

Transit Development Plan FYs 2019–2028

Adopted by the Indian River Board of County Commissioners Fall 2018

Prepared for the Indian River County Metropolitan Planning Organization







Table of Contents

Section 1 Introduction	1-1
1.1 Objectives of the Plan	1-1
1.2 State Requirements	
1.3 TDP Checklist	
Section 2 Baseline Conditions	
2.1 Physical Description of Service Area	2-1
2.2 Demographic Characteristics and Trends in Population	2-3
Population Profile	2-3
Population Density	2-7
Age Distribution	2-10
Housing Density	2-11
2.3 Economic Conditions	
Major Activity Centers and Trip Generation	2-15
Employment Characteristics	2-15
2.4 Current and Future Land Use	2-19
Indian River County	2-19
City of Vero Beach	2-19
City of Fellsmere	2-20
City of Sebastian	2-20
Town of Orchid	2-20
Town of Indian River Shores	2-20
2.5 Tourist and Visitor Levels	2-27
2.6 Travel Behavior and Commuting Trends	
2.7 Roadway and Traffic Conditions	
Existing Roadway Conditions	2-29
Future Roadway Conditions	
2.8 Future Transit Improvements	2-37
2.9 Transportation Disadvantaged Population	
Section 3 Public Involvement	3-1
3.1 On-Board Survey	3-1
Trip Characteristics	3-1
Rider Characteristics	3-6
Recommended Improvements	3-10
3.2 Online Survey	
Trip and Usage Characteristics and Responses	
Demographic Characteristics	3-19
3.3 Bus Operator Surveys	3-23
Potential Service Improvements	
Common Rider Complaints	
Operator Feedback	
3.4 Stakeholder Interviews	
3.5 Discussion Group Workshops	



3.6 Listening Sessions	
Section 4 Inventory of Existing Transportation Services	4-1
4.1 Fixed-Route Services	4-1
System Profile	4-1
Fare Policy	4-2
4.2 Paratransit Services	4-2
TD Paratransit	4-2
ADA Services	4-3
4.3 Transit Facilities	4-3
Transfer Stations	4-3
Park-and-Ride Facilities	4-3
4.4 Transit Vehicle Inventory	4-4
4.5 Other Transportation Providers	4-4
Section 5 Trend Analysis	5-1
5.1 Fixed-Route Trend Analysis	5-1
Selected Performance Measures	5-1
Summary Results of Fixed-Route Trend Analysis	5-2
5.2 Paratransit Service Trend Analysis	
Selected Performance Measures	5-4
Summary Results of Paratransit Service Trend Analysis	5-5
Section 6 Peer System Review Analysis	6-1
6.1 Peer System Selection	6-1
Summary Results of Peer Review Analysis	6-2
Section 7 Situation Appraisal	7-1
7.1 Review of Plans and Studies	7-1
7.2 Summary of Findings	7-1
7.3 Regional Coordination	7-5
Treasure Coast Regional Planning Council	7-5
Treasure Coast Transportation Council	
7.4 Situation Appraisal	7-5
Socioeconomics Trends	7-6
Travel Behavior	7-7
Land Use	7-8
Organizational Structure and Considerations	7-9
Technology	7-10
Funding7-10	
Regional Coordination and Transit Issues	7-11
Section 8 Transit Demand Assessment	8-1
8.1 Market Assessment	8-1
Discretionary Market	
Traditional Market	
8.2 Forecast Ridership Analysis	
Model Inputs / Assumptions and Limitations	
Ridership Forecast	8-9



Forecast Ridership Analysis	
Section 9 Goals and Objectives	9-1
9.1 GoLine Purpose/Mission Statement	9-1
9.2 Goals and Objectives	9-1
Section 10 Transit Alternatives	10-1
10.1 Alternatives Identification	10-1
Service Improvements	10-2
ADA Recertification Process Revisions	10-7
Capital/Infrastructure	10-7
Policy/Other	10-8
10.2 Service Alternatives Evaluation	10-8
Section 11 10-Year Service and Financial Plan	11-1
11.1 Cost and Revenue Assumptions	11-1
Operating Cost Assumptions	11-1
Capital Cost Assumptions	11-2
Revenue Assumptions	11-3
11.2 10-Year Service and Financial Plan (Cost Affordable Plan)	11-4
11.3 10-Year Needs Plan	11-8
List of Tables Table 1-1: TDP Checklist	1 2
Table 2-1: Indian River County Physical Description	
Table 2-2: Indian River County Physical Description	
Table 2-3: Indian River County Population Trends for Cities and Census-Designated	
Places	
Table 2-4: Indian River County Population Projections	
Table 2-5: Indian River County Demographic Characteristics	
Table 2-6: Indian River County Age Distribution Trends	
Table 2-7: Indian River County Population Distribution by Age Group	
Table 2-8: Indian River County Population Distribution by Age Group	
Table 2-9: Indian River County Educational Institutions	
Table 2-10: Indian River Labor Characteristics	
Table 2-11: Indian River Top Employers	
Table 2-12: Indian River County Development Tax Revenue	
Table 2-13: Indian River County Development Tax Revenue	
Table 2-14: Indian River County Commuting Characteristics by Labor Type	
Table 2-15: Indian River County Employment by Location	
Table 2-16: 2040 LRTP Potential Roadway Deficiencies	
·	
Table 2-17: Indian River County Potential Roadway Improvements	
Table 2-18: Indian River County Potential Public Transportation Improvements	
Table 2-19: Indian River County TD Population and Passenger Trends, 2013–2016	
Table 2-20: Transportation Disadvantaged Trips by Passenger Type, Indian River Co	ounty 2 40



Table 3-1: Bus operator survey – passenger opinions of GoLine	3-24
Table 3-2: Bus operator survey – expanded service hours	3-25
Table 4-1: GoLine Weekday Service Profile	4-1
Table 4-2: GoLine System Profile, FY 2015–2016	4-2
Table 4-3: Park-and-Ride Locations in Indian River County	4-3
Table 4-4: Existing Transportation Providers in Indian River County	4-5
Table 5-1: Fixed-Route Performance Measures by Category	5-2
Table 5-2: Summary of GoLine Fixed-Route Trends	5-4
Table 5-3: Paratransit Performance Measures by Category	5-5
Table 5-4: Summary of Community Coach Paratransit Trends	5-6
Table 6-1: Selected Peer Systems for GoLine Peer Review Analysis	6-2
Table 6-2: Summary of GoLine Peer Review Analysis	6-3
Table 7-1: Summary of Federal and State Plans and Programs	7-2
Table 7-2: Summary of Regional and Local Plans and Programs	7-3
Table 8-1: Transit Service Density Thresholds	8-2
Table 8-2: GoLine Baseline Annualized Ridership and Growth Rates (2019–2028)	8-10
Table 9-1: Goal 1 Objectives and Strategies	9-1
Table 9-2: Goal 2 Objectives and Strategies	9-2
Table 9-3: Goal 3 Objectives and Strategies	9-2
Table 9-4: Goal 4 Objectives and Strategies	9-3
Table 9-5: Goal 5 Objectives and Strategies	9-3
Table 10-1: Route 11 Peak Hour Service Only – Weekday Ridership	10-4
Table 10-2: Extend Weekday Service Hours on All Routes and Double Frequencies	
Routes 2, 3, and 8 – Weekday Ridership	
Table 10-3: Double Frequencies on Routes 2, 3, and 8 – Weekend Ridership	
Table 11-1: 10-Year Service and Financial Plan (Cost Affordable)	11-5
Table 11-2: 10-Year Service and Financial Plan (Needs)	11-10
LIST OF MAPS	
Map 2-1: Study Area	
Map 2-2: Indian River County Minority Population	
Map 2-3: Indian River County Existing Population Density (2019)	
Map 2-4: Indian River County Predicted Population Density (2028)	
Map 2-5: Indian River County Older Adult Population	
Map 2-6: Indian River County Existing Dwelling Unit Density (2019)	2-13
Map 2-7: Indian River County Predicted Dwelling Unit Density (2028)	2-14
Map 2-8: Indian River County Existing Employment Density (2019)	2-17
Map 2-9: Indian River Projected Employment Density (2028)	2-18
Map 2-10: Indian River Commuter Outflow	2-30
Map 2-11: Indian River Commuter Inflow	2-31
Map 7-1: Work Destination Analysis	
Map 8-1: 2019 Density Threshold Analysis	8-3



Map 8-2: 2028 Density Threshold Analysis	8-4
Map 8-3: Transit Orientation Index	8-6
Map 11-1: 10-Year Cost Affordable Plan	11-7
LIST OF FIGURES	
Figure 2-1: Indian River County Age Distribution Compared with Florida, 2015	2 10
Figure 2-2: Indian River County 2040 Future Land Use	
Figure 2-4: City of Fellsmere Future Land Use Map	
•	
Figure 2-5: Town of Orchid 2022 Future Land Use Map	
Figure 2-6: Town of Indian River Shores Zoning Map	
Figure 2-7: City of Sebastian 2025 Future Land Use Map	
Figure 2-8: Indian River County 2016 Annual Average Daily Traffic	
Figure 2-9: 2040 LRTP Potential Roadway Deficiencies	
Figure 2-10: 2021–2040 Cost Feasible Plan – Funding and Year of Implementation	
Figure 2-11: 2040 Cost Feasible Plan–Public Transportation Improvements	
Figure 2-12: Total Number of TD Trips, 2013–2016, Indian River County	
Figure 2-13: SRA Community Coach Trips	
Figure 2-14: GoLine and Community Coach Operating Expenses (Monthly)	
Figure 3-1: How did you get to the bus for THIS trip?	
Figure 3-2: Where did you come from before you got on THIS bus?	
Figure 3-3: Where are you going on THIS trip?	
Figure 3-4: After you finish your travel, how will you get to your final destination?	
Figure 3-5: How often do you ride the bus?	
Figure 3-6: Why Users Ride	
Figure 3-7: How would you make this trip if not by bus?	
Figure 3-8: How long have you been using GoLine services?	
Figure 3-9: How often do you ride the bus?	3-7
Figure 3-10: Gender Identity	3-8
Figure 3-11: Age	3-8
Figure 3-12: Ethnicity	
Figure 3-13: What is your annual household income?	3-9
Figure 3-14: Do you have a valid driver's license?	3-10
Figure 3-15: How many working vehicles are in your Household?	3-10
Figure 3-16: What are the top three service improvements that would help you?	3-12
Figure 3-17: Have you or a member of your household used GoLine transit services	? 3-13
Figure 3-18: How often do you use GoLine Services?	3-13
Figure 3-19: How you used public transit services outside of Indian River County?	3-14
Figure 3-20: What type of trips do you use GoLine for?	3-14
Figure 3-21: Please indicate how strongly you agree or disagree with the following	
statements (on a scale of 1–5, 5 being the highest)?	3-15





Figure 3-22: What should GoLine consider as public transit service priorities over the	
next 10 years (service)?3-1	.6
Figure 3-23: What should Indian River County MPO consider as public transit priorities	
over the next 10 years (bus stops and parking)?3-1	.7
Figure 3-24: What should GoLine consider as public transit vehicle priorities over the	
next 10 years (vehicles)?3-1	8.
Figure 3-25: How would you like to have access to public transit information?3-1	8.
Figure 3-26: Have you heard of the SRA (Senior Resource Association) or the MPO?3-1	.9
Figure 3-27: Age of respondents3-2	
Figure 3-28: Gender of respondents3-2	02
Figure 3-29: Income ranges of respondents3-2	1!
Figure 3-30: Primary occupation of respondents3-2	!1
Figure 3-31: Race or ethnicity of respondents3-2	!2
Figure 3-32: Hispanic or Latino?3-2	!2
Figure 3-33: Do you own or have access to a personal vehicle?3-2	!3
Figure 3-34: Bus operator survey – potential service improvements3-2	!3
Figure 3-35: Bus operator survey – frequent passenger complaints3-2	<u>'</u> 4
Figure 10-1: Route 13 Flex Service Concept10-	-3

APPENDICES

Appendix A: Public Involvement Plan

Appendix B: On-Board Survey Instrument

Appendix C: Online Survey Instrument

Appendix D: Bus Operator Survey

Appendix E: Stakeholder Interview Script

Appendix F: Vehicle Inventory

Appendix G: Trend Analysis and Peer Review

Appendix H: Plans Review

Appendix I: T-BEST Fare Scenario Results
Appendix J: Vehicle Replacement Schedule

Appendix K: Transit Asset Management (TAM) Performance Measures





SECTION 1 INTRODUCTION

The Indian River County Transit Development Plan (TDP) major update provides a strategic guide for community public transportation, operated as GoLine, over the next 10 years. The TDP serves as a community vision for public transportation in the service area. A major TDP update provides the platform for transit agencies to outline actions to be taken in the following years and set goals over that time period. As a strategic plan, the TDP will identify needs in an unconstrained fashion and identify service improvements for which currently there is no funding. The most recent 10-year TDP major update for Indian River County was completed in September 2013 for Fiscal Years (FY) 2014–2023. This current major update of GoLine's TDP is due by September 1, 2018, and will cover FYs 2019–2028.

1.1 Objectives of the Plan

The primary purpose of this study is to update the TDP for GoLine services in Indian River County and its connectivity to adjacent areas, as currently required by State law. The completed TDP will provide a 10-year plan for transit and mobility needs, cost and revenue projections, and community transit goals, objectives, and policies.

1.2 State Requirements

As a recipient of State Public Block funds, the Florida Department of Transportation (FDOT) requires a major update of Indian River County's TDP every five years to ensure that the provision of public transportation is consistent with the mobility needs of the local communities. According to Rule 14-73.001—Public Transportation of the Florida Administrative Code (F.A.C.), "The TDP shall be the applicant's planning, development and operational guidance document to be used in developing the Transportation Improvement Program and the Department's Five Year Work Program."

The current TDP requirements were adopted by FDOT on February 20, 2007, and include the following:

- Major updates must be completed at least once every five years, covering a 10-year planning horizon.
- A Public Involvement Plan must be developed and approved by FDOT or be consistent with the approved Metropolitan/Transportation Planning Organization's (MPO) public involvement plan.
- FDOT, the Regional Workforce Development Board (CareerSource Research Coast), and the MPO must be advised of all public meetings at which the TDP is presented and discussed, and these entities must be given the opportunity to review and comment on the TDP during the development of the mission, goals, objectives, alternatives, and 10-year implementation program.
- Estimation of the community's demand for transit service (10-year annual projections) must use the planning tools provided by FDOT or a demand estimation technique approved by FDOT.





A new requirement for the TDP was added by the Florida Legislature in 2007 when it adopted House Bill 985. This legislation amended s. 341.071, F.S., requiring transit agencies to "... specifically address potential enhancements to productivity and performance which would have the effect of increasing farebox recovery ratio." FDOT subsequently issued guidance requiring the TDP and each annual update to include a 1–2-page summary report on the farebox recovery ratio and strategies implemented and planned to improve it as an appendix item.

1.3 TDP Checklist

This 10-year plan meets the requirements for a TDP Major Update in accordance with Rule Chapter 14-72, F.A.C. Table 1-1 is a list of TDP requirements from this Rule and indicates where in this 10-year plan the required item can be found.





Table 1-1: TDP Checklist

Requirement	TDP Section
Public Involvement	
Public Involvement Plan (PIP) drafted	Section 3, Appendix A
PIP approved by FDOT	Section 3, Appendix A
TDP includes description of public involvement process	Section 3, Appendices B-E
Provide notification to Regional Workforce Board	Appendix A
Situation Appraisal	
Land use	Section 7
State and local transportation plans	Section 7
Socioeconomic trends	Section 7
Organizational issues	Section 7
Technology	Section 7
10-year project of transit ridership using approved model	Section 8
Assessment of whether land uses and urban design patterns	Section 2, Section 4,
support/ hinder transit	Section 8, Appendix H
Calculate farebox recovery	n/a
Mission and Goals	
Provider's vision	Section 9
Provider's mission	Section 9
Provider's goals	Section 9
Provider's objectives	Section 9
Alternative Courses of Action	
Develop and evaluate alternative strategies and actions	Section 10
Benefits and costs of each alternative	Section 10
Financial alternatives examined	Section 10
Implementation Program	
10-year implementation program	Section 11
Maps indicating areas to be served	Section 11
Maps indicating types and levels of services	Section 11
Monitoring program to track performance measures	Section 11
10-year financial plan listing operating and capital expenses	Section 11
Financial alternatives examined	Section 11
Relationship to Other Plans	
Consistent with Florida Transportation Plan	Section 4, Appendix H
Consistent with local government comprehensive plan(s)	Section 4, Appendix H
Consistent with long range transportation plan	Section 4, Appendix H
Consistent with regional transportation goals and objectives	Section 4, Appendix H





SECTION 2 BASELINE CONDITIONS

This section provides context for the Indian River TDP through the following components:

- Physical description of service area
- Population characteristics and trends in population
- Socio-demographic characteristics and trends
- Housing, employment/labor, and related densities
- Major activity centers and trip generators
- Current and future land use and densities
- Tourist and visitor levels
- Travel behavior and commuting trends
- · Roadway and traffic conditions
- Current and planned GoLine services
- Other conditions as available and beneficial for additional context

Discussion of these items is supported by maps and graphics. Primary data sources include the US Census Bureau's Decennial Census, the American Community Survey (ACS), and socioeconomic data from the regional travel demand model. These data source are supplemented by other local and regional sources, as needed.

2.1 Physical Description of Service Area

The study area for the Indian River County TDP includes all of Indian River County. Incorporated areas within Indian River County include the cities of Vero Beach, Sebastian, and Fellsmere and the towns of Orchid and Indian River Shores. Map 2-1 illustrates the Indian River County TDP study area. The county has fairly typical geography for the east coast of Florida, with the Indian River separating the mainland and the barrier islands. As shown in Table 2-1, the total area of Indian River County is more than 600 square miles, 81.5% of which is land area.

