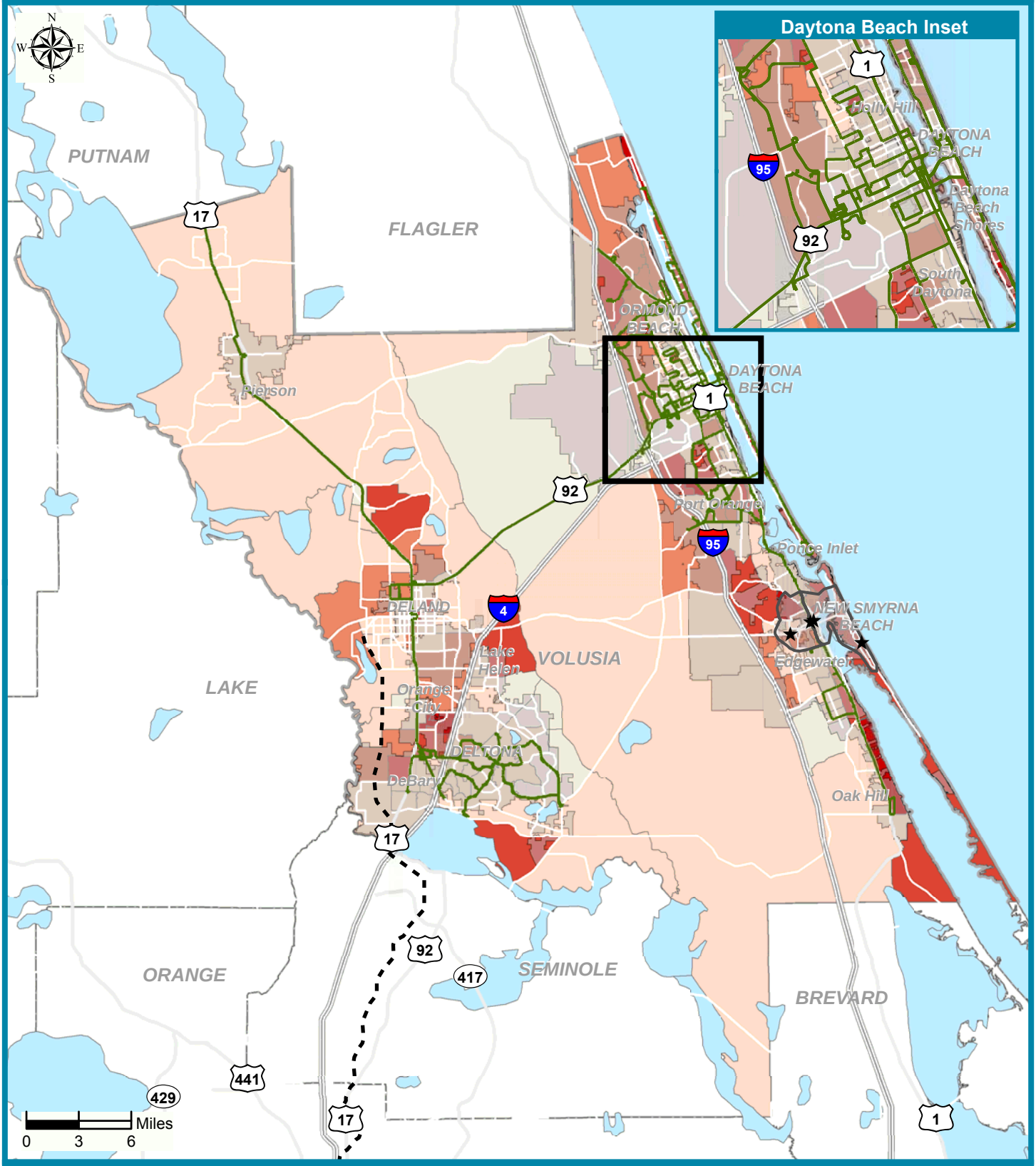
Source: ESRI

Votran Transit Development Plan



Map 2-12: Percent of Population Age 60 and Above (2011)

Legend

Population Age 60 and Above

Percent of Total Population

- 0.00 - 15.00
- 15.01 - 30.00
- 30.01 - 45.00
- 45.01 - 60.00
- 60.01 - 85.00

- ★ Flex Route Timepoints
- Votran Routes
- SunRail Alignment
- Flex Routes
- City Limits

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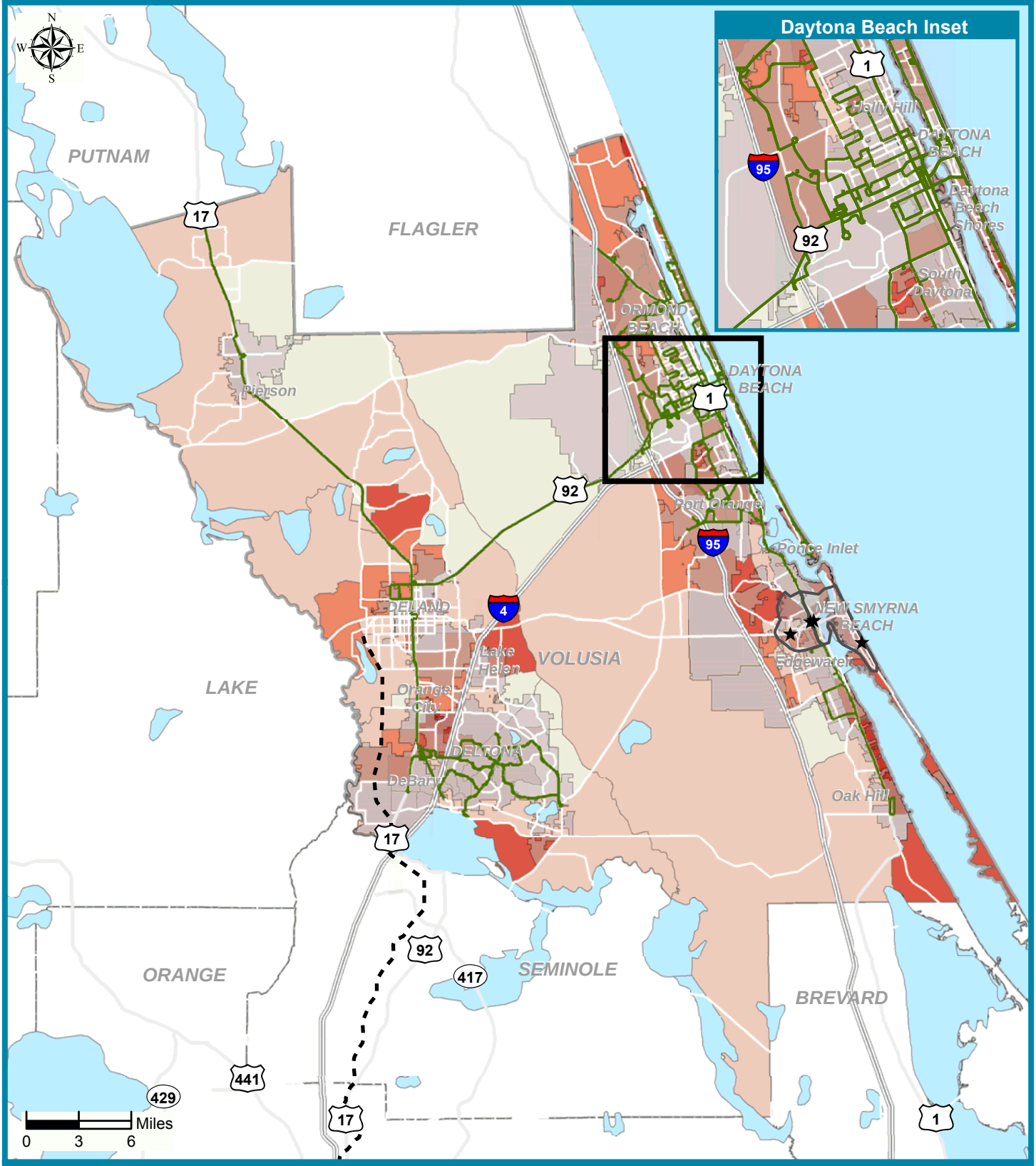
Source: ESRI

Votran Transit Development Plan



Map 2-13: Percent of Population Age 60 and Above (2021)

Legend

Population Age 60 and Above

Percent of Total Population

- 0.00 - 15.00
- 15.01 - 30.00
- 30.01 - 45.00
- 45.01 - 60.00
- 60.01 - 85.00

- ★ Flex Route Timepoints
- Votran Routes
- SunRail Alignment
- Flex Routes
- City Limits

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Source: ESRI

ROADWAY LEVEL OF SERVICE

The Volusia County roadway network includes federal, state, and local roads. The majority of Volusia County's roadway network has capacity for additional cars and currently is not operating below the Level of Service (LOS) standards set by the County; therefore, many residents and visitors to Volusia County are able to enjoy roadways that are not congested. While congestion is not a problem in most locations during peak travel periods many Volusia County roads do experience delays and heavy traffic conditions. These heavily traveled locations currently include segments of: US 1 (SR 5), US 17 (SR 15), Granada Blvd. (SR 40), New York/Lytle Ave. (SR 44), SR 46, Beville Rd. (SR 400), SR 415, US 92 (SR 600), and Atlantic Ave. (SR A1A), and are projected to also include Clyde Morris Boulevard (SR 483), Nova Road (SR 5A), and Dunlawton Avenue (SR 421) by 2021, the horizon year of this TDP. The roadway congestion levels make travel more of a challenge for all modes, since there currently are no dedicated lanes for high occupancy vehicles (HOV) or bus vehicles in Volusia County.

In an effort to balance the transportation network, while also serving the greatest need, many jurisdictions in Volusia County are evaluating how and what is funded through the transportation program.

COMMUTING PATTERNS

This section includes an analysis of the employment commuting patterns for Volusia County residents. Based on 2009 data, Volusia County had 189,501 employed persons living in the county. Of those persons, 100,451 lived and worked in Volusia County. In 2009, 89,050 residents or 47 percent of the labor force living in Volusia County commuted outside of the county for employment. In addition, 55,632 persons commuted into Volusia County for employment, resulting in a net employee outflow of 33,418 persons.

Table 2-4 summarizes the commuter flows for the workers living in Volusia County. The analysis of the 2009 Census Longitudinal Employer-Household Dynamics (LEHD) worker flow database indicates that 53 percent of the employed Volusia County residents commute to jobs in Volusia County. The Volusia County cities employing the highest percentage of the county's labor force were Daytona Beach, DeLand, and Ormond Beach. In 2009, Orlando was the fourth-highest-ranking city employing Volusia County's labor force. The LEHD defines "All Other Locations" as cities and towns not included in the top 10 locations as well as land that is not part of a city or town.

Table 2-5 summarizes the labor shed for workers commuting to Volusia County. The analysis of 2009 Census LEHD database worker flow data indicates that 64.4 percent of Volusia County's workers live in the county. Nearly 36 percent of the county's employees live outside of the county. The top three cities where the county's workers reside include Daytona Beach, Port Orange, and Deltona. More than 52

percent of the County's workers live in "All Other Areas," which include areas outside of the top 10 cities and Census-Designated Places or within unincorporated areas.

Table 2-4
Where Volusia County Residents Work, by City and Census-Designated Place (2009)

City	Count	Share
Daytona Beach, FL	31,639	16.7%
DeLand, FL	20,675	10.9%
Ormond Beach, FL	8,564	4.5%
Orlando, FL	8,241	4.3%
Jacksonville, FL	7,786	4.1%
Port Orange, FL	7,200	3.8%
Sanford, FL	5,671	3.0%
New Smyrna Beach, FL	4,882	2.6%
Orange City, FL	3,313	1.7%
Holly Hill, FL	3,000	1.6%
All Other Locations	88,530	46.7%

Table 2-5
Where Volusia County Workers Live, by City and Census-Designated Place (2009)

City	Count	Share
Daytona Beach, FL	13,700	8.8%
Port Orange, FL	13,460	8.6%
Deltona, FL	11,131	7.1%
Ormond Beach, FL	10,461	6.7%
Edgewater, FL	5,215	3.3%
DeLand, FL	4,954	3.2%
New Smyrna Beach, FL	4,199	2.7%
South Daytona, FL	4,107	2.6%
Palm Coast, FL	3,786	2.4%
Jacksonville, FL	3,549	2.3%
All Other Locations	81,521	52.2%

MAJOR EMPLOYERS

As part of the baseline conditions analysis, data on major employers in Volusia County were reviewed and summarized. The major industries in Volusia County include healthcare and social assistance, retail trade, accommodation and food services, and education services. With approximately 8,000 employees, one of the largest employers in Volusia County is Volusia County's public school system. The next largest employers in Volusia County are Florida Hospital and Halifax Health with approximately 4,000 employees each. The top 15 public and private employers, listed in Table 2-6, employ more than 30,000 people.

Table 2-6
Top 15 Public and Private Employers in Volusia County

Company	Type of Business	Number of Employees
Volusia County Schools	Education	8,080
Florida Hospital - All Divisions	Healthcare	4,248
Halifax Health	Healthcare	3,957
Volusia County Government	Government	3,280
Publix	Grocery	2,486
State of Florida	Government	2,361
Walmart	Retail	2,160
Daytona State College	Education	1,797
U.S. Government	Government	1,422
Embry Riddle Aeronautical University	Education	1,176
Stetson	Education	713
Bethune Cookman University	Education	602
Covidien	Manufacturing	536
John Knox Village	Retirement Community	515
Bright House Networks	Telecommunications	506

Source: Volusia County Department of Economic Development and Enterprise Florida.

DEVELOPMENT ACTIVITIES

FDOT's updated TDP guidelines promote focus and review of ongoing and anticipated residential and commercial development activities. Therefore, a review of development activities and existing and future land uses in Volusia County was conducted. Several Developments of Regional Impact (DRIs) are located on the east side of the county. In addition, two DRIs, Victoria Park and the I-4/SR 472 Activity Center, have been approved on the west side of Volusia County. Table 2-7 presents the approved and proposed major developments within the study area.

As comprehensive plans are updated by the county and its municipalities, more focus on transit is being incorporated in some areas such as Ormond Beach, Orange City, Debary, Deltona, Deland, Port Orange, and Daytona Beach that will impact future development activities.

Ormond Beach is working with its developers to include infrastructure and / or payments (mobility fees) to support enhanced transit service. In the Ormond Crossings development agreement and Hunter's Ridge development order various transit improvements are included ranging from a $400,000 one-time contribution toward service, shelters, pedestrian walkways, bike paths, to possible trams connecting businesses with residential areas.

Daytona Beach has plans for an entertainment district referred to as the "E-Zone" that is anticipated to complement the existing Ocean Center. Development in the E-zone is planned to revitalize the area while continuing to promote Daytona Beach as the location for conventions, tourist travel, and family activities. The E-Zone is fashioned to help the city maintain its designation as the "World's Most Famous Beach" and enhance economic opportunities by attracting additional events and people. The master plan for the E-Zone began in May 2011. The master plan will include an inventory of assets, public involvement, and urban planning and design elements and is being completed with a development team approach. The E-Zone master plan will also need to include documentation on how transit will support the area in attracting new business and tourists.

In addition to the development activities planned for Volusia County and its municipalities, there are several corridor level planning initiatives occurring to review transit applicability in the area. Most notably, are efforts to review the International Speedway Boulevard (ISB) and US 1. An ISB Coalition has been created as a partnership of the public and private sector. The coalition is concentrating on sustainable community infrastructure that supports economic development. A circulator service to support businesses along ISB and provide an alternative to private-auto access when traversing the corridor has been suggested as one of the options that might improve circulation and boost the corridor's attractiveness. In addition to the ISB corridor, the Volusia TPO has taken the lead in commissioning a study to review the US 1 corridor. A review of previous studies, an assessment of what has been implemented to date, and an action plan of what is still needed along the corridor will be completed as part of this effort. Identified in previous studies was the need for transit alternatives and intersection improvements along US 1 to avoid the need for roadway widening projects. Another area under review for potential transit enhancements to support economic development is around the Dirksen Drive and I-4 Interchange.

Volusia County and its municipalities have established land use and zoning maps to guide future developments in the county. Map 2-14 shows the existing land uses in Volusia County and Map 2-15 presents a snapshot of the future land use designations for Volusia County.

Table 2-7

Major Developments (2011)

Development	Jurisdiction	Number of Units	Type
Spruce Creek Fly-In	Volusia County	1,350 DU	Residential
Farmton	Volusia County	59,000 AC	Mixed Use
Daytona Beach International Airport	Volusia County	3,197 FT	Airport
Halifax Harbor Marina	Daytona Beach	468 SL	Marina
Airport Executive Park	Daytona Beach	52 AC	Office
L.P.G.A.	Daytona Beach	6,018 DU	Residential
Hilton	Daytona Beach	306 RM	Hotel
Restoration	Edgewater	9,866 DU	Residential
New Smyrna Beach Marina	New Smyrna Beach	176 SL	Marina
Lyme Stone Ranch	New Smyrna Beach	20 AC	Residential
Breakaway Trails	Ormond Beach	1,000 SF	Residential
National Gardens Property	Ormond Beach	3,930 SF	Residential
Ormond Crossings (non-DRI)	Ormond Beach	900,000 GSF	Mixed Use
Hunter's Ridge	Ormond Beach/Flagler County	3,284 DU / 600,000 SF	Mixed Use
Ponce Marina	Ponce Inlet	142 SL	Port
Spruce Creek Village (Cypress Head)	Port Orange	4,200 DU	Residential
Pavilion at Port Orange	Port Orange	800,000 GSF	Retail
Victoria Park	DeLand	4,805 DU	Residential
I-4/State Road 472 Activity Center	Deltona/DeLand	6,178,674 GSF	Industrial

Source: Department of Community Affairs (DCA) and Central Florida Geographic Information Systems (CFGIS)

REGIONAL TRENDS IN TRANSIT

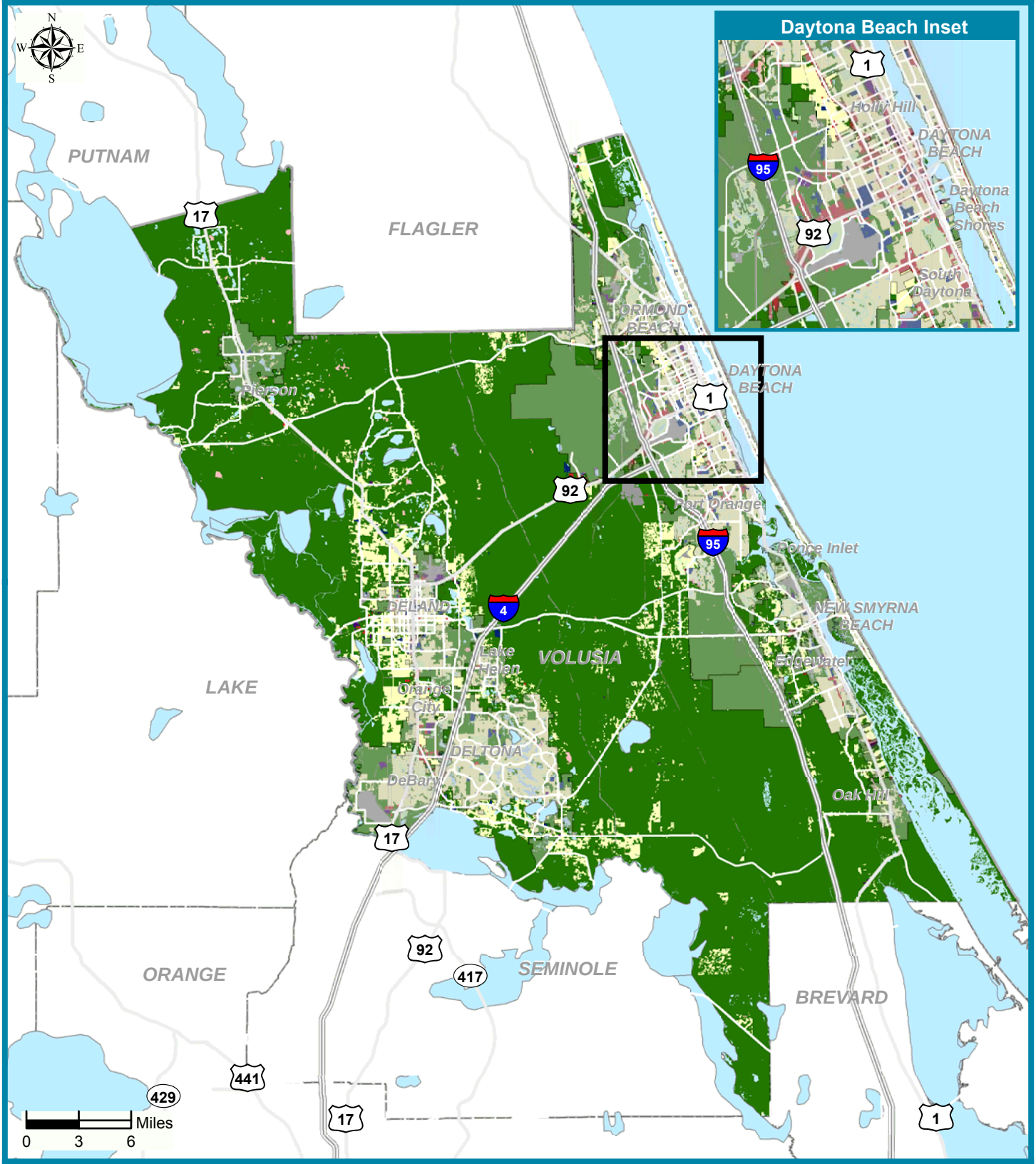
FDOT has finalized a deal to acquire the CSX Railroad tracks between Poinciana (Osceola County) and DeLand to be used for the 61-mile commuter rail known as SunRail. The first phase of the project will connect DeBary to Downtown Orlando. While the project only recently was approved (July 2011), the City of DeBary has completed conceptual Transit Oriented Development (TOD) planning and adopted a TOD Regulating Plan for the DeBary SunRail Station in an effort to plan for the future SunRail project. DeBary's TOD Regulating Plan incorporates the TOD Overlay District into the City's Land Development Code (LDC).

While SunRail is a project of Volusia County, Votran as the county's transit agency has been tasked with coordinating the planning and service delivery efforts. As part of the coordination, Votran has participated in numerous meetings and completed tasks on commuter rail service and its corresponding infrastructure, supporting bus network, fare policy, and necessary technology enhancements. Votran has completed these additional activities with its existing staff and will continue to move forward with

the SunRail support activities to ensure connectivity with local bus. Rail service typically attracts both transit dependent and choice riders because of its reasonable fares, frequency, availability, service area, and enhanced amenities. Due to the substantial investment that will be made by the County for SunRail service, it is important for the county to encourage development activities that are transit supportive. Characteristics of the SunRail service and its impact on Volusia County are discussed in more detail in additional sections.

In 2009, with the passing of SB 360, the City of Ormond Beach qualified as a Dense Urban Land Area (DULA), resulting in an automatic designation as a Transportation Concurrency Exception Area (TCEA). SB 360 has since been repealed, but the new HB 7207 legislation removes transportation concurrency requirements unless a local government wants to maintain concurrency; allowing the Ormond Beach TCEA and related policies to still be applicable while not specifically titled a DULA. Based on Ormond Beach's 2009 citywide DULA designation, the City developed and adopted a multi-modal strategy. The strategy is to locate three TCEAs along three transit routes that are considered part of Votran's eastside spine network. These transit routes are on roadways that the City considers to be constrained. The City is proposing to increase densities and intensities along the three roadway corridors by requiring mixed-use, vertical and horizontal development and build-to-line standards for new development. To fund the multi-modal strategy, a transit and non-motorized fee is supported. The fee will not generate enough funds for the entire fixed-route system since the routes serve multiple jurisdictions. In addition, these funds replace the Proportionate Fair Share contribution required for mitigation on SR 40, US 1, and A1A.

Votran Transit Development Plan



Map 2-14: Existing Land Use

Legend

Existing Land Use

- RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL
- NATURAL RESOURCE
- PUBLIC/INSTITUTIONAL
- TRANSPORTATION/UTILITIES
- RECREATION
- RURAL
- WATER
- City Limits

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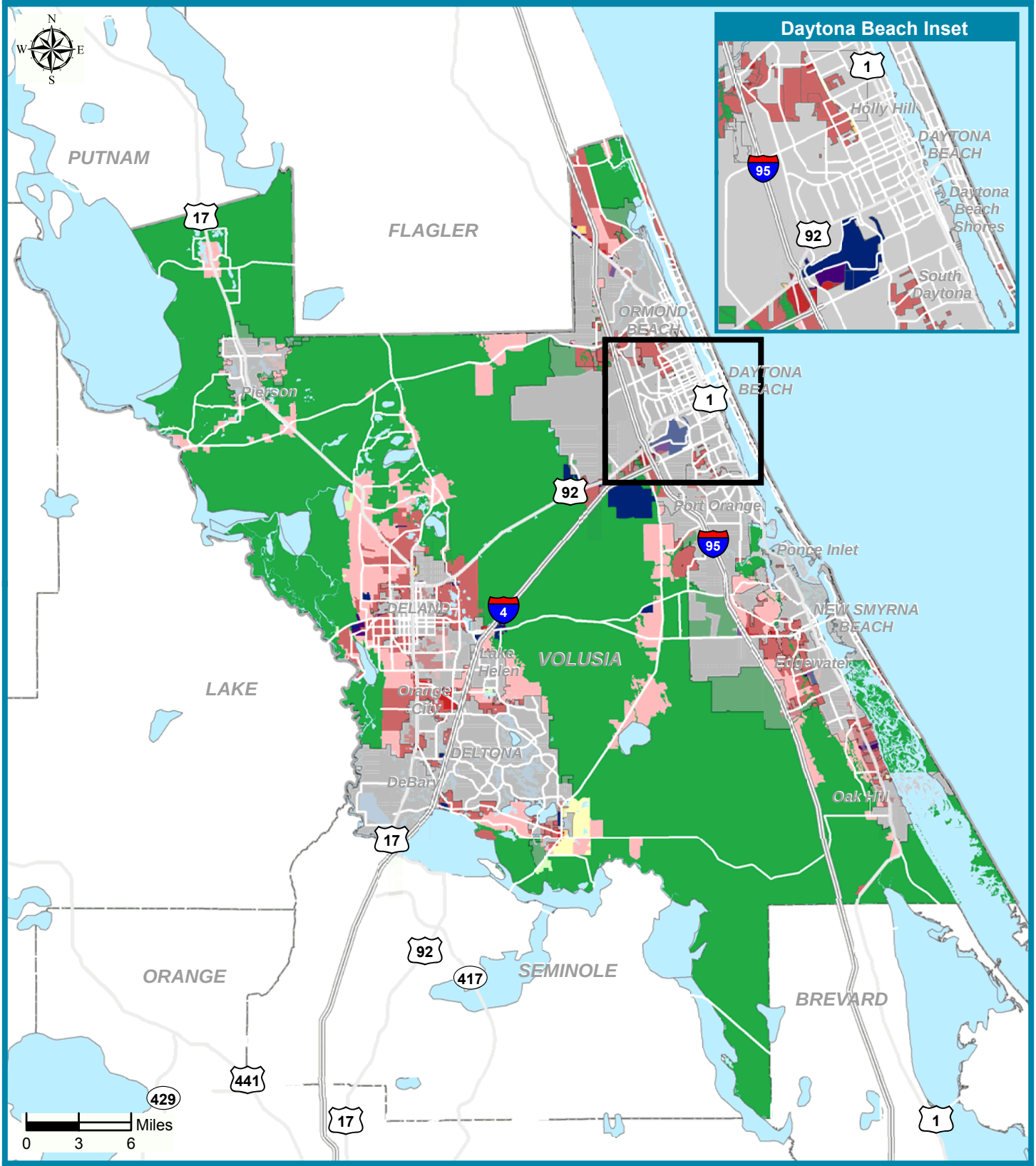
Source: SJRWMD

Votran Transit Development Plan



Map 2-15: Future Land Use

Legend

Future Land Use

- RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL
- NATURAL RESOURCE
- INCORPORATED
- PUBLIC/INSTITUTIONAL
- MIXED USE
- RECREATION
- RURAL
- URBAN
- WATER
- City Limits

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Tindale-Oliver & Associates, Inc. — Planning and Engineering

Source: Volusia County

SECTION 3: EXISTING VOTRAN TRANSIT SERVICES

This section provides a review of existing Votran service levels and is divided into four subsections including Existing Service, Operating Statistics, Performance Evaluation and Trends, and Peer Review. The review of existing service includes a general description of the structure of Votran and its system characteristics. The operating statistics and performance evaluation and trends sections render a detailed examination of route-by-route operating performance. The peer review is presented for the fixed-route system and provides an opportunity for Votran to determine how well it is performing compared to similar peer transit agencies.

INVENTORY OF EXISTING FIXED-ROUTE SERVICE

Volusia County's public transit system, Votran, is provided by the County and managed by McDonald Transit. The service began in 1975, and Votran currently operates 21 fixed-routes, 2 flexible routes, trolley service, and paratransit Gold Service for older adults and persons with disabilities. A majority of the routes operate Monday through Saturday. Service spans from approximately 6 a.m. to 7 p.m., with an average of 60-minute headways. Votran operates limited Sunday and night service. Currently, Votran does not operate service on New Year's Day, Thanksgiving Day, and Christmas Day. Table 3-1 presents additional information on the span and frequency of Votran's fixed-route service.

Table 3-2 summarizes route-level performance statistics for FY 2010. Based on the performance statistics, the table displays the route-level and overall passengers per mile, passengers per hour, and cost per passenger. The total operating costs for FY 2010 were $12,392,885, and farebox revenues for that same fiscal year were $2,157,938.

Table 3-1
Summary of Transit Service Operating Characteristics

Route Number	Route Description	Days of Operation	Service Span	Headways
1	A1A North to Ormond Beach Mall (Granada Ave.)	Monday-Friday	5:40 am - 12:25 am	60 Minutes
		Saturday	6:35 am - 12:25 am	60 Minutes
		Sunday	7:00 am - 6:23 pm	60 Minutes
3	North Ridgewood to Ormond Beach	Monday-Friday	6:02 am - 11:54 pm	60/120 Minutes
		Saturday	6:02 am - 11:54 pm	60/120 Minutes
		Sunday	7:05 am - 6:48 pm	60 Minutes
4	South Ridgewood to Nova/Dunlawton	Monday-Friday	6:32 am - 12:10 am	60 Minutes
		Saturday	6:32 am - 12:10 am	60 Minutes
		Sunday	6:41 am - 6:56 pm	60 Minutes
5	Center St to Nova Rd/Flomich St	Monday-Friday	6:37 am - 6:20 pm	60 Minutes
6	North Nova to Wal-Mart/Ormond Beach	Monday-Friday	6:05 am - 7:15 pm	60 Minutes
		Saturday	6:23 am - 7:15 pm	60 Minutes
7	South Nova to Dunlawton	Monday-Friday	6:05 am - 7:18 pm	60 Minutes
		Saturday	6:05 am - 7:18 pm	60 Minutes
8	Halifax to Bellair Plaza	Monday-Friday	6:32 am - 7:20 pm	60 Minutes
		Saturday	7:53 am - 6:28 pm	60 Minutes
10	Medical Center to Volusia Mall	Monday-Friday	6:35 am - 11:50 pm	30 Minutes
		Saturday	6:39 am - 11:50 pm	30 Minutes
		Sunday	7:00 am - 5:50 pm	60 Minutes
11	Mason Ave to Volusia Mall/I-95	Monday-Friday	6:17 am - 6:50 pm	60 Minutes
		Saturday	6:17 am - 6:50 pm	60 Minutes
12	Clyde Morris to Pavilion Mall	Monday-Friday	6:02 am - 7:10 pm	60 Minutes
		Saturday	6:02 am - 7:10 pm	60 Minutes
15	Orange Ave to the Department of Motor Vehicles	Monday-Friday	5:31 am - 12:18 am	30/60 Minutes
		Saturday	6:06 am - 12:18 am	30/60 Minutes
		Sunday	6:36 am - 6:24 pm	60 Minutes
17A	South Atlantic to Ponce Inlet	Monday-Friday	6:07 am - 12:18 am	60 Minutes
		Saturday	7:02 am - 12:18 am	60 Minutes
		Sunday	7:00 am - 6:23 pm	60 Minutes
17B	Dunlawton/Nova	Monday-Friday	6:30 am - 6:55 pm	60 Minutes
		Saturday	6:32 am - 6:55 pm	60 Minutes

Table 3-1 (continued)
Summary of Transit Service Operating Characteristics

Route Number	Route Description	Days of Operation	Service Span	Headways
18	International Speedway to Florida Hospital/Ormond Memorial	Monday-Friday	7:02 am - 6:50 pm	60 Minutes
		Saturday	7:02 am - 6:50 pm	60 Minutes
19	Florida Hospital/Ormond Memorial via A1A/Granada	Monday-Friday	6:07 am - 6:50 pm	60 Minutes
		Saturday	6:07 am - 6:50 pm	60 Minutes
40	Port Orange towards New Smyrna Beach via US 1	Monday-Friday	6:31 am - 7:03 pm	60 Minutes
		Saturday	6:31 am - 7:03 pm	60 Minutes
41	New Smyrna Beach towards Edgewater via US 1	Monday-Friday	6:45 am - 6:41 pm	60 Minutes
		Saturday	6:45 am - 6:41 pm	60 Minutes
Flex 42	New Smyrna Beach (Downtown to Beachside)	Monday-Friday	6:43 am - 6:33 pm	Timepoints
		Saturday	6:43 am - 6:33 pm	Timepoints
Flex 43	New Smyrna Beach (Downtown to Wal-Mart)	Monday-Friday	6:43 am - 6:33 pm	60 Minutes
		Saturday	6:43 am - 6:33 pm	60 Minutes
60	East/West Connector	Monday-Friday	6:32 am - 7:23 pm	60 Minutes
		Saturday	7:30 am - 7:23 pm	60 Minutes
700	A1A Beachside Trolley	Monday-Friday	11:39 am - 7:05 pm	60 Minutes
		Saturday	11:39 am - 7:05 pm	60 Minutes
Westside Routes				
20	From Market Place Shopping Center to DeLand	Monday-Friday	6:30 am - 7:23 pm	60 Minutes
		Saturday	7:30 am - 6:25 pm	60 Minutes
21	From Market Place Shopping Center to Wal-Mart/Osteen via Providence/Ft. Smith	Monday-Friday	5:33 am - 7:21 pm	120 Minutes
		Saturday	7:14 am - 6:26 pm	120 Minutes
22	From Market Place Shopping Center to Wal-Mart/Osteen via Elkcam/Howland	Monday-Friday	6:00 am - 7:20 pm	120 Minutes
		Saturday	6:00 am - 6:27 pm	120 Minutes
23	From Market Place Shopping Center to Providence/Ft. Smith	Monday-Friday	5:57 am - 7:08 pm	60 Minutes
		Saturday	7:04 am - 6:33 pm	60 Minutes
24	From DeLand to Seville via US 17/CR 3	Monday-Friday	5:40 am - 7:20 pm	6 hours
		Saturday	7:30 am - 7:20 pm	4/6 hours
Volusia/Orlando Express				
200	I-4 Express from Volusia to Downtown Orlando	Monday-Friday	6:00 am - 6:35 pm	Varies

Table 3-2
Summary of Fixed-Route Performance Statistics (FY 2010)

Routes	Total Passengers	Total Revenue	Total Miles	Total Hours	Total Cost	FY 2010 Passengers per Mile	FY 2010 Passengers per Hour	FY 2010 Cost per Passenger
East Side Routes								
1	274,104	$191,613	171,665	11,441	$836,551	1.60	23.96	$3.05
3	209,438	$136,657	95,041	6,998	$511,700	2.20	29.93	$2.44
4	218,071	$139,977	101,123	6,698	$489,776	2.16	32.56	$2.25
5	54,418	$33,527	37,003	3,101	$226,779	1.47	17.55	$4.17
6	125,667	$80,590	113,467	8,605	$629,194	1.11	14.60	$5.01
7	193,310	$118,840	108,853	8,307	$607,386	1.78	23.27	$3.14
8	75,246	$49,858	58,234	3,939	$288,047	1.29	19.10	$3.83
9/19	117,977	$76,979	84,454	6,572	$480,526	1.40	17.95	$4.07
10	241,805	$142,468	107,353	9,362	$684,552	2.25	25.83	$2.83
11	179,963	$108,253	103,706	7,857	$574,500	1.74	22.90	$3.19
12	140,131	$93,243	115,549	8,223	$601,237	1.21	17.04	$4.29
18	117,082	$82,753	69,794	5,367	$355,359	1.68	21.81	$3.04
15	154,766	$88,244	53,261	4,860	$924,829	2.91	31.85	$5.98
17	259,235	$178,650	200,795	12,648	$392,466	1.29	20.50	$1.51
40	55,866	$38,458	87,215	3,948	$288,678	0.64	14.15	$5.17
41	35,937	$29,555	68,656	3,685	$269,482	0.52	9.75	$7.50
42	14,598	$11,122	52,694	3,755	$274,564	0.28	3.89	$18.81
43	9,776	$6,331	24,115	1,958	$143,137	0.41	4.99	$14.64
700	42,611	$33,397	44,664	2,937	$214,718	0.95	14.51	$5.04
60	106,927	$70,874	85,781	3,917	$286,421	1.25	27.30	$2.68
44	6,621	$4,209	25,834	2,073	$151,570	0.26	3.19	$22.89
West Side Routes								
61	106,874	$67,731	99,265	4,313	$315,397	1.08	24.78	$2.95
20	186,807	$129,310	117,820	8,372	$612,196	1.59	22.31	$3.28
22	39,125	$27,601	71,558	4,229	$309,194	0.55	9.25	$7.90
23	38,596	$26,890	70,433	4,099	$299,752	0.55	9.41	$7.77
24	16,037	$13,292	51,097	3,016	$220,503	0.31	5.32	$13.75
21	43,607	$30,993	82,210	4,297	$314,179	0.53	10.15	$7.20
Volusia/Orlando Express								
200	17,077	$34,154	44,055	1,884	$175,208	0.39	9.07	$10.26
Total Eastside Routes	2,633,550	$1,715,600	1,809,254	126,251	$9,231,474	1.46	20.86	$3.51
Total Westside Routes	431,046	$295,817	492,383	28,326	$2,246,429	0.88	15.22	$5.21
Total Night Service	173,408	$112,367	161,487	10,117	$739,775	1.07	17.14	$4.27
Total East, West, and Night	3,238,004	$2,123,784	2,463,124	164,695	$12,217,677	1.31	19.66	$3.77
Total Fixed-Routes	3,255,080	$2,157,938	2,507,179	166,578	$12,392,885	1.30	19.54	$3.81

Source: Votran

Table 3-3 provides ridership figures for FY 2009/10. Total annual ridership during this time period was more than three million passengers. Between 2009 and 2010, Votran ridership has increased by six percent, from 3,071,247 in 2009 to 3,255,080 in 2010.

Table 3-3
FY 2009/10 Ridership Data

Month	Ridership
October	279,890
November	280,636
December	254,075
January	248,945
February	255,583
March	280,722
April	284,506
May	264,656
June	266,931
July	273,666
August	284,269
September	281,201
Total	3,255,080

Source: Votran

Fixed-Route Vehicle Inventory

Table 3-4 provides a summary of the fixed-route transit vehicles operated by Votran. As shown in the table, the entire fleet consists of a total of 60 vehicles. Nine of the vehicles operate using hybrid-electric technology. All of the fixed-route vehicles are equipped with security cameras.

Table 3-4
Fixed-Route Vehicles

Number of Vehicles	Year	Make	Description	Seats	Wheelchair Capacity
16	2000	Gillig	PHANTOM 35'	36	2
4	2001	Trolley	BSTR-35	30	2
3	2003	Gillig	PHANTOM 35'	36	2
8	2003	Gillig	PHANTOM 30'	28	2
3	2004	Bluebird	A3 RE 7800S	54	1
6	2006	Gillig	Gillig Low 35'	32	2
9	2008	Gillig	Gillig Low 35'	32	2
2	2008	Gillig	Gillig Low 29'	28	2
9	2010	Gillig	Gillig Low Floor Hybrid 35'	32	2

OTHER CAPITAL EQUIPMENT

Votran's main operating facility located in South Daytona includes both an administrative and a maintenance building. Votran also has an intermodal transit facility located near the Ocean Center and a transfer plaza on Bethune Boulevard in Daytona Beach. In addition to the existing capital facilities, Votran is coordinating with Orange City to locate a west-side satellite facility on Lovett Road. Votran also is working with the City of DeLand for the planned intermodal center, which will accommodate Votran and SunRail Services.

There are more than 2,200 bus stops located within the Votran fixed-route service area. Votran currently is developing an inventory of the bus stops and the associated amenities. In coordination with the FDOT Transit-Pedestrian Safety pilot project, Votran has reviewed bus stop accessibility along two corridors within Volusia County. As part of future planning efforts, further review of the ADA accessibility at Votran's 2,200 bus stops is needed.

PARATRANSIT SERVICE

Votran's Gold Service provides trips to people who are unable to use the fixed-route service due to disability or when fixed-route service is not available in a person's area and that individual has no other means of transportation. Trips are provided to and from locations during the fixed-route system's regular service hours. Individuals interested in using the Gold Service must apply through a written application process. The application process may take up to 21 days to complete.

Votran's Gold Service is intended to serve a limited group of people under the following programs:

- **Americans with Disabilities Act (ADA):** Those individuals who reside within ¾-mile of an established bus route, but cannot use Votran regular fixed-route service because of a disability.
- **Transportation Disadvantaged (TD):** Includes qualifying individuals located in areas where fixed-route service is not available and who have no other means of transportation.
- **Rural Area Service:** Individuals residing in the rural area are able to access paratransit service funded by the FTA 5311 Rural Transit Assistance Program administered by Votran.
- **Agencies:** Includes people whose trips are funded under a negotiated agency contract.

The provision of Gold Service is divided into four service areas: east Volusia, southeast Volusia, west Volusia, and northwest Volusia. Service in east Volusia is available from 6:00 a.m. – 6:00 p.m., Monday through Saturday, with limited service on Sunday and during the evening hours. Service in west Volusia and southeast Volusia is available from 6:00 a.m. – 6:00 p.m., Monday through Saturday.

Trips must be reserved in advance by contacting the Votran Gold Service reservation department Monday through Saturday between 7:00 a.m. and 6:30 p.m. Reservations may be scheduled up to two weeks in advance. Next day service must be scheduled by 4:00 pm on the day preceding the trip. Votran Gold does not accept same day reservations.

Paratransit Vehicle Inventory

As shown in Table 3-5, complementary ADA service is operated using 40 vehicles. Ten of the vehicles listed below operate using hybrid-electric technology. Votran is in the process of equipping the entire paratransit fleet with four-view security cameras.

Table 3-5
Paratransit Vehicles

Number of Vehicles	Year	Make	Description	Seats	Wheelchair Capacity
2	2002	Ford	TURTLE TOP 25'	20	7
2	2003	Ford	TURTLE TOP 22'	14	4
9	2004	Ford	TURTLE TOP 22'	14	4
1	2006	Ford	TURTLE TOP 22'	14	4
8	2007	Chevy	TURTLE TOP 22'	14	4
8	2008	Chevy	TURTLE TOP 22'	14	4
5	2010	Azure Ford	TURTLE TOP 22' Hybrid	14	4
2	2010	Chevy	TURTLE TOP 25'	20	7
3	2010	Chevy	TURTLE TOP 25'	20	7

PRIVATE TRANSPORTATION PROVIDERS

In May 2011, each private provider in Volusia County was mailed a short questionnaire to obtain information about its transportation services. Providers that did not respond to the request also were contacted by telephone in an attempt to obtain information relating to the services that they provide. The information received from the private providers that responded to the questionnaire, a listing of the providers that did not respond to the request for information, and a copy of the questionnaire are presented as Appendix A.

FIXED-ROUTE TREND ANALYSIS

A trend analysis was conducted to examine the performance of Volusia County's fixed-route bus service. Data were compiled based on the information received from the fixed-route transit service provider (Votran) for six years from 2004 through 2009. This analysis includes statistical tables and graphs that

present selected performance indicators and effectiveness and efficiency measures for the selected time period. Table 3-6 lists the measures used in this performance and trend analysis. Highlights of the trend analysis are presented below.

Table 3-6
Performance Review Measures
Votran Trend Analysis (2004-2009)

General Performance	Effectiveness	Efficiency
Service Area Population	Vehicle Miles Per Capita	Operating Expense Per Capita
Passenger Trips	Passenger Trips Per Capita	Operating Expense Per Capita (in 2004$)
Vehicle Miles	Passenger Trips Per Revenue Mile	Operating Expense Per Passenger Trip
Revenue Miles	Passenger Trips Per Revenue Hour	Operating Expense Per Passenger Trip (in 2004$)
Total Operating Expense	Number of System Failures	Operating Expense Per Revenue Mile
Total Operating Expense (in 2004$)	Revenue Miles Between Failures	Operating Expense Per Revenue Mile (in 2004$)
Passenger Fare Revenue	Weekday Span of Service	Farebox Recovery
		Revenue Miles Per Vehicle Mile
		Average Fare

Performance Indicators

Performance indicators are used to present the data that are reported directly in the Florida Transit Information System's (FTIS) Integrated National Transit Database Analysis System (INTDAS) reports related to overall system performance. Selected performance indicators are presented in Table 3-7 and Figures 3-1 through 3-6 for the fixed-route system, as reported to the Federal Transit Administration's National Transit Database (NTD) program. It is important to note that in fiscal years 2005 and 2008, Votran conducted its mandatory NTD sampling process. During these sampling years, Votran used manual counts collected by surveyors versus electronic reporting measures to estimate its total passenger trips and passenger miles of service.

Table 3-7
General Performance Indicators
Votran Trend Analysis (2004-2009)

Performance Measure	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	% Change 2004-2009
Service Area Population	468,663	468,670	468,670	468,670	468,670	468,670	0.0%
Passenger Trips	2,896,254	3,319,665	3,050,281	2,953,041	3,318,580	3,071,247	6.0%
Vehicle Miles	2,712,747	2,727,627	2,764,881	2,704,279	2,705,643	2,645,438	-2.5%
Revenue Miles	2,566,533	2,582,915	2,599,092	2,555,333	2,480,335	2,467,382	-3.9%
Total Operating Expense	$8,754,929	$9,171,705	$10,360,626	$10,357,545	$11,482,950	$10,957,951	25.2%
Total Operating Expense (in 2004$)	$8,754,929	$8,622,840	$9,425,016	$9,153,680	$9,757,570	$9,343,114	6.7%
Passenger Fare Revenue	$2,013,634	$1,675,671	$1,811,037	$2,291,089	$2,185,205	$2,099,543	4.3%

Source: FTIS

Figure 3-1
Passenger Trips

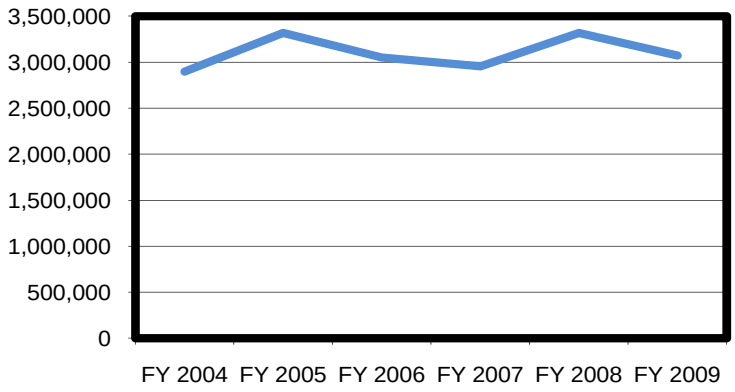


Figure 3-2
Service Area Population

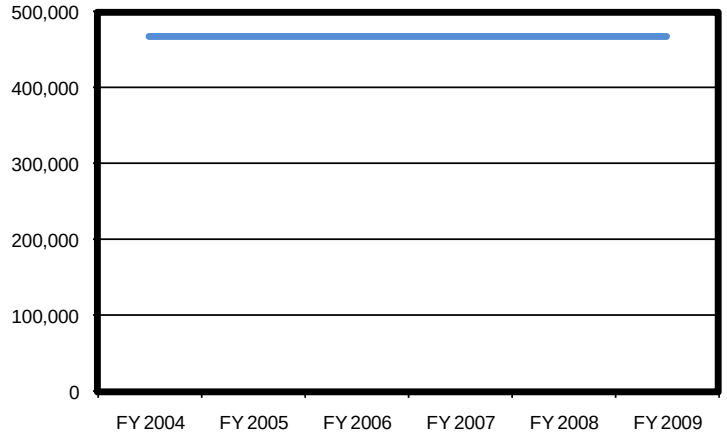


Figure 3-3
Vehicle Miles

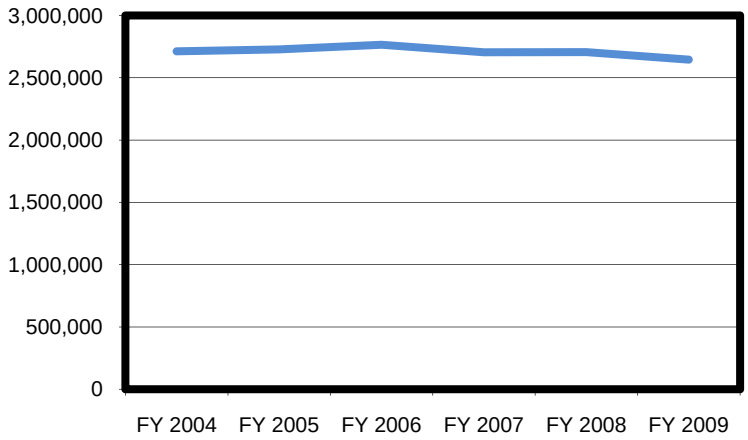


Figure 3-4
Revenue Miles

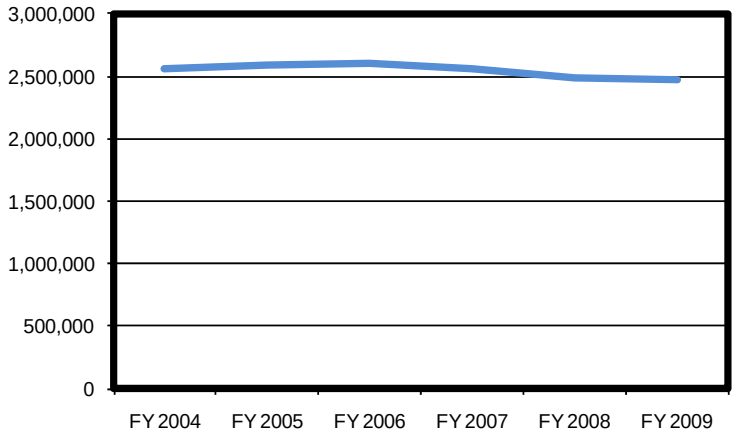


Figure 3-5
Passenger Fare Revenue

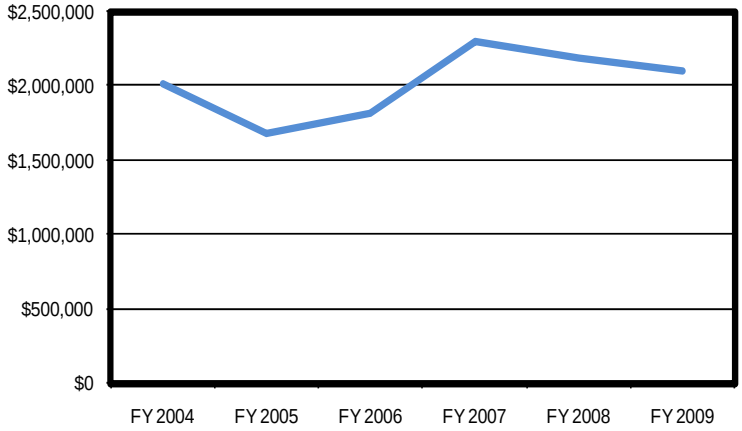
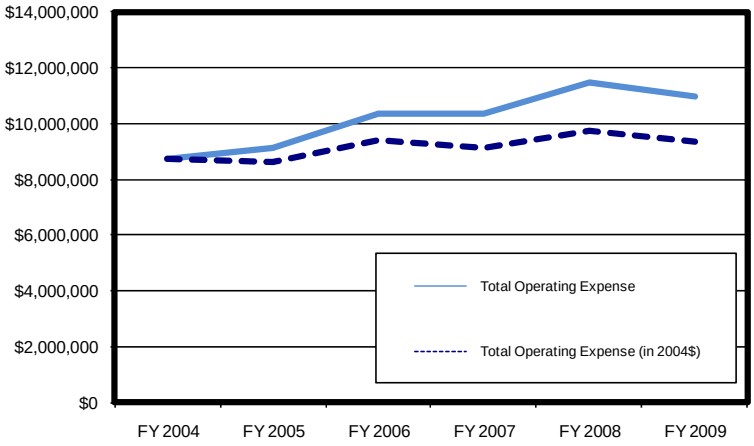


Figure 3-6
Operating Expense



The following is a summary of the trends that are evident among the performance indicators provided in Table 3-7 and Figures 3-1 through 3-6:

- According to the information reported to NTD, the service area population for Votran has remained consistent, with no change from 2004 to 2009.
- The passenger trips for Votran increased from 2,896,254 in 2004 to 3,071,247 in 2009, an increase of approximately 6 percent.
- Total vehicle miles of service decreased from 2,712,747 in 2004 to 2,645,438 in 2009, a decrease of approximately 3 percent.
- Similarly, revenue miles of service also decreased from 2,556,533 in 2004 to 2,467,382 in 2009, a decrease of about 4 percent.

- Total operating expense increased from $8,754,929 in 2004 to $10,957,951 in 2009, an increase of approximately 25 percent. However, the real dollar increase (adjusted for inflation) in total operating expense is below 7 percent.
- Passenger fare revenues have increased from $2,013,634 in 2004 to $2,099,543 in 2009, an increase of over 4 percent.

Effectiveness Measures

Effectiveness measures indicate the extent to which service-related goals are being met. For example, passenger trips per capita are a measure of the effectiveness of a system in meeting the transportation needs of the community. Selected effectiveness measures are presented in Table 3-8 and Figures 3-7 through 3-10.

Table 3-8
Effectiveness Measures
Votran Trend Analysis (2004-2009)

Effectiveness Measure	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	% Change 2004-2009
Vehicle Miles Per Capita	5.79	5.82	5.86	5.77	5.77	5.64	-2.6%
Passenger Trips Per Capita	6.18	7.08	6.51	6.30	7.08	6.55	6.0%
Passenger Trips Per Revenue Mile	1.13	1.29	1.17	1.16	1.34	1.24	9.7%
Passenger Trips Per Revenue Hour	17.96	20.68	18.83	18.43	20.62	19.46	8.4%

Source: FTIS

Figure 3-7
Vehicle Miles per Capita

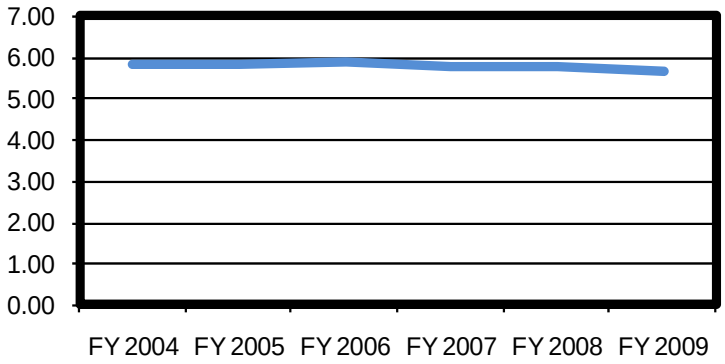


Figure 3-8
Passenger Trips per Capita

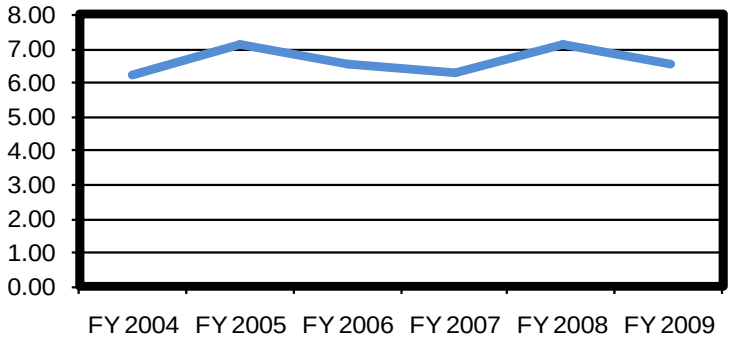


Figure 3-9
Passenger Trips per Revenue Mile

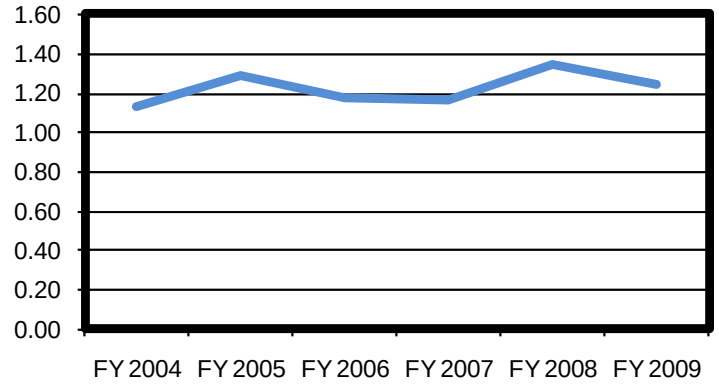
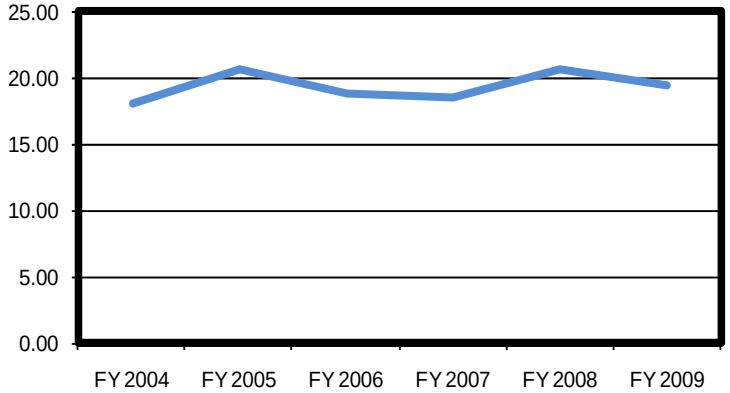


Figure 3-10
Passenger Trips per Revenue Hour



The following is a summary of the trends that are evident among the effectiveness measures presented in Table 3-8 and Figures 3-7 through 3-10:

- Vehicle miles per capita decreased by over 2.5 percent from 2004 to 2009.

