

Agenda Report

2725 Judge Fran Jamieson Way Viera, FL 32940

New Business - Community Services Group

J.2 2/25/2025 Subject:

Adoption, Re: 2025-2035 Transit Development Plan for Space Coast Area Transit.

Fiscal Impact:

Adoption of a Transit Development Plan is required to draw the yearly Florida Department of Transportation Public Transit Block Grant Funds. The Fiscal Year 2025 Block Grant Allocation is \$1,925.467.

Dept/Office:

Transit Services

Requested Action:

It is requested that the Board of County Commissioners adopt the 2025-2035 Transit Development Plan for Space Coast Area Transit for submittal to the Florida Department of Transportation.

Summary Explanation and Background:

The Transit Development Plan (TDP) is required by Florida Department of Transportation (FDOT), Florida Administrative Rule 14-73.001 as a prerequisite to the recipient of State Public Transit Block Grant funds. The rule requires that the TDP be the provider's planning, development, and operations guidance document.

TDP rules require a 10-year planning horizon, inclusion of an FDOT approved Public Participation Plan, and adoption by the transit agency's Board of Directors. Public Outreach for this project included onboard surveys of existing Transit riders, an online survey of non-transit users, 14 Stakeholder interviews, 7 Public Workshops, a survey of Space Coast Area Transit Operators and Web/Email & Social Media Outreach. Outreach for this

A presentation of the TDP was made to the Transportation Planning Organization's Board on December 12, 2024, for their review. While no action was needed on this item, the TPO Board did not present or ask for any

There are three basic steps to the development of a TDP; (1) assessment of the current transit service, service area demographics and review of governmental plans; (2) public involvement and (3) goal setting and 10-year service and budget projections. A checklist of the FDOT requirements for a TDP is included on page 14 of the

Highlights of the 2025-2035 Transit Development Plan Service Alternatives, dependent on funding availability

- **Existing Service Improvements**
- Improve weekday service to 30-minute headways on priority routes

J.2. 2/25/2025

- Extend evening weekday service to 9 pm on priority routes
- Potential Expanded Service
 - Route 8 operates consistent hourly service throughout entire day
 - New service along US 192 from A1A to west of 1-95
 - New service along SR-528 from planned Intermodal Station to Cape Canaveral Cruise Terminal Palm Bay to Micco via US 1
- Considerations for Mobility on Demand Service
- Fleet replacement /expansion (transition to hybrid and alternative fuel vehicles)
- Bus stop amenities and infrastructure improvements
- New Cocoa transfer center
- New Centralized Administration/Operations/Maintenance facility

Since the Transit Development Plan is a planning document, adoption of the Transit Development Plan does not require that service Alternatives be implemented; however, any future service that is partially funded by the Florida Department of Transportation must be included in the Transit Development Plan.

Clerk to the Board Instructions:

Please send copy of Board Memo to Yvonne Miles, Transit Services, 460 S. Harbor City Blvd., Melbourne, FL



FLORIDA'S SPACE COAST

Kimberly Powell, Clerk to the Board, 400 South Street • P.O. Box 999, Titusville, Florida 32781-0999

Telephone: (321) 637-2001 Fax: (321) 264-6972 Kimberly Powell@brevardclerk.us



February 26, 2025

MEMORANDUM

TO: Terry Jordan, Transit Services Director

Item J.2., Adoption of 2025-2035 Transit Development Plan for Space Coast Area Transit RE:

The Board of County Commissioners, in regular session on February 25, 2025, adopted the 2025-2035 Transit Development Plan for Space Coast Area Transit for submittal to the Florida

Your continued cooperation is always appreciated.

Sincerely,

BOARD OF COUNTY COMMISSIONERS

RACHEL M. SADOFF, CLERK

Kimberly Powell, Clerk to the Board

/ns

CC: Finance

Budget

FY 2025 – 2035 Transit Development Plan

Executive Summary January 2025







321 transit.com 401 S. Varr Ave. Cocoa, FL 32922 321-633-1878





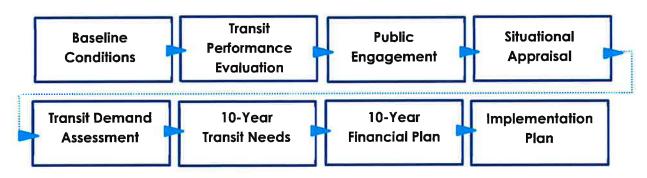
Download the 321Transit App:

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What is a Transit Development Plan (TDP)?

As a recipient of state funding, Space Coast Area Transit is required to establish a TDP every five years. A TDP covers a 10-year planning horizon. This TDP is for the FY2025 – FY 2035 planning horizon. TDP elements include:



Transit's Role on the Space Coast

Transit offers numerous benefits to the public, overall enhancing quality of life, local economies, and building sense of community. Key advantages of public transit include:



Boosts Economic Return

For every \$1 invested in public transit, there is \$2 in economic gain. (American Public Transportation Association)



Reduces Congestion

Public transit can serve as an effective alternative to driving, reducing traffic congestion and parking needs.



Enhances Safety

Public transit reduces vehicle traffic, leading to fewer accidents and safer streets for everyone.



Increases Mobility

Transit offers mobility for non-drivers, providing access to jobs, education, and essential services, particularly for underserved communities.



Lowers Emissions

Public transit decreases reliance on personal cars, in effect, lowering carbon emissions, contributing to a cleaner and healthier environment.

Who does Transit serve?

Understanding demographics is necessary when providing accessible, inclusive, and innovative transportation. Youth, elderly, and individuals with disabilities tend to need access to transportation at a higher rate.

Space Coast's Population:





15.8% Disability



Space Coast Area Transit Services

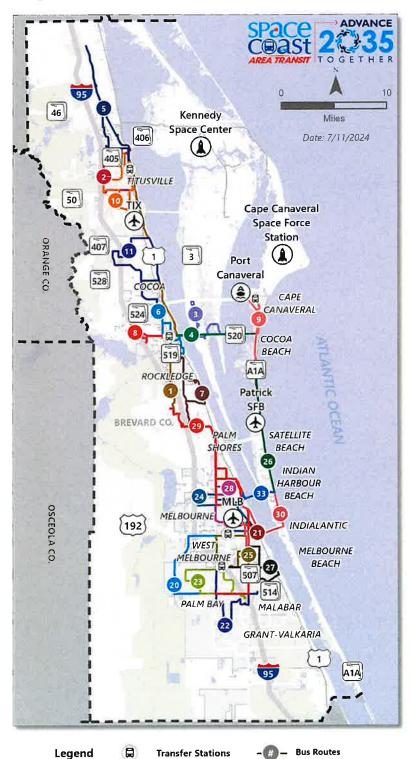
Space Coast Area Transit Fixed-Route Network

Space Coast Area Transit provides:

- 23 fixed routes
- 1,100+ bus stops
- Five main transfer centers:
 - > Titus Landing
 - Cocoa Transit Center
 - Shepard Park
 - > Melbourne Square Mall
 - > Hammock Landing

Space Coast Area Transit's other services include:

- Demand Response/ Paratransit: Serves individuals who cannot use fixed routes
- Vanpool Programs: Serves commuters
- Volunteers in Motion: Assists individuals with essential trips (Ex: medical appointments) who cannot use fixed routes



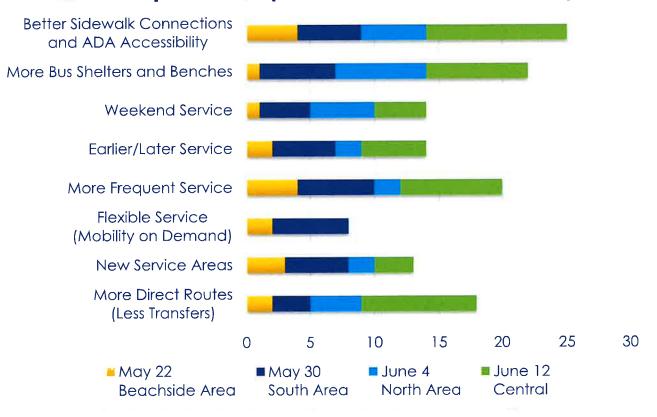


Public & Stakeholder Outreach

Public outreach played a critical role in the development of the TDP. Outreach efforts aided in establishing the vision for Space Coast Area Transit for the next 10-years. Below summarizes outreach efforts and the key findings.



Most Requested Improvements from Workshops





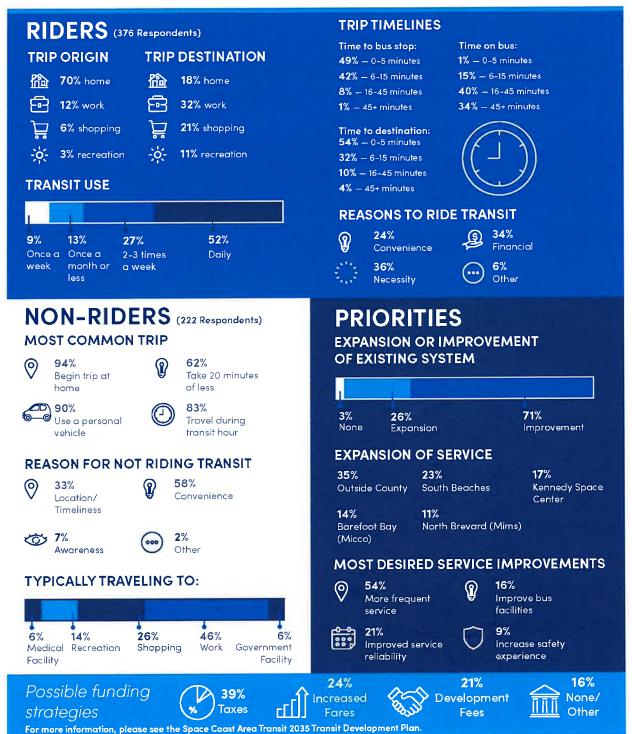
Transit Survey Results

FALL 2023

TRANSIT RIDER SURVEY RESULTS







Transit Vision, Mission, & Goals



Vision:

To provide all persons living, working, or visiting Brevard County the opportunity to use transit as a safe, affordable, convenient, and sustainable way of traveling.

Mission:

Respond to existing and emerging user markets by maintaining current transit service levels while gradually enhancing fixed-route services in the most productive corridors, providing flexible on-demand services in high-need areas where fixed-route service may not be the optimal choice, and implementing sustainable service delivery options, as feasible.

Goals:

(A)	Safety	 Provide a safe reliable, and accessible transit system.
		 Create and maintain an accessible, efficient, and effective multi-modal transit system.
	Multi-Modal Options	 Promote economic growth and improve overall quality of life with a connected & accessible multi modal system.
	Linking Transportation & Land Use	 Deliver a flexible transit system with enhanced mobility through fixed route, premium transit, and emerging technologies.
	Sustainability, Accessibility, &	 Improve operational performance and ridership & while maximizing potential funding opportunities.
	Resiliency	 Deliver a sustainable, accessible and resilient transit system.
	Marketing & Public Engagement	 Expand the opportunities for public engagement, community outreach and marketing strategies throughout the region.



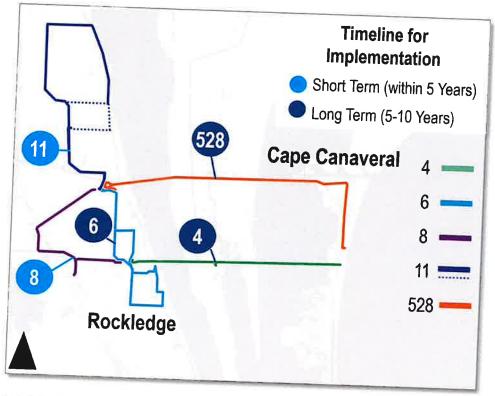
Proposed Service Changes

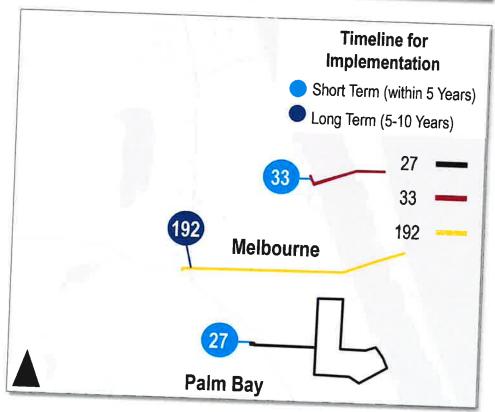
Space Coast Area Transit is working on exciting service improvements based on community feedback and future needs. Some changes will happen sooner, while others will reshape our transit network in the long term. Below summarizes service changes anticipated to be implemented over the next 10 years.

Route	Service Change	Туре
8 West Cocoa	 Run from 6 AM – 7 PM Increase frequency to 60-min Extend to Cocoa Commons via Friday Rd/SR 524 	Network Change
11 Port St. John	 Reduces stops on US-1 Remove route deviation onto Fay Blvd Alternate service between Camp Road & Canaveral Groves Blvd every hour 	Network Change
Palm Bay	Increase frequency to 30-minutes	Increase Frequency
Eau Gallie Arts District	Remove route from network	Route Removal
520 Connector	 Increase frequency during peak hours Reduce frequency during non-peak hours 	Increase Frequency
Cocoa / Rockledge	 Increase frequency during peak hours Reduce frequency during non-peak hours 	Increase Frequency
2 New Route	From St. John's Heritage Pkwy to SR A1A	New Service
8 New Route	 Express 528 to connect Intermodal Station to Cruise Terminal and Cocoa Beach Pier 	New Service



Space Coast Area Transit Proposed Service Changes







Planning Initiatives

Outside of proposed service changes, there are several long-term transit needs as it relates to serving emerging areas of population, employment, and tourism.

Space Coast Area Transit will need to conduct a Comprehensive Operations Analysis (COA) or perform further route analysis for the following:

- Potential service to Barefoot Bay Community
- Potential service into Indian River County with GoLine
- Vanpool programs for Space Industry
- MOD Pilot
 - Assess ideal location for pilot
 - Base on findings of MOD Study by Space Coast Transportation Planning Organization (SCTPO)





Capital, Infrastructure, & Technology Needs

Long term, Space Coast Area Transit will address needs as it relates to capital, infrastructure, and technology. The TDP identifies the following key areas:



Fleet

Evaluate:

- Average fleet age is 8.1 years
- Transit Fleet Replacement
- Potential for fleet electrification



Bus Stops

Enhance:

- Lighting
- Shelters
- Boarding/alighting pads & seating
- Safety



Technology

Implement:

- Dynamic message boards at transfer stations & stops
- Mobile charging ports on all newly purchased buses
- Mobility on Demand pilot



New Transfer Station

Assess:

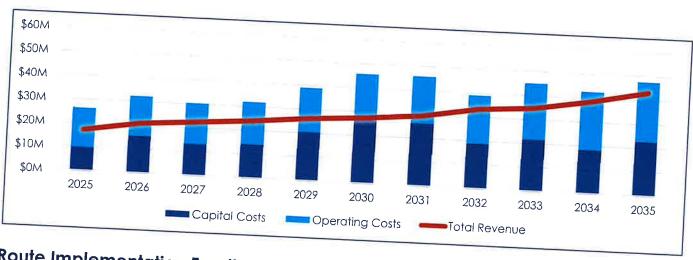
- Funding for Design and Construction
- Addition of new Administration/ Operations/Maintenance Center



10-Year Financial Plan

The 10-Year Financial Plan is a framework for pursuing future service improvements at the discretion of Space Coast Area Transit and the Brevard Board of County Commissioners. It is important to note, the Financial Plan is flexible and does not establish a financial commitment by Brevard Board of County Commissioners. Space Coast Area Transit may delay or advance service improvements as funding

10-Year Plan Costs vs. Revenues



Route Implementation Funding Needs

Route West Cocoa	Туре	Implementation Years	Annual Operating Cost for Implementation
	Network Change	2025 - 2030	\$283K
Port St. John	Network Change	2025 - 2030	\$240K
East Palm Bay	Increase Frequency	2025 - 2030	\$386K
520 Connector	Increase Frequency	2020 0005	4000K
Cocoa/		2030 - 2035	\$1.18M
Rockledge	Increase Frequency	2030 - 2035	\$843K
New Route	New Service	2030 - 2035	\$1.17M
New Route	New Service	2020 0005	\$1.17M
	Total Felins J. J. C.	2030 - 2035	\$806k
	Total Estimated Costs fo	r Route Implementation	\$4.91M





Next Steps & Key Action Items

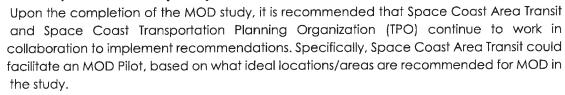
Planning



A Comprehensive Operations Analysis (COA) or smaller route analysis should be conducted to identify strategies to reduce annual operating costs and improve system efficiency. A refined fixed route network could help further maintain the system, long term.

Technology

Mobility on Demand (MOD) Pilot





Fleet Electrification Plan

Space Coast Area Transit will continue to explore technologies advancements to drive innovation in Brevard County and improve customer experience. In the near future, the agency should evaluate comprehensive options for fleet electrification. This plan could include hybrid, electric, and alternative fuels as potential replacements for a portion of the fleet.



Local Agency Coordination

The alignment of the 2050 Long Range Transportation Plan (LRTP) and 2035 TDP has been a critical effort in shaping Space Coast's future transportation systems. Space Coast Area Transit will continue to collaborate with Space Coast TPO for transit-related planning. In addition, Space Coast Area Transit should continue coordination with Florida Department of Transportation (FDOT) District 5 for potential funding and grant opportunities in the future.



Funding

To implement new services, additional funding is needed. There is opportunity for local municipalities to assist with funding, similar to the City of Melbourne. Additionally, the needs and benefits of these new services should be leveraged to local stakeholders for support in pursuing grant opportunities.



Bus Operator Recruitment & Retention

Recruiting and retaining bus operators is critical for Space Coast Area Transit to implement service changes. Space Coast Area Transit should continue efforts in operator workforce development to support reliable and expanded transit services.



Public Outreach Efforts

Continuing public outreach is essential for informing and engaging the community about service changes. Space Coast Area Transit should continue to promote its services through commercial advertising and social media.

401 S. Varr Ave Cocoa, Florida 32922 Space Coast Area Transit







Final Report



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www.spacecoasttpo.com

TRANSIT DEVELOPMENT PLAN

235



February 2025

Publication Date:

Disclaimer:

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Prepared for:

Space Coast Area Transit

Space Coast Transportation Planning Organization

Prepared by:

HDR Inc.

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ACS	American Census Survey
ADA	Americans with Disabilities Act
BIL	Bipartisan Infrastructure Law
BOCC	Brevard County Board of County Commissioners
BPC	Best Performing Cities
CFRPM	Central Florida Regional Planning Model
CTC	Community Transportation Coordinator
CTD	Commission for the Transportation Disadvantaged
DBE	Disadvantaged Business Enterprise
FDOT	Florida Department of Transportation
FIT	Florida Institute of Technology
FTA	Federal Transit Administration
FTE	Full-Time Equivalents
FTIS	Florida Transit Information System
GTFS	General Transit Feed Specification
IIJA	Infrastructure Investment and Jobs Act
ITS	Intelligent Transportation System
LRTP	Long Range Transportation Plan
NTD	National Transit Database
SCTPO	Space Coast Transportation Planning Organization
SD	Service Development
TAMP	Transit Services Transit Asset Management Plan
TIP	Transportation Improvement Program
TDP	Transit Development Plan
TD	Transportation Disadvantaged

1 Introduction



The Brevard County Board of County Commissioners (BOCC) provides public transportation in Brevard County, Florida, through Space Coast Area Transit. Space Coast Area Transit provides fixed-route bus service, complementary paratransit service (as required under the Americans with Disabilities Act [ADA]), vanpools, and volunteer transportation.

As a recipient of Florida Department of Transportation (FDOT) Block Grant funding, Space Coast Area Transit must establish and update annually a Transit Development Plan (TDP) per F.S. 341.052. A TDP provides a vision for the transit system for the next 10 years with major updates occurring every five years. This major update covers the FY 2024/2025 – FY 2034/2035 planning horizon per the Florida Administrative Code (F.A.C.) Rule 14-73.001 "TDP Rule".

This TDP, also known as **Advance 2035**, was prepared in conjunction with the Space Coast Transportation Planning Organization's (TPO) 2050 Long Range Transportation Plan (LRTP) to better align planning efforts, increase collaboration, and create a more multimodal transportation system. Aligning these planning efforts is noted as a best practice. Additionally, at the federal level, the Bipartisan Infrastructure Law (BIL)/ Infrastructure Investment and Jobs Act (IIJA) of 2021 provides new funding opportunities for the

\$1,200
billion
in Bipartisan
Infrastructure Law (BIL)
investments

\$550
billion
for surface
transportation network
improvements

\$266
billion
for enhancing
core infrastructure

The Bipartisan Infrastructure Law,

The Bipartisan Infrastructure Law, passed in 2021, provides new funding for public transportation projects.

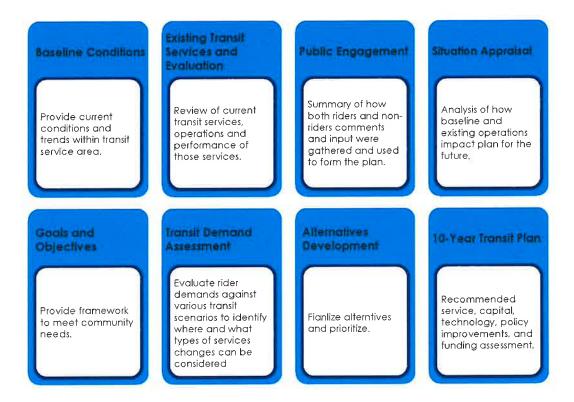
planning, design, and evaluation of public transportation projects as well as technical studies related to public transportation, to create a more efficient transportation system.

1.1 Report Overview and Organization

This report has been prepared and organized to present the reader with the elements used to develop a strategic plan on where and how transit services can grow over the next ten years. Important steps included determining where transit is today, where

should it be in the future and then identifying strategies on how to get there. The following chart in **Figure 1** represents the report outline and follows the TDP major update process provided in the FDOT TDP 2022 Update Handbook.

Figure 1. Advance 2035 Report Organization



1.2 TDP Background and Requirements Checklist

In accordance with the Florida Administrative Code, "The TDP shall be the applicant's planning, development and operational guidance document to be used in developing the Transportation Improvement Plan (TIP) and the Department's Five-Year Work Program."

The first step in this strategic planning process is to understand the current conditions and service area of the transit agency. This report uses local data to document and assess pertinent conditions in which Space Coast Area Transit currently operates. This process will actively engage local stakeholders and supply a critical base of information needed for subsequent planning tasks required of the FY 2024-2035 TDP. The required sections based on Florida Statute and FDOT recommendation are shown in **Table 1**.

Table 1. Summary of FDOT Rule Compliance

FDOT Recommended TDP Component	TDP Rule Reference F.S. 14-73.001	Location in Space Coast Area Transit TDP Final Report
Baseline Conditions Assessment	Section 3 (b)	Section 2
Existing Service/Performance Evaluation	Section 3 (b)	Section 3
Public Involvement	Section 3 (a)	Section 4
Situation Appraisal	Section 3 (b)	Section 5
TDP Goals and Objectives	Section 3 (c)	Section 6
Transit Demand Assessment	Section 3 (d)	Section 7
Transit Needs Development and Evaluation	Section 3 (d)	Section 8
10 Year Transit Plan	Section 3 (e)	Section 9
Plan Coordination and Implementation	Section 3 (f)	Section 10

In order to ensure that the TDP is meeting all the requirements of the TDP Rule, as well as provide readers and reviewers a visually, easy to identify specific elements of the TDP, the following checklist in Table 2 is provided that reflects what section each requirement can be found in.

--This area intentionally left blank.--

Table 2. TDP Checklist

lic E	ngagement Process	Report Section(
1	Public Engagement Plan (PEP)	Appendix B
1	PEP Approved by FDOT	Appendix B
1	TDP includes description of Public Engagement Process	Appendix B
1	Provide notification to FDOT, and CareerSource Brevard (Regional Workforce Board)	Appendix B
ation	al Appraisal	
1	Land Use	Section 5.3
1	State and local transportation plans	Section 5.1
1	Other governmental actions and policies	Section 5.1
V	Socioeconomic trends	Section 5.2
1	Organizational issues	Section 5.4
1	Technology	Section 5.5
1	10-year annual projections of transit ridership using approved model TBEST	Section 7.2
1	Assessment of land uses/urban patterns relative to transit service provision	Section 5.6
1	Calculate and assessment of farebox recovery	Section 3.5
on, N	Aission, Goals & Objectives	
1	Provides vision/mission	Section 6
1	Provides goals and objectives	Section 6
rnati	ves Development & Evaluation	
1	Development and evaluation of alternative strategies and actions	Section 8
1	Benefits and costs of each alternative	Section 8
1	Examination of financial alternatives	Section 8
Year	Implementation Program	
1	10-year implementation program	Section 10
1	Maps indicating areas to be served, service types, levels of service	Section 10
1	Monitoring program to track performance measures	Section 10
1	10-year financial plan listing operating and capital expenses	Section 9
1	Capital acquisition or construction schedule	Section 9
1	Anticipated revenues by source	Section 9
noite	ship to Other Plans	
✓	Consistent with Florida Transportation Plan	Appendix C
1	Consistent with local government comprehensive plan	Appendix C
1	Consistent with regional transportation goals and objectives	Appendix C

2 Baseline Conditions



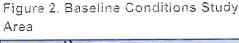
The baseline conditions act as an introduction to the Space Coast Area Transit system and provides context for what the current profile is in Brevard County and who Transit is serving. This assessment will look at the following:

- Space Coast Area Transit Services
- Demographics
 - o Population
 - Age
 - o Persons with Disabilities
 - o Race & Ethnicity
 - o Limited English Proficiency
- Socioeconomic
 - o Education
 - o Housing
 - o Employment
- Travel and Community
 - Auto ownership
 - o Parking
 - o First/Last Mile Connectivity
 - Bicycle/Pedestrian Network
 - Worker Travel Patterns
 - o Public Schools
- Land Use Patterns
 - Activity Center/Major Hubs
 - Tourism Destinations
 - o Development Activity
 - o Future Land Use

Figure 2 provides an overview of the study area, Brevard County.

The Baseline Conditions will be used to develop a Transit Propensity Index to evaluate which

areas of the service area would be best served by fixed-route service. **Figure 3** provides an overview of how the Baseline Conditions are used to develop a Transit Propensity Index.





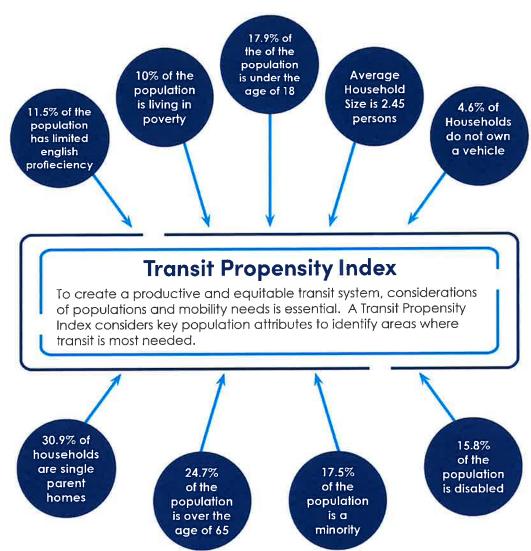


Figure 3. Transit Propensity Index

2.1 Space Coast Area Transit Services

Since 1985, Space Coast Area Transit has been providing vital transportation services for Brevard County residents and its visitors. In addition to its Fixed Route Services, Space Coast Area Transit provides specialty services such as demand response for Transportation Disadvantaged (TD) Paratransit services, Americans with Disabilities Act (ADA) Paratransit services, a Vanpool program, Volunteers in Motion program, and Commute with Enterprise. Following is a brief general overview of each service with a more detailed review of the services provided in Section 3.0.

Transit's **fixed route** network includes 23 routes that serve about 1,100 bus stops and connected with multiple transfer stations. The busiest transfer location is the Cocoa Transit Center, where there are four connecting routes: north to Titusville, south to Melbourne and Viera, east to Merritt Island and Cocoa Beach, and to west Cocoa. Other major transfer locations include Titus Landing in Titusville, Shepard Park in Cocoa Beach, Melbourne Square Mall in Melbourne, and Hammock Landing in West Melbourne.





The **TD and ADA Paratransit** services are provided to residents with mobility needs who are unable to use Fixed Route Services and are operated as a demand-response service. Users of this system rely on it to provide transportation to medical, employment, education/training, nutritional, and other life-sustaining trips.

Volunteers in Motion provides transportation for individuals who are unable to use other Space Coast Area Transit services on their own. The Volunteers in Motion program offers transportation to locations such as medical facilities, pharmacies, and grocery stores. Volunteers in Motion assists individuals who would otherwise be unable to live independently. All



positions to operate this program are volunteer based and the program has assisted thousands of individuals over the years, however, demand for the services typically exceed what can be provided.

For over 40 years, Space Coast Area Transit has provided a **Commuter Vanpool Program** and currently works with Commute with Enterprise to offer these services. Vans are leased by groups of commuters from



Enterprise at a fixed monthly cost that covers leasing, maintenance, insurance, and roadside assistance. There is also an **Agency Vanpool Program**, where non-profit agencies can lease vans to provide transportation services for disadvantaged residents. Due to the all-inclusive coverage, this program offers transportation solutions that would otherwise be unaffordable to many agencies.

2.2 Demographics

Brevard County's composition of demographics and trends are important factors to consider and use in evaluating transit needs. These statistics are used to understand current and potential future riders along with where they live, work and play. According to the U.S. Census Bureau, Brevard County has 1,015.0 square miles of land area and is the 15th largest county in Florida by total area. Statistic sources provided on following pages: Brevard County Data Census Profile (2020 Decennial Census and 2022 ACS)

Population

Florida is witnessing rapid population growth in recent years (**Figure 4**). According to the Florida Office of Economic Development and Research, it is estimated that Brevard County will continue to see increases and have a population of 694,250 by 2035.

Figure 5 and 6 show the Space Coast's population density growth from 2023 to 2035. The areas with the higher densities occur along major highways or arterial roadways such as I-95 and US-1. The barrier islands and beaches also have higher densities. The forecasted density for the TDP horizon year of 2035, generally reflects current levels which indicates future growth may occur where it is already populated through redevelopment. Palm Bay, the county's largest populated city, is also expected to see significant growth in the coming years.

Figure 4. Population Growth, 2018 - 2022

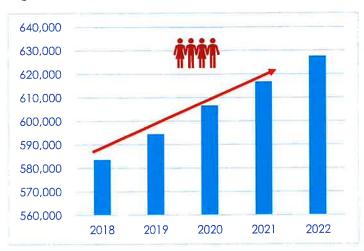
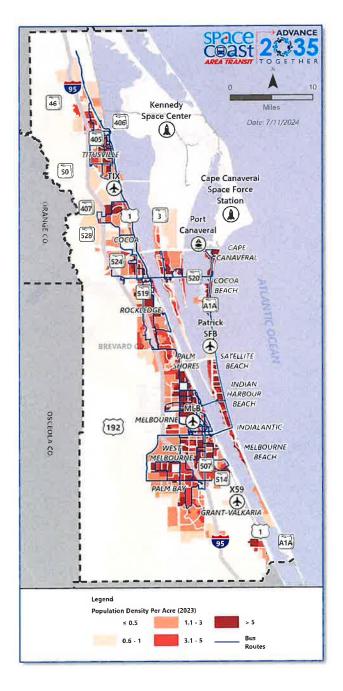


Figure 5. 2023 Population Density

Figure 6, 2035 Population Density



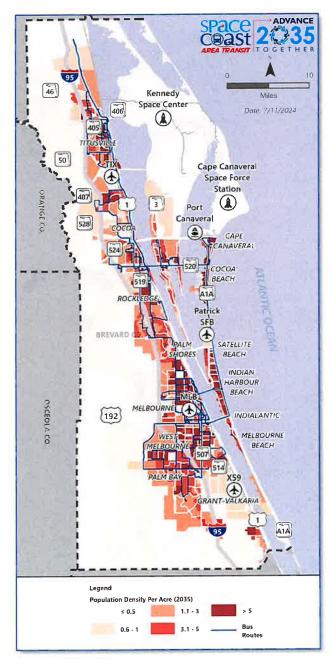
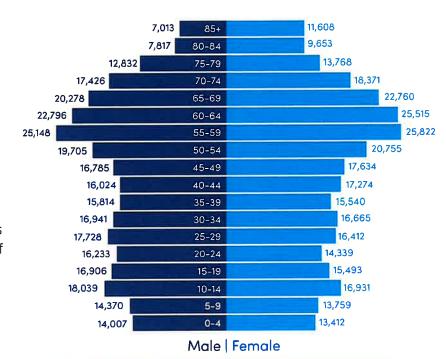


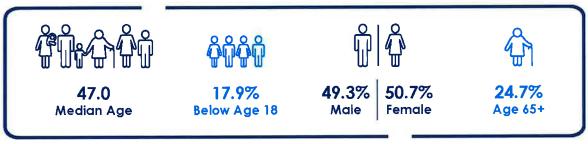
Figure 7. Brevard County 5-Year Age Estimates (ACS, 2021)

Age

Collecting data on the average age is necessary when providing accessible, inclusive, and innovative transportation. Both youth and elderly tend to need access to transportation at a higher rate.

As shown in **Figure 7**, a large portion of the Space Coast's residents are over the age of 65 and may require alternative transportation options to access their daily needs.





Persons with Disabilities

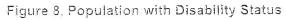
Individuals with hearing, vision, movement, cognitive, ambulatory, or self-care difficulties are considered to hold disability status by the U.S. Census Bureau's American Community Survey (ACS). Persons with these disabilities present mobility challenges and

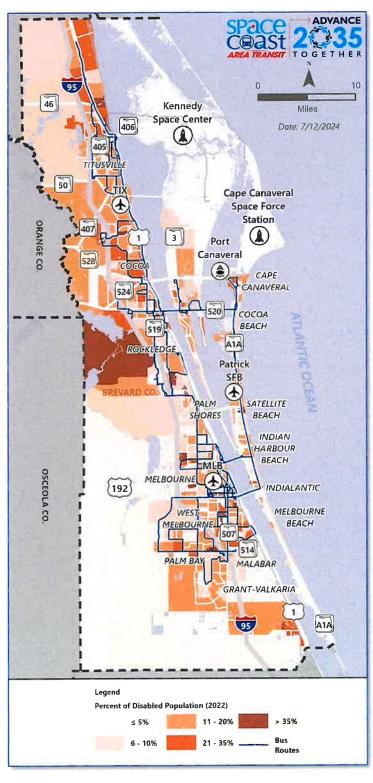
may increase an individual's dependence on transportation services to fulfill daily needs (**Figure**

8). Adults with disabilities are twice as likely to have inadequate transportation compared to those without disabilities.



15.8% Population with Disability





Race and Ethnicity

Comprised from various backgrounds, Brevard County is home to various races and ethnicities (**Figure 9**). Knowing who makes up the community provides insight into how to engage and communicate in an equitable manner.