Table 2-1: Indian River County Physical Description

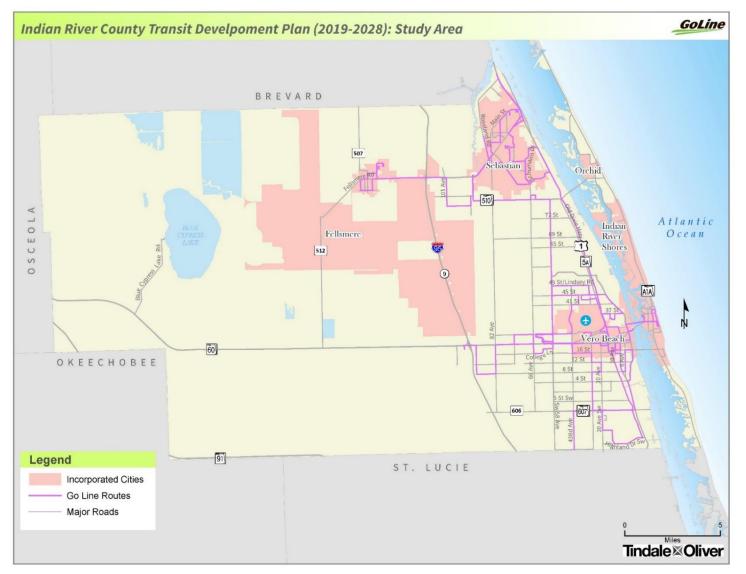
Dhysical Description	Square Miles				
Physical Description	2000	2010			
Total Area	617.92	617.00			
Water Area	113.69	114.13			
Land Area	503.23	502.87			

Source: US Census Bureau, 2000 Census, 2010 Census





Map 2-1: Study Area





2.2 Demographic Characteristics and Trends in Population

Population Profile

This subsection presents a population and housing characteristics profile for Indian River County. Table 2-2 summarizes the population, housing, and number of workers for Indian River County as a whole from 2000 to 2015. Overall, the total population of Indian River County grew approximately 26.5% between 2000 and 2015, and the unincorporated areas grew at nearly the same rate as the overall county during this period.

Table 2-2: Indian River County Population Characteristics, 2000–2015

Characteristic	2000	2010	2015*	% Change 2000–2015
Persons	112,947	138,028	142,866	26.5%
Households	49,137	60,176	57,825	17.7%
Number of workers	47,737	61,657	60,689	27.1%
Average household size	2.25	2.26	2.44	8.4%
Workers per household	0.97	1.02	1.05	8.0%
Persons per square mile of land area	224.4	274.5	284.1**	26.6%
Workers per square mile of land area	94.9	122.6	120.7**	27.2%

Sources: US Census Bureau, 2000 Census, 2010 Census

The population change of its cities, towns, Census Designated Places (CDP), and the unincorporated areas from 2000 to 2015 are displayed in Table 2-3. The Winter Beach CDP experienced the largest increase in population over the same period (168%), and the Town of Orchid experienced the second largest growth increase during this 15-year period (167%); however, it initially had the smallest population and, therefore, the high rate of growth is difficult to put into context with the remainder of the county.

The population projections for Indian River County, based on information from the Bureau of Economic and Business Research (BEBR), are included in Table 2-4. As shown, the population is projected to increase by 13.4% by 2020 from the 2010 census.

Map 2-2 displays the minority population breakdown in Indian River County. As shown, the highest percentage of minority populations are located to the north and south of Vero Beach in Gifford, the Oslo Rd corridor, and in Fellsmere.



^{*2015} ACS Estimate

^{**} Uses 2010 Census Data for land area



Table 2-3: Indian River County Population Trends for Cities and Census-Designated Places

		Population			% Change	
Geographic Area	2000	2010	2015*	2000-2010	2010-2015	2000-2015*
Fellsmere	3,813	5,197	5,390	36.3%	3.7%	41.36%
Florida Ridge CDP	15,217	18,164	19,701	19.4%	8.5%	29.47%
Gifford CDP	7,599	9,590	8,750	26.2%	-8.8%	15.15%
Indian River Shores	3,448	3,901	4,026	13.1%	3.2%	16.76%
North Beach CDP	243	-	-	-	-	-
Orchid	140	415	374	196.4%	-9.9%	167.14%
Roseland CDP	1,775	1,472	1,669	-17.1%	13.4%	-5.97%
Sebastian	16,181	21,929	22,920	35.5%	4.5%	41.65%
South Beach CDP	3457	3,501	3,320	1.3%	-5.2%	-3.96%
Vero Beach	17,705	15,220	15,788	-14.0%	3.7%	-10.83%
Vero Beach South CDP	20,362	23,092	23,973	13.4%	3.8%	17.73%
Wabasso CDP	918	609	575	-33.7%	-5.6%	-37.36%
Wabasso Beach CDP	1,075	1,853	1,549	72.4%	-16.4%	44.09%
West Vero Corridor CDP	7,695	7,138	6,945	-7.2%	-2.7%	-9.75%
Windsor CDP		256	157	-	-38.7%	-
Winter Beach CDP	965	2,067	2,594	114.2%	25.5%	168.81%

Sources: US Census Bureau, 2000 Census, 2010 Census

Table 2-4: Indian River County Population Projections

Census Estimate		Projections					
2010	2016	2020 2025 2030 2035 2040 2					2045
138,028	146,410	156,600	168,400	178,300	186,900	194,800	201,800

Sources: 2016 BEBR Population Estimates and Projections

^{*2015} ACS Estimate



GoLine Indian River County Transit Development Plan (2019-2028): Percentage of Minority Population BREVARD Atlantic 0 Fellsmere Ocean River U S OKEECHOBEE Legend Percent Minority 0% - 15% 16% - 30% 91 ST. LUCIE 31% - 45% 46% - 60% Go Line Routes Major Roads Tindale Oliver Source: 2011-2015 ACS 5-Year Estimates

Map 2-2: Indian River County Minority Population



Table 2-5 displays 2000, 2010, and 2015 demographic characteristics in Indian River County. Characteristics include gender, ethnic origin, Hispanic or Latin origin, education level, poverty status, and vehicles available in the household. As is typical, females slightly outnumber males in Indian River County. About 88% of the population is White, and 9.4% of the population are Black or African American The population that identifies as Hispanic has nearly doubled since 2000 to 11.77%. Fewer than 22% of the population have a college degree or higher. The percentages of families living in poverty increased from 6.3% in 2000 to 9.0% in 2015 (43% increase). Access to vehicles increased over the 15-year period.

Table 2-5: Indian River County Demographic Characteristics

Characteristic	2000	2010	2015*				
Gender							
Male	48.37%	48.36%	48.13%				
Female	51.63%	51.64%	51.87%				
Ethni	c Origin						
White	88.51%	85.69%	87.63%				
Black or African American	8.29%	9.13%	9.40%				
American Indian and Alaska Native	0.25%	0.30%	0.24%				
Asian	0.75%	1.23%	1.21%				
Native Hawaiian and Other Pacific Islander	0.03%	0.04%	0.00%				
Other	2.18%	3.62%	1.52%				
Hispanic or	Latino Origin						
Not of Hispanic/Latino origin	93.47%	88.80%	88.23%				
Hispanic/Latino origin	6.53%	11.20%	11.77%				
Educati	onal Level						
< 12th grade	20.00%	14.62%	12.61%				
High school grad	29.20%	29.03%	30.75%				
Some college or Associate's degree	29.04%	31.41%	31.60%				
Bachelor's degree or higher	21.76%	24.94%	25.04%				
Pover	ty Status						
Families Below Poverty Level (last 12 mos)	6.3%	8.9%	9%				
Vehicles Available in Household							
None	6.0%	2.2%	1.2%				
One	43.7%	24.0%	26.9%				
Two	39.7%	48.0%	48.4%				
Three or more	10.5%	25.7%	23.4%				

Sources: US Census Bureau, 2000 Census, 2010 Census



^{*2015} ACS Estimate

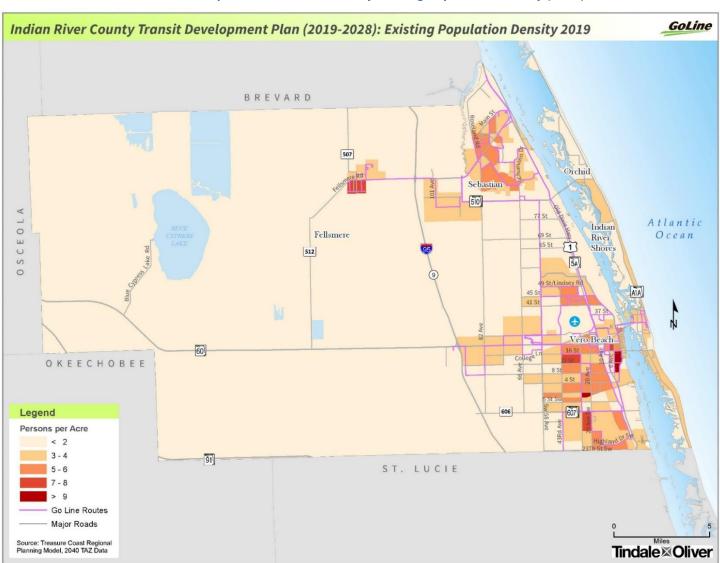


Population Density

Population density (measured in persons per square acre) is another key factor when assessing potential transit needs, as people who live in higher-density areas are more likely to use transit. Maps 2-3 and 2-4 display the 2019 and 2028 population density characteristics for Indian River by Traffic Analysis Zones (TAZ). These data are a forecast of population from 2010 to 2040 to estimate needed improvements in transportation infrastructure. As is typical with Florida coastal communities, population densities are higher in the coastal areas than the inland areas. Much of the growth is projected to occur in the Oslo Road corridor in southern Indian River County and the 58th Ave corridor in central Indian River County.

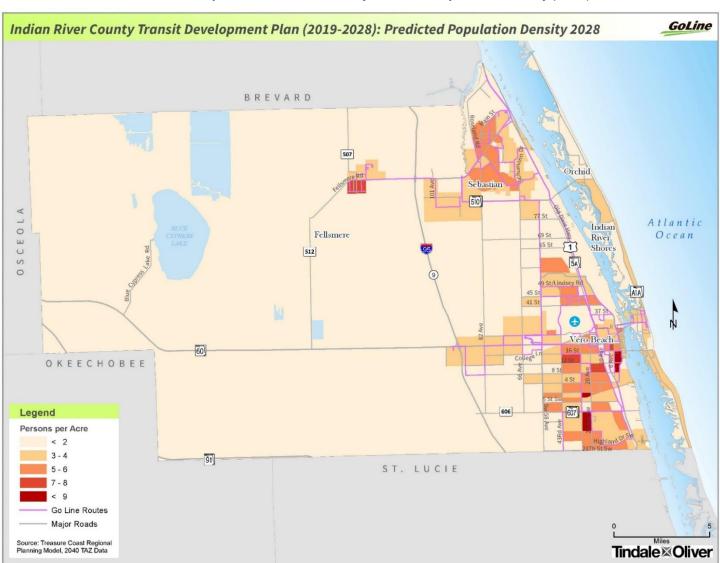






Map 2-3: Indian River County Existing Population Density (2019)





Map 2-4: Indian River County Predicted Population Density (2028)



Age Distribution

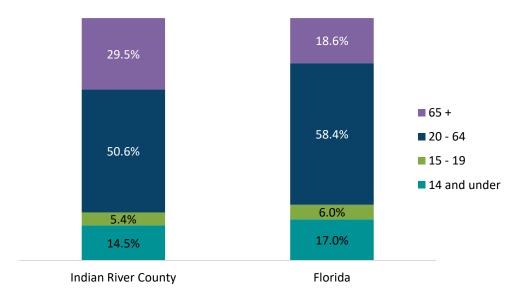
The current and projected age distribution of Indian River County population is a major factor when considering demand for public transportation. As shown in Table 2-6, compared to Florida as a whole, Indian River County has a smaller portion of younger and teen residents and all non-older adult age groups; conversely, it has a much higher percentage of older adults age 65 and older. A full age dispersion is shown in Figure 2-1.

Table 2-6: Indian River County Age Distribution Trends

Age	2000	2010	2015	% Change 2000–2015
14 and under	15.65%	15.21%	14.48%	-7.5%
15 - 19	5.63%	5.80%	5.38%	-4.44%
20 - 64	49.53%	51.81%	50.64%	2.24%
65+	29.19%	27.17%	29.51%	1.10%

Sources: US Census Bureau, 2000 Census, 2010 Census

Figure 2-1: Indian River County Age Distribution Compared with Florida, 2015



Source: 2016 BEBR Population Estimates

Persons age 15 or younger are not legally allowed to operate a motor vehicle. Teenagers who are unable to afford or do not have access to their own vehicle may have a higher propensity for using transit or finding a ride (carpool). As seen in Table 2-7, the percentage of those ages 15–19 is projected to remain virtually the same over the next few decades.

^{*2015} ACS Estimate



Table 2-7: Indian River County Population Distribution by Age Group

Ago Group	% of Population				
Age Group	2016	2020	2025	2030	
0-4	4.6%	4.6%	4.7%	4.6%	
5-17	13.2%	12.8%	12.5%	12.5%	
18-24	6.7%	6.4%	6.3%	6.1%	
25-54	30.9%	29.8%	29.0%	29.0%	
55-64	15.5%	15.7%	14.2%	12.2%	
65+	29.2%	30.7%	33.3%	35.6%	

Source: BEBR population projections.

Total may not sum to 100 due to rounding.

Older persons also may be more likely to use public transportation as the aging process begins to limit their ability or preference to drive. Indian River County has a larger proportion of older adults compared to the statewide average. Table 2-8 shows the projected older adult population for Indian River County and Florida based on data from BEBR's Florida Population Projections. In 2025, the older adult population is projected to increase to 33.3% (2016 estimate is 29.2%) of the county's total population and will continue to increase to 35.5% by 2045.

Table 2-8: Indian River County Population Distribution for Older Adults (Age 65+)

Coography	% Older Adults						
Geography	2016	2020	2025	2030	2035	2040	2045
Indian River County	29.2%	30.7%	33.3%	35.6%	36.4%	36.2%	35.6%
Florida	19.2%	20.5%	22.5%	24.4%	25.35%	25.5%	25.3%

Source: BEBR Population Projections
Total may not sum to 100 due to rounding.

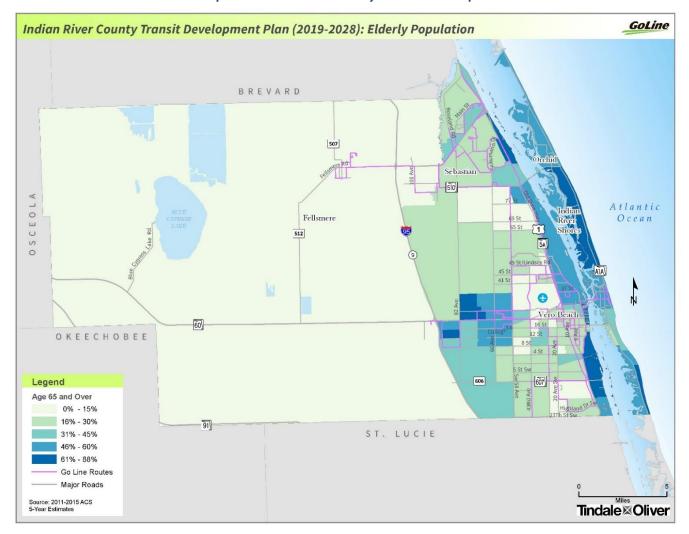
Map 2-5 displays the percentage of population over age 65 throughout Indian River County. As shown, these residents are located primarily in Orchid and Indian River Shores. Other areas with a higher percentage of older populations are located near SR-60 east of I-95 and some areas south of Vero Beach east of US 1.

Housing Density

Dwelling-unit density (measured per square acre) is another key factor for assessing potential transit needs, as denser urban areas tend to create a transit-supportive environment. Maps 2-6 and 2-7 illustrate the 2019 and 2028 dwelling-unit density characteristics by TAZ for Indian River County. The areas of highest dwelling-unit densities mirror the areas in which the highest population densities are found—Sebastian, Vero Beach, and the growing communities in Vero Beach South. Much of the growth in dwelling units between 2019 and 2028 is projected to occur in the 58th Ave Corridor in the south county area.

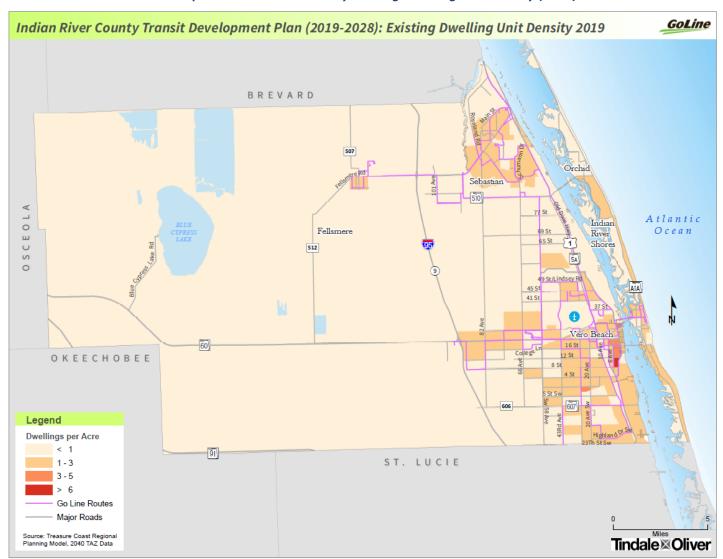






Map 2-5: Indian River County Older Adult Population





Map 2-6: Indian River County Existing Dwelling Unit Density (2019)



GoLine Indian River County Transit Development Plan (2019-2028): Predicted Dwelling Unit Density 2028 BREVARD Sebastian Atlantic 0 Ocean Fellsmere 0 S 49 St/Lindsey Rd 41 St Vero Beach 60 OKEECHOBEE Legend Dwellings per Acre < 1 91 ST. LUCIE 1-3 3 - 5 Go Line Routes Major Roads Tindale Oliver Source: Treasure Coast Regional Planning Model, 2040 TAZ Data

Map 2-7: Indian River County Predicted Dwelling Unit Density (2028)



2.3 Economic Conditions

Understanding the economic conditions of the service area is critical to understanding the dynamics of public transit within the local context. The conditions of the local economy can facilitate a better understanding of where population and employment centers are located and how travel occurs between the various locations both on public transit and via other modes. The following information describes the various factors associated with the conditions found in Indian River County.