- Passenger trips per capita increased from 6.18 in 2004 to 6.55 in 2009, an increase of about 6 percent.
- Passenger trips per revenue mile increased from 1.13 in 2004 to 1.24 in 2009, an increase of almost 10 percent.
- Passenger trips per revenue hour increased from 17.96 in 2004 to 19.46 in 2009, an increase of more than 8 percent.

These measures indicate that Votran is traveling a shorter distance per person, but in that travel they are effectively attracting more passengers. The effectiveness trends could be related to sprawled development occurring in the region, operating bases being located further away from actual routes, and/or modifications to routing.

Efficiency Measures

Efficiency measures are designed to measure the level of resources necessary to achieve a given level of output. Efficiency measures are presented in Table 3-9 and Figures 3-11 through 3-16. Many of the efficiency measures show that costs for service increased, which is consistent with the experience of several Florida transit agencies during this timeframe due to unstable fuel prices, increases in healthcare costs, wage increases, and inflation. Due to the increased costs of service, without corresponding fare increases to passengers the farebox recovery for Votran has decreased. To analyze the costs in real dollars, all costs were deflated to 2004 using annual deflation rates of 3.39 percent for 2005, 3.24 for 2006, 2.85 for 2007, 3.85 for 2008, and 0.34 for 2009, based on the Consumer Price Index (CPI).

Table 3-9
Efficiency Measures,
Votran Trend Analysis (2004-2009)

Efficiency Measure	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	% Change 2004-2009
Operating Expense Per Capita	$18.68	$19.57	$22.11	$22.10	$24.50	$23.38	25.2%
Operating Expense Per Capita (in 2004$)	$18.68	$18.40	$20.11	$19.53	$20.82	$19.94	6.7%
Operating Expense Per Passenger Trip	$3.02	$2.76	$3.40	$3.51	$3.46	$3.57	18.2%
Operating Expense Per Passenger Trip (in 2004$)	$3.02	$2.60	$3.09	$3.10	$2.94	$3.04	0.6%
Operating Expense Per Revenue Mile	$3.41	$3.55	$3.99	$4.05	$4.63	$4.44	30.2%
Operating Expense Per Revenue Mile (in 2004$)	$3.41	$3.34	$3.63	$3.58	$3.93	$3.79	11.0%
Operating Expense Per Revenue Hour	$54.30	$57.14	$63.94	$64.64	$71.34	$69.42	27.8%
Operating Expense Per Revenue Hour (in 2004$)	$54.30	$53.72	$58.17	$57.13	$60.62	$59.19	9.0%
Farebox Recovery	23.00%	18.27%	17.48%	22.12%	19.03%	19.16%	-16.7%
Revenue Miles Per Vehicle Mile	0.95	0.95	0.95	0.94	0.92	0.93	-2.1%
Revenue Hours Per Total Vehicles (000)	2,986.04	2,972.65	3,000.54	3,023.19	3,036.89	2,978.23	-0.3%
Average Fare	$0.70	$0.50	$0.59	$0.78	$0.66	$0.68	-2.9%

Source: FTIS

Figure 3-11
Operating Expense per Capita

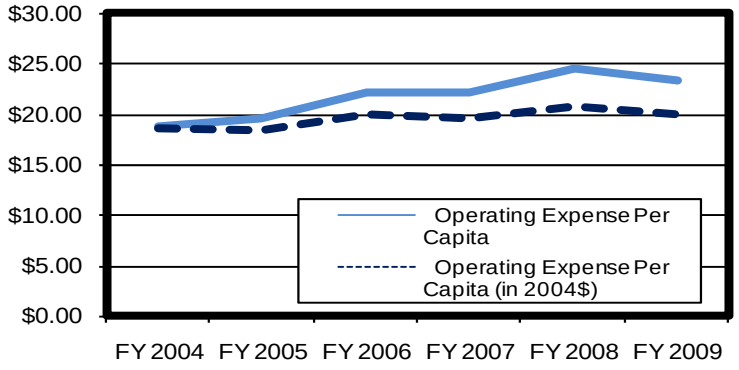


Figure 3-12
Operating Expense per Passenger Trip

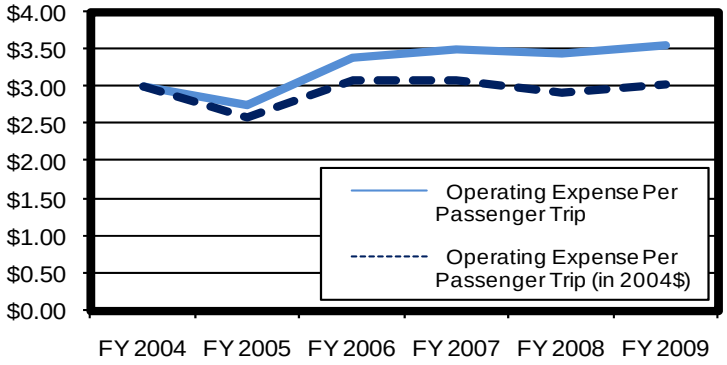


Figure 3-13
Operating Expense per Revenue Mile

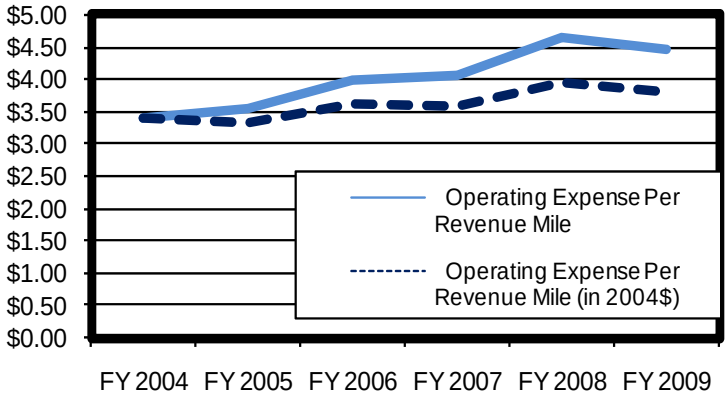


Figure 3-14
Farebox Recovery Ratio

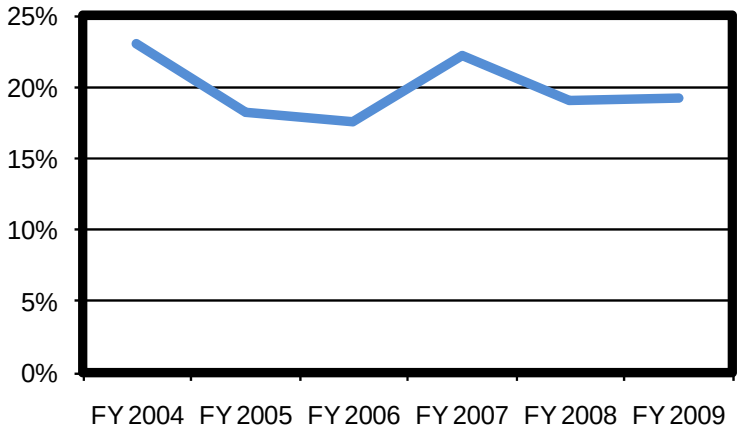


Figure 3-15
Revenue Miles per Vehicle Mile

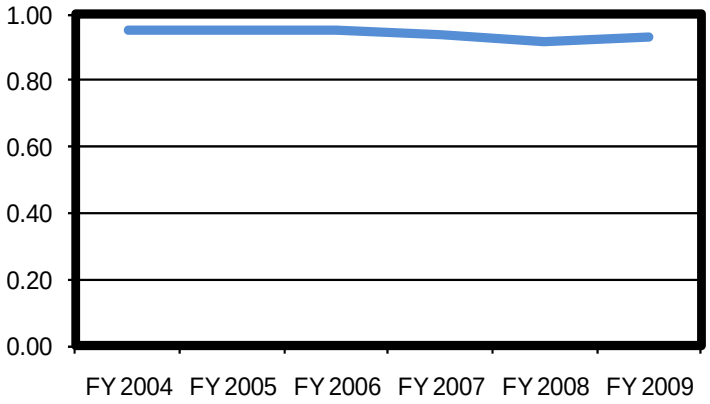
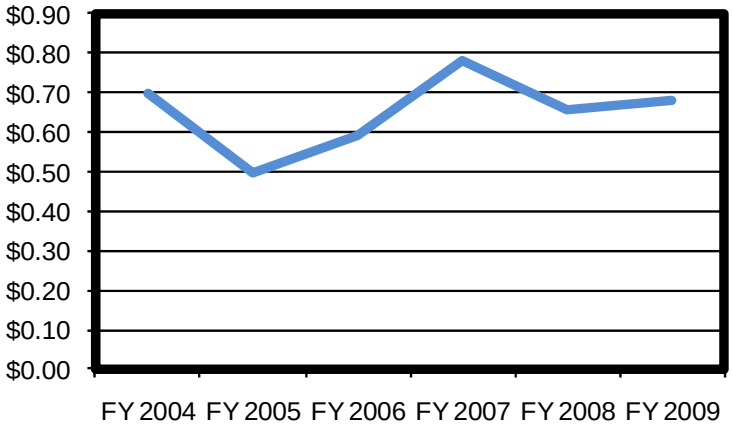


Figure 3-16
Average Fare



The following is a summary of the trends that are evident among the cost efficiency measures presented in Table 3-9 and Figures 3-11 through 3-16:

- Operating expense per capita increased by 25 percent, from $18.68 in 2004 to $23.38 in 2009. The real dollar increase, however, is approximately 7 percent.
- Operating expense per passenger trip increased from $3.02 in 2004 to $3.57 in 2009, an increase of about 18 percent in nominal dollars, but less than 1 percent in real dollars.
- While farebox revenues have increased they have not kept pace with expenditures, therefore, farebox recovery decreased, from 23.0 percent in 2004 to 19.16 percent in 2009, a decrease of nearly 17 percent.
- Revenue miles per vehicle mile decreased, from 0.95 in 2004 to 0.93 in 2009, a decrease of 2 percent.
- The average fare decreased from $0.70 in 2004 to $0.68 in 2009, a decrease of 3 percent.

Summary Results for the Trend Analysis

The trend analysis is only one aspect of transit performance evaluation; however, when combined with the peer review analysis, the results provide a starting point for understanding the trends in transit system performance over time and compared to other transit systems with similar characteristics. Some of the key trends are described below.

Service Consumption – Passenger trips per capita, passenger trips per revenue mile, and passenger trips per revenue hour have shown a positive trend over a relatively short period, 2004 to 2009.

Service Supply – Vehicle miles per capita (service supply) have decreased from 2004 to 2009.

Cost Efficiency – Cost efficiency over the six-year period was measured by analyzing both the nominal and real dollar changes in costs.

Operating expenses per capita, operating expenses per passenger trip, and operating expenses per revenue mile have increased over the six-year period. The increase could be contributed to several factors including increases in insurance, fuel costs, and maintenance costs.

Operating Ratio – The farebox recovery ratio had a negative trend from 2004 to 2009. In 2009, Votran's farebox recovery ratio was 19.16 percent. The average farebox recovery for transit systems in Florida is 18 percent; therefore, Votran is slightly exceeding the state average.

Table 3-10 provides a summary of the trend analysis showing the positive and negative trends identified in the analysis.

Table 3-10
Votran Trend Analysis Summary (2004-2009)

Measure/Indicator	Change (2004-2009)
General Performance	
Service Area Population	0.0%
Passenger Trips	6.0%
Vehicle Miles	-2.5%
Revenue Miles	-3.9%
Total Operating Expense	25.2%
Total Operating Expense (in 2004$)	6.7%
Passenger Fare Revenue	4.3%
Service Supply	
Vehicle Miles Per Capita	-2.6%
Service Consumption	
Passenger Trips Per Capita	6.0%
Passenger Trips Per Revenue Mile	9.7%
Passenger Trips Per Revenue Hour	8.4%
Cost Efficiency	
Operating Expense Per Capita	25.2%
Operating Expense Per Capita (in 2004$)	6.7%
Operating Expense Per Passenger Trip	18.2%
Operating Expense Per Passenger Trip (in 2004$)	0.6%
Operating Expense Per Revenue Mile	30.2%
Operating Expense Per Revenue Mile (in 2004$)	11.0%
Operating Ratio	
Farebox Recovery Ratio	-16.7%
Vehicle Utilization	
Revenue Miles Per Vehicle Miles	-2.1%
Fare	
Average Fare	-2.9%

Source: FTIS

FIXED-ROUTE PEER REVIEW

A peer review analysis was conducted for Votran to compare its performance at a given point in time with other similar agencies. The peer review was conducted using 2009 NTD data, the most current validated NTD data available. Selected performance indicators, effectiveness measures, and efficiency measures are provided throughout this section in tabular and graphical formats to illustrate the performance of the fixed-route system relative to the peer group. For each selected indicator and measure, the tables provide the Votran value, the minimum value among the peer group, the maximum value among the peer group, the mean of the peer group, and the percent that the Votran values are away from the mean. The methodology used to select the peer systems is discussed below.

Peer System Selection Methodology

The peer selection was conducted using the 2009 FTIS database. At the time of the peer selection process, the most current data available in the FTIS database were 2009 NTD data. The peers were identified through an objective assessment of five standard variables in NTD. After the peer systems were selected using the FTIS database, the 2009 NTD data for each peer system were obtained through FTIS and used to conduct the peer review analysis. The variables used to select the peer systems include:

- Geography (southeastern United States)
- Service Area Population
- Operating Expense
- Revenue Miles
- Vehicles Operated in Maximum Service

First, the peer group selection was based on geographic location; the states included were Louisiana, Arkansas, Mississippi, Alabama, Tennessee, North Carolina, South Carolina, Georgia, and Florida. Fixed-route systems operating in these southeastern states were identified and analyzed based on the four remaining variables. Based on the results of the FTIS peer selection process and input from Votran staff, six transit systems were selected for the peer review analysis. Table 3-11 presents the selected peers.

Performance Indicators

Selected performance indicators for the peer review are presented in this section. Categories of performance indicators include population, population density, ridership, revenue miles, and vehicles. Table 3-12 and Figures 3-17 through 3-24 present the performance indicators for the Votran peer review analysis.

Table 3-11
Selected Peer Systems,
Votran Peer Review Analysis

#	System	Location
1	Pasco County Public Transportation (PCPT)	Port Richey, FL
2	Charleston Area Regional Transportation Authority (CARTA)	Charleston, SC
3	Lee County Transit (LeeTran)	Ft. Myers, FL
4	Chatham Area Transit Authority (CAT)	Savannah, GA
5	Sarasota County Area Transit (SCAT)	Sarasota, FL
6	Capital Area Transit System (CATS)	Baton Rouge, LA

Table 3-12
Performance Indicators,
Votran Peer Review Analysis (2009)

Indicator	Votran	Peer Group Minimum	Peer Group Maximum	Peer Group Mean	Votran % from the Mean
Service Area Population	468,670	232,048	505,879	420,474	11.46%
Service Area Population Density	388	388	6,930	2,210	-82.43%
Passenger Trips	3,071,247	926,076	3,990,389	2,940,888	4.43%
Revenue Miles	2,467,382	1,112,571	3,093,375	2,460,461	0.28%
Revenue Hours	157,846	66,508	231,655	170,558	-7.45%
Vehicles Operated in Maximum Service	46	16	66	46	0.00%
Total Operating Expense	$10,975,951	$4,051,160	$14,592,160	$11,512,774	-4.66%
Passenger Fare Revenues	$2,102,992	$655,968	$3,161,494	$2,127,980	-1.17%

Source: FTIS

Figure 3-17
Service Area Population

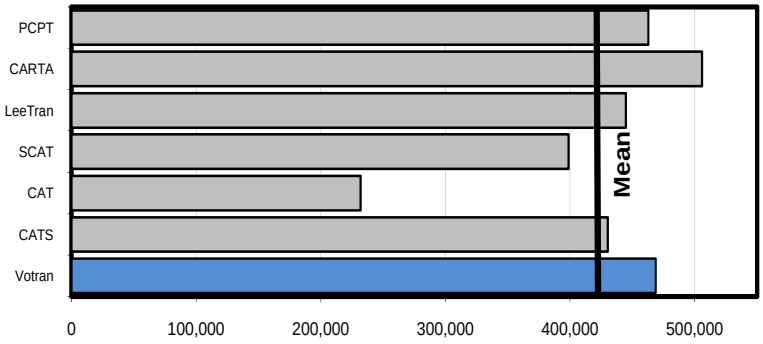


Figure 3-18
Service Area Population Density
(persons/square mile)

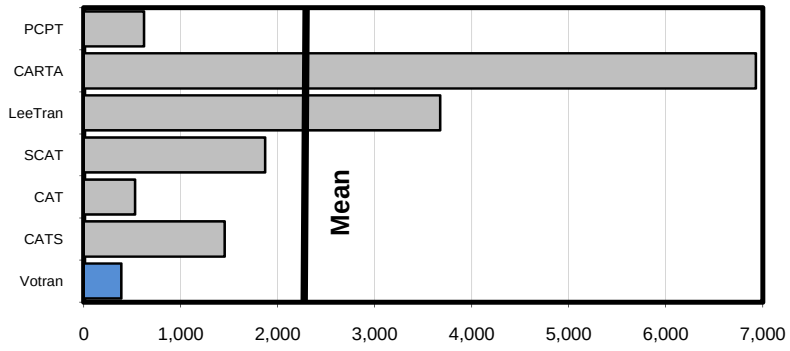


Figure 3-19
Passenger Trips

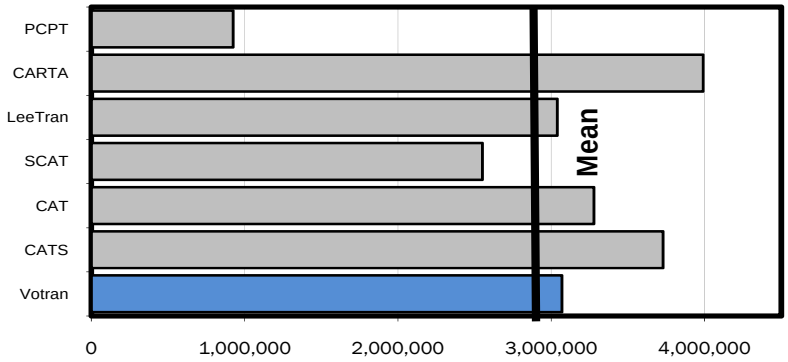


Figure 3-20
Revenue Miles

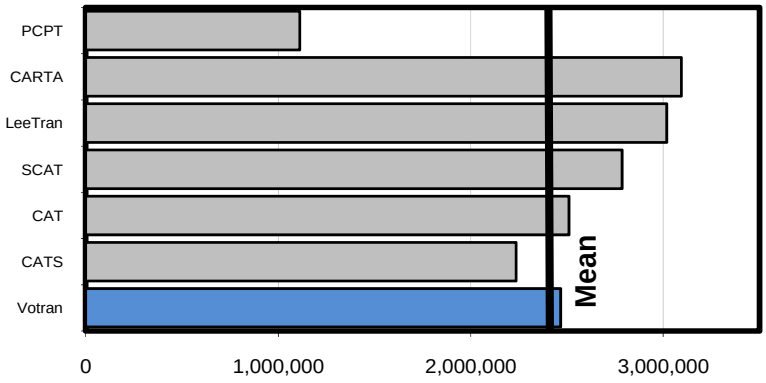


Figure 3-21
Revenue Hours

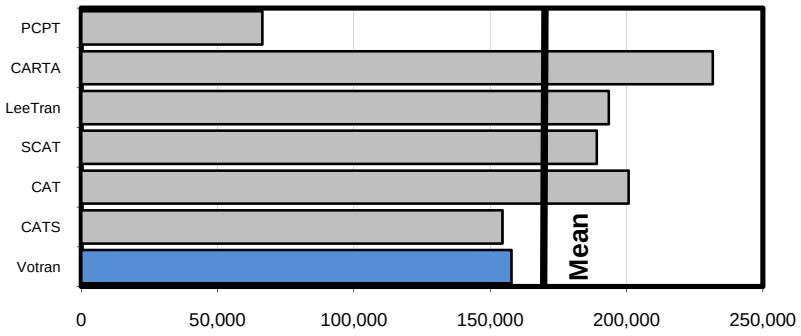


Figure 3-22
Vehicles Operated in Maximum Service

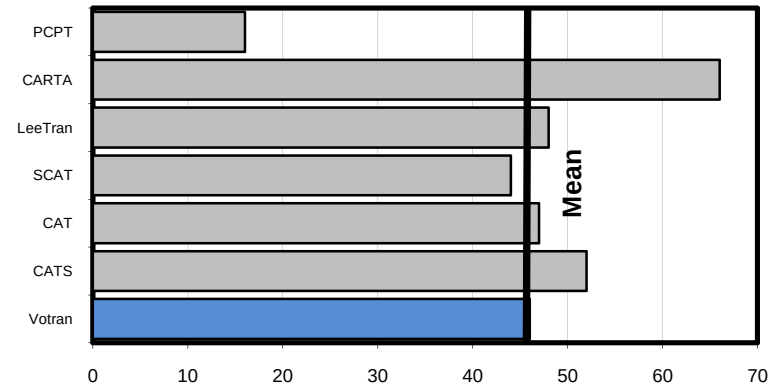


Figure 3-23
Operating Expense

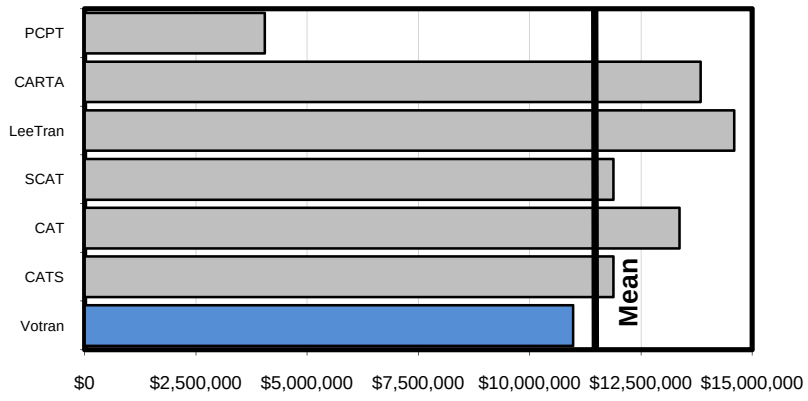
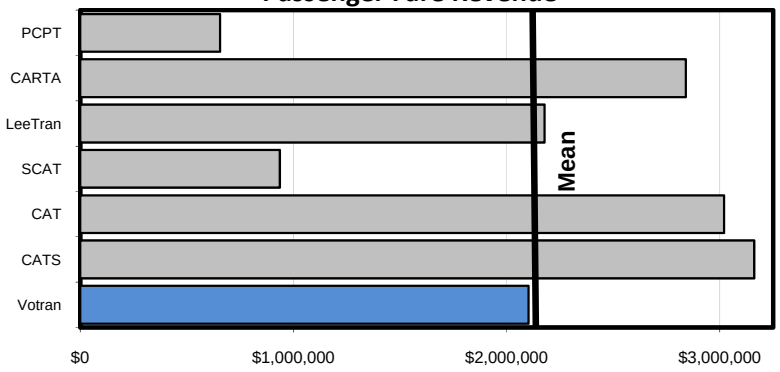


Figure 3-24
Passenger Fare Revenue



The following is a summary of the peer review analysis performance indicators, based on the information presented in Table 3-12 and Figures 3-17 through 3-24:

- Service area population for Votran is greater than the peer group average, 11 percent above the mean, while the population density is 82 percent below the mean.
- The passenger trips for Votran are more than 4 percent above the peer group mean.
- Revenue miles for Votran are 0.30 percent below the peer group mean.
- Votran's vehicles operated in maximum service are equal to the peer group mean.
- Operating expense for Votran is less than the peer group average by almost 5 percent, and passenger fare revenues are below the peer group average by 1 percent.

Effectiveness Measures

Categories of effectiveness measures include service supply, service consumption, and quality of service. These categories are each represented by one variable: vehicle miles per capita, passenger trips per revenue mile, and weekday span of service. Table 3-13 and Figures 3-25 through 3-27 represent the effectiveness measures for the Votran peer review analysis.

Table 3-13
Effectiveness Measures,
Votran Peer Review Analysis (2009)

Measure	Votran	Peer Group Minimum	Peer Group Maximum	Peer Group Mean	Votran % from the Mean
Vehicle Miles Per Capita	5.64	2.58	11.39	6.59	-14.28%
Passenger Trips Per Revenue Mile	1.24	0.83	1.67	1.18	5.43%
Weekday Span of Service (in hours)	18.00	15.63	20.07	18.25	-1.39%

Source: FTIS

Figure 3-25
Vehicle Miles per Capita

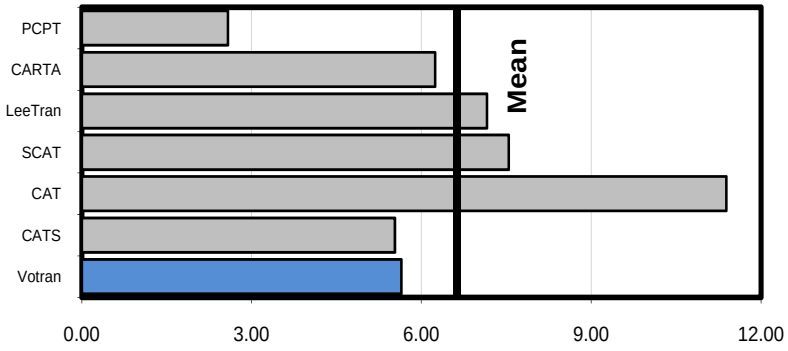


Figure 3-26
Passenger Trips per Revenue Mile

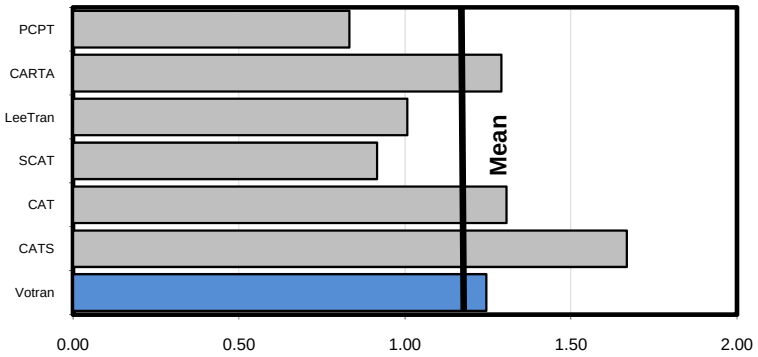
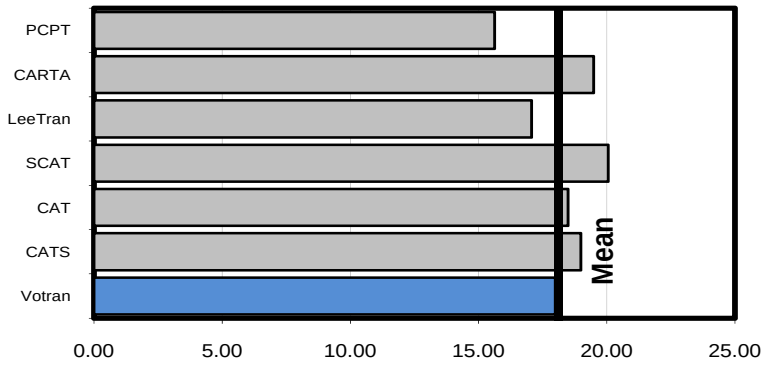


Figure 3-27
Weekday Span of Service (in hours)



The following is a summary of the effectiveness measures for the peer review analysis:

- Vehicle miles per capita for Votran are 14 percent below the peer group mean.
- Passenger trips per revenue mile for Votran are 5 percent above the peer group mean.

- Weekday span of service for Votran is approximately 1 percent below the peer group mean.

Efficiency Measures

Categories of efficiency measures include cost efficiency and operating ratios. Table 3-14 and Figures 3-28 through 3-34 present the efficiency measures for the Votran peer review analysis.

Table 3-14
Efficiency Measures,
Votran Peer Review Analysis (2008)

Measure	Votran	Peer Group Minimum	Peer Group Maximum	Peer Group Mean	Votran % from the Mean
Operating Expense Per Capita	$23.42	$8.76	$57.58	$29.62	-20.93%
Operating Expense Per Passenger Trip	$3.57	$3.19	$4.80	$4.02	-11.09%
Operating Expense Per Revenue Mile	$4.45	$3.64	$5.32	$4.61	-3.60%
Operating Expense Per Revenue Hour	$69.54	$59.75	$76.90	$67.42	3.14%
Farebox Recovery Ratio (%)	19.16%	7.88%	26.61%	18.27%	4.87%
Revenue Miles Per Vehicle Mile	0.93	0.93	0.98	0.94	-1.17%
Average Fare	$0.68	$0.37	$0.92	$0.71	-3.35%

Source: FTIS

Figure 3-28
Operating Expense per Capita

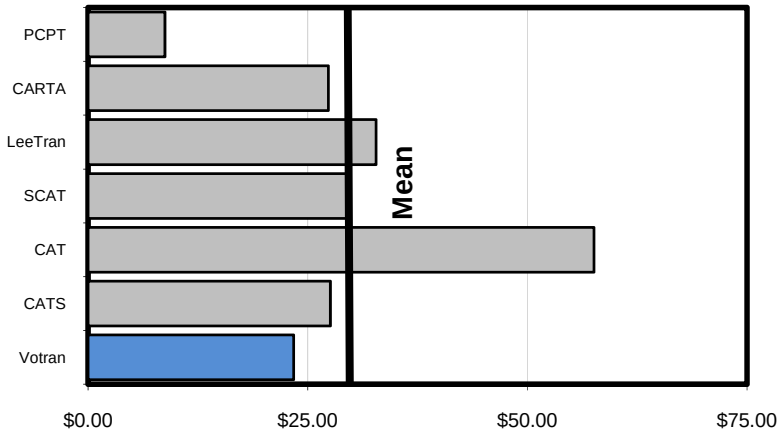


Figure 3-29
Operating Expense per Passenger Trip

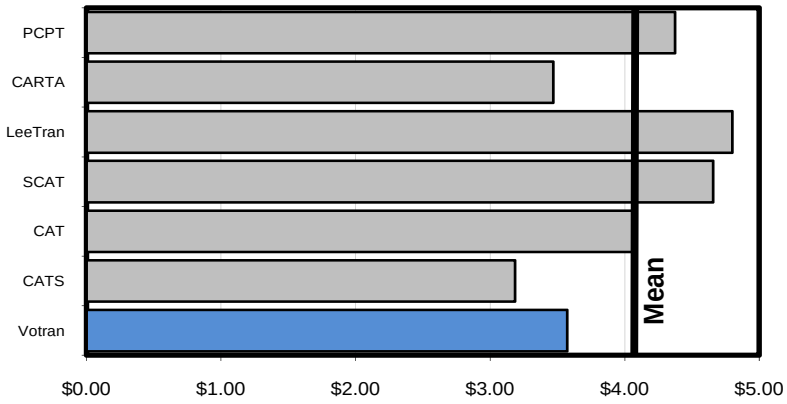


Figure 3-30
Operating Expense per Revenue Mile

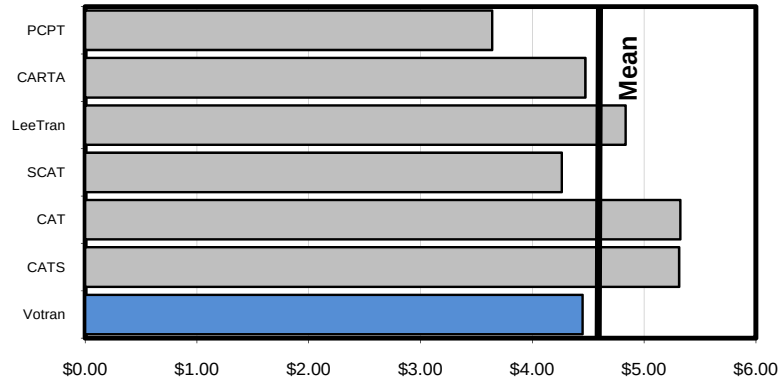


Figure 3-31
Operating Expense per Revenue Hour

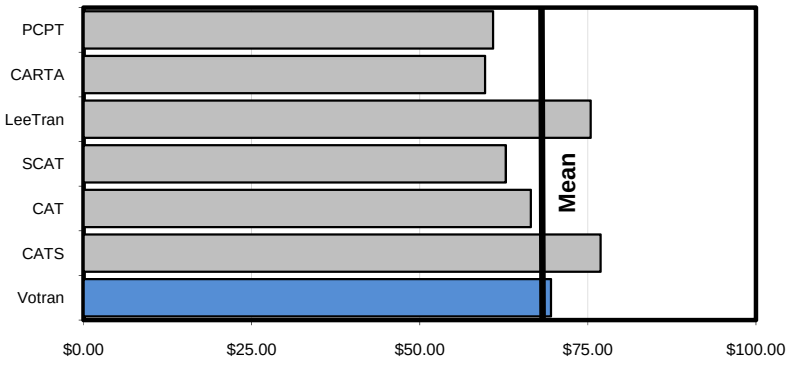


Figure 3-32
Farebox Recovery

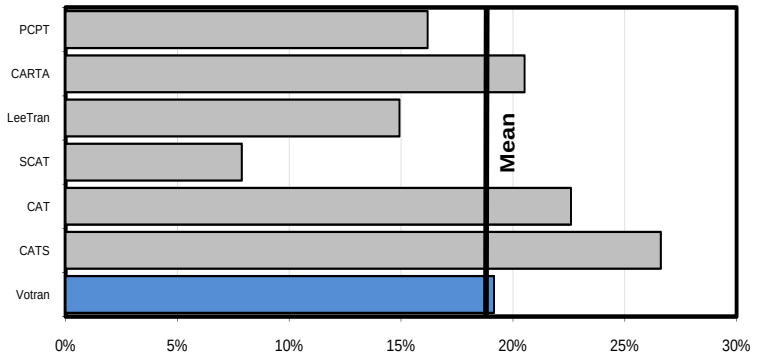


Figure 3-33
Revenue Miles per Vehicle Miles

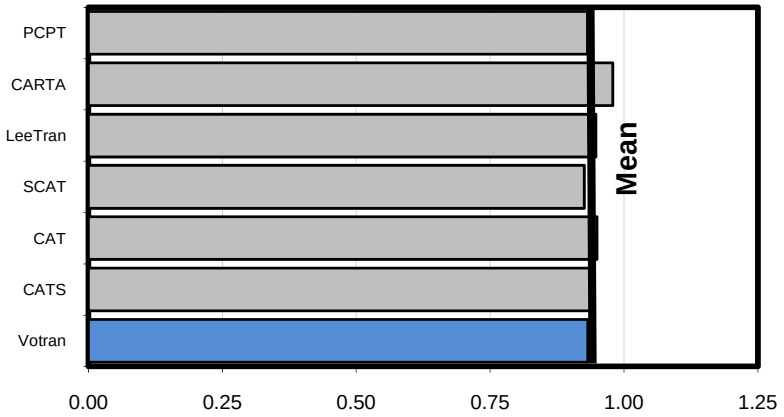
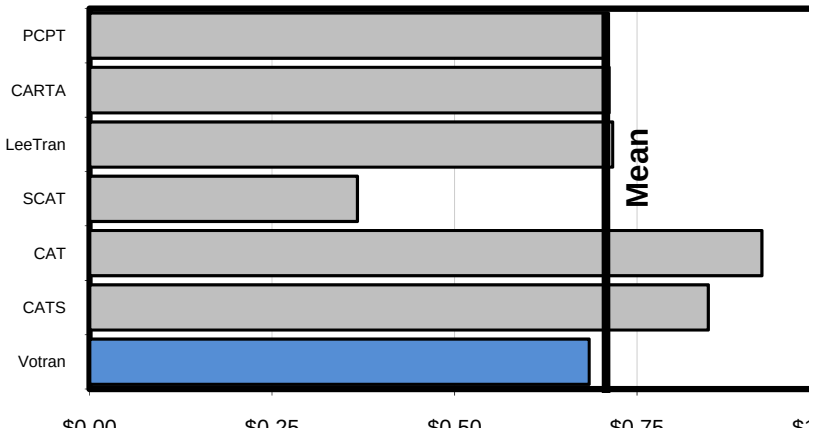


Figure 3-34
Average Fare



The following is a summary of the efficiency measures for the peer review analysis:

- Operating expense per capita for Votran is more than 20 percent below the peer group mean.

- Operating expense per passenger trip for Votran is about 11 percent below the peer group mean. Operating expense per revenue mile for Votran is more than 3.5 percent below the peer group mean, while operating expense per revenue hours is around 3 percent above the peer group mean.
- Farebox recovery for Votran is above the peer group mean by about 5 percent.

Summary Results for the Peer Review Analysis

Table 3-15 provides a summary of the peer review analysis for the Votran fixed-route system. The summary includes the percent that Votran is away from the peer group mean for each performance measure.

Table 3-15
Votran Peer Review Analysis Summary (2009)

Performance Indicators/Measures	Percent from the Mean
Performance Indicators	
Service Area Population	11.46%
Service Area Population Density	-82.43%
Passenger Trips	4.43%
Revenue Miles	0.28%
Revenue Hours	-7.45%
Vehicles Operated in Maximum Service	0.00%
Total Operating Expense	-4.66%
Passenger Fare Revenues	-1.17%
Service Supply	
Vehicle Miles Per Capita	-14.28%
Service Consumption	
Passenger Trips Per Revenue Mile	5.43%
Quality of Service	
Weekday Span of Service (in hours)	-1.39%
Cost Efficiency	
Operating Expense Per Capita	-20.93%
Operating Expense Per Passenger Trip	-11.09%
Operating Expense Per Revenue Mile	-3.60%
Operating Expense Per Revenue Hour	3.14%
Operating Ratio	
Farebox Recovery Ratio (%)	4.87%
Vehicle Utilization	
Revenue Miles Per Vehicle Mile	-1.17%
Fare	
Average Fare	-3.35%

Source: FTIS

SECTION 4: PUBLIC INVOLVEMENT

A public involvement process was developed for the TDP to outline public involvement efforts throughout the TDP process and ensure ample opportunities for the public as well as local agencies and organizations to participate in the development of the TDP. The TDP will be developed in accordance with the Votran TDP Public Involvement Plan (PIP). A copy of the TDP public involvement process has been submitted to and approved by FDOT. Both PIP and FDOT approval are included in Appendix B. This section summarizes the public involvement activities that have been undertaken to date as part of the TDP major update. The components of the public involvement activities are presented below.

REVIEW COMMITTEE MEETINGS

As part of the TDP process, a TDP Review Committee was established to provide oversight and technical feedback. The Review Committee is composed of representatives from the Workforce Development Board, FDOT, Volusia County Growth Management, Volusia County Association for Responsible Development, Daytona Beach Partnership, the ISB Coalition, Volusia County Transportation Planning Organization, Transportation Disadvantaged Local Coordinating Board (TDLCB), and various municipalities, including DeLand, Daytona Beach, Deltona, Port Orange, and Ormond Beach. The Review Committee met several times throughout the course of the project.

The first TDP Review Committee Meeting was held on March 10, 2011. The meeting began with a brief overview of the TDP process, including the advisory role of the Review Committee. The Committee members were asked to participate in an exercise where they gave one sentence or word that would express their transit vision or an item they wanted to have included in the TDP. The responses are included in the meeting minutes presented as Appendix C. During the initial meeting, the Review Committee also reviewed the TDP PIP, the project schedule, and the selected peer systems that would be used to complete the peer review analysis. The meeting concluded with a group exercise that identified key gaps and overlaps in Volusia County's transportation system and some potential solutions. The issues and solutions that were identified are included in Appendix C. Based on comments received from the Review Committee during the initial meeting, Pasco County Public Transportation (PCPT) was added to the list of peer systems that were reviewed as part of the analysis.

The second TDP Review Committee Meeting was held on May 12, 2011. The meeting began with a presentation of the agency trends, peer trends, on-board survey results, public workshop results, and key themes from the stakeholder interview process. The Review Committee was asked to review and provide comments on Votran's mission statement, the previous TDP goals, and potential new goals. The meeting concluded with a discussion on future service alternatives that should be considered in the TDP and the committee's vision for public transportation in Volusia County over the next 10 years. The key

theme that emerged from the discussion was the need for the County to consider incentives that encourage choice transit ridership, including limiting the availability of parking and coordinating with developers to encourage higher densities.

The third TDP Review Committee Meeting was held on July 28, 2011. The meeting began with a presentation that included an overview of the transit demand and mobility needs within Volusia County and a review of potential operating and capital projects for consideration as future services that may be included in the TDP through a staged-implementation plan. The Review Committee was asked to provide feedback on approaching planning from a corridor perspective. Votran commented that the agency is reviewing the corridor approach in terms of transit oriented development and examining high volume segments for road and transit improvements. The committee reiterated the importance of reviewing the densities and intensities along corridors and ensuring that the corridors are transit supportive prior to providing service to new areas. The committee recommended that Votran provide developers and local governments with guidelines and/or model comprehensive plan language that outline the densities that are needed for Votran to consider expanding service to new areas. The Review Committee was asked to identify the areas that they consider to be major corridors in Volusia County. Corridors that were identified by the Review Committee include:

1. US 1
2. A1A
3. Clyde Morris Boulevard
4. US 17/92
5. Nova Road
6. International Speedway Boulevard
7. SR 44
8. Doyle Road
9. Dunlawton Avenue

The Review Committee participated in an interactive exercise that required building-consensus on the list of potential projects, prioritizing the projects by implementation year, and assigning potential funding sources to each project. Prior to beginning the exercise, the potential funding sources were reviewed and explained. The Review Committee commented that other sources should be considered, such as the reallocation of funding allocated in the TPO's Transportation Improvement Program (TIP). Based on the combined results of the activities, the top projects that should be considered for implementation include:

1. New route from the DeLand Amtrak station to Downtown DeLand and the airport
2. Bus shelters and benches
3. Bike racks
4. Daytona Beach Circulator
5. Increase frequencies to 30 minutes on all routes (except Flex Route 42 and 43)

6. Later evening service on Routes 5, 6, 7, 8, 11, 12, 17B, 18, 19, 40, 41, 42, 43, 60, 700, 20, 21, 22, 23, 24
7. Later evening service on Flex Route 42 and 43
8. Express route along ISB from Daytona Beach to the DeLand SunRail Station
9. Customer information kiosks
10. ADA improvements at bus stops, including location adjustments and bus pads

The top three revenue sources that were selected to fund these projects included the implementation of a sales tax, mobility fee, and hotel tax.

STAKEHOLDER INTERVIEWS

To assess the attitudes of key local officials and community leaders regarding the transit system, twenty five stakeholder interviews were conducted. Some interviews included multiple individuals, while others were one-on-one. The interviews sought to assess political and community leaders' views on transit's current and future role in the community, transit finance and governance, and other issues relevant to the transit plan. Table 4-1 through 4-3 provides a list of the stakeholders interviewed for the update process by group: County at-large, east Volusia County, and west Volusia County.

Table 4-1
Stakeholder Interview Participants (Volusia County At-Large)

Name	Affiliation
Frank Bruno	Volusia County
Joyce Cusack	Volusia County
James Dinneen	Volusia County
Mary Anne Connors	Volusia County
Charlene Weaver	Volusia County
David Byron	Volusia County
Jon Cheney	Volusia County
George Recktenwald	Volusia County
Jerry Britton	Volusia County
Melissa Booker	Volusia County

Table 4-2
Stakeholder Interview Participants (Volusia County East Side)

Name	Affiliation
Joshua Wagner	County Council
Joie Alexander	County Council
Mayor Barringer	City of New Smyrna Beach
Pamela Brangaccio	City of New Smyrna Beach
Paul McKitrick	City of Daytona Beach
Reed Berger	City of Daytona Beach
Mayor Johnson	City of Holly Hill
Mayor Locke III	City of South Daytona
Mayor Jennings	City of Daytona Beach Shores
Joyce Shanahan	City of Ormond Beach
Ric Goss	City of Ormond Beach
James Cameron	Daytona Beach Chamber of Commerce
Bob Davis	Hotel & Lodging Association of Volusia County
Maryam Ghyabi	Ghyabi & Associates

Table 4-3
Stakeholder Interview Participants (Volusia County West Side)

Name	Affiliation
Andy Kelly	County Council
Patricia Northey	County Council
Dan Parrott	City of DeBary
Ron Paradise	City of Deltona
Mayor Strickland	Orange City
Jamie Croteau	Orange City
Alison Stettner	Orange City

A series of 29 detailed questions was developed to facilitate the discussion and obtain stakeholders' perceptions of three major areas related to public transportation in Volusia County, including:

- General transit issues
- Votran Vision
- Transit funding issues

A copy of the interview script that was used for all interviews is presented in Appendix C. Common perceptions and themes from the stakeholder interviews were grouped by geographic areas and are summarized below.

General Transit Issues

Stakeholders were asked to provide their opinions and identify their level of knowledge with the existing transit services in Volusia County, including their perception of Votran, if they use Votran, who they believe uses Votran, and what they think are the most significant issues facing Votran users. Stakeholders also were asked their opinions about traffic congestion in Volusia County and the need for initiatives to address any congestion issues. Major themes identified through these interviews that relate to the existing transit services include the following ideas.

County At-Large

- Transit is a social service and not seen as a transportation method of choice; therefore, most people who are not reliant on Votran do not think about its services.
- The current passenger fare is reasonable but maybe too low.
- Those who do use Votran depend on the service for mobility.
- The current Votran system provides adequate coverage.
- The service is not frequent or convenient enough to attract choice riders.
- Stakeholders have not had a need to use Votran.
- The abundance of ample and free parking is a deterrent to using public transit; however, limiting parking would not be supported.
- The County needs a more direct route connecting Daytona Beach and DeLand.
- Votran is doing an excellent job with the resources that are available.
- An education campaign to sell the idea of transit to non-users is needed.
- There is none to some minor traffic congestion in Volusia County.
- People move to Volusia County to avoid higher density development and growth.

East Side

- The majority of Votran users are transit-dependent.
- The current passenger fare could be increased to $3 on the trolley.
- The current fare is reasonable, but could be increased to $1.50.
- The public perception of Votran is good.
- Votran has done an excellent job with the resources that are available.
- Tourists are more likely to use a trolley than the regular fixed-route bus.
- The routes that are operated on the east side of the County are adequate.
- Votran has done an exceptional job with the New Smyrna Beach flex-routes.
- There is not currently a congestion problem in Volusia County.
- When gas prices increase, people may be interested in other transportation alternatives.
- The frequencies and timing are the biggest issues facing Votran. Timing between the Votran buses and the train should be reviewed.

- Stakeholders do not use Votran due to busy schedules and the desire to drive an automobile.
- Service should be geared to support community and entertainment venues.

West Side

- Accessing social services is an issue for the homeless.
- The population is shifting to the west side.
- Locations on the west side without adequate transit include the Salvation Army, the jail, the YMCA, high schools, and the health clinic.
- There is no transit service west of US 17.
- Transit service to Daytona State College is needed.
- With the resources available, Votran leadership is doing an excellent job.
- Stakeholders do not use Votran due to long frequencies that conflict with busy schedules.
- The biggest issue is the existing frequencies.
- There is no congestion in Volusia County.
- The public perception of Votran is satisfactory.
- The current fare is reasonable.
- Most people are unaware of Votran and its services.

Votran Vision

Stakeholders were asked for their opinion regarding improvements that may attract more riders to the Votran system, what additional services and improvements should be implemented, if regional transportation connections are needed, and where they see Votran 10 years from now. Major themes identified through these interviews include the following ideas:

County At-Large

- Smaller buses should be considered on lower performing routes.
- The flex-routes have been successful in the New Smyrna Beach area and should be considered for implementation in other areas within the county.
- The future of transit will be the younger generation who view transit as a sustainable transportation alternative.
- Bus stop shelters/infrastructure is needed within the county.
- Connecting transit routes with trails may attract choice riders, including tourists and bicyclists.
- Community circulators should be implemented in key areas, including the ISB area, the Halifax Medical areas, and the beachside area.
- More park-and-ride opportunities should be provided.

- Circulators to the SunRail will be needed.
- Real-time passenger information should be available at stations.
- The system should be incrementally changed to become more efficient and convenient.
- Votran should become more active in the role of reviewing land uses to encourage multimodal land uses.
- Over the next 10 years, Votran should reduce dependence on foreign oil.

East Side

- Flexibility, frequencies, and the number of transfers will need to be improved to attract choice riders.
- Provide later evening hours on the fixed routes and the trolley service so that people will use the trolley for social activities in the evening.
- Votran will be a key element in the success of SunRail, and connections to SunRail will be imperative in the future.
- Connections from SunRail to the beaches and other areas may attract choice riders in the future.
- Votran should implement more flex-routes, operate smaller buses, and reduce foreign oil dependence by using alternative fuels.
- Some stakeholders believe that no additional steps should be taken to increase public transit use until congestion is allowed to increase and create a demand for transit.
- The A1A corridor should be improved and beautified.
- Rail should be considered for implementation on the east side of the county.
- Regional connectivity to Orange and Seminole counties should be planned for the future.
- More marketing that is clear and concise is needed so that visitors and non-users understand how to use Votran.
- Votran should go to meetings and become more visible to encourage choice ridership.
- Votran should coordinate with local governments during the development review process to increase densities and intensities that support transit.

West Side

- Votran should consider using smaller vehicles since people often complain about the empty buses.
- Votran should implement additional flex-routes.
- Buses need more than 2 bike racks.
- Cross County services is needed on the weekends.
- Park-and-ride and a multimodal station are needed at I-4 and SR 472.

- Land uses should be linked with transit to find reasons to make transit a choice. Linking transit, the train, and TOD will attract more commuters and choice riders.
- SunRail connectivity is important.
- Dedicated bus lanes should be explored.
- Votran should continue to grow and connect people with the train, both coming and going.

Transit Funding Issues

Stakeholders were asked if they would pay additional local taxes for an expanded transit system and whether or not they believe that the community would be willing to consider and support additional local taxes to fund additional public transportation. Stakeholders were also asked to identify specific types of local funding sources that should be used to increase transit in the future.

County At-Large

- The community will not support additional local taxes for transit under the current economic conditions.
- Securing dedicated funding will be critical.
- There is currently no money available for road maintenance and this will be an issue in 3 to 5 years.
- Sales tax or a mobility fee may be the best options for generating future revenues; however, all transportation modes including trails, bikes, roads, and sidewalks should be allocated funding from the revenue generated.

East Side

- A couple stakeholders are willing to pay additional taxes for an expanded transit system; however, stakeholders do not believe that the community will support additional local taxes during the current economic conditions.
- The majority of stakeholders do not believe that local taxes should be increased to fund an expanded transit system.
- The existing system should be reviewed for efficiency improvements that could help save money, including no overlaps in service, more efficient maintenance programs, and the use of alternative fuels.
- A sales tax mechanism should be explored to fund an increase in transit service.
- Advertising on the trolley may help generate additional revenue.

West Side

- No additional taxes should be considered at this time.
- At this time, the community would not support additional taxes.
- If transit is going to be expanded, the community will need to support a sales tax.
- The same funding sources that are used for roads should be used to fund transit.
- Private-public partnerships would help to fund the transit system.
- A tax for trails would be easier to pass than a tax for transit.

PARATRANSIT USER INTERVIEWS

To gain a better understanding of the issues facing Votran Gold Service users, Votran also conducted interviews with three paratransit users who also use the fixed-route system. Interviewees were asked a series of 15 pre-scripted questions that were intended to gauge the users' perspective on existing barriers that impede their mobility, their satisfaction with Votran Gold Service, and how Votran can improve the service in the future.

A copy of the interview script that was used for all interviews is presented in Appendix C. Key themes from each of the interviews that were conducted are summarized below.

- More frequent, less complicated routes are needed but improving frequencies requires money.
- Uncontrolled growth in the county is an issue, and people move to places where there is no transit and expect transit service. Since Votran has limited funding, the growth management department needs to review available services, including transit, prior to permitting building.
- The continuous turn lanes at Nova Road (SR 5A) and Beville Road (SR 400) are unsafe for pedestrians.
- Some paratransit users will use the fixed-route when traveling to known areas, but utilize the paratransit service when going to an unfamiliar location for safety purposes.
- The current fares should be increased.
- The existing infrastructure, streets that are unsafe for pedestrians to cross, and the inaccessible bus stops are the issues with using the fixed-route system.
- It would be nice if Votran expanded the areas that have transit service until 12 a.m.
- Better control over the paratransit system is needed. The trips that are contracted out are not as good as the Votran Gold trips.
- Contractors are not properly trained and often run 30 - 45 minutes late because drivers have too many pickups.
- One cent of the $.05 gas tax should be given to Votran.
- The Route 10 should be reviewed for efficiency improvements.

- Fixed-routes should operate at 30 minute or less frequency.
- Sidewalks are needed throughout the county.
- Flex-routes are a great idea and should be implemented in other areas.
- The transit service is designed for tourists first and then residents.
- The fixed-route stops are in the middle of the blocks rather than at the ends and this is a challenge for the visually impaired.
- The bus stop poles should be different than the other sign poles so that the visually impaired can identify the bus stops. Some bus stop signs do have brackets; however, these are hard to identify in unfamiliar areas.
- Votran Gold drivers are courteous, helpful, and respectful but not the contractors.
- The 60-minute frequencies are the largest barrier to using the fixed-route service and the routes are too long.
- Development should be planned so that the stores face the sidewalks and cars are in the back to improve transit use.
- The trolley service and the fixed-route buses are competing and overlapping. At some times, the vehicles arrive at the same time. The scheduling should be reviewed to avoid duplication in services.
- Nova Road and Dunlawton need expanded evening hours.
- The current shelter designs do not protect people from the weather conditions and elements.
- Roadway conditions are another barrier facing transit users.
- Votran needs to work with FDOT and other agencies to create pedestrian friendly communities.
- Too much time is required to travel from Daytona Beach to Port Orange.
- Votran needs to setup a Facebook page or blog to attract online public participation.
- Technology should be used to make the Votran Gold service more efficient for example, call ahead 1 to 5 minutes before arrival or the ability to make reservations electronically at any time.
- Service should go to Flagler Beach, Seminole County, SunRail, and the Amtrak Station in DeLand.
- Votran staff should be more visible in the community.

PUBLIC WORKSHOPS

As part of the TDP planning process, Votran, in coordination with the Volusia TPO, recently held two public workshops. The workshops were strategically planned to reach Volusia County residents on both the east and the west side. Each workshop began with a presentation that included an overview of the existing Votran services, the purpose of the TDP, an outline of the public involvement efforts that will be undertaken over the course of the project, and an explanation of the preliminary findings from the peer review and the trend analysis.

After the presentation, meeting participants were asked to break into groups for an interactive activity. During the activity, each person in the group was given a role of a person facing transportation

challenges and asked to consider those challenges while building consensus with the other group members on selecting a limited number of projects for funding. The activity was designed to force the participants to consider transportation issues that may be facing other members of the community rather than just their individual needs. The following list includes recommendations from the workshops participants; however, the list is not inclusive of all comments made during the workshop.