White

Not Hispanic or Latino

Hispanic or Latino

Two or More Races

Black or African American

Some Other Race

Asian

American Indian and Alaska Native

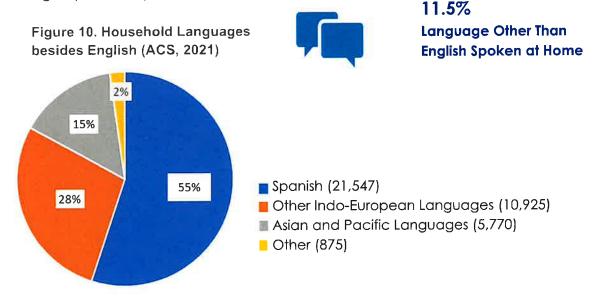
Native Hawaiian/Other Pacific Islander

- 100,000 200,000 300,000 400,000 500,000

Figure 9. Brevard County Race (2020 Census)

Limited English Proficiency

Figure 10 summarizes languages spoken outside of English in Brevard County. Approximately 8% of households in the service area speak Spanish. It is required that the transit agency maintain accessibility to its services and resources for those with limited English proficiency.



2.3 Socioeconomics

The level of education, employment opportunities and availability of affordable housing are all indicators of the demand for transit services. The following statistics are from the U.S. Census.

Education

Education is an important factor in understanding an area's characteristics and transportation modal choices. Level of education has been shown to correlate with income, which may influence the use of public transit. Brevard's education attainment has increased slightly in the last ten years. **Figure 11** shows the level of education attained for Brevard County residents according to the 2022 ACS.

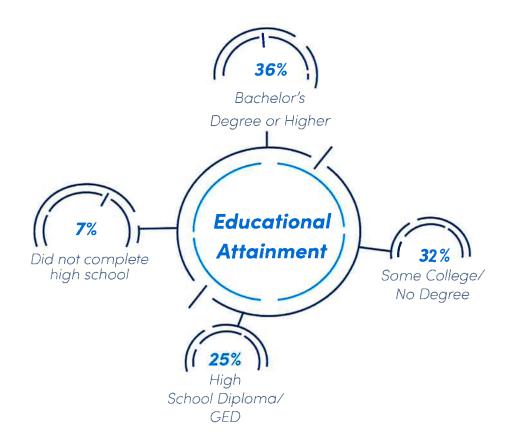
Income

Income is another indicator to consider for likelihood of a household to utilize transit services. Several factors such as household size, expenses, type of employment

contribute to this analysis, but typically lowerincome households are less likely to have budget available to spend on vehicle ownership and maintenance or for making non-essential trips, thereby increasing reliance on public transit.

\$75,320 2022 Median Household Income

Figure 11. Educational Attainment (ACS, 2022)



Employment Brevard County is a diverse region in both professional industries and employment opportunities, including tourism, aerospace, hightech manufacturing, and various others. In Milken Institute's 2022 Best Performing Cities Index (BPC) report, the Space Coast ranked fifth among 200 other larger metropolitan areas for economic growth. With over 232,600 employed residents as of 2022, the region continues to grow and offer unique options for residents. Additionally, the Space Coast is an important part of the nation's semiconductor and electronic component industry employing well over 17,000 skilled workers.

Figure 12 shows Space Coast's areas of job density, most of which are concentrated in Melbourne, Palm Bay, Rockledge, and Cape Canaveral.

Key Industries with Majority Share of Jobs						
	Health Care and Social Assistance	15%				
	Manufacturing	13%				
	Retail Trade	11.5%				
	Accommodation & Food Services	10.3%				
	Professional, Scientific, and Technical Services	8.1%				
	Construction	7.9%				
	Educational Services	7.7%				
	Administration & Support, Waste Management, & Remediation	6.2%				
	Public Administration	5.6%				
	Source: Census	on the Map				

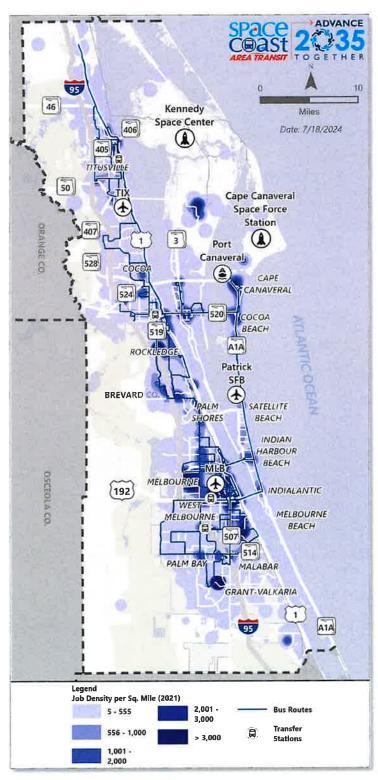


Figure 12. Space Coast Job Density (American Census Survey, 2021)

Housing

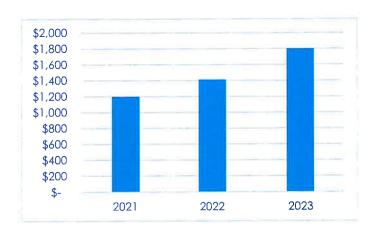
The majority of Space Coast's residents are homeowners. In 2021, 23% of the population rented homes and paid a median monthly rent of \$1,197. In 2022, 23% of the population paid a median monthly rent of \$1,412. This indicates approximately a 18% increase in



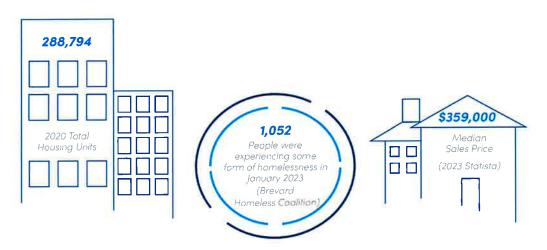
Overall, increased rent rates cause financial difficulty in affording both housing and transportation. Due to this, some households throughout Brevard County may not have access to vehicles and will require alternative transportation options to access essential services.

Homelessness is another element that should be monitored because public transit is a common mode of transportation for those experiencing homelessness. monthly rent for Space Coast residents. Based on this growth rate, it is estimated that renters are paying upwards \$1,800 monthly in present day.

Average Monthly Rent



Ensuring that the homeless population can adequately reach social services such as healthcare and shelters, especially during emergency events, such as extreme cold or hurricanes, is vital to the safety and security of this population.



Poverty

Those who live in poverty are assumed to have the highest propensity to use transit due to limited funding available for living expenses. The U.S. Census Bureau defines the poverty threshold in 2021 as earning under \$27,479 annually for a family of four with two children. Brevard County's poverty rate of 10% is slightly less than the 11.5% nationally. Figure 13 shows the distribution of those living at or below the poverty level in Brevard. Notable populations live in Titusville, areas in Cocoa and Canaveral Groves area, and in pockets of Melbourne and Palm Bay.

Auto Ownership

While many households have one or more vehicles for travel needs, not having access to reliable transportation or a vehicle should be considered when identifying transit routes.

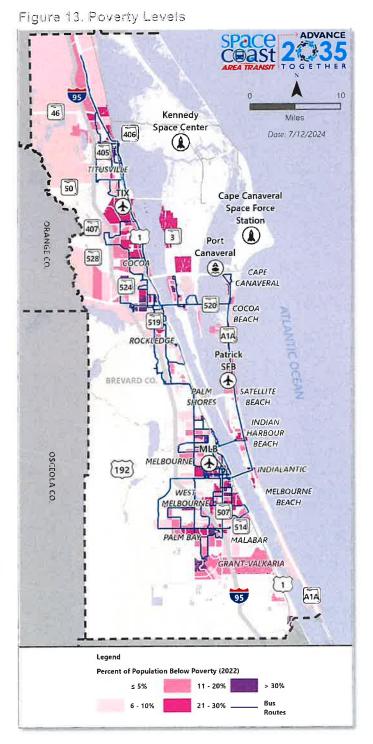


59%2+ vehicles per household



4.6%

0 vehicle ownership



2.4 Land Use, Mobility Networks, and Travel Patterns

Travel behaviors and commuting trends provide valuable insight to overall mobility of Space Coast's Area Transit's service area. **Table 3** provides a summary of transportation modes observed in Brevard County, from ACS 2021.

The majority of Space Coast's workforce drives to work with less than 1% using public transportation. The remainder of Space Coast's workforce works from home, eliminating the need to commute to work.

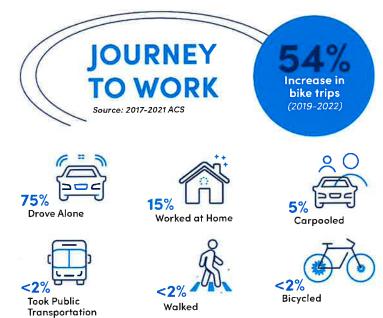


Table 3. Travel Behavior and Commuting Trends (ACS, 2021)

Characteristic	Percentage
MEANS OF TRANSPORTATION TO WORK	
Car, truck, or van	80.8%
Drove alone	75.1%
Carpooled	5.6%
In 2-person carpool	4.2%
In 3-person carpool	1.0%
In 4-or-more person carpool	0.4%
Workers per car, truck, or van	1.04
Public transportation (excluding taxicab)	0.8%
Walked	1.0%
Bicycle	0.4%
Taxicab, motorcycle, or other means	1.4%
Worked from home	15.6%

Travel Flow Analysis
According to the U.S. Census
OnTheMap Tool, 61,235 individuals
live outside but work inside Brevard
County, 158,145 residents live and
work within Brevard County, and
84,153 residents live within but work
outside Brevard County. The majority
of individuals depart for work
between 9 AM – 12 PM (Figure 14).
Most individuals spend between 15
to 24 minutes commutting to work

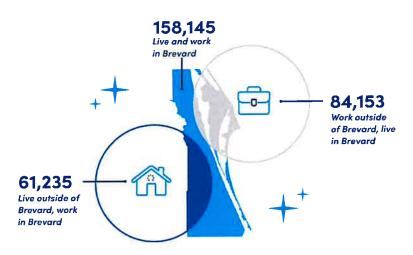


Figure 14. Time of Departure to Work

(Figure 15).

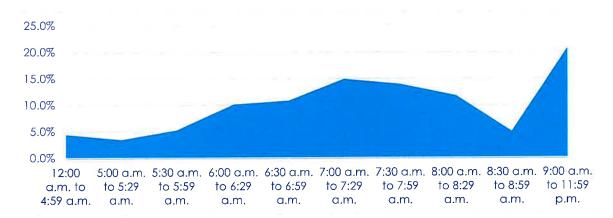
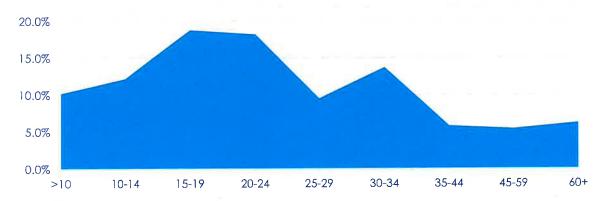


Figure 15. Time to Commute to Work



Bicycle/Pedestrian Network

The Space Coast has experienced an explosion of bicycle trips, with a 54% increase in the number of bike trips between 2019-2022. According to Replica, a trusted data source for the built environment, data from Spring 2023, 5,397 trips were taken by bicycle. As all transit riders start and end their trips as either a pedestrian or bicyclist, it's important to consider the connectivity from transit stops to final destinations (Figure 16). Transit stops that are well connected to the surrounding areas by comfortable and safe bicycle and pedestrian facilities not only address needs of existing transit users but may induce more residents to ride transit. The Space Coast TPO's Bicycle & Pedestrian Master Plan identified as one of its goals to connect high ridership transit routes and stops with bicycle and pedestrian facilities.

All Space Coast Area Transit fixedroute buses are equipped with bike
racks. Dependent on driver
discretion, bikes are allowed inside
buses during inclement weather or
if bike racks are full, which allows
for a multi-modal commuting
experience and first-and-last mile
assistance getting to and from the
bus.

Kennedy Miles ace Center Date: 6/21/2024 Cape Canaveral Space Force Station Port Canaveral (<u>a</u>) CAPE CANAVERAL COCOA A1A Patrick **(+**) SATELLITE BEACH INDIAN HARBOUR MELBOURNE INDIALANTIC MELBOURNE Legend Sidewalk SUN Trail Network Showcase Trails Bike Facility **Existing Trails** Planned Showcase Trails

Figure 16, Bicycle/Pedestrian Network

Parking

Although Brevard County is not necessarily considered high density and a large urban community, the unique geographic feature of being linear and having access to over

50 miles of beaches, providing adequate parking and accessibility to these amenities influences transit operations and demand for services. Specific corridors and areas that are impacted by limited parking include:

- SR A1A
- Downtown Titusville
- Cocoa Village
- Eau Gallie Arts District
- Downtown Melbourne
- Port Canaveral

Although limited in impact, natural and man-made events such as hurricanes and space launches can provide opportunities for public exposure to transit services and how transit could be a viable option on a more regular basis.

Land Use Patterns

Current future land use shows residential and commercial uses concentrated around existing incorporated cities and expanding further west of I-95. To the far west is primarily agricultural classifications. Mixed-Use land use offers the potential for transit-oriented development in areas such as West Melbourne, parts of Melbourne, Cocoa Beach, and areas of the downtowns in Titusville, Cocoa, and Melbourne. The future Cocoa Multimodal Rail Station also offer the opportunity of a mixed-use or transit-oriented development.

Figure 17, Space Coast Future Land Use



Major trip generators (Figure 18) such as shopping, employment centers, entertainment facilities, government centers, heath care facilities, and schools are spread throughout Brevard County with concentrations mainly in the eastern portions of Melbourne and Palm Bay, areas in Rockledge and Cocoa, Downtown Titusville, and sporadically through the barrier islands. Viera is also home to major trip generators as it is the location of the Viera Government Center, **Brevard Public Schools** Administrative Building, and the Veterans Affairs Clinic.

Major employment centers such as areas around the Melbourne Orlando International Airport and Cape Canaveral Space Force Station offer the opportunity to encourage mode shift, reduce parking concerns, and reduce congestion through offering transit services during prime shift changes.

95 46 Kennedy Space Center Date 3/14/2024 406 405 Cape Canaveral Space Force Station 3 Port Canaveral COCOA CAPE *CANAVERAL 520 COCOA 519 BEACH AIA ROCKLEDGE Patrick **SFB** (F) SATELLITE \$ SHORES BEACH INDIAN HARBOUR BEACH NDIALANTIC 192

Zoo Library

Figure 18. Major Trip Generators

33

* MELBOURNE BEACH

MALABAR MALABAR GRANT VALKARIA

Tourism

In the state of Florida, tourism is one of the biggest factors of economic growth. Outside of Disney World, tourism extends over to Brevard County because of the space industry at Kennedy Space Center and Cape Canaveral Space Force Station, cruising industry at Port Canaveral, and eco-tourism destinations such as Brevard's beaches, Merritt Island National Wildlife Refuge, St John's River and the Indian River National Estuary.



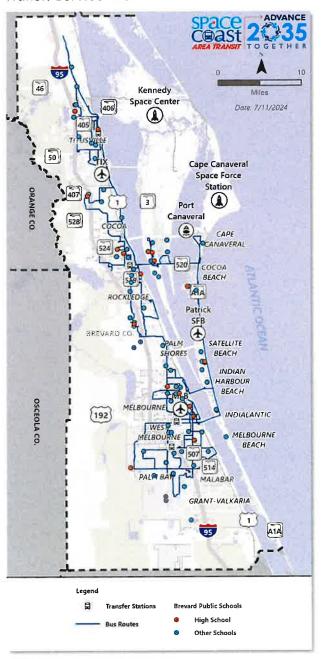


Port Canaveral is an industry leader in cruise travel next to Port of Miami and Port Everglades in South Florida. In the past five years, Port Canaveral has experienced steady growth in passenger traffic. In 2019, Port Canaveral saw 5 million passengers. In 2022, post-pandemic, there were 4.1 million passengers. Then, in 2023, traffic surged to 6.8 million passengers. Passenger numbers are projected to grow further, reaching 7.3 million in 2024. The port's overall economic impact is \$6.1 billion, with \$4 billion coming from cruise operations (State of the Port, 2023.) The SR A1A corridor not only provides access for these cruise travelers but also is a regional visitor destination with many hotels and vacation rentals. Transit services along this route should include providing a positive experience for visitors along with residents who use the system for access to jobs, shopping and general quality of life destinations.

Public Schools

Brevard County Public Schools provides its students with safe, reliable transportation services to and from school. Figure 19 showcases Space Coast Area Transit's current system in relation to public school locations. Most of the current system serves existing public schools in the area. Collaboration between Brevard County Public Schools and Space Coast Area Transit should continue where feasible as there already are existing students and teachers using the system to get to and from school, especially at the high school level.

Figure 19, Brevard County Public Schools & Transit Service Area



2.5 Transportation Disadvantaged Communities & Transit Propensity Index

Transportation Disadvantaged Communities

Identifying communities that are considered disadvantaged, such as from income, property values, number of vehicles per household, etc. transit resources can be better streamlined and allocated to reach these populations in greatest need. With opportunities for additional Federal resources for these areas, the Space Coast TPO and Space Coast Area Transit will assess and address services of the transit system that prioritize communities most in need.

Transportation Disadvantaged Communities are shown in **Figure 20**.

Figure 20. Transportation Disadvantaged Communities

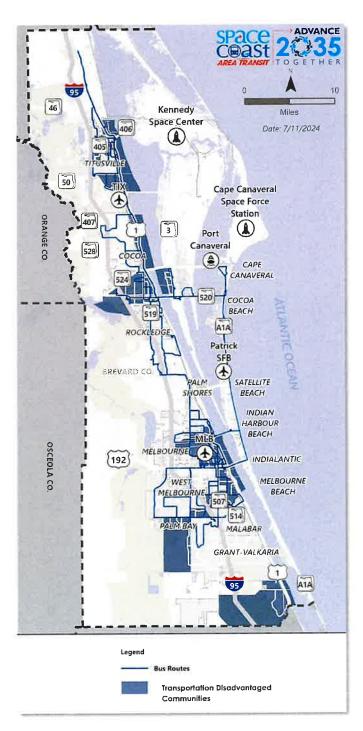


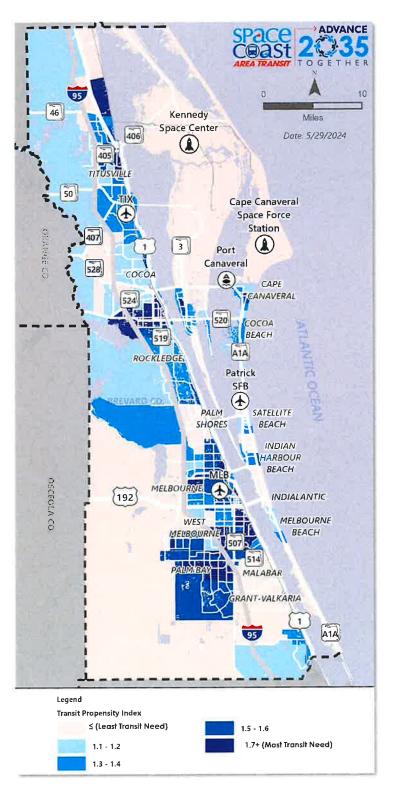
Figure 21, Transit Propensity Index

Transit Propensity Index

To better understand the greatest potential for expanding transit ridership within Brevard County, several factors were analyzed to understand the areas with the potential of greatest need, summarized in **Figure 21**.

The following key areas were identified as they relate to the more disadvantaged populations:

- Areas of eastern Titusville and Cocoa.
- Areas that are west, north, and southeast of Melbourne-Orlando International Airport, approximately a 3-mile radius.
- Lastly, southeastern portions of Melbourne and Palm Bay have some of the largest clusters of disadvantaged populations, south of US-192, along US-1.



3 Existing Transit Services & Performance Evaluation



3.1 Space Coast Area Transit Services

Transit services in Brevard County have been provided by Space Coast Area Transit, a department under the Brevard County Board of County Commissioners organizational structure, since 1983. Daily services are provided through its fixed-route bus system, demand-response/paratransit, vanpool and Volunteers in Motion programs.

Service Area

As shown in Figure 22, the service area of Space Coast Area Transit has a northern terminus in Mims at the Cape Canaveral National Cemetery and a Southern terminus in Palm Bay at Bayside Lakes Commercial Center with east-west loops in Palm Bay, West Melbourne, Melbourne, Merritt Island, Cocoa, and Titusville. The longest route is Route 1. This bus route starts from North Brevard County Government Complex in Titusville and ends at Viera Government Center. It covers over 27 miles and has 140 stops. The system in total covers over 1,100 stops and 321 miles of service.

Space Coast Area Transit Organizational/Management Structure

The Brevard County Board of County Commissioners oversees Space Coast Area Transit as a department. Space

Figure 22. Space Coast Area Transit Fixed Route Network





Coast Area Transit consists of 29 Administrative and Operations staff members and approximately 95 Vehicular Operators (as of June 2024).

Fixed Route Services

TOGETHER

Space Coast Area Transit offers 23 routes with over 1,100 stops at various times of the day, generally between 5AM and 9PM with two routes, (4 and 9) available past 10 PM. Routes typically have hourly headways, though key routes with higher demand offer 30-minute, or even 20-minute, headways as shown in **Figure 23**. Weekend service varies depending on the route. Route 33 offers no weekend service. Routes 4, 6, 9, & 21 run on both Saturday and Sunday. The remainder of routes are available on only Saturdays. Overall, there is limited Sunday service, with only 4 routes (4, 6, 9, & 21). The typical rider spends 6-15 minutes at the bus stop, 16-45 minutes on the bus, and 0-5 minutes from bus stop to their destination. Major transfer locations include Titus Landing in Titusville, Cocoa Transit Center, Melbourne Square Mall, Shepard Park in Cocoa Beach, and Hammock Landing in West Melbourne. These locations offer users key access to network coverage throughout the area. Common origins and destinations for transit riders include home, work, and shopping.



Figure 23. Space Coast Area Transit Headways





Bus Stops

Supporting transit's extensive fixed routes, there are approximately 1,100 bus stops. A Bus Stop Accessibility Study was conducted in 2018 that provides a baseline evaluation of all stops and their compliance with ADA requirements. Consideration of shelters, benches, boarding and alighting areas and other amenities were inventoried. Space Coast Area Transit continues to work with local agencies and the FDOT to bring additional stops into ADA compliance as funding is identified and as projects are implemented where stops are not currently up to latest standards.

Other Services

In addition to the Fixed Route Services, Space Coast Area Transit provides specialty services such as Transportation Disadvantaged (TD) Demand Response services, Americans with Disabilities Act (ADA) Paratransit services, Volunteers in Motion, and a Vanpool program with Commute with Enterprise.

The **TD and ADA Paratransit** services operate as a demand-response service and are provided to residents with mobility needs who are unable to use Fixed Route Services due to some form of disability or inability to access the fixed route system. For ADA Paratransit service, in accordance with ADA requirements, the Space Coast Area Transit must provide complementary demand-response service during the same days and times as fixed-route service is in operation. These services must be provided within 3/4 mile of fixed bus routes and include 3/4 mile radius at the end of each fixed route. Residents who use this service must first apply and become registered as ADA demand-response certified.

Transportation Disadvantaged (TD) services are for riders who, because of physical or mental disability, income status, or age, are unable to use the fixed route system by themselves or have no other means of transportation. The TD program is sponsored by the State of Florida Transportation Disadvantaged Trust Fund. This fund is overseen by the Florida Commission for the Transportation Disadvantaged (CTD), and at the local

level, designated Space
Coast Area Transit as the
local Community
Transportation Coordinator











Florida Commission for the Transportation Disadvantaged

(CTC). Serving in this role, it is the responsibility of Space Coast Area Transit to coordinate, manage and provide transportation services to those individuals who meet the eligibility requirements of the program. TD services are also offered at the same time and on same days as fixed route operations. Similar to the ADA program, users must first submit an application and be a certified TD rider prior to using the services.





Volunteers in Motion provides transportation for individuals who are unable to use other Space Coast Area Transit services on their own. This program offers access to transportation that provides trips to food sources, medical services and shopping essential for living and providing a decent quality of life for those who would otherwise be unable to live at home independently.

Space Coast Area Transit has a very successful Commuter Vanpool Program that is currently operated through a contract with **Commute with Enterprise**. Vans are leased to individuals to use as a commuter vanpool. Small groups of employees participate and

share in the operating costs making this a viable and more cost-effective transportation choice for many, especially those who have longer commutes. Non-profit agencies also participate and provide transportation services to mobility challenged including the aging population of Brevard.

Space Coast Area Transit Facilities

Space Coast Area Transit's main administrative offices (known as North Terminal) are located in Central Brevard at the Cocoa Transfer Station site, 401 South Varr Avenue. This facility serves not only as a major transfer location, but also provides operation and maintenance services of vehicles, along with fuel services. Transit's south terminal, located in Melbourne along US 1, also provides maintenance services along with administrative and operation staff. Space Coast Area Transit is considering the option to build a new facility, solely dedicated to Administrative, Operations & Maintenance efforts due to restrictions of space and growth at current offices.

Park & Ride locations provide a common location where commuters can leave their vehicles and then join others in a vanpool to complete their ride to work. There are currently three Park & Ride locations that provide parking at no cost, Viera, Eau Gallie and Palm Bay.

3.2 Space Coast Area Transit Trends

Space Coast's fixed route passenger trips have shown a slight recovery in 2023 from the COVID-19 pandemic ridership of 2020 and 2021. Space Coast's highest passenger trips in the past five years took place in 2017, at 2.12 million passenger trips. (**Figure 24**).

In 2023, Space Coast's fixed route system experienced the majority of ridership on weekdays, with a daily average ridership of 6,100 passengers (**Figure 25**).



The paratransit/demand response service trends are provided in Figure 26.

Figure 24. Fixed Route Annual Passenger Trips

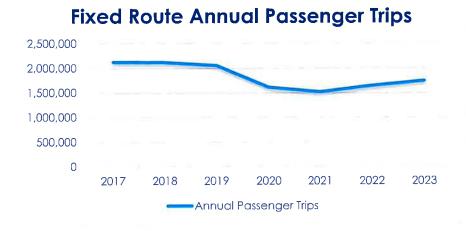


Figure 25. Fixed Route Daily Ridership Average

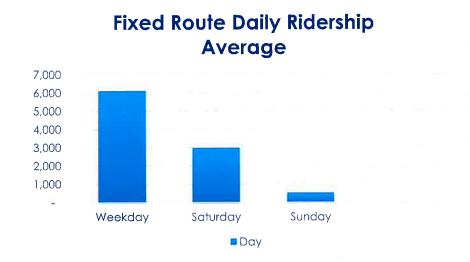
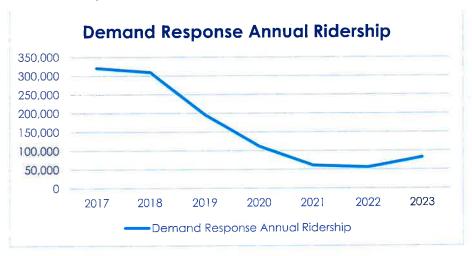




Figure 26. Demand Response Annual Ridership



3.3 Fixed Route Operating Characteristics and Performance

Table 4 summarizes annual ridership by route for FYs 2021-2023. Also provided are the operating headways and spans based on weekday service. Route 4, servicing central Brevard along SR 520 from Cocoa to the beaches, has the highest ridership providing over 239,871 trips in 2023, which is nearly 14% of Space Coast Area Transit's total fixed route. Coming in a close second is route 9, serving SR A1A along the beaches at 224,096 trips in FY 23, representing 13% of total ridership. In central Brevard, Route 6 ranks third serving the Cocoa/Rockledge areas. Overall, these segments present the need to connect users from the inland Cocoa area to the beaches.

Annual ridership by route is shown in **Figure 27**. The lowest ridership routes are 33 (Eau Gallie Arts District) and 11 (Port St. John) with 354 and 10,060 ridership in FY 23 respectively.

Operating hours and ridership by route are reflected in **Table 5** as of June 2024. Majority of routes operate on 60-minute headways. Those with higher ridership, Routes 4, 6, 8, 9, 21, 25 and 28 will run 30-minute headways during the peak hours of demand. Routes 4 and 6 along SR 520 and Cocoa have shortest headways of 20 minutes during majority of operating time from 8:00 a.m. to 5:00 p.m. Route 8 has highest headway in early morning of 125 minutes from 6:00 a.m. to 9:00 a.m. Only three (3) routes operate after 9:00 p.m., 4, 6 and 9.



Figure 27. Total Ridership by Route (2023)

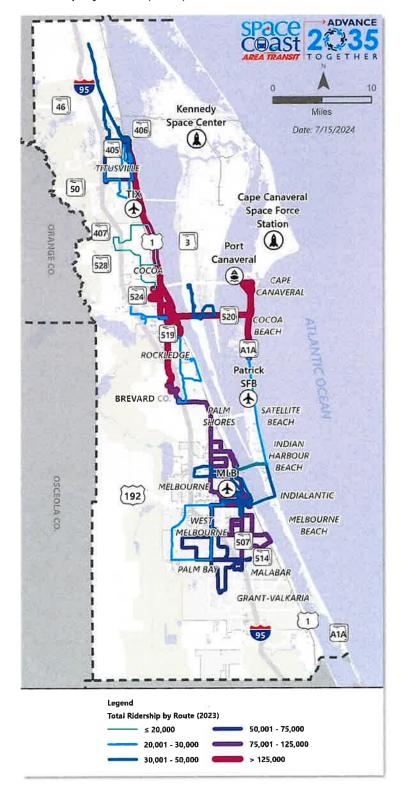




Table 4. Fixed Route Operations and Ridership

	THE RESERVE OF THE PARTY OF THE		Weekday				Annı	Annual Ridership	b d
Route	Area/Corridor	Start Time	End	Peak Headway (min)	Service Days	FY 2021	FY 2022	FY 2023	Change 2022-2023
1	Titusville/Viera	5:10 AM	8:30 PM	90	Mon-Sat	128,123	160,949	158,641	-1.43%
7	Titusville	6:15 AM	7:55 PM	09	Mon-Sat	57,747	55,859	59,485	6.49%
m	Merritt Island	7:11 AM	5:22 PM	9	Mon-Sat	31,113	34,266	32,966	-3.79%
4	520 Connector	5:50 AM	11:35 PM	20	Mon-Sun	193,953	223,806	239,871	7.18%
Ŋ	Titusville/Mims	8:00 AM	4:55 PM	09	Mon-Sat	26,539	33,168	31,489	-5.06%
9	Cocoa/Rockledge	5:50 AM	8:17 PM	20	Mon-Sun	152,750	183,547	185,953	1.31%
7	Rockledge/Viera	7:29 AM	5:55 PM	9	Mon-Sat	22,275	23,347	26,316	12.72%
00	West Cocoa	6:45 AM	6:19 PM	30	Mon-Sat	23,186	29,458	29,547	0.30%
6	Cape Canaveral/Cocoa Beach	6:00 AM	11:13 PM	30	Mon-Sun	132,236	206,557	224,096	8.49%
10	Central Titusville	7:00 AM	7:55 PM	09	Mon-Sun	6,436	21,205	27,023	27.44%
11	Port St. John	7:10 AM	8:00 PM	09	Mon-Sat	2,563	13,304	10,060	-24.38%
20	Heritage - West Melbourne	6:25 AM	8:20 PM	09	Mon-Sat	15,836	20,382	28,888	41.73%
21	Downtown Melbourne	7:15 AM	8:20 PM	30	Mon-Sun	62,104	65,760	78,582	19.50%
22	South Palm Bay	7:35 AM	8:30 PM	09	Mon-Sat	34,912	45,626	50,144	806.6
23	West Palm Bay	6:35 AM	8:30 PM	9	Mon-Sat	41,355	54,699	62,527	14.31%
24	Melbourne/Eau Gallie	6:55 AM	8:50 PM	9	Mon-Sat	41,488	31,976	31,286	-2.16%
25	Melbourne/Palm Bay	6:07 AM	9:07 PM	30	Mon-Sat	88,769	108,587	114,446	5.40%
56	South Beach	7:30 AM	7:18 PM	09	Mon-Sat	18,171	21,659	25,803	19.13%
27	East Palm Bay	6:35 AM	8:30 PM	09	Mon-Sat	62,698	81,976	94,406	15.16%
28	North Melbourne	6:55 AM	8:50 PM	30	Mon-Sat	67,496	81,149	83,859	2.28%
29	Melbourne/Viera	5:57 AM	8:02 PM	09	Mon-Sat	107,655	106,467	609'56	-10.20%
30	South Beach Connector	7:00 AM	7:55 PM	09	Mon-Sat	14,256	37,252	47,685	28.01%
33	Eau Gallie Arts District	9:30 AM	2:20 PM	20	Mon-Fri	302	202	354	75.25%



Table 5. Fixed Route Headways

	Headway (minutes) by Time of Day
Route	5:00 AM 6:00 AM 7:00 AM 8:00 AM 9:00 AM 10:00 AM 11:00 AM 12:00 PM 1:00 PM 2:00 PM 3:00 PM 6:00 PM 6:00 PM 7:00 PM 7:00 PM 8:00 PM 9:00 PM 10:00 PM 11:00 PM
Route 1 - Titusville/Viera	
Route 2 - Titusville	
Route 3 - Merritt Island	09
Route 4 - 520 Connector	30
Route 5 - Titusville/Mims	09
Route 6 - Cocoa/Rockledge	30 20
Route 7 - Rockledge/Viera	
Route 8 - West Cocoa	125 30
Route 9 - Cape Canaveral/Cocoa Beach	SO THE PROPERTY OF THE PROPERT
Route 10 - Central Titusville	09
Route 11 - Port St. John	09
Route 20 - Heritage - West Melbourne	09
Route 21 - Downtown Melbourne	09
Route 22 - South Palm Bay	The state of the s
Route 23 - West Palm Bay	
Route 24 - Melbourne	OF
Route 25 - Melbourne/Palm Bay	09
Route 26 - South Beach	
Route 27 - East Palm Bay	
Route 28 - North Melbourne	09
Route 29 - Melbourne/Viera	
Route 30 - South Beach Connector	
Route 33 - Eau Gallie Arts District	20 20



3.4 Fare Structure

Space Coast Area Transit's current fare system is split into three categories, as shown in **Table 6**. These include Bus, TD Paratransit, and ADA Paratransit fares. 1-Ride fares may be purchased the day of, or in advance on Token Transit app. Users are able to purchase multiple fares at a time on the Token Transit app. Individuals paying for 1-Ride fares on board must present exact change. 10 and 30-day passes may be purchased in advance on Token Transit app. Riders eligible for reduced fare passes include former or active military members, seniors age 60+, students, disabled individuals, TD Paratransit and ADA Paratransit. Fare passes may be purchased in advance with the Token Transit app, by mail, at local public libraries, or Space Coast Area Transit offices.