Major Activity Centers and Trip Generation

Major trip generators in Indian River County include schools and job training centers. Table 2-9 displays information about two of the major education institutions within the county.

Table 2-9: Indian River County Educational Institutions

Company Name	Enrollment**	Location
Indian River State College – Mueller Campus	18,200	Vero Beach
Indian River County Schools**	19,500	Various locations

Figures are approximate.

Employment Characteristics

Employment and labor characteristics also help to understand land use and travel patterns that affect transit service. As shown in Table 2-10, in 2015, there are more than 4,156 employer establishments in Indian River County.

Table 2-10: Indian River Labor Characteristics

Characteristic	Number
Total employer establishments, 2015	4,156
Total employment, 2015	42,560
Unemployment rate, August 2017	5.5%

Source: Census Quick Facts for Indian River County and Bureau of Labor Statistics

Top Employers

As shown in Table 2-11, the School District and Indian River Medical Center are the top employers in Indian River County. It should be noted that employees noted in the table may not all work in one location; they may be spread among multiple employment sites.



^{**}Includes enrollment at all campuses.

^{***}Includes 13 elementary schools, 4 middle schools, 2 high schools, 1 alternative education center, 1 career and adult education center, 1 exceptional student education school, and 5 charter schools.

Sources: Indian River County School District, individual college websites



Table 2-11: Indian River Top Employers

Employer	Total Employees*
School District of Indian River County	2,073
Indian River Medical Center	1,753
Publix Supermarkets	1,250
Indian River County (includes Constitutional offices)	860
Piper Aircraft, Inc.	720
Wal-Mart	693
Sebastian River Medical Center	595
Johns Island	584
Medical Data Systems	500
City of Vero Beach	409
Visiting Nurse Association	396
Indian River Estates	350
CVS Warehouse/Distribution	260
Capt. Hiram's Restaurant/Resort	240
Disney's Vero Beach Resort	237
City of Sebastian	179
Flight Safety International	155
Grand Harbor Management	145
St. Edward's School	120
Vero Beach Hotel and Spa	118
Total	11,637

Source: Indian River Economic Development

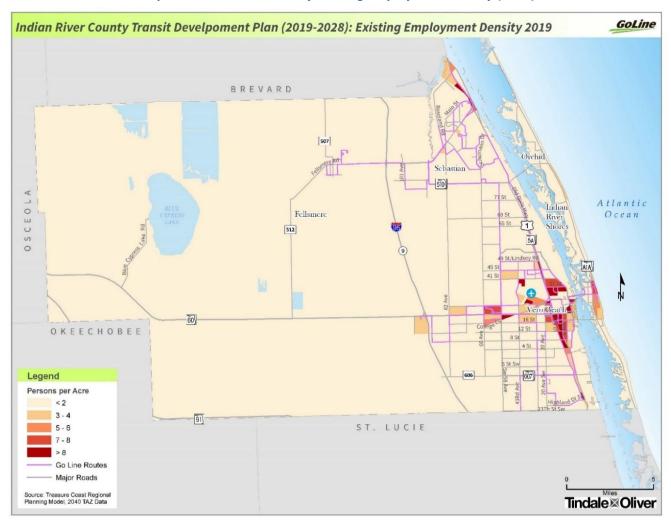
Employment/Labor Density

Maps 2-8 and 2-9 illustrate the employment density by TAZ for 2019 and 2028. Notable areas of high density are near the west Vero Corridor along 82nd Ave between the Indian River Mall and Vero Beach Outlets, along College Lane, and Wabasso west of US 1.

Like population density, the densest employment is located in and around Vero Beach, SR 60, and US 1. Sebastian shows some higher employment density near US 1. The existing route network provides service both of these areas with several routes in Vero Beach. Employment density is more centralized than the general population density along major arterials, and, for the most part, employment is projected to grown in the TAZs where it already exists through 2028.

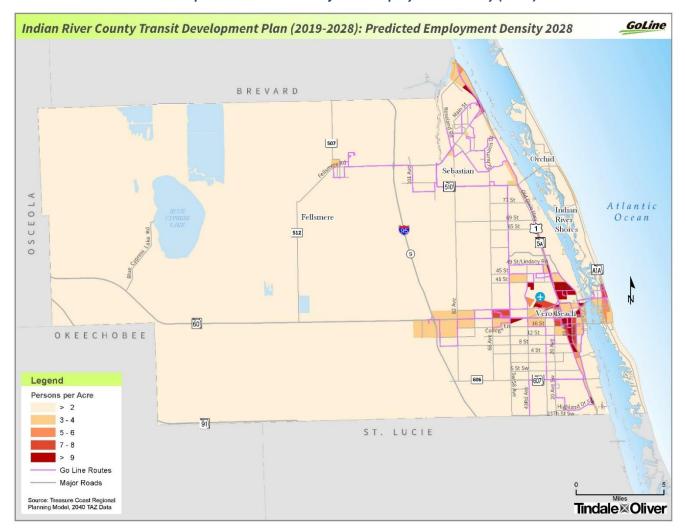






Map 2-8: Indian River County Existing Employment Density (2019)





Map 2-9: Indian River Projected Employment Density (2028)



2.4 Current and Future Land Use

A review of current and emerging land uses was conducted for the baseline conditions assessment. The future land use maps from the most recent Indian River County, Vero Beach, Sebastian, and Orchid Existing or Future Land Use (FLU) Plans are shown in Figures 2-2 through 2-7. From this review, the following observations can be made.

Indian River County

- Indian River County is a polycentric region, with most development concentrated around Sebastian and Vero Beach, both in the eastern half of the county. The majority of the county's land use consists of agricultural uses and large areas designated for conservation.
- There is a significant area of intense agricultural use (shown in teal) designated within the eastern half of the county between I-95 and US 1, both north and south of SR 60.
- Within the urban service boundary, much of the land is designated as municipality (shown in gray) and does not provide for more specific uses, leaving the respective municipalities to provide their own FLUs.
- The majority of the land designated for commercial use (shown in red) is located along the US 1 corridor between Vero Beach South and Sebastian. However, there are designated commercial areas on the periphery of Vero Beach, along SR 60 west of I-95 and approaching Vero Beach, as well as east of I-95 south of SR 60.
- Areas designated as medium-density residential uses (shown in tan and brown) lie along SR 60 north of Vero Beach along 45th St (the Gifford area), south of Vero Beach along US 1, along Indian River Blvd, and in downtown Sebastian.
- There are no mixed-use land use designations in the 2030 FLU designations; however, the 2030 Comprehensive Plan for Indian River County promotes the creation of mixed-use developments.
- A large medical node lies along the 37th St corridor.

City of Vero Beach

- The majority of the land area is designated for residential low and residential medium use (shown in yellow and orange). Some areas are designated for high density residential use are close to the downtown of Vero Beach as well as along Highway A1A.
- A sizeable quantity of Vero Beach is designated for institutional use (predominantly the Vero Beach Regional Airport) and for conservation use (shown in light blue) and environmentally-significant areas (shown in darker blue) along the Indian River.





- The majority of land designated for commercial use (shown in red) is located along Highway A1A and Ocean Dr and between the center of Vero Beach and Indian River Blvd north of 17th St.
- A significant portion of Vero Beach—the central area of the municipality—is
 designated for mixed-uses (shown in pink). These areas are along US 1 south of
 Aviation Blvd and north of 17th St.
- There is no mention of transit-oriented or supportive development land uses; however, the areas of mixed use (shown in pink) often coincide with the GoLine's current route network.

City of Fellsmere

- The majority of land surrounding Broadway St is designated Old Town. The majority
 of land surrounding Pennsylvania Ave is designated neighborhood commercial and
 general commercial further to the east.
- The majority of the land not along Broadway St and Pennsylvania Ave is designated for residential low density and low density mobile home.
- There is no mention of transit-oriented development; however, there is a large area north of the general commercial area that is zoned for high density residential and medium density residential.

City of Sebastian

- The land along Sebastian Blvd is zoned commercial and commercial general on the southeastern side, with low density residential beyond the commercial and on the northwestern side of the corridor. There are some medium density residential zones on the southeastern side of the corridor as well.
- There is no mention of transit-oriented development; however, the area surrounding the US 1 CRA boundary is primarily riverfront mixed-use. Just east, the land is zoned for institutional, commercial general, and medium density residential.

Town of Orchid

- The land along A1A is zoned commercial to the east and multifamily to the west or on the beachside within Orchid. Another area is zoned commercial on the northwest corner of Wabasso Beach Rd and Jungle Trail.
- The majority of the town is zoned for single-family residential.

Town of Indian River Shores

- Indian River Shores has a mix of zoning uses. The majority of the areas zoned for multi-family are located along Highway A1A, and several smaller areas along A1A on the east-side are zoned as limited commercial districts.
- The areas along the Indian River are primarily single-family residential.





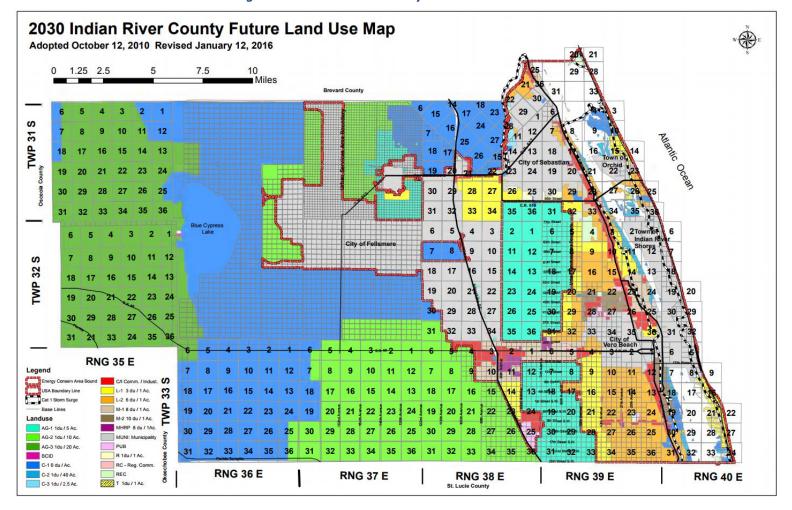


Figure 2-2: Indian River County 2040 Future Land Use



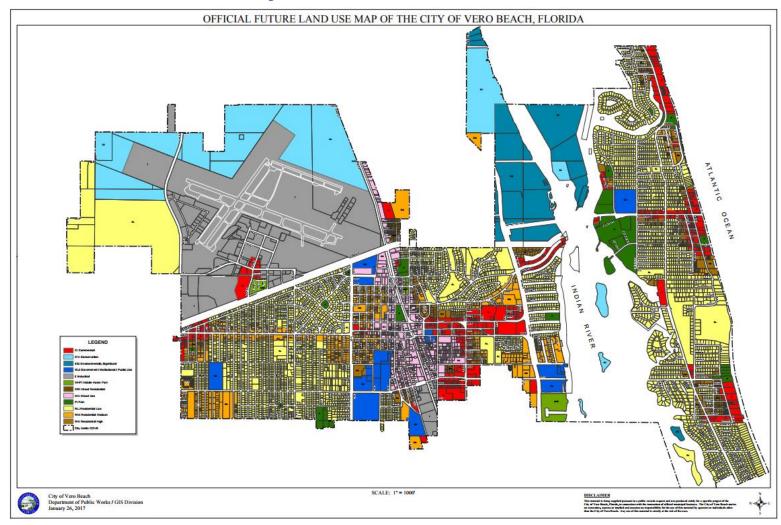


Figure 2-3: Vero Beach 2040 Future Land Use



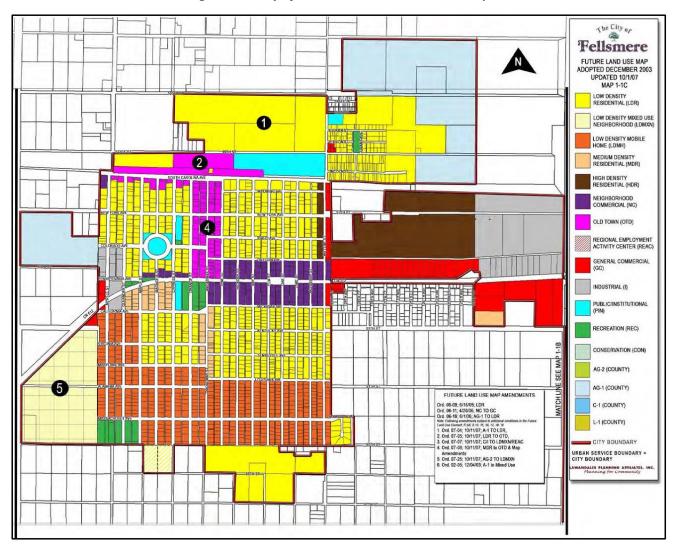


Figure 2-4: City of Fellsmere Future Land Use Map



GRAPHIC SCALE ZONING LEGEND = INTERCOASTAL WATERWAY RIGHT OF WAY = STATE OR COUNTY ROADWAY = EDGE OF WATER = CONSERVATION DISTRICT = MULTI-FAMILY RESIDENTIAL = SINGLE-FAMILY RESIDENTIAL = COMMERCIAL = NATIONAL WIDLIFE REFUGE TOWN OF \09-029 Town of Orchid\Drawings\Civ_I\Permitting\09-029 and use 03-08-2012 way by Alyson or Mar 08, 2012 KNIGHT, McGUIRE & ASSOCIATES, INC.
CONSULTING ENGINEERS AND PLANNERS
SOVAL PAIM POINTS, SUTE 401 VERO BEACH, IE 33960
PHONE: (772) 560-5505 FAX: (772) 560-1455 E-34AIL; CINBE KINGHIM-COUNTY
CHIEFIELD AND AUTHORIZATION NUMBER: #0000535 TOWN OF ORCHID DESIGN/DRAWN **FLORIDA** FUTURE LAND USE SCALE 2022 COMPREHENSIVE PLAN

Figure 2-5: Town of Orchid 2022 Future Land Use Map



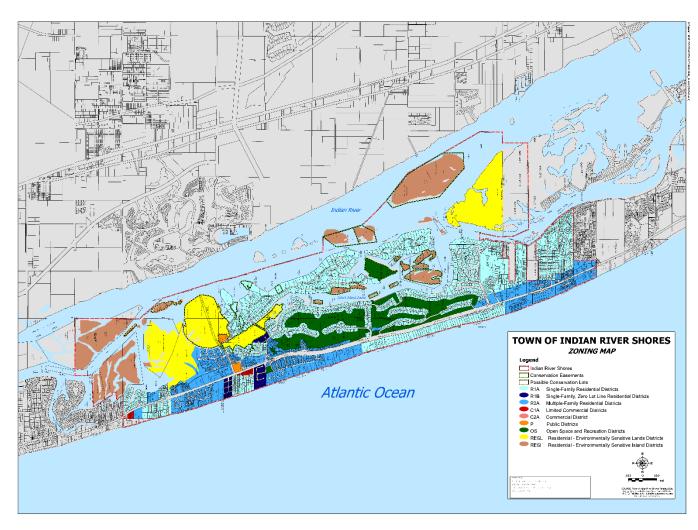


Figure 2-6: Town of Indian River Shores Zoning Map



SEBASTIAN HOME OF PELICAN ISLAND **FUTURE LAND USE MAP 2025** 1,500 3,000 COMMERCIAL LIMITED CRA BOUNDARY

COMMERCIAL GENERAL CITY BOUNDARY

COMMERCIAL 512 COASTAL HIGH HAZARD AREAS CONSERVATION AGRICULTURE (Max. 1 du/5acres) AND DESIGN INNOVATIONS VERY LOW DENSITY RESIDENTIAL (Max. 3 du/ac) COMMERCIAL 512

LOW DENSITY RESIDENTIAL (Max. 5 du/ac) RIVERFRONT MIXED USE LOW DENSITY RESIDENTIAL (Max. 5 du/ac) 140 North Orlando Avenue MOBII F HOMF (Max. 5 du/ac)

MEDIUM DENSITY RESIDENTIAL (Max. 8 du/ac) INDUSTRIAL INSTITUTIONAL Suite 295 Winter Park, Florida 32789

Figure 2-7: City of Sebastian 2025 Future Land Use Map



2.5 Tourist and Visitor Levels

Indian River County does not collect data regarding the number of individual visitors. However, there are several considerations with potential impact on the transportation system of note; mainly, there is a noticeable influx of winter-only residents, beach front recreational activities, sports tourism at the historic Dodgertown training facility, and a number of recurring and smaller and larger annual community events. Additionally, the County collects and discloses data on the Development Tax Revenue that are included in Table 2-12. The Development Tax is a 4% tax rate on all overnight rental property rented for durations fewer than six months. As shown, the Development Tax Revenues increased 34% between FY13 and FY17 despite FY 2017 only having 10 months of data.