- Pursue and establish public-private partnerships for the provision of additional trolley services that serve both employees and visitors of the local area hotels.
- Implement Intelligent Transportation Systems (ITS) to assist disabled transit users with audible next bus announcements and other informative messaging.
- Have employers contribute to vanpool service for employees.
- Use Job Access Reverse Commute and New Freedom funding with local matching funds to increase fixed-route service and make the infrastructure along bus routes compliant with the Americans with Disabilities Act.

A second activity was conducted to identify the transit "gaps" and "overlaps" within the community. During this exercise, the following issues were identified by the meeting participants.

- Improved frequencies are needed throughout the county. Service should be no more than 30 minutes, especially on key routes such as the US 17-92 corridor.
- Additional service is needed to provide connections with the Amtrak station in DeLand.
- Better bus shelter designs are needed to protect bus users from inclement weather.
- A route is needed to connect Deltona and Daytona using I-4, with stops at the mall, Daytona State College, and Lake Helen.
- Additional cross-county service is needed. Improved regional connectivity especially to Sanford International Airport and Veterans Hospital in Orlando.
- The current policy for Transportation Disadvantaged (TD) trips should be reviewed so that persons using the ADA system can also use the TD system.
- Later evening service is needed.
- Service is needed from DeLand to the Daytona Beach Airport.
- Bus connections are needed from DeLand and Deltona to the SunRail station(s).
- Span of service for east/west connectivity is not late enough into the evening. Also, east/west connectivity is needed on other corridors than US 17-92.
- Provision of travel training
- More infrastructure; sidewalks are needed along with transit information at bus stops. Audible announcements and Braille should be a consideration when reviewing transit information at bus stops.
- Improved information is needed for customers calling in about route information.

- The transit agency should complete focus groups with key populations to determine their specific needs (older adults, students, people with disabilities, and workforce).
- Establish park-and-ride lots to coincide with express service.
- Lack of bike trails and paths.
- Transit must be linked better to economic development.
- Paratransit fare is costly and a pass structure should be considered for paratransit customers.
- Ormond Beach portion of Clyde Morris needs bus service.
- The trolley does not serve the transfer center.
- Votran should review if any of the fixed-route or trolley services overlap.

In addition, at each workshop surveys were disseminated in an effort to receive input from all attendees. Survey results from the workshops concluded that respondents consider increasing the frequency of the existing service to be the most important and necessary improvement. The workshop results and the results from a series of stakeholder interviews that were conducted with local leaders will be considered during the selection of projects for incorporation in the 10-year planning period of the TDP.

Also, at the meeting were representatives from the Rethink Commuter Services program sponsored by the FDOT to provide information on carpooling and vanpooling opportunities.

Two additional public workshops were held, on July 27, 2011, to solicit input on the proposed potential projects for implementation over the 10-year planning period. One workshop was held on the east side of Volusia County at the Votran office, and another workshop was held on the west side of Volusia County at the Orange City Council Chambers. These workshops included a presentation on the preliminary findings for the TDP and activities completed to-date, a review of the projects selected for implementation over the FY 2012-2021 timeframe, an open discussion period in an effort to receive public comment, and interactive group activity designed to gauge the public's opinion of the selected projects and priority order. Results of the interactive exercise are presented below by meeting locations.

Votran Workshop

Participants at the east side workshop were asked to form three groups and build-consensus on projects for implementation over the 10-year period and revenue sources to fund those projects. Results from all three groups were combined to determine the consensus of all workshop participants. Below is a listing of the projects that were selected by all three groups. Implementation of a sales tax to fund an expansion of the transit system received votes from all three groups. Mobility fees, hotel tax, and rental car surcharge were selected by two out of the three groups.

1. New route from the DeLand Amtrak station to Downtown DeLand and the airport
2. Daytona Beach Circulator
3. Increased frequencies on all routes to 30 minutes (except Flex-Route 42 and 43)
4. Express route from DeLand to New Smyrna Beach along SR 44
5. Flex-route around the DeBary SunRail station extending to Highbanks
6. New Smyrna Beach Trolley along A1A to Flagler Avenue
7. Bike racks

Orange City Workshop Results

Based on the number of participants at the west side workshop, participants were asked to independently complete the project and funding source activity and then form three groups to build-consensus on the top three priority project. All of the completed exercise sheets were compiled to determine the overall consensus of the group. Below is a listing of the highest ranking projects, the preferred funding sources, and the top three priority projects for each group:

Highest Ranked Projects

1. New route from the DeLand Amtrak station to Downtown DeLand and the airport
2. Flex-route around the DeBary SunRail station extending to Highbanks
3. Bus shelters and benches
4. Bike racks
5. West side satellite facility in Orange City
6. Flex-route from Jacobs and New York Avenue to the Daytona State College West Campus
7. Increase frequencies on all routes to 30 minutes (except Flex-Routes 42 and 43)
8. Add Sunday service to all west side routes from 6:30 a.m. to 8 p.m.
9. Later evening service (10 p.m.) Monday through Saturday on Routes 5, 6, 7, 8, 11, 12, 17B, 18, 19, 40, 41, 42, 43, 60, 700, 20, 21, 22, 23, and 24

Prioritized Potential Funding Sources:

1. Rental car surcharge
2. Hotel tax
3. Sales tax
4. Mobility fee

Group 1 Priority Projects:

1. Later evening service (10 p.m.) Monday through Saturday

2. Add Sunday service to all west side routes
3. Peak hour 30 minute service
4. Bus Service from Daytona Beach to the DeBary SunRail station
5. Flex-route from Jacobs and New York Avenue to the Daytona State College West Campus

Group 2 Priority Projects:

1. West side operations facility
2. Software and customer information kiosks
3. Bike racks
4. Benches and shelters
5. Free or less expensive transfers

Group 3 Priority Projects:

1. Flex-route from Jacobs and New York Avenue to the Daytona State College West Campus
2. Extend evening service to 9 p.m.
3. Increase headways to 30 minutes
4. Flex-route scheduling software
5. West side operations facility

Comments that were received during the second round of public workshops include:

- Votran information should be included in local government newsletters.
- Transit needs to connect to both commercial corridors and residential neighborhoods.
- Consideration should be given to expanding flex-routes into neighborhoods.
- Votran stops and buses need to be attractive and neat to promote future growth of the system.
- Headways should be increased to make transit more of a viable option.

DISCUSSION GROUP WORKSHOPS

To supplement the information collected during the public workshops and to support the TDP update process, four discussion group workshops were held in June 2011. Two workshops were held on the east side of Volusia County at the Votran office and two workshops were held on the west side of Volusia County at the County Administrative Building in DeLand. The discussion group participants included a variety of individuals from Volusia County listed below.

Eastside (Morning)

- Paratransit users
- Coquina Center
- Davita (New Smyrna Beach)
- United Cerebral Palsy of Central Florida
- Disability Solutions
- Bishops Glen Health Care Center

Eastside (Afternoon)

- VCARD
- Florida Hospital Memorial Medical Center
- Salvation Army
- Town of Ponce Inlet
- Volusia Manufacturers Association
- Ormond Main Street
- Conklin Center
- Daytona State College
- Richard Milburn Academy
- Southeast Volusia Chamber of Commerce

Westside (Morning)

- DeBary Manor
- Paratransit users
- University Health Care West

Westside (Afternoon)

- Votran user and citizen advocate
- Daytona State College
- City of Lake Helen
- West Volusia Tourism Bureau
- MainStreet DeLand
- Stetson University
- Volusia County Human Services

The intent of the discussion groups were to have facilitated dialogue with users of the system, professionals, stakeholders, and nonusers to gather views on existing service, expectations for future service, and disseminate information on transit.

During the discussions at the meetings held on the east side of the County, the following key themes emerged:

- Sunday service is too limited.
- Bus service should operate at least one hour later.
- Paratransit scheduling is horrible and several buses often go to the same location rather than coordinating trips.
- Drivers need to participate in etiquette training.
- Better communication is needed between the drivers and dispatch.
- Votran Gold service is good, but significant problems are occurring with the contractors, particularly Med 1.
- Prefer to schedule trips through a live person rather than electronically.
- Pick-up windows with automated calling would work well to limit stress for the passengers and the aids.
- Inequity exists between the service provided on the east side versus the west side.
- Flex service is needed around Summer Trees Drive.
- Pedestrian safety issues exist along Clyde Morris.
- Foul language is used by passengers on the outbound run of Route 11.
- SunRail is not feasible at this time.
- Older adult and special needs facilities would be willing to pay more for transit service, if the efficiency were improved.
- For passengers with disabilities, paying higher fares would be a real hardship.
- Prefer to pay a tax rather than a fare increase.
- Drivers are refusing to pick up and drop off at the Daytona State College Building 320.
- Convenient access to the beach is needed.
- People do not use Votran because of the transfers.
- Votran will be important for connections between SunRail.
- Consider using smaller vehicles in areas that are not well traveled.
- Market transit to the next generation.
- The route on US 1 is too difficult for disabled passengers to use.
- Need to disseminate maps to the chamber and visitor centers.
- Automated system should announce the gate number rather than just the route and time.
- Covered bus shelters are needed around the Council for the Blind.
- Ormond Main Street would like to work with Votran for transportation during the Main Street Festivals.

- Additional security is needed at the transfer plaza.
- An express bus is needed along SR 44 from DeLand to New Smyrna Beach.
- Transit tax would be the least painful way to raise money and should be further considered after elections.
- Volusia County's hotels are smaller, privately-owned facilities that cannot afford additional taxes.
- Density will be important to the success of SunRail.
- The Racing District Fund should be considered as a revenue source for transit.
- People who will use Votran are people who need the service not the middle class.
- There are significant issues with the transit service level of efficiency.
- The affordable housing located on Granada will be perfect for transit service.
- The bus service should be designed to pick up people at hotels and drop them off at the Ocean Center.
- Bus service on LPGA stops at Derbyshire and should go another ¼-mile to the Salvation Army.
- Increased frequencies are needed between the Daytona State College campus and the Advanced Technology Center campus.
- The New Smyrna Beach CRA has money that sunsets in 2015.
- The sales tax method is equitable for funding transit; those who have more will pay more.

During the discussions at the meetings held on the west side of the county, the following key themes emerged:

- Votran users are dissatisfied with Med 1 and would like for Votran to get back into Medicaid transport.
- Same day service would be helpful.
- Votran should operate all buses and avoid using contractors.
- A fare increase would be acceptable since passengers can currently go anywhere for $5, which is much cheaper than taking a taxi.
- Passengers would like to be able to purchase the Votran Gold pass with a credit card.
- Votran should do more marketing and outreach.
- Smaller buses should be considered since the larger buses often appear to be empty. The west side map should be revised to remove the picture of the empty bus.
- Passengers have difficulty using Votran Gold Service for recreational activities due to the service hours and the one hour pickup window.
- The manifest often does not make sense and older drives realize the inefficiency and do not follow the manifest in order to save time when picking up Votran Gold Service passengers.
- Votran should listen to customer complaints and not send the same driver for another pickup after a passenger has called and complained about that driver.
- All Volusia Transport is reliable and is used for private trips.

- Participants would like to transfer between Votran and LakeExpress at the County line.
- Route 60 needs to operate at 30 minute frequencies.
- Votran should take passengers to appointments in Sanford and Orlando.
- Need west side Sunday service.
- The City of Lake Helen would like to provide a Votran turn around within the city.
- Stetson students use the bus to leave the campus, but not to reach the campus or circulate on the campus.
- There is a need for transit service between Daytona State College's west side campus and the Deltona campus.
- Additional east to west access is needed.
- The Route 21 and 22 are two-hour reverse circles and should be reviewed.
- There is a disparity in transit service on the west side of the county.
- Deltona High School and the Deltona Health Department need transit service.
- People who drive cars will not use the current transit service.
- SR 44/New York Avenue is the low hanging fruit for a new route.
- Trolleys would attract people into the downtown areas on the west side.
- Where the county's growth and densities are occurring the demographic of people are highly unlikely to use Votran.
- Routes that connect with cycling opportunities may help to increase choice ridership.
- Bike lockers at bus stops are needed.
- The trolleys should be named and branded for appeal, this could also be a revenue generator.
- The bus stop located at ISB and White Street should be reviewed for accessibility issues.

TRANSIT SURVEYS

During the TDP development process, surveys were disseminated at the first round of public workshops. The TDP survey was also available on the Votran website located at http://volusia.org/votran/tdpsurvey.htm. The results of the completed surveys include:

- 80 percent of respondents were aware of Votran services.
- 100 percent of respondents believe there is a need for more transit service in Volusia County.
- 60 percent of respondents do not use Votran.
- 60 percent of respondents think the public perception of Votran is satisfactory and 30 percent of the respondents think the public perception of Votran is good.
- The majority of respondents would like for Votran to provide more frequent bus service.
- 78 percent of respondents do not believe there is a congestion problem in Volusia County.
- 90 percent of respondents are willing to pay additional local taxes for an expanded transit system.

- 78 percent of respondents think more regional transportation is needed to connect Volusia County with the surrounding areas, specifically to areas including Jacksonville, intercity rail on the FEC, Sanford Airport, Orlando, and the counties of Seminole, Osceola, Lake, Brevard, and Flagler.
- 78 percent of respondents envision rail transit will be needed in the county, specifically to areas including the FEC east coast Amtrak, along the I-4 corridor, Daytona, DeLand, Deltona, and regionally to Jacksonville and Seminole and Orange counties.
- 80 percent of respondents believe that Votran's priority improvement should be improving the frequencies of existing bus routes.
- The majority of respondents that do not use Votran, indicated that they may use the Votran system if the existing frequencies were improved.

ON-BOARD SURVEY

As part of the TDP public involvement process, an on-board survey was conducted in March/April 2011. On-board surveys are an important service assessment tool employed by public transportation agencies. Feedback from the on-board survey efforts will assist Votran in planning for immediate service improvements and in determining future transit need in Volusia County. In addition, Votran can use the on-board survey results to determine the demographic make-up and travel characteristics of its existing customer base. In addition, the results from the March/April 2011 on-board survey were compared to the results of Votran's on-board surveys from 2002 and 2006 to determine the historical trends for passenger demographics and travel characteristics.

SURVEY APPROACH

On-board surveyors were used to help facilitate the survey administration process and ensure a higher response rate. An on-board survey instrument was prepared and administered to bus riders. The survey was translated into Spanish for distribution to those who were not able to complete the English version. The English and Spanish versions of the survey instrument can be found in Appendix D.
The on-board survey was distributed by a team of trained survey personnel. Prior to sending surveyors out on Votran buses, a training session was conducted to instruct surveyors about their duties and responsibilities and to address any issues or concerns that they may have had about the survey process.

ON-BOARD SURVEY RESULTS

The following section documents the results of the on-board survey. A total of 4,752 Votran bus riders responded to the survey. For analysis purposes, the 27 questions on the survey were divided into 3

major categories. Analysis categories include travel characteristics, rider demographics, and customer service and satisfaction.

Travel Characteristics

Travel characteristics questions were designed to ask respondents about their individual trip attributes and their travel behavior. Topics covered by the travel characteristics questions on the survey include:

- Trip origin (type and location)
- Trip destination (type and location)
- Vehicle ownership
- Fare type used
- Transit stop/station access and egress travel mode
- Transfers
- Frequency of transit use

Questions 1 and 5 asked respondents about the type of place they were coming from to start their one-way trip and the type of place they were going to on the same one-way trip, respectively. Figures 4-1 and 4-2 present the results to these two questions. As shown in Figure 4-1, most respondent trips originated at home. The second highest trip origin indicated by respondents was work. Similarly, the two highest destinations were home and work. The trip destination results are shown in Figure 4-2.

Figure 4-1
Trip Origin

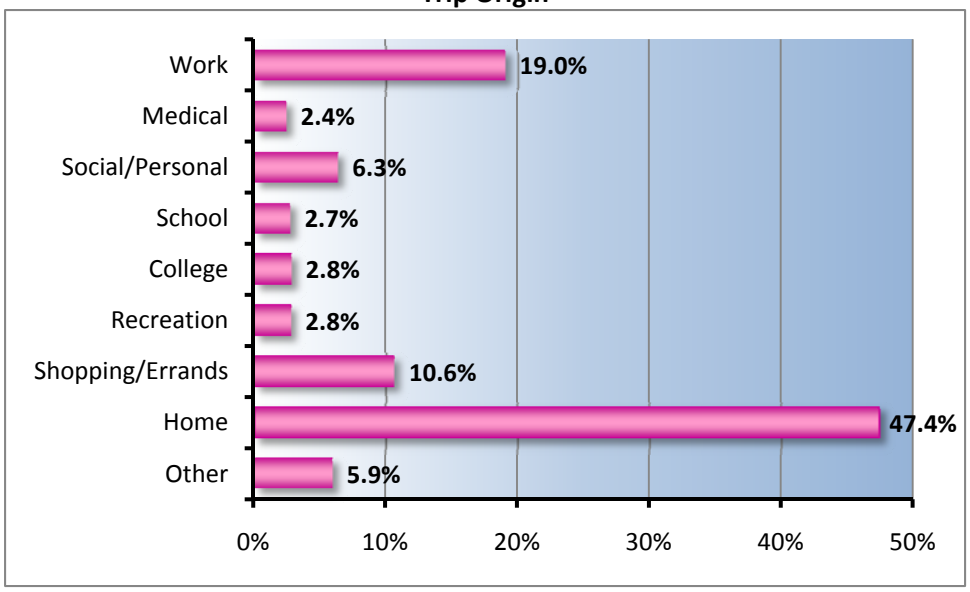
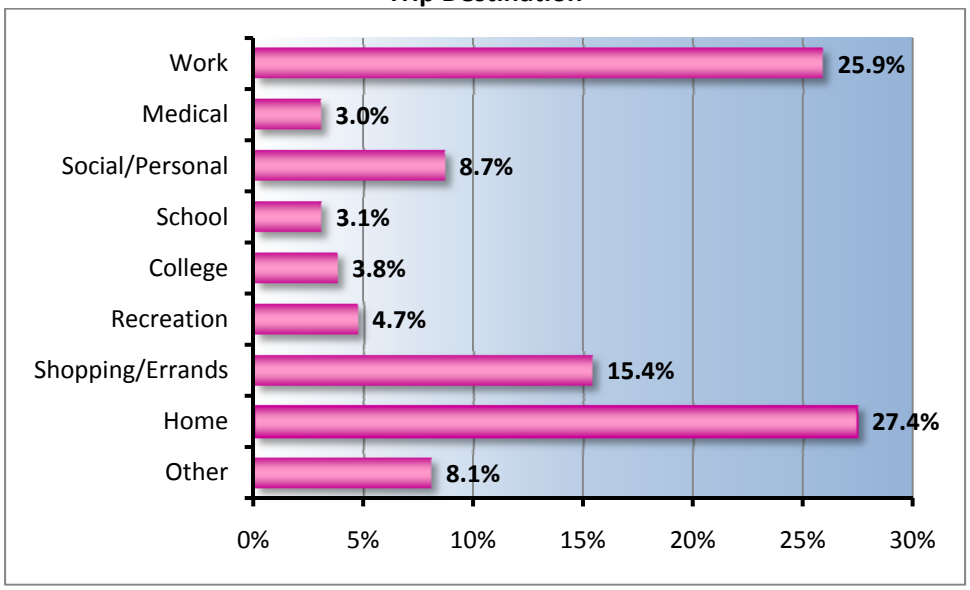


Figure 4-2

Trip Destination



Question 3 and 7 asked respondents to describe how they access the transit system and how they will reach their final destination. If respondents indicated walking or bicycling, they were asked to note the number of blocks they traveled. If driving was selected, respondents were asked to indicate the number of miles they drove to access the transit system. The responses reveal how transit users often must combine various modes of travel in order to complete their individual trip. As shown in Figures 4-3 and 4-4, the majority of Votran bus customers access the bus stop/station when beginning their trip by walking. Walking was also the highest category after using the bus to get to the patron's final destination. The second most common mode of travel used to access the bus stop prior to boarding the bus is being dropped off, while the third most common mode of travel used to reach the bus stop is bicycling.

The second highest selected category used to reach a final destination is "final destination" indicating that many of the Votran bus routes are connecting riders directly with their destinations without the need to use another mode of travel to complete the trip, while the third most common mode of travel used to reach a final destination after departing the bus is bicycling.

Figure 4-3
Transit Station Access

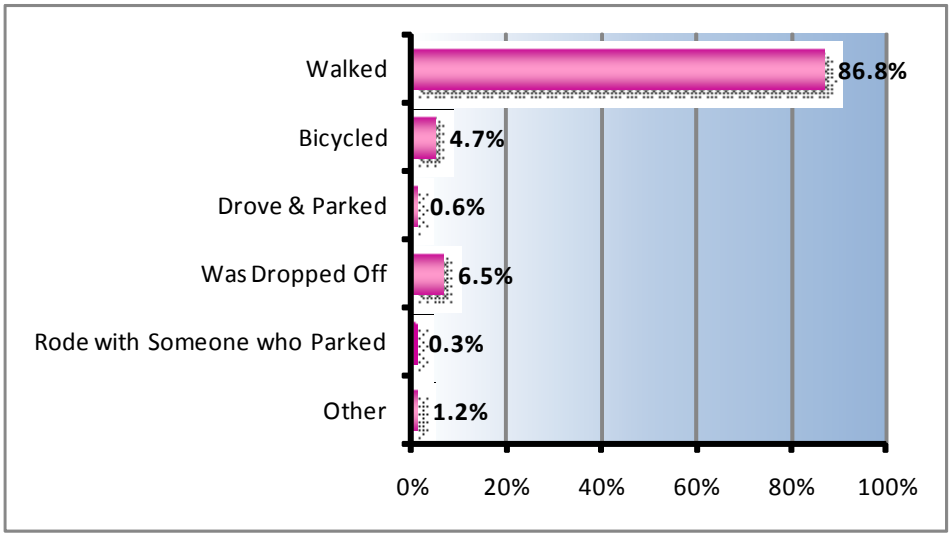
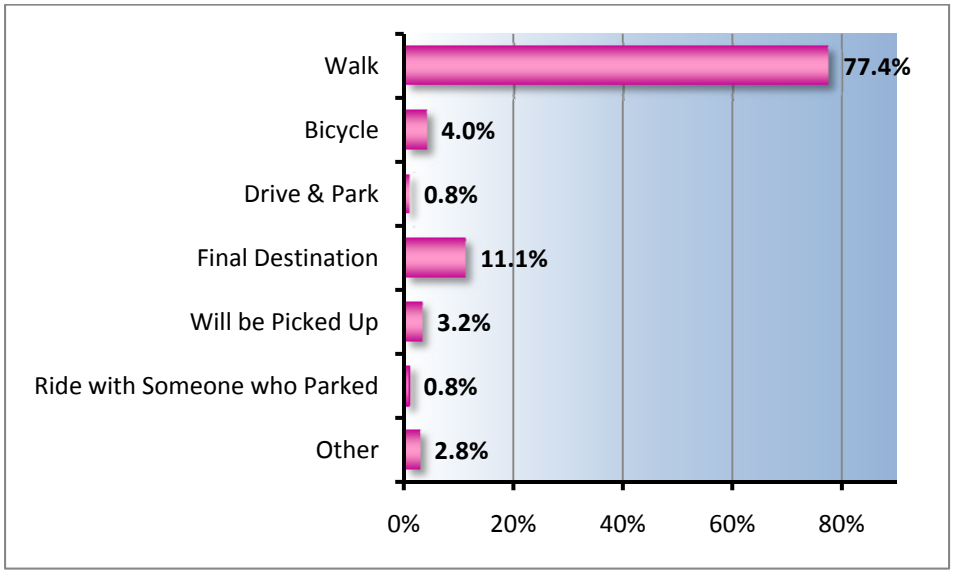


Figure 4-4
Transit Station Egress



As shown in Figures 4-5 and 4-8, respondents who walk to and from the bus stop/station traveled approximately 1 to 2 blocks, and respondents who drove to and from the bus stop/station traveled approximately 4 to 6 blocks.

Figure 4-5
Number of Blocks Traveled to Access Transit

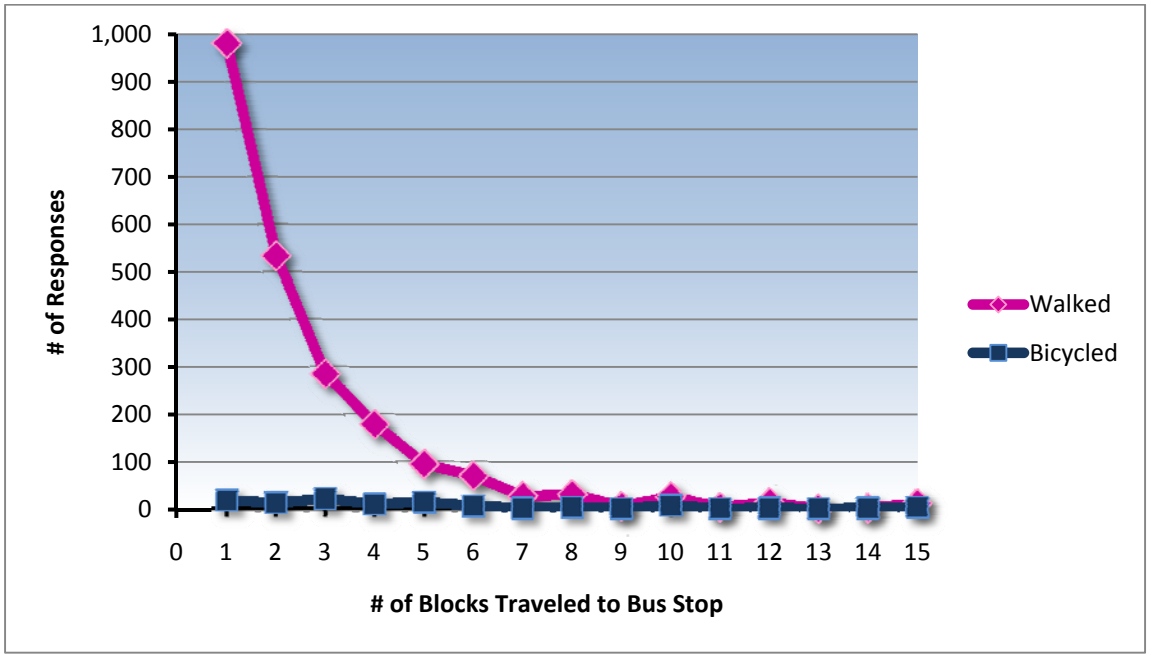


Figure 4-6
Number of Miles Driven to Access Transit

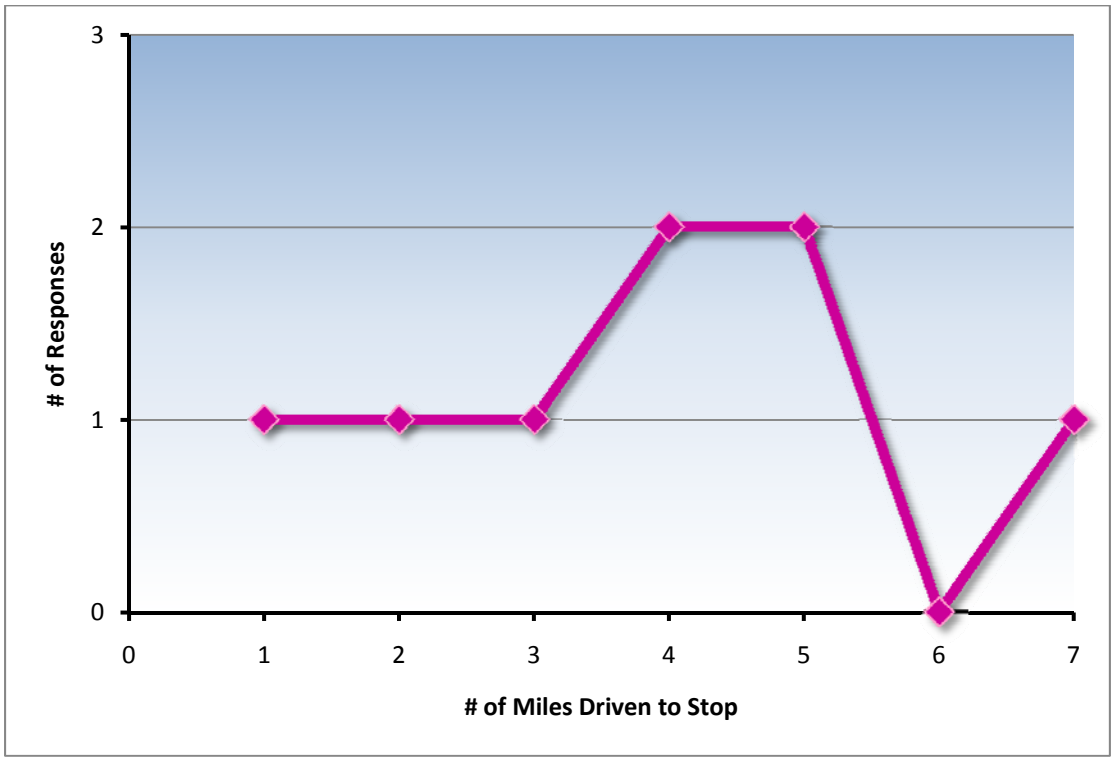


Figure 4-7
Number of Blocks Traveled to Access Transit

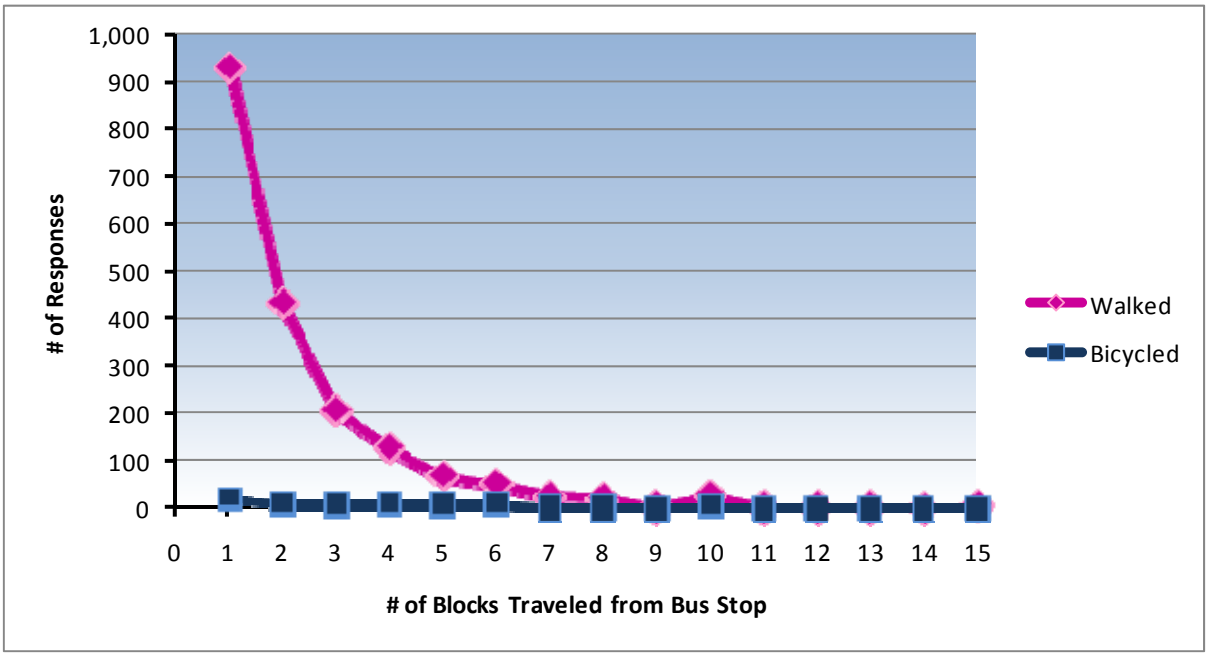
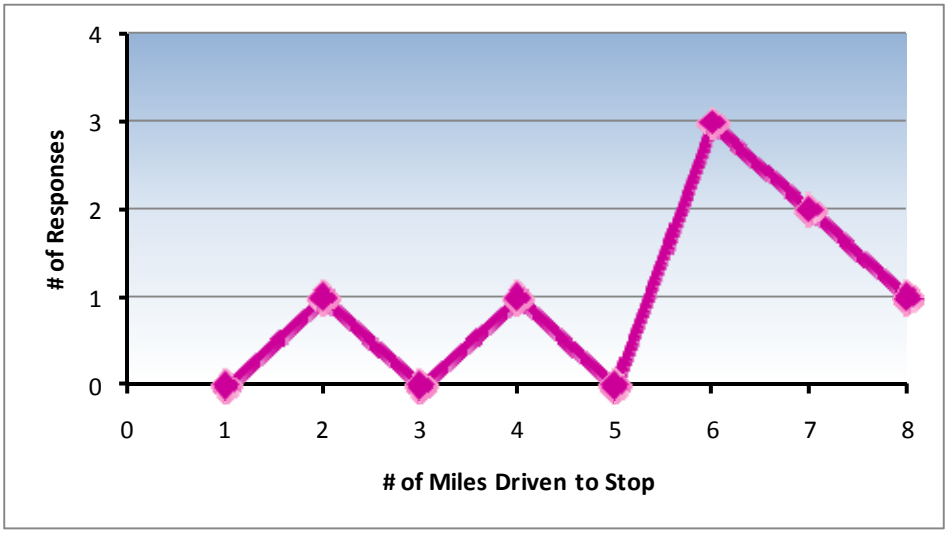


Figure 4-8
Number of Miles Driven to Access Transit



A transfer analysis was performed using the results of Question 4 on the on-board survey. That question asked respondents to list all bus routes to be used, in the exact order of use, to complete their one-way trip. Responses to this question reveal the number of transfers each respondent will make in order to get to their destination.

To conduct the transfer analysis, a series of data cleaning and quality control steps had to be performed. Filtered data was then utilized to examine the number of transfers between routes and to assess transfer combinations for persons using three buses to complete their one-way trip. The data cleaning and filtering process can be summarized in four major steps.

- Eliminate from database same route transfer information
- Verify transfer combination possibilities and eliminate unreasonable transfer combinations from database
- Extract records that indicate at least two routes were used to complete trip
- Sum the total number of records by transfer combination

The initial results of the survey indicated that a total of 1,979 persons transferred buses to complete their one-way trip. An additional quality control check to the data cleaning process was then performed to ensure that the transfer activity reflected is consistent with Votran bus route schedules. That quality control check included the following parameters:

- Transfer activity is inconsistent with transfer locations. For example, except for Route 60, east Volusia County routes cannot directly connect with west Volusia County routes.

- Transfer activity is inconsistent with Votran bus schedule. For example, only specific routes have Sunday service. Those transfers made on Sunday between routes not operated on Sunday were eliminated.

- Close examination of responses to Question 6 reveal that some respondents misunderstood the one-way trip concept as they listed duplicate routes or described circuitous travel patterns ending in the place of origin. Consequently, three-transfer activity, (persons indicated having to use four or more buses) was, not recorded.

The new number of total valid responses returned was 1,863. Based on the total number of valid responses received for Question 4 (3,358), 55 percent of respondents indicated that they would need at least one or more transfers to complete their trip. Table 4-4 notes the total number of respondents who indicated needing to make one or two transfers to complete their trip.

Table 4-4
Transfers per Trip

Number of Transfers	Number of Records
1	1,632
2	231
Total	1,863

Single transfer records were extracted from the database to create transfer activity matrices for weekday, Saturday, and Sunday services and are shown in Tables 4-5 through 4-7. Table 4-8 presents the combined transfer activity for both weekday and Saturday. The use of matrices was employed for the transfer analysis because matrices serve as a user-friendly format for viewing and assessing one-to-one relationships. This is useful in relating bus transfer activity in that matrices afford the opportunity to visualize the number of transfers occurring between all bus routes.

Several general conclusions about Votran transfer activity can be drawn based on the results of the transfer analysis presented in Tables 4-5 through 4-8.

- The six Votran routes that experience the largest volume of transfer activity include Routes 10, 17, 60, 4, 3, and 7.
- Serving as the major east-west backbone of the Votran fixed-route bus service, Route 60 experiences the third largest volume of transfer activity.
- The top five route combinations that experience the highest volume of transfer activity for weekday, Saturday, and Sunday (if available) service include:
    - Route 3 & Route 10 – 55 total records
    - Route 20 & Route 60 – 54 total records
    - Route 3 & Route 4 – 52 total records
    - Route 4 & Route 10 – 47 total records
    - Route 4 & Route 17 – 38 total records
- Transfer activity between Route 3 and Route 4 reveal that a number of bus riders are using Votran service to travel between southeast Volusia County and northeast Volusia County.
- Although there is more transfer activity on weekdays versus Saturdays, transfer activity patterns are similar in proportion.
- For those respondents indicating having to complete at least two transfers, the most frequent combinations are found among the following routes regardless of route order or service days:
    - Routes 21, 20, and 60 – 9 total records
    - Routes 40, 7, and 11 – 4 total records
      Routes 22, 20, and 60 – 4 total records
      Routes 6, 19, and 18 – 4 total records
      Routes 6, 60, and 20 – 4 total records
    - Routes 20, 60, and 11 – 3 total records
      Routes 1A, 60, and 20 – 3 total records
      Routes 4, 18, and 60 – 3 total records
      Routes 5, 15, and 3 – 3 total records

Table 4-5
Weekday Single Transfer Matrix*

Route #	1	1A	3	4	5	6	7	8	10	11	12	15	17	18	19	20	21	22	23	24	40	41	60	Total
1						3			2	2		1	1	1	1								1	12
1A			1	2	1	2			3	2	5		7	1									7	31
3		3		6		4		1	15	1	2	7	4	2	5								9	59
4		2	16			1	8	7	17	8	6	7	9	6	9						7		5	108
5		3	2	3		5	2	5	7	2	1	6	3	3									9	51
6	1	3	1	3	1		4	4	11	2	3	4	1	2	1								6	47
7			4	6		1		2	11	7	3	2	8	6	3								2	55
8		1	2	2	5	4	4		7	1	1	1		2	2								4	36
10	1	7	11	7		3	4	5		2	6	8	7	2	5								2	70
11			3	2			4		11		2	5	3	4	1								2	37
12	1	3	4	9		1	5	3	15	5		1	6	9	6						3		2	73
15	1	1	4	2	1	6	6	5	8	5	2		5	2	1								5	54
17	1	1	6	10		3	4	4	7	6	4	3	2	3	3						8	2	6	73
18	3	4	4	3	3	4	3		8	1	1	3	3		1									41
19		2	4			5	2		1	2	3			6									1	26
20																	3	1	12	4			14	34
21																7			2					9
22																8	2		4					14
23																12	1						1	14
24																6							3	9
40				6			4				6		7	2								3		28
41													1								3			4
43																					1			1
60	1	4		6	3	2	2	5	1	6	3	6	7	1	2	12								61
Total	9	34	62	67	14	44	52	41	124	52	48	54	74	52	40	45	6	1	18	4	22	5	79	947

*Shaded cells indicate transfer combinations with 10 or more records.

Table 4-6
Saturday Single Transfer Matrix*

Route #	1	1A	3	4	5	6	7	8	10	11	12	15	17	18	19	20	21	22	23	24	40	41	42	43	60	Total
1									2				1													3
1A			2	4		3	3	1	3			1	5	2	4										4	32
3		7		7		3	2		7		1	2	4	1	1										8	43
4	1	1	7		1	4	6	1	6	4	6	2	10	3	6						11				1	70
5														1											1	2
6		4	1	1			2	4	3	4	3	2	4	2	2										6	38
7		2	4	2					2	7	1	2	8	3	4						1					36
8		1		2		2			3		2			1											2	13
10		2	7	5		4	4			1	2	4	6	1	5										1	42
11		1	4	1		2	7	1	1		5	1	7		3										3	36
12		3	7	4		3	2	1	1	3		1	4		8						2				1	40
15	1	3		1		3	2	1	6	6	3		4												5	35
17	2	2	2				3	2	7	1	5	1		3	2						1				3	34
18		1	1	1		1			3	2	1		3		1										2	16
19		4	1	2		3	2			3		2	1	4											1	23
20																	3		4	2					16	25
21																4		2	3							9
22																3	2		2							7
23																9	2									11
24																3									1	4
40		1		4			1				3		1									3	1	1		15
41																					2					2
60		3	1	5		2				1	1	2	4	2	1	12				2						36
Total	4	35	37	39	1	30	34	11	44	32	33	20	62	23	37	31	7	2	9	4	17	3	1	1	55	572

*Shaded cells indicate transfer combinations with 10 or more records.

Table 4-7
Sunday Single Transfer Matrix*

Route #	1	3	4	10	15	17	Total
1			1		2	3	6
3	3		6	12	5	1	27
4	6	10		9	4	7	36
10	4	3	3		5	3	18
15	3	3	3	7		1	17
17	2		2	5			9
Total	18	16	15	33	16	15	113

*Shaded cells indicate transfer combinations with 10 or more records.

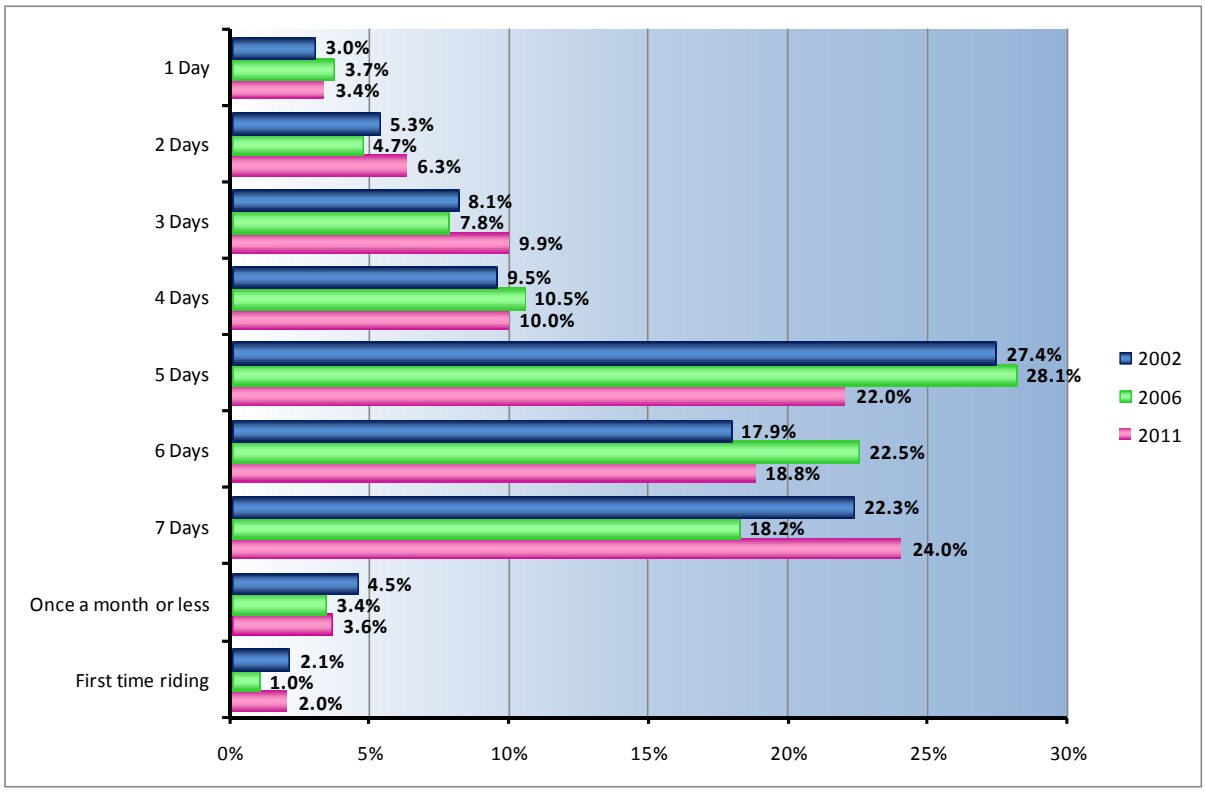
Table 4-8
Weekday and Saturday Combined Single Transfer Matrix*

Route #	1	1A	3	4	5	6	7	8	10	11	12	15	17	18	19	20	21	22	23	24	40	41	42	43	60	Total
1	0	0	0	0	0	3	0	0	4	2	0	1	2	1	1	0	0	0	0	0	0	0	0	0	1	15
1A	0	0	3	6	1	5	3	1	6	2	5	1	12	3	4	0	0	0	0	0	0	0	0	0	11	63
3	0	10	0	13	0	7	2	1	22	1	3	9	8	3	6	0	0	0	0	0	0	0	0	0	17	102
4	1	3	23	0	1	5	14	8	23	12	12	9	19	9	15	0	0	0	0	0	18	0	0	0	6	178
5	0	3	2	3	0	5	2	5	7	2	1	6	3	4	0	0	0	0	0	0	0	0	0	0	10	53
6	1	7	2	4	1	0	6	8	14	6	6	6	5	4	3	0	0	0	0	0	0	0	0	0	12	85
7	0	2	8	8	0	1	0	2	13	14	4	4	16	9	7	0	0	0	0	0	1	0	0	0	2	91
8	0	2	2	4	5	6	4	0	10	1	3	1	0	3	2	0	0	0	0	0	0	0	0	0	6	49
10	1	9	18	12	0	7	8	5	0	3	8	12	13	3	10	0	0	0	0	0	0	0	0	0	3	112
11	0	1	7	3	0	2	11	1	12	0	7	6	10	4	4	0	0	0	0	0	0	0	0	0	5	73
12	1	6	11	13	0	4	7	4	16	8	0	2	10	9	14	0	0	0	0	0	5	0	0	0	3	113
15	2	4	4	3	1	9	8	6	14	11	5	0	9	2	1	0	0	0	0	0	0	0	0	0	10	89
17	3	3	8	10	0	3	7	6	14	7	9	4	2	6	5	0	0	0	0	0	9	2	0	0	9	107
18	3	5	5	4	3	5	3	0	11	3	2	3	6	0	2	0	0	0	0	0	0	0	0	0	2	57
19	0	6	5	2	0	8	4	0	1	5	3	2	1	10	0	0	0	0	0	0	0	0	0	0	2	49
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	1	16	6	0	0	0	0	30	59
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	2	5	0	0	0	0	0	0	18
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	4	0	6	0	0	0	0	0	0	21
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	3	0	0	0	0	0	0	0	1	25
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	4	13
40	0	1	0	10	0	0	5	0	0	0	9	0	8	2	0	0	0	0	0	0	0	6	1	1	0	43
41	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	5	0	0	0	0	6
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
60	1	7	1	11	3	4	2	5	1	7	4	8	11	3	3	24	0	0	0	2	0	0	0	0	0	97
Total	13	69	99	106	15	74	86	52	168	84	81	74	136	75	77	76	13	3	27	8	39	8	1	1	134	1,519

*Shaded cells indicate transfer combinations with 10 or more records.

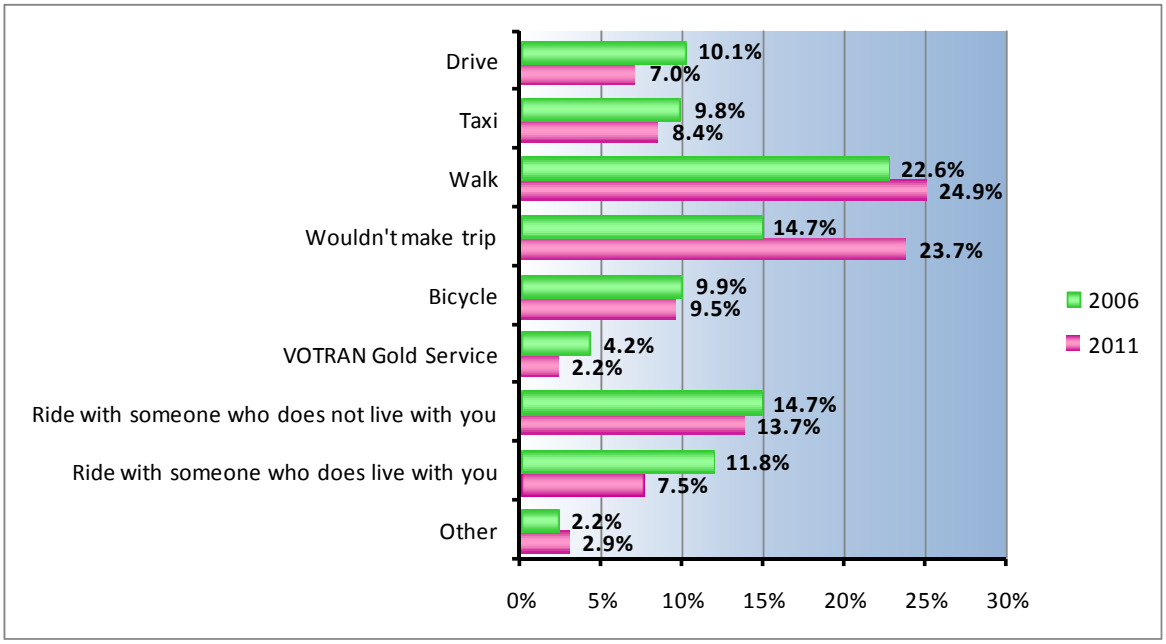
Question 9 asked survey respondents how many days a week they ride the bus. This question focuses on a respondent's overall use of the Votran bus service. The results to Question 9 were compared to the responses from the same question as reported in the 2002 and 2006 Votran on-board surveys. As shown in Figure 4-9, the results reveal that the majority of respondents rely on the bus and use the service 5 to 7 days per week. Votran has experienced a decrease in riders using the service 5 and 6 days per week compared to the 2002 and 2006 surveys, but an increase in riders using the service 7 days per week. In addition, the results indicate that the number of first time riders has increased in comparison to the 2006 survey results.

Figure 4-9
Frequency of Use



Question 8 asked bus riders how they would complete their trip if bus service were not available. As shown in Figure 4-10, the results were compared to the 2006 on-board survey responses. In both 2011 and 2006, the most common response was walk, followed by would not make the trip. The large distribution of individuals who walk or would not make the trip, reflect the significant number of Votran riders who are transit dependent and that the Votran rider has historically relied on transit for mobility.

Figure 4-10
Mode Choice



To assess the utilization rates of fare media and payment methods, a question about how bus riders paid their fare was placed on the survey. The majority of bus riders, 32 percent, used the all-day pass when they boarded the Votran bus. Approximately, 26 percent of respondents indicated using a monthly pass and 24 percent paid the full fare. Figure 4-11 displays the distribution of the respondents fare payment methods.

Figure 4-11
Fare Payment Method

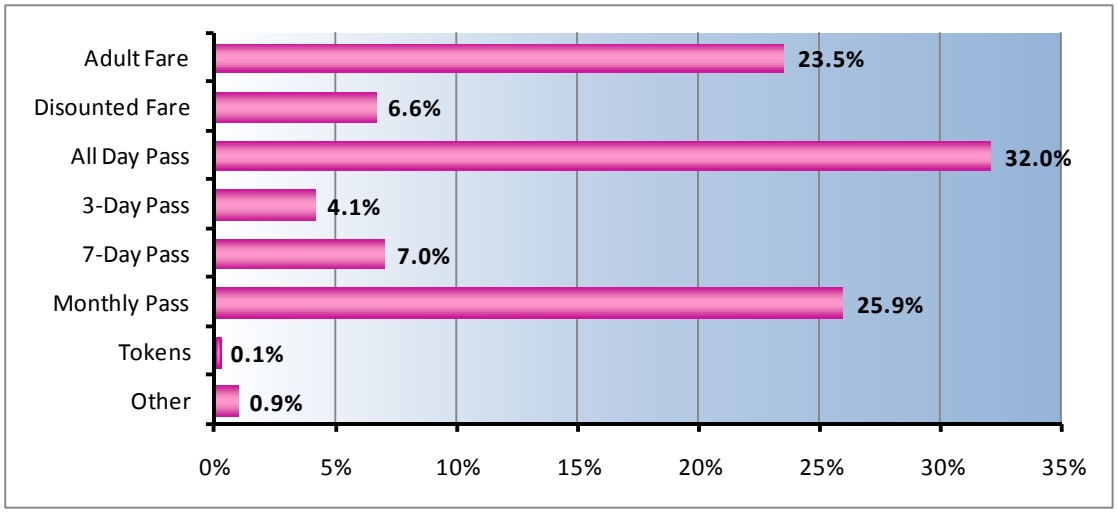
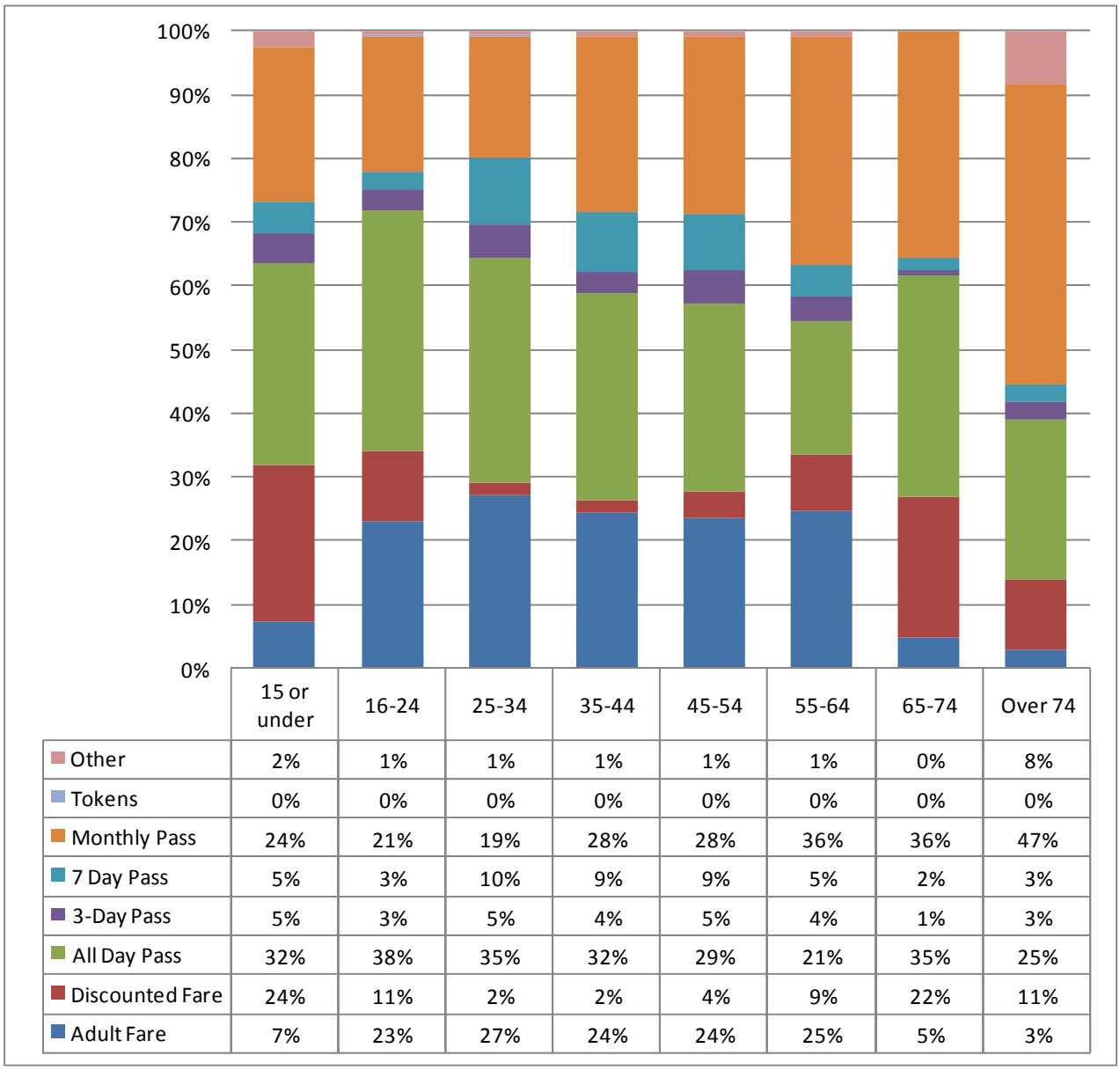


Figure 4-12 shows the method of fare payment used by riders in different age groups. Respondents age 16 to 54 are more likely to pay using the all-day pass when compared to other fare payment options. Respondents age 55 to over 70 are more likely to pay using the monthly pass when compared to other fare payment options. From among the multi-ride passes, the all-day pass is the most commonly-used pass. The monthly pass use increases with rider age.