Table 6. Space Coast Area Transit Fare Structure

BUS, TD Paratransit and ADA Paratransit Fare Table						
Fare	Cost					
	Bus Fare					
Full Fare, 1-Ride	\$1.50					
Reduced Fare, 1-Ride pass	\$0.75					
Full Fare, 10-Ride Pass	\$12.00					
Reduced Fare, 10-Ride Pass	\$6.00					
Full Fare, 30 Day Pass	\$42.00					
Reduced Fare, 30 Day Pass	\$21.00					
TD P	aratransit Fare					
Reduced Fare, 1-Ride	\$1.50					
Reduced Fare, 10-Ride Pass	\$15.00					
ADA	Paratransit Fare					
Reduced Fare, 1-Ride	\$1.50					
Reduced Fare, 10-Ride Pass	\$15.00					

Current vs. Planned Fare Structure

Space Coast Area Transit's fare structure has remained the same since the last Transit Development Plan in August 2022. There are no planned fare changes at this time.

3.5 Farebox Recovery

Farebox Recovery is the percentage of operating costs that are recovered from fare revenues. Since the COVID-19 pandemic, the average farebox recovery rate for transit agencies across the United States has still not reached pre-pandemic levels. Ridership rates have slowly been rebounding but are not enough to counter recent inflation and increasing operating expenses. **Figure 28** shows the agency's 10-year overview for Farebox Recovery.



Figure 28. 10-Year Farebox Recovery Trend (NTD, 2012 - 2023)

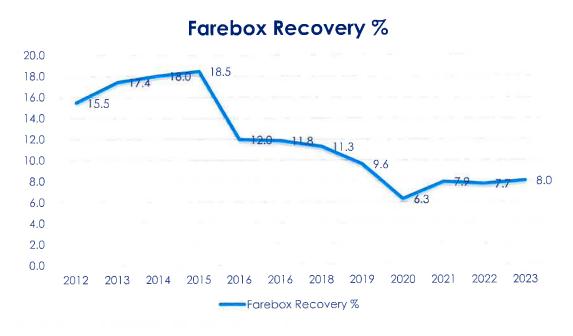


Table 7. Performance Measures 2017 - 2023

Measure	2017	2018	2019	2020	2021	2022	2023
Fare Revenue	\$834,452	\$833,258	\$760,249	\$530,134	\$735,691	\$829,718	\$913,462
Operating Expense	\$12,849,748	\$13,619,692	\$14,302,866	\$12,700,907	\$13,185,484	\$15,125,076	\$16,962,063
Farebox Recovery Ratio	6.49%	6.12%	5.32%	4.17%	5.58%	5.49%	5.39%



Strategies to Improve Farebox Recovery Ratio

The following strategies listed below are recommended to Space Coast Area Transit to employ for maintaining and improving the Farebox Recovery Ratio.

- 1. Increase ridership through transitioning paratransit riders, where reasonable, to fixed route services.
- 2. Increase ridership through public engagement activities and marketing events.
- 3. Monitor key performance measures for individual routes and maintain top performing routes.
- 4. Pursue service agreements with major employers and educational institutions.
- 5. Seek grants and funding opportunities to expand network connectivity and future routes.
- 6. Maintain current fare collection systems and locations to minimize administrative costs.
- 7. Explore short-term improvements during scenario development phase of Transit Development Plan.

3.6 Other Transportation Services

The Space Coast service area is close to major travel destinations and facilities such as Port Canaveral, Kennedy Space Center, Melbourne-Orlando International Airport, and Orlando International Airport. In recent developments, a **Brightline Passenger Rail Station**, will be established in Cocoa. This station will have a major impact on the county's transportation overall network and will require a review of and adjustments to routes for Space Coast Area Transit to serve this new trip generator. This development is taken into consideration when assessing route alternatives in the 10-year Plan.

Greyhound, a nation bus service for those desiring longer trips with connections throughout Florida and beyond to other states, has stops in both Rockledge and Titusville.



Located in Melbourne, the Florida Institute of Technology (FIT) provides its students and staff with a free trolley called the Panther Express Trolley. The bus services the main



campus along Babcock Street and provides rides to the FIT aeronautic site at Melbourne-Orlando International Airport.

Additionally, Stellar Transport offers non-emergency medical transportation in Melbourne. This service specializes in providing door to door services, helping elderly and disabled patients arrive comfortably and on-time to medical appointments.

Other services, taxis and ride shares such as Uber and Lyft also operate within Brevard County offering door to door services, typically through a mobile app. These services help fill in gaps when Space Coast Area Transit is not in operation.

3.7 Peer and Trend Analysis

Purpose of Peer Review

The purpose of a peer review is to assess the goals, efficiency, and effectiveness of Space Coast Area Transit system performance in comparison to other transit agencies. Comparing system performance with prior years provides context and reveals trends in the agency's potential improvement or regression. Additionally, comparing performance with peer agencies helps to identify areas where the agency may be overperforming or underperforming in comparison to similar transit agencies.

This section reviews Space Coast Area Transit's performance, comparing it with prior years and peer transit agencies. Data has been sourced through the National Transit Database (NTD) to ensure the accuracy and consistency of the analysis. Agency performance is discussed with respect to key performance measures that can be used to evaluate the efficiency and effectiveness of the transit system. The performance measures have been selected from FDOT's recommended transit performance measures. These transit performance measures are discussed in three sections: general, effectiveness, and efficiency measures. The analysis includes the results from the past five years of transit operations (2017-2021) and the most recent data available for 2022. Peer and trend analysis charts generated by NTD are in Appendix A: Peer and Trend Analysis.

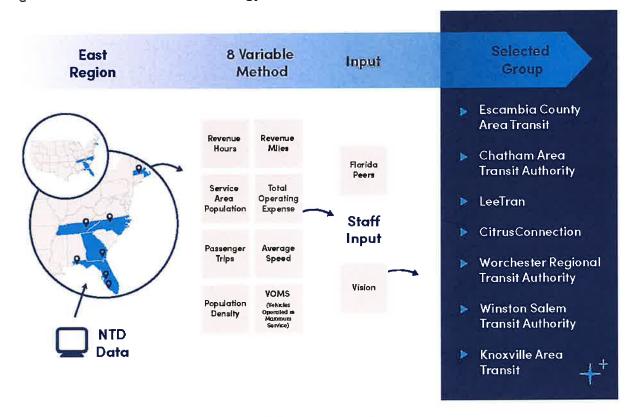
Peer Selection Methodology

The peer selection methodology illustrated in **Figure 29** was used to identify transit systems with similar operational characteristics to that of Space Coast Area Transit based on:

- Assessment of national transit agencies with similarities to Space Coast Area Transit's operating service characteristics using an 8-Variable Comparison Method.
- Whether the agency was included as a peer during the last TDP.
- Input from Space Coast Area Transit staff.



Figure 29. Peer Selection Methodology



The Florida Transit Information System (FTIS) Peer Selection tool was used to identify the peer transit agencies for both fixed route and paratransit operations. From this process, seven peer agencies, shown in **Table 8**, were included in the selected peer group. Of the selected agencies three were from within Florida and the remaining agencies were from around the country.

Table 8. Selected Fixed Route and Paratransit Agencies

Agency Name	Location
Escambia County Area Transit (ECAT)	Pensacola, FL
CitrusConnection (Citrus)	Lakeland, FL
LeeTran	Fort Myers, FL
Chatham Area Transit Authority (Chatham)	Savanah, GA
Worchester Regional Transit Authority (WRTA)	Worchester, MA
	Winston-Salem,
Winston-Salem Transit Authority (WSTA)	NC
Knoxville Area Transit (KAT)	Knoxville, TN



To assess how effectively those services meet the needs of the community, the trend and peer review analyses used key performance indicators/measures categorized as follows:

- **General Measures** to assess quantity of service supply, passenger and fare revenue generation, and resource input
- Effectiveness Measures to assess the extent to which the service is effectively provided
- Efficiency Measures to assess the extent to which cost efficiency is achieved

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Fixed Route Peer and Trend Analysis

This section highlights findings from the fixed route peer and trend analysis. **Tables 9 to**11 summarizes the results of Space Coast Area Transit's fixed route trend and peer analysis. Results of full analysis are provided in **Appendix A: Peer and Trend Analysis**.

General Measures

- Space Coast Area Transit's system operations continue to recover from the pandemic with increases in FTE employees, passenger miles, revenue miles, and revenue hours from 2021 to 2022.
- Space Coast Area Transit's passenger trips decreased by 4.4% from 2017 to 2022.
- Space Coast Area Transit's total gallons consumed increased by 4.6% and revenue hours increased by 1.9% from 2017 to 2022.
- Space Coast Area Transit is 8.3% below the peer mean for total operating expense and has gradually increased since 2017 when accounting for inflation.

Table 9. Space Coast Area Transit's Fixed Route Trend and Peer Analysis General Measures Summary, 2017-2022

Space Coast Area Transit's Fixed Route Trend Analysis						
General Measures	Below	Average	Above	Trend		
Passenger Miles			✓	1		
Passenger Trips		✓		1		
Revenue Hours	✓			1		
Revenue Miles			1	1		
Service Area Population			✓	79.20		
Service Area Size (sq miles)			✓	Issa		
Weekday Span of Service (in hrs)		✓		- 122		
Total Employee (FTEs)	/			1		
Total Gallons Consumed	✓			1		
Total Operating Expense	1			1		
Vehicle Hours	✓			\uparrow		
Vehicle Miles			1	1		
Vehicles Operated in Max. Service	✓			200		



Effectiveness Measures

- The COVID-19 pandemic has significantly impacted the transit agency's ridership and fare revenue. Passenger trips grew by 8.3% from 2021 to 2022 but remain 20% below the pre-pandemic levels. While average fares also decreased during the pandemic (\$0.33), it has since increased to surpass the pre-pandemic level, at \$0.51 in 2022.
- Space Coast Area Transit is below peer review in terms of service effectiveness in two of the five metrics. In 2022, Space Coast Area Transit provided 2.64 trips per 1,000 residents, compared to the peer average of 4.54.
- For the remaining service effectiveness measure, trips per revenue hour, Space
 Coast Area Transit exceeded the average with the second-best performance.
 This indicates that the transit agency is effective in achieving ridership for the
 services operated; however, fewer services are provided per capita on average
 than the peer systems.

Table 10. Space Coast Area Transit's Fixed Route Trend and Peer Analysis Effectiveness Measures Summary, 2017-2022

Space Coast Area Transit's Fixed Route Trend Analysis							
Effectiveness Measures	Below	Average	Above	Trend			
Average Age of Fleet (in years)			✓	1			
Average Trip Length (in miles)			1				
Passenger Trips Per Revenue Hour			✓	1			
Passenger Trips Per Revenue Mile	✓			1			
Passenger Trips Per Service Area Capita	✓			1			



Efficiency Measures

- Space Coast Area Transit's operating expenses have grown yearly, with the largest increase occurring in 2022; despite these increases, the agency has the second lowest operating expenses of the peer transit agencies.
- Space Coast Area Transit's service efficiency compares favorably to the
 peer transit systems, ranking first for operating expense per trip, per
 passenger mile, and per revenue while ranking second for operating
 expense per capita.
- Due to the increase in operating expenses, Space Coast Area Transit's
 farebox recovery has declined over the prior five years from 11.8% to 7.7%.
 This demonstrates a favorable comparison with the peer transit agencies,
 placing fourth highest.

Table 11. Space Coast Area Transit's Fixed Route Trend and Peer Analysis Efficiency Measures Summary, 2017-2022

Space Coast Area Transit's Fixed Route Trend Analysis					
Efficiency Measures	Below	Average	Above	Trend	
Average Fare	✓			↑	
Farebox Recovery			1	V	
Operating Expense Per Passenger Mile	✓			1	
Operating Expense Per Passenger Trip	1			1	
Operating Expense Per Revenue Hour	✓			1	
Operating Expense Per Revenue Mile	✓			1	
Operating Expense Per Service Area Capita	✓			1	
Revenue Miles Per Total Vehicles	1			1	
Revenue Miles Per Vehicle Mile			✓		
Vehicle Miles Per Gallon		- V		4	



Paratransit Trend Analysis

This section highlights findings from the paratransit peer and trend analysis. **Tables 12 to 14** summarizes the results of Space Coast Area Transit's paratransit trend and peer analysis. Results of the full analysis are provided in **Appendix A: Peer and Trend Analysis**.

General Measures

- Space Coast Area Transit's paratransit ridership and fare revenues have not recovered. Paratransit ridership declined again in 2022 and is down 55% of the 2019 peak. Fare revenue is down 65% from 2019, albeit with a slight recovery from 2021 to 2022.
- Space Coast Area Transit served less passenger trips (56,279 trips) than the peer group mean (93,326 trips).
- Space Coast Area Transit's total operating expense is close to the peer group mean of \$4.6 million.
- Space Coast Area Transit has 32 vehicles operating at maximum service (VOMS), similar to the peer mean of 29 VOMS.

Table 12. Space Coast Area Transit's Paratransit Trend and Peer Analysis General Measures Summary, 2017-2022

Space Coast Area Transit's Paratransit Trend Analysis						
General Measures	Below	Average	Above	Trend		
Passenger Miles		✓		4		
Passenger Trips	/			•		
Revenue Hours	✓			1		
Revenue Miles	1			1		
Service Area Population			✓	-		
Service Area Size (sq miles)			1	W(2)		
Weekday Span of Service (in hrs)			✓	200		
Total Employee (FTEs)	✓			1		
Total Gallons Consumed			✓	4		
Total Operating Expense	✓			1		
Vehicle Hours	✓			4		
Vehicle Miles	✓			1		
Vehicles Operated in Max. Service			✓	Spen		



Effectiveness Measures

- Driven by the decrease in passenger trips, Space Coast Area Transit's paratransit service experienced a decrease in passenger trips per revenue mile and in passenger trips per revenue hour, indicating a decline in effectiveness.
- Space Coast Area Transit's average age of fleet (8.14 years) is older than the peer group mean (4.7 years).
- Given to Brevard County's linear nature, Space Coast Area Transit's average trip length is 15.5 miles compared to the peer group mean at 9 miles.

Table 13. Space Coast Area Transit's Paratransit Trend and Peer Analysis Effectiveness Measures Summary, 2017-2022

Space Coast Area Transit's Paratransit Trend Analysis					
Effectiveness Measures	Below	Average	Above	Trend	
Average Age of Fleet (in years)			✓	4	
Average Trip Length (in miles)			1	4	
Passenger Trips Per Revenue Hour	✓			$\mathbf{\downarrow}$	
Passenger Trips Per Revenue Mile	/			1	
Passenger Trips Per Service Area Capita	✓			1	



Efficiency Measures

- Space Coast Area Transit's average paratransit fare (\$3.77) is above the peer group mean (\$2.56).
- Paratransit operating expenses have also decreased since 2019; however, the decrease from 2019 to 2022 was only 28%, leading to reductions in performance for most efficiency and effectiveness measures, including farebox recovery.
- Space Coast Ara Transit's vehicle miles per gallon (3.79 miles/gallon) is below the peer group mean (7.44 miles/gallon).

Table 14. Space Coast Area Transit's Paratransit Trend and Peer Analysis Efficiency Measures Summary, 2017 - 2022

Space Coast Area Transit's Pa Efficiency Measures	Below	Average	Above	Trend
Average Fare	54,000		1	^
Farebox Recovery	/			1
Operating Expense Per Passenger Mile	✓			1
Operating Expense Per Passenger Trip			✓	1
Operating Expense Per Revenue Hour		✓		T
Operating Expense Per Revenue Mile		1		1
Operating Expense Per Service Area Capita	✓			^
Revenue Miles Per Total Vehicles	1			1
Revenue Miles Per Vehicle Mile	✓			1
Vehicle Miles Per Gallon	✓			1



4 Public Engagement Activities and Results



4.1 Public Outreach Summary

Public outreach played a critical role in the development of the TDP. Outreach efforts aided in establishing the vision for Space Coast Area Transit in the next 10-years. This section summarizes outreach efforts and the key findings.

Figure 30 presents all TDP outreach efforts, with the outreach schedule and copies of materials/summaries for these activities included in Appendix B.

Figure 30. TDP Public Outreach Summary



The following improvements were most requested during transit surveys and the Public Workshops:

- More frequent service
- Improved service reliability
- Better sidewalk connections and ADA accessibility
- More bus shelters and benches
- More direct routes (less transfers)

4.2 Public Engagement Plan (PEP)

Public participation is a cornerstone of a transit agency and TPO's everyday activities and provides critical input to the LRTP and TDP planning process. The PEP and FDOT's approval of the PEP are provided in Appendix B. The purpose of the PEP was to engage



the public in a manner consistent with the 2022 SCTPO Public Participation Plan with an added emphasis in these areas:

- Reaching Underserved Communities Implement innovative strategies that
 reach populations who may experience inadequate access to transportation
 options and public services, including, but not limited to: Minorities, low-income,
 persons with disabilities, elderly, youth, and other transportation disadvantaged
 populations.
- **Technology and Innovation** Use of modern technology to assist with virtual and in-person public engagement tactics supporting a two-way conversation between the public and the project team.
- Meaningful Outreach Schedule Provide a thoughtful approach to outreach
 that maximizes staff and consultant time through the hosting of events,
 identifying successful partner events that align with public engagement goals,
 and combining outreach across multiple SCTPO projects where appropriate.

Public Awareness

Project Branding

Project branding was built to complement the Space Coast TPO tagline, "Advancing Transportation Together." "Advancing Long Range Plans" was used to accommodate overlapping public involvement for the TDP and the SCTPO LRTP and sub-brands for each plan noted their separate horizon years. This approach allowed for common collateral and media to be created.

Figure 31. LRTP and TDP Branding



A project webpage was created within the SCTPO website to provide a place for project documentation, and to provide details on public outreach events and feedback opportunities. TDP engagement efforts were also promoted through the SCTPO's e-newsletter and social media channels.



TDP Subcommittee

The TDP subcommittee was composed of the following agencies.

Table 15, TDP Subcommittee

TDP Subcommittee Agencies

Brevard County Traffic Operations

Brevard County Housing and Human Services

CareerSource Brevard (designated Local Workforce Development Agency)

FDOT Modal Development

Transportation Disadvantaged Local Coordinating Board Member

The Viera Company

The TDP Subcommittee held a kickoff meeting on September 13, 2023. This meeting provided project background and reviewed roles and responsibilities. Subcommittee members were asked to represent their organization throughout the process, spread the word about the plan update, review project team deliverables, and ask questions. The project team reviewed the Goals and Objectives and approach to public engagement before outlining next steps.

The TDP subcommittee reconvened on March 7, 2024. The purpose of this meeting was to collaborate and understand the transportation-related needs across the region for consideration in the TDP. The subcommittee provided the project team with comments on the rider survey results infographic and asked clarifying questions on the stakeholder interview notes.

The meeting also included an interactive scenario planning session. This exercise developed route improvements (scenarios), modeled each scenario performance, compared the modeled performance against the existing system, and explored subcommittee recommendations based on performance results.

For this session, Remix Transit was used to develop the scenarios, and each option was modeled using the TBEST software.

Overarching Subcommittee comments during this meeting included:

- Increased service needs due to population growth
- Mobility on Demand (MOD) considerations (who would be the user, serving rural areas vs. beachside, establishing MOD zones)
- There were several comments regarding potential express bus service



Local Coordination

The project team met with various municipalities to collaborate and understand the transit related needs within their areas for consideration in the 2035 Transit Development Plan (TDP). These meetings further explored the topics and route changes discussed in the TDP Internal Scenario Workshop previously held. Summaries of these meetings are included in Appendix B. Meetings held are shown in **Table 16**.

Table 16. Local Agency Coordination

Date	Municipality
8/14/2024	City of Cocoa, City of Cocoa Beach, & City of Cape Canaveral
8/14/2024	City of Melbourne
8/22/2024	City of Palm Bay

Stakeholder Interviews

Stakeholder conversations are a crucial aspect of public engagement for a Transit Development Plan (TDP), as they allow for different groups to provide important information on how they interact with Space Coast Area Transit. The Space Coast TPO met with two County Commissioners, and the following local governments, community-based organizations, and individuals:

- Space Coast TPO Transportation Subcommittee (municipal and modal partners)
- Aging Matters in Brevard
- Family Promise of Brevard
- Brevard Achievement Center Transportation Disadvantaged Local Coordinating Board (TDLCB)
- Brevard County Government
- Arc of Space Coast
- Brevard Homeless Coalition
- Housing for the Homeless

To facilitate and provide context for these conversations, several questions were provided to the stakeholders beforehand. These questions largely focused on Space Coast Area Transit as an agency and the stakeholder's overall thoughts about how they function. Appendix B includes a summary centered around some the overarching themes from the conversations.



4.3 Transit Rider Survey

A survey was conducted to assess the needs and interests of both transit riders and non-transit riders alike. The online survey was open October 16 - November 17, 2023. This coincided with the time of in-person surveying at transit stops and on-board Space Coast Area Transit buses.

Survey Promotions

The online survey was promoted through multiple physical and digital channels including:

- SCTPO Press Release
- SCTPO Get Involved Gazette e-newsletter
- Social Media posts shared by the SCTPO and Space Coast Area Transit
- Distribution of 4x4 "palm card" flyers
- Yard signs displaying a QR code
- Interior advertisements on Space Coast Area Transit buses
- In-person rider intercepts

Figure 32. Survey Promotion, 4x4 "Palm Card" Flyer



In-person Rider Surveys

Surveys were conducted over three days and included both on-board and off-board rider intercepts. Transfer stations including the Cocoa Terminal and Melbourne Square Mall provided opportunities to conduct full surveys with passengers waiting for one of several buses serving each location while also quickly handing out information cards about the online survey to passengers that had to make an immediate transfer.

The project team was also able to conduct full surveys on board or provide the online survey link to riders who preferred to take the survey using their own device.

The survey included 16 questions for current riders and 15 questions for non-riders along with additional demographic questions including age, household income, gender, race, and mobile device and data plan ownership. The survey is also included in Appendix B.





Survey respondents were also able to provide their contact information to receive future updates on the TDP.

Table 17 summarizes the rider survey dates and locations.

Table 17. Rider Survey Dates and Locations

Date	Surveyed Locations
October 24, 2023	Cocoa Terminal Melbourne Square Mall
November 2, 2023	Melbourne Square Mall
November 8, 2023	Cocoa Terminal Melbourne Square Mall
Date	Surveyed Routes
October 24, 2023	1, 6, 4, 9, 20, 21, 24, 25, 28
November 2, 2023	21, 22, 23, 25, 30
November 8, 2023	1, 2, 3, 4, 5, 21, 25, 27, 29

In total, 598 survey responses were collected including 376 riders and 222 non-riders. An overview of their responses is captured in **Figure 33**.



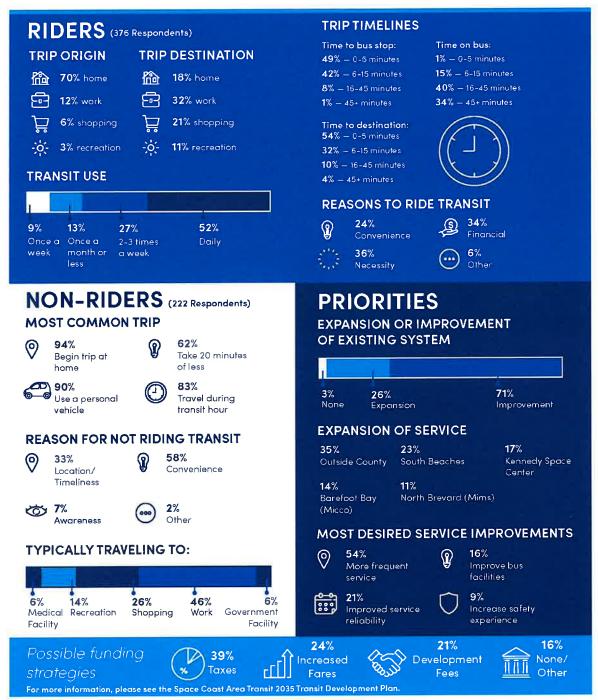
Figure 33. Rider Survey Results

FALL 2023

TRANSIT RIDER SURVEY RESULTS









4.4 Public Workshops

Input from partners/stakeholders and the general public was gathered at seven different workshop-style events held in conjunction with other projects or meetings throughout the process. A description of the workshops and the input received during these efforts is summarized in this section of the report.

Space Coast TPO State of Transportation - November 15, 2023 (Center for Collaboration, Rockledge)

The 2023 State of Transportation brought together municipal leaders, agency representatives, and regional partners from across Brevard County. Information about the TDP and its alignment to the LRTP was shared with the over 80 attendees that were present. Additionally, Ken Harley, Special Projects Coordinator with Space Coast Area Transit, provided an agency overview.

Needs Charette – January 31, 2024 (Center for Collaboration, Rockledge)

The Needs Charette was an in-person opportunity for the project team to collaborate with local partners. Staff at the transit station solicited and received feedback on a range of topics including fixed-route transit, micromobility, and transit-oriented development. Points of discussion included:



- Members questioned if express routes on I-95 and U.S. 1 could alleviate congestion.
- It was also noted that there is a need for bus stop shelters across Brevard County at all bus stops.
- Barefoot Bay was marked as an area that lacks any multimodal options.
- Melbourne, West Melbourne, and Palm Bay agreed that their respective cities need an increase in transit routes.
- The City of Cocoa Beach questioned if bus routes/stops would alleviate congestion in high traffic areas.



Modal Partners Workshop – February 21, 2024 (Space Florida, Merritt Island)

Similar to the Needs Charette, stakeholders in attendance were able to mark up maps and provide feedback on their current and anticipated future needs. Points of discussion included:





- Issues related to people commuting into Brevard County.
- New needs related to freight and cargo due to the growing space freight industry
- There is a new issue for freight and cargo related to the growing space freight industry, which counter to what previously had been planned for the area.
- Stakeholders agreed that there was a need for the Space Coast region to have reliable alternative transportation modes.

2024 Fast Forward Workshops – May/June 2024 (North, Central, South, and Beachside)

Space Coast TPO and Space Coast Area Transit staff also held four general public workshops throughout Brevard County.

- LRTP/TDP Workshop (Beachside) May 22, 2024, 5:30PM 7PM Scotty Culp Municipal Center, Satellite Beach. 13 attendees.
- LRTP/TDP Workshop (South) May 30, 2024, 5:30PM 7PM Franklin T. DeGroodt
 Public Library, Palm Bay. 22 attendees.
- LRTP/TDP Workshop (North) June 4, 2024, 5:30PM 7PM Titusville Public Library, Titusville. 12 attendees.
- LRTP/TDP Workshop (Central) June 12, 2024, 5:30PM 7PM Center for Collaboration, Rockledge. 30 attendees.





Attendees to each workshop could provide feedback on their transit needs and interests to staff at a dedicated TDP station. Participants were also given three dots to place on an exhibit board to answer the question, "What is most important to you when improving our transit system?" Results for this exhibit board are shown in **Figure 34**. An additional board featuring a map of the transit system was also available for residents

to make notes and comment on.

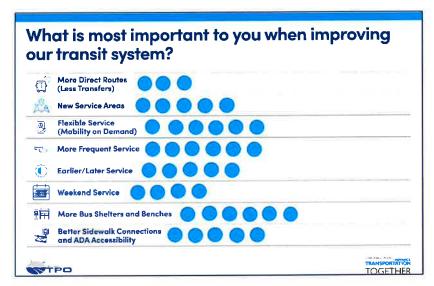
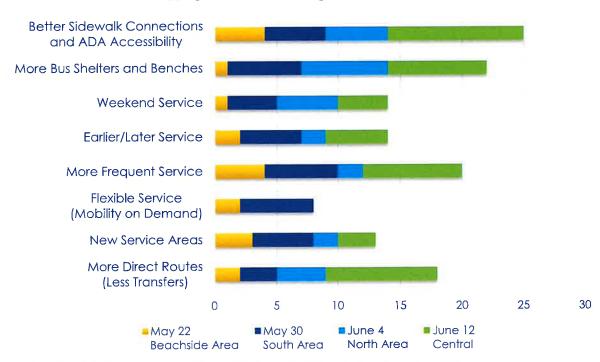




Figure 34. Transit Improvements Results from Mini Workshops

Transit Improvements (Dot Stickers Board)

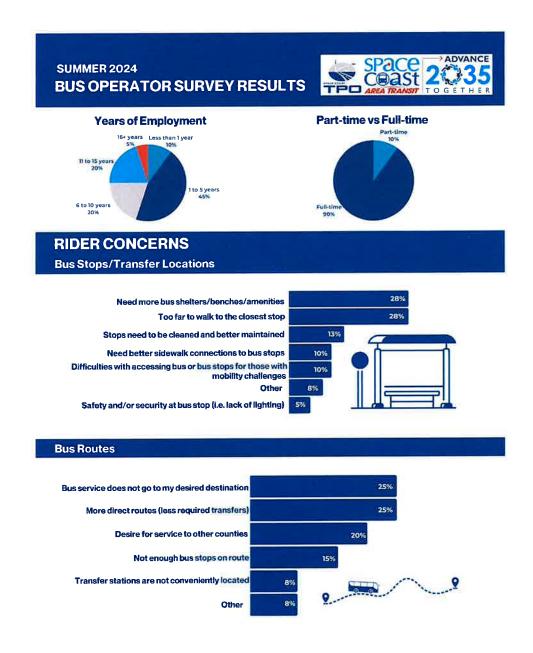




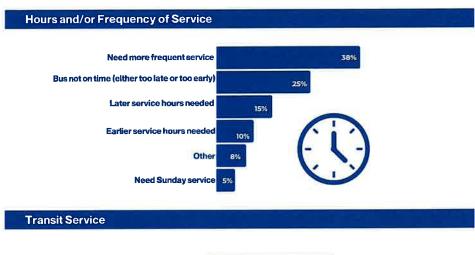
4.5 Bus Operator Survey

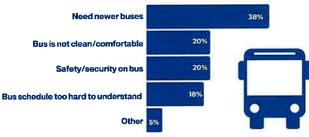
Space Coast Area Transit interviewed bus operators from May 20-31, 2024. The questionnaire is included in Appendix B. The results of the completed surveys have been compiled and are displayed in **Figure 35**.

Figure 35. Bus Operator Survey





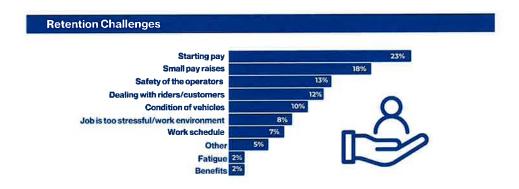




Compliments from Riders





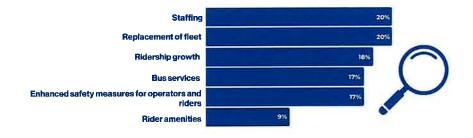


IMPROVEMENTS OVER THE NEXT 10 YEARS

Potential Service Improvements



Focus Areas



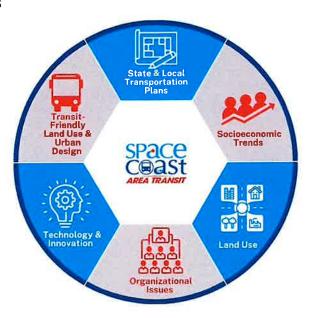


5 Situation Appraisal



Transit systems function best when the local and regional factors that impact the agency's ability to provide service daily effectively and efficiently can be identified and understood. The situation appraisal assists an agency in examining strengths, weaknesses, challenges, and opportunities for the services it provides. A situation appraisal for Space Coast Area Transit was conducted to assess and document key aspects of the operating environment based on information gathered for the TDP, including baseline conditions, public outreach, and state and local transportation plans. Included in this section are assessments of the situation appraisal elements illustrated in Figure 37.

Figure 36. Situational Appraisal Elements





5.1 Plans and Policies

A range of transit, transportation, and planning documents were reviewed as part of the situational appraisal process, as shown in **Table 18**. These documents were reviewed to understand the implications of these plans for public transportation in the Space Coast service area.

A table for the Plans Review is provided in **Appendix C**. Overall, the following key takeaways were derived from the plans review:

- Space Coast Area Transit provides vital services to residents, with a growing need for expanded weekend service, evening service, and increased headways.
- There is overarching interest in exploring and deploying Mobility on Demand and Bus Rapid Transit in the Space Coast service area.
- Municipalities largely support multimodal improvements, including pedestrian, bicycling, and transit facilities.
- The incoming Intermodal Station from Brightline presents future opportunities to connect to fixed-route network.



- There are opportunities to provide connections to neighboring counties, to aid with commuters and travel for work in and out of the county.
- Transit improvements should be given consideration for disadvantaged populations in Southern Brevard, including Palm Bay, Malabar, and Micco.

Table 18. Local, Regional, and State Plans Reviewed

Local

- ✓ Space Coast Area Transit FY 2023-2032 TDP Major Update (August 2022)
- ✓ Space Coast Area Transit FY 2021-2025 Transportation Disadvantaged Service Plan Update (TDSP) (June 2023)
- ✓ Space Coast Area Transit Draft Comprehensive Operational Analysis (COA) (October 2022)
- ✓ Space Coast Transportation Planning Organization (TPO) 2045 Long Range Transportation Plan (LRTP) (December 2020)
- ✓ Space Coast TPO FY 2021–2025 Transportation Improvement Program (TIP)
- ✓ Brevard County Comprehensive Plan (February 2022)
- ✓ Comprehensive Plan Future Land Use and Transportation Elements for:
 - · City of Cocoa Beach
 - · City of Melbourne
 - City of Palm Bay
 - · City of Rockledge
 - · City of Satellite Beach
 - · City of Titusville
 - City of West Melbourne

Regional/State

- ✓ Intermodal Station Feasibility Study/Brightline (October 2024)
- ✓ LYNX FY 2023-2032 TDP Major Update (September 2022)
- ✓ VOTRAN FY 2023-2032 TDP Annual Update (December 2022)
- ✓ Florida Rail System Plan (November 2023)





5.2 Socioeconomic Trends

Brevard County's growth and trends are holding relatively steady when compared with Florida as a whole. Although Brevard County is growing, it's growing at a slower pace than the rest of the state. Brevard County has an older, Caucasian population than Florida as a whole, with higher median household incomes and a lower poverty rate.

Because of the geographic constraints of Brevard County (discussed further in Land Use), population growth going forward can primarily only happen through increased density in areas that are already urbanized. Although Brevard County has relatively low density, the areas with higher density are the cities along the coastline (Melbourne, Palm Bay, Cocoa, and Titusville), all of which are currently supported by Space Coast Area Transit.

Similarly, employment growth will also be constrained to currently urbanized areas that are already served by transit. Increasing transit service thresholds in specific areas could be considered if there is greater-than-expected employment growth in areas where employment density already warrants high to very high transit investment. If this growth occurs in service industries with employees who rely on transit more heavily than in other industries, increase transit service thresholds could be valuable. Employment centers such as Melbourne Orlando International Airport, Titusville, Cape Canaveral and Port Canaveral could demonstrate higher transit needs for commuting purposes.

Two socioeconomic factors in Brevard County are worth watching for increased future transit investment:

Age

Brevard County has a faster-growing 65+ population than the rest of the state. As the county's senior population continues to grow, the decline in an aging population's ability to drive could result in an increased reliance on transit. Thinking proactively about how an aging population might access and use transit would help serve this population now and into the future. Some localities have begun piloting or expanding mobility-on-demand and curb-to-curb programs specifically with their aging and mobility-challenged populations in mind. Creative partnerships with senior living facilities may also be worth exploring.

Concentrated Poverty

As a whole, Brevard County's poverty and unemployment rates are lower than the rest of Florida. While transit coverage does overlay with the County's disadvantaged populations, increased transit service within these areas could be warranted if the population needs more mobility options.