Table 2-12: Indian River County Development Tax Revenue

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
FY Revenue	\$ 1,747,023	\$ 1,918,791	\$ 2,287,264	\$ 2,420,325	\$ 2,347,646*

Note: Months of August and September not included in FY 2016/2017.

Source: Indian River County Budget Department

2.6 Travel Behavior and Commuting Trends

Table 2-13 shows general commuter data for Indian River County. As shown, the primary mode of transportation to and from work is employees driving alone, with more than 10% of commuting trips reported as carpool, more than half less than 20 minutes, and approximately one-third departing between 7:00 AM and 8:00 AM.

Table 2-14 displays the commuting characteristics by labor type. As is typical in most Florida communities, the primary mode of commuting to work is driving alone. Only 0.3% of commuters travel to work using public transportation in Indian River County, an important consideration when determining the potential market of choice riders for transit. More than half of commutes are less than 20 minutes, with most commute times ranging from 10 to 19 minutes. The majority of commuters leave for work during the traditional peak period between 6:00–8:00 AM (more than 50% of commutes), which is consistent with the typical commuting patterns throughout the state.

Table 2-15 summarizes the employment location of Indian River County residents. As shown, more than 80% of respondents indicated that they work in Indian River County. With respect to occupation, more than half of transit riders reported being in management, business, science, and arts. As shown in the table, service was the second highest occupation that reported using public transit to get to work.





Table 2-13: Indian River County Commuting Characteristics

Characteristic	2015			
Mode to Work				
Drove alone	80.9%			
Carpooled	10.2%			
2-person carpool	7.1%			
3-person carpool	1.8%			
4+-person carpool	1.2%			
Workers per car, truck, or van	1.07%			
Public transit	0.3%			
Walked	1.1%			
Bicycle	0.4%			
Taxicab, motorcycle, or other means	1.4%			
Worked at home	5.7%			
Travel Time to Work				
<10 minutes	14.9%			
10-19 minutes	36.9%			
20-29 minutes	22.6%			
30-44 minutes	15.2%			
45+ minutes	10.3%			
Departure Time to Work				
Before 6:00 AM	6.8%			
6:00–6:59 AM	16.4%			
7:00–7:59 AM	33.5%			
8:00–8:59 AM	20.7%			
9:00 AM-12:00 PM	20.6%			

Sources: 2015 ACS Estimates

Table 2-14: Indian River County Commuting Characteristics by Labor Type

Occupation	Total Estimate	Drove Alone	Carpooled	Used Public Transit
Total	52,058	42,089	5,297	175
Management, business, science, arts	32.3%	32.5%	21.7%	52%
Service	22.1%	22.5%	29%	36%
Sales and office	26.6%	27.1%	21%	11.4%
Natural resources, construction, maintenance	10.6%	9.7%	20.8%	0%
Production, transportation, and material moving	8.2%	8.1%	7.5%	0.6%
Military specific	0.1%	0.1%	0%	0%

Sources: US Census Bureau, 2015 ACS 5-year Estimates



Table 2-15: Indian River County Employment by Location

Place of Work	Estimated #	
Total	52,058	
Worked in state of residence	98.3%	
Worked in county of residence	81.9%	
Worked outside county of residence	16.4%	
Worked outside state of residence	1.7%	

Sources: US Census Bureau 2000 Census

Maps 2-10 and 2-11 show commuter flow between Indian River County and the top five surrounding counties. The outflow map shows the counties to which Indian River County residents are traveling for work. The inflow map shows counties that are providing employees to Indian River County businesses.

2.7 Roadway and Traffic Conditions

Existing Roadway Conditions

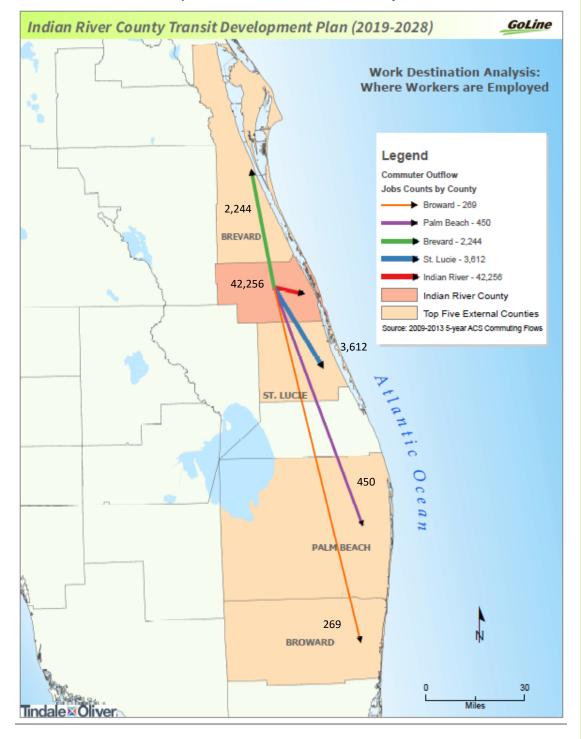
Existing roadway conditions and needs are considered for the baseline conditions assessment. Figure 2-8 shows the Annual Average Daily Traffic (AADT) for the major roadways in Indian River County. The Indian River County 2040 Long Range Transportation Plan (LRTP) identified the following corridors as potential locations for congestion management strategies to be considered:

- SR 60 at 58th Ave
- 58th Ave between 41st St and 49th St
- US 1 between 4th St and 53rd St
- US 1 between CR 510 and the Brevard County line





Map 2-10: Indian River Commuter Outflow





Indian River County Transit Development Plan (2019-2028) **GoLine Home Destination Analysis:** Where Workers Live ORANGE Legend Commuter Inflow Jobs Counts by County 2,703 - Orange - 74 - Palm Beach - 278 BREVARD Brevard - 2,703 St. Lucie - 4.884 Indian River - 42,256 Indian River County Top External Counties Source: 2009-2013 ACS 5-Year Commuter Flows ST. LUCIE 278 PALM BEACH

Map 2-11: Indian River Commuter Inflow



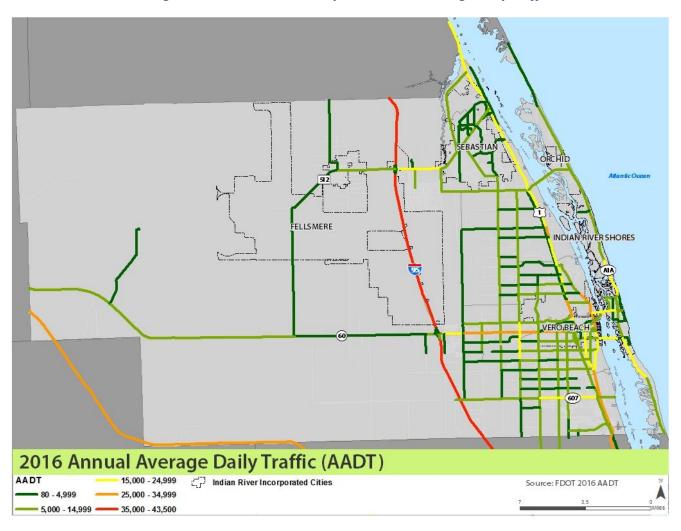


Figure 2-8: Indian River County 2016 Annual Average Daily Traffic



Future Roadway Conditions

The Indian River County MPO's 2040 LRTP sets forth a vision to address transportation system needs and cost-feasible improvements, based on factors such as volume-to-capacity (V/C) ratios. Consistent with the County's concurrency management system, the LRTP estimated the V/C ratios out to 2040 using roadway capacities corresponding to level of service (LOS) D, with two exceptions to this threshold—27th Ave between St. Lucie County line and SR 60, and 43rd Ave between Oslo Road and 16th St, where the adopted LOS is 120% of the LOS E capacity.

The forecasted roadway deficiencies beyond existing committed improvements are summarized in Table 2-16 and depicted in Figure 2-9. Using a variety of prioritization criteria, including the V/C ratio thresholds set out below, a final list of funded roadway projects was proposed, as summarized in Table 2-17. These projects are also shown in Figure 2-10.

• Low Congestion: V/C ratio less than 0.80

High Congestion: V/C ratio between 0.80 and 1.0

• Severe Congestion: V/C ratio greater than 1.0

Table 2-16: 2040 LRTP Potential Roadway Deficiencies

Facility	From	То
Roseland Rd	CR 512	US 1
US 1	Roseland Rd	CR 512
US 1	Barber St	53 rd St
CR 512	Roseland Rd	CR 507
CR 510	CR 512	SR A1A
66 th Ave	49 th St	Barber St
58 th Ave	26 th St	53 rd St
SR A1A	2 mi north of SR 60	1 mi south of 17 th St
Indian River Blvd	37 th St	US 1 / 4 th St
26 th St/Aviation Blvd	43 rd Ave	US 1
43 rd Ave	26 th St	St. Lucie County line
27 th Ave	Oslo Rd	St. Lucie County line

Source: Indian River 2040 LRTP

The Indian River MPO estimates that the county's population will increase by 47% and employment growth by 39% over 2010 by 2040, both of which will add to existing congestion levels over time. The 2040 LRTP highlights a needs plan for highway projects (roadway expansions, interchanges, and new roadways), transit projects (realignments, new routes and service expansions), and pedestrian/ bicycle/multi-use projects (sidewalks and bicycle lanes). Identified needs include projects to expand capacity the most congested corridors; these expansions could temporarily relieve current congestion levels if no additional growth occurs and avoid further capacity deficiencies as a result of continued growth.



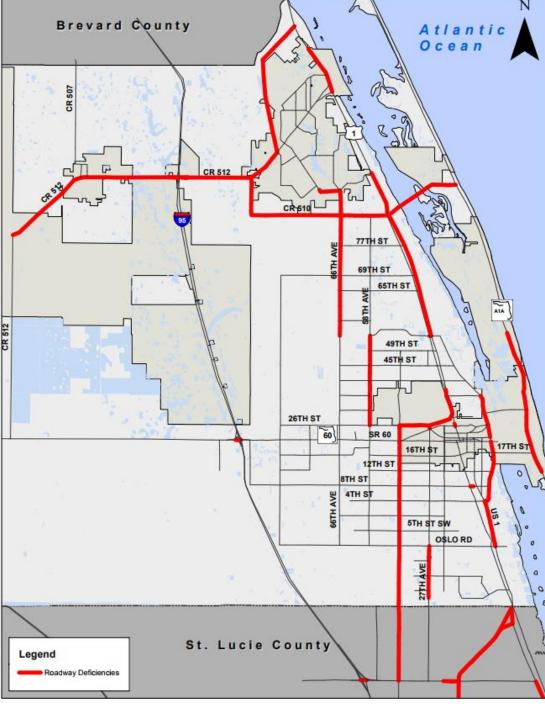


Figure 2-9: 2040 LRTP Potential Roadway Deficiencies



Table 2-17: Indian River County Potential Roadway Improvements

Facility	From	То	Improvement	Implementation Timeframe	
SIS Funds					
I-95	At Oslo Rd		New Interchange	2021-2025	
	Other	Arterials (non SIS	S) Funds		
CR 510*	CR 512	66 th Ave	Widen from 2L to 4L	2021-2030	
43 rd Ave*	26 th St	16 th St	Widen from 2L to 4L	2026-2030	
Oslo Rd*	I-95	58 th Ave	Widen from 2L to 4L	2031-2040	
US 1 (partially funded)	53 rd St	CR 510	Widen from 4L to 6L	2031-2040	
		Local Funds			
CR 510*	CR 512	66 th Ave	Widen from 2L to 4L	2026-2030	
CR 510	66 th Ave	55 th Ave	Widen from 2L to 4L	2021-2025	
CR 510	55 th Ave	Intercoastal Waterway	Widen from 2L to 4L	2021-2025	
CR 512	Willow St	I-95	Widen from 2L to 4L	2031-2040	
CR 512	I-95	CR 510	Widen from 4L to 6L	2031-2040	
43 rd Ave*	26 th St	16 th St	Widen from 2L to 4L	2026-2030	
43 rd Ave	16 th St	Oslo Rd	Widen from 2L to 4L	2031-2040	
66 th Ave	49 th St	81st St	Widen from 2L to 4L	2021-2025	
66 th Ave	81st St	Barber St	Widen from 2L to 4L	2026-2030	
12th St (partially funded)	58 th Ave	74 th Ave	New 2L Facility	2031-2040	
26 th St/Aviation Blvd	66 th Ave	Us 1	Widen from 2L to 4L	2026-2030	
53 rd St	58 th Ave	66 th Ave	New 2L Facility	2026-2030	
53 rd St	66 th Ave	82 nd Ave	New 2L Facility	2031-2040	
74 th Ave	12 th St	Oslo Rd	New 2L Facility	2031-2040	
82 nd Ave	26 th St	69 th St	New 2L Facility	2031-2040	
82 nd Ave	69 th St	Laconia St	New 2L Facility	2026-2030	
Oslo Rd *	I-95	58 th Ave	Widen from 2L to 4L	2031-2040	

*Funded through Other Arterials and Local Funds





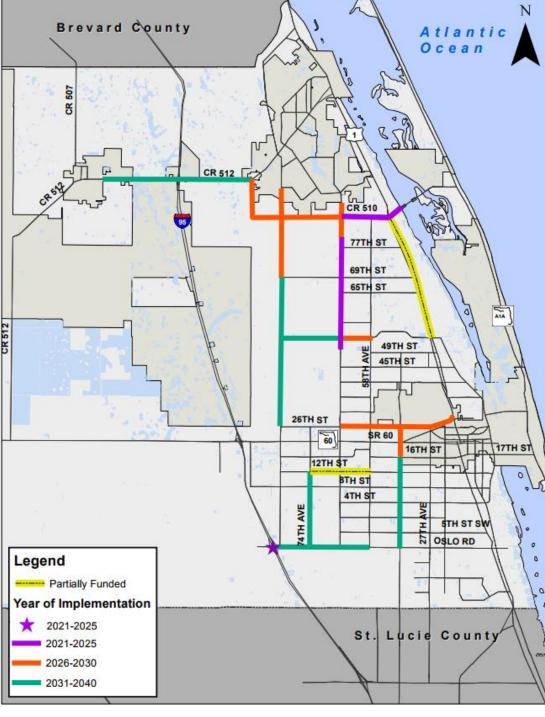


Figure 2-10: 2021–2040 Cost Feasible Plan – Funding and Year of Implementation



2.8 Future Transit Improvements

The LRTP referenced the 2014 Annual Update of the Transit Development Plan (TDP) for the GoLine; because the plan only covers a 10-year planning horizon, new projects to meet the needs of the county through 2040 were identified and are summarized in Table 2-18. Additionally, these improvements are shown in Figure 2-11.

Table 2-18: Indian River County Potential Public Transportation Improvements

Improvement Description	Implementation Timeframe			
Short-Term				
Extend weekday operations from 6:00 AM to 8:00 PM	FY 2014/2015			
Extend Saturday operations from 7:00 AM to 7:00 PM	FY 2016/2017			
Implement Sunday operations from 9:00 AM to 5:00 PM	FY 2018/2019			
Route 11 realignment	Within 6 mos			
Ongoing				
Bus shelters	Continuous			
Fleet upgrade and expansion	Continuous			
Long-Term Cong-Term				
Increase frequency to one bus every 30 min – Routes 1, 2, 3, 4, 8	TBD			
New route connecting Fellsmere and Sebastian to Barrier Island via CR 512, US 1, CR 510 Causeway	TBD			
New route on A1A from Village Beach Market to CR 510 Causeway	TBD			
Aspirational Projects				
Service from Fellsmere to Downtown Vero Beach using CR 512, I-95, SR 60	TBD			
Service from Sebastian to Vero Beach using US 1	TBD			
New circulator route in Fellsmere	TBD			





Brevard County Ocean 77TH ST 65TH S 12TH ST BTH ST 4TH ST 1ST ST SW O\$LO RD Legend Existing GoLine Routes Proposed **Aspirational Routes** Route 1 — Route 9 Potential Bus Shelter Aspirational Route 1 Improve Headways to 30 Minutes Route 10 Aspirational Route 2 Aspirational Village Circulator SR A1A Connector Route 11 Realignment

Figure 2-11: 2040 Cost Feasible Plan-Public Transportation Improvements



2.9 Transportation Disadvantaged Population

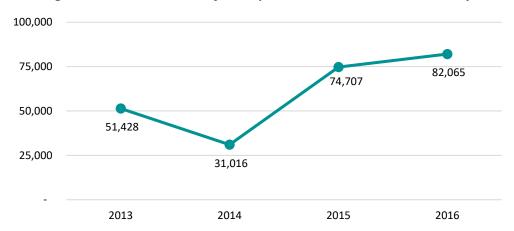
Table 2-19 shows the trend in the potential transportation disadvantaged (TD) population compared to TD passengers served between 2013 and 2016 in Indian River County. During this period, the TD population increased by 10.69%, from 64,057 in 2013 to 70,902 in 2016. The number of TD passengers served by Indian River County TD services as part of the Commission for the Transportation Disadvantaged (CTD) funding and reporting process has fluctuated, reaching a rate of 2.21% in 2016, likely the result of the phased removal of the Medicaid transportation services from the CTD system during FYs 2014 and 2015. Table 2-19 and Figure 2-12 include TD trips directly operated and trips operated by others that report under the coordinated system. Figure 2-12 depicts the total number of TD trips made between 2013 and 2016.