Figure 4-12
Fare Type Paid by Respondent Age

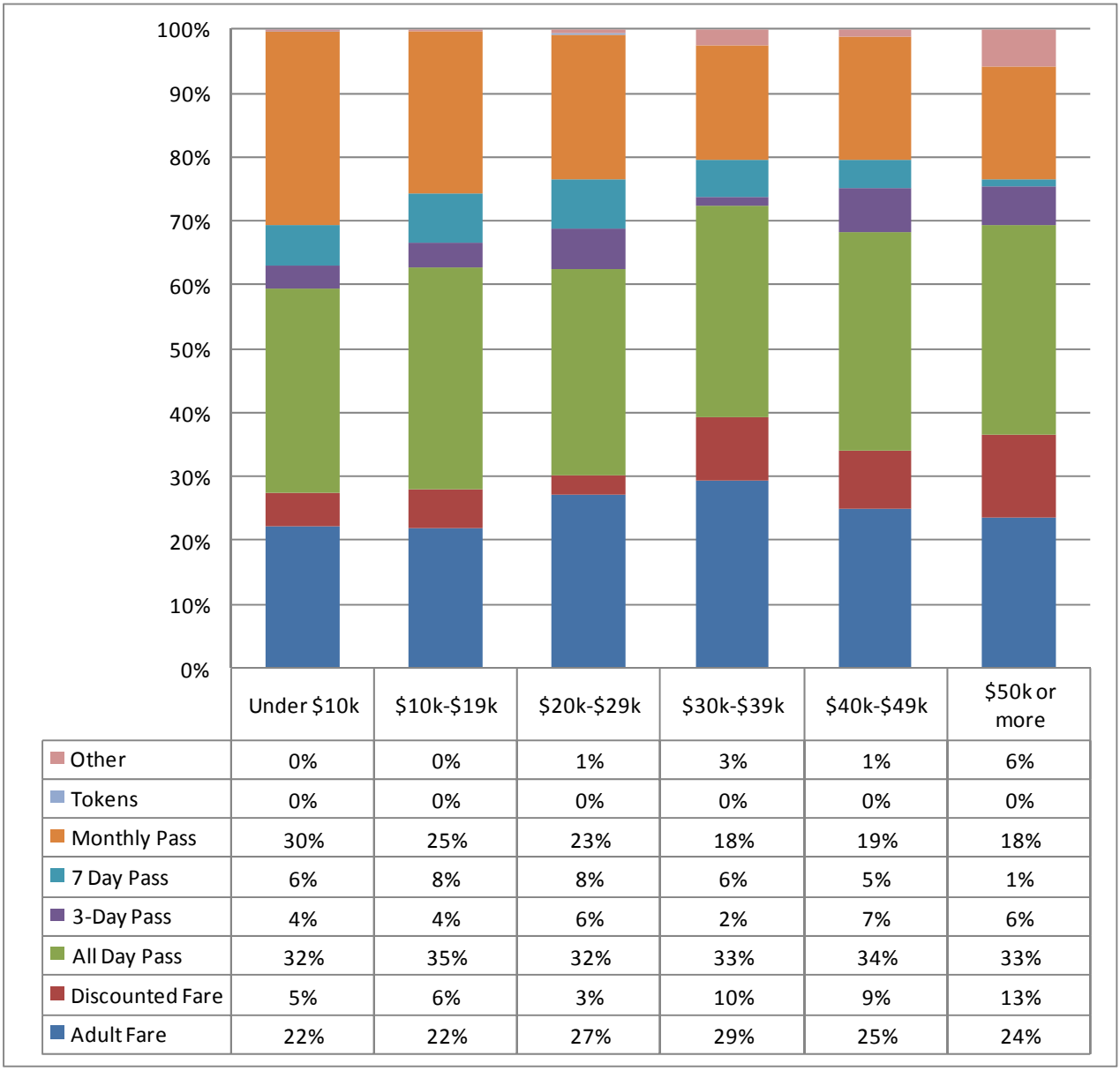


	15 or under	16-24	25-34	35-44	45-54	55-64	65-74	Over 74
Other	2%	1%	1%	1%	1%	1%	0%	8%
Tokens	0%	0%	0%	0%	0%	0%	0%	0%
Monthly Pass	24%	21%	19%	28%	28%	36%	36%	47%
7 Day Pass	5%	3%	10%	9%	9%	5%	2%	3%
3-Day Pass	5%	3%	5%	4%	5%	4%	1%	3%
All Day Pass	32%	38%	35%	32%	29%	21%	35%	25%
Discounted Fare	24%	11%	2%	2%	4%	9%	22%	11%
Adult Fare	7%	23%	27%	24%	24%	25%	5%	3%

Figure 4-13 shows the method of fare payment used by riders with different incomes. The all-day pass is the primary fare type for all riders, regardless of household income. The monthly pass is the second

most preferred fare type for riders earning $19,000 or less. The second most common fare type for riders earning $20,000 or more is the adult full fare.

Figure 4-13
Fare Type Paid by Respondent Household Income



	Under $10k	$10k-$19k	$20k-$29k	$30k-$39k	$40k-$49k	$50k or more
Other	0%	0%	1%	3%	1%	6%
Tokens	0%	0%	0%	0%	0%	0%
Monthly Pass	30%	25%	23%	18%	19%	18%
7 Day Pass	6%	8%	8%	6%	5%	1%
3-Day Pass	4%	4%	6%	2%	7%	6%
All Day Pass	32%	35%	32%	33%	34%	33%
Discounted Fare	5%	6%	3%	10%	9%	13%
Adult Fare	22%	22%	27%	29%	25%	24%

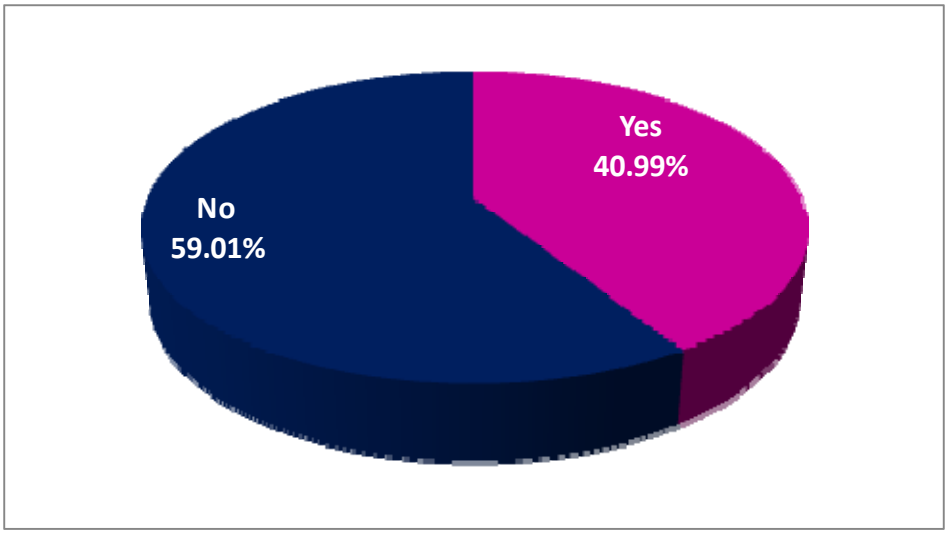
Rider Demographics

The demographic portion of the survey includes a variety of questions that queried respondents about their household income levels, age, gender, and ethnicity, among other things. Other topics covered by

the demographic questions include the reasons for using Votran service and how long riders have been using Votran service.

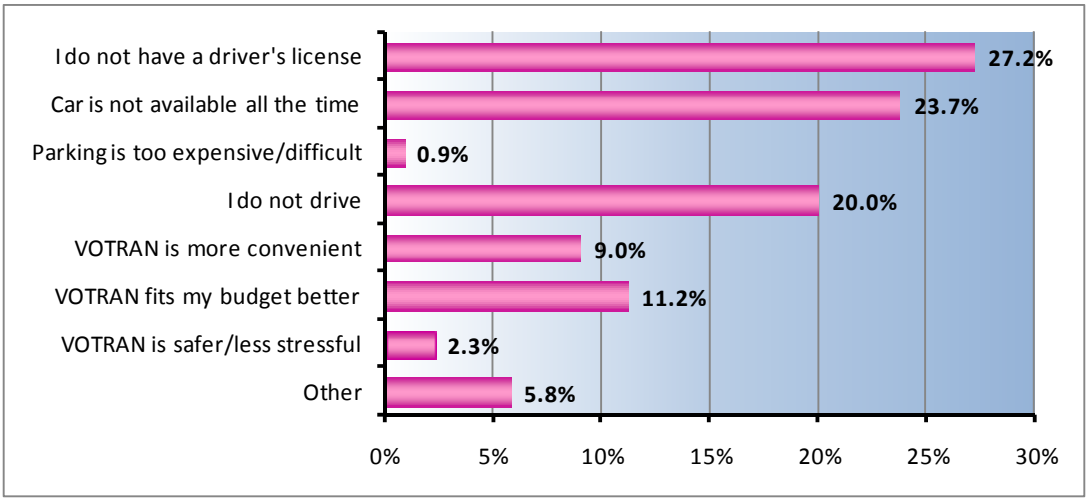
Question 17 on the survey asked respondents to indicate whether or not they possess a valid driver's license. As shown in Figure 4-14, approximately 60 percent of Votran bus riders are without driver's licenses.

Figure 4-14
Valid Driver's License



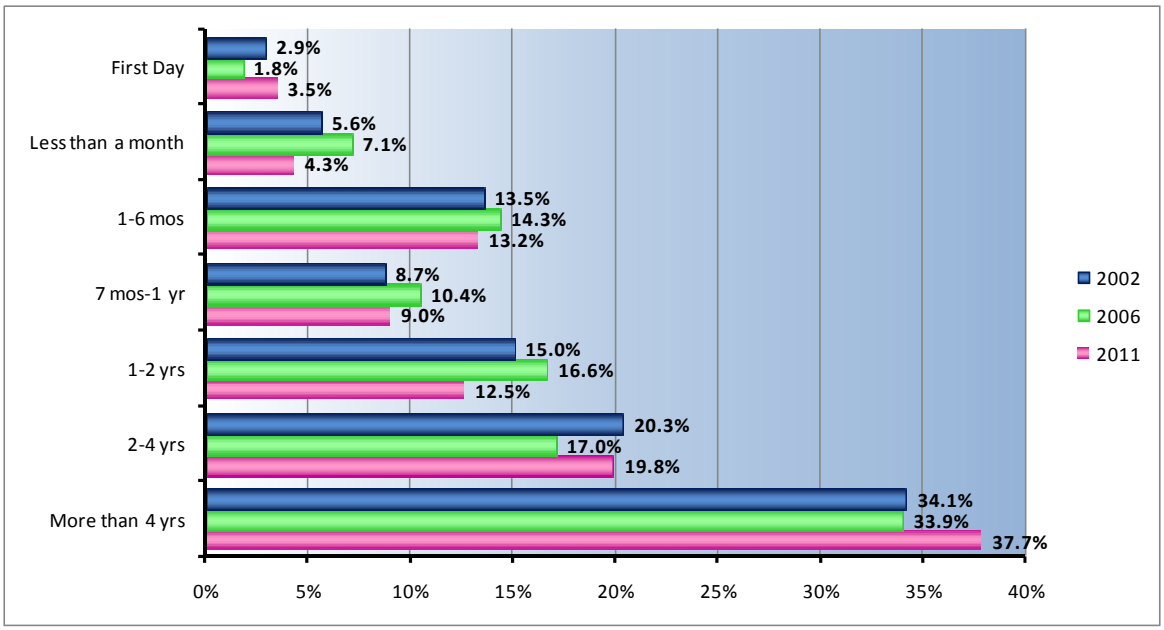
Question 24 asked respondents to indicate the most important reason for riding the bus and to provide only one answer. As shown in Figure 4-15, the number one reason was "I do not have a driver's license"; another was "car is not available all the time," suggesting that a large portion of Votran's riders use transit because they do not have the ability to drive. The responses also reveal information on discretionary ridership. A substitute measure for "choice" riders among on-board survey respondents can be gauged by the percent of responses received for the "Votran is more convenient" and "Votran is safer/less stressful" response categories. Those categories received approximately 9 percent and 2 percent, respectively.

Figure 4-15
Reasons for Using Votran



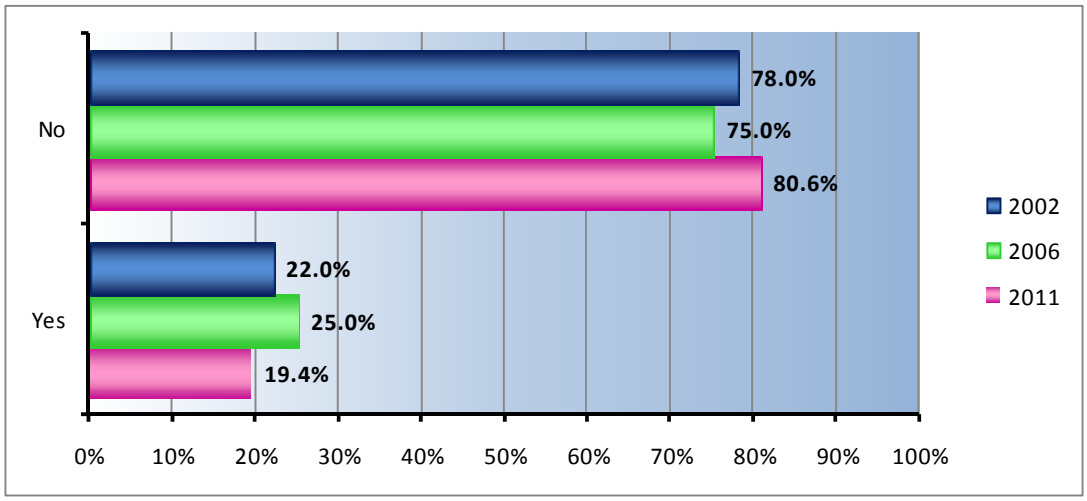
The on-board survey results revealed that a large portion of Votran users are loyal, long-time customers. Figure 4-16 displays the results to Question 10, which asked riders how long they have been using Votran bus service. The results are compared to the results of the same question that was asked during the Votran 2002 and 2006 on-board survey effort. As shown in Figure 4-16, nearly 38 percent indicated using Votran bus service for more than 4 years during the March/April 2011 survey, similar to the results of the 2002 and 2006 surveys that indicated the majority of Votran bus riders used Votran service for more than 4 years.

Figure 4-16
History of Use



Question 18 asked respondents if they have access to a vehicle that could have been used to make the current one-way trip. As shown in Figure 4-17, more than 80 percent of respondents do not have access to a vehicle. The trend shows that Votran riders have historically not had access to vehicles, with 78 percent of respondents reporting no access to a vehicle in 2002 and 75 percent of respondents reporting no access to a vehicle in 2006.

Figure 4-17
Access to Vehicle



Question 18 asked respondents to indicate how many working vehicles they have available at their households. As shown in Figure 4-18, the largest majority of respondents, 62 percent, do not have any working vehicles in their households. Similarly, the 2006 on-board survey results indicated that over 50 percent of respondent had no working vehicles in their households.

The demographics section of the survey also asked respondents to provide some information about themselves. These types of questions enable Votran to construct a profile of the average Votran bus service user. Table 4-9 provides a profile of the average Votran bus rider based on the significant percentage of all responses received for various demographic questions. The highest percentage of responses for each category was compiled to construct the average Votran bus rider. Table 4-9 compares the 2011 average bus rider profile to the average bus rider profiles from 2002 and 2006. The comparison reveals that the average Votran bus rider profile has remained the same since 2002.

Figure 4-18
Working Vehicles

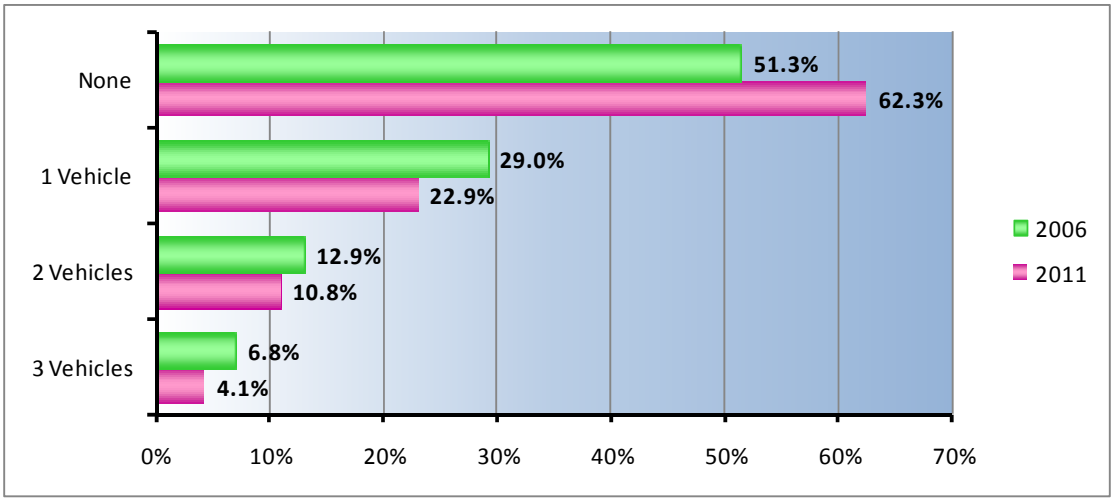


Table 4-9
Average Votran Bus Rider (2002, 2006, and 2011)

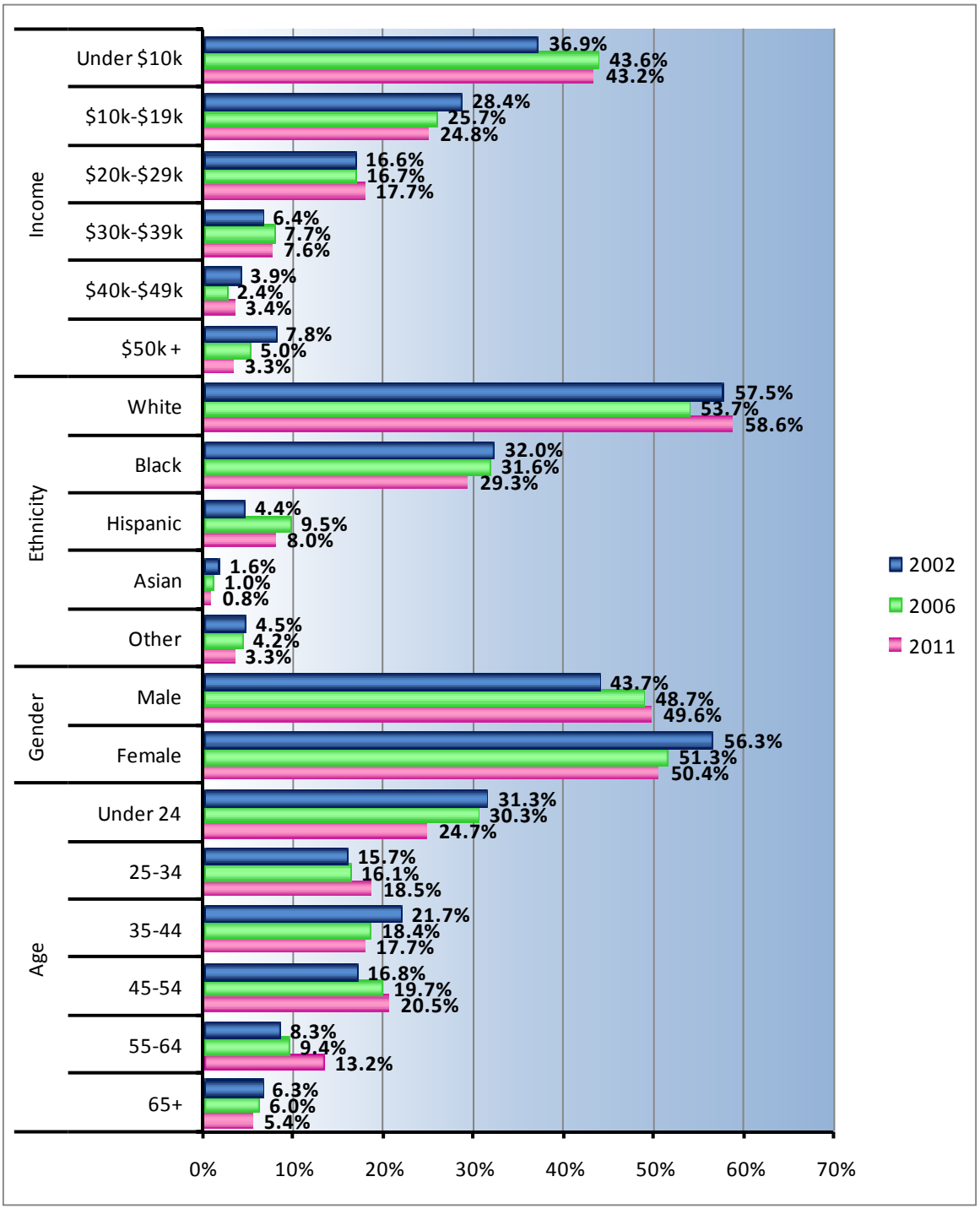
Category	Average Rider Demographic (2002)	Average Rider Demographic (2006)	Average Rider Demographic (2011)
Gender	Female	Female	Female
Ethnic Origin	White	White	White
Age	Under 24	Under 24	Under 24
Annual Household Income	Under $10,000	Under $10,000	Under $10,000
Regular Votran User?	Yes	Yes	Yes

Approximately 3,200 survey respondents (67%) provided answers to the demographic survey questions. Figure 4-19 displays the responses to the demographic questions in graphic form and provides a historical trend comparison of the results of the same demographic questions from previous survey efforts.

Customer Service and Satisfaction

Customer service and satisfaction questions queried respondents regarding improvements to Votran services and about their general satisfaction levels with various aspects of Votran service. In addition, an effort was made to cross-tabulate selected demographic characteristics with satisfaction levels, as appropriate.

Figure 4-19
Votran Rider Demographics



For Question 12, respondents were asked to indicate the 3 areas that are most important to them when riding the bus. As presented in Table 4-10, the top 2 most important considerations when riding the bus are the ability to get where you want to go, frequency of service, and safety/security at the bus stops.

Table 4-10
Most Important Considerations When Riding the Bus

Most Important Areas When Riding the Bus	
Ability to get where you want to go	17.0%
Frequency of service	15.9%
Safety/Security at the bus stop	13.2%
Availability of Sunday service	12.9%
Time of day the latest buses run on weekdays	11.0%
Time of day the earliest buses run on weekdays	10.6%
Overall satisfaction with VOTRAN	10.0%
How easy it is to transfer between buses	5.8%
Number of times you have to transfer	3.6%

Survey respondents were asked to indicate the aspect they like most about riding the bus and the aspect they like least about riding the bus. Tables 4-11 and 4-12 present the top 10 responses to those questions.

Table 4-11
Aspect Liked Most

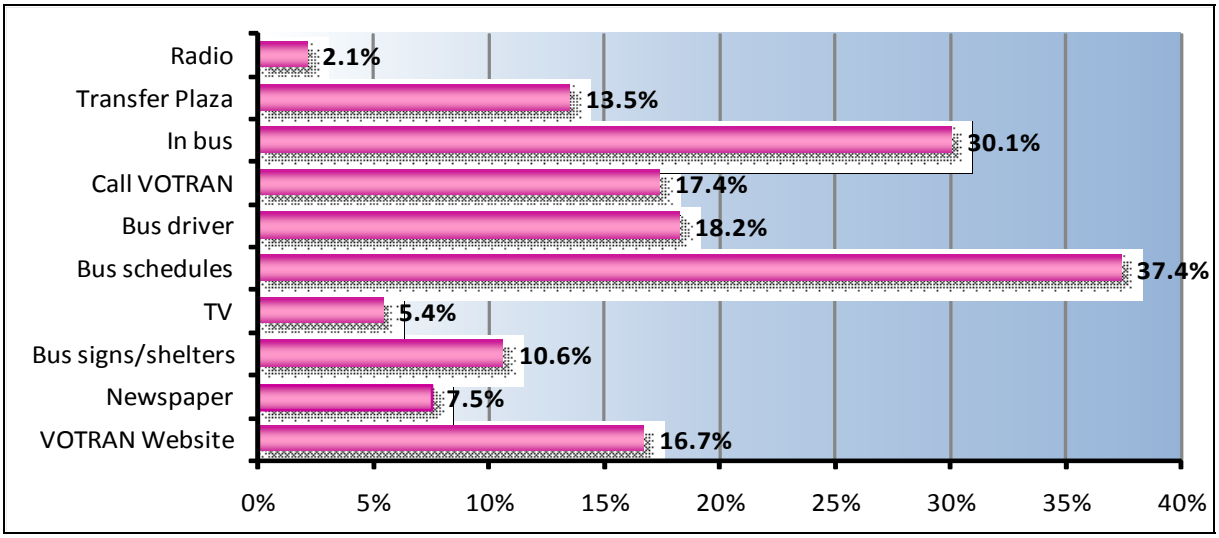
Aspect Liked Most	Percent
Bus drivers	16.21%
Ability to get where you want to go	12.52%
Economical	11.22%
Convenience	10.47%
Availability of service	9.18%
Air conditioning	6.15%
Meet people and see friends	6.15%
Quality of bus atmosphere	6.10%
On-time performance	5.26%
Not walking/biking	3.88%

Table 4-12
Aspect Liked Least

Aspect Liked Least	Percent
Other passengers	15%
Need more weekend service	12%
Limited service hours	10%
Travel time/takes too long	8%
Wait time/Infrequency of service	8%
Overcrowding	8%
Bus Drivers	6%
Bus stop issues	5%
On-time performance	5%
Inconvenience	4%

For Question 27, respondents were asked to indicate how they prefer to receive information about Votran services, schedules, and changes. As shown in Figure 4-20, more than 37 percent prefer paper bus schedules. Thirty percent of respondents prefer that Votran information is available on the bus.

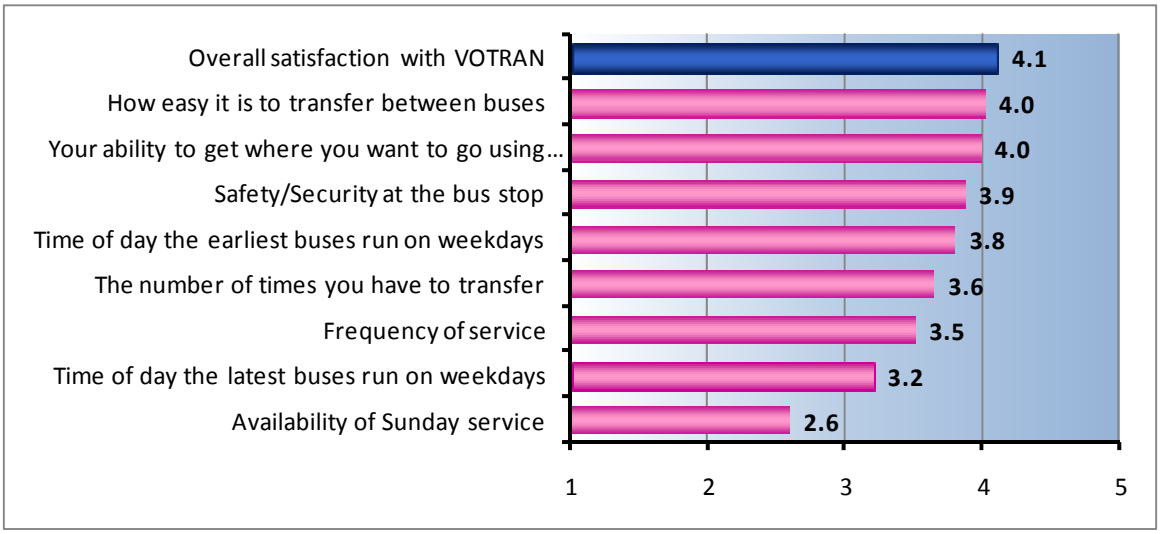
Figure 4-20
Information Dissemination



Question 11 on the survey asked riders to rate the bus service that was provided by Votran on the day the survey was administered. Respondents were given a list of 9 service-related criteria to rate as either "Very Satisfied," "Neutral," or "Very Unsatisfied." The respondents could select their responses by circling a number from 1 to 5, with 1 being "Very Unsatisfied" and 5 being "Very Satisfied." The ratings of all the respondents were averaged to obtain a final overall rating for each criterion. Although scores

for these types of questions are typically high, understanding customer satisfaction levels assists Votran in prioritizing which potential issues need the most attention, and which areas of service require the most improvement. The highest scores were given to the ease of transferring between buses and the ability to get where you are going. Each of those categories received average rating scores above 4.0. Safety/security at the bus stop, weekday start time, the number of transfers required, frequency of service, the evening hours, and availability of Sunday service received ratings below 4.0. The final criterion, the rider's overall satisfaction with Votran, received an average score of 4.1. Figure 4-21 shows all nine categories and their respective average rating scores.

Figure 4-21
Service Rating



Figures 4-22 through 4-25 display Votran customer satisfaction ratings by age, gender, ethnic heritage, and household income. As shown in Figure 4-22, the highest overall ratings were given by respondents age 65 and older, with an average rating of 4.3. The lowest overall ratings were given by respondents between the ages of 16-24, with an average rating of 3.9. Figure 4-23 displays the average overall system service rating by respondent's gender. Males rated the system slightly higher than females, with an overall service rating of 4.2 compared to a rating of 4.0 for females. Figure 4-24 provides the average overall Votran system service rating by respondents of different ethnic heritages. While White and Hispanic respondents rated the system highest on average at 4.2, Asian respondents and respondents indicating "Other" as their ethnic heritage rated the system lowest on average with a rating of 3.7. Figure 4-25 displays the average overall Votran system service ratings stratified by income levels. Average overall satisfaction was highest among those earning between $30,000 or more, with an average overall rating of 4.2. Those earning $29,000 or less rated the system lowest, with an average overall rating of 4.1.

Figure 4-22
Rider Satisfaction and Age

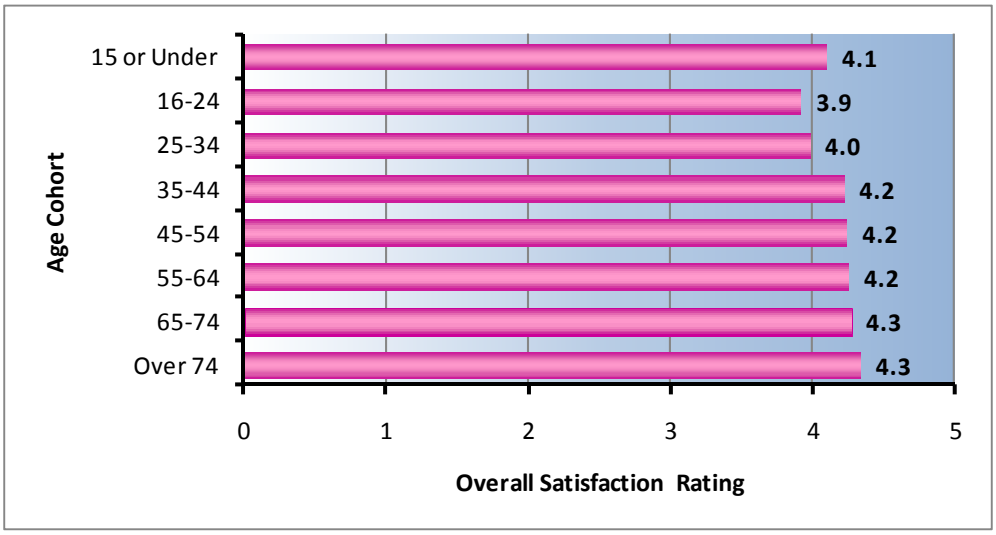


Figure 4-23
Rider Satisfaction and Gender

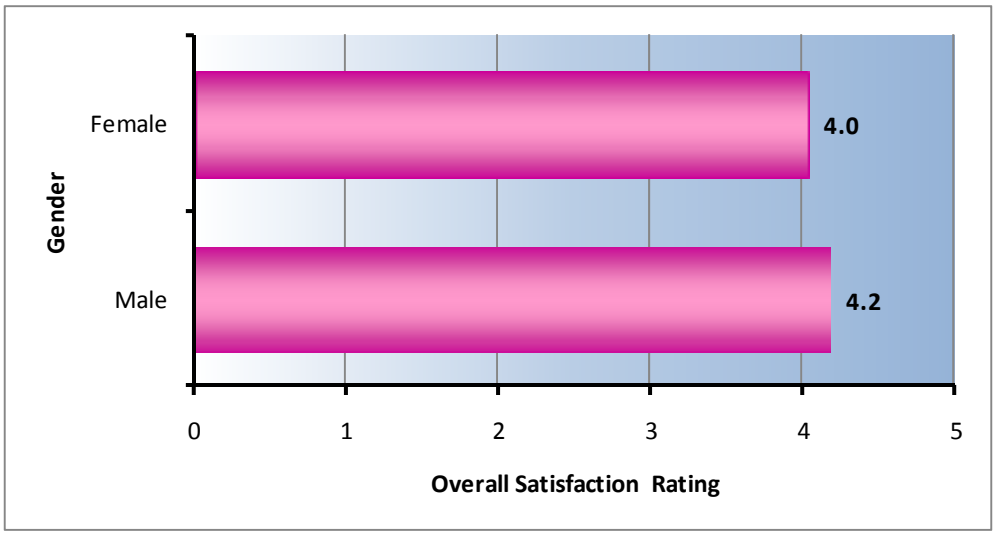


Figure 4-24
Rider Satisfaction and Ethnic Heritage

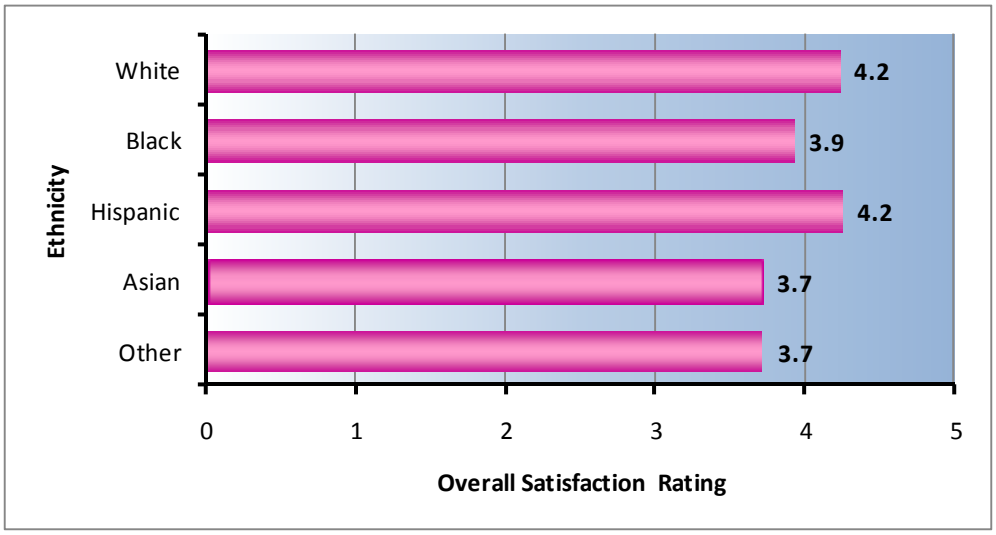
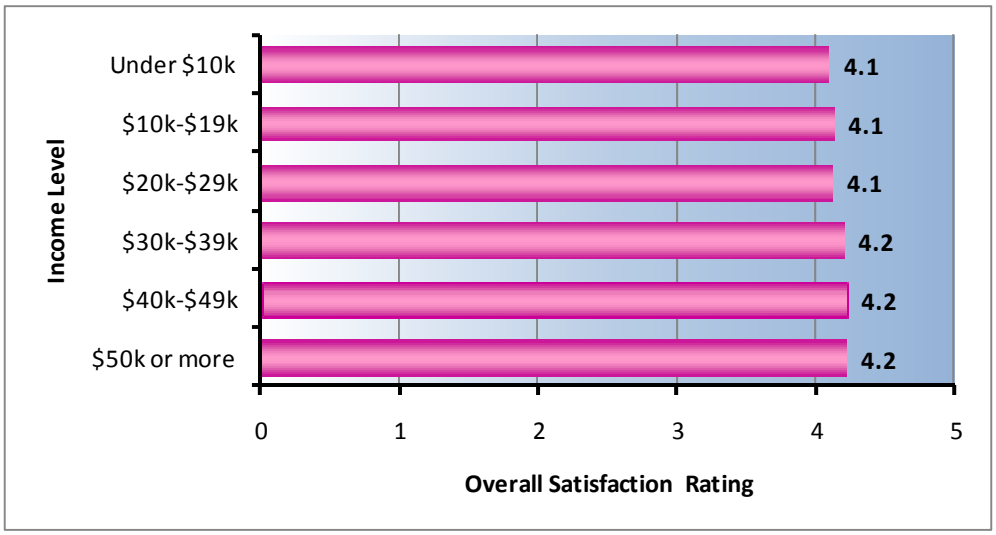


Figure 4-25
Rider Satisfaction and Household Income



ON-BOARD SURVEY GENERAL CONCLUSIONS

Results from the on-board survey provide insight into various aspects of the Votran fixed-route bus service. Salient conclusions drawn from the on-board survey analysis are summarized in this section.

- Bus riders are satisfied with Votran service. The average overall satisfaction rating was 4.1 out of 5.
- A large proportion of bus riders, 32 percent, are boarding the bus using the all-day pass.

- A large share of Votran trips are work trips. Approximately 26 percent of respondents indicated work as their final destination of their particular bus trip.
- Bus riders are primarily regular users of the service. A total of 65 percent of respondents indicated that they ride the bus 5 to 7 days per week. In addition, 38 percent indicated that they have been using Votran service for more than 4 years.
- Survey respondents prefer to view Votran information on paper bus schedules.
- The majority of survey respondents access the bus stop/station by walking.
- Approximately 55 percent of respondents require at least one or more transfers to complete their trip.
- The largest volume of transfer activity occurs on Routes 10, 17, 60, 4, 3, and 7.
- The average Votran bus rider is a white female under age 24 with an annual household income of under $10,000.
- The 2011 survey results are consistent with the previous on-board survey efforts completed in 2002 and 2006.

SECTION 5: REVIEW OF PLANS, STUDIES, AND POLICIES

A supportive component of the TDP Update is the review of transit policies and their relationship to Votran. This section reviews transit policies at the local, state, and federal levels of government. Various transportation planning and programming documents are summarized, with an emphasis on issues that may have implications for public transportation in Volusia County. These implications will be discussed in more detail subsequently in the Situational Appraisal component of the TDP.

The following plans represent state and Federal initiatives affecting Volusia County:

- SAFETEA-LU Legislation
- Clean Air Act of 1990
- DOT Livability Initiative and the Federal Sustainable Communities Program
- 2060 Florida Transportation Plan Update
- State Growth Management Legislation

The following local and regional plans were reviewed in order to understand current transit policies and plans with potential implications for Votran's services:

- Votran and FDOT SunRail Agreement
- Votran Integrated Sustainability Implementation Plan
- Volusia County MPO Transit Corridor Feasibility Analysis Study
- Votran West Side Transit Plan
- Votran East Side Transit Study
- Votran Transit Development Plan Major Update 2007-2016
- Examination of Night Service Alternatives for Volusia County DBA Votran
- Votran Transit Development Design Guidelines
- Volusia County Transportation Disadvantaged Service Plan
- Volusia TPO 2035 Long Range Transportation Plan (LRTP)
- Volusia County Comprehensive Plan
- City of Daytona Comprehensive Plan
- City of DeLand Comprehensive Plan
- City of Ormond Beach Comprehensive Plan
- City of New Smyrna Beach Comprehensive plan
- City of Deltona Comprehensive Plan
- City of Port Orange Comprehensive Plan
- City of Orange City Comprehensive Plan
- City of DeBary Comprehensive Plan
- City of Deltona Urban Design Master Plan

- Regulating Plan for the DeBary SunRail Commuter Rail Station Transit Oriented Development Overlay District
- Ormond Beach Multi-Modal Strategy

FEDERAL POLICIES

SAFETEA-LU

The Safe, Accountable, Flexible, and Efficient Transportation Equity Act - A Legacy for Users (SAFETEA-LU) addresses required planning processes that must be undertaken when applying federal and state funds to transportation projects. SAFETEA-LU addresses the many challenges facing our transportation system today, such as improving safety, reducing traffic congestion, improving efficiency, increasing intermodal connectivity, and protecting the environment. SAFETEA-LU promotes more efficient and effective federal surface transportation programs by focusing on transportation issues of national significance, while giving state and local transportation decision-makers more flexibility for solving transportation problems in their communities. SAFETEA-LU continues and/or establishes numerous funding programs for transit. A reauthorization of SAFETEA-LU or a new multi-year transportation bill is being developed by Congress. During the 2011 fiscal year it is likely that federal transportation funds will be allocated through a continuing resolution.

The new transportation legislation is expected to transform the nation's surface transportation policies by clearly defining the role and specific objectives of the Federal Government in providing resources to States to carry out programs. The new act will focus the majority of transit funding in four core categories to bring urban and rural public transit systems to a state of good repair. These four categories are Critical Asset Investment, Highway Safety Improvement, Surface Transportation, and Congestion Mitigation and Air Quality Improvement. Additionally, the act will provide specific funding to restore transit rail systems; provide mobility and access to transit-dependent individuals; and plan, design, and construct new transit lines and intermodal facilities. Additional objectives will include:

- Create a National Transportation Strategic Plan.
- Improve the safety of the surface transportation network.
- Bring existing highway and transit facilities and equipment to a state of good repair.
- Facilitate goods movement.
- Improve metropolitan mobility and access.
- Expand rural access and interconnectivity.
- Lessen environmental impacts from the transportation network.
- Improve the project delivery process by eliminating duplication in documentation and procedures.

- Facilitate private investment in the national transportation system that furthers the public interest.
- Ensure that States receive a fair rate of return on their contributions to the Trust Fund.
- Provide transportation choices.
- Improve the sustainability and livability of communities.

Clean Air Act of 1990

The Clean Air Act of 1990 and subsequent amendments determine the National Ambient Air Quality Standards (NAAQS). NAAQS are standards based on the amount of particulate matter in the air, measured in parts per million for the following pollutants:

- Carbon Monoxide (CO)
- Nitrogen Dioxide (NO_2)
- Ozone (O_3)
- Sulfur Dioxide (SO_2)
- Lead (Pb)
- Particulate Matter (PM)

On January 6, 2010, EPA proposed revisions to the NAAQS for ground-level ozone. The revisions are based on scientific evidence about ozone and its effects on people, sensitive trees, and plants. The proposed revisions would affect two types of ozone standards. The first standard affected deals with protection of public health, including the health of at-risk populations such as children, people with asthma, and older adults. The secondary standard affected by revisions deals with protection of public welfare and the environment, including sensitive vegetation and ecosystems. Specifically, the EPA proposes to revise the existing ozone standards and update the Air Quality Index (AQI) for ozone.

An area meeting NAAQS standards is classified as an “attainment area.” EPA's reconsideration of the Clean Air Act health standard for ground level ozone is currently going through interagency review led by OMB. Following completion of this final step, EPA will finalize its reconsideration. Due to the current state of the economy, and the financial burden that higher environmental standards are expected to place on corporations, President Obama announced September 2, 2011 that the EPA’s tighter standards would not be implemented. It is anticipated that revised EPA Clean Air Act standards will not be implemented until 2013.

DOT Livability Initiative and Federal Sustainable Communities Program

All of FTA’s programs work to enhance the livability of communities by providing transportation options for people and communities across the country. FTA’s grant programs provide flexibility for

communities to make investments in transit as part of multimodal transportation networks, with connections to improved facilities for walking and bicycling, and encouragement of transit oriented developments. The programs below represent highlights of the policies and provisions specifically intended to help communities improve their quality of life by identifying investments in transit. Most of these policies/provisions do not have designated funding sources associated with them. Rather, these elements are eligible for Federal transit funds under appropriate FTA grant programs.

- **Transit Oriented Development:** FTA encourages Transit Oriented Developments (TODs) through its grants, programs, research, technical assistance, and various partnerships. TOD is defined as compact, mixed-use development near transit facilities and high-quality walking environments. Transit elements of TOD are eligible for FTA funding.

- **Joint Development:** Joint development is a specific form of transit-oriented development that is often project-specific, taking place on, above, or adjacent to transit agency property that was acquired (in whole or in part) with Federal transit funds. Joint development activities are subject to FTA review for eligibility of transit funding.

- **Transit Enhancements:** The term "transit enhancement" (TE) means projects or project elements that are designed to enhance mass transportation service or use and are physically or functionally related to transit facilities. FTA's Urbanized Area Formula Grant Program requires at least one percent of money to be used for transit enhancement. Other transit enhancement funding is also available under the Surface Transportation Program (STP).

- **Bike and Pedestrian:** Funding from FTA grant programs can be used for bicycle facilities and access, and pedestrian-related enhancements connected to transit facilities.

- **Intercity Bus (5311(f)):** The Intercity Bus Program under FTA's Nonurbanized Area Formula Grant Program supports the connections between nonurbanized areas and the larger regional or national system of intercity bus service.

- **Art in Transit:** "Art in Transit" is an example of the quality of life initiatives that FTA supports through the Urbanized Area Formula Grant Program, STP, and other funding sources. FTA program funds may be used for the costs of design, fabrication, and installation of art that is part of a transit facility.

STATE OF FLORIDA POLICIES

Florida Transportation Plan (FTP)

In 2010, FDOT completed the 2060 Florida Transportation Plan Update, which looks at a 50-year horizon. The 2060 FTP calls for a fundamental change in how and where Florida invests in transportation. The FTP defines transportation goals, objectives, and strategies to make Florida's economy more competitive, communities more livable, and the environment more sustainable for future generations. Florida is committed to providing livable communities and mobility for people and freight through greater connectivity and meeting the rising needs of businesses and households for safety, security, efficiency, and reliability. The FTP provides goals and objectives for Florida's transportation system. Pertinent long range goals and objectives are provided below.

- **Goal**: Invest in transportation systems to support a prosperous, globally competitive economy.
  - **Objective**: Improve transportation connectivity for people and freight to established and emerging regional employment centers in rural and urban areas.
  - **Objective**: Invest in transportation capacity improvements to meet future demand for moving people and freight.

- **Goal**: Make transportation decisions to promote responsible environmental stewardship.
  - **Objective**: Plan and develop transportation systems and facilities in a manner which protects and, where feasible, restores the function and character of the natural environment and avoids or minimizes adverse environmental impacts.
  - **Objective**: Plan and develop transportation systems to reduce energy consumption, improve air quality, and reduce greenhouse gas emissions.

- **Goal**: Maintain and operate Florida's transportation system proactively.
  - **Objective**: Achieve and maintain a state of good repair for transportation assets for all modes.
  - **Objective**: Minimize damage to infrastructure from transportation vehicles.
  - **Objective**: Optimize the efficiency of the transportation system for all modes.

- **Goal:** Improve mobility and connectivity for people and freight.
  - **Objective**: Expand transportation options for residents, visitors, and businesses.
  - **Objective**: Reinforce and transform Florida's Strategic Intermodal System facilities to provide multi-modal options for moving people and freight.
  - **Objective**: Expand and integrate regional public transit systems in Florida's urban areas.
  - **Objective**: Increase the efficiency and reliability of travel for people and freight.

- **Objective**: Integrate modal infrastructure, technologies, and payment systems to provide seamless connectivity for passenger and freight trips from origin to destination.

In summary, the FTP supports the development of state, regional, and local transit services. The growth in Florida requires new and innovative approaches by all modes to meet the needs today and in the future.

State Growth Management Legislation (House Bill 7207)

House Bill (HB) 7207, named the Community Planning Act, was signed into law on June 2, 2011. That bill is intended to stimulate Florida's economic development and economic recovery by taking state government out of the development business and giving the responsibility of community planning back to local communities. The landmark legislation is the biggest change to growth management laws in many years – repealing most of the State-mandated growth management planning laws that have governed development activities within Florida since the original Growth Management Act of 1975. As of June 3, 2011, the role of state and regional agencies in the review of comprehensive plan amendments and the time needed to process the majority of plan amendments has been significantly reduced, and many development and plan amendment hurdles have been modified throughout the state—transportation concurrency being one of the main hurdles. State-mandated concurrency requirements have been repealed and, consequently, a large share of growth management responsibility has shifted to cities and counties.

The new legislation also supersedes Senate Bill (SB) 360, the Community Renewal Act, which required the preparation of mobility plans within dense urban land areas (DULAs) and Transportation Concurrency Exemption Areas (TCEAs). Instead, a local jurisdiction interested in implementing its own concurrency ordinance or mobility plan can still do so, but will have limitations on how to implement and enforce the ordinance. HB 7207 strengthens legislative language that supports multi-modal approaches to transportation by stating that Comprehensive Plan Transportation Elements "shall provide for a safe, convenient multi-modal transportation system" (F.S. Section 163.3177 [6b]).

It is important to note that mobility fees developed through a Mobility Plan will not generate significant additional revenue for a community with an existing road impact fee program, nor will implementing mobility fees solve transportation funding in any community. Instead, mobility fee revenue will provide for the flexibility to spend revenues on more than just roads. If a community's vision is to focus on multi-modal travel options, then the ability to spend "one-time payment" revenue on transit buses and infrastructure and the construction of additional bicycle and pedestrian facilities will help achieve that vision. As a result, the community will need a mobility fee that provides for flexibility in the way the revenues can be spent, both in terms of capital infrastructure and transit operations. Votran should

continue to encourage legislative priorities that seek to provide opportunities for local operating funding options.

FDOT Work Program

FDOT annually develops a Five-Year Work Program. The Work Program is a project-specific list of transportation activities and improvements developed in cooperation with the MPO and local transportation agencies. The Work Program must be consistent, to the maximum extent feasible, with the capital improvement elements of local government comprehensive plans.

The Tentative Work Program is presented to the Legislature at the beginning of each legislative session. It identifies transportation projects and programmed funding by year and is adopted by July 1 each year.

Once adopted, the Work Program is used by FDOT to develop the State Transportation Improvement Program (STIP) that is used at the federal level to ensure that planning efforts are consistent with federal guidelines. All transit funding coming through FTA must be included in the STIP before a grant award can be finalized and approved. Close coordination with FDOT on the programming of federal funds is required in the development of the Tentative Work Program, as well as throughout the year as federal adjustments and allocations are announced.

State transit planning and programs encourage the growth of public transportation services, as well as support the increasing local investment in transit systems. The State has several funding programs that are available if local areas are able to commit to a dedicated funding source for system development and expansion. Legislation passed over the past few years indicates that the State plans to continue to foster a multimodal approach to transportation investment.

Strategic Intermodal System

FDOT has developed a transportation system designed to enhance Florida's economic competitiveness. This system, known as the Strategic Intermodal System, or SIS, is composed of transportation facilities and services of statewide and inter-regional significance. In 2003, the Florida Legislature enacted a law establishing the SIS. This new system represents a fundamental shift in the way Florida views the development and financing of transportation facilities and services.

The SIS was designated through the work of statewide transportation partners in 2003 under the Omnibus Transportation Bill. The Legislature recommended partners and enacted objective criteria and thresholds, based on quantitative measures of transportation and economic activity. Two types of facilities were established, including:

- **SIS Facilities** – facilities that play a critical role in moving people and goods to and from other states and nations, as well as between major economic regions in Florida.

- **Emerging SIS Facilities** – facilities that do not currently meet adopted SIS criteria but are experiencing growing levels of activity.

The SIS corridors in Volusia County are I-4 and I-95. Emerging SIS corridors in Volusia County include SR 40 and US 17. State financial strategies emphasize funding for SIS facilities, along with linkages between SIS facilities, including express bus service on highway corridors and bus routes serving intermodal facilities. An update to the SIS is anticipated for completion in the near future that will include the "2040 SIS Multi-Modal Unfunded Needs Plan". In the SIS update, it is anticipated that International Speedway Boulevard will be added as a SIS facility because it links the Greyhound bus station with the airport.

Votran will continue to coordinate with FDOT to understand specific implications of the SIS regarding public transportation. Since significant State funding will be allocated to the SIS, it will be important to identify transit facilities that should be considered for inclusion as an SIS or emerging SIS facility.

State of Florida TD Five-Year/Twenty-Year Plan

Developed by the Commission for the Transportation Disadvantaged (CTD), this plan is required under the Florida Statutes and includes the following elements:

- Explanation of the Florida Coordinated Transportation System
- Five-Year Report Card
- Florida Office of Program Policy Analysis and Government Accountability Review
- Strategic Vision and Goals, Objectives, and Measures

The Long-Range and Five-Year strategic visions were reviewed and used for guidance and are indicated below.

Long-Range Strategic Vision

Create a strategy for the Florida CTD to support the development of a universal transportation system with the following features:

- A coordinated, cost-effective multi-modal transportation system delivered through public-private partnerships.
- A single, uniform funding system with a single eligibility determination process.
- A sliding scale of fare payment based on a person's ability to pay.

- Use of electronic fare media for all passengers.
- Services that are designed and implemented regionally (both inter-county and inter-city) throughout the state.

Five-Year Strategic Vision

Develop and field-test a model community transportation system for persons who are TD incorporating the following features:

- Statewide coordination of community transportation services using Advanced Public Transportation Systems including Smart Traveler Technology, Smart Vehicle Technology, and Smart Intermodal Systems.
- Statewide coordination and consolidation of community transportation funding sources
- A statewide information management system for tracking passenger eligibility determination.
- Integration of Smart Vehicle Technology on a statewide multi-modal basis to improve vehicle and fleet planning, scheduling, and operations. This effort includes vehicle and ridership data collection, electronic fare media, and geographic information system (GIS) applications.
- Development of a multi-modal transportation network to optimize the transportation system as a whole, using Smart Intermodal Systems. This feature would be available in all areas of the state via electronic access.

LOCAL AND REGIONAL PLANS/DOCUMENTS

Votran and FDOT SunRail Agreement

Volusia County is a partner, along with Orange, Seminole, and Osceola counties and the City of Orlando with FDOT in the planning, design, construction, and operation of the Central Florida commuter rail transit project known as SunRail. Volusia County and FDOT have entered into an Interlocal Agreement that describe the financial and operational commitments of the local funding partners and FDOT for the provision of rail transit and feeder bus service for the first seven years of operation. FDOT has committed to subsidize feeder bus service for the initial 7 years of the SunRail operation by financing incremental operations and maintenance, as needed.

As a department of Volusia County and the County's transit provider, Votran will be the operator of the fixed-route and paratransit services that connect to and complement the SunRail system. The additional paratransit service that is needed to support the SunRail will be paid in the same manner as the feeder bus operations.

The preliminary Votran feeder bus plan will require three additional peak buses and 4,560 annual revenue hours. The estimated annual operating and maintenance costs for the feeder bus services are

presented in Table 5-1. The costs were projected to begin in FY 2010; however, based on the revised implementation schedule for SunRail service will likely begin in FY 2013. Table 5-1 does not include the operating and capital costs associated with any additional paratransit services that will be needed. Since development of these operating plans Votran and FDOT continue to coordinate on feeder service to ensure adequate connectivity between modes.

Table 5-1

Votran's Preliminary SunRail Feeder Bus Costs

	Year of Expenditure Costs - CR Feeder Bus Service						
	FY10	FY11	FY12	FY13	FY14	FY15	FY16
Total O&M Cost	336,938	350,416	364,433	379,010	394,170	409,937	426,335
Fare Revenue	62,200	64,700	67,300	70,000	72,700	75,700	78,700
State, Federal, and Other Funding	80,000	83,200	86,500	89,900	93,500	97,300	101,200
Estimated Local/CFCRT Share	194,738	202,516	210,633	219,110	227,970	236,937	246,435

Notes & Assumptions

1. O&M costs assumed to increase by 4.0% annual rate.
2. Assumes 12 months of CR and feeder bus operations in FY10.
3. Fare Revenue for CR feeder bus services assumed to be 3/4 of Votran average farebox receovery ratio (21%).
4. State operating assistance (other then CFCRT support) assumed to be 18% of total O&M expenses.
5. Federal funding assumed to be 8% of total O&M expenses.
6. Other revenue assumed to be 1% of total O&M expenses.
7. Actual CFCRT share will be based on actual fare revenue and State, Federal, and Other Funding.
8. Cost of paratransit service is to be added in any final agreement between the parties.

Source: FDOT and Votran Agreement

Votran Integrated Sustainability Implementation Plan

The Votran Integrated Sustainability Implementation Plan was completed in August 2010. This plan outlines and details Votran's sustainability initiatives and improvements for the next five years. Votran will work to incorporate the following recommendations to ensure long-term viability of sustainability programs:

1. **Implement a sustainability management system loosely based on ISO-14001.**
2. **Implement a ridership enhancement pilot project.** The initial target would be encouraging 300 new riders to ride the bus twice per week in the first year, gradually escalating to 2,064 new riders within five years.
3. **Aggressively pursue federal and state grant funding.**
4. **Implement a compliance management program.** This program will help to verify applicability and ensure compliance with environmental laws and regulations.
5. **Develop a communication strategy.** The strategy should define the message of Votran's sustainability program, the audience, the media, and the schedule for communicating information.