An analysis of the county's Transportation Disadvantaged Population highlights several areas where residents are considered "Most Disadvantaged," including the far north of the county, the areas surrounding SR 520 in Cocoa, and pockets throughout Melbourne and Palm Bay.

Digging deeper into some of the statistics, 2% of the county doesn't have access to a vehicle, but only 0.8% rely on public transportation to get to work, whereas 1% walk. Continuing to connect with transit-dependent residents through public outreach about how their needs could be better met with transit is a valuable exercise for the next chapter of Space Coast Area Transit.

5.3 Land Use Policy



Land use and transportation, when planned concurrently, can lead to more effective land use and transportation networks, which can increase mobility and walkability. Local governments are responsible for land use policies in their respective incorporated areas, including the establishment of zoning districts and future land use designations. Brevard County oversees these decisions for unincorporated portions of the

county only; land use decisions in incorporated areas are made by the respective jurisdictions.

Brevard County is a largely low-density residential county, both now and as planned into the future. Future land uses maintain the basic mix and placement of land uses currently, including:

- Developed land is primarily classified as "Residential Low."
- Higher-density residential uses are primarily in Cocoa, Rockledge, surrounding the Melbourne-Orlando International Airport, and between Indian Harbour Beach and Indialantic.
- The far west of the county will maintain its Agricultural and Conservation designations.
- Industrial uses are primarily concentrated around the Melbourne-Orlando International Airport and U.S. 1.
- Commercial uses are primarily surrounding the airport, south of Cape Canaveral, and along major arterials.

Space Coast Area Transit's service area mostly already includes the expected future growth area of the county. Increase in densities beyond what's expected or changes in uses could warrant increased service. Certain areas of higher density already warrant higher transit investment thresholds than what Space Coast Area Transit provides.



Two new Brevard County developments should be noted with regard to future transit connections:

- Cocoa's Brightline Station. The impact of the **bright**line recently announced Brightline station in Cocoa on future land uses remains to be seen. The potentially transformative project, to be located near where State Road 528 and U.S. 1 meet, could boost the economy of the immediate area in Cocoa through jobs, local business, and new development. Any developments or increases in activity beyond the Future Land Use plan could warrant additional transit service. Of note could be the new ability of cruise travelers to connect to Port Canaveral through the Coca station, which could increase ridership on the 520 Connector as passengers are newly able to seamlessly travel to their cruise without a car.
- South Brevard Residential Development. The new I-95 St. Johns Heritage Parkway interchange is being credited with opening areas west of I-95 in southern Brevard for new residential construction. In May 2024, SunTerra Communities purchased over a thousand acres south of Palm Bay, intending to build 2,700 residential units along with some commercial construction. Called SunTerra Lakes, groundbreaking is expected in 2025, and it won't be alone. This new greenfields development continues the push of growth on the west side of I-95 right up against protected conservation lands and agricultural lands and is seen as an area of future growth. Others include Ashton Park nearby, a 6,763-unit (mostly single-family) Dix Developments project, and Everlands, adding another 1,238 single-family homes. Adding this scale of new growth to South Brevard will almost certainly require more transit capacity on Space Coast Transit's southern routes. Should these new planned developments add more walkability and mix of uses than current residential development in Brevard County, residents will be able to enjoy more of what their community offers without a car, including possibly being able to walk to a transit stop. Although these developments are currently in the planning stages, that some

are being described as "mixed-use" at all could be a positive sign toward the future efficiency and viability of transit in the

county.





5.4 Organizational Issues

Space Coast Area Transit's organizational structure influences its ability to function effectively and serve the needs of their riders. The following is a review of the overall structure of Space Coast Area Transit, its primary responsibilities and roles in the community, and the description of its staffing and resource allocation levels.

Space Coast Area Transit operates as a department under the Brevard County Board of County Commissioners. There are four main divisions of the agency.

Operations & Maintenance Division

The Operations Division administrates the core functions of the agency. These functions are divided by Fixed Route; Maintenance; Paratransit Services; and Safety & Training. Maintenance services are provided through contracted services with remaining day to day operating functions administered by Space Coast Area Transit.

Administrative Services Division

The Administrative Services Division oversees many of the internal administrative functions of the agency. It is subdivided into five functional areas: Procurement, Revenue, Payroll, Finance/Budget, and Grants/Disadvantaged Business Enterprise (DBE). Tasks performed by this Division include budgeting, payroll management, procurement procedures, grant management, inventory management, accounts payable, and accounts receivable.

Support Services Division

The Support Services Division manages most of the public-facing functions of the agency. Tasks performed under this Division include public outreach, communications, government relations, customer relations, facility security, enterprise technology, and applications for public use. In addition, Marketing efforts are contracted out.

The agency's 2022 Asset Management Plan highlights tasks such as marketing and customer service. The agency aims to improve transparency and accountability with stakeholders and customers, by providing more accurate and timely data. Additionally, the agency strives to focus investments on customer satisfaction, through improving reducing missed trips, slow orders, and facility shutdowns.

Planning Division

The Planning Division oversees Space Coast Area Transit's planning, scheduling, and bus stop infrastructure. It is divided into four functional areas: Strategic Planning, Service Planning, Bus Stop Infrastructure, and Equal Employment. Tasks performed under this Division include short- and long-range planning, implementation of new or revised service, preparing the transit development plan and other state/federal planning requirements, and coordinating with other planning agencies. Similar to Support



Services, customer service is a priority as highlighted in the Asset Management Plan. The agency is actively working towards improving on-time performance, service operations, and bus/facility cleanliness for customers.

Staffing

In FY 2022, Space Coast Area Transit reported employing 82 persons for its fixed route bus operations and 5 employees to support the service. Space Coast Area Transit's total full-time equivalent (FTE) employees is about 44% under the peer average. Recruitment for operators has increased since the COVID-19 pandemic, however bus operator retention has continued to be an industry-wide challenge. These constraints may pose challenges to Space Coast Transit's ability to maintain existing service levels and meet demands like more frequent service, expanded service, and later service.

Funding

Between 2022 and 2023, Space Coast Area Transit saw a 57% increase in operating expenses, the largest increase yet. Despite this increase, farebox revenue has not kept up with operating expenses. Overall, Space Coast Area Transit's revenues mainly come from federal grants, state grants, and Brevard County General Fund allocations. These increasing operating expenses present an opportunity for Space Coast Area Transit to assess existing services and improvements for effectiveness and cost efficiency. In addition, seeking further funding from state and local sources should be considered for service expansions.

Figure 37. Space Coast Operating Expenses, 2017 - 2023

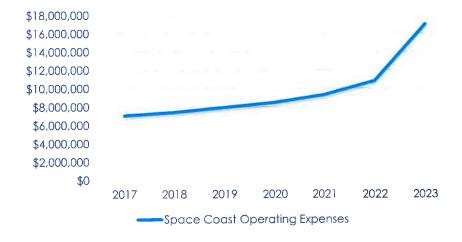
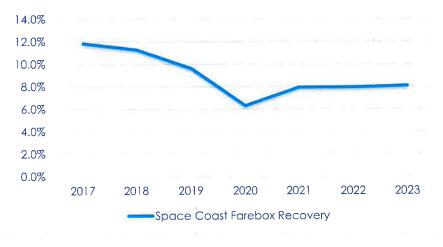




Figure 38. Space Coast Farebox Recovery, 2017 - 2023





5.5 Technology and Innovation

Space Coast Area Transit offers a range of technologies through its service and bus fleet, a few of which include:

- **Mobile Ticketing:** Mobile ticketing system powered by Token Transit allows for contactless payment and access to bus passes via smartphone or computer.
- **Mobile Bus Tracker:** 321Transit Bus Tracker mobile application allows for users to track buses electronically in real time via smartphone or computer.
- **Trip Planning:** Maintaining General Transit Feed Specification (GTFS) files to support trip planning platforms for users on Google Maps, agency's website, and smartphone.
- On-Board Wi-Fi: Free wi-fi available on all fixed-route busses for users.
- Sustainable Fleet: Implementation of hybrid fuel buses in agency's inventory (3 hybrid busses currently).



In addition, the Space Coast TPO conducted an Intelligent Transportation Systems Master Plan Update in 2021. Many Intelligent Transportation System (ITS) components are at work across the region managing roadway traffic, enhancing safety for bicycle/pedestrian trips, and informing travelers of important information that can affect their travel route in Brevard County. Overall, these technologies will improve service for users on board transit, enhance safety at transfer centers and bus stops, and boost safety and accessibility throughout Space Coast's transportation network. Space Coast Area Transit should continue these innovative technology efforts and align efforts with Space Coast TPO when planning future infrastructure needs and operational considerations for technological improvements.

Innovative Technology



Closed Circuit TV (CCTV)



Vehicle Detection



High-Speed Fiber and Wireless Network



Crosswalk Detection Software with traffic control for pedestrian safety



Automatic Vehicle Locating (AVL) for Space Coast Area Transit Fleet



Automatic Passenger Counting (APC) for real-time data collection



Stop Announcements



Free Wi-Fi on Busses



Bus Tracker Application



Hybrid Fuel Transit Vehicles





5.6 Transit-Friendly Land Use & Urban Design Efforts

As discussed in Land Use, the Space Coast service area will see future major developments regarding transit connections. The future Brightline intermodal station will be a hub for all modes, offering parking, transit services, ride shares, local tour charter buses, electric vehicle charging stations, hotel buses, port buses, etc. Space Coast Area Transit will need to provide fixed-route

service and stops to and from this station, to allow workers, residents, and tourists an alternative to driving.

Despite the pockets of new developments and future growth, Brevard County is still overwhelmingly low-density residential, which is a challenge for creating an efficient transit system. The sprawling development pattern and ease and abundance of parking will continue to keep transit as an after-thought for most residents, save for the population without a car discussed in Socioeconomics. Without a change in land use patterns throughout the county, accessing employment centers and activities centers without a car will likely continue to be a challenge. For a transit agency, providing such services is also difficult. Jurisdictions facing similar land use challenges are increasingly considering shifting some of their least popular routes to Mobility on Demand service to better serve less dense areas, be more efficient with labor and vehicle deployment, and pilot new ideas in a low-risk environment. It is worth noting currently, Space Coast TPO and Space Coast Area Transit are conducting a Mobility on Demand Study to assess options and recommendations for the area, along with future grant funding opportunities.



6 Goals & Objectives



This section identifies Space Coast Area Transit's 10-year goals, objectives, and performance measures, summarized in **Table 19**. The TDP goals and objectives, initially developed alongside the 2050 LRTP, are an important part of the transit needs evaluation. Reviewing goals and objectives helps determine how closely the TDP alternative aligns with the community vision. Overall, five goals were established, each having one to three objectives.

Table 19. 10-Year Goals and Objectives

<u>Iransit Vision:</u> To provide all persons living, working, or visiting Brevard County the opportunity to use transit as a safe, affordable, convenient, and sustainable way of traveling.

<u>Transit Mission:</u> Respond to existing and emerging user markets by maintaining current transit service levels while gradually enhancing fixed-route services in the most productive corridors, providing flexible on-demand services in high-need areas where fixed-route service may not be the optimal choice, and implementing sustainable service delivery options, as feasible.

delivery options, as feasible	e.	
Goals		Objectives
Safety		
	Provide a safe and equitable transit system.	 Promote safety and Vison Zero as top priorities of the transit agency. Create and implement after-action review protocol with training compliance.
	Create and maintain an accessible, efficient, and effective multimodal transit system.	 Improve transit service, connectivity, ADA compliance, and integration with other transportation modes. Improve access to jobs and services through increased transit connectivity. Form partnerships with Brightline and other regional transportation providers. Identify non-motorized access deficiencies at transit stops and transfer centers. Improve coordination with the Space Coast Transportation Planning Organization (SCTPO).
Multi-Modal Options		
	Promote economic growth and improve overall quality of life with a connected & accessible multi modal system.	 Promote transit-oriented development (TOD) near transit interchanges within urbanized areas. Promote transit system connectivity to Affordable Housing. Improve mobility for transit dependent populations through potential fixed-route, vanpool, and demand responsive service. Improve transportation, accessibility, and connectivity within underserved and transit dependent communities (low income, zero-auto households, elderly, youth, and persons with disabilities).



		Encourage mode shift away from private motor vehicle trips.
Linking Transportation and	Deliver a flexible transit system with enhanced mobility through fixed route, premium transit, and emerging technologies.	 Expand evening and weekend fixed-route service to service riders with non-traditional work hours and other off-peak travel needs. Develop a strategy for the integration of micro mobility in the transit service area to improve first/last mile connections. Explore the opportunity for mobility-on-demand and other emerging technologies to expand regional transit coverage. Implement technology options which improve information delivery, service, and rider experience.
Sustainability, Equity, & Res	iliency	
	Improve operational performance and ridership & while maximizing potential funding opportunities. Deliver a sustainable, equitable and resilient transit system.	 Identify potential grant opportunities for transit infrastructure, service, and operational improvements. Increase farebox recovery and ridership. Maximize reliability by improving On Time Performance (OTP). Improve service quality and on-board experience for customers. Maximize the number of transit fleet and facilities for optimal peak. Seek opportunities to improve environmentally sustainable practices. Establish resilient recovery during emergencies (i.e., natural hazards, shocks, and stressors). Recruit, attract, and retain well qualified employees while also promoting opportunities for continuous training and development. Decrease overall fleet greenhouse gas (GHG) emissions by 10%.
Marketing & Public Engage	ement	
	Expand the opportunities for public engagement, community outreach and marketing strategies throughout the region.	 Maximize availability of service information, including in accessible formats objective. Seek improved partnerships with other regional agencies to further participate in community events and meetings. Expand marketing outreach to businesses, high schools, colleges, and universities to strengthen partnerships and boost ridership.



7 Transit Demand Assessment



7.1 Transit Accessibility Analysis

An analysis was conducted on Space Coast Area Transit's key transfer centers to measure the system's degree of accessibility and efficiency. This analysis provides insight on how the current system influences travel patterns of current and potential riders.

Accessibility Methodology

Remix, a transit software platform, was used for analyzing transit accessibility. Remix provides visual data of destinations that are accessible through the fixed-route network.

The accessibility tool is a travel-time isochrone that shows how far a person can travel via transit in a given timeframe, (referred to as 'Jane' in Remix). Travel distance is categorized by four isochrones. Travel distance includes a combination of taking transit, potential transfers, and walking.

Accessibility was measured for a weekday, at 8:00 AM within a 90-minute travel timeframe. The number of jobs accessible, zero vehicle households, older adults, and low-income population via transit was also measured. The following transfer locations were selected as origins for this analysis:

- Cocoa Transit Center
- Titus Landing
- Melbourne Square Mall
- Hammock Landing

Key Takeaways

Figures 39 to 42 display accessible jobs and travel times via the Space Coast transit system. The following travel patterns were noted for each transfer center:

- Cocoa Transit Center: From this transfer center, a person can access Titusville, Merritt Island, Viera, and the Beaches within 90 minutes. Travel time to southern areas such as Melbourne and Palm Bay may take longer.
- Titus Landing: From this transfer center, a person can access all Titusville routes and the Cocoa Transit Center. Travel time to the Beaches, Melbourne, and Palm Bay may take longer.



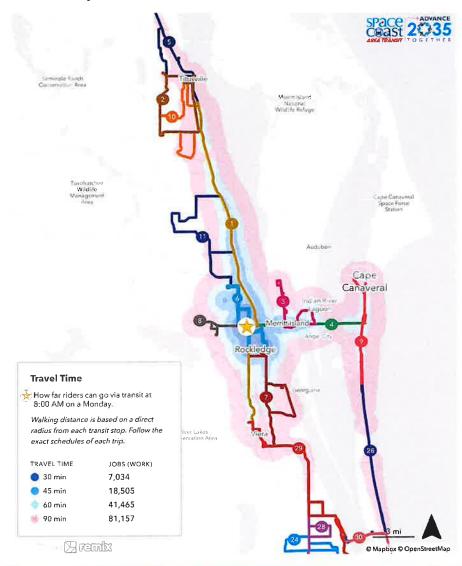
- Melbourne Square Mall: From this transfer center, a person can access most of Melbourne's routes and reach northern Palm Bay and Indialantic. Travel time to Space Coast's Central and Northern areas would take longer.
- Hammock Landing: Like Melbourne Square Mall, from this transfer center a person can access most of Melbourne and Palm Bay. Out of the four transfer centers, Hammock Landing routes connect riders to the highest number of jobs (84,000+) within a 90-minute travel timeframe. However, travel time to Space Coast's Central and Northern areas would take longer.

Overall, the current transit system offers large coverage of the Space Coast area. There are limitations in accessibility, however, due to the service area's linear geography. For this same reason, there are constraints posed for individuals traveling from north to south/south to north within the service area. This constraint may be further exacerbated by service hours, potential transfers, waiting times, frequency, and existing pedestrian networks.

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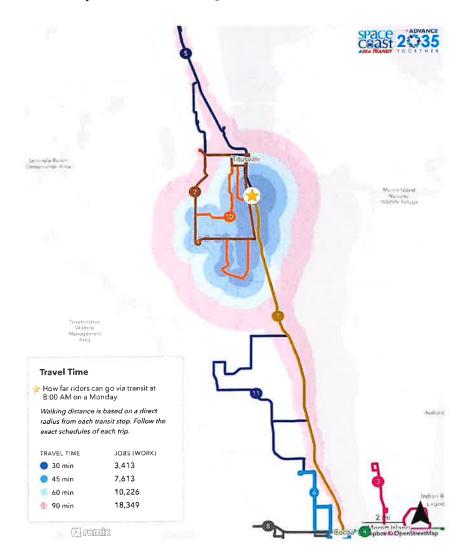
Figure 39. Accessibility from Cocoa Transit Center



Cocoa Transit Center					
Travel Time	# of Jobs	# of Zero Vehicle Households	# of Seniors (age 65+)	# Poverty Population	
30 min	7,034	377	2,116	1,977	
45 min	18,505	948	6,925	5,079	
60 min	41,465	1,695	18,099	9,174	
🧓 90 min	81,157	3,723	50,506	20,797	



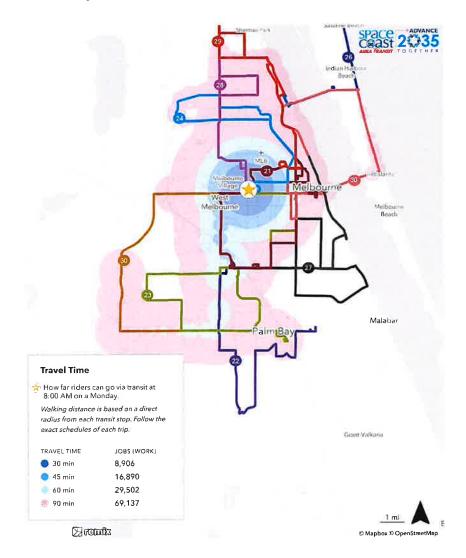
Figure 40. Accessibility from Titus Landing



		Titus Landing		
Travel Time	# of Jobs	# of Zero Vehicle Households	# of Seniors (age 65+)	# Poverty Population
30 min	3,413	190	3,527	1,509
45 min	7,613	431	6,650	3,097
00 min	10,226	808	8,138	3,742
90 min	18,349	1,192	13,834	6,429



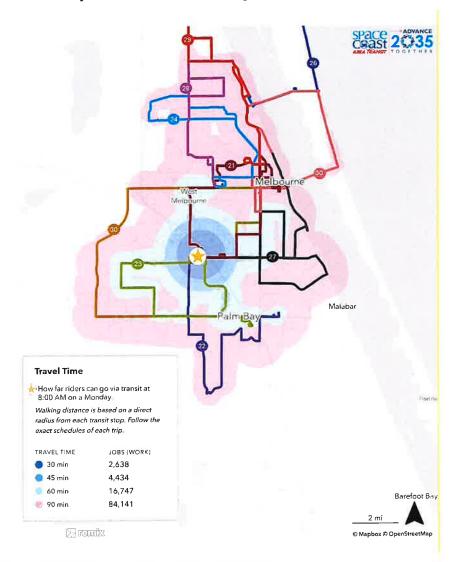
Figure 41. Accessibility from Melbourne Square Mall



Melbourne Square Mall					
Travel Time	# of Jobs	# of Zero Vehicle Households	# of Seniors (age 65+)	# Poverty Population	
30 min	8,906	229	1,696	690	
45 min	16,890	457	4,112	1,630	
60 min	29,502	877	9,213	4,288	
90 min	69,137	3,604	31,665	18,521	



Figure 42. Accessibility from Hammock Landing



	Hammock Landing					
Travel Time	# of Jobs	# of Zero Vehicle Households	# of Seniors (age 65+)	# Poverty Population		
30 min	2,638	159	1,757	1,106		
45 min	4,434	391	4,687	2,708		
60 min	16,747	1,637	16,811	9,505		
🧼 90 min	84,141	4,921	42,958	25,175		



7.2 10-Year Forecast Ridership Analysis

Forecast Ridership Methodology

Developing a forecast of future transit ridership helps to highlight future demand for transit service on the existing network. TBEST was used to develop the 10-year ridership forecast. This modeling software is recommended and supported by FDOT for use in the TDP ridership analysis. TBEST incorporates data from the US Census, the Florida Department of Revenue, and other sources to help project transit ridership, population growth, and changes in population density across a transit service area.

As with any modeling software, TBEST has limitations, and the projections are based on current population growth trends and travel patterns. Each of these can be influenced by external factors outside of the scope of the model, such as changes in travel patterns from increases in working-from-home, adoption of new technologies (autonomous vehicles), and changes in transportation costs. Furthermore, the 10-year forecast is based on the existing transit network with no changes to scheduling, frequency, or route structure. Any service improvements or alterations to the network would impact the results.

Existing Network Ridership Forecast

Table 20 shows the 2023 and 2035 network ridership forecast. The results are displayed at the route level to enable comparison across the transit network. It is noted that the 2023 boardings have been generated in the TBEST model and do not reflect the actual 2023 ridership numbers. Using the model's estimated base year allows for more accurate comparisons between the base and future year projections.



Table 20. 2023 - 2035 Fixed Route Network Forecast

Route	2022 Actual Ridership	2023 Actual Ridership	2023 Modeled Ridership	% Difference 2023 Actual vs. Model	2035 Modeled Ridership	Change in 2023-2035 Modeled Boardings	% Change 2022-2023
1- Titusville/Viera	143,375	158,641	161,010	+1.5%	172,797	+11,787	+7.3%
2 - Titusville	52,837	59,485	60,216	+1.2%	64,850	+4,634	+7.7%
3 - Merritt Island	29,601	32,966	33,469	+1.5%	35,708	+2,239	+6.7%
4 - 520 Connector	197,3 <mark>0</mark> 8	239,871	242,619	+1.1%	258,302	+15,683	+6.5%
5 - Titusville/Mims	27,124	31,489	31,794	+1.0%	33,913	+2,119	+6.7%
6 - Cocoa/Rockledge	162,331	185,953	188,760	+1.5%	200,631	+11,871	+6.3%
7 - Rockledge/Viera	23,710	26,316	26,658	+1.3%	28,338	+1,680	+6.3%
8 - West Cocoa	25,909	29,547	29,915	+1.2%	31,911	+1,996	+6.7%
9 - Cape Canaveral/Cocoa Beach	179,498	224,096	226,802	+1.2%	241,215	+14,413	+6.4%
10 - Central Titusville	23,729	27,023	27,254	+0.9%	29,253	+1,999	+7.3%
11 - Port St. John	8,541	10,060	10,059	0.0%	10,661	+602	+6.0%
20 - Heritage - West Melbourne	25,643	28,888	29,231	+1.2%	31,168	+1,937	+6.6%
21 - Downtown Melbourne	69,932	78,582	79,761	+1.5%	84,546	+4,786	+7.1%
22 - South Palm Bay	45,602	50,144	50,761	+1.2%	54,164	+3,403	+6.7%
23 - West Palm Bay	57,185	62,527	63,415	+1.4%	67,910	+4,495	+7.1%
24 - Melbourne	29,483	31,286	31,571	+0.9%	33,699	+2,128	+6.7%
25 - Melbourne/Palm Bay	103,326	114,446	116,056	+1.4%	124,269	+8,213	+7.1%
26 - South Beach	21,587	25,803	26,541	+2.9%	28,396	+1,855	+7.0%
27 - East Palm Bay	84,473	94,406	92,619	-1.9%	100,051	+7,432	+8.0%
28 - North Melbourne	77,719	83,859	85,448	+1.9%	90,956	+5,508	+6.4%
29 - Melbourne/Viera	87,739	95,609	98,009	+2.5%	104,987	+6,978	+7.1%
30 - South Beach Connector	42,705	47,685	48,387	+1.5%	52,129	+3,742	+7.7%
33 - Eau Gallie Arts District	202	354	359	+1.5%	381	+22	+8.7%
Total	1,519,559	1,739,036	1,760,714	+1.2%	1,880,235	119,522	+6.9%



Key Takeaways

Population growth and increases in density are expected to increase ridership on all existing Space Coast bus routes. The system-wide ridership growth is forecasted to be 6.9%, with an additional 119,522 riders by 2033.

- o Route 27 is projected to have the highest growth rate with an increase of 8.0%, followed by Routes 2 and 30 at 7.7%. Routes 27 and 30 are located towards the southern end of the service area. Route 30 provides connection to Indian Harbour Beach and Route 27 services east Palm Bay.
- o Routes 4 and 9 are expected to experience the highest growth in raw ridership, with each route projected to grow by over 14,000 riders. These routes currently have the highest system ridership, each servicing over 220,000 passengers per annum. Routes 4 and 9 connect Cocoa to Cape Canaveral and Cocoa Beach.



8 10-Year Transit Needs Development & Evaluation



This section summarizes needs and alternatives identified for the Space Coast Area Transit system over the next 10 years. The needs were identified without consideration of funding constraints to reflect community desires and to serve as a starting point for future improvements.

8.1 Public Transit Needs Development Process

The needs development followed the process shown in **Figure 43**. The process builds on goals and objectives, community needs, situational appraisal, and the transit demand assessment. Potential outcomes and scenarios were established during an Internal Scenario Workshop involving Space Coast Area Transit and Space Coast Transportation Planning Organization (SCTPO). This collaboration will help maintain planning consistency between the 2035 TDP and 2050 LRTP. Needs were developed in consideration of meeting the goals and objectives, public input for outreach event, surveys and evaluation of existing and future conditions.

Figure 43. Transit Needs Development Process



Based on the development process, the 10-year Public Transit Needs can be summarized in five main areas:

- Transit Services and Operations
- Capital and Infrastructure
- Technology
- Policy and Financial
- Plannina



8.2 10-Year Public Transit Needs

Transit Services and Operations

Potential transit service improvements for the next 10 years are summarized in **Table 21**. Some of the more minor changes are candidates for implementation within the first five years, while other more substantial route changes involving network modifications are better suited for the 5-to-10-year timeframe. There were also several long-term transit needs gathered during the Internal Scenario Workshop as it relates to new routes to serve emerging areas of population, employment, and tourism (see **Emerging Areas and Regional Transit Service Considerations & Needs**). Route by route costs and strategies are identified in the Implementation Plan.

Table 21. Route Service Changes Summary

Route	Service Change	Reason for Change	Estimated Implementation
8 - West Cocoa	Run Route 8 all day. Increase frequency to 60- minutes. Adjust route to go up Friday Road and turn around at Publix at Cocoa Commons.	Improve service reliability and network connectivity.	1 - 3 years
11 - Port St. John	Reduce stops on US-1 to avoid overlap with Route 1. Remove route deviation onto Fay Boulevard.	Improve service reliability and use of resources.	1 - 3 years
27 - East Palm Bay	Increase frequency to 30-minutes.	Improve service reliability and network connectivity.	1 - 3 years
33 - Eau Gallie Arts District	Remove route from network.	Better use of network resources and efficiency.	1 - 3 years
4 - 520 Connector	Increase frequency during peak hours. Reduce frequency during nonpeak hours.	Improve service reliability and network connectivity to Intermodal Station.	1 – 3 years
6 – Cocoa / Rockledge	Increase frequency during peak hours. Reduce frequency during nonpeak hours.	Improve service reliability and route efficiency.	1 – 3 years
US-192 (New Route)	New US 192 route from St. John's Heritage Parkway to SR-A1A. Routes 20 and 30 will need to be realigned to avoid overlap of routes.	Improve service reliability, network connectivity, and on time performance.	5 – 10 years
SR-528 (New Route)	*New Express Bus route on 528 to connect Intermodal Station to Cruise Terminal and Cocoa Beach Pier.	Improve service reliability and network connectivity.	5 – 10 years



Short Term Service Changes (5 Years)

The following describes service changes to routes that could more easily be implemented within a 5-year period.

Route 8 – West Cocoa

Route 8 – West Cocoa			THE RESIDENCE
Current Frequency	6 – 9 AM: 125 minutes 9 – 3 PM: 30 minutes 5 – 7 PM: 60 minutes	Proposed Frequency	60 minutes
Current Service Hours	6:00 AM - 3:00 PM 5:00 PM - 7:00 PM	Proposed Service Hours	6:00 AM - 7:00 PM
Proposed Network Change	Adjust route to go up Cocoa Commons	o Friday Road and tu	rn around at Publix at
Change Justification	Provides easier conn	ectivity and more fre	equent service
Support	Rider Survey; Comm	unity Conversations	
TDP Goals	2 (Multi-Modal Optio Use)	ns) & 3 (Linking Trans	portation & Land
Impacted Routes	Route 4, 6		
Timeline	1-5 years		

Figure 44. Route 8 - West Cocoa

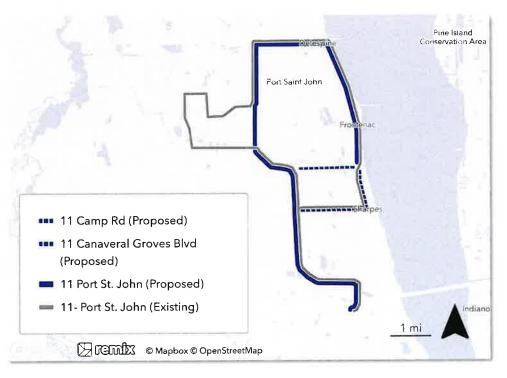




Route 11 – Port St. John

(0010 11 1011 \$1. 3011	<u> </u>		
Route 11 - Port St. Joh	n		
Current Frequency	60 minutes	Proposed Frequency	No change
Current Service Hours	7:00 AM - 8:00 PM	Proposed Service Hours	No change
Proposed Network Change	Boulevard and rem reduce Route 11 sto Camp Road & Can Long Term Change:	Remove the Route 11 or ain on Grissom Parkway ops on US-1. Alternate seaveral Groves Blvd eve Consider replacing rouremain on Fay Bouleval	r. Additionally, ervice between ry hour. Ite with MOD or
Change Justification	Low ridership on US- efficient use of trans	 Provide quicker servi sit resources. 	ce and more
Support	Rider Survey; Comn	nunity Conversations	
TDP Goals	4 (Sustainability, Equ	uity, and Resiliency)	
Impacted Routes	Route 1		
Timeline	Short Term Change: Long Term Change:		

Figure 45. Route 11 - Port St. John

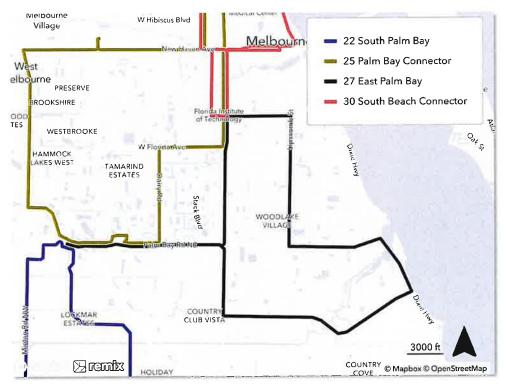




Route 27 – East Palm Bay

ROOTE Zi Edit i dilli Be	~ /		
Route 27 – East Palm B	ay		
Current Frequency	60 minutes	Proposed Frequency	30 minutes
Current Service Hours	6:30 AM - 7:30 PM	Proposed Service Hours	No change
Proposed Network Change	No change		
Change Justification	Continue to support	increasing ridership.	
Support	Rider Survey; Comm	unity Conversations	
TDP Goals	2 (Multi-Modal Option Use)	ons) & 3 (Linking Transpo	ortation & Land
Impacted Routes	Route 22, 23, 25, 30		
Timeline	1-5 years		

Figure 46. Route 27 - East Palm Bay

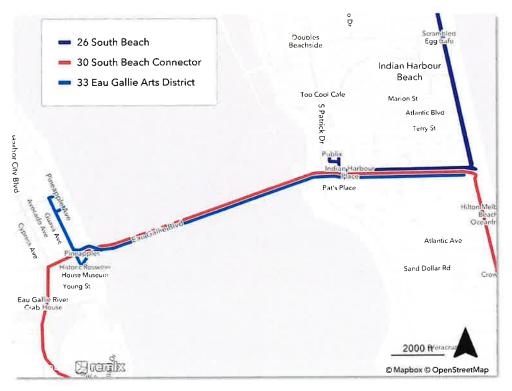




Route 33 – Eau Gallie Arts District

Route 33 – Eau Gallie	Arts District		
Current Frequency	20 minutes	Proposed Frequency	N/A
Current Service Hours	9:00 AM - 11:00 AM 1:00 PM - 3:00 PM	Proposed Service Hours	N/A
Proposed Network Change	Remove from the fixe	ed route network	
Change Justification	Lowest performing robe allocated elsewh	oute in the transit system ere.	n. Resources could
Support	Local Agency Conv	ersations	
TDP Goals	4 (Sustainability, Equi	ity, and Resiliency)	
Impacted Routes	Route 26, 30; Service US-192 (New Route)	to beachside still made	e available, see
Timeline	1-5 years		

Figure 47. Route 33 - Eau Gallie Arts District





Long Term Service Changes (5 – 10 Years)

The following describes new or significant route changes that will require further analysis and are candidates for the 5-to-10-year period.