Table 2-19: Indian River County TD Population and Passenger Trends, 2013–2016

Year	2013	2014	2015	2016	% Change
Potential TD population	64,057	65,699	69,120	70,902	10.69%
TD passengers served	1,749	1,375	1,499	1,566	-10.46%
TD trips	51,428	31,016	74,707	82,065	59.57%
% of potential TD population served	2.73%	2.09%	2.17%	2.21%	-19.11%

Source: Florida CTD annual operating reports

Figure 2-12: Total Number of TD Trips, 2013–2016, Indian River County



Source: Florida CTD annual operating reports

As shown in Table 2-20, the majority of TD trips in FY 2016 were made by older adults (39,574), followed by low-income persons with disabilities (31,357).





Table 2-20: Transportation Disadvantaged Trips by Passenger Type, Indian River County

Passenger Type	Trips
Older adults	39,574
Persons with disabilities	11,134
Low-income	0
Other	0
Low-income with disabilities	31,357
Total	82,065

Source: Florida CTD, 2016 Annual Operating Report

As shown in Figure 2-13, ambulatory TD trips decreased by 36% since FY 2017, and ambulatory ADA trips increased by 36,172% (from 73 trips in FY 2012 to 26,479 trips in FY 2017).

40,000 35,000 30,000 Number of Trips 25,000 20,000 15,000 10,000 5,000 FY 12 **FY 13** FY 14 **FY 16** FY 17 FY 15 TD Trips Ambulatory TD Trips Wheelchair ADA Trips Ambulatory ADA Trips Wheelchair TD Trips Total (Non Medicaid) TD Trips ADA Trips Total ······Linear (ADA Trips Total)

Figure 2-13: SRA Community Coach Trips

The increase in ADA ambulatory trips increased operating costs of Community Coach service significantly. As shown in Figure 2-14, GoLine operating costs increased 8.2%, or about 2.3% per year since July 2014. In contrast, Community Coast costs increased 66.3% during this same period, or an average of 19% annually. If the increase in ADA trips continues as it did during the past several years, then local funding levels will need to increase substantially to sustain this service or current funding will need to be reallocated from fixed-route service to ADA service in FY 2019. Because TD trips decreased over the past several years, TD funds are underutilized.



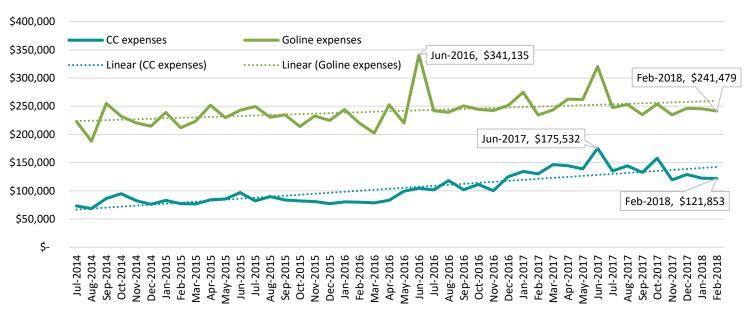


Figure 2-14: GoLine and Community Coach Operating Expenses (Monthly)



SECTION 3 PUBLIC INVOLVEMENT

This section summarizes the public involvement process and activities that have occurred as a part of the Indian River County TDP. The goal of the public involvement activities was to increase active participation from citizens early in the process as a means of informing the development of the TDP. Input from the public is critical, as the plan provides a strategic guide for public transportation in the community. A Public Involvement Plan (PIP) was prepared for this TDP and approved by FDOT. A copy of the PIP submitted to FDOT is provided in Appendix A.

Specific public involvement activities described in this section include a number of surveys and other public involvement techniques for various stakeholders, citizens, and transit users and operators. Listening sessions, discussion groups, on-board surveys, online surveys, operator interviews, and stakeholder interviews were conducted.

The remainder of this section summarizes in detail the public involvement activities conducted for the Indian River County TDP.

3.1 On-Board Survey

An on-board survey was administered December 13–16, 2016, and again on December 18, 2016. Throughout the course of data collection, an in-field survey team rode buses to administer a tablet-based survey to riders on the bus and at transfer stations. The surveyor distributed surveys, asked passengers to complete the surveys, and assisted passengers with questions regarding the survey. A copy of the on-board survey instrument provided in Appendix B.

In total, 753 surveys were collected from GoLine riders during the survey process. The majority of riders chose to take the survey; however, some riders declined to provide input. In addition, some surveys had missing responses, as some riders requested to not respond or provide particular information. All input provided was incorporated into this analysis.

The results of the surveys were aggregated to identify patterns of how the GoLine service is being used, what improvements riders would like to see in the service, and how satisfied riders are with the current service provided. These results are discussed below.

Trip Characteristics

The following section is about how GoLine riders were using the bus at the time they were surveyed and how they generally used GoLine transit for transportation. Riders were asked to describe how often they rode the bus and for what purpose, how they got to and from stops, what buses they transferred from to complete their trips, how far they traveled to and from stops, how much would they pay if a fare was implemented, how would they make the trip if not by bus, and why they were riding the bus.





How did you get to the bus for THIS trip?

A total of 726 riders responded to this question, and 27 did not. The majority of riders (75%) walked less than 3 blocks to make the trip on the bus. Of the respondents, 12 said they drove to the stop to ride the bus. The survey asked the riders who drove to indicate the mileage they drove to get to the bus stop; one rider said 3 miles, three riders said 5 miles, and four riders said 10 or more miles. In addition, some riders transferred from other routes to get to the bus at the time of the survey, transferring from routes 8, 9, and 10. Figure 3-1 shows how riders got to the bus before making the trip.

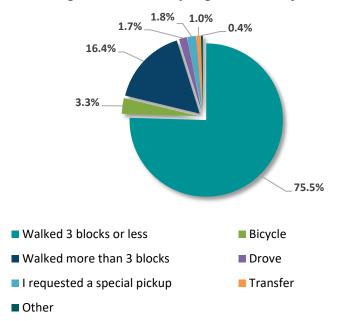


Figure 3-1: How did you get to the bus for THIS trip?

Where are you coming from and where are you going on THIS trip?

In total, 734 riders listed their origin before boarding the bus, including 2 (0.3%) said who came from alternative locations than those listed (a courthouse and the library); 19 riders chose not to respond. In total, 68% of riders were traveling from home, and 11% were traveling from work. Figure 3-2 shows the distribution of rider origins.

A total of 715 riders listed their destination, and 38 chose to not respond; 30% said they were going home and nearly 49% said work or shopping/errands. Some riders chose the "other" category, which included lawyer's office, church, library, and courthouse. Figure 3-3 provides more detail about where riders were going after they completed the trip.





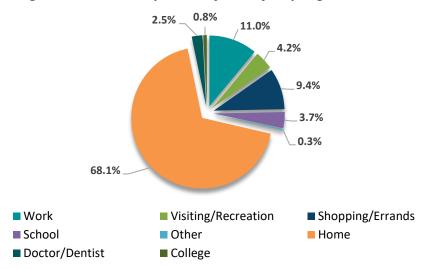
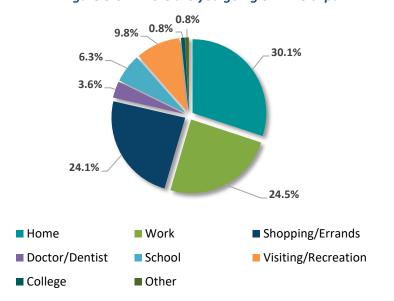


Figure 3-2: Where did you come from before you got on THIS bus?





How will you get to your final destination?

A total of 686 riders responded to this question, and 67 riders did not. Nearly 76% said they planned to walk 3 blocks or less after they complete the trip, 18% of riders said they planned to walk more than 3 blocks (see Figure 3-4), and 1 rider said they walked approximately 1 mile or 3 blocks or less after they got off the bus. Riders drove an average of nearly 10 miles after they got off the bus if they selected "drive" as a category.





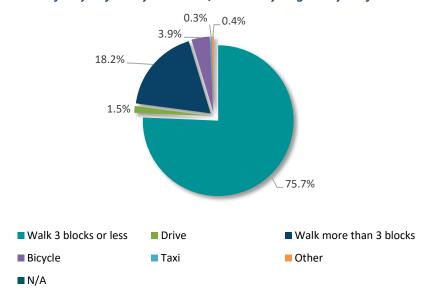


Figure 3-4: After you finish your travel, how will you get to your final destination?

Frequency of Use

Riders were asked how frequently they ride GoLine transit. In all, 680 riders responded to this question and 73 did not; 69% said they rode the bus 4 or more days per week and 19% rode the bus 2 or 3 days per week. Figure 3-5 shows how often respondents rode the bus.

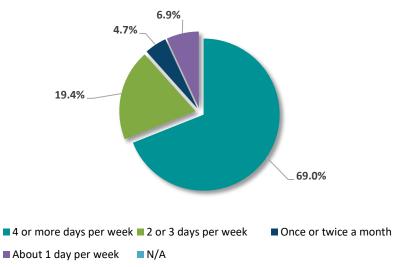


Figure 3-5: How often do you ride the bus?



Use of Transit

Riders were asked why they ride the bus. A total of 674 riders responded to this question; a plurality (39%) said they do not have a car available and nearly 38% said they do not drive. Riders had the opportunity to select "other" as an option, and responses included medical conditions, avoiding drinking and driving, and learning how to use other modes of transportation. Figure 3-6 illustrates why riders use GoLine as a mode of transportation.

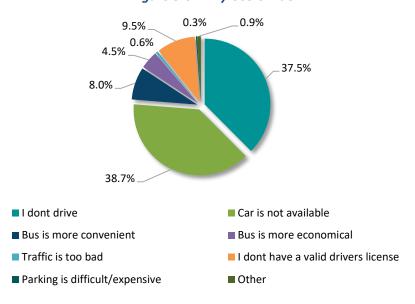


Figure 3-6: Why Users Ride

How would you make this trip if not by bus?

Riders who rely on GoLine as a primary mode of transportation would be impacted the greatest if it was not available. More than 39% of respondents said they would ride with someone to make the trip if GoLine was not available, and nearly 37% said they would either walk or not make the trip. Riders who selected "other" as a category indicated they would skateboard or use an Uber.





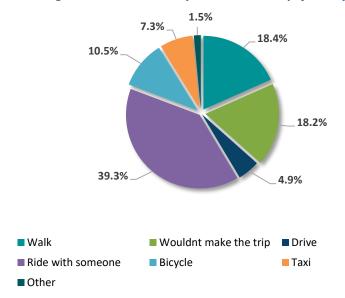


Figure 3-7: How would you make this trip if not by bus?

Transit Fare

Currently, GoLine does not require riders to pay a fare to use the service. Riders were asked what they would be willing to pay if a fare was implemented. In total, 515 people responded and indicated a willingness to pay \$0.50–\$15.00, with an average of \$1.80 and a median of \$1.00.

Overall Satisfaction

Survey participants were asked to rate their overall satisfaction level with GoLine's services. Of the 639 responses, the majority (462, or 72%) rated GoLine's service a "5" (out of 5), and 19% (119) rated it a "4"; 8% rated the service a "3" and 2% rated it either a "2" or "1" (see Figure 3-8).

Rider Characteristics

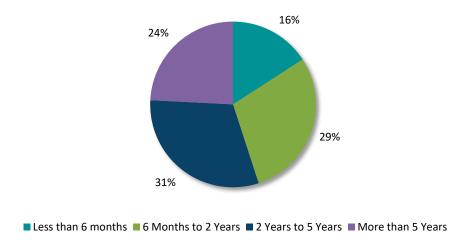
How long have you been using GoLine services?

The 649 responses to this question were relatively evenly spread out, as shown in Figure 3-9, with riders who used GoLine for less than 6 months constituting the minority, at 16%. The majority of riders, 60%, had been using GoLine for between 6 months and 5 years.

Figure 3-8: How long have you been using GoLine services?







How often do you ride the bus?

Of the 680 respondents, the majority, nearly 70%, rode the bus 4 or more days per week and 20% riding 2 or 3 days per week (see Figure 3-10). The lack of infrequent transit riders indicates that the majority of riders use the bus as their primary mode of transportation.

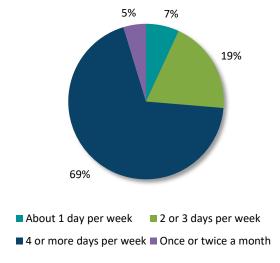


Figure 3-9: How often do you ride the bus?

Gender

The percentages of the 689 responses to the question regarding gender identity are indicated in Figure 3-12.





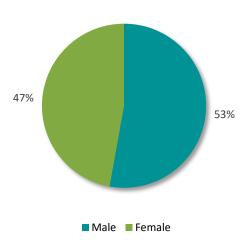


Figure 3-10: Gender Identity

Age

Percentages of the 662 responses to the question regarding age range are shown in Figure 3-13, with demographics fairly evenly spread.

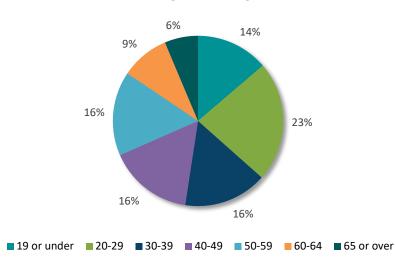


Figure 3-11: Age

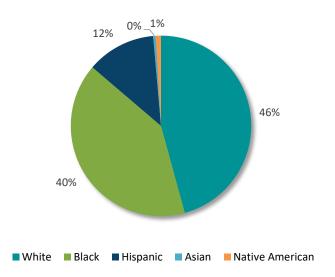
Ethnicity

In total, 647 responded to question regarding their ethnicity. The majority identified as White (46%), 40% identified as Black, and 12% identified as Hispanic (Figure 3-14). Several survey participants identified as two or more ethnicities, biracial, of Native American origin, Asian, Italian, or Irish.

Figure 3-12: Ethnicity







Income

With 498 responses to the question to identify their income range, significantly fewer responded than to the rest of the survey questions, which is likely a function of the personal nature of the question. As shown in Figure 3-15, the majority, 42%, said they had an annual household income of less than \$10,000, and 34% said between \$10,000 and \$19,999. More than 75% said they made less than \$20,000 annually.

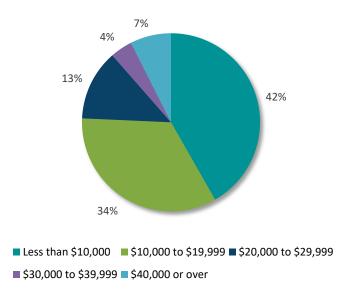


Figure 3-13: What is your annual household income?

Drive License

In total, 639 people responded to the question asking if they possessed a driver's license; 40% said they did, and 60% said they did not (see Figure 3-16).





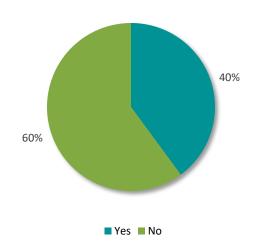


Figure 3-14: Do you have a valid driver's license?

Number of Working Vehicles in Household

A total of 571 answered the question regarding how many working automobiles were in their household. A majority, 60%, had no working vehicles in their household, and 29% had only one working vehicle (see Figure 3-17).

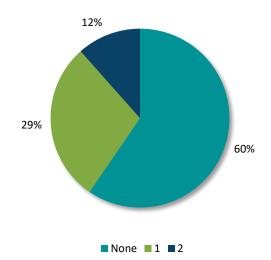


Figure 3-15: How many working vehicles are in your Household?

Recommended Improvements

What are the three most important improvements that would make GoLine Transit work better for you?

Survey participants were asked to select the top three service characteristics they would like to see or that would help them as a transit user if GoLine were to implement improvements to their services. As shown in Figure 3-18, the majority of responders selected an





improvement relating to the length of service provided on weekdays and weekends; 101 indicated that extending the length of service at the end of the day on weekdays would help, 122 indicated that extending length of service at the end of the day on Saturdays would help, and 97 stated that earlier buses on Saturdays would help. The next highest responses dealt with the frequency of service and timeliness of service—53 stated that increased frequency would help, and 51 stated that more timely service would help. Improvements to bus driver knowledge, abilities, and courtesy were the least cited as being helpful improvements.





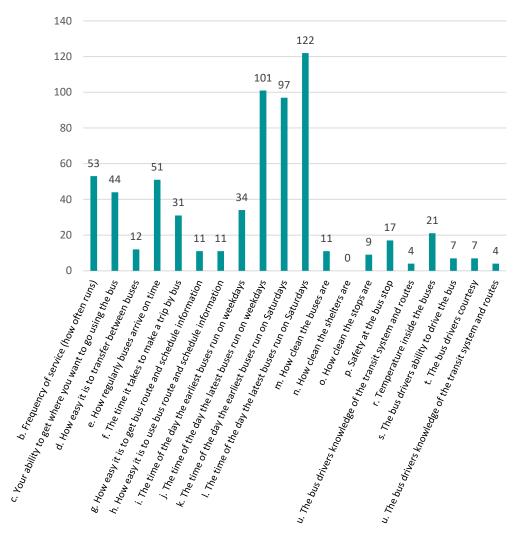


Figure 3-16: What are the top three service improvements that would help you?

3.2 Online Survey

As part of the public involvement process, an online survey was developed in tandem with the on-board survey as a means of capturing the opinions of populations other than those who frequently ride transit and other stakeholders or citizens. SurveyMonkey, an online survey tool, was used to host the survey. In total, 249 survey responses were received. A copy of the online survey instrument is provided in Appendix C. Survey results are presented below.

Trip and Usage Characteristics and Responses

Have you or a member of your household used GoLine Transit Services?

As shown in Figure 3-19, 55% of responders had used GoLine's transit services previously and 39% had not.





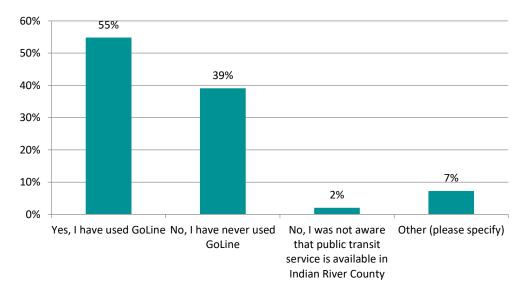


Figure 3-17: Have you or a member of your household used GoLine transit services?