Volusia County MPO Transit Corridor Feasibility Analysis Study

This Volusia TPO's 2009 study assessed the feasibility of 15 potential transit corridors within Volusia County using a two-step process. First, the corridors were analyzed by three measures: population and employment density, land use, and neighborhoods and community. Next, the corridors were compared against each other resulting in four cross-county corridors (FEC Railroad, US 92, I-4, and SR 44) and four local circulators (DeBary to Deltona, DeLand, East Coast, and Daytona Beach) proceeding to the second step of the analysis process.

The second step of the analysis process assigned the most appropriate transit modes to each of the eight remaining corridors. After the transit modes were assigned, each of the eight corridors was evaluated based on the following measures of effectiveness:

- Transit System Usage
- Accessibility
- Environmental Justice
- Transit Dependent Riders
- Costs
- Land Use Neighborhoods and Community
- Population and Employment
- Natural and Built Environments

The final results of the study indicated that currently there is not a substantial need for high capacity transit service in Volusia County based on the existing densities. However, as the county continues to grow, each community should work to encourage future transit supportive land uses. The I-4 Corridor and the US 92 Corridor are both recommended for further study based on the connections between Daytona Beach and the SunRail service. The Daytona Beach Circulator had the most potential for high capacity based on the heavily populated area and the trip generators.

VOTRAN East Side Transit Study

The Votran East Side Transit Study was completed in June 2009. Six initiatives from the VOTRAN 2007-2016 TDP were addressed in this study, including:

- Conduct east side comprehensive operations analysis (COA)
- Increased service frequencies on U.S. 1 corridor
- Improvements to Beach Service Area
- East-West service (Route 60) frequency improvements

- Improve service frequencies on selected routes
- Review Saturday, Sunday, and evening schedules

Major findings from the study include:

- The overall design of the VOTRAN east side route network is strong in terms of affording mobility to customers and residents.
- There is a need to position the transit system for future network growth by using the Ormond Town Square or Wal-Mart Supercenter located at Granada and Williamson Boulevards, just east of I-95 as a secondary transit transfer center.
- The frequencies on Routes 3 and 4 should be increased to 30 minutes.
- The frequency on Route 60/61 should be increased to 30 minutes between the Transfer Plaza and the Volusia Mall.
- Consideration should be given to expanding night service to Routes 7 and 12.
- Consideration should be given to expanding Sunday service to include the entire spine route network and core route network.
- The lower performing routes are classified as Routes 5, 6, 8, 9 and 11.
- Better connections between the northwest sector and the east service area should be explored.
- Creating a new route from Ormond Town Square to the Volusia Mall along Williamson Boulevard may provide opportunities for route realignments and serve the new Ormond Memorial Hospital.
- Based on the average trip cost in New Smyrna, a flex type service that operates in zones should be implemented.
- VOTRAN should plan for the expansion of its service area as Developments of Regional Impact (DRIs) are developed within the county.
- VOTRAN should continue to refine plans to serve the new commercial development along Dunlawton and I-95.
- Route realignments to eliminate the loop on Route 5 and the segment west of the Volusia Mall to the Farmer's Market on Route 11.
- Extend Route 1B south on Williamson to service the new Ormond Memorial Hospital.
- Extend Route 12 into the Pavilion DRI.

Votran West Side Transit Plan

The 2007 West Side Transit Plan identified recommended service plans for the near-term, SunRail service to DeBary, and SunRail service to DeLand. Since the completion of the 2007 plan some improvements have been implemented while others have been revised based on existing needs and trends. The recommendations presented below are from the initial plan.

Near-Term Improvements (FY 2007) –

- Truncate the two southern branches of Route 20 and terminate the service at the Market Place Shopping Center.
- Extend Route 21 to the Deltona Community Center near Lakeshore Drive and the new Wal-Mart Supercenter on SR 415.
- Extend Route 22 to the Deltona Community Center near Lakeshore Drive and the new Wal-Mart Supercenter on SR 415.
- New Route 23 to replace the Route 20 service on Charles Beall Boulevard, Volusia Medical Center, and Saxon Boulevard.
- Conduct a detailed assessment to determine whether to modify or discontinue Route 24 based on its low ridership and poor productivity.

SunRail service to DeBary (FY 2010) –

- Extend Route 20 west from Market Place Shopping Center.
- Extend Routes 21 and 22 along the planned Saxon Boulevard extension to the DeBary station.
- Extend Route 23 west from Market Place Shopping Center.

SunRail service to DeLand (FY 2012) –

- Extend Route 60 west to the DeLand SunRail Station vial International Speedway Boulevard south on Spring Garden Avenue, west on New York Avenue, and west on Old New York Avenue.

Votran Transit Development Plan Major Update 2007-2016

The most recent major TDP update was developed in 2006 for FY 2007 through FY 2016. The needs and opportunities identified in the TDP were grouped into two general categories: Votran service planning areas and key focus areas and strategic initiatives. Key service planning areas included:

- West Side
- South East
- Beach Service
- East Side
- Paratransit Services

The TDP identified the following key focus areas and strategic initiatives that were considered to impact the overall Votran system:

- Commuter Rail
- Technology
- Infrastructure and Facilities
- Other Capital Items
- Community Relations, Outreach, and Marketing Activities
- Transit Education Programs
- Coordination/Interaction with Local Governments and Other Agencies
- Florida Growth Management Act and Proportionate Fair-Share Transit Opportunity
- SAFETEA-LU Programs

Key projects and services that were recommended for implementation over the ten-year planning period include:

- Pursue a long-term dedicated funding source.
- Establish the DeLand Intermodal Center.
- Modify routes on the west side to accommodate the Central Florida Commuter Rail.
- Develop feeder service to support the Central Florida Commuter Rail.
- Increase frequency of service in the US 1 corridor.
- Improve frequencies.
- Improve beach area service.
- Review Saturday, evening, Sunday, and holiday schedules.
- Plan additional express bus service along major corridors (candidate corridors include US 1, Nova Road, A1A, and ISB).
- Continue to work toward the establishment of a countywide policy for the installation of shelters and benches (should include design guidelines, location, placement, and physical characteristics).
- Develop and implement super stops.

In addition, the TDP specified other actions, including the planning and implementation of federal grant programs, monitoring technology advancements applicable to public transportation, working with government agencies to achieve better bus stop accessibility, tracking performance, encouraging public input, and marketing activities to advertise, educate, and generate additional ridership.

Examination of Night Service Alternatives for Volusia County DBA Votran

Based on the increased desire for Votran to provide later evening transit bus service and the considerable financial impact associated with the provision of later evening service, this plan was developed in 2002 to examine a variety of alternatives for the provision of night service so that the most suitable and fiscally-responsible option is identified for implementation. Based on an analysis using NTD data from peer group system, the study determined that Votran is not providing a service span that is typical for a system of its size. Based on the distribution of end times for its specific peer group, it would appear that Votran should be providing transit service until at least 10 p.m., with an overall service end time falling somewhere in the range of 10:30 p.m. to 12:30 p.m.

Seven service options were analyzed for possibly having application in Volusia County for the specific purpose of improving nighttime mobility, including:

1. Vanpools
2. "Super" Gold Service
3. Shared-ride taxicab service
4. Taxicab vouchers
5. Fixed-route bus service – Eastside
6. Fixed-route bus service – Eastside & Westside
7. Combination of fixed-route bus service & "super" Gold Service

This study concluded that based on consideration of the advantages and disadvantages of each of the night service alternatives, as well as their cost-per-trip estimates, Votran and the County Council should pursue the implementation of nighttime fixed-route bus service in the Eastside core. The study also noted that implementing the service on the smaller scale would provide Votran and the county officials with the opportunity to gauge the initial level of demand for night transit service, as well as the success of this alternative in meeting that demand, while keeping the initial investment comparatively low. Votran, as funding allowed, implemented the recommendations from this plan.

Votran Transit Development Design Guidelines

This document presents a set of development design standards that should be considered during the planning and designing of future developments or redevelopment projects. The guidelines developed by Votran include transit thresholds that should be exceeded during the review process and a checklist to be used during the evaluation of how well the development will accommodate transit vehicle circulation and provide for accessibility to transit services. The complete document includes land use considerations, bus stop siting and design criteria, and suggestions for further consideration. The document may be downloaded from the Votran website at http://volusia.org/votran/VOTRAN%20Transit%20Design%20Guidelines.pdf.

Volusia County Transportation Disadvantaged Service Plan

The Volusia County Transportation Disadvantaged Service Plan (TDSP) Major Update was completed and approved by the Local Coordinating Board (LCB) on September 13, 2006. The TDSP is used by the CTC and the LCB to maintain and/or improve transportation services for the Transportation Disadvantaged (TD) and to serve as a framework for performance evaluation. The TDSP is updated annually and submitted to the Florida CTD for final approval. Volusia County services under the TD program are provided funding from state TD funds, local revenues, and private sources.

In November 1993, Volusia County Government was designated as the CTC in Volusia County and has been reauthorized under a Memorandum of Agreement (MOA), with the last reauthorization occurring in 2007. The day-to-day operations of the public transit system, including the TD program, are delegated to Votran through a management contract. Votran operates the majority of its trips in-house; however, the system is partially brokered to private-for-profit operators.

Barriers to coordination that were identified in the 2006 TDSP include:

- In Volusia County there is more demand for TD services than supply.
- Some social agencies have had their transportation funding reduced, resulting in the burden being shifted to the TD program.
- Medicaid is an administrative encumbrance.
- The development patterns in Volusia County make the delivery of transportation services difficult and costly.

The five-year trend analysis presented in the TDSP indicates that the performance measures decreased in FY 2002 and FY 2003; however, in FY 2004 and FY 2005 Votran experienced increases in passenger trips, vehicle miles, revenue miles, and operating expenses.

Volusia TPO 2035 Long Range Transportation Plan (LRTP)

The 2035 Volusia LRTP is the fundamental planning document for long-range transportation system development in Volusia County. The projects included in the LRTP will utilize federal and state funds and may be pursued by the TPO area over the next 25 years. The plan must be “cost feasible”; therefore, financial resources that will cover the cost of the projects must be identified. The TPO has assumed a ½ cent Transportation Surtax approved by local voter referendum will be in place by 2016.

The LRTP has five specific goals for an integrated system to support economic development, allowing for the effective movement of people, goods, and services necessary to maintain and enhance quality of life:

- Goal 1: Ensure that our transportation network considers the mobility needs of all user groups equally and is developed and managed in ways that foster safety and security.

- Goal 2: Develop transportation systems that contribute to the economic vitality of the region and ensure that they are designed, located, and constructed in an environmentally sustainable manner.

- Goal 3: Consider the timing and location of transportation improvements to preserve and ensure existing urban areas and to recognize the development of our future.

- Goal 4: Develop an efficient transportation system that promotes a wide range of transportation options and integrates these options cohesively with the surrounding community.

- Goal 5: Develop a transportation system that most effectively utilizes the financial resources available and improves the quality of life for residents.

The LRTP update had an extensive public involvement process, which included surveys, "Make Your Mark" activities, and various public meetings. The public input indicated fairly strong local support for expanding public transit. That input, along with other TPO planning efforts, encouraged the TPO Board to participate in a workshop regarding the development of public transit that ultimately led to the decision to incorporate a sales tax into the plan. A very specific policy statement also was adopted by the Board to this effect. Table 5-2 presents the transit projects that are included in the 2035 LRTP.

Table 5-2
Volusia TPO 2035 LRTP Transit Projects

Tax Funded Transportation Options**								
Project	From	To	Year *(start service)*	Number of Vehicles	Capital Costs (millions) *Year of Expenditure*	Operating Costs (millions) *Year of Expenditure (Transit)*	Project Type	Description
Added Bus Service – DeBary/DeLand	West Volusia Area	DeBary/DeLand Sunrail Station	2015	3	$0.00	$0.00	bus	Added bus service to support SunRail operations starting in 2015. Service is funded by the Department of Transportation for first 7 years.
Added Rail Station - Daytona Beach Area	Daytona Beach		2015	N/A	$0.00	$0.00	rail	Platform Station for establishing intercity rail service by Amtrak along the Florida East Coast rail line. Project will be funded through a federal grant and is not part of the TPO priority process.
Added Bus Service - US 1 Corridor	Port Orange	Ormond Beach	2016	3	$1.76	$26.90	bus	Add busses to improve the frequency of existing service on US-1 to 30 minutes.
Added Bus Service – SR A1A Corridor	SR 40 (Granada Blvd)	SR 421 (Dunlawton)	2016	2	$1.17	$17.93	bus	Add busses to improve the frequency of existing bus/trolley service on SR A1A to 15 mintues and expand seasonal trolley service to year around.
Added Bus Service – Cross-county*	Daytona Beach	DeLand	2018	3	$1.84	$24.76	bus	Add busses to improve the frequency of cross county service on US-92 to 30 mintues and extend routes to the SunRail Station in 2020.
Added Bus Service - East Volusia	Port Orange	Ormond Beach	2018	4	$2.46	$33.02	bus	Add busses to improve the frequency of service in Port Orange and Ormond Beach to 30 minutes and add night and Sunday routes in Port Orange.
Added Bus Service - West Volusia	Crown Center (Saxon & US 17/92)	Northgate Plaza (US 17 & 92)	2018	3	$1.84	$24.76	bus	Add busses to the existing route in West Volusia operating along US 17/92 to improve the frequency of service to 30 minutes.
Added Bus Service - Daytona Beach*	DBIA	Transfer Plaza	2018	3	$1.84	$24.76	bus	Add busses to improve the frequency of service in the core areas of Daytona Beach to 15 and 30 minutes.
Added Bus Service - Cross county	New Smyrna Beach	DeLand	2018	2	$1.23	$16.51	bus	Start a new service that will improve access across Volusia County in the southern portion of the county.

Table 5-2 (continued)
Volusia TPO 2035 LRTP Transit Projects

Project	From	To	Year (start service)	Number of Vehicles	Capital Costs (millions) Year of Expenditure	Operating Costs (millions) Year of Expenditure (Transit)	Project Type	Description
Added Bus Service - Deltona Circulator	Deltona Area	Deltona Area	2020	2	$1.29	$15.02	bus	Add busses to existing service to increase the frequency to 30 minutes in the City of Deltona.
DeLand Circulator (Trolley)*	Downtown DeLand	Rail Station (Sunrail/Amtrak)	2020	3	$1.94	$22.52	bus	Start a new trolley bus circulator system in the downtown DeLand area with increased service for the local area.
Daytona Area Circulator (Trolley-TBD)*	Downtown Daytona (ISB)		2020	4	$2.58	$30.03	bus	Start a new trolley service that provides direct connections to key destinationsand increased frequency of service via a downtown circulator system.
Added Bus Service - Rural Northwest	Pierson	Crescent City (Route 24)	2020	2	$1.29	$15.02	bus	Proposed through the Make Your Mark planning sessions and by the LRTP Subcommittee, this includes additional busses needed to restore and expand service in north-west Volusia
Commuter Rail (SunRail) Expansion	DeBary Station	DeLand Station	2020	N/A	$0.00	$0.00	rail	Extend Sunrail commuter rail service to the DeLand Amtrak Station as outlined in the existing project plans and agreements.
DeLand Rail Spur	DeLand Amtrak Station	Downtown DeLand	2025	1	$13.40	$9.61	rail	Provide a connection along the existing rail spur from the Sunrail station (DeLand Amtrak station) to downtown DeLand near Woodland Blvd. Project capital costs presume Federal funding (local match is 25%)
Transit Corridor System Bus Rapid Transit	DeLand	Daytona Beach	2030	6	$34.50	$24.78	bus	Add enhanced transit connections operating on the main corridors and between east and west Volusia County. Project capital costs presume Federal funding (local match is 25%)
				TOTAL	**$67.1**	**$285.6**		

* Projects are components of an East-West Corridor System between DeLand and Daytona that supports development of a Bus Rapid Transit service

** Local revenue source includes 1/2 cent Transportation Surtax beginning in year 2016.

NOTE: The Transit plan was developed in coordination with Votran planning staff. Financial details and start of service is subject to change.

Source: Volusia TPO 2035 LRTP Summary Report

Volusia County Comprehensive Plan

Volusia County 's goal is to provide a coordinated multimodal transportation system that serves the needs of current and future residents in such a way as to encourage energy efficient land use patterns and discourage urban sprawl. To this end, the County's comprehensive plan has a number of objectives and policies within its Future Land Use and Transportation Elements that promote the use of transit and other alternative modes of transportation.

Within its Transportation Element (TE), the County intends to implement programs to provide a safe, convenient, and energy efficient multimodal transportation system (Objective 2.1.1), which helps to reduce vehicle miles traveled and greenhouse gas emissions. This objective is also consistent with and supported by the new transportation planning requirements of Section 163.3177(6)(b), Florida Statutes. The County's TE contains policies that speak to developing strategies to facilitate the use of alternative modes of travel, aided by multimodal terminals, park-and-ride lots, and bike/pedestrian facilities along corridors which provide transit service (Policies 2.1.1.6, 2.1.1.20, and 2.1.1.21). Volusia County also has a number of policies in Objectives 2.1.1, 2.1.2, 2.1.5 that promote and support the use of transit. The Policies in Objective 2.1.1 require coordination with FDOT, the Volusia TPO, METROPLAN, Orlando, Votran, LYNX, other agencies, and the municipalities within the county relative to the County's efforts to develop and provide efficient and effective public transportation and other commuter assistance programs (Policies 2.1.1.7, 2.1.1.9, 2.1.1.10, 2.1.1.11, and 2.1.1.15). Policy 2.1.2.3 in Objective 2.1.2 speaks to coordination of the transportation system with the Future Land Use Map. The policies in Objective 2.1.5 speak to coordination with the TPO, Votran, and other agencies and units of government relative to the provision of passenger amenities along major public transportation corridors, particularly to meet the needs of transportation disadvantaged passengers. Policy 2.1.6.5 in Objective 2.1.6 establishes LOS for fixed route public transportation.

Within its Future Land Use Element (FLUE), the County also has provisions that are supportive of the use of transit. One goal of the FLUE is to ensure that future growth is timed and located in such a way as to maximize the efficient use of public infrastructure (Goal 1.1). To this end, Policy 1.1.1.6 requires all neighborhood, community, and regional shopping centers to include bicycle parking areas and bus bays and shelters, where appropriate, to encourage alternative transportation modes. Policy 1.1.1.7 states that regional shopping centers should be served by mass transportation routes and designed to accommodate mass transit riders and amenities. Finally, Policy 1.1.3.5 requires that new urban developments be located inside urban areas with direct access to mass transit routes.

City of Daytona Comprehensive Plan

The City of Daytona Beach has a Mass Transit section within the Transportation Element of its comprehensive plan. The purpose of the Mass Transit section is to encourage coordination with Votran on improvements to transit service within the city. To accomplish this purpose, Goal 1 is to encourage

Votran to continue to provide a coordinated mass transit system to City residents at an acceptable level of service, including beachside trolley service (Objective 1.1), bus service (Objective 1.2), and bus transfer facility and bus stop amenities (Objective 1.3). The City also has a policy that requires fixed-route public transportation when minimum residential and non-residential floor space thresholds are exceeded (Policy 1.4.1).

Goal 2 of the Mass Transit section seeks to retain and expand transit service for older adults, persons with disabilities, and other transportation disadvantaged groups with both regular and specialized service, including paratransit services such as buses with wheel chairlifts (Objective 2.1). The City also will encourage participation in a regional commuter rail system as part of its citywide multimodal transportation system (Goal 3, Objective 3.1).

City of DeLand Comprehensive Plan

The City of DeLand has goals, objectives and policies within its Transportation and Future Land Use Elements relative to the promotion and support of transit use.

Goal t-1 of the Transportation Element is to develop an integrated multimodal transportation system that meets or exceeds the city's existing and future transportation needs through 2020. Based on Policy t1.1.13, the City will work with the Volusia TPO and Votran to develop numerical indicators against which the achievement of the community's mobility goals can be measured, including annual transit trips per capita. Policy t1.2.2 requires the City to coordinate the development and maintenance of the City's transportation system with FDOT, the TPO, and the County to facilitate a coordinated system of roadways and public transportation.

The City also has a goal of developing an integrated multimodal transportation system within and to the established downtown area (Goal t-6) through improved traffic and pedestrian circulation systems in the downtown (Objective t6.1). Strategies to achieve this goal include parking provisions and pedestrian connectivity to public transportation (Policies t6.1.3 and t6.1.4). The City encourages alternative modes of transportation to single occupant vehicles (Goal t-7) to promote increased opportunities for public transportation, bicycle and pedestrian circulation systems (Objective t7.1). Strategies include sidewalk connectivity (Policies t7.1.1, t7.1.2, and t7.1.3) and preservation of future public transportation right-of-way and exclusive public transportation corridors (Policy t7.1.8). The City also periodically monitors the need for a downtown circulator trolley to alleviate travel on congested downtown streets (Policy t7.1.9).

Pursuant to Objective t7.2, the City will coordinate with the TPO to ensure that the provision of public transportation is considered in lieu of or part of major transportation construction projects (Policy t7.2.1), and the City will study the possibility of implementing a TOD overlay district to create incentives and design guidelines for TOD within targeted areas of the City (Policy t7.2.3).

With respect to the provisions in the FLUE, the City has policies that require the use of the neighborhood concept to promote the use of transit for all income ranges (Policy f1.2.2), encourage the location of high density residential land uses in areas with adequate existing services including transit (Policy f1.2.4), and require that alternative modes of transportation be made available inside special districts such as Neighborhood Redevelopment Districts (Policy f1.4.3). Policy f2.1.1.b requires that accessibility to public transportation be considered as part of the site plan review process. A number of other FLUE provisions speak to increasing densities where it supports transit use (Objective f8.1) and exploring the concept of TOD (Objective f8.2 and its policies).

City of Ormond Beach Comprehensive Plan

Within its Transportation Element, the City of Ormond Beach's multimodal strategy is to link transportation planning with land use planning (Objective 1.6). The implementing policies in this Objective establish criteria for, authorize the designation of, and map "multimodal corridors," which must include the presence of transit. These policies also speak to access to and connectivity along these corridors. Objective 1.7 and its implementing policies promote alternative modes of transportation through the construction and use of, among other things, transit facilities. Objective 1.8 and its implementing policies require the integration of transit supportive design provisions into the Land Development Code. Goal 2 of the City's TE addresses mitigation of transportation impacts, and Policy 2.1.3 allows the transit facility improvements and transit operation contributions as mitigation options. Policy 4.1.4 states that the City will develop a multimodal access guide in order to provide concise information about how to use various travel modes, including maps and graphics on how to use transit, transit information, times and distances of walks to and from transit stops to particular destinations, information on transit use for persons with disabilities, and information on transit amenities. Improved knowledge on the use and availability of transit will aid in the utilization of transit.

Within its FLUE, several of the future land use categories within the Future Land Use Map require the availability of transit, including General Commercial, Tourist Commercial, and Office/Professional designations as well as activity centers. The FLUE also requires that medium- and high-density residential developments as well as low-income and older adults housing be located near employment centers with access to mass transit routes (Policies 1.1.9 and 1.1.10). The FLUE also encourages TOD as a tool for enhancing community livability (Policy 1.1.14). The FLUE has several provisions which support the TOD concept and transit use strategies in the TE (Policy 2.4.9 and Objective 2.6).

City of New Smyrna Beach Comprehensive plan

The City of New Smyrna Beach Transportation Element has two goals that speak to transit use: the Mobility / Efficiency Goal and the Accessibility Goal. The Objective of the Mobility/Efficiency Goal is to guide the City in development of its future transportation system. To this end, Policy c promotes the use of alternative modes to reduce congestion and vehicle miles traveled. Strategies under this policy include a) development of a safe bicycle and pedestrian transportation system with access to public

transit facilities, b) incorporation of transit in the review of all site plans and subdivision plats, c) increase in information to the public regarding available transportation choices, and d) encouragement of the use of public transit. Policy g establishes a transit level of service standard of 15-minute service during peak hour demand by 2020.

The objective of the Accessibility Goal is to develop a transportation system that is reliable and accessible to all potential users by creating a physical environment that supports access to public transit (Objective 1) and coordinating public transit with other transportation modes (Objective 2). The policies within these two objectives address accessibility and amenities at bus stops, transfer sites, park-and-ride lots, distribution of schedules and literature about transit services, and the needs of the transportation disadvantaged.

The Sustainability Goal of the FLUE includes an energy efficiency objective that promotes transit use (Objective 1), a smart growth objective that encourages development at appropriate scale, form and density/intensity to support bus transit service (Objective 2 and Policy h). Objective 3 encourages land use patterns that increase the use of public transit (Policy c).

City of Deltona Comprehensive Plan

The City of Deltona strives to develop programs that ensure that current and future land uses are served by adequate transportation and multimodal system options (Goal T1 of the TE). To this end, the City will work with the TPO, Votran, and other units of government to develop and improve its mass transit and other ride sharing programs to expand ridership throughout the City (Policies T1-1.8 and T1-1.13). The City will also coordinate with the TPO, Votran, Volusia County, FDOT, and other transportation entities to ensure that the provision of mass transit is considered in lieu of or as part of major highway construction projects and ensure that transportation disadvantaged riders are adequately served (Policies T1-5.4 and T1-8.2). The City will continue to work with Votran to improve and/or expand existing local transit routes in order to connect them to larger, regional public transit systems (Policy T1-7.5).

Several provisions within the FLUE can be found relative to the use of transit services. Particularly, Policy FLU1-1.7 states that non-residential centers should be served by mass transit routes, and Policy FLU1-7.9 encourages residential developments to incorporate transit-oriented access and options. Commercial and mixed-use developments also are required to provide mass transit access (Policy FLU1-9.2).

City of Port Orange Comprehensive Plan

The City of Port Orange continues to support and participate in the transit system as planned by the TPO and operated by Votran and will continue to concentrate high-density residential land uses along major roadways and transit corridors. To this end, the City has adopted a Transportation Mobility Element

(TME). Goal 1 of the TME establishes a transportation system that provides mobility, access and choices that encourage energy-efficient multimodal transportation through Mobility Improvement (MI) zones, which encompass the entire city. The objectives and implementing policies in this goal emphasize transit- and pedestrian-oriented and context-sensitive site design standards and regulations for each of the MI zones. Mixed-use developments are required to provide access to transit facilities (Policy 1.5.1), and Policy 1.5.2 requires the City to develop a "complete streets" strategy by 2013, which includes a multiple transportation mode network that addresses access, circulation, and transit-supportive facility improvements. Policy 1.5.4 requires the City to create TOD Overlay Zones for select nodes and corridors so that the city can become more pedestrian- and transit-oriented.

In Objective 2.3 and its implementing policies, the City continues to work with Votran to achieve a level of service of 30 minutes or less headways and strives to achieve a 1.0 percent modal split for transit use by 2015. The policies address location and design for transit stops, passenger amenities, the land use type and density around transit stops, develop of park-and-ride lots, etc. The TME also includes policies that speak to vehicular and bicycle parking standards and guidelines that are intended to be supportive of transit use (Policies 2.9.7 and 2.11.3).

With Goal 1: Sustainability, the FLUE seeks to promote compact, mixed-use developments arranged to encourage and support transit use (Objective 1.1 and Policies 1.2.7, 1.3.3, 3.4.5, 3.4.6, and 4.1.4). Per Policy 5.3.3, the City will require higher densities upon redevelopment of residential property and coordinate with Votran to identify the most appropriate locations for transit stops in the Port Orange Town Center Redevelopment Area during the development application process.

City of Orange City Comprehensive Plan

The City of Orange City recently updated its comprehensive plan, particularly the Transportation and FLUEs, to shift the focus from a single transportation mode –the private automobile –towards multimodal transportation planning. The City's goal is to progress from a residential and retail-based community to a more economically self-sufficient community –and as this occurs, a wider choice of transportation options will be needed. To this end, the City has recently adopted its "mobility plan" to move goods and people by providing mobility options and accessibility to residents and visitors so that they can participate in social and economic activities.

Within the TE, the City has revised its goals, objectives and policies to reflect its mobility planning goal (Goal 1, Objective 1.1, and implementing Policies 1.1.1 through 1.1.12) of incentivizing riders to use multiple modes of travel, including SunRail, Votran's transit routes, and pedestrian and bicycle paths (Policy 1.1.1). The City intends to use ridership and revenue miles of service data as reported by transit service providers –and estimates of functional population within the transit service area to determine the degree of achievement of the goal to shift trips towards multiple modes (Policy 1.1.10).

Within the FLUE, the City has amended various policies to support and promote its mobility plan and to support transit use (Policies 1.1.8, 1.1.9, 1.1.12, 2.2.2, and 5.1.1). It has also added a new Goal 10 to encourage the redevelopment of the US 17-92 corridor in order to stimulate neighborhood vitality in this area. Policy 10.1.2(2) in Goal 10 requires 1) pedestrian-scale features, amenities and design principles, 2) developments to be "transit-ready" whether current service is available or not, and 3) parking strategies supportive of transit use.

The City's comprehensive plan focuses on the need to coordinate land use and transportation strategies in order to achieve its goal of improving and enhancing mobility within the city through greater access to transit and other modes, more attractive incentives, and pedestrian-friendly choices.

City of DeBary Comprehensive Plan

The City of DeBary's goal is to facilitate the development of a cost-effective, coordinated, and energy-efficient multimodal transportation system for the movement of people and goods. This is reflected in Objectives 6.1, 6.3, 6.5 and 6.7. Policy 6.101 adopts the City's Future Transportation Map 2025, which depicts, among other things, the City's public transportation system, including specific trip generators, stations, terminals, and public transportation ROW. Objective 6.3 and its implementing policies require the City to provide for the protection of future ROWs for roads and mass transit facilities, including exclusive mass transit corridors. Objective 6.5 and its policies require the City to provide, through coordination with transit service providers, for efficient public transportation (including paratransit) services based on existing and proposed major trip generators, safe and convenient public transit terminals, and accommodation of passengers with special needs. Policy 6.502 states that the City will support the development of transit-supportive facilities, i.e. bus shelters, bus pull-outs, fringe parking facilities, and optimum street layouts. Objective 6.7 and its policies are relative to the SunRail commuter rail system, including encouragement of travel on SunRail, expansion of public transportation facilities (including bus routes and park-and-ride facilities), and the development of a program for bicycle and pedestrian connections along US 17/92 linking the SunRail station with other areas of the region. Policy 6.710 requires the City to develop alternative parking management strategies to encourage transit use.

City of Deltona Urban Design Master Plan

The Urban Design Master Plan of the City of Deltona establishes a "Nature" theme with the goal of embracing the natural resources of Deltona in an effort to promote and foster a public realm that attracts people to live, work, and play. The goal of the Urban Design Master Plan is to create a citywide "green" identity. Transit-related design elements incorporated in the Master Plan include:

- Decorative transit shelters planned along the three transit routes need to be consistent with the "Nature" theme

- The planned activity center located in the southeast quadrant of I-4 and Howland Boulevard is anticipated to be a major generator of employment and may justify additional transit routes and improvements to pedestrian access
- Transit stops with the highest use along the bus routes within the employment development areas shall provide shelters consisting of a bench and a trash receptacle located at back of sidewalk or back of curb. Avoid locating the shelter directly on the sidewalk or overhanging a nearby sidewalk.
- Development of partnerships with private social service providers and Volusia County are encouraged to develop a centralized social service hub at Providence Boulevard and Debary Avenue and/or the State road 472 Activity Center.
- Development of partnerships with developers and Votran are encouraged to incorporate public parking garages, and park and ride facilities in the employment development areas.
- Economic and regulatory incentives should be provided to incorporate public parking garages, and park-and-ride facilities in the development plans.

Regulating Plan for the DeBary SunRail Commuter Rail Station Transit Oriented Development Overlay District

The DeBary TOD Regulating Plan establishes the regulatory framework to implement the TOD overlay district adopted by the City's Comprehensive Plan. The plan promotes compact land use patterns that support energy efficiency and multimodal transportation operation and street design that creates public space. According to the plan, the general purposes of the document are:

1. Encourage transit use
2. Increase housing opportunities
3. To provide standards to ensure a high quality appearance
4. Provide a functional mix of land uses
5. Promote energy efficient land use patterns
6. Promote walking and bicycling

The DeBary TOD overlay district is an incentive-based option and is not required. The overlay district is an opt-in, incentive-based district that overlays, but does not supersede existing zoning or land use districts. Four sub-areas are included in the district:

1. US 17/92 – developments facing US 17/92 involving direct design treatments from back of curb to building.
2. TOD Core – properties between approximately ¼-mile of the DeBary SunRail station.

3. Outside TOD Core – properties between approximately ¼-mile and ½-mile of the DeBary SunRail station.
4. Transitional Areas – properties beyond approximately ½-mile of the DeBary SunRail station.

Incentives for developing under the TOD overlay district include the elimination of the Planned Unit Development zoning requirement, higher densities, increased building heights, additional permitted land uses, and reduced parking and stormwater management requirements. The City also may consider other incentives including but not limited to economic incentives, expedited permitting, and development and infrastructure standards to enhance the physical and economic feasibility of transit-oriented and pedestrian-friendly development.

Ormond Beach Multi-Modal Strategy

The Ormond Beach multi-modal strategy is to locate three TCEAs along three transit routes that are considered Votran's Eastside spine network. The routes operate along roadway corridors that the City considers constrained in terms of capacity improvements. To increase the potential for ridership, the City is proposing to increase densities and intensities along the three corridors by requiring mixed-use, horizontal development, and build to line standards for new development.

The three commercial corridors that have TCEA potential are:

1. A1A from SR 40 to the city line
2. SR 40 from A1A to Williamson
3. US 1 from Wilmette Avenue to the city line on the southern boundary

These corridors are being recommended because Votran operates core bus service along these corridors and the areas contain commercial corridor and downtown redevelopment opportunities. Higher densities and intensities can support transit and assist Votran in their goal of reducing headways and extending service hours. FDOT's TOD guidelines along with Votran's Transit Design Guidelines serve as the guidelines for development along US 1, SR 40, and A1A.

The City of Ormond is advocating for a transit and non-motorized fee to fund the multi-modal strategy. The funds that are projected to be generated are less than the expenditures; however, the City notes that the transit routes have multiple jurisdictional benefits; therefore, the City's share of the total costs is limited by its ability and funding capacity. The new fees will replace the Proportionate Faire Share contribution required for mitigation on SR 40, US 1, and A1A.

SUMMARY

This chapter reviewed related transportation planning and programming documents to assess existing transit policies, along with their relationship to Votran. Policies were reviewed at the local, state, and federal levels of government to determine guidance for the subsequent development of the Situation Appraisal for the TDP Update. The review of local, state, and federal transportation policies indicates that no conflicts are expected with regard to consistency with other plans and programs.

SECTION 6: SITUATION APPRAISAL

The TDP Rule requires that TDP major updates include a situation appraisal of the environment in which the transit agency operates. This appraisal documents factors that will help Votran better understand its local environment and the critical issues that could impact its programs over the next decade in the context of the following elements:

- Regional transportation issues
- Socioeconomic trends
- Travel behavior
- Land use
- Technology
- Service and operational trends
- Trends in revenue and policy environment
- Ridership forecasting

The assessment of these elements resulted in the identification of possible implications for Votran. The assessment and resulting implications are drawn from the following sources:

- Review of relevant plans, studies, and programs prepared at all levels of government
- Results of technical evaluations performed as part of the transit development planning process
- Outcomes of discussion with Votran staff
- Input gathered through public involvement activities

Issues, trends, and implications are summarized for each of the major elements in the remainder of this section.

REGIONAL TRANSPORTATION ISSUES

Regional transportation issues are of critical importance to Votran and are highlighted below.

SunRail

FDOT, in coordination with Volusia, Seminole, Orange, and Osceola counties and the City of Orlando, is moving forward with the implementation of the 61-mile commuter rail project known as SunRail. SunRail will travel along the existing CSX rail freight tracks through the four-county area. The first phase of SunRail will include a station linking DeBary to Orlando and is planned for operation in 2013. The second phase will include additional stations, including in DeLand.

In preparation for the additional transit service that will be needed to connect with the DeBary SunRail station, Votran has continue to review and coordinate on route plans. Currently, the planned Votran feeder bus service includes the following:

1. Route 20 - extend to Fort Florida (peak service Monday - Friday from 6-8AM and 5-7PM)
2. Route 21 - extend to Fort Florida (peak service Monday - Friday from 6-8AM and 5-7PM)
3. Route 23 - extend to Fort Florida (peak service Monday - Friday from 6-8AM and 5-7PM)

- *Implication* – The first seven years of operating SunRail service and the connecting transit routes will be funded through FDOT; however, the County will be responsible for funding the connecting transit routes and the required local percentage of operating the commuter rail system at the onset of year 8. Based on the current budget and economic conditions, additional funding will need to be secured to continue funding the services after the FDOT funding expires. In preparation for SunRail service, Volusia County began debt service of $1.2 million with the adoption of its FY 2010 budget to support the construction, reconstruction, or improvement of transportation and rail facilities. The funding for the current debt service has been secured through a State Infrastructure Bank (SIB) loan provided by FDOT. Another funding implication deals with Votran having to compete with another transit mode for local dollars to fund service. The County has struggled to fund Votran's current operations, and the system is considering a fare increase. With the addition of another mode needing local support, the County's coffers will be more strained. Votran will have to do more to secure funding for maintenance and growth of the existing bus network. The County must also ensure that it does not sacrifice the bus system to support SunRail, as this type of change in other locations has led to lawsuits claiming that modes traditionally serving transit-dependent populations are being inequitably funded to pay for modes customarily serving choice users.

  In addition, to funding implications, Votran must evaluate the existing route structure to maintain service to existing customers while adding connectivity to the new modal type. Because SunRail service is a premium mode, amenities for the service are more enhanced then what is typically found for lower-grade systems; therefore, Votran will have to enhance some operating capabilities to allow for seamless transfer between modes. These enhancements range from infrastructure to technology and include items such as ticket vending machines, smart cards, instant schedule access, and park-and-ride lots. Some of these items can be stand-alone improvements, while others are integrated into various aspects of transit operations and require more in depth planning and implementation.

  Two other considerations include policy and staffing related to the increased coordination that will be required to achieve success with both Votran and SunRail services. Votran staff will need to play an integral role in developing the public transit policies for Volusia County to ensure

equity between the services and protect the system's integrity. To minimize cost, staffing within Votran is lean. The expanded role of monitoring service connectivity and addressing issues between services should be evaluated prior to SunRail implementation to ensure that staffing levels are at a capacity to handle the additional responsibilities. Staff also must be versed in rail operations to ensure that policy changes are effective, which may require additional training. The county's investment in SunRail should also promote a new view of transit as a tool for economic development not a social service. The changing role of transit also may require organizational changes at the County. With the level of local investment anticipated for public transit with the addition of SunRail, it should be considered as vital as the roadway network, leading to its standing as a separate department. Combining public transit with traffic engineering is another option, with a title change of department as transportation to more accurately reflect its function. With the increased information access for SunRail, it also will be important to have an information technology staff person dedicated to Votran.

Serving as the CTC

Votran is currently the designated CTC for Volusia County; however, it ceased non-emergency Medicaid transportation service as of February 1, 2008. The burden (financial and operational) on the Votran Gold Service to supply non-emergency Medicaid demand-responsive trips and a reduction in the annual Medicaid reimbursement by 18 percent led to the removal of this trip type. Votran is to arrange cost-effective, efficient, unduplicated, and unfragmented service. The CTC is responsible for assessing community transportation needs and resources to maximize the provision of service. To manage and deliver TD service, Votran with approval from the TDLCB has developed policies and procedures. Also, the TDLCB approved the existing fare structure in coordination with Votran. Votran develops annually cost for each TD trip in accordance with the CTD's Cost/Revenue Allocation and Rate Justification process.

- *Implication* – Because Votran is the public transit provider for Volusia County, it has been a strategic decision to serve as the CTC and ensure local coordination of transportation services. As the CTC, Votran not only provides transportation disadvantaged trips, but coordinates with other providers of transportation, issues and manages coordination agreements, collects data, and completes transportation provider compliance inspections. As the CTC, Votran also coordinates with the TDLCB, completes the TDSP annual updates and its major update every fifth year, and completes the Annual Operating Report (AOR). Votran receives and manages funding from the CTD. If Votran decided not to serve as the CTC, removal of such designation could impact funding provided through the CTD, decrease the current level of coordination for public transportation achieved through Votran's leadership, increase coordination for Votran staff to work with a newly-designated CTC, and effect customers served by Votran on CTD-funded trips.

Commuting To and From Jobs

Based on the analysis of the 2009 Census LEHD data, 89,050 residents (47%) of Volusia County's labor force commute outside of the county for employment, and 55,632 workers commute into Volusia County for employment.

- *Implication* – There are both pros and cons to providing cross-county services. Providing transit service across county lines creates the potential for decreasing the county's existing employee pool as residents review employment opportunities in surrounding counties. This could also work in reverse by allowing residents from the surrounding county to access work in Volusia County. Based on the current economy and high unemployment rates, providing transportation to and from employment is not a significant concern for most employers; however, as the economy begins to recover and the competition for employees increases, employers may focus more on the availability of transit. Planning for and implementing future transit services such as SunRail and its corresponding bus support network will provide vital connections between employment centers and employees as well as an economic benefit to the community. An additional consideration for Votran with cross-county travel is optimizing the provision of that transit service by connecting to existing services in other counties. However, these connections open up implications for fare payment options between systems, safety of transfer points, ease of transfers, and customer information. In addition, there are regulations with regard to the provision of service within and outside of county lines, adding a coordination element between transit agencies. Depending on how the services are routed, that cross county lines competition for passengers could become an issue between transit agencies. Transit agencies competing for customers may be an enhancement for private corporations, but for publicly-funded services it could result in service duplications and over-investment.

State and Local Plans

As previously discussed, federal, state, and local plans and legislation continue to be transit supportive. Federal legislation, the state transportation plan, HB 7207, and Volusia County and its municipalities' comprehensive plans have incorporated transit at a greater level in recognition of the importance of mass transit; however, funding the service to coincide with planning efforts is becoming increasingly difficult. The TPO 2035 LRTP also promotes transit service within Volusia County. The 2035 LRTP includes within its cost feasible plan increased bus frequencies, new service to support SunRail and other areas, and the study of premium services.

- *Implication* – Votran has the benefit of policy direction that encourages the use of transit with the detriment of decreasing budgets to provide that very service. Therefore, Votran must

ensure that existing service is efficient and effective to allow them to do more with less. Votran must also continue to monitor service and make modifications that enhance performance similar to the conversion of fixed-route service to flex service in New Smyrna Beach. These types of service modifications display to the public that Votran is responsible with public funding, provides more relevant service based on the local demographics, and supports local planning efforts by providing communities with more options for transit services. The inclusion of projects in the TPO 2035 LRTP for Votran indicates support for new funding sources that will support planned additional service.

Along with the LRTP, Votran must coordinate with local governments and private industry to incorporate transit, as feasible, in future policies and developments. With changes to state legislation and local plans, an opportunity arises for the discussion on transit's role in the community. Transit cannot be implemented without local support; therefore, the existing environment where roadway funding is constrained and communities are not as supportive of roadway expansion plans to deal with congestion, Votran can more actively suggest transit as an alternative. Transit alternatives range from lower cost flexible services to higher costing premium services such as rail, which provide local communities with a variety of options based on the goal that transit is desired to meet. If the goal is; community circulation, then a flex-service may be appropriate; if the goal is local connectivity, then a fixed-route service may be the solution; and if the goal is regional access; a BRT or rail service may be sought. Despite the service needs, Votran has to coordinate with Volusia County and its municipalities to plan for transit service.

SOCIOECONOMIC TRENDS

Urbanized Area Designation

Urbanized areas are defined based on the population reported in the most recent decennial Census. Federal formula funds for transit are calculated based on the populations reported by urbanized area. The west side of Volusia County has been growing at a faster pace than the east side. If 2010 Census reports that the population on the west side of the county has exceeded 200,000, the area will become a separate UZA.

- *Implication* – The establishment of an urbanized area on the west side of Volusia County will affect the current level of federal funding that Votran receives for transit and require modifications to the metropolitan planning process. Currently, Votran uses 5307 federal formula funding for capital and operating expenses. If the west side of Volusia County becomes urbanized, exceeding the 200,000 population threshold, this will reduce Votran's ability to apply

5307 funding to operating costs during a time when operating revenues are already limited. This change would add additional pressure to Votran to seek new revenue sources to support operations and/or increasing fare levels. This also might require modifications to plans and documents that include budgets showing 5307 funds as operating. In addition to the added pressure for operating funding, loss of 5307 funding for operating will make it difficult to expand services on the west side of the county. A benefit of rural areas transitioning to urban areas related to Votran service is that a reduction in Gold service could be gained by reducing the need for rural area Gold trips. Because the Gold service is more costly on a per-passenger basis than fixed-route, the urban area designation for the west side of the county could lead to savings in demand-response transport.

Population Growth

From 2000 to 2010, the population of Volusia County increased by 12 percent; however, the rate of growth has been slower in recent years. Comparing 2009 BEBR to 2010 Census population figures, a slight decline in population is indicated. The full results of the 2010 Census have not been released yet for inclusion of more recent data in this TDP. Those figures that are available have been included in the service area description. The population projections refer solely to permanent residents and do not include the large number of seasonal residents and tourists who visit Volusia County.

- *Implication* – There are implications for population growth, as evidenced from the 2000 Census to the 2010 Census regarding UZA designation. The decline in the population growth rate has additional implications for Votran. Slower population growth rates also may reduce the need or rate of expansion of transit services throughout the entire county. The County will need to review transportation solutions for areas with non-transit supportive densities. As discussed in the review of local plans section of this TDP, many Volusia County municipalities have updated their comprehensive plans to become more transit-supportive; however, this support is spurred by redevelopment or additional development. With slower population growth, development and redevelopment opportunities will not be as prevalent. This leaves Votran in the precarious position of determining when to introduce new service or increased service for areas that are transit-supportive in policy but not in reality. This dilemma is one that all transit agencies struggle with– should service predate the customer base, or vice versa? Slower growth also means fewer individuals contributing to local revenues through ad valorem, sales, gas and other taxes and fees, which support Votran. The TDP has been developed using the best population data available within the necessary timeframe for completion.

Demographic and Current Transit Market

Transit markets can be organized into three major categories: traditional markets, discretionary markets, and regional markets. The traditional market includes individuals who have no or limited transportation alternatives and rely on public transit for essential and recreational trips. This market includes older adults, youth, persons with disabilities, and those with low-income and no/limited vehicles. The discretionary market refers to individuals who have a choice of transportation alternatives and may choose transit if the service is able to be competitive with the automobile in terms of travel time, convenience, or other reasons. The *regional market* refers to the demand for commuter travel to other counties in the region. Based on the Votran on-board survey results, the typical Votran rider is from the traditional market.

- *Implication* – Currently, the traditional market is the primary market for public transit in Volusia County. Existing conditions, including the low population density, large square miles of land area, and the existing level of transit service make it difficult to target discretionary and regional transit markets. Having a system made up primarily of traditional transit users continues the view of transit as a social service program versus a viable community asset. This view may impact service and funding decisions made by the Votran governing board. Also, adding customers that have more discretionary income could lead to the implementation of premium services that can be supported at a higher fare level by these users.

TRAVEL BEHAVIOR

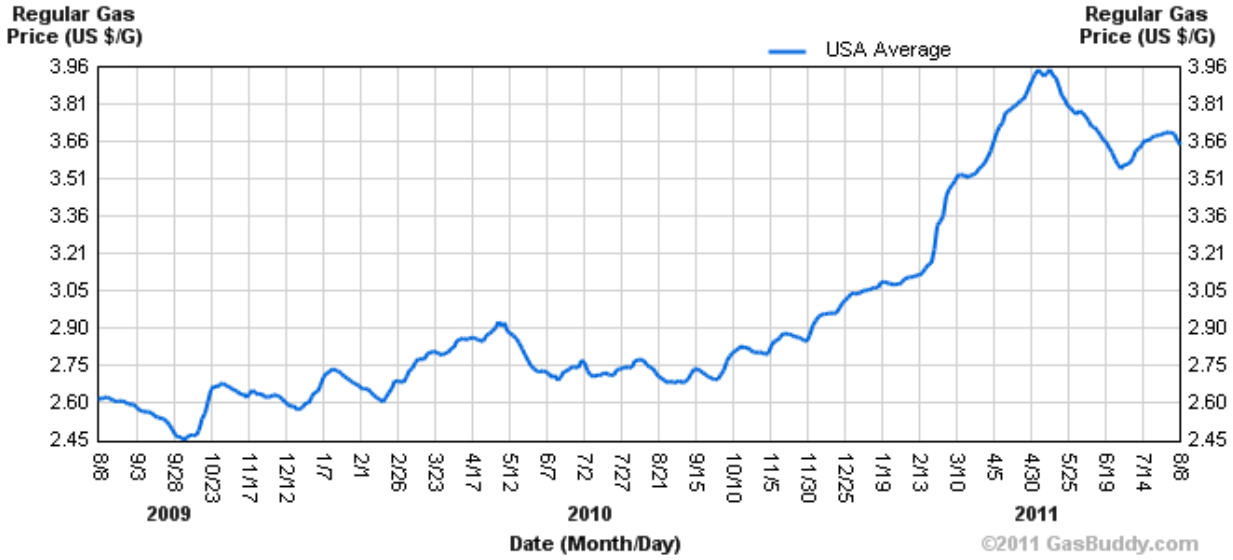
Travel behavior in Volusia County is influenced by a variety of factors. This section analyzes some of those key factors, including the impact of fluctuating fuel prices, mobility between the east and west sides of the county, and low-density development patterns.

Fuel Prices

According to the American Public Transportation Association (APTA), price increases in gasoline create related increases in public transportation ridership. APTA's analysis reveals that a price of $4 per gallon for regular gas could produce an additional 670 million passenger trips per year, an additional 1.5 billion passenger trips at $5 per gallon, and an additional 2.7 billion passenger trips at $6 per gallon.
Meeting demand for increased passenger trips poses capacity issues for transit agencies across the nation. According to APTA, 85 percent of transit agencies reported experiencing capacity constraints on parts of their systems during the 2007 and 2008 gas price spike. Even though 48 percent of transit agencies added service to meet the increased demand during this time, more than half of the systems

reported overcrowding beyond local service standards. Figure 6-1 presents the average retail fuel price trend for 2008 through 2011.

Figure 6-1
Average Retail Fuel Price (2008-2011)



Source: 2011 GasBuddy.com.

- *Implication* – In the existing economic climate, cash-strapped transit agencies will face additional difficulty in meeting increased demand if fuel prices continue to increase, adversely impacting transit agency operating budgets. However, if transit agencies that have the resources needed to expand services expend those resources to meet the increased demand resulting from higher gas prices, those agencies may be adversely impacted when gas prices decrease due to the current unstable economy, resulting in lower ridership and excess capacity. If new riders are attracted to the system based on gas prices, it provides Votran a great opportunity to deliver a comparable trip to the private auto at a lower price and possibly retain some of those new customers even when gas prices fall.

Decreasing Demand for ADA Paratransit Service

Transit agencies promote fixed-route transit services but typically do not encourage use of the paratransit system because of its relatively higher cost per trip. In addition, the bus service offers more access to individuals and does not require a reservation, which typically is part of the demand-response service process. In Volusia County, the aging population slightly decreased between 2000 and 2010, according to Census figures for those over the age of 65. Votran ridership on the Gold service has steadily decreased since FY 2005 for ADA trips as reported to the NTD, while fixed-route ridership has increased, which is exactly the relationship that should be sought in transit service performance.

- *Implication* – As the need for ADA paratransit service decreases, Votran can focus more on improving the fixed-route network. This shift in ridership should also help to reduce overall costs for the existing service. Increased fixed-route accessibility is necessary to maintain this trend. Stop-level accessibility, as well as, pedestrian-oriented street networks are critical in promoting transit usage by older adults and persons with disabilities. Also, with the addition of SunRail improved and accessible infrastructure will increase access. Continued investments in infrastructure to increase accessibility to fixed-route service, thereby allowing and encouraging the transition from paratransit to fixed-route should be undertaken by municipalities with existing and planned transit service. While Votran is the public transit provider for the County it must coordinate with each municipality on their bus stops, shelters, and other infrastructure impacting the provision of service.

Differences between ADA and TD Services – Gold Service

Votran's Gold service offers door-to-door service to residents and qualifying visitors that meet the age, disability, income, and/or other transportation disadvantaged requirements. While Gold service is provided to these various populations, its provision is based on the funding programs of ADA, TD, and agencies. Based on the qualifying program that funds Gold trips, there are corresponding service parameters:

- ADA – the trip is provided only from and to locations within ¾-mile of a fixed-route.
- TD – trips are funded to anywhere within the county.
- Agency – trips are provided in accordance with the specific agency contract.

Based on these parameters, some customers have the option of traveling anywhere within the county, while others are restricted to areas within proximity to bus routes. In addition, based on the fixed-route schedule, residents on the east side of the county have more Gold service weekend options than those on the west.

- *Implication* – Service is offered in a financially-responsible and legal manner by Votran; however, customers depending on the Gold program believe that these service arrangements create inequities. This belief is a negative image of the system that is not beneficial to the agency or its customers. Votran will continue to review that its customers have access county-wide. In addition, modifications to the service parameters add the potential for increased Gold service, which is a higher-cost mode. It is recommended that Votran review options provided by other transit agencies to overcome this inaccurate perception of demand-responsive service.

LAND USE

One important factor that impacts transit is land use patterns. Higher-density and mixed-use development is more supportive of traditional transit service than lower-density and single-use development. The mixture of uses promote internal capture, and when those uses are properly integrated and designed to be pedestrian-friendly and transit-oriented, the right supply of transit service will be successful. In self-contained communities, transit circulation versus long-haul routes assist in reducing private auto trips. Circulator-type service, sometimes referred to as flexible routes, support mobility between uses in a smaller defined area that includes residential development and other uses. The Volusia County existing land use patterns require a diverse level of transit service due to a combination of factors, including high- and low-density areas, environmental lands, and beach communities. Votran is tasked with developing and supplying transit service within the funding designated.

In addition, the County's current and future land use planning must account for the land use patterns as planned for 16 separate municipalities. To ensure consistency between the County's and the cities' growth planning efforts, the County created the Volusia County Smart Growth Initiative, which includes a Council of Governments (VCOG) Technical Committee. The technical committee comprises planners from each municipality and the County school board to develop maps and ordinances that support smart growth. Volusia County also has created the Volusia County Association for Responsible Development (VCARD), which is focused on both new development and redevelopment that enhances the county. Both VCOG and VCARD must consider the role of transit in carrying out their mission, and Votran must ensure coordination with these groups. With the SunRail service planned for implementation transit-supportive land uses will be even more important for the county and its municipalities.

Development Patterns

Volusia County has a future land use map that includes environmental, recreational, urban (-low, medium, and high) incorporated area designations, and mixed uses, among others. The County is classifying future land use designation in relation to the type of transit service for which it would from Votran. For example, an area that is planned for high-density and mixed-use development may be able to receive premium service, while an area planned to be rural may receive only flexible service from Votran. These transit levels and their corresponding land uses are still being developed by the County for incorporation into the comprehensive plan. The municipalities within Volusia County also have added a mix of transit supportive policies to include items such as TOD, transit-related mobility fees, and increased densities. These comprehensive plan policies have been integrated into the land development codes (LDC) to ensure that both DRIs and smaller-scale developments are reviewed for compliance. In Volusia County, the Technical Review Committee assists applicants in determining how

projects can comply with the LDC, which provides the County an opportunity to determine if the project is appropriate for the area and the level of services that will be required by the County to include transit.

- *Implications* – Policies supportive of transit assist Votran in supplying service that will be successful. The current economy makes it difficult for local governments to refuse any development, which could lead to development patterns that may not be as supportive of transit. Votran must participate in the development review process to educate and insist on development that makes transit sense. Any new development that promotes sprawl will make Votran's job more difficult and will increase cost while decreasing efficiency. Previously in this document the planned DRIs for Volusia County are identified. These large-scale developments include a combination of residential, mix-use, and industrial development patterns. To address the variation in land use, Votran should continue coordination with the FDOT Rethink commuter services program to promote additional alternatives and TDM throughout the county.

Corridor Planning Approach

Corridors with high transit-trip intensity should receive priority when considering premium service. Current corridors with lower trip intensity should be targeted for service enhancements, such as increased frequency and night service, where appropriate. During the third Review Committee Meeting, corridors were identified that the committee believes are the County's major corridors that would support transit and other improvements. The preliminary list of corridors is presented in the Public Involvement Section; however, further technical analysis is needed to identify the transit supportive corridors that should be reviewed for the staged-implementation of improvement projects and future development recommendations.

- *Implication* – Votran will be continually challenged to provide service to those who need it, but who live in areas that are not transit supportive. Votran should review the corridor study conducted by the TPO and determine if further study is needed to identify the major corridors that should be planned for transit improvements. Further study could also identify and prioritize future services and infrastructure improvements by corridors. Improvements will include premium services, increased frequency, infrastructure, and pedestrian safety and accessibility. The corridor approach also works effectively with the comprehensive plan changes that are being made by local governments within Volusia County. Identifying those corridors that will have premium services will allow Votran to better connect the region and plan the densities and intensities necessary to support the enhanced service along corridors. The corridor approach also allows transit investment to be focused, which is even more critical when funding is limited.