Route 4 – 520 Connector

10010 1 020 001	<u> </u>		
Route 4 - 520 Connec	tor		
Current Frequency	6 – 9AM: 30 minutes 9 – 6 PM: 20 minutes 6 – 11 PM: 60 minutes	Proposed Frequency	6 – 9AM: 20 minutes 9 – 6 PM: 30 minutes 6 – 11 PM: 60 minutes
Current Service Hours	6:00 AM - 11:00 PM	Proposed Service Hours	No change
Proposed Network Change	No change		
Change Justification	Among highest perfo	orming routes and in	dicates a high level of
Support	Rider Survey; Comm	unity Conversations	
TDP Goals	2 (Multi-Modal Optic Use)	ons), 3 (Linking Transp	ortation and Land
Impacted Routes	6, 8		
Timeline	5-10 years		

Figure 48. Route 4 - 520 Connector

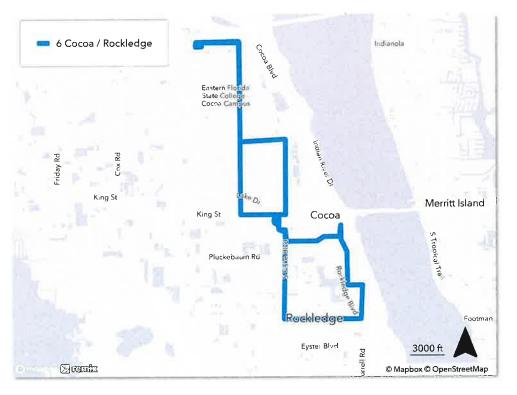




Route 6 - Cocoa/Rockledge

Roofe C Cocca, Roof			
Route 6 – Cocoa/Roc	kledge		
Current Frequency	6 – 8AM: 30 minutes 8 – 5 PM: 20 minutes 5 – 11 PM: 60 minutes	Proposed Frequency	6 – 9AM: 20 minutes 9 – 6 PM: 30 minutes 6 – 11 PM: 60 minutes
Current Service Hours	6:00 AM - 11:00 PM	Proposed Service Hours	No change
Proposed Network Change	No change		
Change Justification	Improve network co	nnectivity and servic	e reliability
Support	Rider Survey; Comm	unity Conversations	
TDP Goals	2 (Multi-Modal Optic Use)	ons), 3 (Linking Transp	ortation and Land
Impacted Routes	1, 4, 7, 8		
Timeline	5-10 years		

Figure 49. Route 6 - Cocoa/Rockledge

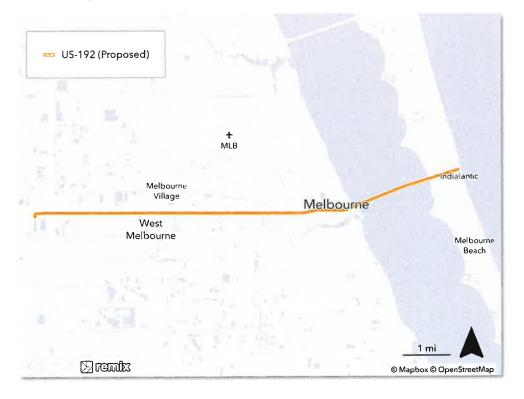




US-192 (New Route)

Route 192 - US-192 (N	ew Route)		
Current frequency	N/A	Proposed Frequency	30 minutes
Current Service Hours	N/A	Proposed Service Hours	6:00 AM - 7:00 PM
Proposed Network Change		ing more direct service arkway to SR-A1A on th	
Change Justification	Ridership in area/ for direct route or	surrounding routes indic n US-192.	cates high demand
Support	Rider Survey; Con	nmunity Conversations	
TDP Goals	2 (Multi-Modal Op Use)	otions), 3 (Linking Transp	ortation and Land
Impacted Routes	20, 21, 25, 28 & 30		
Timeline	5-10 years		

Figure 50. US-192 (New Route)

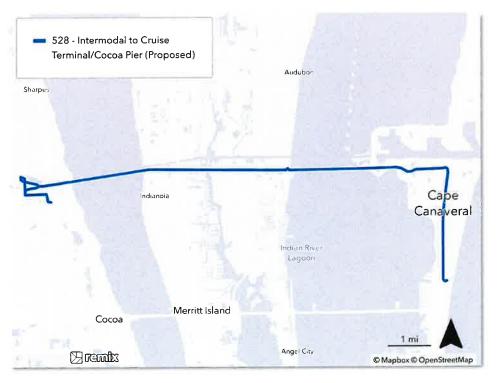




SR-528 (New Route)

3K-320 (14CW KOOTC)			
Route 528 - SR-528 (N	ew Route)		
Current Frequency	N/A	Proposed Frequency	60 minutes May require 30-minute frequency depending on future demand.
Current Service Hours	N/A	Proposed Service Hours	6:00 AM - 10:00 PM
Proposed Network Change		SR-528 connecting the al, and terminating at the	
Change Justification	Development of Ir	ntermodal Station and achside	demand for
Support	Local Agency Co	nversations; Communit	y Conversations
TDP Goals		tions), 3 (Linking Transp lity, Equity, & Resiliency	
Impacted Routes	6, 9, & 11 - Improv	res connectivity	
Timeline	5-10 years		

Figure 51. Route 528 (New Route)





Emerging Areas and Regional Transit Service Considerations & Needs

Below summarizes long-term regional transit service needs as developed in the Internal Scenario Workshop, based on a collective analysis of future conditions and public comments.

Palm Bay

Multiple commercial and residential developments are coming to Palm Bay, specifically in the St. John's Heritage Parkway area near I-95. Currently, there is no fixed-route service to these developments. In addition to this, the Bayside Lakes Publix located nearby already experiences a high number of transit riders. Long-term, expanded fixed-route service in the area will need to be considered as Palm Bay continues to grow.

Brevard County/Indian River County Line

In the TDP Rider Survey, 35% of participants expressed the desire for service expansion outside Brevard County. There is a growing need for transit to serve across the county line to Indian River County. Many residents of the Barefoot Bay community need to travel into Indian River County for essential services. Long term, Space Coast Area Transit and Indian River County's GoLine could further discuss how to best serve and fund service to the Barefoot Bay community. One possibility is to provide funding to Indian River County for them to provide service. This could also be a FDOT Service

Development Grant candidate. Another recommended alternative would be for transit to provide a new route connecting Barefoot Bay to just over the county line at Indian River transit's northern most stop.



US-192, Melbourne and West Melbourne

West Melbourne is also undergoing residential developments along St. John's Heritage Parkway and Malabar Road. Due to this, it was established in the next 5-10 years, a new route should serve US-192 from St. John's Heritage Parkway to SR-A1A as discussed

previously. Long term, increased frequency and expanded fixed-route service will be needed as West Melbourne continues to develop.



Space Industry

The Space Industry includes major employers such as NASA, SpaceX, and Blue Origin. Some of these employers use Enterprise Vanpool for employees. Long term, there is an opportunity for Space Coast Area Transit to seek partnerships with the Space Industry. Additionally, a peak hour service route, or Express Route, could be implemented to



serve these employment centers. Through this, there could be funding partnerships with the Space Industry, if this type of service benefits enough employees.

Capital and Infrastructure

Space Coast Area Transit Fleet Replacement

Based on the Peer and Trend Analysis, Space Coast Area Transit's average age of fleet (8.1 years) is older than the peer group mean (4.7 years). This aging fleet can present future operational challenges and safety issues. The transit agency will need to further evaluate efforts to maintain a state of good repair for the fleet in the future Transit Asset Management Plan and Fleet Replacement Program. Specifically, Space Coast Area Transit should establish a fleet replacement schedule for the long term. Additionally, the agency should explore further options for fleet electrification, such as hybrid, electric, or fuel alternatives. The transit agency would also need to assess feasibility and costs for fleet charging stations, if fleet electrification is pursued.

Bus Stops

Long term, Space Coast Area Transit will need to prioritize bus stop improvements, including better lighting, shelters, bike racks, and enhanced safety features.

Mobility on Demand

Considerations for Mobility on Demand continue to evolve and will be finalized in the Mobility on Demand Study being conducted by SCTPO. This TDP does not provide any modeling for MOD in its service changes. However, Downtown Melbourne could be a good candidate for a MOD pilot. Once the MOD study is completed, it is recommended that Space Coast Area Transit and SCTPO continue to work in collaboration to update future TDPs and implement Mobility on Demand recommendations in the future.

New Transfer Station (Design and Construction) and New Administration/Operations/Maintenance Facility

The Cocoa Transfer Center is critical component and location for the agency's bus transfers, operations, and maintenance. To better accommodate services, an expanded and updated facility will need to be pursued. Space Coast Area Transit needs to assess and establish funding sources for the design and construction of the refined Cocoa Transfer Center. Additionally, due to limited space for growth at current offices, Space Coast Area Transit needs to assess funding/feasibility for construction of a new office facility. This facility would be solely dedicated to housing the agency's administrative, operations, and maintenance efforts.

Intermodal Station

The development of the Intermodal Station provides many opportunities for Space Coast Area Transit to serve future visitors in the area. Long term, route connections to the Intermodal Station should be further explored. Additionally, bus bays along US-1



should be considered, to offer easier access and connection between the Intermodal Station and Space Coast Area Transit routes.

Technology

Space Coast Area Transit currently offers Wi-Fi on all fixed routes, real-time bus status updates via app, and audio/visual announcements on buses that include upcoming stops and ADA features. Moving forward, the agency should focus on improving passenger amenities by adding more bus stop shelters and providing more bike racks at stops. Space Coast Area Transit could also explore implementing dynamic message boards at transfer stations and on buses for real-time updates. Additionally, expanding cell phone charging options, across all buses, will enhance convenience for riders.

Policy and Financial

Further financial analysis and plans for the service changes will be outlined in the TDP's 10-Year Financial Plan and Implementation Plan. Below are considerations for Space Coast Area Transit to improve system awareness and funding strategies long-term.

Marketing

Currently, Space Coast Area Transit plans to provide marketing materials to new apartment complexes along routes. Space Coast Area Transit should continue to increase marketing efforts to capture non-riders of the system. In the next 5-10 years, the agency should look at increasing advertisements and public awareness. This could be done through commercial advertising, social media, and public outreach events for targeted audiences.

Funding

Space Coast Area Transit currently allows Melbourne residents to ride fare-free on all routes within Melbourne city limits. This is made possible through funding from the City of Melbourne. Additionally, the City of Palm Bay purchases and provides bus passes to residents. Long term, there is opportunity for similar approaches where local municipalities assist with funding. Expanding or adding certain routes could be achieved by requesting additional funding, if justified.

Planning

Comprehensive Operations Analysis

A COA or a more targeted route analysis should be conducted to identify ways to reduce annual operating costs and enhance system efficiency. Refining the fixed route network could contribute to the long-term sustainability of the system.

MOD Pilot

After the MOD Study, Space Coast TPO and Space Coast Area Transit could launch a MOD pilot program, focusing on the ideal locations or areas identified in the study.





Fleet Electrification Plan

While Space Coast Area Transit has an existing electrification plan, a comprehensive plan needs to be developed. This plan should assess a range of fleet electrification options, including hybrid, electric, and alternative fuel vehicles, to gradually transition part of the fleet to cleaner technologies.

8.3 10-Year Transit Demand Analysis

TDP alternatives were modeled in TBEST to further understand ridership and demand in the next 10 years.

TBEST incorporates data from the US Census, the Florida Department of Revenue, and other sources to help project transit ridership, population growth, and changes in population density across a transit service area. As with any modeling software, TBEST has limitations, and the projections are based on current population growth trends and travel patterns.

TDP alternatives were compared against base conditions, in which the current fixed-route system was modeled to reflect growth in 10 years, with no service improvements. Ridership results comparing the base conditions and TDP alternative are summarized in **Table 22**.



Table 22, TDP Alternatives vs. No-Build 10-Year Results

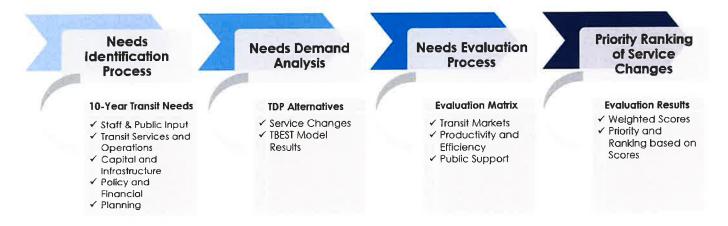
Route	Base Condillons 2035 Ridership	TDP Alternative 2035 Ridership	% Change	Notes
1- Titusville/Viera	161,422	165,215	2.3%	
2 - Titusville	58,022	71,396	23.0%	
3 - Mertiff Island	33,380	50,518	51.3%	
4 - 520 Connector	242,228	264,948	9,4%	Increased frequency results in increased ridership.
5 - Thusville/Mims	31,876	36,117	13.3%	
6 - Cocoa/Rockledge	182,518	198,904	%0 6	Increased frequency resulls in increased ridership,
7 - Rockledge/Viera	26,393	25,449	4.7%	
8 - West Cocoa	29,314	40,068	36.7%	Increased frequency and route network extension results in increased ridership.
9 · Cape Canaveral/Cocoa Beach	219,097	207,201	-5.4%	
10 - Central Tilusville	26,091	30,119	15.4%	
11 - Fort St. John	8,361	2,555	-69.4%	Removal of deviation and stops results in ridership decrease but improves use of transit resources.
20 - Heritage - West Melbourne	27,949	9,385	-66,4%	Realignment of Route 20 due to US-192 new route results in irdership decrease, however, is supplemented by ridership increase in US-192 new route,:
21 - Downtown Melbourne	197.61	84,546	%0'9	
22 - South Palm Bay	48,888	52,664	7.7%	*
23 - West Palm Bay	61,084	29,317	-52.0%	
24 - Melbourne	30,404	30,170	-0.8%	
25 - Melbourne/Palm Bay	110,315	113,009	2.4%	
26 - South Beach	25,180	26,280	4,4%	
27 - East Palm Bay	869'68	136,380	52.0%	Increased frequency results in increased in ridership.
28 - North Melbourne	82,873	86,905	4.9%	20
29 - Melbourne/Viera	96,415	99,954	3.7%	
30 - South Beach Connector	46,875	53,194	13.5%	Potential realignment of Route 30 due to US-192 new route results in ridership increase, however, is further supported by ridership increase in new US-192 route.
33 - Eau Gaille Arts District	7,926		100.0%	Removal of Roule 33 results in ridership decrease, however, is supplemented by ridership increase in new US-192 route.
US-192 (New Route)	· ·	43,740	100.0%	US-192 ridership increase supports coverage of existing routes 20, 30, and 33.
SR-528 (New Route)		30,515	100 0%	Ridership potential could be higher than TBEST estimate. TBEST cannot fully model ridership potential at the Intermodal Station until operations are in full effect.
Tolal	1,851,213	1,963,888	6.1%	= Service Change in TDP Alternative



8.4 10-Year Public Transit Needs Evaluation

Through conducting an evaluation of TDP needs, Space Coast Area Transit can effectively prioritize where to allocate resources in the next 5 to 10 years. This evaluation process is summarized in Figure 52.

Figure 52, 10-Year Transit Needs Evaluation Process



Transit Markets

Data and demographics, reviewed in Baseline Conditions, were used to evaluate what transit markets are being captured by fixed route services. These transit markets were also discussed during the Internal Scenario Workshop.

Traditional Market

Transit dependent populations are largely concentrated around Titusville, Cocoa, West Melbourne, and Palm Bay. Traditional Markets references areas that historically have a high propensity for using transit services, including transit dependent populations, see Transit Propensity Index.

Discretionary Market

Space Coast's discretionary market is largely concentrated in Melbourne for the aerospace and tourism industries. Discretionary Markets considers potential riders living in high-density areas of population and employment, that would utilize alternative transit services if made available.

Travel Market

Travel markets represent hotel density, and tourists who may utilize alternative transit services when visiting the area. Travel markets are heavily located in Titusville, Cocoa Beach, Cape Canaveral, and Melbourne. The development of the Intermodal Station will spur further growth in Space Coast's travel market, in which Space Coast Area Transit may need to further adjust fixed-route services at that time, including the proposed SR-528 Express Route, if implemented.



Productivity and Efficiency

To measure productivity and efficiency, TBEST incorporates the system's existing conditions as the validated base network for the model. TDP alternatives are then inputted as a scenario in the validated base network. This network was then grown to reflect 10-year conditions, including:

- Route alignments
- Service spans
- Headways
- Bus stop locations
- New routes

After this, the TBEST model outputs productivity and efficiency results, including annual ridership, estimated annual operating costs, and cost per rider. Productivity and efficiency results for Base conditions and TDP alternatives are compared in **Table 23**.



Table 23. TDP Alternative Ridership and Costs Comparison

Route	Service Change	Estimated TDP Alternative 2035 Annual	% Change in Annual	Estimated Base Conditions 2035	Estimated TDP Alternative Annual	Estimated TDP Alternative Cost Per
		Ridership	diusianib	Operating Cost	Cost	Rider
4 - 520 Connector	Increase frequency during peak hours. Reduce frequency during non-peak hours.	264,948	9.4%	\$930,723	\$1,146,791	\$4.32
6 - Cocoa/Rockledge	Increase frequency during peak hours. Reduce frequency during non-peak hours.	198,904	80.6	\$669,184	\$721,433	\$4.90
8 - West Cocoa	Run Route 8 all day. Increase frequency to 60-minutes. Adjust route to go up Friday Road and turn around at Publix at Cocoa Commons.	40,068	36.7%	\$212,763	\$395,931	\$9.88
11 - Port St. John	Remove stops on US-1 to avoid overlap with Route 1. Remove route deviation onto Fay Boulevard.	2,555	-69.4%	\$430,245	\$353,713	\$138.43
27 - East Palm Bay	Increase frequency to 30-minutes.	136,380	52.0%	\$321,124	\$757,857	\$5.55
33 - Eau Gallie Arts District	Remove route from network,	•	-100.0%	\$30,200*	il.	(1)
US-192 (New Route)	*New US 192 route from St. John's Heritage Parkway to SR-A1A. Routes 20 and 30 will need to be realigned to avoid overlap of routes.	43,740	100.0%		\$409,198	\$9.35
SR-528 (New Route)	*New route on 528 to connect Intermodal Station to Cruise Terminal and Cocoa Pier.	30,515	100.0%	y • 30	\$712,401	\$23.34**

Johor.

^{**}Estimated ridership and costs for a new Express route on SR-528 will require further evaluation with the development of the Intermodal Station. TBEST cannot fully model ridership potential at the Intermodal Station until operations are in full effect.



^{*}By removing Route 33, Eau Gallie Arts District, from the network, modeling assumes a cost savings of approximately \$30.2k annually. These resources could be shifted towards other route operations to alleviate costs.

Evaluation Results

To prioritize service improvements, three criteria areas were reviewed to measure the effectiveness of each service change, as shown in **Table 24**. Criteria were measured on a range of low (**1 point**), moderate (**2 points**), and high (**3 points**) effectiveness.

Table 24. Transit Needs Evaluation Matrix

Criteria	Measure	Measure Description	Measure Weight	Criteria Weight
	Traditional	Transit Propensity Index/Disadvantaged Communities	50%	40%
Transit Markets	Discretionary	Total Employment/Population Served	50%	40 /0
Productivity &	Ridership	Estimated Annual Ridership	50%	40%
Efficiency	Operating Cost	Estimated Annual Operating Cost	50%	40 /0
Public Involvement	Rider Survey	Level of Interest for Improvements	100%	20%



Table 25 presents the evaluation of service changes and their respective ranking.

Table 25, 10-Year Service Change Evaluation Scores and Ranking

Route	Service Change	Transit Markets	Productivity & Efficiency	Public Involvement	Weighted Score	Ranking
4 - 520 Connector	Increase frequency during peak hours. Reduce frequency during non-peak hours.	2.5	2.5	3.0	8.0	<u>-</u>
US-192 (New Route)	*New US 192 route from St. John's Heritage Parkway to SR-A1A. Routes 20 and 30 will need to be realigned to avoid overlap of routes.	3.0	2.0	3.0	8.0	7
SR-528 (New Route)	*New route on 528 to connect Intermodal Station to Cruise Terminal and Cocoa Beach Pier.	3.0	1.5	3.0	7.5	m
8 - West Cocod	Run Route 8 all day. Increase frequency to serve peak hours. Adjust route to go up Friday Road and turn around at Publix at Cocoa Commons.	2.0	2.5	3.0	7.5	4
27 - East Palm Bay	Increase frequency to 30-minutes.	2.0	2.5	2.0	6.5	S
6 - Cocoa/Rockledge	Increase frequency during peak hours, Reduce frequency during non-peak hours.	1.0	2.0	2.0	5.0	9
33 - Eau Gallie Arts District	Remove route from network.	1.0	2.0	2.0	5.0	7
11 - Port St. John	Remove stops on US-1 to avoid overlap with Route 1. Remove route deviation onto Fay Boulevard.	1.0	1.0	2.0	4.0	œ



9 Advance 2035 Together Ten-Year Plan

This section presents the recommended 10 year financial and implementation plan for Space Coast Transit's FY2025 to FY2035 TDP.

9.1 Key Assumptions

The estimated costs discussed below do not establish a financial commitment for Brevard County and, based on the level of funding available, may remain as unfunded in the 10-year plan. To develop the financial and implementation plan, the following key assumptions were used:

• Fiscal Year 2022 served as the Current Year of cost since it was the most recent year with validated NTD information and provided the following costs¹:

Table 26. Assumptions from NTD 2022

Assumption	Cost
Fixed Route Operating Cost per Revenue Hour	\$98.72
Fixed Route Operating Cost per Revenue Mile	\$5.15
ADA Paratransit Operating Cost per Revenue Hour	\$93.89
ADA Paratransit Operating Cost per Revenue Mile	\$4.59
Vanpool Operating Cost per Revenue Hour	\$51.90

- Capital & Operating Costs Inflation Rate 3 percent²
- TDP Base Year 2023
- Brevard County Transit Services Transit Asset Management Plan (TAMP) Updated November 30, 2022, was used to determine fleet requirements to maintain the current system with the following vehicle costs and average annual replacement rate:

Table 27. Assumptions from Transit Asset Management Plan 2022

Replacement Type	Estimated Unit Cost	Replacement Rate
Replacement 35' to 40' Bus		5 vehicles per year
Replacement 30' Bus	\$600,000	4 needed over 10-year period
Replacement 30' ADA Vehicle	\$200,000	3 vehicles per year
Replacement ADA Van	\$75,000	2 vehicles per year
Replacement Paratransit Vanpool	\$75,000	4 vehicles per year
Replacement Commuter Vanpool	\$75,000	4 vehicles per year
Replacement Service Vehicle	\$60,000	3 vehicles per year

¹ Source Florida Transit Information System (ftis.org)

² US Bureau of Labor Statistics



- Capital Costs for new services, such as new vehicles, are purchased the year prior to reflect the acquisition time.
- Revenue Assumptions are based on data from and discussions with agency staff, historical performance data, information on FTA/FDOT funding programs, and other sources.
 - Revenue sources included in the agency's FY 2024 budget, including federal and state formula funds and other recurring sources, such as Florida CTD funds, are the basis for the plan. The composition/use of funding sources is assumed to continue over the next 10 years unless otherwise noted.
 - Additional fare revenue to be generated by new/expanded services implemented during the 10 years is based on an average fare of \$0.42 consistent with NTD values and factors in the FY2023 fare revenue and annual ridership.
 - o FDOT's Service Development Program awards discretionary state funding for projects involving the use of new technologies; services, routes, or vehicle frequencies; the purchase of special transportation services; and other such techniques for increasing service to the riding public. Projects involving the application of new technologies or methods for improving operations, maintenance, and marketing are also eligible. Funds can be awarded up to 50% of the project costs for a maximum duration of three years. Projects submitted for funding must be justified in the agency's TDP (or TDSP, if applicable)



9.2 Service Plan

The transit service, capital/infrastructure, and planning/policy needs are incorporated into the 10-year plan, with implementation based on the estimated costs vs. anticipated available funding, discussions with agency staff, alternatives evaluation results, operational considerations, and other factors.

For all service changes, the plan assumes local funds are needed to match service development (SD) grants. The plan also assumes service development grants for improvements to most existing routes. The 10-year transit service plan includes the following improvements:

Table 28. Local Funding Match

	Route	Туре	Implementation Years	Funding Sources
8	West Cocoa	Network	2025 - 2030	\$179K FDOT SD Grant
	Mesi Cocod	Change	2025 - 2030	\$179K Unfunded Local Match
	Port St. John	Network	0005 0000	\$131K FDOT SD Grant
W	POIT ST. JOHN	Change	2025 - 2030	\$131K Unfunded Local Match
	Ford Dales Davi	Increase	2005 2020	\$250K FDOT SD Grant
27	East Palm Bay	Frequency	2025 - 2030	\$301K Unfunded Local Match
	520	Increase	0000 0005	\$250K FDOT SD Grant
4	Connector	Frequency	2030 - 2035	\$783K Unfunded Local Match
	Cocoa /	Increase	0000 0005	\$250K FDOT SD Grant
6	Rockledge	Frequency	2030 - 2035	\$733K Unfunded Local Match
192	Naw Banka	New	2020 0025	\$250K FDOT SD Grant
	New Route	Service	2030 - 2035	\$924K Unfunded Local Match
600	Name Banda	New	0000 0005	\$250K FDOT SD Grant
528	New Route	Service	2030 - 2035	\$556K Unfunded Local Match

^{*}Capital Costs assume \$600,000 for base capital cost and are adjusted for inflation depending on implementation years.

9.3 10-Year Financial Plan

This section provides the recommended 10-Year Financial Plan developed for the TDP Major Update. The projected costs and the projected revenue stream are provided in **Figure 53 and 54**. The proposed new routes are funded through pursuing competitive grants, such as the FDOT Service Development Grant, and local funds. For the first 5 years, there are sufficient federal, state, and local funds to accommodate the 10-year plan. Funds reported each year are carried over to the subsequent year to purchase new or replacement vehicles. Additionally, capital funds are shifted to support a portion



^{**}Operating Costs assume 50% funding through FDOT grant programs (\$250k maximum for 3 years), requiring 50% unfunded local match.

of the operating costs. Per state guidance, up to 75% of an agency's capital funding can be shifted towards operations.

Figure 53. Annual Operating & Capital Costs

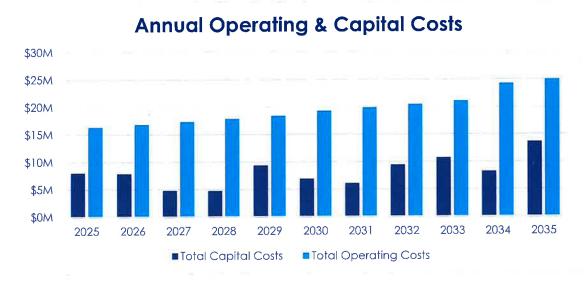


Figure 54. 10 Year TDP Costs & Revenues

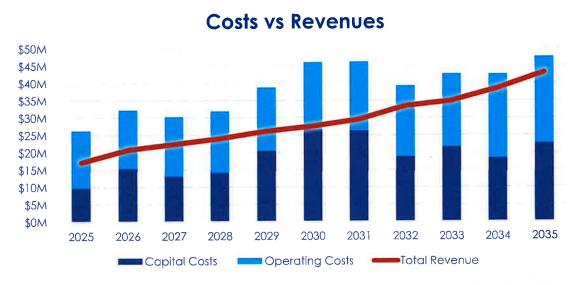


Table 29 summarizes the annual capital and operating for next 10 years if the all the recommended projects are implemented. Table 30 compares the revenue streams to the estimated costs. As indicated by this figure, the financial plan is balanced and is reliant on regular increase in federal and state support, as well as additional local funds to provide the necessary match for competitive grants for the new services.



Table 29, Cost Summary

Operating Exponses Existing Operating Expenses	- June										-
Operating Exponses Existing Operating Expenses	2072	2026	2027	2028	2028	2030	2031	2032	2033	2034	2035
Existing Operating Expenses											
	\$ 16,527,578,92	17.023.406.29	17,534,108,48	\$ 18,060,131,73 \$	18,601,935,68	19,159,993.76	19,734,793,57 \$	20,326,837,38 \$	20,936,642,50 \$	21,564,741,77 \$	22,211,684,02
Maintenance of Software		1		8	6/3	69		•		S	
Security					<i>ь</i> э	,			69	6 9 7	
Roule #4 - 20 min Pk Freg	S 2.255.54 S	2.323.20	2,392,90	\$ 2,464.69 \$	2,538.63 \$	2,614.79	2,693.23 \$	2,774.03 \$	2,857.25	2.942.97 \$	3.031.25
Route #6 - 20 min Pk Freq	9	(144,991.98) \$	(149.341.74)	\$ (153,821,99) \$	(158,436,65) \$	(163, 189, 75) \$	(168,085,44) \$	(173,128.01) \$	(178,321.85) \$	(183,671,50) \$	(189,181.65
Route #8 - 60 min Freg & Extend	69			S	49	225,966.49 \$	232,745,48 \$		246,919.68	254 327 27 \$	261 957 09
Route #11 - Roule Reduction	\$ (93.938.88) \$	\$ (56.757.04)	(99,659,75)	\$ (102,649,55) \$	(105,729,03) \$	(108,900,901)	(112,167,93)	(115,532,97) \$	(118,998,96) \$	ľ	(126,245,99
Pointe #27 - 30 Min Fred										551 073 83	567 606 05
Doub #400 New Borde						6			ef.	1 174 851 95	1 210 097 51
Nouse #132 - New Nouse	9 (20120000	0.0000
Route # 528 - New Route		59		9	п	-				806,647,88	830,847,31
Subtotal Operating Expenses	\$ 16,638,895,58 \$	16,783,980,47 \$	17,287,499.89	\$ 17,806,124.88 \$	18,340,308.63 \$	19,116,484.37 \$	19,689,978.91 \$	20,280,678.27 \$	\$ 20,889,098.62 \$	24,048,345.23 \$	24,769,795.59
Capital Expenses											
Capitalized Maintence	59	9,004,070.48	9,274,192.59	\$ 9,552,418.37 \$	9,838,990.92	10,134,160.65 \$	10,438,185,47 \$	10,751,331.03 \$	11,073,870.97	11,406,087.09 \$	11,748,269.71
									110		
Replacement Non-Revenue Vehicles	5	4		59	9		•	•	**	69	•
Replacement Buses - Maintain Existing Service (35' to 40')	\$ 3,933,817.20 \$	2,701,221,14	2,782,257,78	\$ 2,149,294,13 \$	5,165,470,23 \$	2,280,186.15 \$	2,348,591,73 \$	5,644,448.79 \$	4,152,701,61 \$	3,421,826,13 \$	8,811,202,28
Replacement Buses - Maintain Existing Service (30')				\$ 716,431,38 \$		760,062,05 \$	\$,	830,540,32	\$	t.
Replacement ADA Vehicles - Maintain Existing (301)	\$ 437,090.80 \$	900,407,05	463,709,63	\$ 716,431,38 \$		760,062,05	1,304,773,18	1,612,699,66	1 107 387 10 \$	1,710,913,06	1,174,826.97
Replacement ADA Vehicles - Maintain Existing (Vans)				-			69		J		3*
Replacement Vans - Maintain Paratransit Vanbool	\$ 655,636,20 \$			\$ 179,107.84 \$		855.069.80		*	311.452.62 \$	1.069.320.67	35
Replacement Vans - Maintain Commuter Vancool	491.727.15	675.305.29	434,727.78	716,431.38	737.824.32 \$	760,062.05 \$	685,005.92	705,556,10	726,722.78	641,592.40	770,980.20
Bords #8 - 60 min Feet & Extend	8	69		69	737 924 32 \$		69	9		69	
Borto #07 - 30 Min From							,	•	R30 540 32		
Boute #100 - New Bords				0,4		6		0	-	9 99	101
Route # 528 - New Route				\$		S					, ng
Security Equipment/Cameras	\$ 00,000,00	:4	36	\$. \$	s .			5	\$ -		7
Radios	\$ 85,000.00 \$	71,027,00	73,158,00	\$ 75,353.00 \$	3 77,613,00 \$	79,942,00 \$	82,340,00 \$	84,810,00 \$	8 87.354.30 \$	89,974,93	92,674,18
Computer Hardware	\$ 75,000.00 \$			\$							Ÿ
Fare Equipment	\$ 944,463.00 \$			\$				•		\$.	٠
Facility Improvements	\$ 1,119,623.00 \$			5	S · S		,		S		7
Bus Stoo Improvements	\$ 200,000,00 \$				s	•	*			5	Ý
MOD Application/Technology	\$ 186.978.00	,		٠	*	8	3.5	(*)	ř		٠
New Cocoa Transfer Center - Design	\$ 273,181,75 \$	4		\$				*:	69	s s	**
New Cocoa Transfer Center - Construction	\$ 00,000,008	2.086.693.33				+	S			\$.	1
New Centralized Transit Facility - Design	S			\$	\$ 2,388,105,00 \$		\$		\$	s . s	
Software Procurement	\$ 318,228,00 \$,	•	\$			S		S	S .	₩.
New Centralized Transit Facility - Construction	69			\$	59	11,068,865,00 \$	11,400,931.00	92		S . S	(E)
	0 00 000 000 0	00 105 001 71 0	at 170 000 cr	0 41407 407 40	3 77 020 000 0	TE 007 002 00	o po too oro or	01 10 00 00 0	300000000000000000000000000000000000000	000,000,000	70 020 202 00



Table 30, Revenue Summary

				Fiscal Year	Cont						The second second second
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	20.15
Current Revenue Sources											
Federal Funding	8,195,873,60 \$	8,610,257,40 \$	9.021,641,20 \$	9,433,050,00	10,336,790,90 \$	10,255,792,60 \$	10.897.029.41	13,682,832.00 \$	13,924,848,28 \$	13,802,031.90 \$	17,108,355.77
Balance Forward - Federal Funds		8		\$.			**	\$.			
State Grants	7,189,282.54 \$	7,903,481,63 \$	6.884,113.13 \$	9 824,744,63 \$	10,785,376,13 \$	11,746,007,63 \$	12,706,639,13 \$	13,667,270,63 \$	14,627,902.13 \$	15,588,533.63 \$	16 549, 165, 13
Farebox Existing System 5	924,088.88 \$	929 446.60 \$	934,839,40 \$	940,261,47 \$	945,714.98 \$	951,200.13 \$	956,717,09 \$	962,266,05 S	967,847,19 \$	873,469,71 \$	979,106,78
General Fund	2,347,070,00 \$	2,417,482,10 \$	2.490.006.56 \$	2.564,706,76 \$	2,641,647.96 \$	2,720,897,40 \$	2.802 524,32 \$	2.686,600.05 \$	2.973,198.05 \$	3,062,394.00 \$	3,154,265,82
Misc Local Revenue \$	921,000,000 S	971,709.00 \$	1,122,140,00 \$	1,272,571,00 \$	1,423,002.00 \$	1,573,433,00 \$	1,723,864,00 \$	1,874,295,00 \$	2,024,726,00 \$	2,175,157,00 S	2,325,588,00
Current Revenue Sources											
Fares for New/Expanded Services			\$	\$	\$.	6,025.88 \$	6,062,00 \$	\$ 00'660'9	6,136.00 \$	45.673.00 \$	45,942.00
Local Revenue for New Service (Match & Continued Funding) S	2.255.54 \$	2,323,20 \$	2,392.90 \$	2,464,69 \$	2,538.63 \$	112,477.34 \$	119,298.66 \$	126,324.82 S	243,640,93 \$	1,994,170.89 S	2,077,587,21
FDOT Intermodal Development Grant (50% of Costs)											
FDOT Corridor Funds (100% of Costs)							- Commence Commence				and Street Section
FDOT Service Development Grant (50%)				100		110,078,05 \$	110,078,05 \$	110.078.05 \$		750.000.00 \$	750,000,00
Total Revenue \$	19,582,570,56 \$	20,834,701,93 \$	22,435,133,19 \$	24,037,798.55 \$	26,135,070.60 \$	27,475,912.03 \$	29,422,212,66 \$	33,315,765,60 \$	34,768,298,58 \$	38,391,421,13 \$	42,990,020,71
M. Van Frommas X Beannis Simman	l	l	l	l	l		l	l	l	l	
Total Beneditie	17.106.093.14 S	20.726.861.81	22,326,701,94 \$	23,928,747,77 \$	26,025,447,18 \$	27,365,687,64 \$	29,311,384,22 \$	33,204,329,83 \$	34,663,269,63 \$	38,285,619,17 \$	42,873,732,59
200	28,309,640,68 \$	150	30,315,545,67 \$	31,911,592,37 \$	39 762 185 06 \$	45,814,884.12 \$	45 949 806 21 \$	39,079,523,85 \$	42,501,289,61 \$	42,388,059.51 \$	47,367,748 93
Revenue less Expenses	(9,203,547,54) \$	(11,495,842.95) \$	(7,988,843,73) \$	(7.982,844.60) \$	(12,736,737,88) \$	(18,449,206,48) \$	(16,638,421,99) \$	(5 875, 194, 02) \$	(7.838,019 98) \$	(4,102,240,34) \$	(4,494,016,34)
Rollover Funds from Prior Year Funding Balance											
Annual Funding Balance - Surplus / (Shortfall)	(9.203.547.54) \$	(11,495,842,95) \$	(7.988.843.73) \$	(7,982,844,60) \$	(12,736,737,88) \$	(18,449,206,48) \$	(16,638,421,99) \$	(5,875,194.02) \$	(7,838,019.98) \$	(4,102,240,34) \$	(4,494,016.34)



10 Implementation Plan

10.1 List of Key Action Items



Planning and Analysis

A COA or smaller route analysis should be conducted to identify strategies to reduce annual operating costs and improve system efficiency. A refined fixed route network could help further maintain the system, long term.