How often do you use GoLine Services?

The majority of respondents, 42%, has never use GoLine's services, and 14% used it rarely. Only 28% used GoLine services a few times per week or more (see Figure 3-20).

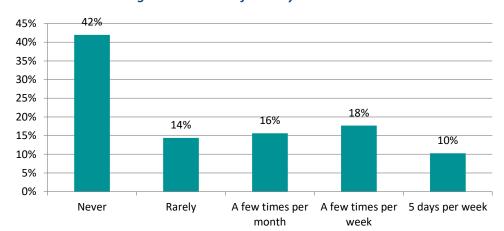


Figure 3-18: How often do you use GoLine Services?

Have you used public transit services outside of Indian River County?

As shown in Figure 3-21, the majority of respondents had used public transit while either living in another city (32%) or visiting another city (33%).





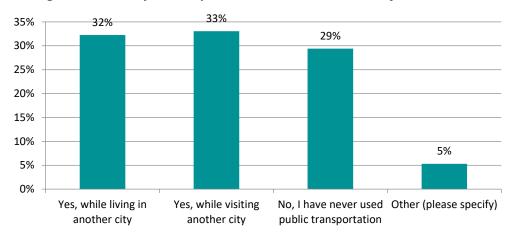


Figure 3-19: How you used public transit services outside of Indian River County?

What types of trips do you use GoLine for?

Of those who used GoLine, a significant portion used it either to go to work (29%), for medical appointments (29%), or to go shopping (41%). In contrast, 33% of respondents had no current plans to use GoLine's services (see Figure 3-22).

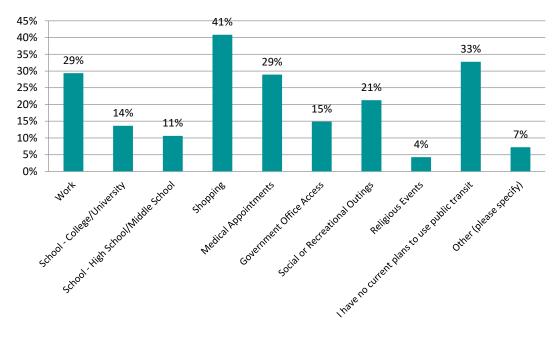


Figure 3-20: What type of trips do you use GoLine for?



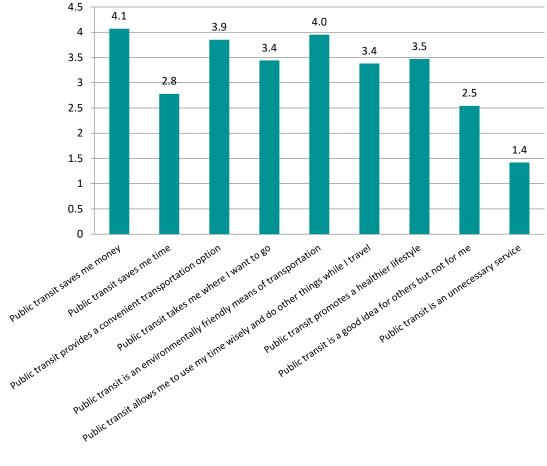
Perception of Transit

Respondents were asked to rate on a scale of 1 to 5 (with 5 being the highest) how strongly they agreed or disagreed with the following statements:

- Public transit saves me money.
- Public transit saves me time.
- Public transit provides a convenient transportation option.
- Public transit takes me where I want to go.
- Public transit is an environmentally friendly means of transportation.
- Public transit allows me to use my time wisely and do other things while I travel.
- Public transit promotes a healthier lifestyle.
- Public transit is a good idea for others but not for me.
- Public transit is an unnecessary service.

As shown in Figure 3-23, respondents rated money savings the highest, followed by public transit is an environmentally-friendly option and provides convenient service.

Figure 3-21: Please indicate how strongly you agree or disagree with the following statements (on a scale of 1–5, 5 being the highest)?

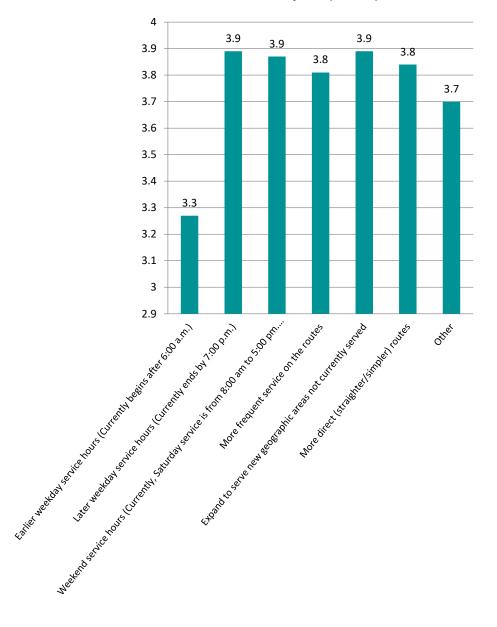




Public Transit Service Priorities

Respondents were asked to rank what GoLine should consider as public transit service priorities over the next 10 years. As shown in Figure 3-24, earlier weekday services hours ranked as the lowest priority, and later weekday service hours, later weekend service hours, and expanded geographic area of service ranked as the highest priorities for service improvements from the public.

Figure 3-22: What should GoLine consider as public transit service priorities over the next 10 years (service)?







Public Transit Bus Stop and Parking Priorities

Respondents were asked to rank what the Indian River County MPO should consider as public transit service priorities over the next 10 years related to bus stops and parking. Improved bus stop amenities such as shelters ranked as the highest priority, with improved bicycle and pedestrian access and connectivity to bus stops a close second (see Figure 3-25).

4.1 4.0 4 3.9 3.9 3.8 3.7 3.7 3.6 3.5 3.5 3.4 3.4 3.3 3.2 3.1 Improve bus stop Bicycle storage at Other Improve Increase vehicle amenities (shelters, pedestrian/bicycle bus stop areas parking at bus stop etc.) access to bus stop areas areas

Figure 3-23: What should Indian River County MPO consider as public transit priorities over the next 10 years (bus stops and parking)?

Public Transit Vehicle Priorities

Respondents were asked to rank what GoLine should consider as public transit service priorities over the next 10 years related to vehicles. As shown in Figure 3-26, the highest priority was to create real-time transit vehicle arrival and departure information for mobile users—essentially a live-tracking mobile phone or internet application. The second highest priority was the provision of Wi-Fi on transit vehicles.





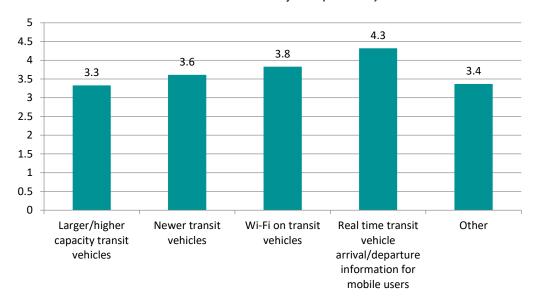


Figure 3-24: What should GoLine consider as public transit vehicle priorities over the next 10 years (vehicles)?

Accessing Public Transit Information

Respondents were asked to rank how they prefer to have access to information on public transit. As shown in Figure 3-27, web-based access was identified as the preferred method of accessing public information, whether through the GoLine website or through a smartphone application. Newspaper, TV, and radio were identified as the preferred methods for obtaining public transit information.

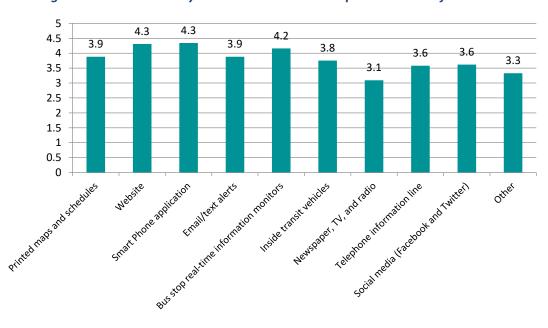


Figure 3-25: How would you like to have access to public transit information?



Transit and Transportation Organization Knowledge

Of the respondents to the online survey, 62% knew or had heard of either the Senior Resource Association (SRA) or the MPO. As shown in Figure 3-28, 38% were unaware of either, indicating a general lack of knowledge by the public concerning transportation resources and organizations.

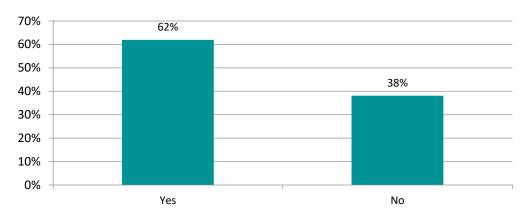


Figure 3-26: Have you heard of the SRA (Senior Resource Association) or the MPO?

Demographic Characteristics

Similar to questions on the on-board survey, respondents were asked about race, age, income, and other demographic characteristics to better inform data about who uses public transit or who is interested in helping make decisions regarding public transit in Indian River County.

Age

As shown in Figure 3-29, 25% of respondents were over age 65, 62% were over age 45, and 10% were age 16–24.





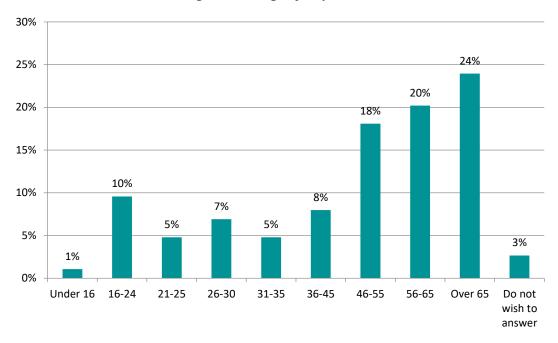


Figure 3-27: Age of respondents

Gender Identity

As shown in Figure 3-30, the majority of online survey responders, 65%, identified as female, and 35% identified as male.

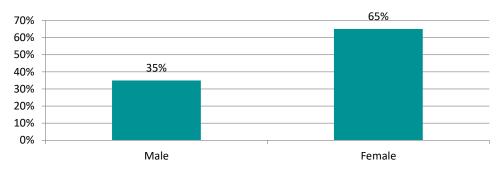


Figure 3-28: Gender of respondents

Income

In total, 21% of online survey responders did not wish to identify their income range. Otherwise, there was an even spread of income ranges represented by survey respondents (see Figure 3-31).





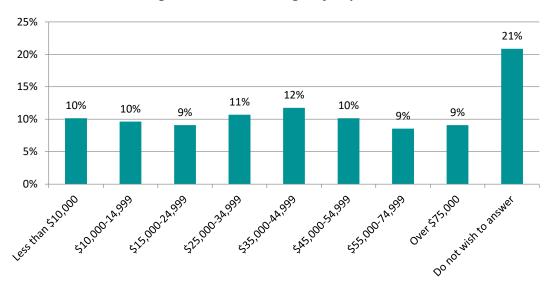


Figure 3-29: Income ranges of respondents

Occupation

Online survey respondents work primarily in an office or professional environment (27%) or are retired (27%), as shown in Figure 3-32. People who attended secondary or primary school constituted 12% of survey participants.

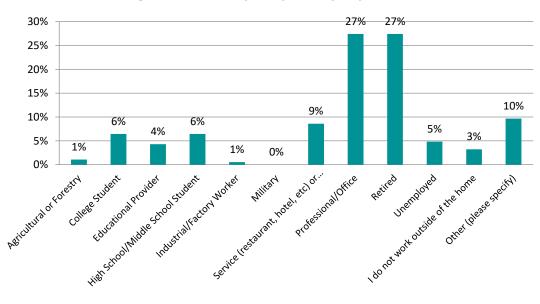


Figure 3-30: Primary occupation of respondents

Race/Ethnicity

As shown in Figure 3-33, the majority of respondents identified as White or Caucasian (69%). The second highest number of responses were those whom did not wish to answer or identify with any race or ethnicity—around 17%.





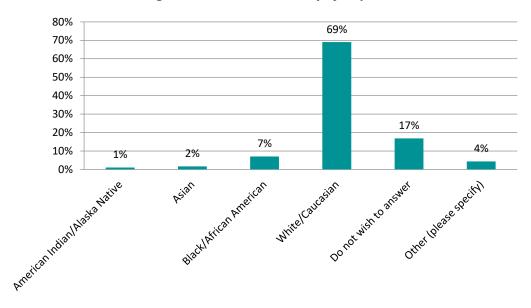


Figure 3-31: Race or ethnicity of respondents

Hispanic or Latino identity

Survey participants were asked if they identified as Hispanic or Latino. The majority, 76%, did not, and 11% did (see Figure 3-34).

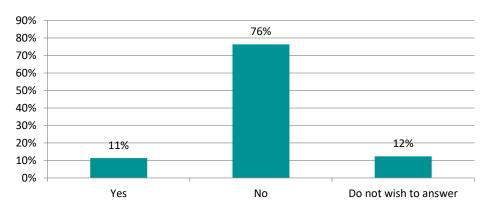


Figure 3-32: Hispanic or Latino?

Access to or Ownership of a Personal Vehicle

The majority of survey participants, 67%, indicated they owned or had access to a personal vehicle, 22% do not, and 12% had access to one (see Figure 3-35).





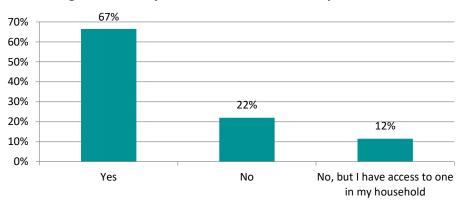


Figure 3-33: Do you own or have access to a personal vehicle?

3.3 Bus Operator Surveys

Bus operator surveys provide a forum and methodology to gather input from transit workers at the front lines concerning problems, solutions, and observations of transit in their community. Operator interviews were conducted in December 2017 and January 2018. A copy of the bus operator survey questions is provided in Appendix D. A total of 17 bus operators completed the survey.

Potential Service Improvements

Operators were asked to rank their top three preferences from a list of service improvements; these preferences are summarized in Figure 3-36. The most frequent response indicated a desire for improved maintenance of transit vehicles, and the next priorities were improved bus stops and adding shelters at frequent pickup points. More frequent service, later weekday service, Sunday service, and "other" categories received a smaller number of responses (2 or 3 each). Comments for the "other" category included enforcing a no-food policy and cleaning buses. No operators listed earlier weekday service as a potential improvement. About half followed the survey's ranking instructions; the other half simply circled their choices. For this reason, the chart shows a frequency count of all question 1 responses.

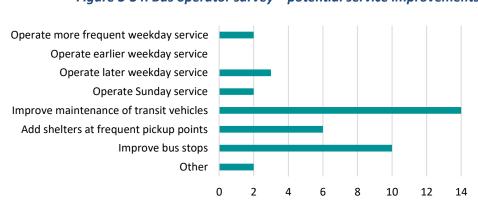


Figure 3-34: Bus operator survey – potential service improvements



Common Rider Complaints

Operators reported a range of common complaints from riders and provided comments, as summarized in Figure 3-37. The most frequently cited complaint was the absence of out-of-county connectors, with 14 responses. Lack of Sunday service, services do not go where passengers want, passengers cannot get information, and the need for later/evening service were the next most common complaints, with 4–6 responses each. Early/late transit service, lack of shelters/benches, transit vehicles not clean, and "other" received a smaller number of passenger complaints, with "other" including a shortage of route information maps to give to passengers and complaints that operators drive too fast. Operators did not report any complaints related to transit vehicle comfort, earlier morning service, or unsafe service. The majority of respondents did not follow the survey's ranking instructions for this question and opted to simply circle the complaints they wanted to report. For this reason, the chart shows a frequency count of all question 2 responses.

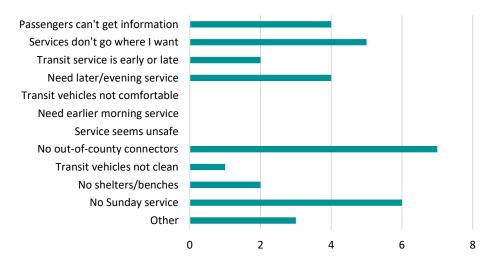


Figure 3-35: Bus operator survey – frequent passenger complaints

Question 3 asked operators to indicate what passengers think of GoLine service, ranging from "always agree" to "seldom agree"; distribution of these responses was scattered. Table 3-1Table 3-1 summarizes the results of survey Question 3.

Total **Always Sometimes** Often Seldom **Response Choices** Responses Agree **Agree** Agree Agree Service doesn't go where I want 12 1 4 4 3 No out-of-county service 13 1 2 6 4 Passengers can't get information 12 5 2 0 5 Transit vehicle is not clean 11 1 4 1 5 No shelters or benches 11 1 3 3 4 3 2 Need later evening service 11 3 3 No Sunday service 10 2 2 2 4

Table 3-1: Bus operator survey – passenger opinions of GoLine



Operator Feedback

A series of free-response questions allowed operators to provide specific comments on service, routes, maintenance, operations, and in general. The answers provided by operators are below.

Q: What recommendations would improve GoLine service?

- Offering competitive pay for drivers
- Improving vehicle maintenance (including adding new vehicles, air-conditioned vehicles, and eliminating pests from vehicles)
- Quality-controlling drivers (monitoring performance and timeliness)
- Expanding services later into the evening and adding multiple buses on each route
- Charging a small fare

Q: Do you think earlier morning, later evening, or Sunday service is necessary?

Most operators did not feel that offering earlier morning, later evening, or Sunday service was necessary. Table 3-2 summarizes the responses to these questions.