TECHNOLOGY

Votran service operates using advanced technologies, including Automatic Vehicle Location (AVL), and Mobile Data Terminals (MDTs), that increase operational efficiency by increasing the level of real-time information available. Votran also uses Automatic Passenger Counters (APC) to collect ridership information at the stop level and continues to use Avail Technologies to capture and integrate data from employed technologies. The Votran website provides customer information and is a tool that can collect data from the public to assist in operations. Votran will need to assess the technology employed for connectivity with the SunRail system. Ticket vending machines and increased customer information will need to be evaluated by Votran; however, with the lean staff managing Votran additional staffing or consultant assistance may be needed for this undertaking.

- *Implication* – The ability of Votran to effectively employ technology has optimized the level of service that it provides and keeps it on par with advancements in the transit industry. Votran should continue incorporating technology into its operation to deliver more customer information tools such as trip planners and real-time schedule information. The technology supported by Votran must be balanced with staffing levels and available funding. While increased technology can be a great asset, purchasing technology without staff to analyze outputs, or funding to maintain and upgrade systems leads to waste. Votran's technology will need to be upgraded to support SunRail, specifically as it relates to fare collection. At present, Votran actively evaluates the role of technology to enhance overall operations. Ticket vending machines are planned with the addition of SunRail. These machines will need to be functional for patrons and may require IT support from Volusia County. In addition, transfers between systems (SunRail, LYNX, and Votran), may require additional interfaces between the agencies for fare collections and distribution. To enhance the effectiveness and efficiency of back-office operations and for customer ease when using any mode, Votran should review its fare structure and determine if there are policy and rate consistencies that can be achieved.

Alternative Sized and Fueled Vehicles

Using ARRA funds, Votran purchased hybrid-powered vehicles. During the TDP public outreach activities discussions occurred regarding the feasibility of using smaller vehicles that may better match the capacity needed for a given type of service. Votran evaluates vehicle size versus capacity needs prior to purchase.

- *Implications* – A preliminary feasibility assessment of alternative-fueled buses, including the pros and cons of hybrid electric buses, are presented as Appendix E of this report. Pending financial feasibility, it is recommended that alternative-fueled buses be purchased as part of vehicle replacement and service expansion. It is important to note, however, that vehicle

technologies are evolving rapidly, and since vehicle acquisition is likely to be several years in the future, technologies should be reassessed prior to making the investment decision at that time.

Votran also should continue evaluating vehicle size prior to purchase based on seating capacity, maximum loads, maintenance costs, wheelchair capacity/ADA, fuel economy/fuel type, cost of vehicle, suitability use for service type, and life cycle/useful life. Smaller vehicles are evaluated as a way to optimize transit capacity and potentially reduce costs. Votran could benefit by educating the public on the overall impacts of vehicle size on operations and inform them that Votran actively evaluates this criterion prior to purchases. To the extent possible, it is recommended that Votran maintain efforts to match vehicle size and capacity with the demand and nature of each bus route (e.g., smaller vehicles on flex routes). This objective will need to be balanced with the need for spare buses that must be available to replace buses requiring repair or maintenance.

SERVICE AND OPERATIONAL TRENDS

Flexible service is employed by many transit agencies in the United States because of its unique ability to capture elements of both fixed-route and demand-responsive service. Flex service can be employed effectively in areas with a lower demand for transit service, to provide a lower cost service in areas where the demand is unknown and for internal circulation within developments. Flexible service operates either door-to-door or curb-to-curb options through reservations paired with scheduled fixed-point service. In 2004, Spielberg and Pratt completed a study to review shuttle-type services for their impact on a community and found that these services typically support travel demand management and lead to increased use of alternative modes. The study also found that flexible-type services help to reduce congestion and increase mobility, require local subsidies, and are progressive with regard to income. The most effective flexible services are found in communities that have marketing programs to advertise the service and incorporate parking pricing and management strategies, as well as land uses that encourage alternative modes. Because flexible service typically is implemented using smaller vehicles, it requires careful design to avoid overburdening the service where it cannot meet the scheduled timepoint or passenger scheduled pick-ups and is unreliable. Once demand for the service exceeds the ability of the service to be flexible, a fixed-route service should be considered. Flexible service levels are dependent on vehicle size, demand for service, the reason for service implementation (circulation, reduce cost, etc.), and the ability to provide other service options. This type of service should not exceed eight passengers per hour. In addition, it is important to understand that the flexibility with this type of service requires a great deal of administration. Coordinating reserved trips and on-time arrivals at the fixed-point requires reservationist, schedulers, dispatch, and operators work together to deploy service successfully.

- *Implication* – Votran has implemented flexible service in New Smyrna Beach, and more municipalities in Volusia County are considering the applicability of this type of service. Offering flexible service diversifies the service available through Votran, but requires Votran to educate local governments on service applicability to avoid implementing flexible routes in areas more prone to fixed-route. The flexible service uses the same vehicles used in the provision of Gold service, which assists in costs by not requiring a new inventory of parts or additional skills by staff to maintain and operate the vehicles. Many communities also have limited transit service; therefore, using flexible service will allow Votran to implement an alternative mode at lower cost. The implementation of flexible service also can assist in managing the demand for higher-cost paratransit service. It is important to note that flexible services typically do not compete with private taxi service due to the two- hour minimum reservation requirement. In addition to service supplied, many communities in Volusia County are considering how flexible service could benefit their residents. Flexible service is an appealing option to some municipalities because of the smaller vehicles, potentially lower-cost of service, and flexibility of the system to provide fixed-route and deviated service by reservation.

Service Trends

Votran is reviewing the need for, but not necessarily planning service reductions. In FY 2010/2011, Votran needed to make service modifications like converting fixed-route service to flex service with routes 42 and 43 in New Smyrna Beach to reduce cost. This type of service modification and/or route realignments to make service more efficient will continue to be reviewed by Votran. While a fare increase is being considered to offset reduced local revenues and increasing service costs, every effort is being made to maintain existing service levels. With the instability in fuel prices and the slow economic conditions, transit ridership continues to increase, which makes decisions to maintain service levels easier for County officials. With the revisions to the State's growth management legislation and the implementation of SunRail, it is anticipated that service provided by Votran will need to increase in the future.

- *Implication* – Maintaining and increasing ridership has assisted Votran in retaining support for transit service. With continued economic difficulties it will be important for Votran to ensure that all existing services are effective and efficient. There is also a shift in local support for transit. At public outreach activities participants that don't currently use transit are becoming more vocal about their support of transit and the need for more transit. These individuals are also indicating a desire for higher frequency transit and more premium modal options. The addition of SunRail service will assist in providing higher modal options but, will not suffice for all of the transit needs as evidenced by the TPO's LRTP and other planning documents.

TRENDS IN REVENUE AND POLICY ENVIRONMENT

FDOT Toll Revenue Credit

Recently, FDOT was notified that it did not meet state-of-good repair requirements and, therefore, may be prohibited from using toll revenue credits as a match for capital projects beginning in FY 2013. Most Florida transit agencies have depended on toll revenue credits as their source of capital match. To not have access to this level of capital match, transit agencies will have to rely on additional state or local revenues to match federal dollars.

- *Implication* – Without toll revenue credits as a match, Votran will have to seek additional dollars to match federal funds. This will be an additional burden, as local and state budgets also have been strained. If toll revenue credits are not available and the matching funds cannot be secured from other sources, capital projects will be delayed. A delay in capital projects could negatively affect infrastructure and capital planning but, depending on the level of delay, could also create service-related impacts.

Revenue Constraints

As existing revenue sources including state and federal funds are diminishing and new regional transportation services are introduced, the TDP stakeholders recognized the need for a stable and dedicated funding source. However, the TDP stakeholders also commented that based on the current economic conditions, no new taxes should be supported at this time.

In an effort to fund the maximum amount of service with the funding available, Votran is focusing on cost-reduction efficiency improvements. Votran's efficiency initiatives include replacing low-performing fixed-routes with flex route service, maintaining streamlined staffing levels, and improving infrastructure to increase ridership. Votran also is assessing the need for a fare increase to augment local funds with additional passenger revenues.

- *Implication* – Votran's last fare increase was implemented in 2007; however, with rising fuel prices and other operating expenses, Votran may want to consider reevaluating its fare structure in an effort to improve the farebox recovery ratio. Prior to completing a fare increase, Votran is required by FTA to complete a fare analysis. The analysis is to ensure that proposed fare changes do not cause inequities for any specific group. If inequities are identified Votran must justify proceeding with the fare change despite the inequity or identify appropriate mitigation measures. A fare increase may disenfranchise some existing users and decrease ridership (not greater than 5%); however, these ridership decreases usually are temporary and revenue typically shows an increase. The fare increase will provide additional funding to help

maintain existing service. The fare analysis should also review the potential impact to ridership levels based on the fare change. In addition, Votran should review the fare policy and structure to allow for coordination with LYNX and SunRail as appropriate.

Federal Funding Uncertainties

Due to the economy and federal discord on policy and funding, a new transportation bill has not been implemented. Congress has approved continuing resolutions to the SAFETEA-LU legislation to appropriate funding for transit service. It is unknown when a long-term transportation bill will be approved and what the funding levels might be under a new bill.

- *Implication* – With the uncertainty of federal funding sources, Votran cannot undertake precise long-term planning, especially with regard to capital projects. Without knowing federal funding levels and potential changes to grant programs, Votran is in a holding pattern, as federal requirements also impact state and local needs. It is anticipated that a new transportation bill will focus on infrastructure and sustainability; therefore, Votran should be aware of this change.

Growth Management Legislation

Growth management legislation recently adopted by Florida's lawmakers repeals most of the growth management planning laws that have guided development since 1987. State lawmakers are seeking to make it easier and cheaper for developers to decide where and how much to build. The new legislation eliminates many of the prior requirements related to transportation and environment to encourage more economic growth. Some of the key elements of the legislation on transportation include the following:

- Elimination of the need for state-mandated concurrency for transportation and making it optional for local governments.
- Elimination of the state requirement to adopt mobility strategies to support/fund mobility and criteria for mobility planning.
- Modification of the proportionate share policy.

The bill does, however, include language to promote alternative modes of transportation.

- *Implication* – Votran may not be impacted by the new legislation in a negative manner depending on how the County and its local governments modify their comprehensive plans. Since the new growth management bill encourages alternative transportation, Votran may be provided additional opportunities to coordinate with local governments for transit service.

Depending on local policy decisions, private developers may be more or less inclined to support transit service going forward. Without direct responsibility for the local policy decisions, Votran will need to be flexible in responding to transit needs within the county and its municipalities.

Air Quality Non-Attainment

In 2008, the federal government reduced the National Ambient Air Quality Standard (NAAQS) for ozone. In March 2009, Florida's governor submitted recommendations to the Environmental Protection Agency (EPA) on the areas to be designated as Florida's non-attainment areas.

- *Implications* – At the current time, Volusia County is not included in the recommended areas designated as non-attainment. Volusia County should continue to implement service and technologies that positively impact air quality.

ORGANIZATIONAL ISSUES

Votran operates as a department of Volusia County and has provided public transit service for the past 36 years, with responsibility for operations, marketing, and administration. The consistency of McDonald Transit management has allowed Votran to gain efficiencies by reducing the need for training associated with new contractors. Because the management is through competitive contract, there is an option to evaluate the quality and value of the service at each contract renewal interval and through the competitive contract procedures.

Transit Delivery Framework

The current transit delivery framework for Volusia County includes Votran playing a day-to-day role in planning and oversight of transit through contract with McDonald Transit. Various transit governance and service delivery options are used by other communities throughout Florida and the U.S. and, based on the performance measures and public comments received during this TDP, the methods currently employed by Volusia County appear to be successful. Votran coordinates with the Volusia TPO and local governments to incorporate transit into the planning process and ensure adequate levels of service.

- *Implications* – Votran, in coordination with the TPO, should continue coordination on planning transit service for Volusia County. Votran continually reviews service through assessments such as the east and west side studies. Votran should continue the quality service provided and should complete demand level assessments to determine where new services are needed in conjunction with the county and its municipalities. It is important that new service is implemented through local coordination to ensure support for and continuation of transit service.

Private Transportation Providers

Volusia County has several private transit providers that provide demand-responsive and taxi-type service. There appears to be no conflict between the private provider service and services offered by Votran. During this TDP, additional services were requested by the public to have Votran support special events. While Votran is open to providing service for special events, it must comply with FTA regulations. FTA has issued charter service rules that prevent public intrusion into private markets, with the flexibility of permitting public agencies to meet special community needs when the private sector cannot respond in a cost-effective manner.

- *Implications* – As Votran plans to grow and expand services, it should review private transit provider service and coordinate with private providers to ensure that there are no duplications in service and that expansion is made without competitive disadvantages.

RIDERSHIP FORECASTING

As part of this TDP, the FDOT TBEST model was used to forecast ridership for existing services based on changes in the demographic and potential new service options. The model was validated using FY 2010 ridership totals by route. The results from TBEST are presented in various sections of this TDP.

- *Implication* - The TBEST ridership forecasts can assist Votran in determining the implementation of new service and whether service modifications may be needed to existing routes in future years to maintain ridership.

SUMMARY

This situational appraisal was performed to document the current operating environment and identify potential implications that should be considered by Votran in preparing this major update to the 10-Year TDP. The implications summarized in this section were used to support the transit demand estimation and mobility needs assessment, as well as the development and evaluation of transit priorities presented later in this document.

SECTION 7: TRANSIT DEMAND AND MOBILITY NEEDS

Transit demand and mobility needs were assessed for the study area using various analytical techniques. Two market assessment tools and ridership forecasting software were used to assess demand for public transportation services. This section includes the results of that demand analysis. When combined with the public involvement feedback presented in Section 1, the demand assessment yields the building blocks for a transit services Needs Plan for the county.

MARKET ASSESSMENT

The transit market assessment for Volusia County includes an evaluation from two different perspectives: the discretionary market and the traditional market. Analysis tools used to conduct each market analysis were a Density Threshold Assessment (DTA) and a Transit Orientation Index (TOI). These tools were used to determine whether existing transit routes are serving areas of the county considered to be transit-supportive for the corresponding transit market. The transit markets and the corresponding market assessment tool used to measure each are described in detail below.

- **Discretionary Market** – Density Threshold Assessment (DTA)
  The discretionary market refers to potential riders living in higher density areas of the county that may choose to use transit as a commuting or transportation alternative. A DTA was conducted based on industry standard relationships to identify those areas of Volusia County that will experience transit-supportive residential and commercial density levels in 2021.

  Three levels of density thresholds were developed to indicate whether or not an area contains sufficient densities to sustain efficient fixed-route transit operations. The levels include:

  - **Minimum** – Reflects minimum population or employment densities to consider basic fixed-route transit services (i.e., fixed-route bus service).

  - **High** – Reflects high population or employment densities that may be able to support higher levels of transit investment than areas that meet only the minimum density threshold (i.e., increased frequencies, express bus).

  - **Very High** – Reflects very high population or employment densities that may be able to support higher levels of transit investment than areas that meet the minimum or high density thresholds (i.e., premium transit services, etc.).

  Table 7-1 presents the density thresholds for each of the noted categories.

Table 7-1
Transit Service Density Threshold

Transit Mode	Population Density Threshold[1]	Employment Density Threshold[2]
Minimum	4.5 - 5 dwelling units/acre	4 employees/acre
High	6 -7 dwelling units/acre	5 - 6 employees/acre
Very High	>=8 dwelling units/acre	>=7 employees/acre

[1] TRB, National Research Council, TCRP Report 16, Volume 1 (1996), "Transit and Land Use Form," November 2002, MTC Resolution 3434 TOD Policy for Regional Transit Expansion Projects.
[2] Based on a review of research on the relationship between transit technology and employment densities.

- **Traditional Market – Transit Orientation Index (TOI)**

  The traditional transit market refers to population segments that historically have a higher propensity to use transit and/or are dependent on public transit for their transportation needs. Traditional transit users include the older adults, youth, and households that are low income and/or have no vehicles.

  A TOI assists in identifying areas of the county where a traditional transit market exists. To create the TOI, 2010 ESRI demographic data estimates were compiled at the block group level and categorized according to each block group's relative ability to support transit based on the prevalence of specific demographic characteristics. For this analysis, four population and demographic characteristics were used to develop the TOI. Each characteristic traditionally is associated with the propensity to use transit. The four characteristics that were used to produce the index include the following:

  - Population density (persons per square mile)
  - Proportion of the population age 60 and over (older adults)
  - Proportion of the population under age 16 (youths)
  - Proportion of the population below the poverty level

ESRI data do not include zero-vehicle household information. As a surrogate measure, the number of households with an annual income equal to or less than $10,000 was used. It was assumed that households earning less than $10,000 are not able to afford vehicles or other costs associated with vehicle ownership. The block groups are related as "Very High," "High," "Medium," or "Low" in their respective levels of transit orientation, where "Very High" reflects a very high transit orientation, i.e., a high proportion of transit-dependent populations.

Maps 7-1 through 7-3 illustrate the 2011 and 2021 DTA, and 2011 TOI, respectively. In addition, the maps include the existing Votran service network to show how well Votran covers areas of the county that are considered transit supportive for both market assessments.

The 2011 TOI for the study area shows that, for the most part, block groups in portions of developed areas of Volusia County have Low or Medium transit orientation. In addition, the existing Votran routes are located in the portions of the study area with High or Very High transit orientation.

As shown on the 2011 DTA map, there are only a few areas in Volusia County that qualify as transit supportive, including block groups in Ormond Beach, Daytona Beach, Port Orange, Edgewater, DeLand, and Orange City. Of the block groups that are supportive of bus service, all are located near a fixed-route or within a designated flex-route service area.

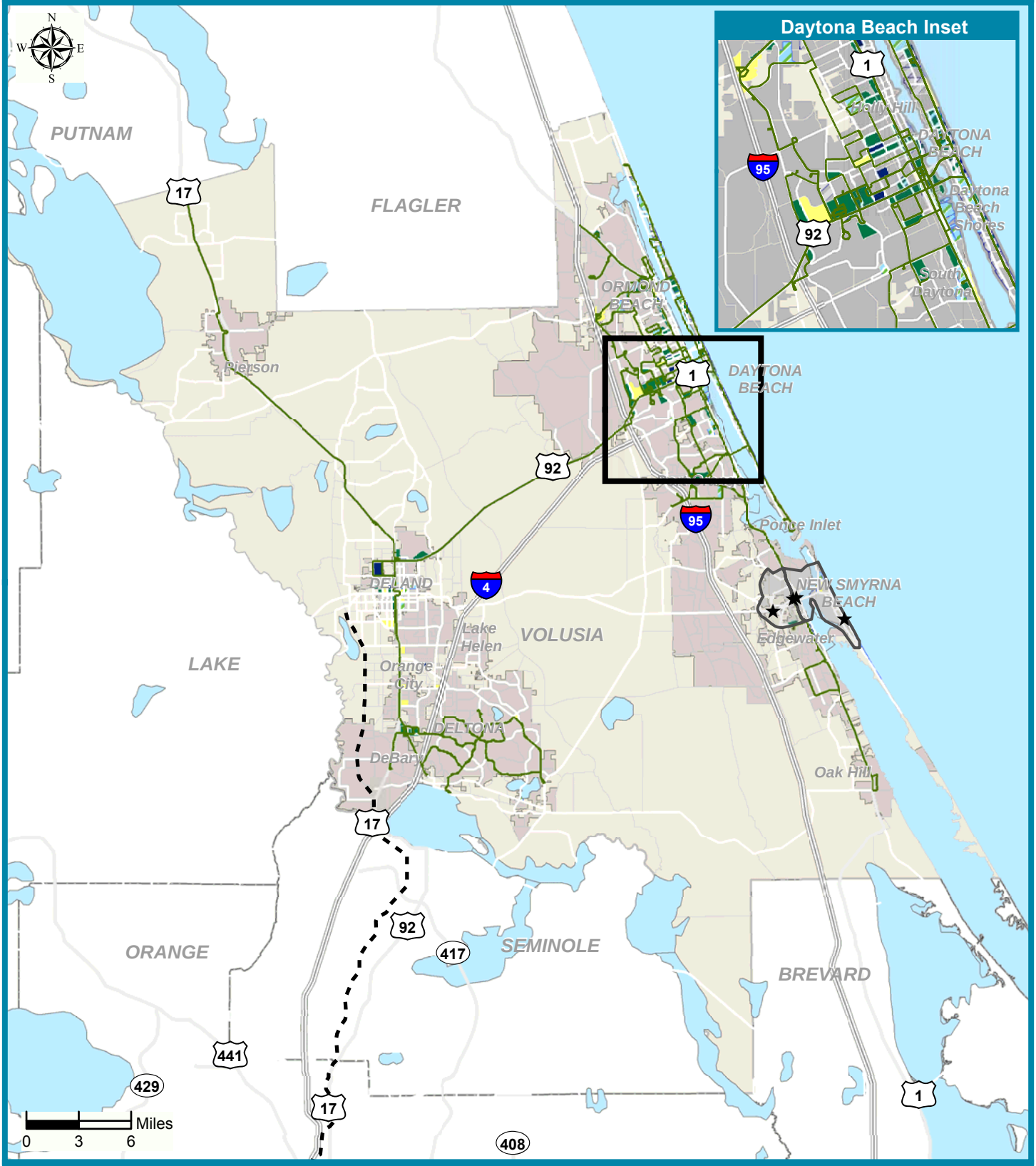
In 2021, several block groups within Volusia County are anticipated to become more transit supportive; however, there are still few areas with transit-supportive density thresholds. The 2021 transit-supportive block groups currently are served by transit. Based on the current efforts to establish TOD districts in preparation for the future SunRail and to create areas with increased densities in lieu of roadway expansion, Volusia County may experience an increase in transit-supportive block groups through development and redevelopment efforts.

TBEST MODELING RIDERSHIP FORECASTING

Future year alternatives have been presented and were approved by the public and the Review Committee. Since there was general consensus about the potential improvements, ridership forecasts were prepared using the FDOT-approved transit demand forecasting tool, Transit Boardings Estimation and Simulation Tool (TBEST). TBEST is a comprehensive transit analysis and ridership-forecasting model that is capable of simulating travel demand at the individual route level. The software was designed to provide near- and mid-term forecasts of transit ridership consistent with the needs of transit operational planning and TDP development. In producing model outputs, TBEST also considers the following:

- *Transit network connectivity* – Refers to the level of connectivity between routes with the bus network. The greater the connectivity between bus routes, the more efficient the bus service becomes.
- *Spatial and temporal accessibility* – Refers to service frequency and to distance between stops. The larger the physical distance between potential bus riders and the bus stops, the lower the level of service utilization. Similarly, the less frequent service is perceived as less reliable and, in turn, utilization decreases.

Votran Transit Development Plan



Map 7-1: Density Threshold Assessment (2011)

Legend

Dwelling Unit Density Threshold
- Not Transit Supportive
- Minimum
- High
- Very High

Employment Density Threshold
- Not Transit Supportive
- Minimum
- High
- Very High

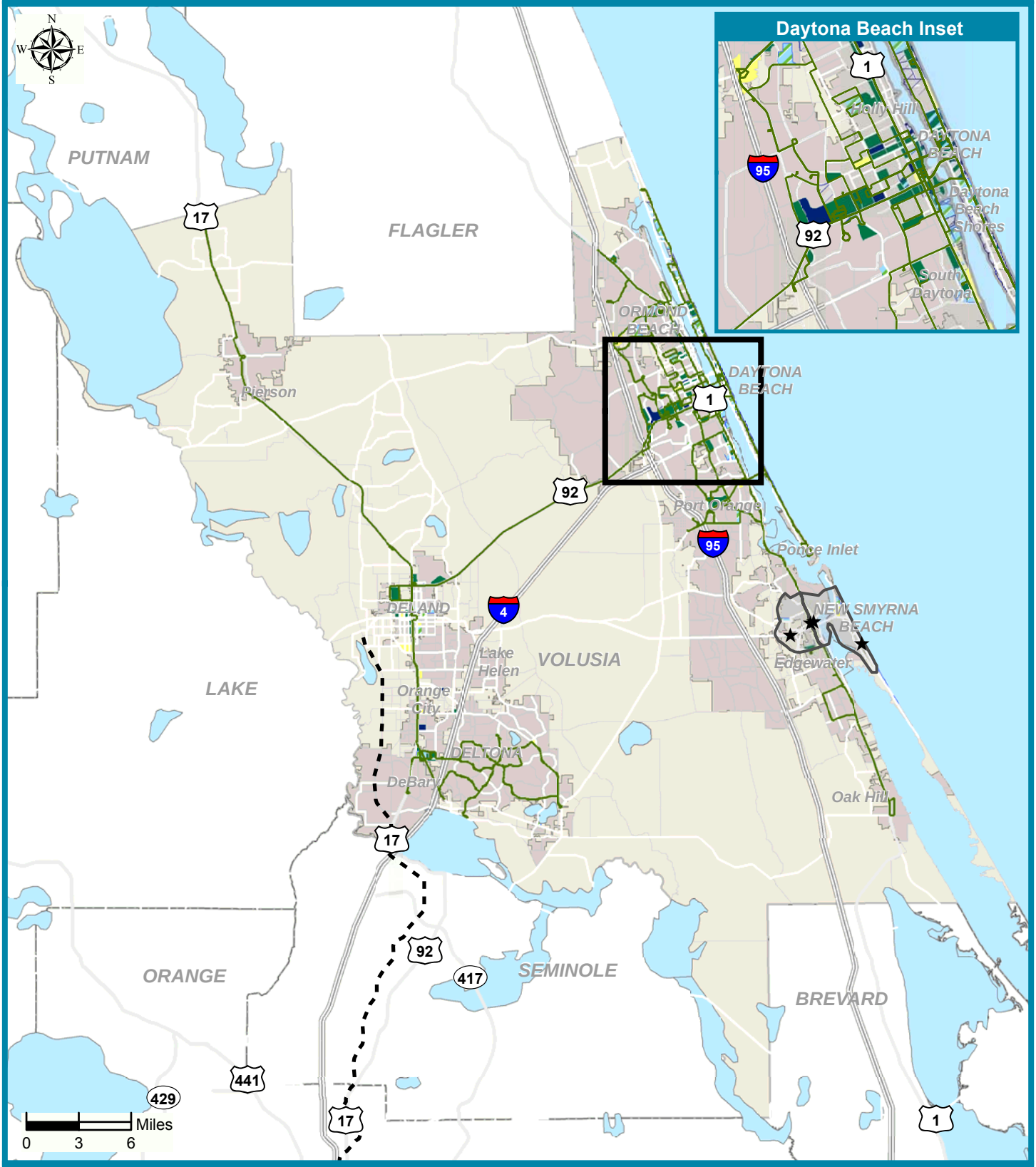
- ★ Flex Route Timepoints
- Votran Routes
- SunRail Alignment
- Flex Routes
- City Limits

Votran — We drive a great bargain

Tindale-Oliver & Associates, Inc. — Planning and Engineering

Source: Volusia County

Votran Transit Development Plan



Map 7-2: Density Threshold Assessment (2021)

Legend

Dwelling Unit Density Threshold
- Not Transit Supportive
- Minimum
- High
- Very High

Employment Density Threshold
- Not Transit Supportive
- Minimum
- High
- Very High

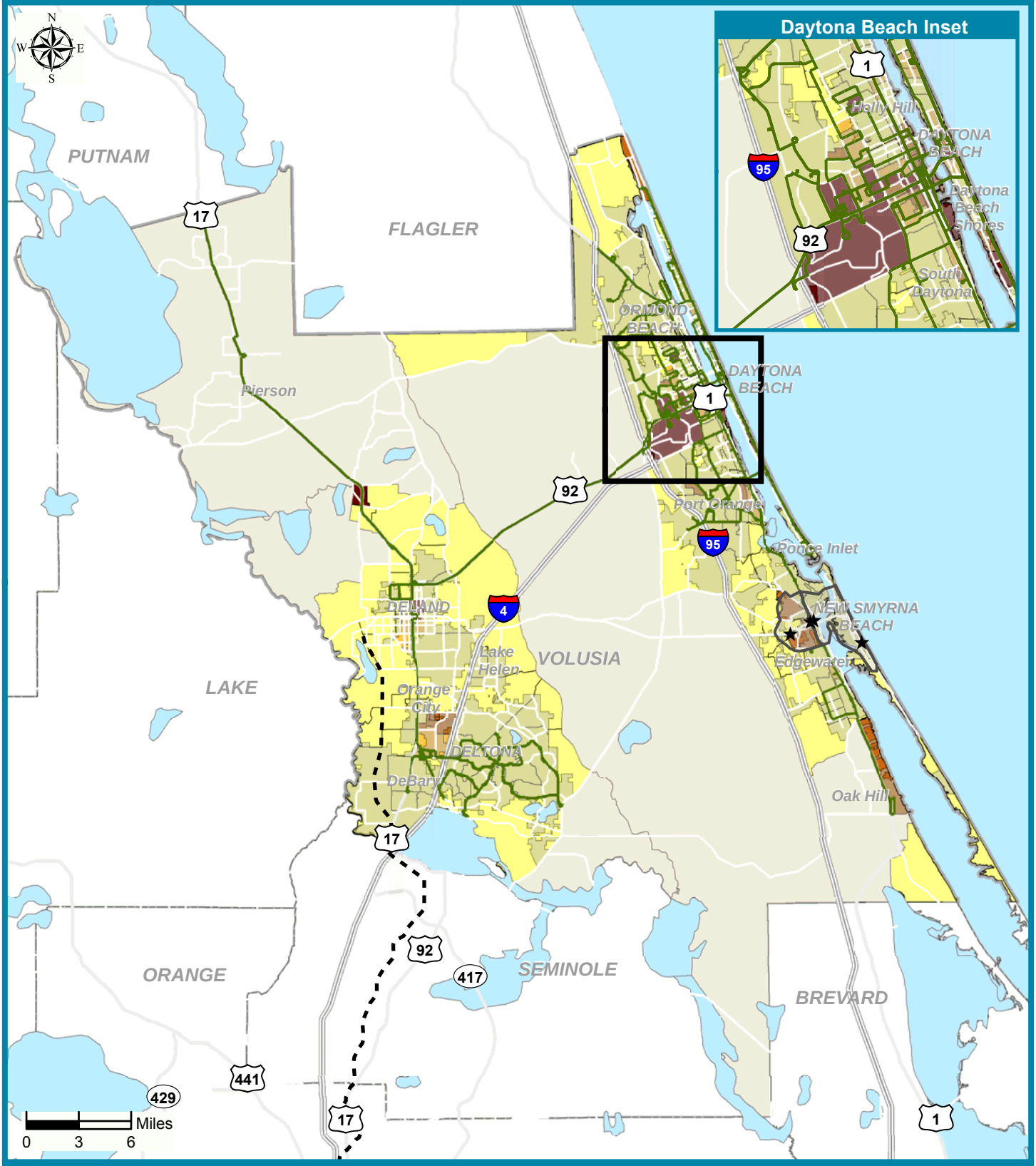
- ★ Flex Route Timepoints
- Votran Routes
- Potential SunRail Alignment
- Flex Routes
- City Limits

Votran — We drive a great bargain

Tindale-Oliver & Associates, Inc. — Planning and Engineering

Source: Volusia County

Votran Transit Development Plan



Map 7-3: Transit Orientation Index

Legend

Transit Orientation Index
- Very High
- High
- Medium
- Low
- Very Low

- ★ Flex Route Timepoints
- Votran Routes
- SunRail Alignment
- Flex Routes
- City Limits

Votran — We drive a great bargain

Tindale-Oliver & Associates, Inc. — Planning and Engineering

Source: ESRI (2010)

- *Time-of-day variations* – TBEST accommodates peak period travel patterns by rewarding peak service periods with greater service utilization forecasts.
- *Route competition and route complementarities* – TBEST accounts for competition between routes. Routes connecting to the same destinations or anchor points, or that travel on common corridors, experience decreases in service utilization. Conversely, routes that are synchronized and support each other in terms of service to major destinations or transfer locations and schedule benefit from that complementary relationship.

The following section outlines the model input and assumptions used, includes a description of the TBEST scenario run performed using the model, and summarizes the ridership forecasts produced by TBEST.

Model Inputs/Assumptions and Limitations

TBEST uses various demographic and transit network data as model inputs. The inputs and the assumptions made in modeling the Votran system in TBEST are presented below. It should be noted, however, that the model is not interactive with roadway network conditions. Therefore, ridership forecasts will not show direct sensitivity to changes in the roadway traffic conditions or speeds.

- *Transit Network* – The transit route network for all Votran routes was updated to reflect 2010 conditions, the validation year for the model. The transit network in TBEST required various edits to reflect the current route alignments and service characteristics in Volusia County, including:
    - Matching service span to existing service spans.
    - Modifying headways, also known as frequency with which a bus will arrive at a stop (e.g., one bus every 60 minutes or one bus every 30 minutes).
    - Establishing passenger travel times on board a bus.
    - Defining special generators.

- *Demographic data* – The demographics used as the base input for the TBEST model were derived from the 2000 Census and the 2010 InfoUSA spatial and tabular databases. The model uses a Census-Block-level personal geodatabase as the format for spatial distribution of population data. Varying data sets were used for TBEST because demographic data in TBEST are hard-coded and cannot be modified by end-users.

- *Population and Employment Growth Rates* – TBEST uses a socio-economic data growth function to project population and employment data. A population growth rate and an employment growth rate were calculated using the ACS. System-wide annual growth rates (from 2002 to 2009) derived for total population and employment are 1.4 and 1.1 percent, respectively. As indicated previously, population and employment data are hard-coded into the model and

cannot be modified by the end-user. As applied, the growth rates do not reflect fluctuating economic conditions as experienced in real time.

- *Special generators* – These were determined to evaluate locations with opportunities for high ridership. Votran's special generators include the following:

    - VOTRAN Transfer Plaza
    - Intermodal Transit Facility
    - Volusia Mall
    - Countryside Station Shopping Center
    - Northgate Shopping Plaza
    - Crowne Center Transfer Center

- *TBEST Model Limitations* – According to Rule 14-73.001 of the Florida Administrative Code, TBEST is the FDOT-approved model for transit ridership forecasting as part of TDPs in Florida. It has long been a desire of FDOT to have a standard modeling tool for transit demand that could be standardized across the state similar to the Florida Standard Urban Transportation Model Structure (FSUTMS) used by MPOs/TPOs in developing LRTPs. However, while TBEST is an important tool for evaluating improvements to existing and future transit services, model outputs do not account for latent demand for transit that could yield significantly higher ridership and, correspondingly, model outputs may over-estimate demand in isolated cases. In addition, TBEST cannot display sensitivities to external factors such as an improved marketing and advertising program, changes in pricing service for customers, and other local conditions.

Although TBEST provides ridership projections at the route and bus stop levels, its strength lies more in its ability to facilitate relative comparisons of ridership productivity. As a result, model outputs are not absolute ridership projections, but rather are comparative for evaluation in actual service implementation decisions. TBEST has generated interest with DOTs in other states and continues to be a work in progress that will become more useful as its capabilities are enhanced in future updates to the model. Consequently, it is important for the transit agency to integrate sound planning judgment and experience when interpreting TBEST results.

Using these inputs, assumptions, and actual ridership data, the TBEST model was validated. Using the validation model as the base model, TBEST ridership forecasts for the TDP planning horizon year, FY 2021, were developed. The generated annual ridership forecasts reflect the estimated level of service utilization if no changes were to be made to any of the fixed-route services. Annual TBEST ridership forecasts for the TDP alternatives and their corresponding implementation years also were developed and are presented in Section 10 of this report.

Implications

Based on the TBEST results shown, maintaining the status quo will result in marginal increases in transit ridership. For Votran to increase its market share for transit, service expansion will need to occur and service improvements will need to be implemented.

Table 7-2
Annual Ridership and Growth Rates (Status Quo)

Maintain Existing Votran Service - Ridership Projections by Route					
Routes	2012 Total Ridership	2016 Total Ridership	2021 Base Total Ridership	Absolute Change (2012-2021)	Growth Rate (2012-2021)
Beachside A1A Trolley	50,204	51,244	52,283	2,080	4%
Route 1	237,538	239,155	240,771	3,233	1%
Route 3	233,571	245,969	258,367	24,796	10%
Route 4	245,307	249,242	253,177	7,870	3%
Route 5	55,796	58,226	60,656	4,860	8%
Route 6	127,865	131,781	135,697	7,831	6%
Route 7	196,115	200,889	205,663	9,548	5%
Route 8	77,327	80,071	82,814	5,487	7%
Route 10	276,171	281,059	285,948	9,777	3%
Route 11	182,449	187,041	191,633	9,184	5%
Route 12	142,886	146,613	150,340	7,454	5%
Route 15	193,260	200,693	208,125	14,865	7%
Route 17	298,128	316,454	334,780	36,652	11%
Route 18	152,675	155,387	158,099	5,425	3%
Route 19	140,267	148,623	156,978	16,712	11%
Route 20	190,270	193,287	196,304	6,034	3%
Route 21	44,311	44,734	45,157	846	2%
Route 22	39,781	40,160	40,538	757	2%
Route 23	39,323	39,854	40,385	1,062	3%
Route 24	15,946	16,100	16,254	308	2%
Route 40	56,154	57,805	59,457	3,303	6%
Route 41	36,904	37,346	37,789	885	2%
Route 42	14,784	14,892	14,999	215	1%
Route 43	9,855	9,949	10,043	188	2%
Route 60	216,813	221,870	226,926	10,113	4%
*Express Link 200	5,200	-	-	(5,200)	
TOTALS	3,278,898	3,368,441	3,463,184	184,285	5%

*This route is anticipated to be discontinued when SunRail is operational.

SECTION 8: GOALS, OBJECTIVES, AND INITIATIVES

This section presents Votran's transit goals, objectives, and initiatives for the next 10 years. Goals, objectives, and initiatives are an integral part of any transportation plan because they provide the policy direction to achieve the community's vision. A goal is a long-term end toward which programs or activities are ultimately directed. On the other hand, an objective is a specific, measureable, intermediate end that is achievable and allows measurement of progress toward a goal. An initiative is the course of action or way in which programs and activities are conducted to achieve an identified objective.

The goals, objectives, and initiatives presented in this section were prepared based on the review of the goals, objectives, and initiatives adopted in the 2007-2016 TDP Major Update. Other factors contributing to this section include the assessment of existing conditions, feedback received during the public involvement process, and the review of local planning documents. Initiatives have been developed for each objective to set a course of stroke for attaining the goals and objectives.

VOTRAN PUBLIC TRANSIT VISION

To establish the vision for Votran, it is important to assess where it currently is and where they anticipate going over the next 10 years. The vision is a statement that sets the course for achieving the mission, goals, and objectives. The Votran vision should identify clearly what the agency does, it serves, and how to best provide service. With that in mind, the Votran vision has been established as a benchmark to be achieved over the next 10 years.

VOTRAN PUBLIC TRANSIT VISION

To provide efficient and effective transit service that encourages residents and visitors to rely on Votran as a viable modal choice for travel in Volusia County.

VOTRAN PUBLIC TRANSIT MISSION

An assessment of Votran's existing mission was completed to ensure that it is still relevant for the agency based on the existing operations, the current operating environment, and the intended future direction of the agency. The existing mission is being retained for this ten-year timeframe to encourage continued progress toward accomplishment of this mission.

VOTRAN PUBLIC TRANSIT MISSION

To identify and safely meet the mobility needs of Volusia County. This mission will be accomplished through a courteous, dependable, cost-effective, and environmentally-sound team commitment to quality service.

GOALS, OBJECTIVES, AND INITIATIVES

In the 2007-2016 TDP Major Update Votran established five goals to work toward:

1. Participate in and ensure availability of an effective public transportation system that safely and efficiently moves people throughout, in, and out of Volusia County.
2. Provide and enhance quality passenger infrastructure and facilities to enhance bus service and attract discretionary riders.
3. Coordinate the transit system and its improvements with transportation planning efforts of all government entities.
4. Provide a transit system that is, to the maximum extent possible, financially feasible by securing adequate funding.
5. Conduct a proactive and ongoing public outreach program.

The goals focused on five consistent policy areas including:

1. Availability, efficiency, and safety of service
2. Passenger amenities and marketing
3. Transportation planning coordination
4. Funding
5. Public involvement process

The previous goals and, policy focus areas and their corresponding objectives are still appropriate for Votran to undertake as high-level agency directives; however, the goals, objectives, and initiatives identified below have been developed for this TDP and streamlined for Votran to focus on over the 10-year timeframe. The goals are not provided in priority order, as accomplishing each goal is the desire of the agency. At the end of this section, a checklist is provided to assist Votran in monitoring its progress on achieving each goal. The checklist is also a reminder that this is an ongoing process, and this plan should be used to guide ongoing operations and policies.

The primary focus of Goal 1 and its corresponding objectives and initiatives are associated with the service improvements. Knowing current performance and taking the necessary steps to maintain and enhance the effectiveness of the system increases the value of Votran to its users and the community as a whole. Two measures that can be reviewed to determine if this goal is being achieved are frequency and on-time performance. These two components of the system can be measured and reviewed by Votran to evaluate the manner in which service is provided. With improvements in these two areas, increases in ridership are possible, reduction in existing expenditures can be attained and service related complaints should decrease. Reaching optimum efficiency without a decline in customer service is a difficult task for most transit agencies, as removing lower performance services can disenfranchise some segments of the population.

Goal 1) Provide a superior transit system delivering effective and efficient service
Objective 1) Monitor service quality and maintain minimum standards
Objective 2) Improve service levels (span of service and frequency) based on transit demand
Objective 3) Improve and maintain the Votran fleet
Objective 4) Provide connectivity throughout the region with a focus on transit generators and other modal options
Initiative 1) Conduct a comprehensive operational analysis (COA) by December 2014 to identify service efficiencies and/or revisions that can be implemented
Initiative 2) Annually complete performance monitoring based on the performance standards for fixed-route and paratransit services
Initiative 3) Conduct an on-board survey at least every 5 years as part of major TDP updates to monitor changes in user demographics, travel behavior characteristics, and user satisfaction
Initiative 4) Operate a fleet of fixed-route vehicles with an average age of less than 7 years
Initiative 5) Continue to pursue additional funding opportunities to increase frequencies on high performing routes to thirty minutes or less
Initiative 6) As funding is available provide weekend and later evening services throughout the system
Initiative 7) Seek opportunities to expand service to new areas within the County as
Initiative 8) Within 72 hours of a customer complaint acknowledge receipt by contacting complainant
Initiative 9) Review applicability of a corridor approach to transit service to provide premium services on primary corridors with local service providing community connections
Initiative 10) Perform scheduled maintenance activities for all transit vehicles to avoid service interruptions and increase system safety

While maintaining efficient and effective operations is extremely important to service, one primary element contributing to the success of public transit is the customer experience. When customers view transit as a reliable, comfortable, safe, and timely service their aptitude to continue use and not seek other modal options is increased. It is important that all elements of the service delivery process cater to the customer to attract choice riders. In addition, while many view transit-dependent riders as a

constant user of public transit, when transit use is unpleasant these individuals will turn to other options such as carpooling, biking, walking, using taxis, or reducing the number of discretionary trips. While these other options still support the environment, reducing transit use is not the mission of any transit agency; therefore, a focus on customer service is necessary. In accordance with Goal 2's focus on the customer, recommendations for amenities are necessary to enhance the customer's trip from the initial access point to the final destination. As evidenced by the responses to the on-board survey conducted during the development of this TDP, customer satisfaction is above average. To measure the customer's opinion of Votran service throughout the TDP timeframe, customer complaint levels should continue to be monitored. Also, surveys providing data on customer likes and dislikes should be completed at a minimum of every two years.

Goal 2) Deliver a transit experience that is pleasing to the customer and encourages additional use
Objective 1) Make safety a primary element in the development, operation, and maintenance of the transit system
Objective 2) Continue to develop Votran's service branding throughout Volusia County
Objective 3) Increase avenues for customers to access information on transit service
Initiative 1) Provide easily identifiable and ADA accessible stops for access to service
Initiative 2) Ensure better distribution of marketing materials throughout the county and create a single system map for online use that includes all transit service offered by Votran
Initiative 3) Routinely assess operations to ensure the system eliminates excessive wait times between service
Initiative 4) Continue to provide clean and accessible vehicles for use in service
Initiative 5) Conform to schedule to ensure customers can rely on service
Initiative 6) Provide transit information kiosks at major transit generators and online to allow for various ways to access information
Initiative 7) Evaluate contract services regularly to ensure they maintain the same standards as the directly operated services
Initiative 8) By 2017, ensure that all bus stop poles are uniquely identified to distinguish them from other poles
Initiative 9) Continue to use the Service Review Committee to evaluate on a regular basis where services connect to reduce the need for multiple transfers
Initiative 10) Continue to provide customer service and sensitivity training to all new employees and contractors to ensure that all customers are treated with respect
Initiative 11) Provide opportunities fo r customers to learn about transit operations and participate in developing service
Initiative 12) Enhance fa re payment options to allow additional customer options for paying for service to include items such as ticket vending machines, stored value cards, credit and debit card payments, and smart cards as feasible

Votran's visibility and more importantly and understanding of its service is key to success of the system. In that regard, Goal 3 seeks to promote activities that integrate Votran into all factions of the County. Participating in local activities and providing consistent information on a regular basis will impact Votran's image. However, as part of developing, maintaining, or increasing the community's view of

Votran, the system must responsibly administer services. Responsible management and operations include continuing practices such as working with local governments to develop transit oriented and supportive land uses, connecting transit with other resources, seeking appropriate and diversified funding opportunities, and streamlining costs. Public perception with regard to publicly-funded services is related largely to its view of the importance of that specific service. For example, in high crime areas, individuals are less likely to complain about investments in law enforcement. Votran must build the trust of Volusia County residents in a similar sentiment; public transit is a necessity to the overall health and safety of the community.

Goal 3) Ensure that Votran is a viable and fiscally responsible transportation alternative for the community
Objective 1) Build meaningful partnerships and intergovernmental relationships that increase the visibility of Votran and enhance economic growth
Objective 2) Proactively pursue effective strategies that conveniently and comfortably move people
Objective 3) Develop marketing strategies to increase ridership and visibility of Votran
Objective 4) Ensure connectivity throughout the region to other modes, transit systems, and major attractors
Objective 5) Make certain that service is provided in the most cost-effective manner making transit a responsible local investment
Objective 6) Continually seek financial opportunities to support the overall financial health of the system
Initiative 1) Develop transit information packets and user-friendly brochures for distribution by the Chambers of Commerce, Community Redevelopment Agencies, Mainstreet Associations, Economic Development Commission, VCARD, and others that promote transit use
Initiative 2) Work with the TPO and its committees to form a subcommittee that meets quarterly to focus on transit and land use integration
Initiative 3) Participate in local job fairs, colleges and university, and with the Volusia County Public School System to increase knowledge about the transit system/service
Initiative 4) Distribute transit service information and user-friendly brochures to at least 25 percent of businesses within ¼-mile of existing transit routes by 2016
Initiative 5) Develop a standard set of service guidelines and corresponding cost, benefit, and incentives table to assist local governments in updating comprehensive plans with the appropriate land uses and densities to make existing and proposed services successful and cost effective
Initiative 7) Include a mix of service types (local, premium, and connector) and amenities (Wi-Fi, shelters, information) to diversify the system and make it more attractive to a greater number of potential customers
Initiative 8) Actively develop and submit grants for public and private funding
Initiative 9) Initiate additional public-private partnerships to increase revenue
Initiative 10) Encourage process that requires transit applicability and infrastructure needs in all roadway projects

As a service that can assist the County in maintaining the environment, Votran can attain Goal 4. It is important that publicly-funded services contribute to the overall health of the community, and Votran is uniquely qualified to complete this from an environmental, social, and personal health perspective. The more individuals that Votran can get to use its services, the fewer the automobile trips. This reduction in private auto travel will improve emissions from cars, while ensuring that bus emissions are proportionately lower due to greater ridership per trip. In addition, as Votran purchases newer vehicles or constructs additional facilities and amenities, using "green" and Leadership in Energy and Environmental Design (LEED) building standards consistent with its sustainability plan will help the environment. The public transit system also improves social well-being, by providing an opportunity for community members to get to know each other on-board vehicles. Transit use contributes to personal health by encouraging exercise such as walking and/or biking to access stop locations.

Goal 4) Reduce energy demand, implement environmentally-friendly processes, and protect Volusia County's natural environment
Objective 1) Implement innovative programs to reduce vehicle miles traveled within Volusia County
Objective 2) Implement environmentally-friendly operating procedures
Objective 3) Reduce carbon emissions and fossil fuels
Objective 4) Undertake capital purchases that increase or maintain Votran's impact on the physical environment
Initiative 1) Continue coordination with Commuter Services for the implementation of additional commuter programs
Initiative 2) Establish new park-and-ride locations to provide additional options to drivers and more access points to transit for automobile users
Initiative 3) Continue integrating alternative fuel vehicles into the fleet to the extent feasible
Initiative 4) Utilize Job Access and Reverse Commute (JARC) funding to implement new and innovative job related public transit options
Initiative 5) Increase ridership by 1 percent each year
Initiative 6) As appropriate, consider the potential to purchase smaller vehicles to match the capacity requirements of new service areas
Initiative 7) Construct future Votran facilities utilizing environmentally-friendly materials, where feasible and possible
Initiative 8) Review and update Votran's sustainability plan and design standards every two-years to incorporate advancements in environmental materials and policies
Initiative 9) Develop marketing materials and programs to demonstrate the value and role of transit in regional carbon emissions reduction

Goal 5 recognizes the importance of implementing technology to increase information, which can lead to more efficient service and improve Votran's ability to provide additional information to customers and the general public. It is important to note that technology is most effective when it is paired with

adequate staffing levels to manage outputs. Accomplishing this goal is not only dependent on understanding and adequately implementing new technologies, but also on the available funding to make capital investments. To evaluate the effectiveness of the technology, staff should review service level improvements related to the information produced by units such as APCs. When low-performing bus stops can be removed from a route, thus improving the efficiency of the route, support is gained for technology improvements. Also, with the addition of SunRail, technology becomes even more important to ensure connectivity between modes. Computer aided dispatch (CAD)/automatic vehicle location (AVL) can provide vehicle location information to determine if passengers have adequate transfer times based on the bus or rails actual location versus scheduled location.

Goal 5) Utilize the best technologies and innovations available that offer both enhanced system performance and positive return on investment
Objective 1) Expand Intelligent Transportation System (ITS) Improvements
Objective 2) Assess all major capital purchases prior to initiating for value to the agency, capacity to deploy successfully, and cost-benefit to the community
Initiative 1) Continue to improve customer information systems (including website) for scheduling information to increase the ease of accessing services
Initiative 2) Develop an ITS plan that includes evaluation criteria for potential and proposed ITS projects
Initiative 3) Implement a trip planner by September 2016 to assist current passengers and make using the system more attractive to choice riders
Initiative 4) Update bus stop inventory to include all amenities within a geographic information system (GIS) by 2015
Initiative 5) Add Global Positioning System (GPS) units and CAD/AVL systems to all new buses
Initiative 6) Update software as appropriate to maintain access to information and the ability to efficiently communicate internally and externally
Initiative 7) Continue to upgrade video surveillance on vehicles and throughout the infrastructure to protect customers, staff, infrastructure, and equipment

Votran is a respected agency that provides transit service to Volusia County and has a reputation for providing quality service and leadership. Goal 6, strives to maintain and heighten this level of public transit service delivery. The objective and initiatives acknowledged under this goal provide a framework for Votran to continue adding quality professionals to Volusia County's staff. Votran should seek feedback on its leadership through routine audits, performance reviews, and peer agency comparisons to ensure that it is performing at an equivalent or greater standard as what currently exist.

Goal 6) Provide top-notch leadership in attaining the region's mobility needs
Objective 1) Ensure capable staff are available to lead the agency and deploy the best possible service
Initiative 1) Retain and recruit the brightest transit professionals to deliver service
Initiative 2) Ensure staff training opportunities to keep pace with industry standards
Initiative 3) Review policies and procedures annually to ensure they provide the oversight and guidance to promote a healthy work environment

The following checklist can be used as a reporting mechanism for the TDP's annual progress report update and is provided to encourage Votran to evaluate its progress toward achieving each goal.

Fiscal Year	2012		2013		2014		2015		2016	
Goal Status	In Progress	Achieved	In Progress	Achieved	In Progress	Achieved	In Progress	Achieved	In Progress	Achieved
Goal 1										
Goal 2										
Goal 3										
Goal 4										
Goal 5										
Goal 6										

Fiscal Year	2017		2018		2019		2020		2021	
Goal Status	In Progress	Achieved	In Progress	Achieved	In Progress	Achieved	In Progress	Achieved	In Progress	Achieved
Goal 1										
Goal 2										
Goal 3										
Goal 4										
Goal 5										
Goal 6										

SECTION 9: TRANSIT ALTERNATIVES

The purpose of this section is to summarize the potential transit improvements developed as part of the 10-year planning horizon of this TDP Major Update. Recommended improvements to a transit system can include items such as the implementation of a new route or improved frequency on a route or can be more administrative in nature, such as improving marketing or purchasing technology. The improvements presented in this section are part of Votran's transit vision for the 10-year planning horizon. These improvements in no way establish a financial commitment for Volusia County; they have been developed only for transit planning purposes and do not reflect the actual budget or expenses of Votran. Section 10 presents the cost feasible financial plan, identification of the shortfall if all improvements are implemented, and a display of each service-related improvement by suggested implementation year and whether it can be funded with existing sources. The revenue streams identified in the financial plan are also for planning purposes and may not reflect actual funding levels. The table identifying the shortfall summarizes the total cost of all needs recommended for this planning period.

TEN-YEAR TDP PRIORITIES

Transit alternatives for Volusia County were developed through:

- Public involvement input
- Discussions with Votran staff
- Discussions with the TDP Review Committee
- Situation appraisal
- Transit demand estimation and identification of mobility needs
- Review of Volusia County planning efforts

The TDP priorities have been grouped into four major categories: operations priorities, capital and infrastructure priorities, planning priorities, and policy priorities. Each category and its corresponding priorities are described below.

Operations Priorities

Operations priorities refer specifically to transit service. For example, new bus routes and realignment of existing services are considered operational improvements. TDP priorities for the 2012 TDP include the following:

- **Continue operating the existing bus routes and maximize existing service efficiency** – The existing fixed routes should continue to operate in coordination with the service improvements

that have been included to bolster the efficiency of the existing routes and improve ridership levels.

- **Continue operating the complementary ADA paratransit service and expand ADA service to complement new service** – To continue serving the needs of the ADA-eligible residents of Volusia County and in compliance with the ADA regulations, Votran is obligated to expand paratransit service in conjunction with the implementation of new fixed routes.

- **Improve existing service** – A number of improvements are recommended for existing services to accommodate current demand, to include: increasing hours of service later in the evening, adding Saturday and Sunday service, and increasing frequency on most routes to a half-hour.

- **Implement new fixed bus routes** – Five new bus routes were identified through the transit demand assessment, public involvement activities, and discussions with Votran staff. These new services are designed to capture emerging and underserved transit markets, and provide connectivity with SunRail.

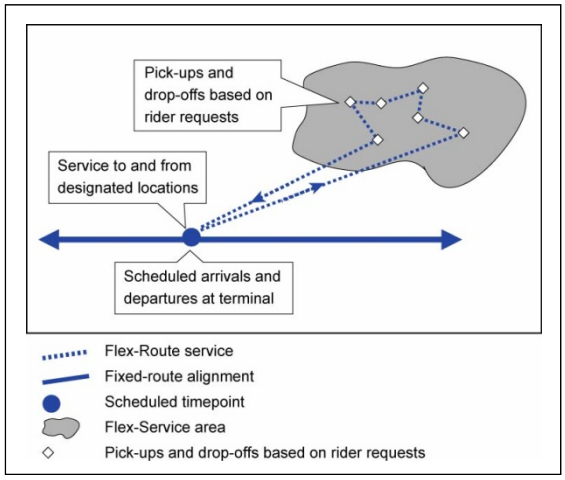
    - Public input received during the TDP development process indicates that municipalities prefer the visual appearance of trolley service rather than traditional fixed-route bus service. Several of the fixed-routes identified in the TDP may be implemented as trolleys to appeal to choice riders and promote tourism. Implementation of future trolley services will require funding from the municipalities or Community Redevelopment Agencies (CRAs), similar to existing funding for the Daytona Beach Trolley service.

- **Implement new flex routes –** Eight new flex routes were identified to improve access and connectivity within areas that are not currently served by Votran. Flex-route service is a hybrid service that combines the predictability of fixed-route bus service with the flexibility of demand response service. This service generally operates in suburban areas where the street and pedestrian networks are not conducive to fixed-route bus service. As shown in Figure 9-1, flex-route service originates from a fixed point, such as a transit center, where it connects with fixed-route buses or rapid transit service. The service areas of flex-route services are usually about five to seven square miles, in which one vehicle can offer service once per hour. Eighteen-passenger, wheelchair-accessible, vehicles are used for flex services in Volusia County. Reservations can be made on the same day of travel and do not require a prior day reservation, as is typical of demand response services. Same-day reservations generally are possible because the service areas are relatively small.