Technology

MOD Pilot



Once the MOD study is completed, it is recommended that Space Coast Area Transit and SCTPO continue to work in collaboration to implement recommendations. Specifically, Space Coast Area Transit could facilitate an MOD Pilot, based on what ideal locations/areas are recommended for MOD in the study.

Electrification of Fleet Plan



Space Coast Area Transit should continue to explore technologies advancements to drive innovation in Brevard County and improve customer experience. In the near future, the agency should evaluate comprehensive options for fleet electrification. This plan could include hybrid, electric, and alternative fuels as potential replacements for a portion of fleet.

Local Agency Coordination



The alignment of the 2050 LRTP and 2035 TDP has been a critical effort in shaping Space Coast's future transportation systems. Space Coast Area Transit should continue to collaborate with Space Coast TPO for transit-related planning, including the MOD study. In addition, Space Coast Area Transit should continue coordination with FDOT District 5 for potential funding and grant opportunities in the future.

Funding



To implement new services, such as Routes 192 and 528, additional funding will be needed long term. There is opportunity for local municipalities assist with funding, like the City of Melbourne. Additionally, the needs and benefits of these new services should be leveraged to local stakeholders for support in pursuing grant opportunities.





Bus Operator Recruitment & Retention

Recruiting and retaining bus operators is critical for Space Coast Area Transit to implement service changes. Space Coast Area Transit should continue efforts in operator workforce development to support reliable and expanded transit services.



Public Outreach Efforts

Continuing public outreach is essential for informing and engaging the community about service changes. Space Coast Area Transit should continue to promote its services through commercial advertising and social media.

10.2 List of Unfunded Needs

The implementation plan shown in Table 31 outlines the service changes from 2025 to 2035, as well as identifies the unfunded needs. Unfunded needs are calculated by assuming the 50% funding through FDOT grant programs, and 50% unfunded local match. This schedule does not preclude Space Coast Area Transit's ability to delay or advance projects as funding and/or priorities change. It also does not limit the ability to change the existing system due to changing conditions, poor performance, and/or funding availability. Progress towards each of the projects as well as customer satisfaction of the system will be tracked annually as part of the Annual Update Process.

Table 31, TDP Implementation Plan and Unfunded Needs

	Route	Туре	Implementation Years	Capital Costs*	Operating Costs**	Total Unfunded
8	West Cocoa	Network Change	2025 - 2030	\$738K Unfunded	\$179K Funded \$179K Unfunded	\$917K
1	Port St. John	Network Change	2025 - 2030	-	\$131K Funded \$131K Unfunded	\$262K
27	East Palm Bay	Increase Frequency	2025 - 2030	\$782K Unfunded	\$250K Funded \$301K Unfunded	\$1.08M
4	520 Connector	Increase Frequency	2030 - 2035	\$1.31M Unfunded	\$250K Funded \$783K Unfunded	\$2.09M
6	Cocoa / Rockledge	Increase Frequency	2030 - 2035	\$1.39M Unfunded	\$250K Funded \$733K Unfunded	\$2.31M
192	New Route	New Service	2030 - 2035	\$1.66M Unfunded	\$250K Funded \$924K Unfunded	\$2.38M
528	New Route	New Service	2030 - 2035	\$830K Unfunded	\$250K Funded \$556K Unfunded	\$1.38M
		Estimate	d Unfunded Exp	enses for	Implementation	\$10.4M

^{*}Capital Costs assume \$600,000 for base capital cost, and a one-time bus purchase a year before implementation. Costs are adjusted for inflation depending on implementation years.



^{**}Operating Costs reflect annual costs and assume 50% funding through FDOT grant programs (\$250k maximum, for up to three years), requiring 50% unfunded local match.

10.3 Route Implementation Framework

The remainder of the implementation plan provides a framework for pursuing future service changes. As shown in Table 32, service changes are summarized in a "cut sheet" approach, including key route characteristics, changes, costs, and considerations for future implementation with local partners. Space Coast Area Transit should refer to these cut sheets to guide future service changes, assess feasibility, and seek future funding. It is important to note that this implementation framework is flexible, and Space Coast Area Transit's may delay or advance service changes as funding and/or priorities evolve.

Table 32. Route Implementation Table Guide

Route #	
Current Frequency	Proposed Frequency
Current Service Hours	Proposed Service Hours
Proposed Network Change	
Change Justification	
Support	
TDP Goals	
Impacted Routes	
Capital Costs	
Operating Costs	
Implementation Considerations	



Route 4 – 520 Connector

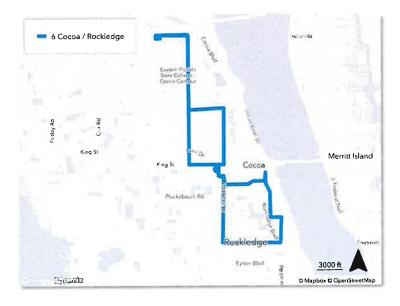
	76 1 020 Commedia.						
Route 4 – 520 Con							
Current Frequency	6 – 9AM: 30 minutes 9 – 6 PM: 20 minutes 6 – 11 PM: 60 minutes	Proposed Frequency	6 – 9AM: 20 minutes 9 – 6 PM: 30 minutes 6 – 11 PM: 60 minutes				
Current Service Hours	6:00 AM - 11:00 PM	Proposed Service Hours	No change				
Proposed Network Change	No change						
Change Justification	Among highest perford demand	ming routes and indic	ates a high level of				
Support	Rider Survey; Community Conversations						
TDP Goals	2 (Multi-Modal Options), 3 (Linking Transportation and Land Use)						
Impacted Routes	1, 6, 8, 9 – Improves transfers and connectivity						
Capital Costs	\$600,000 for base capital cost. \$1,311,272 for implementation year when adjusted for inflation. 2 additional buses needed.						
Operating Costs	\$1,030,824 for current \$1,033,080 for impleme		djusted for inflation.				
Implementation Considerations	Annual Operating Cos \$250,000 covered in se \$783,080 will be neede 1,033,080 in total per y local funding. Total Capital Costs: 1,311,272 for annual copportunities.	ervice development g ed in local funding. rear, after service dev	elopment grants and				





Route 6 - Cocoa/Rockledge

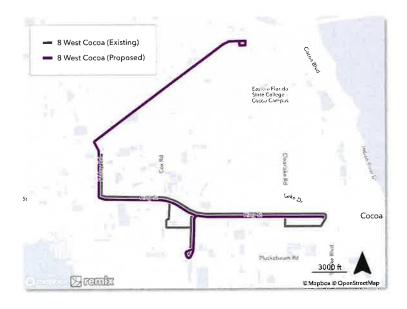
Nobic 0 - Cocoa/N	e 0 - Cocod/Nockiedge						
Route 6 - Cocoa/R	Rockledge						
Current Frequency	6 – 8AM: 30 minutes 8 – 5 PM: 20 minutes 5 – 11 PM: 60 minutes	Proposed Frequency	6 – 9AM: 20 minutes 9 – 6 PM: 30 minutes 6 – 11 PM: 60 minutes				
Current Service Hours	6:00 AM - 11:00 PM	Proposed Service Hours	No change				
Proposed Network Change	No change						
Change Justification	Improve network cor	nectivity and service	reliability				
Support		Rider Survey; Community Conversations					
TDP Goals	2 (Multi-Modal Options), 3 (Linking Transportation and Land Use)						
Impacted Routes	1, 4, 7, 8 – Improves transfers and connectivity						
Capital Costs	\$600,000 for base capital cost. \$1,391,129 for implementation year when adjusted for inflation. 2 additional buses needed.						
Operating Costs	\$900,787 for current of \$983,721 for impleme	perating cost. ntation year when ad	justed for inflation.				
Implementation Considerations	\$733,721 will be need \$983,721 in total per y local funding. Total Capital Costs:	service development (





Route 8 – West Cocoa

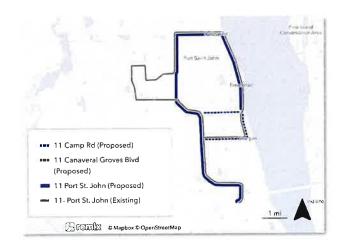
00/0 0 // 00/ 00004						
Route 8 – West Coc	oa					
Current Frequency	6 – 9 AM: 125 minutes 9 – 3 PM: 30 minutes 5 – 7 PM: 60 minutes	Proposed Frequency	60 minutes			
Current Service Hours	6:00 AM - 3:00 PM 5:00 PM - 7:00 PM	Proposed Service Hours	6:00 AM - 7:00 PM			
Proposed Network Change	Adjust route to go up Cocoa Commons	Friday Road and turn	around at Publix at			
Change Justification	Provides easier conne	ectivity and more freq	uent service			
Support	Rider Survey; Community Conversations					
TDP Goals	2 (Multi-Modal Options) & 3 (Linking Transportation & Land Use)					
Impacted Routes	4, 6 - Improves time transfers and connectivity.					
Capital Costs	\$600,000 for base capital cost. \$737,924 when adjusted for inflation during implementation year. 1 additional bus needed due to increased frequency.					
Operating Costs	\$303,873 for existing o \$359,388 for impleme	perating cost. ntation year when ad	justed for inflation.			
Implementation Considerations	\$179,694 will be need \$359,388 in total per y local funding. Total Capital Costs:	ervice development (





Route 11 – Port St. John

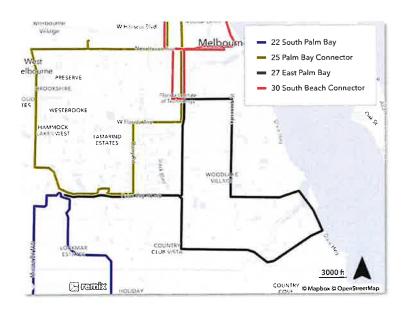
Route 11 – Port St	John		
Current Frequency	60 minutes	Proposed Frequency	No change
Current Service Hours	7:00 AM - 8:00 PM	Proposed Service Hours	No change
Proposed Network Change	Boulevard and rema Route 11 stops on US Canaveral Groves Bl Long Term Change: 6 shortening route to re Highway.	-1. Alternate service b vd every hour. Consider replacing rou emain on Fay Bouleva	y. Additionally, reduce etween Camp Road & ute with MOD or rd, instead of Kings
Change Justification	Low ridership on US-1. Provide quicker service and more efficient use of transit resources.		
Support	Rider Survey; Community Conversations		
TDP Goals	4 (Sustainability, Equity, and Resiliency)		
Impacted Routes	1 – Reduces overlapping routes on 11 to improve on time performance.		
Capital Costs	\$600,000 for base capital cost. No additional buses needed.		
Operating Costs	\$326,829 for existing (\$263,196 in operating		tion year when
Implementation Considerations	\$131,598 will be need \$263,196 in total per local funding. Total Capital Costs: \$600,000 for base ca	service development ded in local funding.	





Route 27 – East Palm Bay

Roule 27 – East Pain	ПВОУ		
Route 27 – East Pal	m Bay		
Current frequency	60 minutes	Proposed Frequency	30 minutes
Current Service Hours	6:30 AM - 7:30 PM	Proposed Service Hours	No change
Proposed Network Change	No change		
Change Justification	Continue to support increasing ridership.		
Support	Rider Survey; Community Conversations		
TDP Goals	2 (Multi-Modal Options) & 3 (Linking Transportation & Land Use)		
Impacted Routes	22, 23, 25, 30 – Improves transfers and connectivity		
Capital Costs	\$600,000 for base capital cost. \$782,864 for implementation year when adjusted for inflation.		
Operating Costs	\$371,902 for current operating cost. \$551,074 for implementation year when adjusted for inflation.		
Implementation Considerations	Annual Operating Costs: \$250,000 covered in service development grants, for 3 years max. \$301,074 will be needed in local funding. \$551,074 in total per year, after service development grants and local funding. Total Capital Costs: \$782,864 for annual capital cost, could pursue Federal grant opportunities.		





Route 192 – US-192 (New Route)

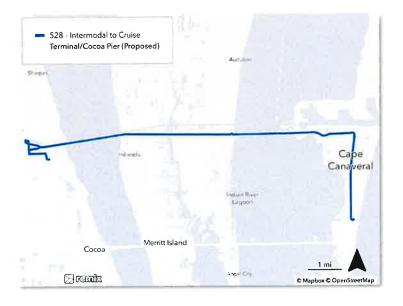
KOUTE 192 - 03-192	New Moore,		
Route 192 – US-192 (New Route)			
Current Frequency	N/A	Proposed Frequency	30 minutes
Current Service Hours	N/A	Proposed Service Hours	6:00 AM - 7:00 PM
Proposed Network Change	New route providing more direct service on US-192, from St. John's Heritage Parkway to SR-A1A on the beachside.		
Change Justification	Ridership in area/surrounding routes indicates high demand for direct route on US-192.		
Support	Rider Survey; Community Conversations		
TDP Goals	2 (Multi-Modal Options), 3 (Linking Transportation and Land Use)		
Impacted Routes	20, 21, 25, 28 & 30 – Improves transfers and connectivity		
Capital Costs	\$600,000 for base capital cost. \$1,661,081 for implementation year when adjusted for inflation. 2 additional buses needed.		
Operating Costs	\$824,018 for base operating cost. \$1,174,852 for implementation year when adjusted for inflation.		
Implementation Considerations	\$924,852 will be nee \$1,174,852 in total pe and local funding. Total Capital Costs:		





Route 528 – SR-528 (New Route)

ROUTE 328 - 3R-328			
Route 528 - SR-528	(New Route)		
Current Frequency	N/A	Proposed Frequency	60 minutes May require 30-minute frequency depending on future demand.
Current Service Hours	N/A	Proposed Service Hours	6:00 AM - 10:00 PM
Proposed Network Change Change Justification	the Cruise Termin	SR-528 connecting the Ir nal, and terminating at th Intermodal Station and c	e Cocoa Beach Pier
Support	Local Agency Conversations; Community Conversations		
TDP Goals	2 (Multi-Modal Options), 3 (Linking Transportation and Land Use), 4 (Sustainability, Equity, & Resiliency)		
Impacted Routes	6 & 11 - Improves connectivity		
Capital Costs	\$600,000 for base capital cost. \$830,540 for implementation year when adjusted for inflation. 2 additional buses needed.		
Operating Costs	\$565,767 for base operating cost. \$806,648 for implementation year when adjusted for inflation.		
Implementation Considerations	\$556,648 will be r \$806,648 in total local funding. Total Capital Cos	d in service development needed in local funding. per year, after service de	evelopment grants and





Appendix A: Trend and PEER Analysis



Appendix A: Peer and Trend Analysis

This appendix provides details of the peer and trend analysis of the Space Coast Area Transit's fixed route and paratransit (demand-response) services conducted as a part of the existing services and performance evaluation, Section 3.0 of the 2035 Transit Development Plan. Various performance measures obtained from validated NTD data were used to both select appropriate peer agencies and to help evaluate and benchmark the effectiveness and efficiency of the agency's services over time and compare to the selected peer systems listed below.

Fixed-Route and Paratransit Peer Agencies

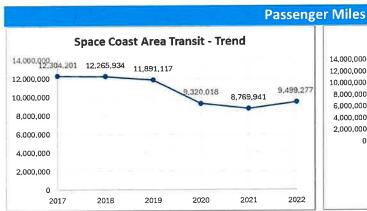
Tixou Regio and Lateriano. To . 195	
ECAT - Escambia County Area Transit (Pensacola, FL)	
Chatham - Chatham Area Transit Authority (Savanah, GA)	
LeeTran – LeeTran (Fort Myers, FL)	
Citrus – CitrusConnection (Lakeland, FL)	
WRTA – Worchester Regional Transit Authority (Worchester, MA)	
WSTA –Winston Salem Transit Authority (Winston Salem, NC)	
KAT – Knoxville Area Transit (Knoxville, TN)	

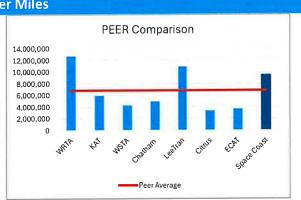
Transit Performance Measures

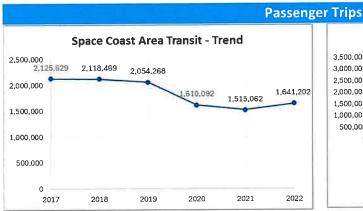
General Measures	Effectiveness Measures	Efficiency Measures
Passenger Miles	Average Age of Fleet (in years)	Average Fare
Passenger Trips	Average Trip Length (in miles)	Farebox Recovery (%)
Revenue Hours	Passenger Trips Per Revenue Hour	Operating Expense Per Passenger Mile
Revenue Miles	Passenger Trips Per Revenue Mile	Operating Expense Per Passenger Trip
Service Area Population	Passenger Trips Per Service Area	Operating Expense Per Revenue Hour
	Capita	
Service Area Size (sq miles)		Operating Expense Per Revenue Mile
Weekday Span of Service		Operating Expense Per Service Area
(in hrs)		Capita
Total Employee (FTEs)		Revenue Miles Per Total Vehicles
Total Gallons Consumed		Revenue Miles Per Vehicle Mile
Total Operating Expense		Vehicle Miles Per Gallon
Vehicle Hours		
Vehicle Miles		
Vehicles Operated in Max.		
Service		

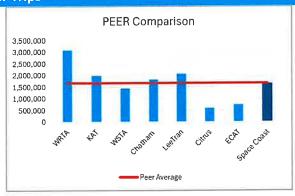


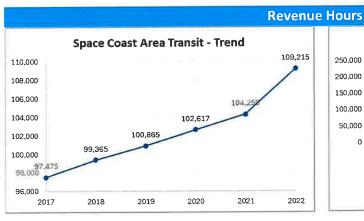
Fixed Route General Measures

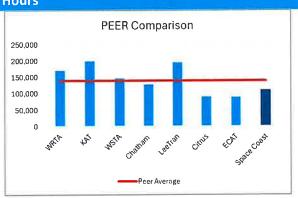


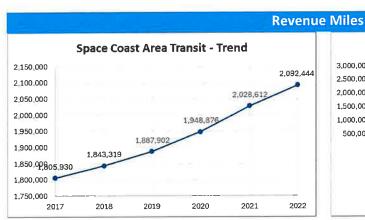


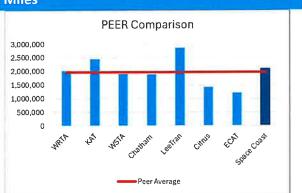


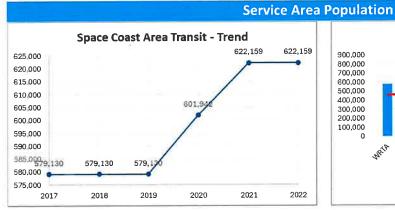


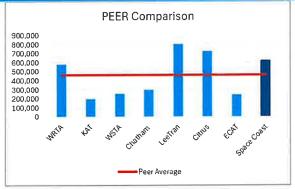


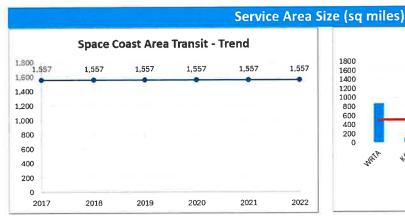


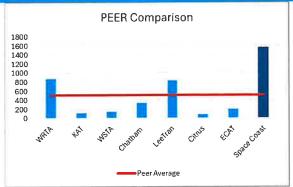


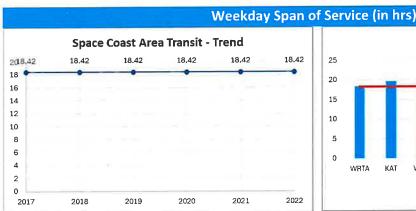


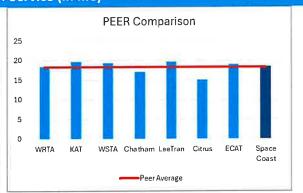


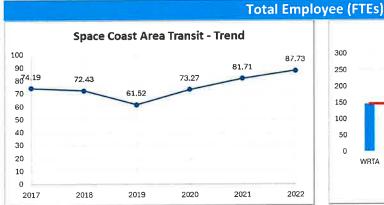


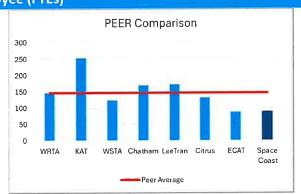


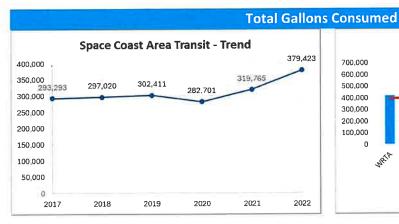


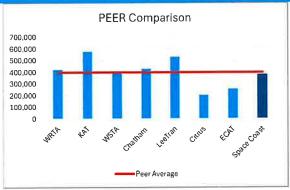




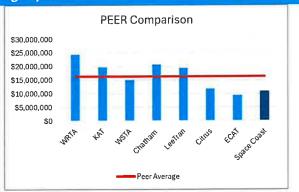




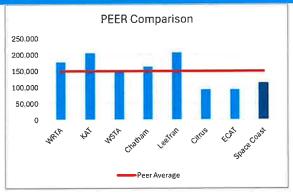


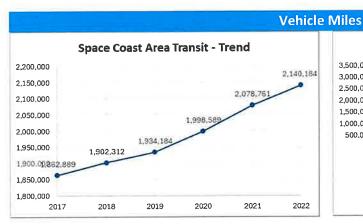


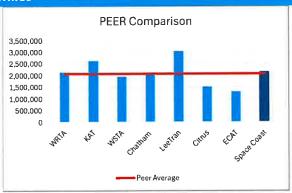
Total Operating Expense Space Coast Area Transit - Trend \$12,000,000 \$10,781,542 \$10,000,000 \$8,000,650,053,010 \$7,391,175 \$7,917,068 \$8,454,199 \$6,000,000 \$4,000,000 \$2,000,000 \$0 2020 2021 2022 2017 2018 2019

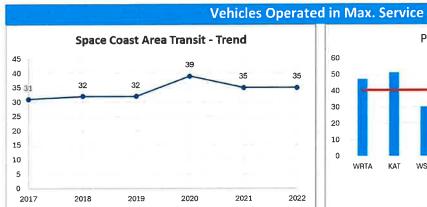


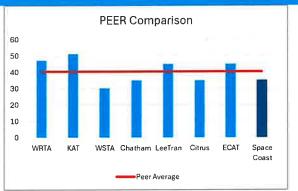
Vehicle Hours Space Coast Area Transit - Trend 112,669 114,000 112,000 110,000 107.7 108,000 105,562 106,000 103,367 104,000 102,268 102,000 155 100,000 98,000 -2021 2022 2017 2018 2019 2020







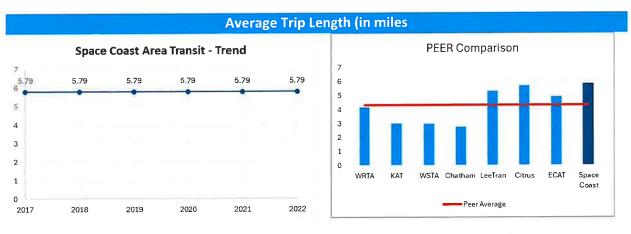


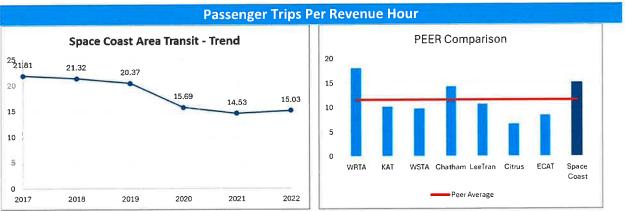




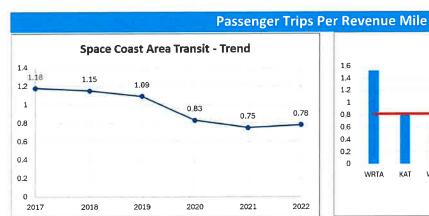
Fixed Route Effectiveness Measures

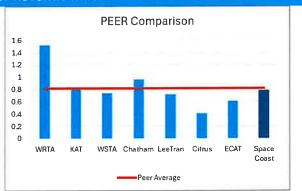
Average Age of Fleet (in years) PEER Comparison **Space Coast Area Transit - Trend** 12 10 8.64 10 7.68 7.55 7.35 8 6,97 76.43 6 5 4 3 2 WRTA KAT WSTA Chatham LeeTran 1 Peer Average 2021 2022 2019 2020 2018 2017

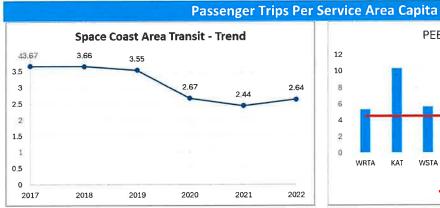


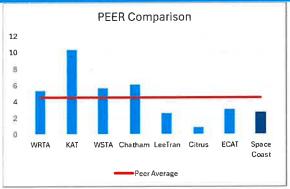




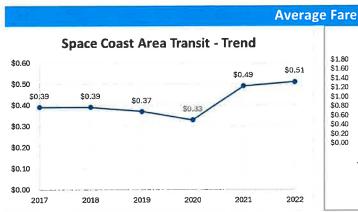


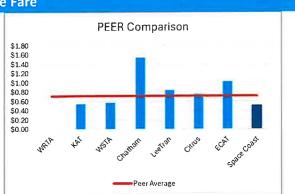




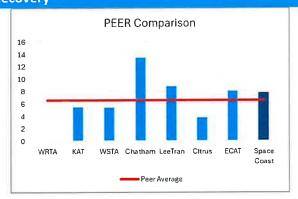


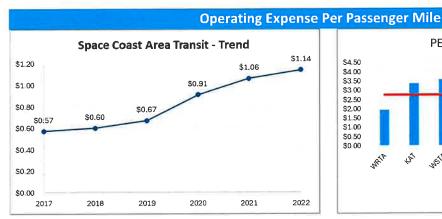
Fixed Route Efficiency Measures

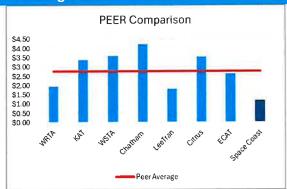


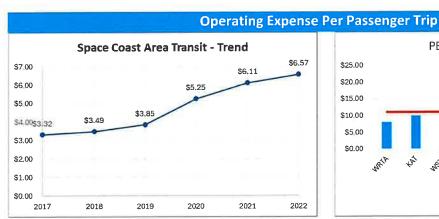


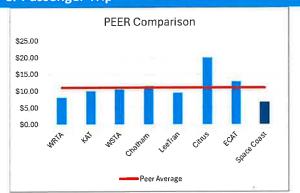
Farebox Recovery Space Coast Area Transit - Trend 14 11.83 11.27 9.6 10 7.95 7.7 8 6.27 6 4 2 0 2020 2021 2022 2018 2019 2017

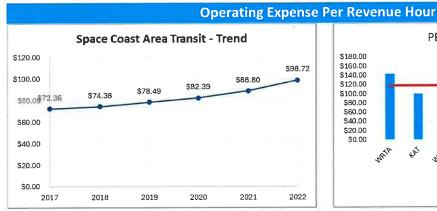


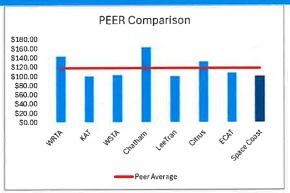


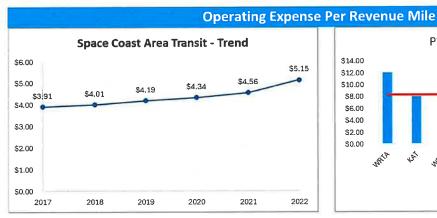


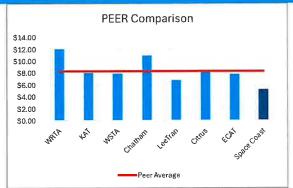




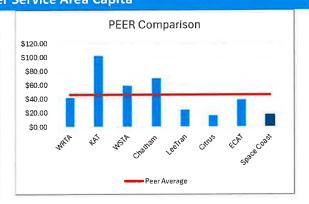




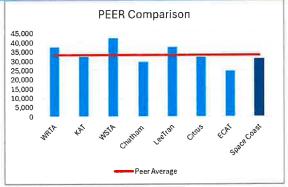


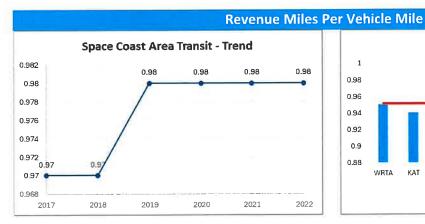


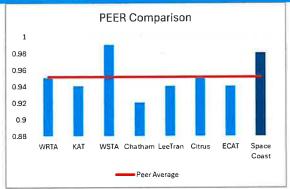
Operating Expense Per Service Area Capita Space Coast Area Transit - Trend \$20.00 \$17.33 \$18.00 \$14.88 \$16.00 \$14.04 \$13.67 \$12.76 \$14,0\$12.18 \$12.00 \$10.00 \$8.00 \$6.00 \$4.00 \$2.00 \$0.00 2017 2018 2019 2020 2021 2022

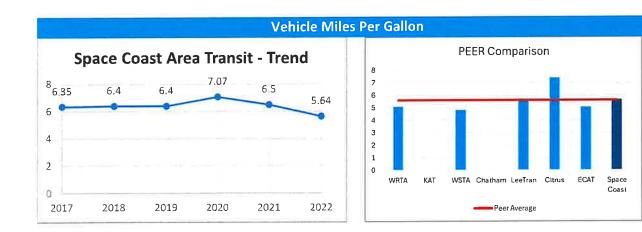






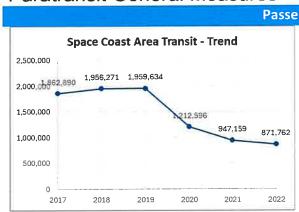


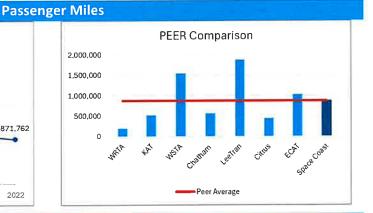




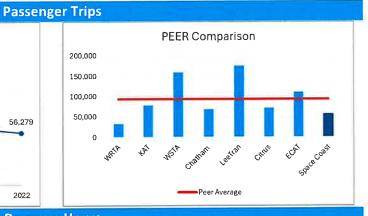


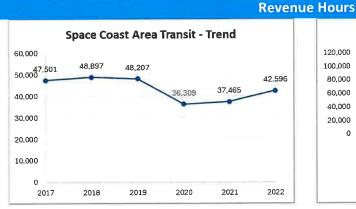
Paratransit General Measures

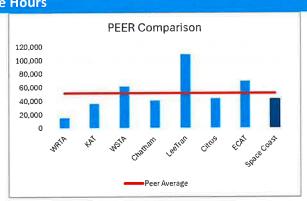




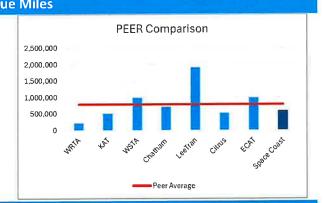
Space Coast Area Transit - Trend 140,000 126,211 126,428 120,000 100,000 8,232 80,000 61,107 56,279 60,000 40,000 20,000 2022 2017 2018 2019 2020 2021







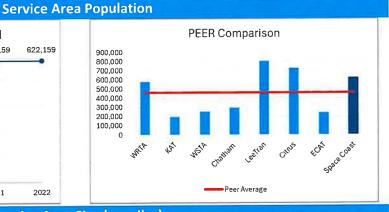
Revenue Miles Space Coast Area Transit - Trend 733,755 800,000 700,000 724,907 583,903 600,000 8,519 519.025 500,000 400,000 300,000 200,000 100,000 0 2018 2019 2020 2021 2022 2017

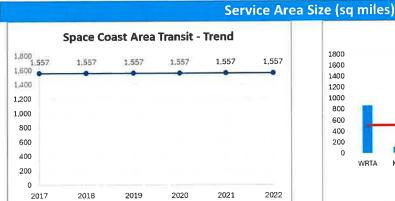


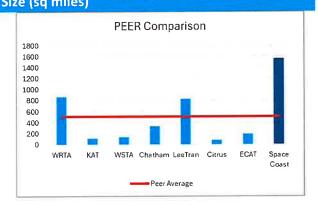
Space Coast Area Transit - Trend 622,159 622,159

2020

2021







625,000 620,000

615,000

610,000

605,000

600,000 595,000 590,000 585,000,79,130

580,000 575,000

2017

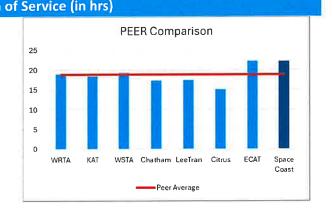
579,130

2018

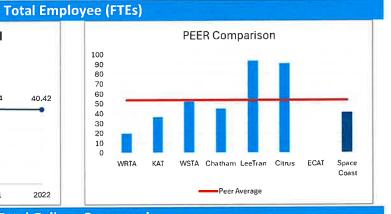
579.