Response Choices	Yes	No	Total Responses
Is earlier morning service necessary?	4	13	17
Is later evening service necessary?	5	9	14
Is Sunday service a needed improvement?	4	11	15

Table 3-2: Bus operator survey – expanded service hours

Q: What is the greatest strength/weakness of GoLine service?

- The most frequently-noted strength was that the service is free of charge. Other
 weaknesses cited included drivers/customer service, timeliness, and service to
 necessary populations and locations.
- The most frequently-noted weakness was poor vehicle maintenance (i.e., buses breaking down, age of vehicles, air conditioning). Other weaknesses cited included limited operating times on weekends, driver attitude/lack of drivers, malfunctioning GPS tablets, and communication.

Q: What improvements would you make to the GoLine service (regardless of money)?

- Service improvements:
 - To Barefoot Bay (most suggested destination)
 - To the mall (west of mall)
 - To north and south hubs
 - To south/west Vero Beach
- Passenger amenity improvements:
 - Well-maintained vehicles





- Free service
- Customer service (at hubs and from drivers)
- o Bus stop shelters and signs along route
- Sunday service
- More ramps
- Newer/better/functioning vehicles (air conditioning, front and rear doors)
- Technology improvements:
 - Functioning tablets/radios
 - Elimination of route matching
 - o Drive-through bus wash facility
- Process or tool to improve driver ability to be more involved in decision-making related to schedule and policy changes:
 - More input in route-making process (use driver knowledge)
 - Increased driver training
 - Fix route matching

Q: Do you have any route-specific recommendations?

- Route alignment changes that would serve riders better:
 - New route up Roseland Rd to Barefoot Bay
 - o Inactive stops should be "called in"
 - Route up and down 512, Route 13 on Saturdays, more stops on US 1 in Sebastian
 - Move stops from front of IR shopping plaza near mall
- Safety improvements (tight turns, dangerous pedestrian environment, etc.):
 - o Stops should not be near signals, especially near turn lanes
 - Eliminate U-turns by drivers
 - o Right turn from 60 to 58 (traffic does not yield, making U-turn dangerous)
 - o Turn on 27
 - North and south hubs
 - Stops by busy roads that block lanes should have dedicated turn-off lanes (SR60, 58 Ave)
 - o Route 7 stop at 43rd and 16 is dangerous
 - o GPS tablets and passenger count are distracting
- Other information that might be helpful to improve GoLine:
 - o Health concerns regarding riders soiled with bodily fluids should be addressed
 - Passengers are confused by the schedule
 - Give drivers better pay
 - o Provide a liaison for driver concerns, complaints, and safety





3.4 Stakeholder Interviews

Stakeholder interviews provide a one-on-one forum to gather input from the policy leaders and agency/community representatives concerning the vision for public transportation in their community. Interviews were conducted from September 29, 2017 through October 8, 2017. While 10 stakeholders were initially identified for interview, only four of the stakeholders were successfully reached and interviews conducted, including the following representatives:

- Casey Lunceford, Provost, Mueller Campus, Indian River State College
- Jay Lundy, Operations Manager, CareerSource Research Coast
- Helene Caseltine, Director of Economic Development, Indian River Chamber of Commerce
- Julianne Price, PACE Coordinator, Indian River County Environmental Health Department

A list of 15 questions was developed for the interviews, with each stakeholder being asked similar questions from the list. A copy of the stakeholder interview script is provided in Appendix E. The input received during these interviews was reviewed, and major themes are identified and summarized below.

When asked questions about the general perception of transit in Indian River County, the following themes emerged:

- Most interviewees did not have personal experience riding GoLine transit services, although most worked with people who relied on GoLine services.
- Transit plays a necessary and vital role in Indian River County, particularly for the workforce, low-income persons, and young people. The role of GoLine should be evolving as the county evolves and needs change.
- Generally, there seems to be a lot of awareness about and support for GoLine and the services they provide to the community.
- Most think GoLine is doing well, meeting the needs of the community and individuals while providing necessary amenities.
- Generally, there is room for improvement, particularly in terms of overall
 accessibility and connectivity of GoLine's services with other modes and
 infrastructure such as sidewalks and bicycle lanes. Ensuring connectivity to areas of
 employment with minimal transfers, as well as connections to secondary and
 primary schools was suggested.

When asked questions about the future vision for transit in Indian River County, the following themes emerged:

 Extend services to Fellsmere, 98th past Vero Beach Outlets, the CVS Distribution Center, non-major medical facilities, Oslo east of 195, SR60 west of 195, and South County.





- Consider express bus services, including longer service hours and increased frequencies. More community engagement, particularly at public functions and targeted advertising.
- Existing coverage and frequency was generally cited to be adequate, but improvements in both would be good if funding is available.
- Transit is necessary and important to support economic vitality and growth, particularly for attracting new employers and ensuring accessibility for employees.
- Expanded service hours was important, particularly for low-income workers and service workers whom may start early or get off late.
- GoLine was essential for providing transportation for those whom are low-income or have disabilities, but better advertising of the services may be helpful.
- The future of GoLine included suggestions to look towards capturing the next generation of riders, expand service hours, ensure financial sustainability, support low-income workers, work to reduce number of transfers needed to get to final destinations, express routes, feeder routes for major employers, and others.
- Most interviewees were unfamiliar with existing land use laws and policies. One
 interviewee recommended that developers of higher density projects be required to
 install bus shelters and amenities and recommended that the City ensure sidewalks
 and bicycle lane connectivity to bus stops.
- Half of interviewees did not feel technology would have a significant impact on the
 transit operating environment in the county. One felt it would, but had concerns
 about the availability for low-income residents; another felt that advancements in
 technology would be a good opportunity for improved advertising and revenue for
 GoLine, while providing amenities such as Wi-Fi.
- Most interviewees had no additional comments, but one reemphasized the need for and role of transit for the workforce and low-income individuals.

3.5 Discussion Group Workshops

A series of five (5) group discussions were undertaken as part of the TDP development process to identify and develop a clear vision and to establish priorities for the transit system. These group discussions were in the form of workshops and included presentations on the TDP process and the current state of the transit system. The workshops and results are summarized below.

Indian River MPO Technical Advisory Committee (TAC), January 26, 2018

The first of the group workshops was conducted during the regular meeting of the TAC and included a presentation that introduced, outlined, and gave a current status of the TDP development process and an interactive discussion on the current needs and future direction of the transit system. This included a series of questions with discussion and then polling the TAC members to get their consensus on the subjects of: the role of transit; needed growth; investment priorities; and financial stability. The resulting input included:





- The system primarily serves low income riders, with some recognition that lower wage workers are using the system regularly to access jobs.
- Should plan for a 25-50% growth in ridership over the next 10 years.
- Top three priorities are later service, more frequent service, and more weekend service.
- Capital priorities are more shelters, better sidewalk connections, and technology.
- Potential funding sources were gas taxes, general funds, and consideration of a passenger fare.
- Decisions should be balanced between ridership growth and financial stability but financial stability.

The input received from each will help guide the development of the transit vision, system goals, and prioritizing alternatives.

Indian River MPO Citizens Advisory Committee (CAC), February 6, 2018

A group workshop was conducted during the regular meeting of the CAC and included the same format and presentation given to the TAC. The CAC were presented with the same series of questions for guiding the discussion and polling members. Below is a summary of the consensus on the subjects of: the role of transit; needed growth; investment priorities; and financial stability.

- The system primarily serves workers and low income riders.
- Should plan for 50% growth in ridership over the next 10 years.
- Top three priorities are later service, more frequent service, and more weekend service.
- Capital priorities are more shelter, better sidewalk connections, and technology
- Potential funding sources were sales tax and gas taxes.
- Decisions should be balanced between ridership growth and financial stability, but placed an emphasis on growing the ridership base.

The input received from each will help guide the development of the transit vision, system goals, and prioritizing alternatives.

Indian River County MPO Board, February 14, 2018

The next discussion group workshop was conducted with the full MPO Board during their regular meeting. As with the committees, it included a presentation that introduced, outlined, and gave a current status of the TDP development process and an interactive discussion on the current needs and future direction of the transit system. The same series of questions were posed with discussion and then polling of the Board members to get their consensus. The resulting input included:

- The system primarily serves workers and low income riders.
- Should plan for a 25-50% growth in ridership over the next 10 years.





- Top three priorities are more frequent service, more weekend service, and bus stop improvements.
- Capital priorities are more shelters, better sidewalk connections, and technology.
- Potential funding sources were gas taxes and general funds.
- And while decisions should be balanced between ridership growth and financial stability, there was a recognized need to put emphasis on the future with ensuring financial stability.

The input not only guided the development of the transit vision, system goals, and prioritizing alternatives, it was also an indicator that long-term funding, revenue sources, and controlling expenses needs to be fully vetted during the TDP process.

Indian River County Transportation Disadvantaged Local Coordinating Board (TDLCB), February 28, 2018

A group workshop was conducted during the regular meeting of the Indian River TDLCB, the advisory group that helps oversee the transportation disadvantaged program in Indian River County. The workshop included the same format and presentation given to the TAC, CAC, and MPO Board. The TDLCB members responded slightly different than the others, but the results were similar and are summarized below.

- The system primarily serves low income
- Should plan for a 25-50% growth in ridership over the next 10 years
- Top three priorities are later service, earlier service, and more weekend service
- Capital priorities are more shelter, better sidewalk connections, and technology
- Potential funding sources were sales tax and general funds
- Decisions should be balanced between ridership growth and financial stability

Like the results of the other workshops, the input was used to help guide the development of the transit vision, system goals, and prioritizing alternatives.

Indian River MPO Board, May 9, 2018

An additional discussion and workshop was conducted with the full MPO Board during their regular meeting three months after the first one. This meeting provided critical discussion during the TDP process because it was clear that a financial crisis was looming for the GoLine system and a resolution needed to be included as part of the recommended alternatives. The financial issue related to the growth in ridership of the ADA required complimentary paratransit services. As outlined further in later sections, the ADA paratransit ridership has escalated in an unsustainable manner and, with the higher costs associated with the door-to-door services, the available revenues would be exhausted in the next year. If unresolved, this could potentially lead to reductions in GoLine fixed-route services. During this workshop, the dilemma was explained and a series of options to help resolve the rising trips and associated costs of the ADA paratransit services were presented. The options included five strategies that could help manage and/or reduce the ADA paratransit trip demand. The in-depth discussion resulted in some clear direction and





priorities to guide the development of the TDP implementation and finance elements and the results were integrated into the alternatives evaluation and resulting priorities.

3.6 Listening Sessions

Two public listening sessions were conducted in Indian River County, one at the Main Transit Hub and another at the United Against Poverty Harvest Grocery Store and Outreach Center. These sessions were designed to be held in locations or at events where people gather to capture information from seasonal and permanent residents about community values, needs, and priorities. The sessions included display boards, interactive information exchange, public surveys, brief interviews, and enlistment for social media. In total, 15 comment cards were collected from the outreach effort and are summarized as follows:

- The majority rode the bus every day or several days per week.
- Most felt that transit's role in the community was essential, important, and well
 used.
- Most stated that transit was very important for them or that they relied entirely on public transit
- Several stated that GoLine's services were on time and took them to where they needed to go.
- Several indicated they would like Sunday service and expanded routes and hours.





SECTION 4 INVENTORY OF EXISTING TRANSPORTATION SERVICES

This section includes an overview of public transportation services and facilities provided by Senior Resource Association, Inc. (SRA), which is most commonly recognized as GoLine's fixed-route services. In addition to fixed-route bus services, SRA functions as the Community Transportation Coordinator (CTC) for Indian River County and provides public transportation to the TD populations living in the county. An overview of private and third-party transportation providers serving Indian River County also is included.

4.1 Fixed-Route Services

GoLine services include a total of 15 bus routes as part of the fixed-route network within Indian River County plus a regional connection to the Indian River State College Main Campus in St. Lucie County. The majority of buses operate from 6:00 AM to 7:00 PM Monday through Friday. Saturday service is provided on 12 routes from 8:00 AM to 5:00 PM; only Routes 11, 13, and 15 do not currently offer Saturday service. A summary of the fixed-route services is provided in Table 4-1. A door-to-door bus stop connector is available for riders who qualify and do not have access to a GoLine bus stop.

Service Route # Description **Service Period** Frequency Beachside to Main Transit Hub 60 min 6:00 AM -7:00 PM 1 2 IR Mall to Main Transit Hub 60 min 6:00 AM - 7:00 PM Gifford Health Center to Main Transit Hub 60 min 6:00 AM - 7:00 PM IG Center to Main Transit Hub 60 min 6:00 AM - 7:00 PM 4 5 Sebastian (north areas) 60 min 6:00 AM - 7:00 PM 6 IG Center to Main Transit Hub 60 min 6:00 AM - 7:00 PM 7 IG Center to Indian River Mall 60 min 6:00 AM - 7:00 PM Gifford Health Center to Main Transit Hub 60 min 6:00 AM - 7:00 PM 9 North County Transit Hub to IR Mall 60 min 6:30 AM - 6:30 PM 10 Fellsmere to North County Transit Hub 60 min 6:00 AM - 7:00 PM Sebastian to Main Transit Hub 6:00 AM - 7:00 PM 11 120 min 12 Sebastian (south areas) 60 min 6:00 AM - 7:00 PM Indian River Mall to Vero Beach Outlets 13 60 min 6:00 AM - 7:00 PM 14 Gifford Health Center to Indian River Mall 60 min 6:00 AM - 7:00 PM 15 IG Center to Ft. Pierce IRSC Campus 60 min 7:00 AM - 7:00 PM

Table 4-1: GoLine Weekday Service Profile

System Profile

To provide a brief perspective into the relative productivity of GoLine's fixed-route services, annual ridership and the measure of riders per revenue hour is summarized in Table 4-2 Taken together, the five routes with the highest levels of ridership comprise approximately 53% of the total fixed-route ridership (Routes 2, 3, 4, 8, and 10). The top three most productive routes, in terms of riders per revenue hour, are Routes 2, 4, and 8.





Table 4-2: 6	GoLine System Profile	, FY 2015–2016
	FY 2015-2016	Riders per

Route	FY 2015-2016 Annual Ridership	Riders per Revenue Hour
1	83,746	22.76
2	187,196	50.88
3	95,243	25.89
4	117,362	31.9
5	70,491	19.16
6	54,110	14.71
7	52,317	14.22
8	121,647	33.07
9	68,251	19.23
10	93,592	25.44
11	24,144	7.17
12	42,198	11.47
13	45,448	14.62
14	80,146	21.78
15	15,644	5.03
16	4,499	1.01
Total/Average	1,156,034	19.91

Fare Policy

Although there are no required fares for GoLine passengers riding the fixed-route services, passengers are encouraged to make a donation to help support the bus system.

4.2 Paratransit Services

Throughout Indian River County, door-to-door service is provided Monday through Friday from 6:00 AM to 7:00 PM and on Saturdays from 8:00 AM to 5:00 PM. Paratransit service is available to eligible TD and/or ADA paratransit-eligible persons in Indian River County. Prior to receiving service for the first time, persons must register with SRA. In addition, coordinated services, which are provided through contracted transportation providers and typically serve Medicaid patients (further outlined in "Other Transportation Providers") are available 24 hours per day, 7 days per week to eligible individuals. To reduce costs and increase efficiency for these coordinated services, clients often are asked to share a van.

TD Paratransit

As the local CTC, SRA coordinates medical and non-medical transportation services for the TD population. Priority for service is given to those who do not own or drive their own vehicle and do not have family or friends to assist them in traveling to and from destinations. TD service also is provided based on needs; medical needs and life-sustaining activities are given higher priority than business or recreation trips. Sponsored TD trips are provided at a \$2.00 one-way fare.





ADA Services

Federal law requires transit systems to provide ADA service for residents who live within ¾-mile of a fixed route but are unable to access the fixed-route system because of a disability. Door-to-door service via the Community Coach is provided to the eligible ADDA passengers. ADA trips are provided free of charge because of federal regulations that limit the cost of an ADA trip to not more than two times the cost of an equivalent fixed-route trip; fixed-route service in Indian River County is provided at no fare. In recent years, utilization of the ADA service has increased at a rate that is unsustainable.

4.3 Transit Facilities

Transfer Stations

Five transfer stations are part of the GoLine network and are located throughout the county, maximizing connections among the fixed-route services. GoLine's transfer stations are the key hubs at which routes connect and are located close to major activity centers and include the following:

- Main Transit Hub, 1225 16th St, Vero Beach
 - o Serving routes 1, 2, 3, 4, 6, 8, 11
- Gifford Health Centers, 4675 28th Ct, Vero Beach
 - o Serving routes 3, 8, 14
- Indian River Mall, 6200 20th St, Vero Beach
 - Serving routes 2, 7, 9, 13, 14
- North County Transit Hub, along CR 510, Sebastian
 - o Serving routes 5, 9, 10, 12
- Intergenerational Center, 1590 9th St SW, Vero Beach
 - Serving routes 4, 6, 7, 15

Park-and-Ride Facilities

GoLine currently does not own or operate any park-and-ride facilities; however, the FDOT District 4's Commuter Services program, also known as South Florida Commuter Services, lists four park-and-ride locations in Indian River County, as summarized in Table 4-3; all four locations coincide with one of GoLine's transfer facilities.

Table 4-3: Park-and-Ride Locations in Indian River County

Name	Address	City	ZIP Code	No. of Spaces
Main Transit Hub	1225 16th St	Vero Beach	32960	10
Intergenerational Center	1590 9th St SW	Vero Beach	39262	30
Indian River Mall (NE entrance)	6200 20 th St	Vero Beach	32966	30
Gifford Health Center	4675 28th Ct	Vero Beach	32967	10

Source: https://www.1800234ride.com/parkridelocations



4.4 Transit Vehicle Inventory

GoLine service is currently provided through a fleet of 26 vehicles, and Community Coach service is provided through a fleet of 24 vehicles. A summary of GoLine's transit vehicle inventory is provided in Appendix F.