  The number of passengers per hour on the flex-route services should be monitored to determine vehicle ability to maintain the scheduled time point and complete the pickups for

reserved trips within the slack time. When the flex-routes begin operating at a level of 8 – 10 passengers per hour, consideration should be given to transitioning from the flex-route to a fixed-route. Operating with more than eight passengers per hour may affect vehicle capacity and on-time performance.

Figure 9-1
Flex-Route Service



- **Implement inter-county and express bus service** – There is a demand for inter-county service to Seminole County for access to shopping and medical appointments and cross-county service for greater access to social services and recreational opportunities. Four express bus services, supported by three new park-and-ride facilities, are included in the TDP. The express bus services are located along major corridors in Volusia County and will provide peak-hour connectivity between DeLand and New Smyrna Beach, Daytona Beach, and Seminole County. The fourth express route will provide connectivity between Port Orange and Ormond Beach. With the implementation of express service, the corridors should also be reviewed for potential infrastructure improvements to help improve access to transit. The express routes and corridor improvements should be monitored continuously to determine the need for transitioning from express to more premium transit services.

  In addition to the express routes that have been identified as part of the 10-year TDP vision plan, Votran has planned for route modifications that will provide connectivity to the DeBary SunRail station. These route connections will be implemented in conjunction with SunRail service. FDOT will provide funding for the local share of the SunRail routes for the first seven years of operation.

Capital and Infrastructure Priorities

Capital and infrastructure priorities refer to improvements not related directly with service delivery. For example, rolling stock (i.e., vehicles) is treated as an up-front capital investment. Additional examples of capital needs include administrative functions such as planning studies. TDP capital and infrastructure priorities for the 2012 TDP include the following:

- **Replace aging vehicle fleet with vehicles that use environmentally-friendly propulsion technology** – The average age of the fleet is seven years. Assuming a vehicle useful life of 12 years, Votran will need to replace a significant portion of its existing fleet over the 10-year planning period. Votran recently purchased and began integrating hybrid vehicles into the existing fleet. Vehicles should be purchased equipped with technology employed by Votran, such as fareboxes and APCs.

- **Construct new Intermodal Transfer Facility (ITF)** – Construction of the DeLand ITF will provide better accessibility for passenger transfers and improve system connectivity on the west side of the county. TDP operational priorities include a route modification that realigns the existing Route 60 to connect at the DeLand ITF. New routes planned for the west side will include transfer points at the DeLand ITF. The transfer facility will serve as a community superstop to improve cross-county connections and provide opportunities for connecting with SunRail.

- **Construct West Side Satellite Garage** – Relocation of the west side operations facility from Osteen to Orange City will help Votran to reduce the number of non-revenue vehicle miles traveled and improve the efficiency of providing transit service on the west side of the county.

- **Improve Stop Amenities and Infrastructure** – Input received throughout the plan development process indicates a need for improvements to transit stop infrastructure and amenities. Votran has more than 2,200 stops that will need to be inventoried and prioritized for bus stop enhancements. Improving stops and stop infrastructure will enhance the visibility of the service and possibly draw more users to the system. Votran will continue to coordinate with local municipalities on the placement of bus stops and stop amenities to assist in the improvement of their local infrastructure.

    - **Establish Community Superstops** – As stop amenities and infrastructure are planned over the 10-year period, consideration should be given to the corridors and the potential for increased investment in establishing superstops within West Volusia, New Smyrna Beach, and Port Orange. Superstops are larger bus staging areas used at locations where multiple services come together at a point in the system. The superstop should serve as a community focal point and a transit system destination/transfer station. As premium services, including express and bus rapid

transit (BRT) are developed along corridors, superstops will function as key access points. Some of the characteristics of a superstop include high volumes of customers, significant transfer activity among routes, and major land use development. Amenities that are essential to community superstops include:

- Transit signage
- ADA access compatibility
- Seating area
- Lighted passenger shelter
- Trash receptacle
- Landscaping
- Bicycle storage
- Bus bay
- Information kiosks

- **Establish Park-and-Ride Lots** – In conjunction with FDOT, Volusia County, and future private developments, shared-use/joint-use park-and-ride lots should be established as part of the expanded transit infrastructure for the 10-year TDP. Costs of park-and-ride lots are shown in the financial plan and funding for this expenditure is assumed as the responsibility of FDOT.

- **Ticket Vending Machines (TVM)** – Votran has included in the financial plan ticket vending machines that will allow passengers to purchase access to the Votran bus and SunRail at various locations. The preliminary locations for the TVMs have been identified as the Votran Transfer Plaza, DeLand intermodal facility, SunRail stations, and east-side intermodal facility but, may change based on future service and demand for this type of amenity.

- **Alternatives Analysis (AA) Study** – AA studies are required by FTA to be eligible for funding under the New Starts and Small Starts Programs. Their goal is to evaluate which alternative presents the best option for implementation based on a myriad of criteria such as cost-benefit analysis, user market profile, demand, environment, and local support. Because Votran is determining the benefit of a corridor approach to transit service, if premium modes of service are needed, the agency will want to complete an AA to determine the best mode and service parameters. Typically, after an AA is completed, the agency will undergo the environmental process, preliminary and final engineering, design, and then implementation in accordance with the FTA planning process. Funding to undertake this form of study is included as part of the capital budget. The AA cost included in the financial plan is assumed to be coordinated with and funded through the TPO.

Planning Priorities

- **Corridor Planning Study** – Votran should conduct a study to determine the most heavily-traveled corridors in the county with existing fixed-route bus service operating at high ridership levels. The TDP Review Committee has identified a number of corridors in the county that should be further reviewed and assessed using a corridor planning approach methodology. The land uses, traffic volumes, demographics, roadway conditions, and existing transit service along these corridors should be studied and prioritized to determine the most appropriate corridors that may support a premium transit service network. With the transition from fixed-route to premium bus service, the corridor would be a high priority for other mobility improvements, including passenger amenities and ADA improvements. As part of the planning process, other pedestrian improvement should be identified and staged for implementation in order to improve accessibility to new premium services. In addition, future development along the corridors should be reviewed for TOD elements that generate trips and encourage alternative modes in an effort to sustain high transit propensity. A corridor approach also provides an opportunity to focus service and investment. A corridor planning study to identify the transit needs is shown in the financial plan and assumed to be funded through the Volusia TPO.

- **Intelligent Transportation Systems Plan (ITS)** – Votran operates using a number of advanced technologies designed to collect statistical information for future planning and reporting purposes. Other technologies are available to assist customers with obtaining transit information and improving customer service. Development of an ITS plan will help to identify areas that may be improved through ITS and establishment of a staged-implementation plan for updating Votran's existing technology.

- **Major TDP Update** – FDOT requires that a TDP undergo a major update for the fifth year. In addition, FDOT requires that TDP progress reports are submitted annually. It is anticipated that this effort will be undertaken and funded in coordination with the Volusia TPO.

- **Bus Stop Inventory and Assessment** – Votran should conduct a study to inventory and prioritize ADA bus stop improvements along corridors.

Policy Priorities

- **Evaluate Fare Policy** – Both current patrons' and the general public's perceived value of service offered by Votran should be assessed from time to time, and changes to fare policy should be adopted based on the results. In addition, maintaining the farebox recovery and consistency in fares with transit agencies that coordinate service with Votran are other reasons for completing a fare study. Table 9-1 present the current fare structure adopted by Votran.

Table 9-1
Votran Current Fare Structure

Fare Category	Regular	Discount*	Children (under age 6)
One-Way Trip	$1.25	$0.60	Free
10 Full Fare Tokens	$11.25	$5.40	
All Day Pass	$3.00	$1.50	
3-Day Pass	$6.00	$3.00	
7-Day Pass	$12.00	$6.00	
31-Day Pass	$40.00	$20.00	

*Senior, student, and disabled discounts are available (must show government issued I.D. card showing valid proof of age or Volusia County school student I.D. card)
**Express service operated through contract to LYNX costs $3.50 per trip or $80 for a monthly pass. Token fares and discounted fares are also available.

- **Bus Stop Shelter Design** – During public workshops and discussion group meetings, members of the public commented that many of Volusia County's bus shelters are not functional. For example, a recent shelter design along ISB in Daytona Beach is aesthetically pleasing but complaints have been made by riders regarding its functionality. Bus stop shelter design guidelines should be developed to assist local jurisdictions with providing the community shelters that are both functional and still representative of the community's character. The guidelines should not dictate a uniform shelter but rather should include the design requirements that are needed to effectively provide shelter and accessibility. Sample shelter types from around Florida along with standard bus shelter design guidelines are included below.

    - Minimum 30" x 48" wheelchair space.
    - Entry/exit points with minimum 3' clear width.
    - 5' x 8' boarding and alighting area, can be extended into shelter.
    - No change in elevation greater than ¼".
    - Account for environmental factors, including sun, rain, wind.
    - Compliance with Florida Building codes and local codes.
    - Shelter must be anchored.
    - Use materials that will minimize the need for maintenance.
    - Must be frangible or breakaway.
    - Seating not required but is a best practice and should be accommodated within the shelter as feasible.
    - Minimum height standard of 84" (7').
    - Accommodate a clear opening at the bottom for cleaning.
    - Allow space behind the shelter for maintenance.

- **Development Review Considerations** – Developments often are approved without a transit agency review. To ensure that the new development will be served by existing or planned transit services a process should be established to involve Votran in site plan review. Votran receives requests for the provision of transit service to new developments after the development has been reviewed and approved. Based on the size of Volusia County and the current land development patterns, providing transit service in new areas is costly. A policy should be developed to document Votran's role in the development review process and the densities and intensities that would be required to support transit if development were to occur in an area without existing or planned transit service. The DTA guidelines used to assess transit demand as part of the TDP are presented in Table 7-1. As shown in Table 7-1, the minimum densities needed to support local fixed-route bus service are 4.5–5 dwelling units per acre and 4 employees per acre. To support increased frequencies and/or express bus service 6–7 dwelling units per acre and 5–6 employees per acre are needed. To support premium transit service, densities would need to be greater than 8 dwelling units per acre and greater than 7 employees per acre. Volusia County's development review policy may require developers to meet the density thresholds previously listed to be considered for the associated transit service or a new policy may be developed using the various resources that are available for assessing TOD requirements, including the Votran Transit Development Guidelines or the FDOT TOD guidelines. The TPO adopted a policy requiring local jurisdictions to consider public transit in Traffic Impact

Analysis performed on projects seeking TPO funding. Local governments should adopt a similar policy for all projects whether or not TPO funding is sought.

Based on the analysis above, Table 9-2 presents the Operating Needs Plan, including funded and unfunded needs and the corresponding year of proposed implementation. Many of the services will remain unfunded unless additional revenue streams are identified. Table 9-3 presents the capital improvements and phasing plan that was identified through the TDP process. It is important to note that the priorities listed in Tables 9-2 and 9-3 are subject to the availability of funding. If alternative revenue sources are identified for the implementation of any improvement, regardless of the implementation year identified in this TDP that improvement may be advanced for implementation in an earlier year.

The priorities listed in Tables 9-2 and 9-3 do not exactly mirror, but are consistent with the goals, objectives, and initiatives in this report. Map 9-1 displays these transit improvements visually. Map 9-2 shows improvements on the east, Map 9-3 displays west-side improvements and Map 9-4 identifies the Sunrail connections identified in this TDP. Map 9-5 is provided to show trail system connectivity with existing and planned transit service and infrastructure.

RIDERSHIP PROJECTIONS

As mentioned previously, TBEST is required by legislation and is the FDOT-approved transit demand forecasting tool for TDPs. TBEST was used to project ridership according to the phased implementation plan. TBEST uses network connectivity, spatial, and temporal accessibility, time-of-day variations, and route competition to project ridership. Population projections are also considered; however, land uses are not taken into account in TBEST. While TBEST is a useful tool, it is important to note that its strength lies in comparative projections, not absolute projections. It is unlikely that the projections provided represent actual ridership to be attained. TBEST also experiences difficulty projecting ridership for beach routes due to their tourist oriented use and weekend ridership is generally overestimated. Taking the weekend ridership inaccuracies into account, a control factor was used to reduce weekend ridership to ratios consistent with the current weekend ridership as compared to weekday ridership. It is more likely that the estimates below project relative ridership amounts between routes. TBEST is most accurate with shorter, local routes; its accuracy diminishes with longer express routes. As a result, caution and professional judgment should be used when considering the absolute ridership projections resulting from the TBEST model. In addition, as service levels increase or new service is introduced some routes may experience ridership decreases because patrons have more service options. TBEST continues to be a work in progress and will become more and more useful as its full limitations are addressed in future updates to the model.

Table 9-4 provides TBEST projections for 2012, 2016, and 2021, the base, mid, and horizon years of implementation under this TDP. The ridership projections in Table 9-4 assume implementation of all service improvements irrespective of funding availability.

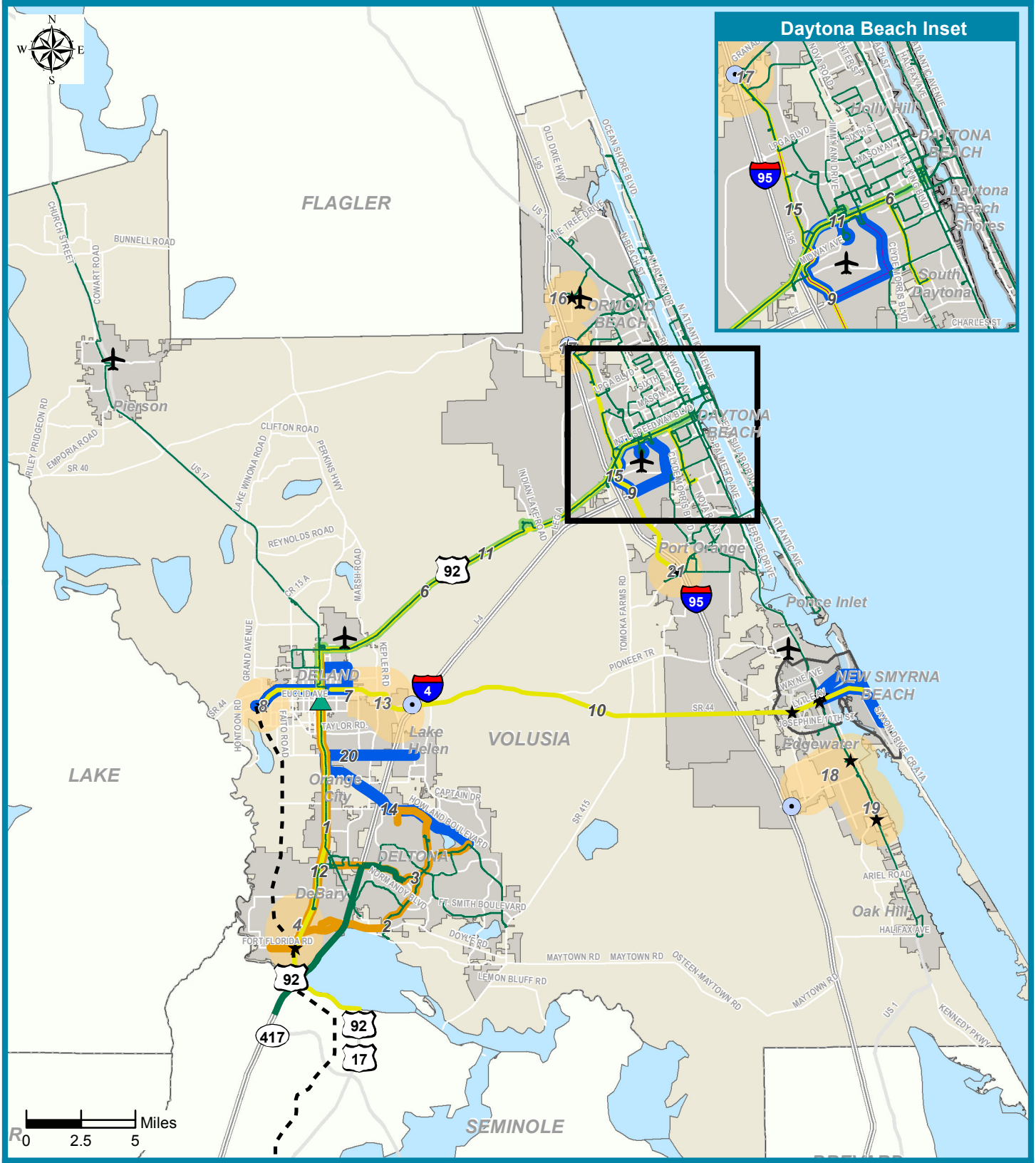
Table 9-2
Ten-Year TDP Operating Implementation Plan

Service Type / Mode	Description	Proposed Implementation Year	10-Year Costs of Service	Funding Status
Maintain Existing	Fixed-route and Flexible services	All	$132,108,199	Funded
Maintain Existing	Paratransit Service	All	$72,201,262	Funded
Recommended Operating Improvements				
New Alternative 1	Route Realignment: Route 20 extension to DeBary SunRail Station	2013	$1,101,307	Funded - FDOT
New Alternative 2	Route Realignment: Route 21 extension to DeBary SunRail Station	2013	$1,101,307	Funded - FDOT
New Alternative 3	Route Realignment: Route 23 extension to DeBary SunRail Station	2013	$1,101,307	Funded - FDOT
New Alternative 4	Add New Service: DeBary SunRail Station Flex-Route	2014	$5,273,759	Unfunded
New Alternative 5	Add New Service: New Smyrna Beach Trolley	2015	$4,084,076	Funded - Private
New Alternative 6	Route Realignment: Extend Route 60 to DeLand ITF	2016	$1,076,942	Unfunded
New Alternative 7	Add New Service: Route from DeLand Amtrak to Downtown	2016	$5,725,365	Unfunded
New Alternative 8	Add New Service: DeLand SunRail Station Flex-Route	2016	$2,512,283	Unfunded
New Alternative 9	Increase Frequency: 30 minutes on Routes 3, 4	2013	$10,809,474	Funded - FDOT
New Alternative 10	Increase Frequency: 30 minutes on Routes 1, 60, 20	2017	$8,219,638	Unfunded
New Alternative 11	Increase Frequency: Proposed SunRail Routes (20, 21, and 23)	2017	$1,921,441	Unfunded
New Alternative 12	Increase Hours of Sunday Service: Routes 1, 3, 4 (8 PM)	2017	$208,156	Unfunded
New Alternative 13	Increase Hours of Service: Route 60 and 20 (10 PM)	2017	$646,801	Unfunded
New Alternative 14	Increase Hours of Service: Flex-Routes 42 and 43 (8 PM)	2021	$82,104	Unfunded
New Alternative 15	Add New Service: ISB Circulator	2017	$9,609,733	Unfunded
New Alternative 16	Add New Service: Express route from DeLand to New Smyrna Beach	2017	$6,125,857	Unfunded
New Alternative 17	Add New Service: Express route from DeLand SunRail Station to Daytona Beach	2017	$6,125,857	Unfunded
New Alternative 18	Increase Frequency: 30 minutes on Routes 10 and 15 during evening hours	2018	$1,930,810	Unfunded
New Alternative 19	Increase Frequency: 30 minutes on Routes 17B, 21, and 7	2018	$6,556,979	Unfunded
New Alternative 20	Increase Hours of Service: Sunday service on Routes 60 and 20	2018	$2,606,696	Unfunded
New Alternative 21	Increase Hours of Service: Sunday service on Routes 17B, 21, and 7	2018	$2,394,245	Unfunded
New Alternative 22	Increase Hours of Service: Saturday service on Route 5	2018	$1,682,553	Unfunded
New Alternative 23	Increase Hours of Service: Later evening Sunday hours (8 PM) Routes 10, 15, 17A	2018	$150,727	Unfunded
New Alternative 24	Increase Hours of Service: Later evening hours (10 PM) Routes 7, 17B, 21	2018	$3,171,412	Unfunded
New Alternative 25	Add New Service: Express route to Central Florida Regional in Seminole County	2018	$5,001,964	Unfunded
New Alternative 26	Add New Service: DeLand Flex-Route (Jacobs and New York)	2018	$1,713,926	Unfunded
New Alternative 27	Increase Frequency: 30 minutes on Routes 6, 22, 18, 19	2019	$6,409,838	Unfunded
New Alternative 28	Increase Frequency: 30 minutes on Route 700 (Trolley)	2019	$759,928	Unfunded - Private
New Alternative 30	Increase Hours of Service: Later evening hours (10 PM) Routes 6, 18, 19, 700, 22, 23	2019	$3,795,241	Unfunded
New Alternative 31	Add New Service: Route on 472 from West Volusia Regional Shopping to Dupont Lakes	2019	$2,963,641	Unfunded
New Alternative 32	Add New Service: Express route along Williamson from Port Orange to Ormond Beach	2019	$3,795,241	Unfunded
New Alternative 33	Add New Service: Ormond Beach Flex-Route (north of SR 40)	2019	$1,300,442	Unfunded
New Alternative 34	Increase Frequency: 30 minutes on Routes 11, 12, 8, 40	2020	$4,391,689	Unfunded
New Alternative 35	Increase Frequency: 120 minutes on Route 24	2020	$552,691	Unfunded
New Alternative 36	Increase Hours of Service: Sunday service on Routes 11, 12, 8, 40	2020	$1,600,798	Unfunded
New Alternative 37	Increase Hours of Service: Sunday service on Route 24	2020	$257,271	Unfunded
New Alternative 38	Increase Hours of Service: Later evening hours (10 PM) Routes 8, 11, 12, 40, 24	2020	$2,181,447	Unfunded
New Alternative 39	Increase Hours of Service: Sunday service Flex-Routes 42 and 43	2020	$217,796	Unfunded
New Alternative 40	Add New Service: Ormond Beach Flex-Route (west of I-95)	2020	$877,116	Unfunded
New Alternative 41	Add New Service: City of Edgewater Flex-Route (Turgot/US 1 to SR 44)	2020	$877,116	Unfunded
New Alternative 42	Add New Service: City of Edgewater Flex-Route (Turgot/US 1 to 35 Street)	2020	$877,116	Unfunded
New Alternative 43	Increase Frequency: 30 minutes on Routes 5, 17A, and 41	2021	$1,650,912	Unfunded
New Alternative 44	Increase Hours of Service: Sunday service on Routes 5, 17A, and 41	2021	$809,812	Unfunded
New Alternative 45	Increase Hours of Service: Later evening hours (10 PM) Routes 5, 41	2021	$487,328	Unfunded
New Alternative 46	Add New Service: Orange Camp Road (US 17/92 to Lakeview Dr)	2021	$344,837	Unfunded
New Alternative 47	Add New Service: Port Orange Flex-Route (Pavilion at Port Orange)	2021	$443,716	Unfunded
Other Operating Expenses				
ADA Paratransit Service	ADA Service for New/Expanded Service	All	$22,812,192	Partially Funded
Miscellaneous	ACMI	All	$5,034,540	Partially Funded
Miscellaneous	Transit Studies	All	$1,900,000	Partially Funded

Table 9-3
Ten-Year TDP Capital Implementation Plan

Capital Needs	Unit Cost	10-Year Need	Total Cost
Vehicle Requirements			
Fixed-Route / Fixed Guideway			
Fixed-Route Replacement Buses - Existing Service	$583,096	51	33,061,743
Fixed-Route Buses - New Service	$583,096	82	56,335,450
Spare Buses	$583,096	22	14,826,774
Flex-Route Vehicles - New Service	$85,000	8	812,294
Spare Flex-Route Vehicles	$85,000	2	196,255
Total		**165**	**105,232,516**
Other Revenue Vehicles			
Replacement ADA Vans - New and Existing Service	$85,000	28	2,804,222
Spare Vans	$85,000	5	506,336
Total		**33**	**3,310,558**
Support Vehicles			
Replacement Cars - New and Existing Service	$27,000	20	615,981
Total		**20**	**615,981**
Commuter Vehicles			
Replacement Vehicles - New and Existing Service	$35,000	30	1,197,742
Total		**30**	**1,197,742**
Other Capital Improvements			
Office Furniture and Equipment	$50,000	10	570,353
Shelters	$30,000	40	1,368,848
Bike Racks (at Bus Stops)	$1,800	40	82,131
Flex-Route Scheduling Software	$120,000	1	128,774
West Side Satellite Garage	$3,500,000	1	3,625,941
Radio System Upgrades	$600,000	2	1,353,123
DeLand Intermodal Transportation Facility	$6,000,000	1	6,515,297
Park-and-Ride Lot Ormond Beach (FDOT Improvement)	$1,000,000	1	1,207,038
Park-and-Ride Lot SR 44 & I-4 (FDOT Improvement)	$1,000,000	1	1,151,571
Restoration Park-and-Ride (FDOT Improvement)	$1,000,000	1	1,235,766
ADA Bus Stop Improvements	$150,000	10	1,711,059
Trash Cans	$800	40	36,503
Solar Compactor Trash Cans	$5,000	12	67,944
Ticket Vending Machines	$70,000	5	379,291
Technology Upgrades	$75,000	5	422,734
Maintenance & Rehabilitation - Existing Facilities	$200,000	10	2,281,413
Alternatives Analysis Study (TPO 5303 Funding)	$400,000	3	1,384,180
Capital Tools	$25,000	10	285,177
Total			**$23,807,141**
Total 10-Year Capital Cost All Improvements			**$134,163,939**

Votran Transit Development Plan



Map 9-1: Votran 10-Year Potential Transit Projects

Legend

- SunRail Alignment
- Existing Votran Routes
- Proposed Route
- Existing Express Route
- Proposed Express Route
- SunRail Connections
- Existing Route Modification
- Park-and-Ride
- Deland Intermodal Facility
- Flex Route Timepoints
- Proposed Flex Routes
- Flex Routes
- City Limits

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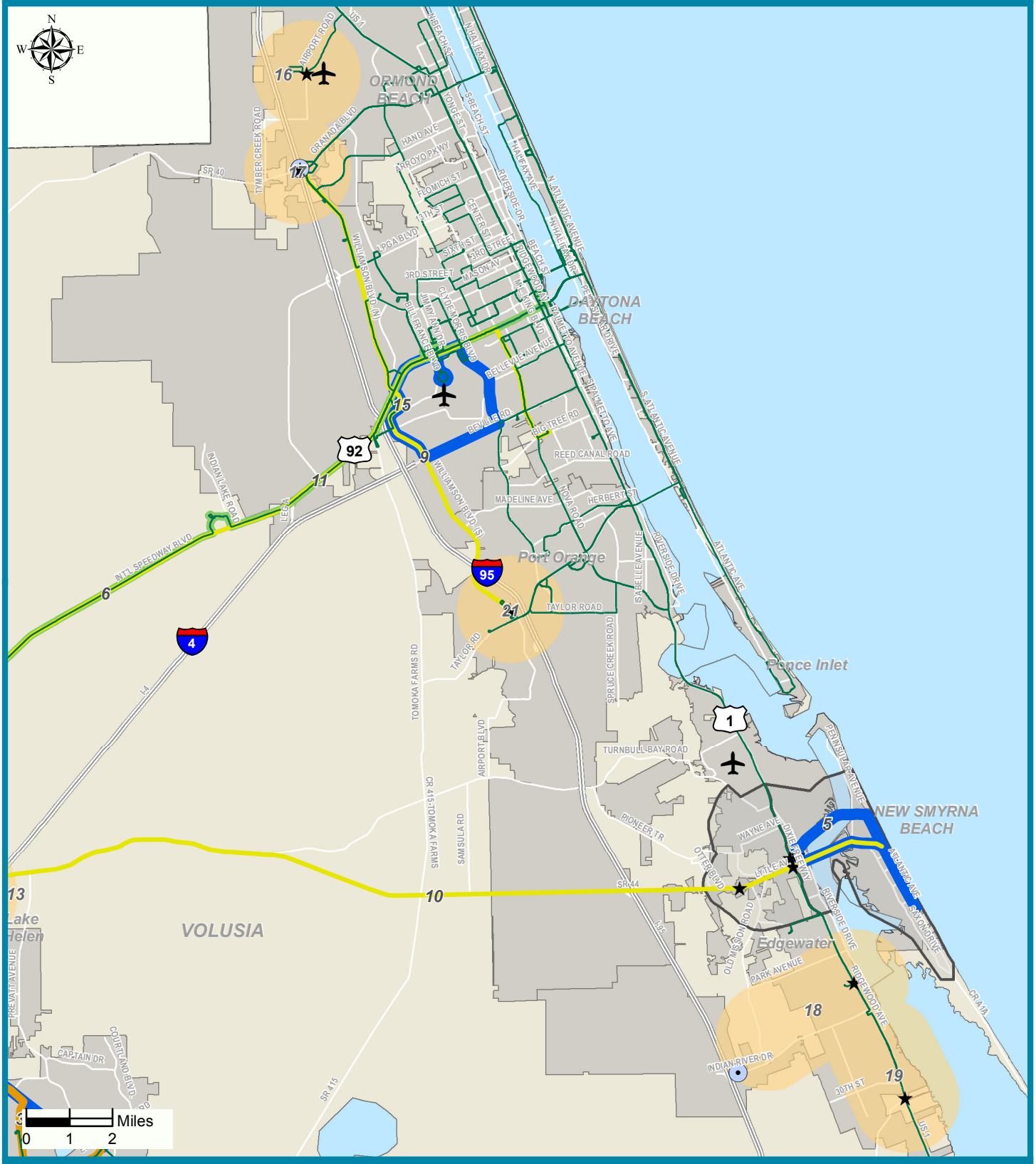
Tindale-Oliver & Associates, Inc. — Planning and Engineering

Source: Volusia County

Votran Transit Development Plan



Map 9-2: Votran 10-Year Potential Transit Projects (East County)

Legend

- SunRail Alignment
- Existing Votran Routes
- Proposed Route
- Existing Express Route
- Proposed Express Route
- SunRail Connections
- Existing Route Modification
- Park-and-Ride
- Deland Intermodal Facility
- ★ Flex Route Timepoints
- Proposed Flex Routes
- Flex Routes
- City Limits

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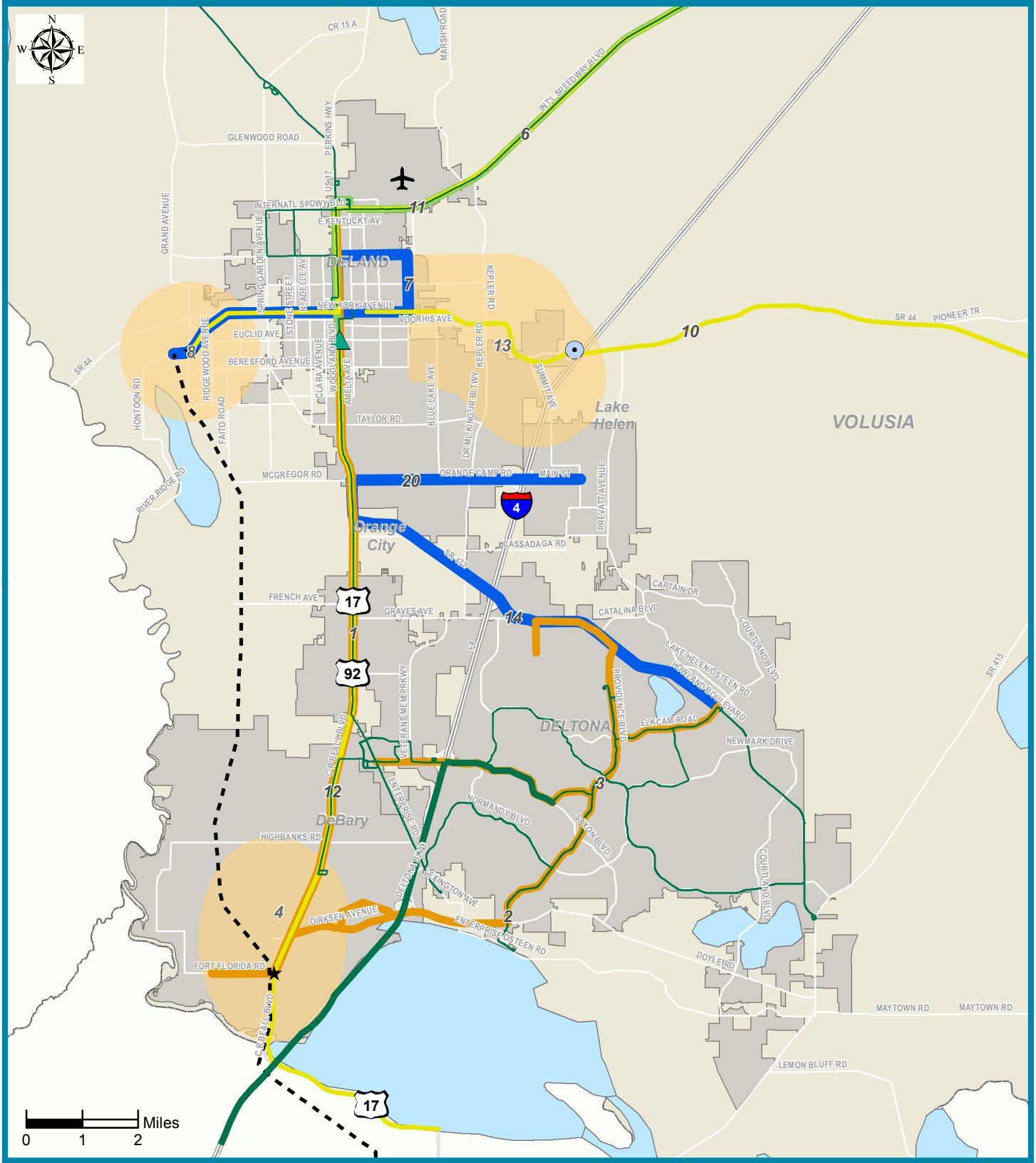
Source: Volusia County

Votran Transit Development Plan



Map 9-3: Votran 10-Year Potential Transit Projects (West County)

Legend

- SunRail Alignment
- Existing Votran Routes
- Proposed Route
- Existing Express Route
- Proposed Express Route
- SunRail Express Route
- Existing Route Modification
- Park-and-Ride
- Deland Intermodal Facility
- ★ Flex Route Timepoints
- Proposed Flex Routes
- Flex Routes
- City Limits

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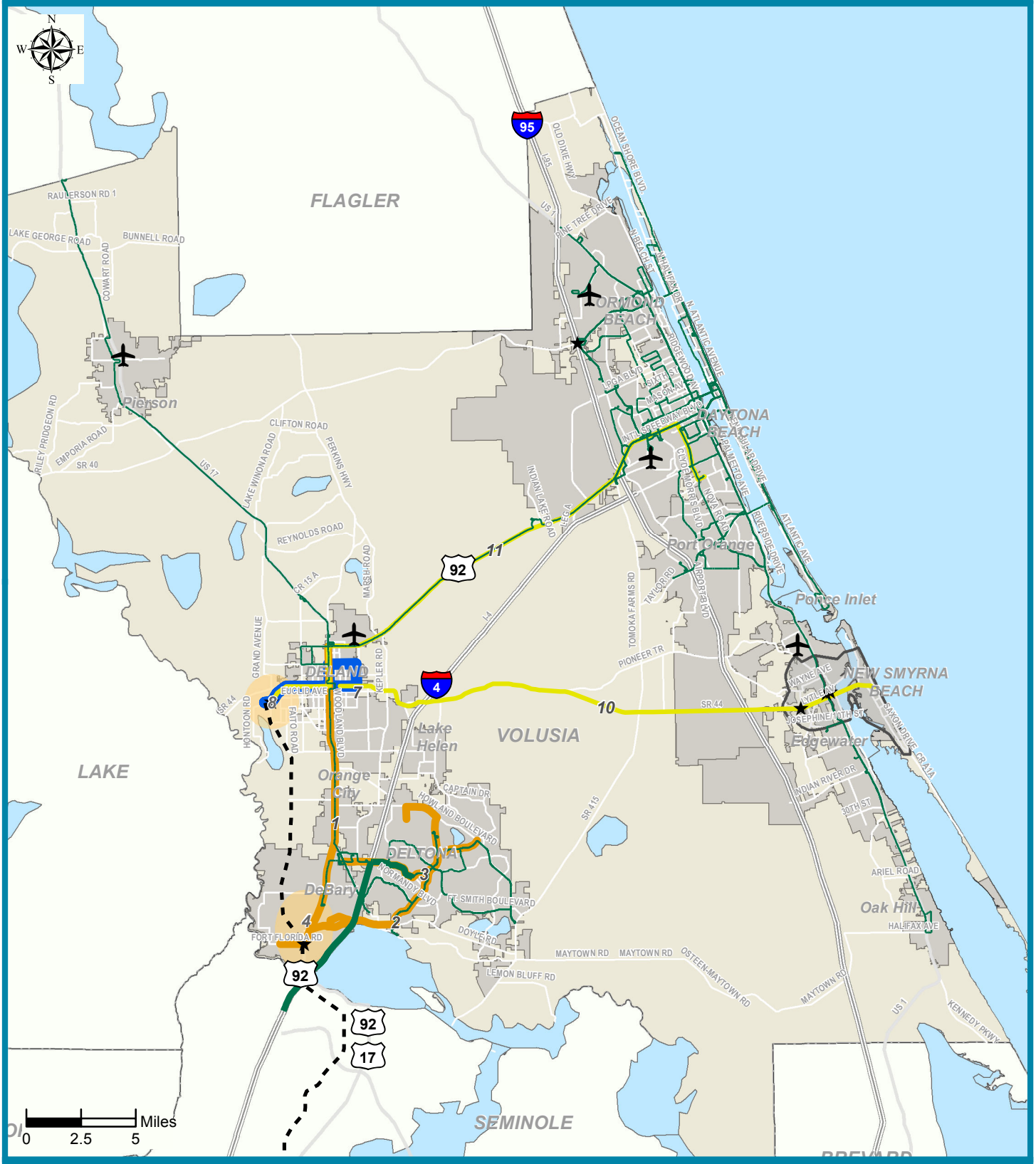
Source: Volusia County

Votran Transit Development Plan



Map 9-4: Votran SunRail-Related 10-Year Potential Transit Projects

Legend

- SunRail Alignment
- Existing Votran Routes
- Proposed Route
- Existing Express Route
- Proposed Express Route
- SunRail Connections
- SunRail Flex Route Timepoints
- Proposed SunRail Flex Routes
- Flex Routes
- City Limits

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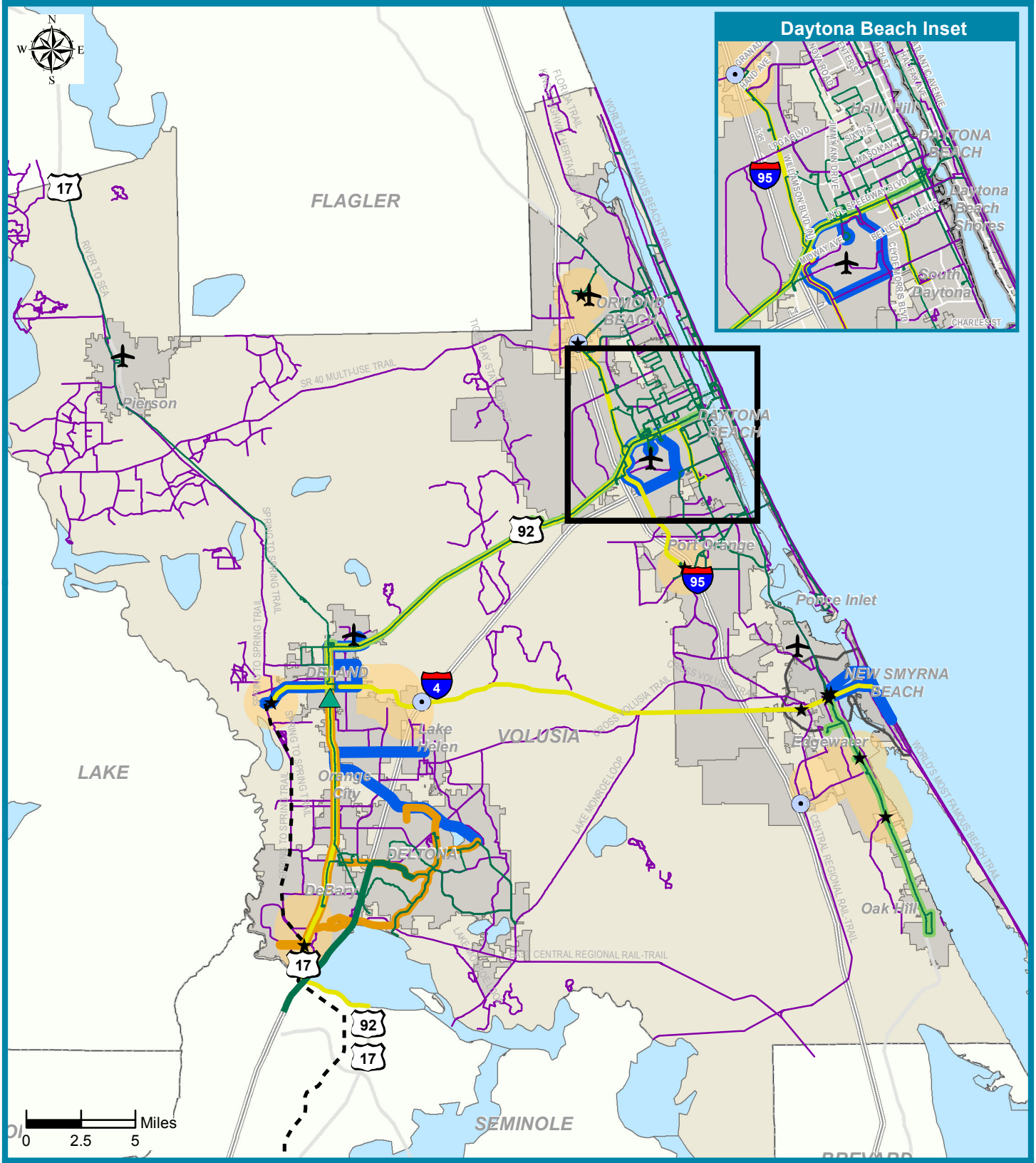
Source: Volusia County

Votran Transit Development Plan



Map 9-5: Trail Connectivity with Existing and Potential Transit Projects

Legend

- SunRail Alignment
- Existing Votran Routes
- Proposed Route
- Existing Express Route
- Proposed Express Route
- SunRail Connections
- Existing Route Modification
- Park-and-Ride
- Deland Intermodal Facility
- Flex Route Timepoints
- Trails
- Proposed Flex Routes
- Flex Routes
- City Limits

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Tindale-Oliver & Associates, Inc. — Planning and Engineering

Source: Volusia County

Table 9-4
TBEST Ridership Projections

Votran Service with Proposed Improvements - Ridership Projections by Route					
Routes	2012 Total Ridership	2016 Total Ridership	2021 Alternative Total Ridership	Absolute Change (2012-2021)	Growth Rate (2012-2021)
Beachside A1A Trolley	50,204	94,839	158,827	108,623	68%
Route 1	237,538	225,506	259,331	21,793	8%
Route 3	233,571	286,903	309,153	75,583	24%
Route 4	245,307	261,783	252,223	6,916	3%
Route 5	55,796	67,963	91,367	35,571	39%
Route 6	127,865	136,414	164,960	37,095	22%
Route 7	196,115	200,595	257,051	60,936	24%
Route 8	77,327	84,502	107,251	29,924	28%
Route 10	276,171	286,183	258,814	(17,357)	-7%
Route 11	182,449	185,408	230,614	48,165	21%
Route 12	142,886	149,176	188,009	45,123	24%
Route 15	193,260	192,942	176,677	(16,583)	-9%
Route 17	298,128	334,364	399,003	100,875	25%
Route 18	152,675	155,436	197,972	45,298	23%
Route 19	140,267	145,907	194,428	54,162	28%
Route 20 & SunRail Connection	190,270	231,950	306,079	115,809	38%
Route 21 & SunRail Connection	44,311	105,424	107,373	63,062	59%
Route 22	39,781	39,606	46,530	6,749	15%
Route 23 & SunRail Connection	39,323	76,623	80,466	41,143	51%
Route 24	15,946	27,383	79,651	63,705	80%
Route 40	56,154	57,659	71,391	15,238	21%
Route 41	36,904	38,285	59,996	23,092	38%
Route 42	14,784	19,933	20,366	5,582	27%
Route 43	9,855	9,524	10,752	897	8%
Route 60	216,813	296,293	349,968	133,155	38%
*Express Link 200	5,200	-		(5,200)	
17/92 to Lakeview	-	-	9,437	9,437	100%
Central Florida Regional Hospital Express	-	-	54,907	54,907	100%
DeBary SunRail Flex	-	91,816	84,067	84,067	100%
DeLand Amtrak/Airport	-	54,051	53,597	53,597	100%
DeLand Flex	-	-	35,559	35,559	100%
DeLand SunRail Flex	-	37,519	35,466	35,466	100%
DeLand to New Smyrna Beach	-	-	95,616	95,616	100%
Edgewater Flex North	-	-	85,967	85,967	100%
Edgewater Flex South	-	-	60,147	60,147	100%
ISB Circulator Circulator	-	-	100,898	100,898	100%
ISB DeLand SunRail to Votran Transfer Plaza	-	-	52,886	52,886	100%
New Smyrna Beach Trolley	-	22,175	21,832	21,832	100%
Ormond Beach Flex North	-	-	13,784	13,784	100%
Ormond Beach Flex South	-	-	29,171	29,171	100%
Pavilion at Port Orange Flex	-	-	99,887	99,887	100%
West Volusia to Dupont Lakes	-	-	28,090	28,090	100%
Williamson Express	-	-	31,856	31,856	100%
TOTALS	3,278,898	3,916,162	5,271,416	1,992,518	38%

*This route is anticipated to be discontinued when SunRail is operational.

SECTION 10: FINANCIAL PLAN

This section of the TDP presents capital and operating costs associated with implementation of the 10-year Needs Plan. Based on the current economic conditions and funding constraints, transit improvements included in the Needs Plan will not be implemented without securing additional revenue sources; therefore, a status quo plan is also included to present the operating and capital costs associated with maintaining the current level of service. Nevertheless, operating and capital costs for the Needs Plan have been prepared in the event that additional funding is identified.

TEN-YEAR TDP FINANCIAL PLAN

Numerous assumptions were made to project public transportation costs and revenues for the time period from FY 2012 through FY 2021. The assumptions made for operating and capital costs and revenues for service are based on a variety of factors, including NTD data, trend data, previous plans and agreements, and discussions with Votran staff. These assumptions are summarized below.

Cost Assumptions

- Based on the Consumer Price Index (CPI) data for the last 10 years, from 2001 to 2010, the average annual inflation rate is 2.38 percent. Therefore, an annual inflation rate of 2.4 percent is used for all operating cost projections for fixed-route service.

- Annual operating cost for fixed-route service is based on the total hours for each route multiplied by the costs per hour. The cost per hour was determined using FY 2009 total motorbus costs divided by total hours reported to the NTD. The result of $69.78 per hour of service was inflated by three years for the initial FY 2012 cost per hour. Each year service is in operation the inflation rate is applied to the costs of service.

- The annual operating cost for existing paratransit service is based on the FY 2009 NTD total costs of paratransit service (purchased and directly operated) inflated to FY 2012 using a 2.4 percent inflation rate for a FY 2012 cost of $6,480,165. Each year thereafter is increased based on the rate of inflation.

- Based on Votran historical data, cost for ADA complementary paratransit service for any new fixed-route improvement is assumed at 56 percent of the costs of that improvement each year the improvement operates.

- The number of replacement buses is determined based on FTA guidelines for vehicle retirement and fleet management recommendations. Based on the current cost of vehicles in Florida, an average unit cost of $583,096 is assumed for a fixed-route replacement bus or vehicle purchased to support new fixed-route and express service improvements. The cost of that vehicle includes all technological upgrades and operating components such as bike racks, fareboxes, video cameras with on-board digital video recorders, MDTs, APCs, and AVL. The unit cost for ADA complementary paratransit vehicles is assumed to be $85,000. The vehicle costs are in FY 2010 dollars and are assumed to increase two percent annually after FY 2010.

- A 20 percent spare ratio is factored into the vehicle replacement and expansion schedule.

- Express and flex-service operating costs are assumed at the same rate per hour as fixed-route service. Typically, flex-service is a lower costs option over fixed-route service where population density is lower, such as in suburban areas. However, there were no historical data of flex-services provided by Votran as it recently introduced this mode. To ensure that costs were not underestimated in the needs plan and to allow for a more in-depth review of flexible service versus fixed-route service in some areas at time of implementation, the fixed-route per hour costs was used.

Revenue Assumptions

- Revenues are based on varying sources including the FY 2010 adopted and FY 2012 estimated Volusia County budget, Florida CTD estimates, and the Volusia TPO June 28, 2011 Adopted Transportation Improvement Program (TIP).

- Federal operating revenues are based on the TIP through FY 2016, a two percent increase is assumed each year thereafter, with the exception of 5316 and 5317 grant programs.

- Federal operating revenues for grant programs 5316 and 5317 are consistent with the TIP through 2016 and remain constant throughout the TDP timeframe, since these programs are competitive in nature and funding levels are not guaranteed to Votran.

- State block grant revenues are based on the Transportation Improvement Program through FY 2016 and remain at that rate for the remaining years based on the uncertainty of increased state funding levels.

- "FDOT-Other" includes funding for Route 3 and 4 frequency improvements, transportation disadvantaged matching dollars, match for operational related planning studies, and funding the Express Link 200 service through 2013. This category is based on the annual allocations

identified in the TIP through FY 2016. FYs 2017–2021 removes state funding for Link 200 and frequency improvements

- FDOT – SunRail revenue is based on the operating costs identified in this plan for the three routes identified in the Letter of Understanding between FDOT and Votran and the corresponding complementary paratransit service for seven years from FY 2013.

- Florida CTD funding is based on the estimates available from the CTD for FY 2012 and 2013 and inflated by two percent each year thereafter.

- County funding is based on the estimated commitment identified in Volusia County's FY 2012 recommended budget document and remains constant through 2016. In 2017, revenue is increased by two percent each year.

- "Other" comprises farebox revenue estimates, interest, and miscellaneous income. Farebox revenues are estimated at 17 percent of the total operating cost for the 10-year period to maintain a steady farebox recovery level. Currently, Votran is experiencing a farebox recovery ratio of 19 percent, however, with increasing costs unless the fares are increased this level will decrease. The 17 percent rate was used to factor in inflation in case an increase is not approved. Based on public input, there were mixed reviews on fares. Some commented that the fare is too low, others that the fare is too high, especially based on average rider income level. Therefore, a conservative farebox was used. FY 2012 interest and miscellaneous funding were based on the Votran FY 2010 adopted budget. Inflation was applied beginning in FY 2013 at a rate of one percent, based on the fluctuating interest and investment rates currently being experienced.

- New revenue source can represent any of the potential revenue sources shown below or a stream of revenue not currently identified. It can be a combination of federal, state, and local funding, and/or private contributions. New revenue represents the total operating funding shortfall for the ten-year status quo plan divided by and allocated among the last five years of the plan. Based on existing service levels and transit funding, a shortfall has been identified. Efficiency measures have been made by Votran previously and will continue to be evaluated as appropriate, but it is clear that new funding is needed to maintain existing service before expansion can be considered.

Using these cost and revenue assumptions, the status quo financial plan was completed. With existing revenue services, Votran would experience a shortfall to even provide the current level of service. The cost feasible plan as displayed in Table 10-1 includes a new unidentified revenue source to balance the funding needs with costs for existing service. The new funding source is provided to cover the shortfall

and may come from any individual or combination of local, state, and federal sources. Table 10-2 presents the total cost of the needs plan, existing revenues, and the funding shortfall.

Table 10-1
Financial Plan (Status Quo)

Source	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	10-Year Total
OPERATING AND CAPITAL COSTS											
Operating Costs - Existing Service	$18,458,224	$18,897,529	$19,192,105	$19,648,878	$20,116,521	$20,595,294	$21,085,462	$21,587,296	$22,101,074	$22,627,079	$204,309,461
Total Operating Costs	**$18,458,224**	**$18,897,529**	**$19,192,105**	**$19,648,878**	**$20,116,521**	**$20,595,294**	**$21,085,462**	**$21,587,296**	**$22,101,074**	**$22,627,079**	**$204,309,461**
Capital Costs	$11,990,475	$5,670,144	$4,090,921	$11,224,119	$4,288,506	$756,813	$8,123,237	$1,728,720	$10,437,595	$4,265,529	$62,576,059
Total Capital Costs	**$11,990,475**	**$5,670,144**	**$4,090,921**	**$11,224,119**	**$4,288,506**	**$756,813**	**$8,123,237**	**$1,728,720**	**$10,437,595**	**$4,265,529**	**$62,576,059**
Total Costs	**$30,448,699**	**$24,567,674**	**$23,283,026**	**$30,872,997**	**$24,405,026**	**$21,352,106**	**$29,208,699**	**$23,316,016**	**$32,538,669**	**$26,892,608**	**$266,885,520**
OPERATING REVENUES											
Federal											
Section 5303 (TPO Planning Funds)	$152,443	$152,443	$152,443	$152,443	$152,443	$155,492	$158,602	$161,774	$165,009	$168,309	$1,571,401
Section 5307 for Operating	$3,501,148	$3,360,980	$3,476,370	$3,527,496	$3,527,400	$3,597,948	$3,669,907	$3,743,305	$3,818,171	$3,894,535	$36,117,260
Section 5311	$211,467	$222,041	$233,143	$244,799	$257,039	$262,180	$267,423	$272,772	$278,227	$283,792	$2,532,883
Section 5316	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$2,000,000
Section 5317	$300,000	$300,000	$300,000	$300,000	$300,000	$300,000	$300,000	$300,000	$300,000	$300,000	$3,000,000
State											
FDOT State Block Grants	$1,903,994	$1,988,607	$1,998,243	$2,020,301	$2,061,346	$2,061,346	$2,061,346	$2,061,346	$2,061,346	$2,061,346	$20,279,221
FDOT - Other	$180,091	$1,542,091	$90,091	$816,091	$816,091	$90,091	$90,091	$90,091	$90,091	$90,091	$3,894,910
FDOT - SunRail Routes	$0	$520,296	$532,679	$545,357	$558,337	$571,625	$585,230	$599,158	$0	$0	$3,912,682
State - TD Commission Funds	$842,892	$853,354	$870,421	$887,830	$905,586	$923,698	$942,172	$961,015	$980,236	$999,840	$9,167,043
County											
Existing County General Funds	$7,391,803	$7,391,803	$7,391,803	$7,391,803	$7,391,803	$7,539,639	$7,690,432	$7,844,240	$8,001,125	$8,161,148	$76,195,599
Other											
Farebox Revenues	$3,137,898	$3,212,580	$3,262,658	$3,340,309	$3,419,809	$3,501,200	$3,584,529	$3,669,840	$3,757,183	$3,846,603	$34,732,609
Advertising Revenues	$198,500	$202,470	$206,519	$210,650	$214,863	$219,160	$223,543	$228,014	$232,574	$237,226	$2,173,520
Interest on Investments & Miscellaneous Revenue	$95,000	$95,950	$96,910	$97,879	$98,857	$99,846	$100,844	$101,853	$102,871	$103,900	$993,910
*New Revenue Source for Future Implementation	$0	$0	$0	$0	$0	$1,415,104	$1,415,104	$1,415,104	$1,415,104	$1,415,104	$7,075,522
Total Operating Revenue	**$18,115,236**	**$20,042,615**	**$18,811,280**	**$19,734,957**	**$19,903,573**	**$20,937,329**	**$21,289,223**	**$21,648,513**	**$21,401,938**	**$21,761,895**	**$203,646,559**
Total Operating Cost	**$18,458,224**	**$18,897,529**	**$19,192,105**	**$19,648,878**	**$20,116,521**	**$20,595,294**	**$21,085,462**	**$21,587,296**	**$22,101,074**	**$22,627,079**	**$204,309,462**
Net Operating (Contingency / Need)	**($342,988)**	**$1,145,086**	**($380,825)**	**$86,079**	**($212,948)**	**$342,035**	**$203,761**	**$61,217**	**($699,136)**	**($865,184)**	**($662,903)**
CAPITAL REVENUES											
Federal	$5,432,172	$5,906,453	$7,099,101	$7,109,271	$4,472,600	$4,402,052	$4,330,093	$4,256,695	$4,181,829	$4,105,465	$51,295,731
State	$679,022	$738,307	$887,388	$888,659	$559,075	$550,257	$1,720,240	$532,087	$1,758,494	$1,778,360	$10,091,887
Local	$679,022	$738,307	$887,388	$888,659	$559,075	$550,257	$541,262	$532,087	$522,729	$513,183	$6,411,966
Total Capital Revenue	**$6,790,215**	**$7,383,066**	**$8,873,876**	**$8,886,589**	**$5,590,750**	**$5,502,565**	**$6,591,595**	**$5,320,869**	**$6,463,052**	**$6,397,009**	**$67,799,585**
Total Capital Cost	**$11,990,475**	**$5,670,144**	**$4,090,921**	**$11,224,119**	**$4,288,506**	**$756,813**	**$8,123,237**	**$1,728,720**	**$10,437,595**	**$4,265,529**	**$62,576,059**
Net Capital (Contingency / Need)	**($5,200,260)**	**$1,712,922**	**$4,782,955**	**($2,337,530)**	**$1,302,244**	**$4,745,752**	**($1,531,642)**	**$3,592,149**	**($3,974,544)**	**$2,131,480**	**$5,223,526**
TOTAL COST VS. LOCAL REVENUES											
Total Revenue	**$24,905,451**	**$27,425,681**	**$27,685,156**	**$28,621,546**	**$25,494,323**	**$26,439,894**	**$27,880,818**	**$26,969,382**	**$27,864,990**	**$28,158,904**	**$271,446,144**
Total Cost	**$30,448,699**	**$24,567,673**	**$23,283,026**	**$30,872,997**	**$24,405,027**	**$21,352,107**	**$29,208,699**	**$23,316,016**	**$32,538,669**	**$26,892,608**	**$266,885,521**
Net Total (Contingency / Need)	**($5,543,248)**	**$2,858,008**	**$4,402,130**	**($2,251,451)**	**$1,089,296**	**$5,087,787**	**($1,327,881)**	**$3,653,366**	**($4,673,680)**	**$1,266,296**	**$4,560,623**
Percent Local Government Share of Total Revenue	**32%**	**30%**	**30%**	**29%**	**31%**	**31%**	**30%**	**31%**	**31%**	**31%**	**30%**

***This funding source does not currently exists, but is necessary to maintain existing service levels.**

Table 10-2
Financial Plan (Needs Plan)

Source	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	10-Year Total
OPERATING AND CAPITAL COSTS											
Operating Costs - Existing Service	$18,458,224	$18,897,529	$19,192,105	$19,648,878	$20,116,521	$20,595,294	$21,085,462	$21,587,296	$22,101,074	$22,627,079	$204,309,461
Operating Costs - Enhancements	$478,000	$1,951,768	$2,563,364	$3,662,989	$5,800,443	$12,469,671	$20,286,875	$28,616,127	$36,616,221	$42,829,973	$155,275,431
Total Operating Costs	**$18,936,224**	**$20,849,297**	**$21,755,470**	**$23,311,866**	**$25,916,963**	**$33,064,965**	**$41,372,337**	**$50,203,423**	**$58,717,295**	**$65,457,052**	**$359,584,892**
Capital Costs	$11,990,475	$5,670,144	$4,090,921	$11,224,119	$4,288,506	$756,813	$8,123,237	$1,728,720	$10,437,595	$4,265,529	$62,576,059
Capital Costs - Enhancements	$171,179	$3,199,717	$2,149,866	$2,630,817	$1,760,646	$25,862,739	$10,194,316	$14,669,048	$6,813,852	$4,135,701	$71,587,880
Total Capital Costs	**$12,161,655**	**$8,869,861**	**$6,240,786**	**$13,854,936**	**$6,049,152**	**$26,619,551**	**$18,317,553**	**$16,397,768**	**$17,251,447**	**$8,401,230**	**$134,163,939**
Total Costs	**$31,097,878**	**$29,719,158**	**$27,996,256**	**$37,166,802**	**$31,966,115**	**$59,684,516**	**$59,689,890**	**$66,601,191**	**$75,968,742**	**$73,858,282**	**$493,748,831**
OPERATING AND CAPITAL REVENUE											
Total Operating Revenue	**$18,115,236**	**$20,042,615**	**$18,811,280**	**$19,734,957**	**$19,903,573**	**$20,937,329**	**$21,289,223**	**$21,648,513**	**$21,401,938**	**$21,761,895**	**$231,472,410**
Total Capital Revenue	**$6,790,215**	**$7,383,066**	**$8,873,876**	**$8,886,589**	**$5,590,750**	**$5,502,565**	**$6,591,595**	**$5,320,869**	**$6,463,052**	**$6,397,009**	**$99,884,885**
Total Revenue	**$24,905,451**	**$27,425,681**	**$27,685,156**	**$28,621,546**	**$25,494,323**	**$26,439,894**	**$27,880,818**	**$26,969,382**	**$27,864,990**	**$28,158,904**	**$271,446,144**
Net Capital (Contingency / Need)	**($6,192,427)**	**($2,293,477)**	**($311,100)**	**($8,545,256)**	**($6,471,792)**	**($33,244,622)**	**($31,809,072)**	**($39,631,810)**	**($48,103,752)**	**($45,699,379)**	**($222,302,687)**

Potential Revenue Sources

For Volusia to move forward with the 10-year vision plan, additional revenue sources will be necessary to address unfunded needs. The following list provides revenue sources that Votran may be eligible for during FY 2012-2021. It is important to note that during the planning horizon, additional sources of funding may surface that are not currently available. Therefore, it is vital that all agencies supporting public transit improvements continue to review funding opportunities and exhaust all available sources to support public transit enhancements.