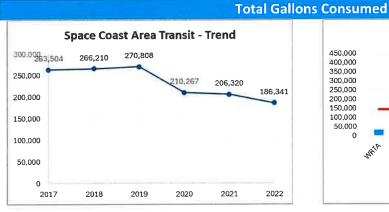
2019

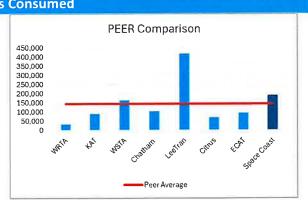
Space Coast Area Transit - Trend 25,2,08 22.08 22.08 22.08 22.08 22.08 22.08 20 15 10 5 0 WRTA KAT



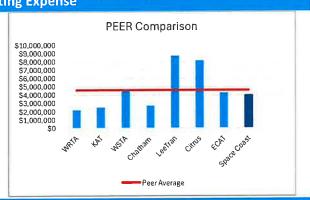
Space Coast Area Transit - Trend 70 57.64 663.02 50 40,74 40,42 40 32,26 30 20 10 2017 2018 2019 2020 2021



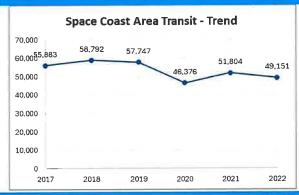


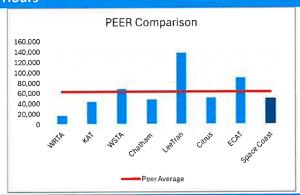


Total Operating Expense Space Coast Area Transit - Trend \$5,368,955 \$5,554,884 \$6,000,000 \$4,946,725 \$5,000,000 \$3,999,488 28,336 \$3,637,661 \$4,000,000 \$3,000,000 \$2,000,000 \$1,000,000 \$0 2021 2017 2018 2019 2020

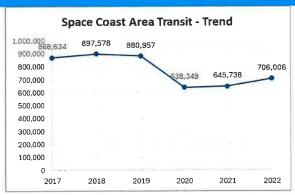


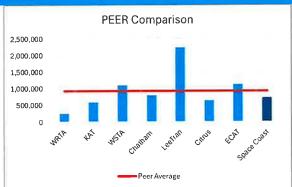
Vehicle Hours

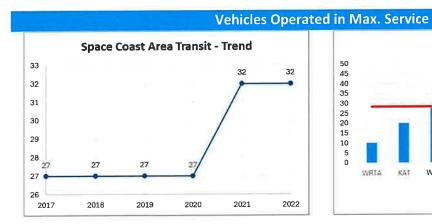


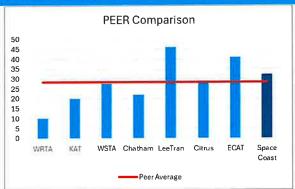


Vehicle Miles



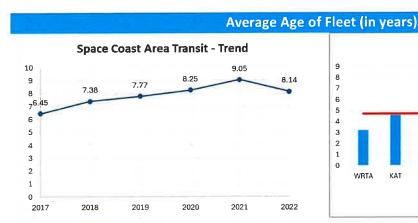


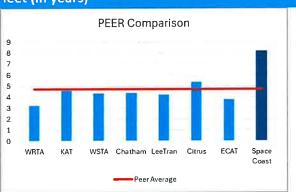




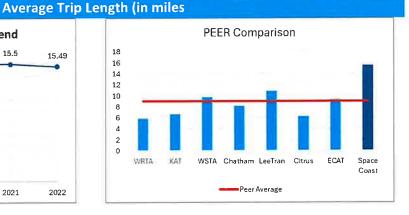


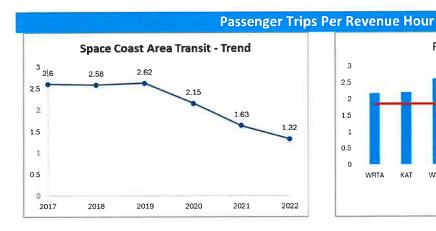
Paratransit Effectiveness Measures

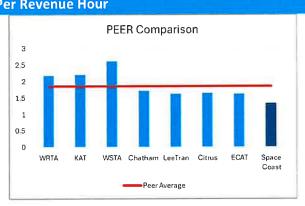




Space Coast Area Transit - Trend 15.55 15.5 15.5 15.49 15.5 15.45 15.4 15.35 15.3 15.25 15.2 15.15 15.15. 15.05 15 2018 2019 2020 2021 2022







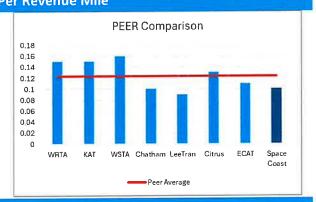
Passenger Trips Per Revenue Mile Space Coast Area Transit - Trend 0.18 0.17 0.17 0.17 0.16 0.14 0.12 0.1 0.18 0.16 0.14 0.12 0.1 0.18 0.06 0.06 0.04 0.02 0 WRTA KAT

2019

2020

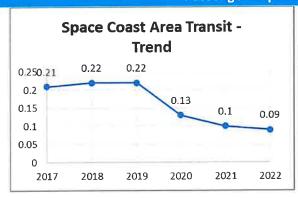
2017

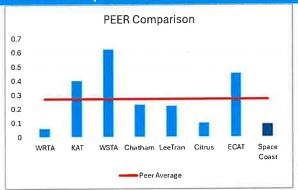
2018



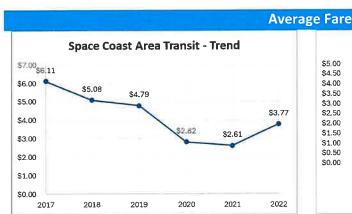
Passenger Trips Per Service Area Capita

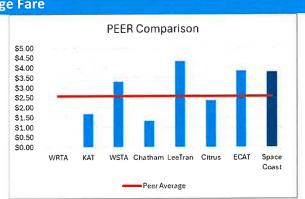
2021



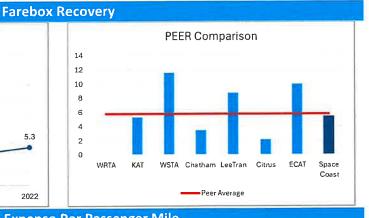


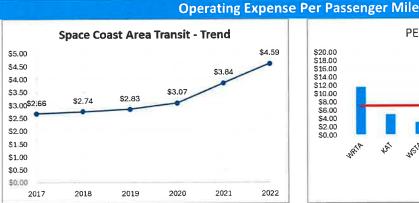
Paratransit Efficiency Measures

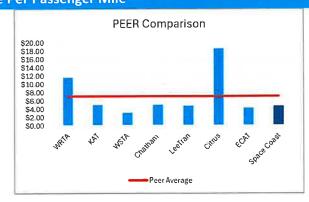




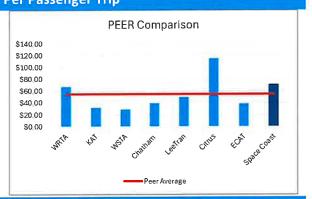
Space Coast Area Transit - Trend 15,27 16 11.94 10.9 5.92 5.3



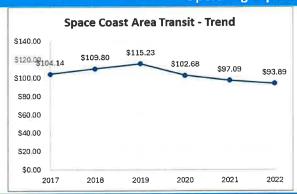


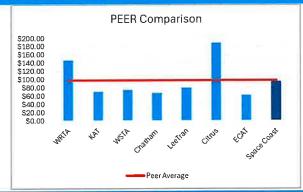


Operating Expense Per Passenger Trip Space Coast Area Transit - Trend \$80,00 \$71.07 \$70,00 \$59.53 \$60.00 \$47.66 \$50.00 \$43.94 \$42.54 \$40,00 \$30.00 \$20,00 \$10.00 \$0.00 2017 2018 2021 2022

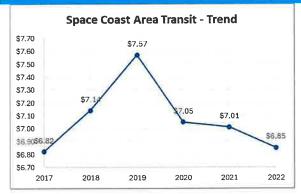


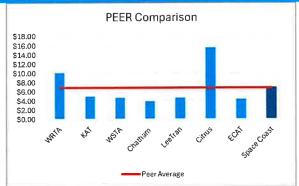
Operating Expense Per Revenue Hour



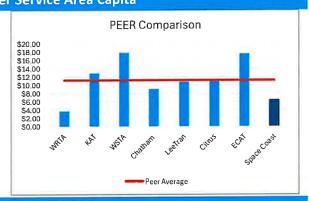


Operating Expense Per Revenue Mile

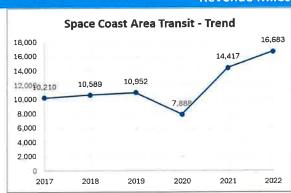


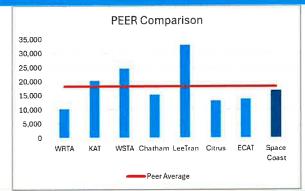


Operating Expense Per Service Area Capita Space Coast Area Transit - Trend \$12.00 \$9.59 \$9.27 \$10.00 \$8,54 \$8.00 \$6.43 \$6.19 \$5.85 \$6.00 \$4.00 \$2.00 \$0.00 2022 2021 2019 2020 2017 2018

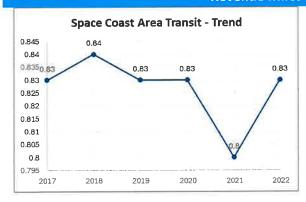


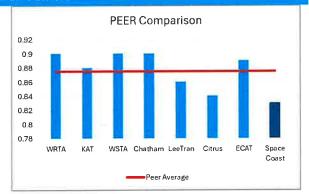
Revenue Miles Per Total Vehicles

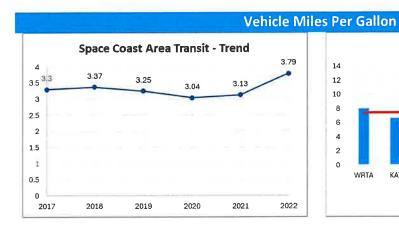


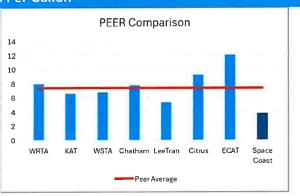


Revenue Miles Per Vehicle Mile











Appendix B: Public Engagement



Public Outreach Schedule Summary

The table below summarizes the timeline for all TDP public outreach efforts.

Public Outreach Meeting/Tool	Туре	Date
TDP Subcommittee Kickoff	Subcommittee Meetings	9/13/2023
Online TDP Ridership Survey	Survey	10/2023 – 11/2023
TDP Ridership Survey: Cocoa Terminal & Melbourne Square Mall	Survey	10/24/2023
TDP Ridership Survey: Mobility Week - Cocoa Terminal (AM) & Shepard Park (PM)	Survey	10/30/2023
TDP Ridership Survey: Mobility Week - Hammock Landings (AM) & Melbourne Square Mall (PM)	Survey	11/2/2023
TDP Ridership Survey: Cocoa Terminal & Melbourne Square Mall	Survey	11/8/2023
State of Transportation	Public Workshop	11/15/2023
Stakeholder Interviews	Stakeholder and Local Agency Interviews	1/2024 – 2/2024
TDP Subcommittee #2	Subcommittee Meetings	1/16/2024
Needs Charrette	Public Workshop	1/31/2024
Modal Partners Workshop	Public Workshop	2/21/2024
TDP Subcommittee #3	Subcommittee Meetings	3/7/2024
Fast Forward Workshops - North Area	Public Workshop	5/22/2024
Fast Forward Workshops - Central Area	Public Workshop	5/20/2024 – 5/30/2024
Fast Forward Workshops - South Area	Public Workshop	6/4/2024
Fast Forward Workshops - Beachside Area	Public Workshop	6/12/2024
Coordination Meeting - City of Cocoa, City of Cocoa Beach, & City of Cape Canaveral	Stakeholder and Local Agency Interviews	8/14/2024
Coordination Meeting - City of Melbourne	Stakeholder and Local Agency Interviews	8/14/2024
Coordination Meeting - City of Palm Bay	Stakeholder and Local Agency Interviews	8/22/2024
TDP Subcommittee #4	Subcommittee Meetings	9/27/2024



Public Engagement Plan



PUBLIC ENGAGEMENT PLAN



Adopted October 2023 Updated June 2024

2725 Judge Fran Jamieson Way Building. B, Room 105, MS #82 Melbourne, FL 32940 321-690-6890

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LONG RANGE PLANS

TRANSPORTATION



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About Long Range and Transit Development Plans

In Florida, Metropolitan Planning Organizations (MPOs) are required by both federal code 23 CFR Parts 450 and 771 and State Statute 339.175 F.S. to prepare a Long Range Transportation Plan (LRTP) that has at least a 20-year planning horizon. Transit agencies in Florida are required under the Florida Administrative Code 14-73.001 to prepare a Transit Development Plan (TDP) with a 10-year planning horizon.

The Space Coast Transportation Planning Organization (SCTPO) is partnering with Space Coast Area Transit to combine the development of the LRTP and the TDP for planning consistency while also maximizing efforts spent engaging stakeholders and the community at large through the activities outlined in this Public Engagement Plan.

Public Engagement Plan Purpose

Public participation is a cornerstone of the SCTPO's everyday activities and also provides critical input to the LRTP and TDP planning process. The purpose of this plan is to engage the public in a manner consistent with the 2022 SCTPO Public Participation Plan with an added emphasis in these areas:

- Reaching Underserved Communities implement innovative strategies that reach populations who may experience inadequate access to transportation options and public services, including, but not limited to, minorities, low-income, persons with disabilities, elderly, youth, and other transportation disadvantaged populations.
- Technology and Innovation Use of modern technology that can support virtual and in-person public engagement tactics supporting a two-way conversation with the public and the project team.
- Meaningful Outreach Schedule Provide a thoughtful approach to outreach that maximizes staff and consultant time through the hosting of events, identifying successful partner events that align with public engagement goals, and combining outreach across multiple SCTPO projects where appropriate.

Partners and Stakeholders

A database of stakeholders will be maintained by the Project Team and include representation from the agencies described in the following sections. To ensure consistency and compliance with local jurisdiction requirements and community preparedness, this project will connect with stakeholders from the following:

County and Cities

Brevard County, Cities of Cape Canaveral, Cocoa, Cocoa Beach, Indian Harbour Beach, Melbourne, Palm Bay, Rockledge, Satellite Beach, Titusville, and West Melbourne. Towns of Grant-Valkaria, Indialantic, Malabar, Melbourne Beach, Melbourne Village and Palm Shores.

Transportation and Modal Partner Agencies

Florida Department of Transportation (District 5), Space Coast Area Transit, Melbourne Orlando International Airport, Titusville-Cocoa Airport Authority, Canaveral Port Authority, NASA/Kennedy Space Center, Space Florida, and Patrick Space Force Base.

Community Organizations

Brevard Public Schools, Community Redevelopment Agencies, Eastern Florida State College, University of Central Florida Cocoa Campus, Space Coast Office of Tourism, CareerSource Brevard (local workforce development agency), Florida Department of Health in Brevard, Community Action Agency, Brevard County Housing and Human Services, local Economic Development Commission for Florida's Space Coast, East Central Florida Regional Planning Council, Indian River Lagoon National Scenic Byway, Chambers of Commerce, Housing & Human Services/ Community Development Services, Homeless Coalition, and other social and economic service agencies as appropriate.

Environmental Agencies

Brevard County Natural Resources, Brevard County Environmentally Endangered Lands Program (EEL), Merritt Island National Wildlife Refuge (US Fish & Wildlife Service (MINWR), Canaveral National Seashore (National Park Service) (CANA), Melbourne-Tillman Water Control District, St. Johns Water Management District, and Indian River Lagoon National Estuary Program.

Stakeholder Outreach

The project will maintain regular updates, outreach, and coordination with several key stakeholder groups.

Space Coast TPO Governing Board and Committees

In addition to plan adoption meetings, technical presentations will be provided to the SCTPO Governing Board and committees at project milestone points for the purpose of guiding key decisions (see Table 1).

Table 1 | TPO Governing Board and Committee Presentations

Board/Committee	Public Engagement Plan	Goals	Needs	2035 TDP	Cost Feasible 2050 LRTP
TPO Governing Board	/	✓	✓	✓	1
Technical Advisory Committee	✓	✓	✓	✓	✓
Citizens Advisory Committee	✓	1	1	1	1
Bicycle, Pedestrian, & Trails Advisory Committee		✓	✓	✓	✓
Transportation Disadvantaged Local Coordinating Board		~		✓	✓

LRTP Working Group

The LRTP Working Group will meet regularly and provide an opportunity for the project team to provide updates and receive input in advance of presentations to the SCTPO Governing Board and committees. The Working Group will be tasked with reviewing technical documentation and providing their feedback. The SCTPO will try to schedule Working Group meetings in conjunction to already scheduled activities, such as Transportation Subcommittee meetings, as many of the same participants will be in attendance.

TDP Subcommittee

The TDP Subcommittee will provide oversight to guide the overall TDP process and be comprised of subcommittee members representing organizations with an inherent interest in transit development. See Table 2 for list of agency representation.

Table 2 | TDP Subcommittee

TDP Subcommittee Agencies

Brevard County Traffic Operations

Brevard County Housing and Human Services

CareerSource Brevard (designated Local Workforce Development Agency)

FDOT Modal Development

Transportation Disadvantaged Local Coordinating Board Member

The Viera Company

Transit One

Equitable Communication

Demographic and socioeconomic data will help drive this plan's approach to ensuring thorough public engagement that reaches residents across Brevard County. A Community Profile is included in **Appendix A**. Key factors that will influence the PEP's approach include:

- Child Care Needs (83 index) Meeting time, location, and virtual option considerations
- Senior Population (26%) Meeting time, location, and outreach activity consideration
- Limited English Proficiency Understanding that English is widely spoken, materials will be created in English with non-English materials being made available if requested
- Disabled Population (13.4%) Meeting time, location, and outreach activity consideration

Equity Screen

There are 30 census tracts around Titusville, Cocoa, in and around Melbourne and Palm Bay, and the southernmost portion of the county that are identified as disadvantaged using the EJ Screen Environmental Justice and Mapping Tool from the Environmental Protection Agency consistent with the Justice 40 Executive Order. This screening will be used to identify opportunities for equitable and meaningful engagement throughout the public engagement process.

Public Engagement Tools and Tactics

TDP Transit Rider Survey

A Transit Rider Survey of fixed-route bus patrons and non-riders will be conducted in an effort to capture rider trip origin and destination, transit use, trip timelines, and reasons to ride transit. It will also capture the non-rider's most common trips, reasons for not riding transit, and typical trip destinations. The survey will provide the rider and non-rider transit priorities, such as the expansion or improvement of the existing system, expansion of service, most desired service improvements, and possible funding strategies. The survey will be distributed online and through in person outreach and will be included in project documentation. The transit rider survey will be distributed at the most traveled transit bus stops and on board via scanning a QR code with their smartphone or paper copy. The survey will be promoted via social medial by boosting it to the underserved zip codes on Facebook, Nextdoor, SCTPO newsletter, etc. The results will be displayed on the SCTPO's website as an infographic.

TDP Bus Operator Survey

A survey will be distributed to Space Coast Area Transit bus operators via email and QR code flyer to scan with their smartphones to gauge their opinions and what they hear from transit riders, regarding the following concerns:

- Hours and/or frequency of service
- Bus routes
- Bus tops/transfer locations
- Transit service
- Compliments from riders
- Challenges retaining bus operators
- Potential service improvements
- Areas of improvements (i.e., staffing ridership growth, bus services, replacement of fleet, rider amenities, enhanced safety measures for operators and riders)

The results will be displayed on the SCTPO's website as an infographic.

Long Range Plans Webpages

Two project webpages will be hosted within the SCTPO website to provide project information for the LRTP and TDP while also providing an opportunity for the public to provide their input and engage with project information. A link to the webpages will be easy to find on both the SCTPO and the Space Coast Area Transit websites and be shared with local partners for additional promotion.

Newsletters

Timely content will be included in the SCTPO electronic newsletters including the En Route Newsletter. This will include content about the project kickoff, in-person and virtual public engagement opportunities, availability of an online public engagement platform and sharing of video and graphical project media. Basic project information (call to action, website link) will be included with additional featured content on the LRTP and TDP to be included as appropriate. Newsletters are sent to all individuals on the SCTPO email list.

Social Media and Online Advertising

Social Media will be utilized through both organic postings and paid advertising with the goal of driving public engagement and participation. The SCTPO utilizes Facebook, X, YouTube, NextDoor, and LinkedIn.

Online advertising will target Brevard County residents and timing of paid posts will align with the project's public input needs (i.e., Needs Assessments and in advance of the Cost Feasible Plan Development). Posts including project videos or other media with a higher rate of engagement should also be considered for increased reach through paid advertising on Facebook.

For the purposes of the FY 2025-2035 Transit Development Plan update, content will be created by the consultant in collaboration with the SCTPO and Space Coast Area Transit for providing information through their social media channels (Facebook, X, YouTube, Instagram).

Transit Advertising

Interior bus advertising rack cards, yard signs, and handouts will be used to promote engagement among transit riders. The Space Coast Area Transit mobile app has also been identified as a potential resource for sharing project information and public engagement opportunities.

Visualization Tools and Publications

Project Branding

A "Long Range Plans" brand will be established that will include sub-brands for the 2050 LRTP and FY 2025-2035 TDP. This approach will allow for common collateral and media to be created. The overall brand will have a unique look and feel compared to other SCTPO campaigns and branding but will tie-in to the "Advancing Transportation Together" tagline. Proposed project logos and branding elements, including how they will be used alongside the SCTPO logo, are included in **Appendix B**.

Technology and Interactive Presentations

Technology and interactive elements will be utilized to encourage public engagement. This will be done in the form of utilizing platforms such as Mentimeter to conduct live polling and through a Transportation Tycoon platform to simulate an in-person prioritization activity for those unable to attend. Use of boosting on social media platforms to encourage attendance and engagement. Boosting can allow for targeted zip codes to reach underserved communities, or those around the meeting if geographically specific. Other technologies and interactive tools may be utilized as identified throughout the project development.

Public Engagement Video

A video will be created to communicate and encourage public engagement and participation in the transportation planning process, specifically in long range planning. Video will be played at meetings and showcased on social media.

Events

The general approach to event scheduling and participation values *quality over quantity*. The SCTPO may leverage outreach around other studies to avoid overextending limited staffing resources and causing fatigue among stakeholders and the public. Where possible, dissemination of project information and solicitation of feedback will be conducted at established events in target areas that offer built-in attendance. Events such as the annual SCTPO Open House (June) also offer an opportunity to engage the public around the LRTP and TDP while sharing other TPO updates and project information. SCTPO will also utilize partner agencies' events and programs when possible or applicable.

In compliance with the SCTPO's Title VI policy's stated goal to, "ensure full and fair participation by all potentially affected individuals, groups, and communities in the transportation decision-making process," the event schedule will include meeting and event times and locations that are sensitive to the needs of the community, particularly those of transit riders, so that participation is maximized.

State of Transportation

One new event that will be established for this project is the "State of Transportation." This event will convene residents, technical professionals, local advocates, and elected officials to discuss transportation topics and collaborate on local needs across Brevard County. This summit will be a one-day event. The State of Transportation is scheduled for November 15, 2023, at the Center for Collaboration in Rockledge.

LRTP Working Group Charette

The purpose of the Working Group Charette is to engage the Working Group and other partners towards the development of a wholistic multimodal needs project list. Charette will host a variety of tables for attendees to engage and express their transportation needs for: safety, resiliency, capacity, transit, technology, and bicycle/pedestrian/trails.

Virtual Events

Consideration will be given to virtual outreach events to accommodate residents with needs such as transportation or childcare. These events may be small-group (i.e., roundtable with a planner) or larger based on interest. The website will also house activities that simulate any activities offered at in-person workshops. As well as, whenever possible recordings of presentations will be made available.

Public Workshops

Planned public workshops are outlined in Table 3.

Table 3 | Public Workshop Schedule

Public Workshop	Nov 2023	May/June 2024	Aug 2024	Mar 2025
State of Transportation	LRTP & TDP			
Public Needs Workshops (4 Locations)		LRTP & TDP		
Bus Stop TPD Plan Pop-Ups (5 Locations)			TDP	
Draft Cost Feasible Plan Workshop				LRTP

Performance Measures

In order to monitor and document effectiveness of the public outreach activities utilized throughout the development of the LRTP and TDP, the following performance measures shown in Table 4 have been developed.

Table 4 | Summary of Public Engagement Plan Performance Measures

Outreach Tool	Objective	Performance Measure	Target
In-Person Engagement	Provide opportunities for the public to engage directly with the project team	# of events held or participated in to promote LRTP/TDP	15
			Facebook Impressions = 125,000
	Utilize social media to engage the	# of reactions, comments and	Facebook Video views = 3,000
Social Media Engagement	public around the project`	views (when applicable)	Twitter/NextDoor Impressions = 75,000
			YouTube Views = 250
Project Website	Provide an online home for project information and feedback	# of sessions	500
TDP Rider Survey	Provide opportunities for the public to provide feedback on transit fixed- route	# of surveys taken	300
En Route Newsletter Features	Provide project updates and opportunities for feedback	# of Newsletters including project information	10
Press Releases	Provide local and regional partners notice of events	# of Press Releases	3
Stakeholder Engagement	Provide opportunities for stakeholders to engage directly with the project team	# of stakeholders reached out to	15

Documentation

A technical memorandum documenting the public engagement outcomes and findings will be prepared and included in the final report documents in an appendix.

Abby Hemenway, APR Public Information & Outreach Manager Space Coast Transportation Planning Organization SPACE COAST

APPENDIX A

Brevard County Community Profile

Da Demographic and Socioeconomic Profile Brevard County, FL

KEY FACTS



Median Age (2022 Esn)

Average Household Size (2023 Esri)

\$63,632



Median Household Income (2021 ACS)

HOUSING STATS







Median Home Value (2023 Esir) \$303,706





Own Rent

AT RISK OR UNDERSERVED (2023 Esri)

EDUCATION (2021 ACS)



Child Care Mek, in (Inde: 1

83

19%

Pop Age 25-Bachelors Degree Pup Age 25 - Some College/No Degree 22%

Pop Age 25 - High School Diplama

Pup Age 26 - 9th-12th No Diploma

22%





AT RISK OR UNDERSERVED (2017 - 2021 ACS)















3%

Owner Households with No Vehicles

Households with No Internet Access

Households Below the Poverty Level

0

10%











Females 20-64 in Work Force with Child <6

30%











26%







Justice40



25-29 min 20-24 min



JOURNEY TO WORK (2017 - 2021 ACS)



Took Light Rail, Streetcar or Trolley

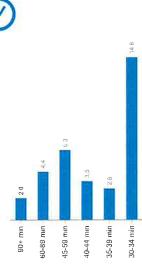
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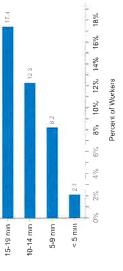


TRAVEL TIME TO WORK

Worked al Home

10%



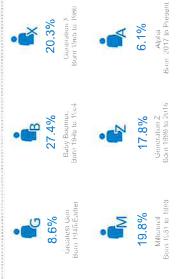


PS Demographic and Socioeconomic Profile Brevard County, FL

The largest group '\$100,000 - \$149,999 (17 7%) The smallest group '\$200,000 - (7 6 %)	9,999 (17.7%) 6 a)		
Indicator ▲	Value	Di∰	
<\$15,000	8 4%	-1.3%	Ī
\$15,000 - \$24,999	8 9%	+1 1%	
\$25,000 - \$34 999	8 0%	-0.4%	
\$35,000 - \$49,999	12.8%	+1 0%	
\$50,000 - \$74,999	15 8%	-2.0%	
\$75,000 - \$99,999	12.8%	-0.3%	•
\$100,000 - \$149,999	17.7%	+1 8%	
\$150,000 - \$199,999	8 0%	+1.0%	
\$200,000+	7 6%	-0 R%	

Bars show deviation from 12 (Florida)

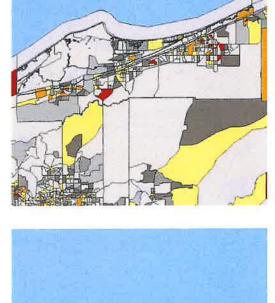
POPULATION BY GENERATION (2023 ESII)



EMPLOYMENT (2023 Esri)









Percent of Population whose income in the past 12 months is below poverty level.

13% - national average

> 24%

• > 25%

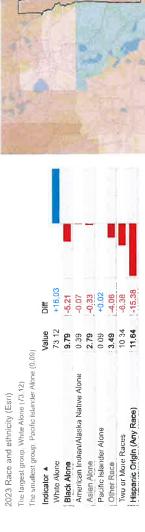
Percent of Population that is 65 Years and Over





Percent Unemployment

FX Race, Ethnicity, and Language Profile Brevard County, FL Brevard County, FL







Bars show deviation from 12 (Florida)

Percent of adults 18 years and over who have limited English ability

10,4





Some other race alone, not Hispanic or Latino

Native Hawaiian or uther Pacific Islander alone not Hispanic or Latino

Two or more races, not Hispanic or Latino

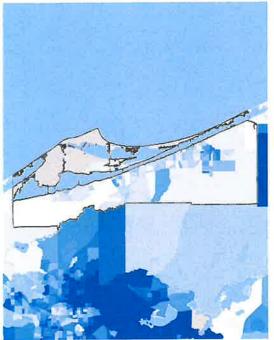
American Indian or Alaska Native alone not Hispanic or Latino

Black or African American alone not Hispanic or Latino

Asian alone, not Hispanic or Latino

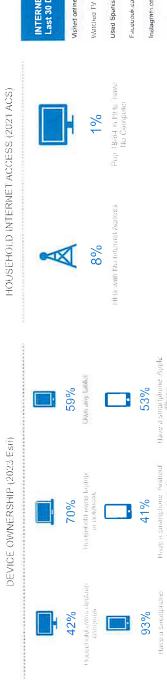
White alone, not Hispanic or Latino

Hispanic or Latino









Visited ontine thou (%) Watched TV program online (%) Used Speria's language website in tast app (%) Facebook coin (%) Linkedin coin (%) Lunkedin coin (%) Youtube coin (%) Social nervoul used to trick current events (%) Search engine Ing. coin (%) Search engine Ing. coin (%)	INTERNET & SOCIAL MEDIA USAGE In Last 30 Days (2023 Esr))	MEDIA USAGE In	% HH
	ited online bloy (%)		404
	tched TV program online (2.		20%
Facebook con (%) Instagrant com (%) Linkedin, com (%) Tumbli, com (%) Youtube nom (%) Societ metrook usert to heak content events (%) Search engine hing-con (%) Search engine bing-con (%)	ed Spariish language websik	ທ last app (ຈຳ)	%E
Instagrant com (%) Lukedin, com (%) Tumbli,com (%) Ivalia: com (%) Youldbe nom (%) Soord netronk used to linch content events (%) Search engine: hing-con (%) Search engine: hing-con (%)	ebook com ('a)		\$.99
Linkedin.com (%) Tumbl.com (%) Venteb.com (%) Youtebe.com (%) Soored netronk usert to hinck current events (%) Search engine: bing.com (%) Search engine: bing.com (%)	lagran.com (%)		31%
Tumbl; com (%) Ivalies com (%) Youtube, com (%) Soord netrouk usert to hack content events (%) Search engline Intracon (%) Search engline Intracon (%)	kedin com (%)		11%
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Societ netricels used to hists content events (%) Search engine: bing.com (%) Search engine: bing.com (%)	Jube com (%)		51%
Search engine" bing.com (%) Search engine, upoqle.com (%)	aral network used to linack cu	rent events (%)	11%
Search engine, yoogle con (%)	arch engine bing.com (%)		40%
	arch engine: google com riv		85%
Search engine, yahoo, com (%)	arch engine yahou com (%)		17%

< 3.8



APPENDIX B

Project Branding

PLAN LOGOS





PUBLIC ENGAGEMENT PLAN



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LONG RANGE PLANS

TRANSPORTATION N





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www.spacecoasttpo.com

LONG RANGE TRANSPORTATION PLAN

2250





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www.spacecoasttpo.com

TRANSIT DEVELOPMENT PLAN

235

TOGETHER



Abby Hemenway, APR Public Information & Outreach Manager Space Coast Transportation Planning Organization SPACE COAST

Transit Development Plan - Report

FDOT Approval Letter





RON DESANTIS GOVERNOR 719 S. Woodland Boulevard DeLand, Florida 32720 KEVIN J. THIBAULT, P.E. SECRETARY

March 16, 2022

Terry Jordan, Transit Director Space Coast Area Transit 401 S. Varr Avenue Cocoa, Florida 32922

RE: Public Involvement Plan Space Coast Area Transit FY 2023-32 Transit Development Plan – FDOT Technical Assistance Comments

Dear Mr. Jordan:

The Florida Department of Transportation (FDOT), District Five, has reviewed the Public Involvement Plan (PIP) for Space Coast Area Transit's FY 2023-32 Transit Development Plan (TDP) major update. FDOT commends Space Coast Area Transit for preparing a public involvement plan outlining a variety of outreach strategies for stakeholder involvement as part of the TDP major update.

Multimodal transportation choices including high quality public transportation services is a primary objective of the FDOT as memorialized in the Florida Transportation Plan and the Florida Strategic Highway Safety Plan. In light of this objective and as a TDP Review Committee partner, FDOT has reviewed the PIP and determined that it meets the requirements of Florida Administrative Code 14-73.001 for public involvement, which includes a description of the process used and the public involvement activities. FDOT offers the following technical assistance comments to enhance the public involvement process of the TDP update.

- The PIP references several outreach activities and strategies. However, there are no timelines or schedules associated with the overall public participation process or the individual outreach activities. It would be helpful to share a proposed schedule of activities so the Department can have a general understanding of the public participation timeline. Although specific dates might not have been set, a general timeline would be useful for evaluation.
- The PIP commits to compliance with Space Coast Area Transit's Title VI Program and Space Coast Transportation Planning Organization's Public Participation Plan to ensure meaningful participation of minority and low-income populations throughout the TDP process. Based on other TDPs previously submitted to the Department, representation at public meetings and via online surveys have largely been by non-riders. This leads to input on potential alternatives primarily from non-riders. The Department encourages Space Coast Area Transit to seek participation from current riders, traditionally underserved populations and people with limited access to online resources, as much as possible.

Space Coast Area Transit's Public Involvement Plan for FY 2023-32 TDP Major Update – FDOT Technical Assistance Comments
March 16, 2022
Page 2 of 2

Thank you for providing FDOT with the opportunity to review and comment on the Public Involvement Plan of the FY 2022-31 TDP Major Update. If you have any questions, please contact me at (321) 319-8175 or jo.santiago@dot.state.fl.us.

Sincerely,

To Sentingo

Transit Intermodal Supervisor Office of Modal Development FDOT District Five

C: Luciana Taylor, Transit Programs Administrator, District Five Office of Modal Development

Transit Development Plan - Report

Local Coordination Meeting Summaries





TDP Local Agency Coordination Meeting – Summary Notes

Project: 2035 Transit Development Plan – Space Coast Area Transit

Date: Wednesday, August 14, 2024

Time: 10:00 a.m. – 11:00 a.m.

Location: Microsoft Teams

Attendees: Laura Carter, Debbie Flynn, and Sarah Kraum (SCTPO)

Terry Jordan and Jim Scherff (Space Coast Area Transit)

Amber Lindsey (HDR)

Cindy Dittmer, Todd Corwin, and James Ennis (City of Melbourne)

Welcome and Introductions

Debbie Flynn, SCTPO welcomed the attendees and provided a brief TDP introduction, what tasks have been completed and the next steps.

Purpose

The purpose of this meeting was to collaborate and understand the transit related needs within the City of Melbourne for consideration in the 2035 Transit Development Plan (TDP). The meeting further explored the topics and route changes discussed in the TDP Internal Scenario Workshop previously held.

Reviewed Existing Fixed Routes via Remix

Use of the transit Remix software was used to review existing and proposed route changes along with identifying where future development and services may be needed.

Future Development

- City of Melbourne informed the Project Team of the following future developments:
 - Limited future developments along Wickham Rd will use current Routes 28 and 29.
 - Multi-family development on the south side of Parkway, west of Wickham Rd
 - Exact location of development will require review of access to existing sidewalk on south then north side of Parkway. An additional crosswalk to access the sidewalk may be needed.
 - Multi-family development on the south side of Eau Gallie Blvd (southeast corner behind the Wawa) will use the current Eau Gallie Route. Likely, development will provide "affordable housing" for the area. (approx. 600 units)
 - Annexation west/south of the Flea Market
 - Half of property single-family townhomes (500 units)
 - Possible multi-family or commercial on other half
 - Washingtonia Parkway extension to be preserved within mixeduse development area.
 - o Amazon Warehouse will be activated soon.
 - Will the third shift require Transit to run at a later time?



- Sanitary sewer lines will be constructed on the north side of Eau Gallie Blvd, west of I-95, which will potentially spur future development.
- Melbourne Orlando International Airport
 - Laguana Beach Hotel Development (Route 21)
 - 8 to 10-acre pool/beach resort with retail and restaurants
 - Environmental studies are currently being conducted before the purchase agreement is finalized.
 - Multi-family development is in airport flight path, which is not typically supported.
 - Tropical Haven Mobile Home Park (800 units) is being sold to a private entity.
- o Old Sears Building
 - 250 multi-family units to wrap around building
- Downtown Area
 - Multi-family units
- St. Stevens Way at University Blvd/Lipscomb St
 - Multi-family units
 - Walking distance to Route 27

Affordable and Supportive Housing Locations

- Providence Place, a multi-family complex with a service building for a supportive housing has not been finalized. Would be near John Rodes and Eau Gallie, behind Wawa
- Florida Marketplace property at Hibiscus Blvd/Babcock St (Route 30)
 - o 1,000 multi-family units with commercial along the roadway
 - o Will be constructed in phases starting on the west side of the property

Proposed Route Changes

- Route 33 Eau Gallie Arts District
 - Remove route from network
- New Route US 192
 - New US 192 route from St. John's Heritage Parkway to SR A1A
 - o Routes 20 and 30 will need to be realigned to avoid overlap of routes

Follow-up

- SCTPO staff will provide the GIS shapefile of the current and future transit R\routes to City of Melbourne staff. They will use the data to determine the city's sidewalk improvement areas.
- SCTPO staff to coordinate with Mobility on Demand (MOD) Study for possible MOD to service Heritage Park off Grant St
 - Transit is unable to implement a fixed-route service due to the limited road network to get in and out/turn around.



TDP Local Agency Coordination Meeting – Summary Notes

Project: 2035 Transit Development Plan - Space Coast Area Transit

Date: Wednesday, August 14, 2024

Time: 1:00 p.m. – 2:00 p.m.

Location: Microsoft Teams

Attendees: Laura Carter, Debbie Flynn, and Sarah Kraum (SCTPO)

Terry Jordan and Jim Scherff (Space Coast Area Transit)

Amber Lindsey (HDR)

Abby Morgan (City of Cocoa)

Kyle Harris and Zach Eichholz (City of Cape Canaveral)

Morgan Zuhlke (City of Cocoa Beach)

Welcome and Introductions

Debbie Flynn, SCTPO welcomed the attendees and provided a brief TDP introduction, what tasks have been completed and the next steps.

Purpose

The purpose of this meeting is to collaborate and understand the transit related needs within the central Brevard area for consideration in the 2035 Transit Development Plan (TDP). The meeting further explored the topics and route changes discussed in the TDP Internal Scenario Workshop previously held.

Reviewed Existing Fixed Routes via Remix

Use of the transit Remix software was used to review existing and proposed route changes along with identifying where future development and services may be needed.

Future Development

- Cape Canaveral Hospital is anticipated to move from existing location on SR 520 causeway to SR 520 on Merritt Island by 2027.
- City of Cocoa Beach provided information on the following developments:
 - o The Drift: 375 West Cocoa Beach Causeway
 - Apartment Complex and two restaurants
 - Completion within 5 years
 - International Palms Convention Center, hotel, and restaurant: SR A1A
 - o Food Hall: Minuteman Causeway
 - Brewery and Restaurant: Holiday Lane
- City of Cape Canaveral provided information on the following developments:
 - o Aquarium: North SR A1A/Port area
 - o Hotels:
 - 150-unit hotel with 1st public restaurant: 150 Imperial Blvd
 - 150-unit hotel: 9119 Astronaut Blvd



- 8955 Columbia Rd future hotel location
- Westgate Hotel: Ocean Beach Blvd/Pier → 5+ years
- Food Hall with Apartments above: 8801 Astronaut Blvd
- o Retail/Apartments/Townhomes: 168 Center St
 - Redevelopment mixed use, retail at ground level with apartments above (6 stores) and townhomes adjacent (3 stories)
- Cocoa provided information on the following developments:
 - Old Sears plaza on US 1 (just south of Rosa Jones) at Cocoa/Rockledge boundary is being redeveloped with multi-family; future tenants can access transit along Florida Ave.
 - Multi-family 210-unit development: SR 520/Industry
 - o 7 Commercial Lots along SR 524

Affordable and Supportive Housing Locations

• Affordable Housing development: Arbors Landing, 312-unit apartments: SR 524/Cox Rd

Proposed Route Changes

- Route 4 SR 520 Connector
 - o Increase frequency during peak hours
 - Reduce frequency during non-peak hours
 - Extend route to serve Intermodal Station
- Route 6 Cocoa/Rockledge
 - o Increase frequency during peak hours
 - o Reduce frequency during non-peak hours
 - o Minor adjustment to Route 6 to avoid redundant service with Route 4
- Route 8 West Cocoa
 - Run route all day
 - Increase frequency to serve peak hours
 - Extend route to run along Friday Rd and SR 524
- New SR 528 Route
 - The route will be a dedicated route running along SR 528 to connect the Intermodal Station to Port Canaveral and Cocoa Beach Pier

Intermodal Station (Transit Transfer Station)

Space Coast Area Transit researching opportunity to locate Transfer Center at the Intermodal Station.

Funding

Local Support

Transit informed the cities of the local support Space Coast Area Transit receives from Melbourne and Palm Bay. The City of Melbourne provides transit funding directly to Transit for their residents to ride free within their city. The administration of this program, however, does not provide ability to actual track Melbourne resident riders. Anyone boarding within City of Melbourne is not charged, however if they travel just outside city limits, they would be charged return fare. It is difficult to track and bus operators do not have time/resources to ID riders. Transit would prefer any future programs work similar to how Palm Bay provides support.

The City of Palm Bay uses their CDBG funding to provide their residents 30-day bus passes to use within Brevard County until they run out. Residents are responsible for obtaining passes



from the city and therefore the city manages the program. This allows the city to know how many of their residents are using the program.

Cocoa, Cocoa Beach, and Cape Canaveral stated to explore opportunity for local funding from their cities, they would like to see a proposal from transit that could provide them their daily and annual ridership, cost per hour, and how their local funding would be used. Further coordination was encouraged.

FDOT Corridor Grant

Transit informed the cities that FDOT currently provides Corridor Grant Funding to Routes 4 and 9

Bus Shelters

Cape Canaveral staff brought up the need for more bus shelters. Transit informed the cities that they are more than willing to provide bus shelters, however, the cities would need to determine if there are easements where they would like them installed. The city or possibly developers would be responsible for providing the boarding and alighting pad and Transit would provide the shelter. Transit is also willing to work with the cities if they feel their bus stops need to be relocated or if new stops need to be implemented. Cape Canaveral's current bus shelters are going to be repainted due to fading.

Technology

Transit staff also discussed that Space Coast Area Transit's app allows riders to inform them of when their bus will be arriving, so they do not have to stand out in inclement weather waiting for their bus.



TDP Local Agency Coordination Meeting - Summary

Project: 2035 Transit Development Plan – Space Coast Area Transit

Date: Thursday, August 22, 2024

Time: 10:00 a.m. – 11:00 a.m.

Location: Microsoft Teams

Attendees: Laura Carter, Debbie Flynn, and Sarah Kraum (SCTPO)

Terry Jordan and Jim Scherff (Space Coast Area Transit)

Amber Lindsey (HDR)

Valentino Perez, Lisa Frazier, Hector Franco, and Tonya Holder (City of Palm Bay)

Welcome and Introductions

Debbie Flynn, SCTPO welcomed the attendees and provided a brief TDP introduction, what tasks have been completed and the next steps.

Purpose

The purpose of this meeting is to collaborate and understand the transit related needs within the City of Palm Bay area for consideration in the 2035 Transit Development Plan (TDP). The meeting further explored the topics and route changes discussed in the TDP Internal Scenario Workshop previously held.

Reviewed Existing Fixed Routes via Remix

Use of the transit Remix software was used to review existing and proposed route changes along with identifying where future development and services may be needed.

Future Development

- City of Palm Bay informed the Project Team of the following future developments:
 - Multi-family development under construction at Port Malabar Blvd & US 1 with additional developments coming south of Port Malabar Blvd
 - New developments are occurring along Clearmont St and Franklin Dr
 - Multi-family development planned for old FIT building near Turkey Creek
 - Bayside Lakes has 4-5 new shops coming with an additional 4 more
 - New Crown Plaza on Malabar Rd, just west of Walmart will have a supermarket, car wash, and other shops
 - New supermarket on Minton Rd, next to Pineapple Cove
 - Palm Bay Rd and I-95, apartments buildings on south side of road only affordable housing project
 - o St. Johns Heritage Parkway:
 - Development along corridor is mostly single family with some multi-family
 - Publix to be built at St. Johns Heritage Parkway and Malabar Rd
 - At unbuilt SJHP & Babcock St area there has already been service request but only for students attending EFSC
 - SJHP & Babcock St: 3 large residential projects been on books for a while – still years out before construction to begin



Proposed Route Changes

- Route Optimization Study is suggested with existing system for Palm Bay rather than any expansion of system for next 5-10 years
- Recent inquiry with Freebee Mobility on Demand (MOD) type system is currently not moving forward
- SCTPO to coordinate with Palm Bay staff to discuss potential of implementing MOD as part of TPO's separate MOD study

Funding

- CDBG grant funding is currently being used to assist transit
- Palm Bay currently updating land development code, looking to include incentives for developers to include building of bus stops, shelters, and parking as part of their plans
 - Update to also include changing language for transit stops from "major" transit stop to just transit stop to cover all

Other

- Transit is currently holding conversations regarding bus shelters and amenities such as benches
- Turkey Creek and Port Malabar developer has mentioned including shelters as part of their plans

Follow-up

- SCTPO to provide Palm Bay with route maps
- Transit to provide Palm Bay with sample language being used to support Live Local Act
- Palm Bay to provide SCTPO with feedback on future development

Transit Development Plan - Report

Stakeholder Interview Questionnaire and Summaries





Stakeholder Interview

Project: Space Coast Area Transit 2035 Transit Development Plan

Subject: Transportation Disadvantaged Local Coordinating Board (TDLCB)

Date: Monday, February 12, 2024

- **1.** What do you believe is the perception of Space Coast Area Transit in the disadvantaged community?
- **2.** Do you think Space Coast Area Transit is effectively serving the disadvantaged community? Why or why not?
- 3. What are some of the pros/cons of the transit system for the disadvantaged community?
- 4. How can we improve the transit system for the disadvantaged population?
- **5.** Do you think that Space Coast Area Transit should coordinate with private transportation providers to assist with serving disadvantaged communities?
- **6.** Are there any other concerns/issues that you have related to the disadvantaged community and Space Coast Area Transit?
- **7.** Do you believe that Space Coast Area Transit's website/phone application/materials are accessible to the disadvantaged community?
- **8.** Should Space Coast Area Transit expand service into new areas or concentrate on existing service areas?



Stakeholder Conversations

Stakeholder conversations are a crucial aspect of public engagement for a Transit Development Plan (TDP), as they allow for different groups to provide important information on how they interact with Space Coast Area Transit. The Space Coast TPO met with the following local government representatives and community-based organizations:

- Space Coast TPO Transportation
 Subcommittee (municipal and modal partners
- Aging Matters in Brevard
- · Family Promise of Brevard
- Brevard Achievement Center
- Transportation Disadvantaged Local Coordinating Board (TDLCB)

- Assisstant County Manager Jim Liesenfelt
- Arc of Space Coast
- Brevard Homeless Coalition
- Commissioner Pritchett
- Commissioner Tobia
- · Housing for the Homeless

To facilitate and provide context for these conversations, several questions were provided to the stakeholders beforehand. These questions largely focused on Space Coast Area Transit itself and their overall thoughts about how they function. Below is a summary centered around some the overarching themes from the conversations.

Where does Space Coast Area Transit excel?

Coverage: The existing fixed-route network provides good coverage.

Technology: The website and smart phone application are good tools for those utilizing transit.

Customer Support: Space Coast Area Transit works well with transportation disadvantaged communities and organizations to provide additional support, especially as it relates to their Special Transportation Services (TD and ADA Paratransit and Volunteers in Motion)

"The service is stable, routes have been on the same corridors and the community knows where transit is, because it has always been there."

Jim Liesenfelt, Assistant County Manager

Where can Space Coast Area Transit improve?

Reliability: It can take time for new riders to learn how to navigate and utilize the existing fixed-route system. Stakeholders that work with the transportation disadvantaged communities expressed how improvements could be implemented, allowing them to work with their customers and potentially utilize the fixed-route network in lieu of paratransit or another service.



Frequency: Additional service for fixed-route services could be invaluable for those working late night shiftwork. Several stakeholders mentioned that the existing hours that the fixed-route service operates restricts some of their customers from utilizing that service. Their customers have jobs that require them to work early morning and late-night shifts. Also, when asked about new routes vs improved frequencies, the latter was the most often cited improvement from each stakeholder.

Targeted coverage: If new services can be implemented, it was suggested to collaborate with the transportation disadvantaged organizations to identify the most beneficial areas. Future affordable housing or employment centers where two common suggestions.

New service types: Mobility on Demand (MoD) has been noted by stakeholders as a potential service that they believe would benefit their residents. Space Coast TPO is currently conducting a MoD Study to further evaluate implementation across Brevard County.

What are potential challenges that Space Coast Area Transit faces?

Affordable Housing: This was mentioned by nearly every stakeholder as a factor influencing their organization and Brevard County. This issue is of course, not unique to Brevard County. However, it does provide a challenge to Space Coast Area Transit, as people are then incentivized to seek employment opportunities wherever necessary, potentially taking them to places where transit does not operate, or outside of transit hours of operation. Essentially, the financial pressure from the lack of affordable housing places pressure on residents to seek other modes of transportation.

Inflation: This is also another factor that was mentioned during several stakeholder conversations, but is not unique to Brevard County, and instead is putting financial pressure on their residents and organizations.

Where to incorporate this feedback?

Many of these inferences were incorporated into the analysis of different scenarios for the fixed-route network, and what improvements could be implemented. This feedback was largely consistent with the Transit Rider Survey, which was conducted in Fall 2023.

During the development of this TDP, the 2050 Long Range Transportation Plan (LRTP) was also ongoing. For example, the lack of affordable housing and the financial pressure from inflation, is feedback that may be more readily addressed within the LRTP rather than the TDP.

Transit Development Plan - Report

Rider Survey Questionnaire



D	ate:	



Scan this QR Code with your phone to take the online version of this survey if preferred.

We want to hear from you, as a resident of Brevard County, whether you ride the bus or not! Your feedback is important to us as we plan the path forward for the Space Coast Area Transit system. Thank you for your time!

1.	• • • • • • • • • • • • • • • • • • • •	ent or visitor are you?	(4	continued)
		Seasonal Tourist		Safer option than other choices
	Other (please spe	erry)		Other (please specify)
2.	What zip code do yo	ou live within or are		
	staying within.		5.	What is the most important part of your
				experience as a Space Coast Area Transit
3.	How often do you r	ide Space Coast Are		customer? (Please choose ONE)
	Transit?			Bus reliability (on tie, predictable service)
	Daily	Two to three		How often the bus comes by
		times a week		Access to destinations (places routes go to)
	Once a week	Once a month of less		Bus cleanliness
	I do not ride Space	e Coast Area Transit		Bus stop amenities (bench, shelter, shade, etc)
	rab not ride space	e coast Area Transic		Customer service
4.	What is the main rea	son you ride Space Coast		Bus operator performance
	Area Transit			Hours of bus service
	Less expensive that	n driving		(early, late, weekend service)
	Easier than driving			Number of buses needed for trip
	Easier than walking	g or biking		Overall length of trip time
	Car issues or in sho	op/being repaired		Feeling safe while on the bus
				Other (please specify)
	Less expensive tha	n Uber/Lyft		
	No current access insurance	to a car, driver's license, or		
	Environmental con	cerns		

6. How satisfied are you with Space Coast Area Transit? (Circle a score)

Very Satisfied		Neutral		Very Unsatisfied
5	4	3	2	1

7. For your most common trip on transit, what is your starting point?

Home
Work
School/College
Recreation/Social
Shopping/Errands
Medical
Church
Library or Government Building
Beach
Other (please specify)

8. For this trip, how do you get to your bus stop and how long does it take?

114	Walk Minutes	
	Wheelchair/Mobility device -	Minutes
	Bicycle Minutes	
	Scooter (2 wheels) Minutes	
	Taxi Minutes	
	Uber/Lyft Minutes by	
	Dropped off by someone else	Minutes
	Other - Minut	25

9. For this trip, what route or routes (if applicable) do you use to get there?

Routes	1 st route	2 nd route	3 rd route
Route 1 Titusville/Viera			
Route 2 Titusville			
Route 3 Merritt Island			
Route 4 520 Connector			
Route 5 Titusville/Mims			
Route 6 Cocoa/Rockledge			
Route 7 Rockledge/Viera			
Route 8 West Cocoa			
Route 9 Cape Canaveral/Cocoa Beach Route 10 Central Titusville			
Route 11 Port St. John			
Route 20 Heritage-West Melbourne			
Route 21 Downtown Melbourne			
Route 22 South Palm Bay			
Route 23 West Palm Bay			
Route 24 Melbourne/Eau Gallie			
Route 25 Melbourne/Palm Bay			
Route 26 South Beach			
Route 27 East Palm Bay			
Route 28 North Melbourne			
Route 29 Melbourne/Viera			
Route 30 South Beach Connector Route 33 Eau Gallie Arts District			

10. For this trip, where are you going?	(12 continued)
Home	Providing more frequent serve
Work	(more buses per hour or day)
School/College	Other (please specify)
Recreation/Social	
Shopping/Errands	13. What new area should Space Coast Area Transit
Medical	extend to? (Please choose ONE)
Church	North Brevard (Scottsmoor Area)
Library or Government Building	Kennedy Space Center
Beach	Melbourne Beach
Other (please specify)	Micco Area
	Indian River County
11. For this trip, how do you get to your destination after you get off the bus?	Volusia County
Walk Minutes	Orlando/Orange County
Wheelchair/Mobility device Minutes	Other (please specify)
Bicycle Minutes	
Scooter (2 wheels) Minutes	14. Making the improvements you identified may require additional funding for Space Coast Area
Taxi Minutes	Transit. Which funding options would you
Uber/Lyft Minutes by	support? (Check all that apply)
	Increase local gas tax
12. Please select the Top Three (3) service	Increase sales tax Increase property tax
improvements you think are most important for Space Coast Area Transit. (Please choose	New application/development fees
THREE)	
Reaching destinations faster	I would not support new funding options to improve Space Coast Transportation Transit
Improving safety/security at stops and on the buses	Other (please specify)
More benches and shelters at bus stops	
Improving timely transfers between routes	15. Due to limited financial resources, should Space Coast Area Transit prioritize improving the
Providing earlier service on existing routes	existing system or expanding to new service
Providing later service on existing routes	chisting system of expanding to new service
! TOVIGITIS TALLET SET VICE OF EXISTING TOURES	areas?
Providing more buses on Saturday	areas? Improve the existing system, such as buses coming
	areas?

16. Please let us know if you have additional comments.	19. To which gender do you identify? Male Female Prefer not to answer
	Other (please specify)
	20. To which race do you identify? White
4 m 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Black/African or African American
17. Under which age range do you fall? 18 or under 19 – 24 25 – 34	Asian
35 – 44	American Indian or Alaska Native
65 or older Prefer not to answer	Hispanic
	Prefer not to answer
18. In what range does your household income	Other (please specify)
fall?	Other (please specify)
Under \$10,000 \$30,000-\$39,999	21. Which of the following do you own? (Check a
\$10,000-\$19,999 \$40,000-\$49,999	that apply)
\$20,000-\$29,999\$50,000-\$75,999	Mobile phone with data plan
\$75,000-\$99,999 \$100,000 or more	Mobile phone with Wi-Fi only
Prefer not to answer	Smart phone with data plan
	Smart phone with Wi-Fi only
Your opinion matters, and we appreciate you t	aking the time to complete our survey.
If you'd like to receive future updates on our T your email and/or phone number. Your email your survey responses.	ransit Development Plan (TDP), please provide and phone number will be disassociated from
Email:	
Phone number:	

Transit Development Plan - Report

Bus Operator Survey Questionnaire



Space Coast Area Transit

10-Year Transit Development Plan

Bus Operator Survey

Instructions: Please take a few moments to answer the following questions. This survey is part of an effort to improve transit through Space Coast Area Transit's 10-Year Transit Development Plan. Your input is greatly appreciated! All responses are anonymous.

1.	How many years have you been an operator for Space Coast Area Transit?
	Less than 1 yr1-45-1010-1515+
2.	Are youPart-timeFull-time
3.	Please list the most frequent or primary route that you drive (Ex.: Route 1)
4.	Which concerns do you hear the most frequently from riders related to hours and/or frequency of service? Please select two (2), only.
	Need more frequent service
	Earlier service hours needed
	Later service hours needed
	Need Sunday service
	Bus not on time (either too late or too early)
	Other (please specify):
5.	Which concerns do you hear the most frequently from riders related to <u>bus routes</u> . Please select two (2), only.
	Bus service does not go to my desired destination
	More direct routes (less required transfers)
	Not enough bus stops on route
	Desire for service to other counties
	Transfer stations are not conveniently located
	Other (please specify):

Transit	e rank the following list <u>of potential service improvements</u> Space Coast Area t should seek to improve over the next ten years. <u>Rank from 1 highest priority to ng lowest.</u>
Ве	etter lighting at bus stops
M	ore frequent service
Ex	tended or New Routes
Ev	rening/nighttime service
Ex	press Routes
	ommunication with other operators to streamline route service time and onnections
	stallation of traffic signal technologies to improve on time reliability on routes x.: light is green when transit vehicle approaches intersection)
	e rank the following list of <u>focus area's</u> Space Coast Area Transit should seek to we over the next ten years. <u>Rank from 1 highest priority to 6 being lowest.</u>
Co	ommunity Support
Sto	affing
Ric	dership Growth
Ви	us Services
Re	eplacement of Fleet
Ric	der Amenities

Transit Development Plan - Report

Appendix C: Plans Review



Tables 1 & 2 summarize local and state plans reviewed for Situational Appraisal. Due to the recency of the 2023-2032 Transit Development Plan, most of these plans reviewed are derived from the previous Situational Appraisal and its recommendations to consider for the TDP.

Table 1. Local Plans Reviewed

Plan/Document Reviewed	Agency	Purpose	Recommendations/Objectives/Strategies for TDP
Space Coast Area Transit FY 2023-2032 TDP	Space Coast Area Transit	Purpose is to provide a 10-year vision for fixed-route and paratransit services. TDPs are a requirement to receive State of Florida Transit Block Grant Program funds. Major update is a technical review of baseline conditions and system performance and includes robust public outreach process which helps to develop 10-Year vision for transit system.	Recommended 10-Year Plan • Implement mid-day service • Expand Sunday service • Increase evening service past 9:00 PM • Improve 30 minute headways on select routes • Implement MoD Service in Southern Brevard County
Major Update (2020) Space Coast Area Transit TDSP Major	Space Coast Area Transit	Purpose is to provide service that groups riders together for a shared ride service. Through this program, the Florida Commission for the Transportation Disadvantaged (CTD) and local agencies work together to provide necessary transportation to medical appointments, employment, educational and other life sustaining services. Major TDSP components include a Development Plan, Service plan, and Quality Assurance.	 Concentrate services to disadvantaged populations in Southern Brevard, including Palm Bay, Malabar, and Micco Increase frequency and expand evening service on fixed route system Continue and maintain bus stop ADA accessibility and cleanliness Grow Volunteers in Motion Program and agency vanpool

Plan/Document Reviewed	Agency	Purpose	Recommendations/Objectives/Strategies for TDP
		federal, and other funds and serves as TPO's short range plan (5 years).	 Capital and operating for fixed-route service
Brevard County Comprehensive Plan (2022)	Brevard County	Purpose of Transportation Element is to provide a safe, convenient, and energy-efficient transportation system that supports community and enhances mobility while minimizing impacts to neighborhoods, and environment.	 Develop transportation alternatives to accommodate existing and proposed major trip generators. Recognize interrelationship of land use patterns and transportation needs. Establish Complete Streets policies to enable safe access for community.
City of Cocoa Comprehensive Plan	City of Cocod	Mission is to provide safe efficient, and comprehensive multimodal transportation system available to all residents and visitors.	 Develop plan that allows and encourages accessibility to public transit Incorporate "Smart Growth" principles Connectivity to public transit Urban Mixed-Use District
City of Cocoa Beach Comprehensive Plan	City of Cocoa Beach	Mission is to provide functional transportation network to ensure safe, convenient, and sustainable accessibility and mobility to all users.	 Encourage Space Coast Area Transit to locate transit routes along Minutemen Causeway. (currently no service) Develop opportunities to accommodate bicyclists, peds, transit, and other travel modes. Provide as many modal options as possible (park-and-ride lots, commercial/recreational facilities). Encourage Space Coast Area Transit to locate transit routes along Minutemen Causeway.

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Plan/Document Reviewed	Agency	Purpose	Recommendations/Objectives/Strategies for TDP
		transportation system that adequately serves needs of all residents and visitors of Palm Bay.	 Reduce congestion and support urban infill and redevelopment of land.
City of Rockledge Comprehensive Plan	City of Rockledge	Mission is to provide safe and efficient transportation system that offers variety of transportation mode options.	 Develop streets designed to accommodate a mix of travel modes including vehicles, bikes, transit, and pedestrians, Establish increased density bonuses for transit-oriented development projects.
City of Satellite Beach Comprehensive Plan	City of Satellite Beach	Mission is to a transportation system that ensures safe and efficient movement of people and goods based on major trip generators, public facilities, and TD special needs.	 Develop comprehensive, integrated multimodal street network by promoting transportation planning strategies and private development activities. Provide safe and convenient on-site pedestrian circulation. Require cross-access connection/easements or joint driveways. Implement and improve upon, as resources permit, recommendations of Citizens' Ad Hoc Bicycle/ Pedestrian Committee for development of network of recreation trails connecting significant destinations in city.
City of Titusville Comprehensive Plan	City of Titusville	Mission is to provide safe, convenient and energy-efficient transportation system that promotes multiple modes of transportation for goods and people to encourage stability and improved quality of life.	 Provide bicycle and pedestrian ways through development of plans, land development regulations, or other development controls. Promote development of Complete Streets. Develop bicycle and pedestrian infrastructure and amenities and by seeking to provide wider sidewalks.

Plan/Document Reviewed	Agency	Purpose	Recommendations/Objectives/Strategies for TDP
			 Seek funding to participate with Space Coast Area
			 Transit in provision of bus shelters along
			transit routes.
			 Develop bicycle and pedestrian master
			plan in coordination with Space Coast TPO.
			 Increase transit routes and frequencies.
			 Develop systemwide multimodal
			transportation network plan.
			 Create pedestrian environment through
			enhanced landscapes, streetscapes, and
			public infrastructure.
			 Develop multimodal transportation system
		A ri coincide	that provides connectivity throughout
City of West		MISSION IS TO PLOVIDE TO!	Brevard County area.
Melbourne	City of West	HIDDIIII HEEDS OF CITY STESIDELLS,	 Support expansion of city's bike-pedestrian
Comprehensive	Melbourne	DUSINGSSES, GING VISITORS DY	network by considering bike pedestrian
Plan		officiont transportation system	facilities as components of standard design
			criteria for new and reconstructed roads.
			 Develop comprehensive, integrated,
			multimodal street network by coordinating
			transportation planning strategies and
			private development activities.

Table 2. Regional/State Plans Reviewed

Plan/Document Reviewed	Agency	Key Goals	Recommendations/Objectives/Strategies
Intermodal Station Feasibility Study / Brightline	Space Coast Transportation Planning Organization	Brightline is a regional passenger rail service between South Florida and Orlando. Future expansions have been announced to Cocoa, Tampa, and Stuart.	This study identifies and analyzes intermodal connections to major regional destinations along with the potential travel demand to the station, conceptual design for the station, potential infrastructure improvements to support the station and an implementation plan. It is recommended for Space Coast Area Transit to follow this study for key updates and its final recommendations.
LYNX 2023-2032 TDP Major Update (2022)	Χ X L	Purpose is to provide a 10-year vision for fixed-route and paratransit services in the county as requirement to receive. State of Florida Transit Block Grant Program funds. Major update is a technical review of baseline conditions and system performance and includes robust public outreach process which helps to develop 10-Year vision for transit system.	There are no existing public transit connections from Orange County to Brevard. While there is an emphasized need for enhancing current service by increasing service frequency and spans, and adding new fixed-route services, new regional connections to Brevard County were not identified as a proposed transit service improvement.
VOTRAN 2023- 2032 TDP Major Update (2022)	VOTRAN	Purpose is to provide a 10-year vision for fixed-route and paratransit services in	Transit connections from Volusia to neighboring counties, including Brevard, were identified as a regional transportation need in a stakeholder workshop, however no new regional transit connections to Brevard were identified as a proposed transit improvement.

Plan/Document Reviewed	Agency	Key Goals	Recommendations/Objectives/Strategies
		the county as	
		requirement to receive	
		State of Florida Transit	
		Block Grant Program	
		funds. Major update is a	
		technical review of	
		baseline conditions	
		and system	
		performance and	
		includes robust public	
		outreach process which	
		helps to develop 10-	
		Year vision for	
		transit system.	
		Purpose is to provide a	
		10-year vision for	
		fixed-route and	
		paratransit services in	
		the county as	 Identifies a significant share of workers commuting
		requirement to receive	from Brevard County to Indian County (2,500
; ; ; ;		State of Florida Transit	commuters).
Maidh River	() () () () () () () () () ()	Block Grant	 US-1 between CR 510 and the Brevard County Line
TOURING IT AND I	Maidil River	Program funds. Major	was identified as one of the most congested
	Cooliny	update is a	corridors that should be considered as a potential
upaale (2022)		technical review of	candidate for congestion management strategies.
		baseline conditions	 No new regional connections to Brevard County
		and system	were identified as a need.
		performance and	
		includes	
		robust public outreach	
		process which	

Plan/Document Reviewed	Agency	Key Goals	Recommendations/Objectives/Strategies
		helps to develop 10- Year vision for transit system.	
Statewide Rail System Plan (2023)	FDOT	Purpose is to guide the state's rail freight and passenger transportation planning activities and project development plans	 Enhancement of existing intercity passenger rail route of less than 750 miles to Miami-Orlando (Brightline) In partnership with FDOT, Brightline received \$25 million in RAISE grant funding in FY 2022 for the Florida East Coast Corridor Trespassing and Intrusion Mitigation Project. The project will enhance safety along the Florida East Coast Corridor (Miami-Dade, Broward, Palm Beach, Martin, St. Lucie, and Brevard Counties). This investment will benefit this corridor by constructing supplemental safety measures at 328 roadwayrailroad grade crossings and installing 33 miles of padastrian protection features.

401 S. Varr Ave Cocoa, Florida 32922 Space Coast Area Transit

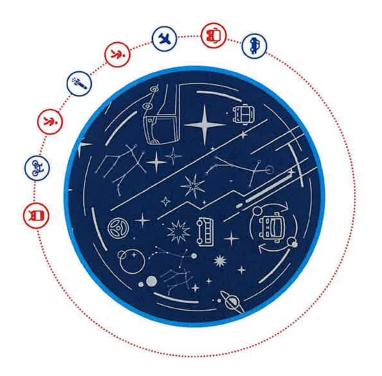








Transit Development Plan FY 2025 - 2035



2025-2035 Transit Development Plan



- What is a Transit Development Plan (TDP):
- Required by Florida Department Of Transportation (FDOT) to receive State funds
- 10-year plan that tells a community's story and defines public transit needs
- Functions as transit's planning, development, and operational guidance
- Major update required every five years, with annual progress reports due in years between
- Any major service changes requesting FDOT funding must be included in plan



Public Engagement & Stakeholder Outreach





5 Subcommittee

Meetings



Public Workshops



14
Stakeholder &
Local Agency
Interviews



Rider & Non-Rider Survey (In-person and online)



Bus Operator Survey



Web/Email & Social Media Outreach

1,067+ Participants

FALL 2023

TRANSIT RIDER SURVEY RESULTS



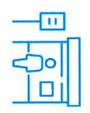


Common Themes





Better
Sidewalk
Connections
and ADA
Accessibility



Increase Stop Amenities



More Frequent Service



More Direct Routes (Less Transfers)

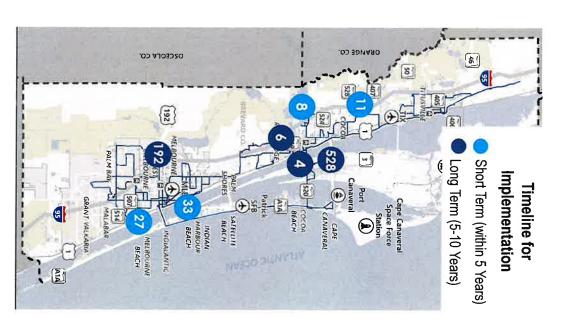
Legend

G: Transfer Stations

But Routes

Proposed Service Changes Summary

Route	ō	Service Change	Type
0	8 West Cocoa	 Run all day & increase frequency to 60-minutes Extend up Friday Rd & Cocoa Commons Publix 	Network Change
8	Port St. John	 Reduces stops on US-1 Remove route deviation onto Fay Boulevard 	Network Change
8	27 East Palm Bay	Increase frequency to 30-minutes	Increase Frequency
&	Eau Gallie Arts District	Remove route from network	Route Removal
4	520 Connector	 Increase frequency during peak hours Reduce frequency during non-peak hours 	Increase Frequency
6	Cocoa / Rockledge	 Increase frequency during peak hours Reduce frequency during non-peak hours 	Increase Frequency
3	New Route	From St. John's Heritage Pkwy to SR A1A	New Service
528	New Route	 Express 528 to connect Intermodal Station to Cruise Terminal and Cocoa Beach Pier 	New Service



Meeting

Item:	J. L.	
Motion By:	TA	
2 nd By:	KA	

Commissioner	District	Yes	No
Commissioner	1	1	
Delaney		V	
Vice Chair Goodson	2	V	
Commissioner	3	2	
Adkinson		V	
Commissioner	5		
Altman		V	
Chairman Feltner	4		