- **Mobility Fee** – The County could implement a countywide mobility fee to support and fund mobility needs. The one-time payment for new development has the potential to fund transit capital and provide Votran with revenue to fund new transit infrastructure necessitated by growth and development.

- **Advertising Revenue** – Votran could increase its revenue through the sale of advertising at shelters. The sale of external advertising will require some local policy amendments.

- **Tourist Development Tax** – The County could increase or reallocate the existing Tourist Development Tax for the provision of transit services to the beaches, hotels, and major attractions.

- **TD Trust Fund** – A marketing campaign should be created to encourage Volusia County residents to voluntarily contribute to the TD Trust Fund when registering their vehicles or renewing their registrations. Funds collected in Volusia County would go towards additional trips for people using the coordinated system. Contributing to the trust fund may not generate as much revenue as in previous years due to raids on the transportation trust fund to assist the state with budgetary shortfalls.

- **Disabled Parking Volunteer Program** – A volunteer disabled parking enforcement program would allow citizen volunteers to issue citations to those illegally using disabled parking spaces. Fines collected through this program could be used as revenue for the County's paratransit service.

- **Bicycle Locker Rental Revenue** – Votran could generate additional revenue through the rental of bicycle lockers at transfer facilities and fixed-route bus stops.

- **Transportation Investment Generating Economic Recovery (TIGER)** – The County should investigate the use of TIGER funding, discretionary capital funding made available to assist with the funding of projects similar to those funded under the New Starts and Small Starts federal funding programs.

- **Transit Investments for Greenhouse Gas and Energy Reduction (TIGGER)** – The County should investigate the use of TIGGER funding, a discretionary grant program for public transportation projects that result in a decrease in a transit system's energy use or reduce a transit system's greenhouse gas emissions.

- **Charter County Surtax** – This sales tax up to 1 percent and outside of the 1 percent cap on other discretionary sales taxes must be approved by a majority vote of the electorate and can be used by a transit agency for the purposes of development, construction, equipment, maintenance, operation, supportive services, and related costs of a fixed-guideway rapid transit system.

- **Ad Valorem Increase** – Cities and the County could increase the millage rate to generate revenues to support transit operations. The County also has the ability to create municipal service taxing unit (MSTU) and levy a millage to support additional public transit service.

- **Gas Tax** – increases to the gas tax can be applied and used to fund operating and capital expenditures. However, as transit use increases and the rate at which gas is consumed fluctuates gas tax revenues may be an unstable source of funding for transit services. Currently, Volusia County employs all gas tax available, so a legislative change would be required to allow the County to generate any additional gas tax.

- **Sales Tax** – The County may levy the additional ½ cent of the discretionary sales tax to raise additional funds to fund transit capital costs.

- **Fare Increase** – Votran periodically should evaluate the fares charged for service to ensure that the cost of service to users is maintained at a reasonable percentage consistent with the provision of service and also to prevent significant increase in fares at once, due to minor increases not periodically occurring.

- **Private Partnerships** – Volusia County and the municipalities should work with Votran to continue to support transit services through new development. As new development occurs, the County and the cities should ensure that the appropriate contributions are being secured for capital and operating costs related to providing public transit service to development. Partnerships should be sought with major employers to create employee pass programs or make donations to support transit service to their workplaces.

- **Public Transportation Pilot Program Grants** – This grant opportunity is available through the SAFETEA-LU transportation bill and provides assistance for innovative activities to involve the public in the planning process for transportation. If awarded, this grant could assist in offsetting new marketing and/or public involvement efforts that might be implemented to support new and existing transit service.

- **Service Development Grants (SDGs)** – These grants are made available through FDOT to assist with new and innovative public transit operating and capital expenses when state funding is available for this program. FDOT suspended providing SDGs until state revenue is increased.

- **Job Access and Reverse Commute (JARC)** – These grants provide formula funding to support the development and maintenance of job access projects designed to transport welfare recipients and eligible low-income individuals to and from jobs and activities related to their employment. The current revenue assumes an annual allotment of JARC. Votran already has planned to use some of these funds, but can seek additional funding under these programs.

- **New Freedom (NF)** – These grants provide formula funding to support new public transportation services and public transportation alternatives beyond those required by the ADA. The current revenue assumes an annual allotment of NF. Votran already has planned to use some of these funds, but can seek additional funding under these programs.

- **Existing Funding Allocation Modification** – Modifying the allocation of existing XU funding also may provide additional revenues to support transit. This is a policy decision that would have to be undertaken by the TPO and its committees to approve a higher percentage of funding for transit versus roadways, maintenance, and bike and pedestrian activities. This option should maintain a coordinated transportation network if employed as all of these modes work together and none function well as sole entities.

- **Other** – During public involvement activities the following additional revenue options were mentioned to support transit that have not been reviewed for legal standing or local application:

    - Fee to use Volusia County waterways that would be designated for transit
    - Charges based on Vehicle Miles of Travel
    - Student fees for additional service connecting colleges and universities in Volusia County
    - Congestion pricing
    - Fee on sale of property – 1% from all real estate sales will be paid by the seller to Volusia County
    - County level vehicle registration or inspection fee

Appendix A: Private Transportation Providers

June 16, 2011

Dear Transportation Provider,

Votran is developing a ten year plan that guides, assesses, and sets a vision for transit service incorporating the local operating environment, public involvement, and funding availability. The study is being conducted by Tindale Oliver & Associates, Inc. and you will find more information at http://volusia.org/votran/tdp.htm .

As part of the Transit Development Plan (TDP), Votran must provide information on all public transportation providers within the Volusia County. Your agency has been identified as a transportation provider; therefore, you are being contacted. Please take a few moments to complete the attached survey and return to our attention to assist with this effort. You may return completed surveys as follows:

E-mail: tsirmons@tindaleoliver.com
Fax: (407) 657-9106, Attn: Tremayne Sirmons
USPS: Tindale-Oliver & Associates, Inc.
Attn: Tremayne Sirmons
1595 South Semoran Blvd., Suite 1540
Winter Park, FL 32792

Thank you for your participation and support of Votran. If you have any questions or need additional information please do not hesitate to contact the following:

Heather Blanck
Assistant General Manager of Planning,
Marketing, and Customer Service
Votran
950 Big Tree Road,
South Daytona, FL 32119-8815
Phone: (386) 756-7496 ext. 4112
Fax: (386) 756-7487
hblanck@co.volusia.fl.us

LaChant Barnett
Project Manager
Tindale-Oliver & Associates, Inc.
1595 S. Semoran Blvd., Suite 1540
Winter Park, FL 32792
Phone: (407) 657-9210
Fax: (407) 657-9106
lbarnett@tindaleoliver.com

Volusia County Transportation Service Provider Survey

Volusia County Transit (Votran) is in the process of developing its ten-year Transit Development Plan (TDP) major update, in accordance with the Florida Department of Transportation (FDOT) TDP Florida Rule 14-73.001. They are also updating the Transportation Disadvantaged Service Plan (TDSP), a requirement of the Florida Commission for the Transportation Disadvantaged. The State of Florida requires that Votran list all of the transportation providers within its geographic service area. Please take the time to fill out this survey and assist Votran in providing better transportation to all of Volusia County's residents.

1. What is the name of your company? _____

2. What type of service do you provide? (e.g., taxi, demand response, charter) _____

3. Please list the location of your facilities:

Name (e.g., dispatch)	Location	Age	Condition (please circle one)
_____	_____	_____	Excellent Good Fair Poor
_____	_____	_____	Excellent Good Fair Poor
_____	_____	_____	Excellent Good Fair Poor

4. What are the boundaries of your service area? _____

5. What are your hours of operation? _____

6. What is your fare per trip? _____

7. What is your service frequency? _____

8. What are your primary destinations? _____

9. What is your average annual ridership? _____

10. Please list your rolling stock

Type (e.g., car, van, bus)	Age	Number of Units	Special Accessories
_____			
_____			
_____			

11. Please list any other equipment used to perform daily operation (e.g., automotive repair)

Type	Age	Number of Units	Condition (please circle one)
_____	_____	_____	Excellent Good Fair Poor
_____	_____	_____	Excellent Good Fair Poor
_____	_____	_____	Excellent Good Fair Poor

12. Please list any affiliations with groups or programs involved with public transit:

Thank you for taking the time to complete this survey. Please return the completed survey to Tindale-Oliver & Associates, Inc., 1595 South Semoran Boulevard, Suite 1540, Winter Park, Florida 32792, or fax to (407) 657-9106, or email pwhitton@tindaleoliver.com. If the information is available in another format, please mail, fax, or e-mail the existing format without completing this questionnaire.

Table B-1

Private Transportation Providers (Completed Survey Questionnaire)

Agency/Provider	Type of Service	Facilities				Service Area Boundaries	Hours	Fare	Service Frequency	Primary Destinations	Average Annual Ridership	Rolling Stock		
		Name	Location	Age	Condition							Type	Age	# of Units
Tri-Star Taxi	Taxi	Dispatch	Daytona and Deltona	3	Excellent	Volusia County	24 hours / 7 days a week	Depends on the distance	Daily	As needed	-	Cars		2
												Van		7
Red Cab Service	Taxi	Dispatch	Deltona	7	Good	None	7 a.m. to 9 p.m.	Anywhere in Deltona $12	15-20 Months	Anywhere	Varies	Vans	10-11 years	2

Table B-2

Private Transportation Providers (No Response to Survey Questionnaire)

Southern Komfort Taxi
Yellow Cab/AAA Metro Taxi
Boulevard Taxi Inc/ Orange City Cab Company
A1A Ocean Drive Transport & Limo
Vip Taxi & Limo
American Taxi
A J Special Transportation
Akm Transport Svc
Deland Taxi
All Volusia Transportation
Steves Taxi Deland
Florida Cab & Shuttle
Aristocrat Palm Coast Taxi

Appendix B: Public Involvement Plan & FDOT Approval

Votran
Transit Development Plan

Public Involvement Plan

Prepared for:

Votran
950 Big Tree Road
South Daytona, Florida 32119
ph (386) 756-7496

May 2011

Tindale-Oliver & Associates, Inc.
1000 Ashley Drive, Suite 100
Tampa, FL 33602
ph (813) 224-8862, fax (813) 226-2106

1595 S. Semoran Boulevard, Suite 1540
Winter Park, Florida 32792
ph (407) 657-9210, fax (407) 657-9106

545 N. Broadway Avenue
Bartow, Florida 33830
ph (863) 533-8454, fax (863) 533-8481

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I. INTRODUCTION

The Volusia County transit agency, (Votran) is in the process of developing its ten-year Transit Development Plan (TDP) major update. The ten-year TDP is a strategic guide for public transportation in the community over the next ten years. The plan also represents the transit agency's vision for public transportation in its service area during the ten year time period. Several public involvement activities were selected for inclusion in the TDP's public involvement process to ensure the active participation of citizens in the community. Each of the public involvement activities are discussed in this section. The activities have been placed into two major categories: direct involvement activities and information distribution activities. Direct involvement activities refer to those that engage the public in "hands on" workshops and/or discussion about the project. The information distribution activities refer to public information materials that are used to inform the general public of project related topics and issues.

This Public Involvement Plan (PIP) has been developed as part of the TDP in order to formally document all planned public outreach activities to be undertaken. The Plan identifies numerous opportunities for public involvement as well as involvement on the part of local agencies and organizations. In accordance with the Florida Department of Transportation (FDOT) TDP Florida Rule 14-73.001, this Plan was developed to be consistent with the Volusia Transportation Planning Organization (TPO) Public Involvement Plan. Activities proposed within this PIP include coordination with the TDP review committee, stakeholder interviews, an on-board survey, discussion group workshops, and public workshops. The results of the public involvement activities will be used in the development of the ten-year transit plan as part of the major TDP update.

Title VI of the Civil Rights Act

Votran is committed to ensuring that no person shall on the basis of race, color or national origin, sex, age, disability, family or religious status, as provided by Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, and the Florida Civil Rights Act of 1992 be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination or retaliation under any Votran program or activity.

Environmental Justice

Title VI of the 1964 Civil Rights Act and the 1994 U.S. Department of Transportation (DOT) Order on Environmental Justice requires that the transportation planning process seeks to identify the needs of low-income and minority populations. Votran is committed to enhancing public involvement activities to identify and address the needs of minority and low-income populations in making transportation decisions.

Limited English Proficiency (LEP)

Public transportation providers receiving federal funding from the DOT have a responsibility, under Title VI of the Civil Rights Act of 1964, to take reasonable steps to ensure Limited English Proficiency (LEP) persons have meaningful access to benefits, services, information, and other important programs and activities. Persons with LEP include individuals who have a limited ability to read, write, speak, or understand English. Votran is committed to creating a positive environment for persons with LEP and ensuring that they have an opportunity for full participation in public involvement activities.

Special Accommodations

Persons who require special accommodations under the Americans with Disabilities Act (ADA) or persons who require translation service to participate in public meeting activities are requested to notify Votran at least forty-eight hours prior to workshops or meetings. Requests for alternative format materials or translation should be made in advance to accommodate the development and provision of these materials. Votran public meeting notices will include the Votran staff contact phone number and deadline date for requesting special accommodations at workshops or meetings.

II. PUBLIC INVOLVEMENT PLAN TECHNIQUES

Many public involvement techniques were selected for inclusion in the TDP PIP to maximize the potential for active participation by citizens in the community. Each of the techniques is briefly summarized in this Section. Direct involvement techniques refer to those that engage the public in "hands on" workshops and/or discussion about the project. Information distribution techniques refer to those that utilize the dissemination of public information materials to inform the general public of the project.

Direct Involvement Activities

Public involvement activities involving direct interaction with agencies, organizations, and/or citizens will be used throughout the study process. The direct involvement activities selected for the study include the following.

- Public Information Materials
- Stakeholder Interviews
- Public Workshops
- Review Committees Meetings
- TPO Committees and Board
- County Council
- City Commissions/Councils
- Surveys

The following section describes each direct involvement activity in detail. In addition, the number of times each activity is programmed to be performed is noted where appropriate.

- **Review Committee –** A TDP Review Committee will be assembled to provide project oversight and technical feedback throughout the TDP development process. The Review Committee is scheduled to meet four times throughout the course of the project. Private individuals residing in Volusia County and representatives from the following agencies and organizations may be selected as Review Committee members:

    - Votran
    - Volusia Transportation Planning Organization
    - Florida Department of Transportation District 5
    - Volusia County Growth and Resource Management
    - City of DeLand
    - City of Ormond Beach
    - City of Daytona Beach

- City of Deltona
- City of Port Orange
- Daytona Beach Partnership
- Center for Business Excellence
- University of Central Florida
- Transportation Disadvantaged Local Coordinating Board
- County Resident

- **Stakeholder Interviews –** Stakeholder interviews will be conducted to solicit ideas, concerns, and comments from key individuals/organizations, community leaders, and other individuals identified by Votran to obtain their opinions and ideas regarding current and future transit services in Volusia County. Interviews are planned to be held with twenty-five stakeholders and will seek to assess the stakeholder's views of current transit service, implementing and funding new transit projects, as well as identifying transit issues that are of greatest local concern. The interviews will be conducted either in-person or by telephone and will require between thirty minutes to an hour of the stakeholder's time. A brief questionnaire will be developed to include several open-ended questions pertaining to the stakeholder's perceptions of existing transit services, as well as their opinions regarding the future of public transportation in the community. The stakeholder questions can be provided in advance for review prior to the interview. Representatives from the following agencies and organizations may be selected for stakeholder interview:

  - Tourist Development Council
  - Transportation Disadvantaged Local Coordinating Board
  - Central Florida Commuter Rail Commission
  - Volusia County Council, Manager, and Staff
  - Hotel & Lodging Association of Volusia County
  - International Speedway Boulevard Coalition
  - Daytona Beach Downtown Redevelopment Authority
  - Daytona Regional Chamber of Commerce
  - Mayors or Designated Representatives of Volusia County's Municipalities
    - City of Daytona Beach
    - City of DeBary
    - City of DeLand
    - City of Deltona
    - City of Orange City
    - City of Ormond Beach
    - City of New Smyrna Beach
    - City of Port Orange
    - City of South Daytona Beach

- City of Daytona Beach Shores
- City of Holly Hill

- **Transit Passenger Surveys –** A system-wide on-board survey of Votran fixed-route bus patrons will be designed and conducted to inquire about passenger demographics, travel behavior, satisfaction, needs, and issues. On-board surveyors will help facilitate the survey administration process by distributing and collecting survey questionnaires.

- **Public Workshops –** Public workshops have proven to be an effective technique for obtaining substantive public participation in the planning process and will be the primary mechanism to obtain input from the general public regarding the transit needs of Volusia County. The workshop locations will be selected in an attempt to distribute meetings across the Votran geographic service area. If necessary, additional public involvement activities may be conducted to reach the greatest number of participants throughout the Votran service area.

  The first set of workshops will occur early in the process. The purpose of the first set of workshops will be to acquire additional input on the perceptions of transit service and mobility needs in the study area. The specific times and locations for these workshops are provided below:

  1) **Votran, Meeting Room**
     March 29, 2011 from 4:30 p.m. to 6:30 p.m.
     950 Big Tree Road
     South Daytona, Florida 32119

  2) **Volusia County Administration Center, Training Room**
     March 30, 2011 from 4:30 p.m. to 6:30 p.m.
     123 W. Indianan Avenue
     DeLand, Florida 32720

  The second set of public workshops is anticipated to occur later in the process once the potential transit alternative improvements and solutions have been identified. This will allow the public to provide input on the prioritization of the proposed alternatives in the final TDP implementation plan. Public workshop participants will have 45 days after each workshop to submit comments on the materials presented.

  The public workshops conducted as part of the study process will be an "open-house"-style workshop and may employ one or more public participation techniques (presentations, surveys, dot polling, visual displays, and other informational materials). The types of strategies employed will depend on the workshop topics and venues.

  - *Open House Workshops* – An open house is typically the most flexible public workshop that allows participants to tour staged workshop stations at their own

pace. Workshop stations will be designed to address separate issues. This public involvement technique is typically designed to be informal and does not require an invitation to participate. It also may be appropriate to coordinate some of the public workshops with other scheduled events to help spur attendance. This will provide opportunities for all interested parties to be actively engaged in the public involvement process for the major TDP update.

The detailed schedule of the second set of meetings will be determined in conjunction with Votran staff. At a minimum, these workshops shall be given public notice in accordance with Volusia County, Votran and the TPO's public notification requirements. However, it is anticipated that additional marketing materials will be developed to promote the public workshops and information about the public workshops will likely be posted in County government buildings, public libraries, municipal governments, recreation centers, community centers, newspapers, websites, and on board buses within the County.

- **Discussion Group Workshops –** To supplement the information collected during the previously listed public involvement activities, four discussion groups will be held to support the TDP update process. Two of the discussion groups will be conducted using current transit riders to help represent the "user" perspective. Participants of the transit-user discussion group will be recruited through flyers on-board the Votran buses. In addition, two additional discussion group meetings will be held consisting of members from the business, health, and education communities, as well as non-profit social service agencies and local chambers of commerce, to help represent the view of informed "non-users". Votran staff will work with the Review Committee to identify and recruit potential "user" and "non-user" participants and preferred venues for the workshops.

- **Public Presentations –** A total of six presentations of the TDP will be made at the direction of Votran staff and may include:

    - *Volusia County Council* – The County Council is the governing body for Volusia County Government. The Board is responsible for creating policies that establish the County's budget, enacting new laws, ruling on rezoning applications and other land-use cases, and appointing the County Manager and the County Attorney.

    - *TPO Board* – The TPO Board is composed of decision-makers responsible for regional transportation planning in Volusia County. Consequently, it is critical to keep them informed throughout the project and to obtain their input and guidance for the study.

- *TPO Technical Coordinating Committee* – The TCC is composed of technically qualified representatives of agencies responsible for local planning and engineering activities throughout Volusia County. It is the responsibility of the TCC:

    - To coordinate transportation planning and programming activities;
    - To review transportation studies and reports;
    - To review work programs and transportation improvement programs; and
    - To provide technical recommendations to the TPO on transportation issues.

- *TPO Citizens Advisory Committee* – The role of the CAC is to represent the views of Volusia's citizens in regards to transportation-related matters. The CAC is composed of citizens appointed by the TPO Board and Votran representing the Community Transportation Coordinator.

Presentations may also be made to city councils or commissions in Volusia County, chambers of commerce, coalitions, and local agency boards as directed by Votran staff in conjunction with the Review Committee.

- **Peer Review and Involvement –** In addition to Votran, the public involvement process for the TDP update will also include the involvement of other entities, such as FDOT, the regional workforce board, and other interested parties, as appropriate. These parties will be invited to all public participation events and provided an opportunity to review and comment on the draft TDP.

Information Distribution Activities

The information distribution activities selected for the TDP are listed and discussed below.

- **Public Involvement Plan –** The public involvement plan will be made available to Votran staff for placement on the Votran web site.

- **Press Releases/Flyers for Public Workshops –** Press releases and flyers will be prepared prior to each of the public workshops to notify citizens and encourage participation. Flyers will be made available in a variety of formats and forums to be determined by Votran and the Review Committee and will be provided to Votran staff for distribution. In addition, the workshops will be noticed in a newspaper of general circulation, which may include but is not limited to one of the following: the Daytona Beach News Journal and West Volusia Beacon.

- **Public Broadcast Radio and Television –** To the degree feasible, TDP meetings and other project announcements will be advertised on public broadcast radio and television.

- **Reports and Information for Votran Website –** Technical reports, study and workshop materials, and other information will be provided to Votran staff for posting on the Votran website.

- **Notification of General Public –** The general public will be notified of public meetings through a number of methods: legal advertisement, Votran website, flyers, and press releases.

- **Mailing/Contact Lists –** Votran mailing list will enable the distribution of project-related information throughout the development of the TDP. Mailings will be designed to reach diverse populations throughout the County and the study area. Specifically, an effort will be made to reach local stakeholder groups with study materials. Such groups include the various chambers of commerce throughout the community and the Friends of Votran e-mail group.

- **Additional Presentation and Workshop Materials –** Public involvement materials developed for the public involvement plan will be made available to Votran staff and Review Committee members for use at their discretion at other public involvement events and opportunities. Materials include presentations, presentation boards, surveys, and other tools and informational resources used to gather public input throughout the study process.

III. MEASURES OF EFFECTIVENESS

Effectiveness measures have been established to evaluate the effectiveness of the public involvement process. For the purposes of this Public Involvement Plan, effectiveness measures will be defined as follows:

- **Total number of persons engaged** – This will be measured by using a sign-in/attendance log to monitor attendance for any discussion group, Review Committee meeting, and public workshop.

- **Total number of public involvement events** – The total number of public involvement events will be documented within the public involvement section of the TDP. In addition, the public meeting locations will be depicted on a map within the Votran geographic service area.

- **Total number of persons surveyed** – The total number of persons surveyed will be documented in the public involvement section of the TDP.

- **Total visits to website to complete surveys** – Surveys accessed and completed on the Votran website will be documented and included in the public involvement section of the TDP.

- **Review Committee Survey** – A survey will be provided to all Review Committee members to allow them to rate their participation and the value of the review committee in the TDP development process.

- **Total service recommendations in ten-year plan that result from public involvement** – Public involvement participants will be given comment forms to document comments and/or recommendations. All questions that cannot be answered at the meetings will be responded to in writing within 30 days, provided the person provides their name and address.

IV. PUBLIC INVOLVEMENT SCHEDULE

A project schedule was developed for the public participation portions of the study. This project schedule is provided in Table 1. Please note that the dates for specific meetings and public involvement activities are approximate and subject to change pending guidance from Votran and the project Review Committee.

Table 1
Preliminary Project Public Involvement Schedule

Public Involvement Activity	Date
On-Board Survey	March 28, 2011
Public Workshops (1st set)	March 29 and 30, 2011
Stakeholder Interviews	March 2011
Review Committee Meeting #1	March 10, 2011
Agency Discussion Group	April 2011
Transit Users Discussion Group	April 2011
Review Committee Meeting #2	May 2011
Review Committee Meeting #3	June 2011
Public Workshops (2nd set)	June 2011
Review Committee Meeting #4	July 2011
Presentation #1 (Direction of VOTRAN Staff)	June 2011
Presentation #2 (Direction of VOTRAN Staff)	June 2011
Presentation #3 (Direction of VOTRAN Staff)	June 2011
Presentation #4 (Direction of VOTRAN Staff)	June 2011
Presentation Draft Final TDP for Approval (TPO Board)	July 2011
Presentation Draft Final TDP for Approval Volusia County Council	July 2011
All Public Comments Due	August 1, 2011

Florida Department of Transportation

RICK SCOTT
GOVERNOR

133 S. Semoran Blvd.
Orlando, Florida 32807

ANATH PRASAD, P.E.
SECRETARY

May 13, 2011

Ms. LaChant Barnett
Project Manager
Tindale-Oliver & Associates, Inc.
1595 S. Semoran Blvd., Suite 1540
Winter Park, FL 32792

Subject: Votran FY 2012-2021 Transit Development Plan

Dear Ms. Barnett,

We have reviewed the Public Involvement Plan submitted for the Votran Transit Development Plan and found it to be in compliance with Rule Chapter 14-73.

Please feel free to contact me at 407-482-7860 if you require additional information.

Sincerely,

Diane Poitras

Diane Poitras
Transit Analyst
District Five

Appendix C: Public Outreach

Votran
Transit Development Plan (TDP)
Public Workshop Survey

Please take the time to complete this short survey. Responses will be used to develop the Votran TDP. The TDP will guide Volusia County's public transportation over the next ten years. Please circle your answers.

1. Are you aware of Votran and its services? Yes No

2. Is there a need for additional transit service in Volusia County? Yes No

3. Do you use Votran? Yes No

4. What is your perception of Votran? Good Satisfactory Poor

5. What type of transit services would you like to see more of in the Volusia County area?
   (Please circle only one answer)
   More Frequent Bus Service Express Bus *(Travels from point A to point B without stopping*)
   Trolley *(Streetcar powered electrically and typically operated on city streets)*
   Increased Weekend Service Late Evening Service

6. Do you believe there is a traffic congestion problem in Volusia County? Yes No

7. Are you willing to pay additional local taxes for an expanded transit system? Yes No

8. Is more regional transportation needed to connect Volusia County with other counties or cities?
   If yes, which counties or cities. Yes _____ No

9. At some point in the future, do you envision that rail transit will be needed in the county? If so, when should it be implemented and which locations should be the major destinations?
   Yes _____
   No

10. What type of overall improvement do you believe would be more important for Votran to pursue in the near future? (Please check (√) only one answer)
    ____Improving the frequency of existing bus routes
    ____Extending bus service to new areas

11. If you are not a current Votran user, what would interest you in using the Votran system?
    Increased Frequencies Extended Evening Service Increased Weekend Service
    Connections to new areas, where_____ Connections to recreational opportunities
    Other _____

Thank you for completing this survey. Please place your completed survey at the designated location or mail your written comments to Tindale-Oliver & Associates, Inc., Attn: Tricia Whitton, 1595 South Semoran Boulevard, Suite 1540, Winter Park, Florida 32792 or pwhitton@tindaleoliver.com by May 10, 2011.

VOTRAN TDP STAKEHOLDER INTERVIEW QUESTIONS

1. Are you currently aware of Volusia County's public transit system (Votran) and its services?

2. What groups of travelers seem to experience the most difficult transportation conditions (the disabled, low-income, elderly, commuters, etc)? Why?

3. Is there a need for additional transit service in Volusia County?

4. Who do you believe uses the transit system? (Workers, Students, Unemployed, Elderly, Tourists/Visitors)

5. What do you think are the most significant issues facing transit users?

6. What do you think are the most significant issues facing automobile travelers?

7. What type of transit services would you like to see more of in Volusia County? (More Frequent Fixed-Route, Express Bus, Trolley, Demand Response, Increased Weekend Service, Late Evening Service)

8. Are you willing to pay additional local taxes for an expanded transit system?

9. Is the public perception of Votran good, satisfactory, or poor?

10. What are reasonable passenger fares for transit service? (please specify per trip or other)

11. What do you believe is the purpose of most transit trips? (Medical, Shopping, Recreation, Work, School)

12. Do you use Votran? Why? Why not?

13. Do you believe there is a congestion problem in Volusia County? (If Yes, go to the next question, if No skip to question 19)

14. Do you believe that public transportation can relieve congestion in Volusia County?

15. What efforts or initiatives are you aware of that have been undertaken in the last five years to address traffic congestion in the region (locally)?

16. (Of those listed above), which would you describe as having been successful and why?

17. (Of those listed above), which would you describe as having been unsuccessful and why?

18. What efforts would you like to see undertaken, to address traffic congestion in this region?

19. What are the major destinations within your immediate community?

20. What are the major destinations outside of your community where people are traveling to, from your area?

21. What additional steps do you feel should be taken to increase the use of public transit in Volusia County?

22. Is more regional transportation needed to connect Volusia County with surrounding areas (Flagler, Brevard, Seminole, Lake, Putnam, and Marion counties)?

23. What types of local funding sources should be used to increase transit service in the future? (i.e. private partnerships, advertising revenues, fare increases, ad valorem tax, sales tax, gas tax)

24. Where do you see Votran ten years from now?

25. Do you believe Votran has done an effective job providing transit service?

26. Do you believe Votran has done an effective job marketing transit service options?

27. In addition to the planned SunRail system, do you envision that in the future rail transit will be needed in the city/county? If so, when should it be implemented and where should it go?

28. If any, what improvements should Votran implement to improve connectivity with the planned SunRail?

29. What type of transit service is best suited for the growing development around ISB and the airport, stretching as far west as Williamson, south to Beville road and eastward to Clyde Morris?

Votran & Volusia Transportation Planning Organization
Transit Development Plan (TDP) & Transportation Disadvantaged Service Plan (TDSP)
Review Committee Meeting Summary
March 10, 2011

Attendees:

Judy Pizzo, FDOT
Diane Poitras, FDOT
Ric Goss, Ormond Beach
Andre Anderson, CBE
Bill McCord, Port Orange
R. Sans Lassiter, LTG, VCARD, DBPA
Ron Paradise, Deltona
Becky Mendez, Volusia County
Mike Holmes, DeLand
Carole Hinkley, VTPO
David Dixon, TDLCB
Richard Walton, CODB
Karen Jans, UCF, ISB
Ken Fischer, Votran
Heather Blanck, Votran
Liz Suchsland, Votran
Joel Rey, TOA
Tricia Whitton, TOA
LaChant Barnett, TOA

- The meeting opened with a welcome and introductions.
- Joel explained the role of the review committee as advisory in nature and then discussed their role in the TDP & TDSP process. Joel also discussed the components of a TDP and TDSP.
- Next the group participated in an exercise where they gave one sentence or word that would encompass their transit vision or an item they wanted to have included in the TDP. The following were responses:
    - Land use patterns – enhance density
    - Connectivity to SunRail
    - Multi-modal component of traffic impact studies
    - Mobility fee instead of road impact fee
    - Better east/west connectivity – 17-92 corridor
    - Look at groups, how are we moving people? (students, tourists, residents, etc.)
    - Pursue discretionary riders
    - Bus stop information improvements – shelters, accessibility, schedules
    - Develop working model. Planning for comp. plans to encourage transit
    - TCEAs relate to both land areas and roads
    - Enhanced multi-modal opportunities on I-4 corridor
    - Link/coordinate transit and county transportation department
    - Transit must be attractive
    - Need a coordinated transit network
    - Accessibility of SunRail and paratransit connectivity to SunRail
    - More consideration of flex service routes
    - ADA accessibility
    - Special event services (be cognizant of charter bus regulations)

    - Branding of services
    - Private-Public-Partnerships
    - Connectivity to employers with transit
    - Focus on green aspects
    - Connect with economic development
- The public involvement plan (PIP) was identified as one of the handouts and the committee was asked to review the PIP and provide comments within two weeks. If there are no comments the PIP will be transmitted to the Florida Department of Transportation (FDOT) District 5.
- The group was notified of the upcoming public workshops and told that a flier was provided that they should share the information with their respective agencies/groups.
- A webpage will be developed to communicate information to the public and get input. The review committee expressed that web communication is increasing and people are moving away from traditional forms of communicating like attending workshops.
- The peer agency systems were identified and discussion ensued regarding other transit agencies servicing a similar geographic area with the East/West populations. Joel mentioned that Pasco County had a similar make-up and could be reviewed with the peers. The group was advised that the peers were selected based on geographic area, population, vehicles operated in maximum service, and service supplied characteristics.
- A schedule of documents was briefly discussed.
- The schedule of future review committee meetings being the 2nd Thursday of the month was provided as an option.
- A gaps and overlaps exercise was completed to allow the group to identify items they felt were gaps in transportation and some potential solutions. The group responded with the following:
    - Similar comments as made in the first exercise
    - Connectivity and service from the DeLand area to the Daytona Beach Airport
    - Connections from DeLand/Deltona to SunRail stations
    - Span of service for east/west connectivity (not late enough)
    - Regional connectivity Sanford Airport and Orlando VA
    - Travel training
    - Infrastructure issues – lack of sidewalks, lack on information on transit service especially at stops
    - Shelter upgrades
    - Schedule availability
    - Focus groups with key populations to identify needs
    - Park-N-Ride lots in conjunction with express service
    - Lack of bike trails and paths
    - Frequency of service (should be ½ hour or less) – focus on key routes
    - Link transit to economic development opportunities.
- The following action items resulted from the meeting:
    - Stakeholders list to be e-mailed to review committee meeting – TOA
    - Peers will be e-mailed to review committee with Votran highlighted – TOA

    - Votran webpage to be developed – TOA in conjunction with Votran
    - Review committee meeting summary – TOA
    - Comments if any to be provided on PIP – committee members
- Meeting concluded

Appendix D: On-Board Survey Instrument

VOTRAN On-Board Survey

VOTRAN is planning for the future and needs your feedback to help improve transit services. Your participation in this survey is anonymous and voluntary. If you do not wish to participate, please return the blank form to the surveyor. If you choose to fill out a survey, please check (✓) the correct item, write out, or circle your answers. THANK YOU FOR YOUR COOPERATION.

This survey is about the ONE-WAY transit trip you are making now!

Example of ONE-WAY Bus Trip

1. What **TYPE OF PLACE** are you **COMING FROM NOW?** (Please ✓ the starting place of this **ONE-WAY TRIP**) (Please ✓ only one)

1__ Work
2__ Medical
3__ Social/Personal
4__ School (K-12)
5__ College/Tech
6__ Recreation
7__ Shopping/Errands
8__ Home
9__ Other (specify)_____

2. What is the **ADDRESS OR NAME** of the **PLACE, BUSINESS, OR BUILDING** you are **COMING FROM NOW**?

Address or Intersection (e.g., 1700 West International Speedway Boulevard)

Place, Business, or Building Name (e.g., Volusia Mall)

City State Zip

3. How did you get to the first bus stop for this **ONE-WAY TRIP**? (Please ✓ only ONE)

1__ Walked ➡ *# blocks?* ____
2__ Bicycled ➡ *# blocks?* ____
3__ Drove & parked ➡ *# miles?*____
4__ Was dropped off
5__ Rode with someone who parked
6__ Other (specify) _____

4. LIST ALL of the BUS ROUTES in the EXACT ORDER you will use to make THIS ONE-WAY TRIP:

FIRST Bus Route ➡ **SECOND** Bus Route ➡ **THIRD** Bus Route ➡ **FOURTH** Bus Route

5. What **TYPE OF PLACE** are you **GOING TO NOW** on this **ONE-WAY TRIP**? (Please ✓ the ending place of this **ONE-WAY TRIP**) (Please ✓ only ONE)

1__ Work
2__ Medical
3__ Social/Personal
4__ School (K-12)
5__ College/Tech
6__ Recreation
7__ Shopping/Errands
8__ Home
9__ Other (specify)_____

6. What is the **NAME OR ADDRESS** of the **PLACE, BUSINESS, OR BUILDING** you are **GOING TO NOW**?

Address or Intersection (e.g., 1700 West International Speedway Boulevard)

Place, Business, or Building Name (e.g., Volusia Mall)

City State Zip

7. After you get off the last bus you will use to complete this **ONE-WAY TRIP**, how will you get to your **FINAL DESTINATION** ? (Please ✓ only ONE)

1__ Walk ➡ *# blocks?* ____
2__ Bicycle ➡ *# blocks?* ____
3__ Drive ➡ *# miles?*____
4__ This stop is the final destination
5__ Will be picked up
6__ Ride with someone who parked
7__ Other (specify) _____

8. How would you make this one-way trip if not by bus? (Please ✓ only ONE)

1__ Drive
2__ Taxi
3__ Walk
4__ Wouldn't make trip
5__ Bicycle
6__ VOTRAN Gold Services
7__ Ride with someone who does not live with you
8__ Ride with someone who lives with you
9__ Other (Specify)_____

9. On average, how many days a week do you ride the bus?

1__ 1 2__ 2 3__ 3 4__ 4 5__ 5 6__ 6 7__ 7
8__ Once a month or less
9__ First time riding

10. How long have you been using VOTRAN bus service?

1__ This is the first day
2__ Less than one month
3__ 1 month to 6 months
4__ 7 months to 1 year
5__ 1 to 2 years
6__ 2 years to 4 years
7__ More than 4 years

PLEASE CONTINUE ON BACK OF SURVEY ➡

11. How satisfied are you with each of the following? Circle a score for each characteristic.

Please indicate	Very Satisfied		Neutral		Very Unsatisfied
a. Your overall satisfaction with VOTRAN	5	4	3	2	1
b. Frequency of service (how often buses run)	5	4	3	2	1
c. Your ability to get where you want to go using the bus	5	4	3	2	1
d. The number of times you have to transfer	5	4	3	2	1
e. How easy it is to transfer between buses	5	4	3	2	1
f. Time of day the *earliest* buses run on **weekdays**	5	4	3	2	1
g. Time of day the *latest* buses run on **weekdays**	5	4	3	2	1
h. Availability of Sunday service	5	4	3	2	1
i. Safety/Security at the bus stop	5	4	3	2	1
j. Other, please specify_____	5	4	3	2	1

12. Considering Question 11 above, list the three areas that are most important to you when riding the bus: _____, _____, and _____

13. Your age is?

1__ 15 or under
2__ 16 to 24
3__ 25 to 34
4__ 35 to 44
5__ 45 to 54
6__ 55 to 64
7__ 65 to 74
8__ Over 74

14. What is your gender? 1__ Male 2__ Female

15. What is your race or ethnic heritage? (Please ✓ only ONE)

1__ White 2__ Black 3__ Hispanic 4__ Asian 5__ Other_____

16. What was the range of your total household income for 2010?

1__ Under $10,000
2__ $10,000 to $19,999
3__ $20,000 to $29,999
4__ $30,000 to $39,999
5__ $40,000 to $49,999
6__ $50,000 or more

17. Do you have a valid driver's license? 1__ Yes 2__ No

18. Do you have access to a car or other personal vehicle that you could have used to make **THIS** trip?

1__ Yes 2__ No

19. How many working vehicles (cars, motorcycles, trucks, vans) are at your home? (✓only ONE)

1__ 1 2__ 2 3__ 3 or more 4__ None

20. How many months out of the year do you reside in Volusia County?

1__ Less than one month
2__ Visitor/Tourist
3__ 1-6 months
4__ Permanent Resident
5__ 6 to 12 months

21. What is the zip code of your permanent residence? _____

22. What type of fare do you usually pay when you ride the bus?

1__ Adult Fare ($1.25)
2__ Discounted Fare (60¢)
3__ All Day Pass ($3.00/$1.50)
4__ 3-Day Pass ($6.00/$3.00)
5__ 7 Day Pass ($12.00/$6.00)
6__ Monthly Pass ($40.00/$20.00)
7__ Tokens
8__ Other _____

23. Please tell us **one thing** you like **most** about riding the bus._____

_____

24. What is the most important reason you ride the bus? (Please ✓ only ONE)

1__ I do not have a valid driver's license
2__ Car is not available all the time
3__ Parking is too expensive/difficult
4__ I do not drive
5__ VOTRAN is more convenient
6__ VOTRAN fits my budget better
7__ VOTRAN is safer/less stressful
8__ Other _____

25. Please tell us **one thing** you like **least** about riding the bus._____

_____

26. Do you find it difficult to use VOTRAN's bus route and schedule information to plan your trips?

1__ Yes 2__ No

IF YES, how might VOTRAN make its route maps and schedules easier to use?_____

_____

27. How do you prefer to receive information about VOTRAN service, schedules, and changes?

1__ VOTRAN website
2__ Newspaper
3__ Bus signs/shelters
4__ TV
5__ Bus schedules
6__ Bus driver
7__ Call VOTRAN
8__ Other _____
9__ In bus
10__ Transfer Plaza
11__ Radio

Additional Comments:_____

_____

_____

THANK YOU FOR COMPLETING THE SURVEY!

Encuesta de Usuarios de VOTRAN

VOTRAN esta planeando para el futuro y necesita su opinión para ayudar a mejorar el servicio de transito. Su participación en esta encuesta es anónima y voluntaria. Si usted no desea participar, por favor devolver la encuesta al encuestador. Si usted decide completar esta encuesta, por favor marque con (✓) su respuesta. GRACIAS POR SU COOPERACIÓN .

Esta encuesta se trata del viaje que esta haciendo ahora.

Ejemplo de un Viaje de Autobús

1. ¿Donde **COMENZÓ** este viaje? *(*Marque solo una respuesta*)*

1_ Trabajo
2_ Medico
3_ Social/Personal
4_ Escuela (K-12)
5_ College/Universidad
6_ Recreo
7_ Compras
8_ Casa
9_ Otro _____

2. ¿Cual es la **DIRECCIÓN O NOMBRE** del **LUGAR, NEGOCIO, O EDIFICIO** donde comenzó su viaje?

Dirección o intersección (p.ej., 1700 West International Speedway Boulevard)

Nombre del Lugar, Negocio, o Edificio (p.ej., Volusia Mall)

Ciudad

3. ¿Cómo hizo para llegar a el paradero para este viaje? (Marque solo una respuesta)

1_ Camino ➡ *# cuadras?* ____
2_ Bicicleta ➡ *# cuadras?* ____
3_ Manejó y estacionó ➡ *# millas?*____
4_ Alguien me trajo en vehiculo
5_ Alguien me trajo y estaciono su carro
6_ Otro _____

4. **ANOTE TODAS** las **RUTAS** en el **ORDEN EXACTO** que usted, usará para completar **ESTE VIAJE**.

PRIMERA Ruta	SEGUNDA Ruta	TERCERA Ruta	CUARTA Ruta

5. ¿Cual es su **DESTINO FINAL** para este viaje? *(*Marque solo una respuesta*)*

1_ Trabajo
2_ Medico
3_ Social/Personal
4_ Escuela (K-12)
5_ College/Universidad
6_ Recreo
7_ Compras
8_ Casa
9_ Otro _____

6. ¿Cual es la **DIRECCIÓN O NOMBRE** del **LUGAR, NEGOCIO, O EDIFICIO** donde **TERMINARAS** este viaje?

Dirección o intersección (p.ej., 1700 West International Speedway Boulevard)

Nombre del Lugar, Negocio, o Edificio (p.ej., Volusia Mall)

Ciudad

7. ¿Cómo piensa llegar a su **DESTINO FINAL** después de bajarse de el autobús? (Marque solo una respuesta)

1_ Caminare ➡ *# cuadras?* ____
2_ Bicicleta ➡ *# cuadras?* ____
3_ Manejar ➡ *# millas?*____
4_ Esta parada es mi destino final
5_ Alguien me recogerá
6_ Viaje con alguien que estaciono su carro
7_ Otro _____

8. ¿Cómo harías este viaje si no por autobús?

1_ Manejando
2_ Taxi
3_ Caminando
4_ No haría el viaje
5_ Bicicleta
6_ VOTRAN Gold Services
7_ Viajar con alguien que no vive cerca de usted
8_ Viajar con alguien que vive cerca de usted
9_ Otro _____

9. ¿Cuantos días a la semana usas el autobús? (Marque solo una respuesta)

1_ 1 2_ 2 3_ 3 4_ 4 5_ 5 6_ 6 7_ 7
8_ Menos de una vez a la semana
9_ Es la primera vez que uso el autobús

10. ¿Cuanto tiempo llevas usando los servicios de VOTRAN?

1_ Este es el primer día
2_ Menos de un mes
3_ Entre un mes y seis meses
4_ Entre siete meses y un año
5_ Entre 1 y 2 años
6_ Entre 2 y 4 años
7_ Mas de 4 años

POR FAVOR SEGUIR LA ENCUESTA ➡

11. ¿Que satisfecho estas con cada una de las siguientes preguntas?

	Muy Satisfecho		Neutral		Muy Insatisfecho
a. ¿Su satisfacción con servicios de VOTRAN?	5	4	3	2	1
b. ¿Frecuencia de servicio de los autobuses en esta ruta?	5	4	3	2	1
c. ¿Que directamente va esta ruta a su destinación?	5	4	3	2	1
d. ¿El numero de veces que tienes que cambiar de autobús?	5	4	3	2	1
e. ¿Qué facil es cambiar de autobús?	5	4	3	2	1
f. ¿Qué *temprano* corren los autobuses entre semana ?	5	4	3	2	1
g. ¿Qué *tarde* corren los autobuses entre semana ?	5	4	3	2	1
h. ¿Cantidad de servicio los domingos?	5	4	3	2	1
i. ¿Seguridad en el autobús y los paraderos?	5	4	3	2	1
j. Otro, por favor indique_____	5	4	3	2	1

12. Considerando la pregunta 11, indique las tres areas mas importantes para usted cuando usa el bus: _____ , _____ , y _____ .

13. Tu edad es….

1__ 15 o menos
2__ 16 a 24
3__ 25 a 34
4__ 35 a 44
5__ 45 a 54
6__ 55 a 64
7__ 65 a 74
8__ Mas de 74

14. ¿Cual es su género? 1__ Masculino 2__ Femenino

15. ¿Cual es su raza o herencia étnica? (Marque solo una respuesta)

1__ Anglo 2__ Negro 3__ Hispano 4__ Asiático 5__ Otro_____

16. ¿Cual fue el ingreso total de su casa en el año 2009?

1__ Menos de $10,000
2__ $10,000 a $19,999
3__ $20,000 a $29,999
4__ $30,000 a $39,999
5__ $40,000 a $49,999
6__ $50,000 o mas

17. ¿Tienes un permiso de conducir válido? 1__ Si 2__ No

18. ¿Tenias acceso a un carro o vehiculo personal para completer este viaje? 1__ Si 2__ No

19. ¿Cuántos carros, camionetas, y/o camiones se encuentran disponibles en su casa?

1__ 1 2__ 2 3__ 3 o mas 4__ None

20. ¿Cuantos meses al año vives en Volusia County?

1__ Menos de un mes
2__ Visitante/Turista
3__ 1-6 meses
4__ Residente Permanente
5__ Entre 6 y 12 meses

21. ¿Cual es su código postal? _____

22. ¿Qué tipo de tarifa usas para usar el autobús?

1__ Tarifa Adulto ($1.25)
2__ Tarifa Rebajada (60¢)
3__ Pase Diario ($3.00/$1.50)
4__ Pase de 3 Dias ($6.00/$3.00)
5__ Pase de 7 Dias ($12.00/$6.00)
6__ Pase Mensual ($40.00/$20.00)
7__ Fichas (Tokens)
8__ Otro _____

23. Indique **una** razón por lo cual **te gusta** usar el servicio de VOTRAN. _____

_____

24. ¿Cual es la razón más importante por la cual usas el autobús? (Marque solo una respuesta)

1__ No tengo un permiso de conducir válido
2__ Mi carro no esta disponible siempre
3__ Parquear es muy caro/difícil
4__ No manejo
5__ VOTRAN es mas conveniente
6__ VOTRAN esta bien con mi presupuesto
7__ VOTRAN es mas seguro
8__ Otro_____

25. Indique **una** razón por lo cual **no te gusta** usar el servicio de VOTRAN. _____

_____

26. ¿Es difícil usar la información que se encuentra en los horarios de autobús de VOTRAN?

1__ Si 2__ No

Si indicaste que SI, que arreglo se podría hacer a esos horarios para que sean mas fáciles de usar? _____

_____

27. ¿Cómo prefieres recibir información sobre el servicio, horarios, y cambios de VOTRAN?

1__ Página Web de VOTRAN
2__ Periódico
3__ En la parada de autobús
4__ Television
5__ Horarios de autobús
6__ Conductor de el autobús
7__ Llamar a VOTRAN
8__ Otro_____
9__ En el autobús
10__ En la plaza de cambios
11__ Radio

Comentarios Adicionales: _____

_____

_____

GRACIAS POR COMPLETAR ESTA ENCUESTA!

Appendix E: Farebox Recovery Ratio Report

ANNUAL FAREBOX RECOVERY RATIO REPORT – 2011
VOTRAN – FIXED-ROUTE SYSTEM, VOLUSIA COUNTY, FLORIDA

CURRENT FAREBOX RECOVERY RATIO

The farebox recovery ratio for Votran, the public transportation provider for Volusia County, was 17 percent in FY 2010. The background with regards to the farebox recovery ratio includes the following:

PRIOR YEAR FARE STUDIES AND CHANGES

The last fare increase approved by the County Council was effective January 1, 2007 and remains in effect at present. This fare increase brought the base fare from $1.00 to $1.25, representing a 25 percent increase. In addition, the Votran express route 200 provided by LYNX underwent a fare increase in January 2008 raising its base fare to $3.50 from $2.00. With the implementation of the express route fare, Votran added a monthly pass option at a cost of $80.

While the County recognized that some initial ridership reductions were typically after a fare increase, this was believed to be temporary, and total fare receipts would increase with the changes in fares.

PROPOSED FARE CHANGES FOR THE UPCOMING YEARS

At this time, a fare increase is being evaluated for fiscal year (FY) 2012. With the instability in fuel prices, the decrease in property values reducing ad valorem revenues, and the desire to at a minimum maintain existing service a fare increase must be considered. A final determination on whether to proceed with a fare increase and the corresponding fare levels will be determined after a fare analysis and Title VI fare increase equity assessment has been completed.

Because the last system-wide fare increase was implemented in 2007, it is recommended that Votran proceed with the reviewing a fare increase for FY 2012. It is also recommended that Votran plan to examine fare levels every two years to avoid large one-time increases that shock passengers and to keep the fare revenue at an adequate proportion to the expenditures. In past ten years the farebox recovery has been as high as 23 percent and as low as 16 percent. A fare increase that plans to achieve fare collections that bring the recovery rate within the 16 – 24 percent range is a responsible undertaking by Votran.

STRATEGIES THAT WILL AFFECT THE FAREBOX RECOVERY RATIO

The FY 2012-2021 TDP Major Update identifies several strategies that will be used to maintain or increase the farebox recovery ratio, including the following:

- Increase ridership through more strategic marketing activities aimed at attracting choice riders;
- Ensure that transit serves major employers and activity centers;
- Continue to evaluate services and make service modification to improve lower performing routes or to remove these routes from the system;
- Review the applicability of premium service on major corridors to provide a competitive modal option over automobile use;
- Provide local employers with incentives for transit use;
- Improve the existing schedule to attract new riders;
- Monitor key performance measures for individual fixed routes;
- Move forward with the current fare analysis to assess whether the fare increase is warranted for FY 2012;
- Plan to review fares every couple years to guarantee fare revenue levels are maintained proportionate to expenses;
- Increase ridership by continuing to transition transportation disadvantaged service patrons to the fixed-route system;
- Improve frequencies on the fixed-route system to attract new riders;
- Ensure that bus passes can be purchased at locations that are convenient to the riders;
- Set a goal to increase farebox recovery and have staff commit to achieving the goal through a suggestion program that encourages more efficient ways to provide service;
- Inform customers on the importance of paying the correct fare for each trip through a marketing approach. This customer information effort should be combined with an operator education initiative on the importance of reducing the instances of short-fare trips; and,
- Review the applicability of smart cards and other fare options to increase sales.