4.5 Other Transportation Providers

This section provides context for the Indian River TDP through the provision of an inventory of existing transportation services in Indian River County. By employing online research and a survey form to ensure the accuracy of collected data, the following information was gathered for each service provider:

- Name
- Type of operation
- Ownership
- Service area
- Possession of a service agreement with the County
- Service period
- Service frequency/availability
- Principal location
- Contact phone number
- Vehicle information
- Seating capacity
- Wheelchair accessibility
- Fare structure
- Website URL

Other private and public-serving agencies offer transportation services for specific client groups, as shown in Table 4-4. These transportation providers were contacted for general information about the services offered; the information provided is summarized in Table 4-4.





Table 4-4: Existing Transportation Providers in Indian River County

Name	Туре	Ownership	Service Area	County Agreeme nt?	Service Period	Service Frequency/ Availability	Address & Phone	Vehicles	Seating Capacity	Wheel Chair Equipped	Regular Fare	Website
Abilities Resource Center	Medical and disabled transport	Non-Profit	Indian River County	Yes	365 days	24/7	1375 16th Ave, Vero Beach FL 32960, (772) 562-6854	9	-	Yes	\$5.99 for routine group trips (multi loaded); \$13.57 for separate trips	http://www.arcir.org/services.html
Able Transport	Medical Transport	-	-	No	-	-	-	-	-	Yes	Medicaid Approved	-
All County Ambulance	Ambulance Transport and SRA back-up	Private	Indian River, Martin, St. Lucie, Okeechobee & Hendry counties	Yes	365 days	24/7	4227 Saint Lucie Blvd, Fort Pierce FL 34946, (772) 465-1111	6 Ambulances	N/A	Yes	Varies	http://allcountyambulance.com/
American Cab	Taxi/airport service	Private	Indian River & Brevard counties	No	365 days	24/7	420 S Harbor City Blvd, Melbourne FL 32901, (321) 725-2222	Passenger cars	Varies, typically 4-7	No	Varies	http://www.americancabandbus.com/
American Cancer Society	Non- emergency medical transport and SRA back-up	Non-Profit	Florida	Yes	Mon-Fri, 3 days advance notice	8 AM–6 PM, 24/7 Dispatch	3375 20th St #100, Vero Beach FL 32960, (772) 562-2272	Passenger cars	Varies	-	-	http://fssrc.phhp.ufl.edu/content/american- cancer-society-transportation-program
Black Diamond Express Shuttle	Taxi/airport service	Private	Indian River & Brevard counties	No	365 days	24/7	1275 US Hwy 1 ## 221, Vero Beach FL 32960, (772) 207-1077	Passenger cars	Varies, typically 4-7	No	Varies	http://blackdiamondexpressshuttle.com/
City Cab of Vero Beach	Medicaid Provider	Private	Indian River County	No	-	-	4349 45 th Ave, Vero Beach FL 32967, (772) 562-1640	-	-	-	Medicaid Approved	https://indian- river.fl.us/health/transportation/index.html
Economic Opportunity Council	-	-	Indian River County	No	-	-	1456 Old Dixie Hwy, Building B, PO Box 2766, Vero Beach FL, (772) 562-4177	-	-	-	-	-
Greyhound Bus Lines	Fixed-route bus	Intercity bus	All US	No	365 days	Set trips daily	Sebastian & Vero Beach locations	2 trips	55	No	Varies; \$25+	https://www.greyhound.com/



Name	Туре	Ownership	Service Area	County Agreeme nt?	Service Period	Service Frequency/ Availability	Address & Phone	Vehicles	Seating Capacity	Wheel Chair Equipped	Regular Fare	Website
Indian River Council on Aging	Medicaid Provider	Private	Indian River County	No	-	-	688 14 th St, Vero Beach FL 32960, (772) 569-0903	Vans	-	Yes	\$1 or Medicaid Approved	https://www.seniorresourceassociation.org/
IRC Volunteer Ambulance Squad	Non- emergency medical transport	Non-Profit	Indian River County	No	365 days	24/7	17th Ave, Vero Beach FL 32960, (567) 3160-1729	-	-	Yes	Non-fee (donations accepted)	http://www.ridevas.org/cfiles/about_us.cfm
Jr's Caravan Transportation	Taxi/airport service	Private	Indian River County	No	365 days	M-Th 7AM— 1-10PM, F 7AM— 1:30AM, Sa 8AM— 1:30AM, Su 9AM—8PM	1557 Emerson Ln, Sebastian FL 32958, (772) 985-4830	Passenger cars	Varies, typically 4-7	No	Varies	http://www.jrscaravansebastian.com/
Klub Kar	Taxi/airport service	Private	Vero Beach	No	365 days	6 AM–1:30 AM (7 AM and 8 AM Sat/Sun start)	1050 Old Dixie Hwy, Vero Beach FL 32960, (772) 778-8287	Passenger cars	Varies, typically 4-7	-	Varies	https://www.facebook.com/pg/KlubKar/abo ut/?ref=page_internal
Melbourne Shuttle & Taxi Service	Taxi/airport service	Private	Indian River & Brevard counties	No	365 days	24/7	2903 W New Haven Ave # 446, Melbourne FL 32904, (321) 221-1111	Passenger cars	Varies, typically 4-7	No	Varies	http://melbournefloridashuttle.com/
Stellar Transport	Medical Transport	Private	Melbourne & Vero Beach. Local & Florida Long- Distance	No	365 days	24/7	301 E. Hibiscus Blvd, Melbourne Florida 32901, (321) 222-6222	Passenger cars & Vans	Varies, typically 4-7	Yes	\$30+	https://www.stellartransport.com/
Uber	Taxi/ rideshare	Private	Vero Beach + radius around city	No	365 days	Subject to availability	301 Vermont St, San Francisco CA 94103 (800) 353-UBER	Passenger cars	Varies, typically 4-7	No	Varies	https://www.uber.com/
Veterans Council of Indian River County	Medical transport to VA Medical Center	Non-Profit	Indian River County	No	Mon-Fri	7 trips/day	2525 St. Lucie Ave, Vero Beach FL 32960, (772) 410-5820	2 shuttle buses	-	-	-	http://www.veteranscouncilirc.org/bus- program



SECTION 5 TREND ANALYSIS

To assess how efficiently GoLine supplies fixed-route transit service and paratransit service and how effectively those services meet the needs of the area, a trend analysis of critical performance indicators was conducted to examine the performance of its services over a five-year period. To complete this trend analysis, data from the Florida Transit Information System (FTIS) were used, which includes validated National Transit Database (NTD) data, for which the last five fiscal years of data are available, FYs 2012–2016. Various performance measures were used to present the data that relate to overall system performance.

Three categories of indicators and performance measures were analyzed for the trend analysis of the existing transit services:

- **General performance measures** indicate the quantity of service supply, passenger and fare revenue generation, and resource input.
- **Effectiveness measures** indicate the extent to which the service is effectively provided; can be used to implement goals towards improving the quality of service and customer satisfaction and increasing the market share of transit.
- **Efficiency measures** indicate the extent to which cost efficiency is achieved, i.e., costs in relation to benefit; these can be used to implement goals towards long-term viability and stability of the service.

The trend analysis is organized by the type of measure or indicator and includes statistics, figures, and tables to illustrate GoLine's performance over the past five years. More complete details of the performance review by performance measure can be found in Appendix G for both fixed-route and paratransit services.

5.1 Fixed-Route Trend Analysis

Selected Performance Measures

Table 5-1 presents the 24 performance measures by category used in the trend analysis for GoLine's fixed-route services. A review of these trends is presented by performance measure type, beginning with General Performance Measures and followed by Efficiency Performance Measures and Effectiveness Performance Measures. Some performance measures were eliminated from this analysis due to gaps in data.





Table 5-1: Fixed-Route Performance Measures by Category

Category/Measure
General Performance Measures
Passenger Trips
Passenger Miles
Vehicle Miles
Revenue Miles
Vehicle Hours
Revenue Hours
Route Miles
Total Operating Expense
Vehicles Available in Maximum Service
Effectiveness Performance Measures
Vehicle Miles per Capita
Passenger Trips per Capita
Passenger Trips per Revenue Mile
Passenger Trips per Vehicle Hour
Passenger Trips per Revenue Hour
Revenue Miles between Failures
Efficiency Performance Measures
Operating Expense per Capita
Operating Expense per Passenger Trip
Operating Expense per Passenger Mile
Operating Expense per Revenue Mile
Operating Expense per Revenue Hour
Farebox Recovery Ratio (%)
Revenue Miles per Vehicle Mile
Revenue Miles per Total Vehicles
Average Fare

Summary Results of Fixed-Route Trend Analysis

As previously noted, an analysis of GoLine's fixed-route bus service was conducted using the most recent five year NTD data available (FYs 2012–2016). Although the trend analysis is only one aspect of an overall transit performance evaluation, when combined with the peer review, the results provide a starting point for understanding the efficiency and effectiveness of a transit system. It is important to note that some of the performance measure values for FY 2015 were derived by multiplying values acquired from the 2015 NTD report by a factor of 0.8 due to the need to discount to 12 months the data that were reported for 15 months due to a change in the fiscal year reporting period. Beginning in 2014, GoLine began reporting its annual NTD information as Purchased Transportation instead of Directly Operated, which resulted in a slight change in the reporting period. Therefore, it is possible that some of the inter-year trends are not completely accurate; however, because regular reporting periods resumed for FY 2016, the five-year trend, e.g., the 2012–2016 percent change, is accurate.





Trend Analysis Summary

- **Service Supply** Vehicle miles per capita (service supply) increased by approximately 37% since 2012, indicating that GoLine's services increased during the five-year analysis period. This corresponded with mixed levels of consumption rates as highlighted in service consumption.
- Service Consumption Passenger trips per capita rose almost 9% over the five-year period. However, passenger trips computed per revenue mile, vehicle hour, and revenue hour fell by approximately 18%, 20%, and 24%, respectively, indicating that GoLine is supplying more service but may have room for improved efficiency.
- Quality of Service Not only did the number of vehicle system failures decline over the five-year period, the revenue miles between failures increased by approximately 32%. This indicates that the system's service quality experienced a significant improvement during this period.
- **Cost Efficiency** All cost-related metrics increased for GoLine over the five-year period, with the single exception of a small decline in operating expense per revenue hour (-3.28%), suggesting an overall increase in operation costs.

Table 5-2 summarizes the trend analysis of GoLine's existing fixed-route system in terms of the percent that each performance measure changed between FYs 2012 and 2016.





Table 5-2: Summary of GoLine Fixed-Route Trends

Indicators/Measures by Type	% Change 2012–2016
General Performance Me	easures
Passenger Trips	8.88 %
Passenger Miles	16.90 %
Vehicle Miles	37.43 %
Revenue Miles	32.34 %
Vehicle Hours	36.85 %
Revenue Hours	43.18 %
Route Miles	35.69 %
Total Operating Expense	38.48 %
Vehicles Available in Maximum Service	36.84 %
Effectiveness Performance	Measure
Service Supply	
Vehicle Miles per Capita	37.43 %
Service Consumption	
Passenger Trips per Capita	8.88 %
Passenger Trips per Revenue Mile	-17.73 %
Passenger Trips per Vehicle Hour	-20.44 %
Passenger Trips per Revenue Hour	-23.96 %
Quality of Service	
Revenue Miles between Failures	32.34 %
Efficiency Performance N	leasure
Cost Efficiency	
Operating Expense per Capita	38.48 %
Operating Expense per Passenger Trip	29.18 %
Operating Expense per Passenger Mile	18.47 %
Operating Expense per Revenue Mile	4.64 %
Operating Expense per Revenue Hour	-3.28 %
Operating Ratios	
Farebox Recovery Ratio (%)	n/a
Vehicle Utilization	
Revenue Miles per Vehicle Mile	-3.70 %
Revenue Miles per Total Vehicles	-3.29 %
Fare	
Average Fare	n/a
Source: NTD FTIS	-

5.2 Paratransit Service Trend Analysis

Selected Performance Measures

Table 5-3 lists the 21 performance measures by category used in the trend analysis for GoLine's paratransit services provided by Community Coach, as well as TD services. The scope of this analysis is smaller than that for the fixed-route services because of the availability of fewer indicators and measures. A review of these trends is presented by performance measure type, beginning with General Performance Measures and followed by Efficiency Performance Measures and Effectiveness Performance Measures.



Table 5-3: Paratransit Performance Measures by Category

Category/Measure
General Performance Measure
Passenger Trips
Passenger Miles
Vehicle Miles
Revenue Miles
Vehicle Hours
Revenue Hours
Total Operating Expense
Vehicles Available in Maximum Service
Effectiveness Performance Measure
Vehicle Miles per Capita
Passenger Trips per Capita
Passenger Trips per Revenue Mile
Passenger Trips per Vehicle Hour
Passenger Trips per Revenue Hour
Revenue Miles between Failures
Efficiency Performance Measure
Operating Expense per Capita
Operating Expense per Passenger Trip
Operating Expense per Passenger Mile
Operating Expense per Revenue Mile
Operating Expense per Revenue Hour
Revenue Miles per Vehicle Mile
Revenue Miles per Total Vehicles

Summary Results of Paratransit Service Trend Analysis

The analysis conducted for Community Coach's separate door-to-door service used data from the FTIS, which includes validated NTD data for FYs 2013–2017. Combined with the trend analysis conducted for GoLine's fixed-route service and the peer review analysis, the results further the understanding of the efficiency and effectiveness of a transit system.

Trend Analysis Summary

- **Service Supply** Vehicle miles per capita (service supply) d increased significantly since 2013, indicating that paratransit services in terms of vehicle miles increased at a faster rate than population during the five-year analysis period.
- Service Consumption Passenger trips per capita increased approximately 50% over the five-year period. Passenger trips per revenue mile, vehicle hour, and revenue hour each declined (approximately -14%, -2%, and 6%, respectively), indicating that service is being provided at a higher rate of growth than passenger trips and that the pace of service growth may be affecting overall efficiency.
- Quality of Service Not only did the number of vehicle system failures decline over the five-year period, the revenue miles between failures increased by approximately





208%. This indicates that the system's service quality experienced a significant improvement during this period.

• **Cost Efficiency** – Although the operating expense per capita for paratransit service increased slightly over the five-year period, the other four remaining metrics decreased, indicating that the cost efficiency of the service provided has improved over the five-year period.

Table 5-4 summarizes the trend analysis of paratransit service in terms of the percentage that each performance measure changed between FYs 2013 and 2017.

Table 5-4: Summary of Community Coach Paratransit Trends

Indicators/Measures by Type	% Change 2013–2017							
General Performance Measures								
Passenger Trips	49.3%							
Passenger Miles	43.8%							
Vehicle Miles	70.5%							
Revenue Miles	74.9%							
Vehicle Hours	52.4%							
Revenue Hours	58.4%							
Total Operating Expense	3.3%							
Vehicles Available in Maximum Service	28.0%							
Effectiveness Performance N	leasures							
Service Supply								
Vehicle Miles per Capita	70.5%							
Service Consumption								
Passenger Trips per Capita	49.3%							
Passenger Trips per Revenue Mile	14.6%							
Passenger Trips per Vehicle Hour	-2.01%							
Passenger Trips per Revenue Hour	-5.70%							
Quality of Service								
Revenue Miles between Failures	207.5%							
Efficiency Performance Me	asures							
Cost Efficiency								
Operating Expense per Capita	3,3%							
Operating Expense per Passenger Trip	-13.4%							
Operating Expense per Passenger Mile	28.2%							
Operating Expense per Revenue Mile	-40.9%							
Operating Expense per Revenue Hour	-34.8%							
Vehicle Utilization								
Revenue Miles per Vehicle Mile	2.5%							
Revenue Miles per Total Vehicles	-36.3%							

Source: NTD FTIS





SECTION 6 PEER SYSTEM REVIEW ANALYSIS

Using the same measures as the preceding Trend Analysis, a peer system review analysis was conducted to compare various GoLine fixed-route performance characteristics to a group of transit peers using the most recent data at the time of the analysis, FY 2015 NTD data.

Various performance measures were used to present the data that relate to overall system performance. Furthermore, the three categories of indicators and performance measures that were analyzed for the peer analysis of the existing transit service were the same as those used for the trend analysis.

The selection process for the peer system review is described first, followed by a summary of highlights from the peer review analysis. More complete details of the performance review by performance measure can also be found in Appendix G.

6.1 Peer System Selection

The fixed-route peer system selection was conducted using 2015 NTD data available in the FTIS database. The 2015 data for all systems reported in NTD were then compared with 2015 data for GoLine. The pool of possible peers was assessed and subsequently scored through an objective assessment of nine standard variables in the NTD:

- Geography (southeastern US)
- Average speed (RM/RH)
- Passenger trips
- Revenue miles
- Service area population
- Service area population density
- Total operating expense
- Vehicles operated in maximum service
- Revenue hours

First, the peer group selection was based on geographic location (southeastern states), which include Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia. Fixed-route systems operating in these states were added to the pool of possible peers and then were hand-selected using two subjective criteria.

Next, the remaining potential peer candidates were compared to the peer list from the prior TDP Major Update as well as the peer systems identified in the recent TRB report "Fare-free Transit in a Small Urban Environment: Indian River County's Million Rider Experience" to add consistency to the series of peer analyses conducted for the GoLine. The eventually-selected peers, as summarized in Table 6-1, were included because of their inclusion in at least one of the two previously-mentioned analyses and coming within two standard deviations of the nine standard variables used in the FTIS database peer selection tool.





Agency Name	Abbreviation	Location
High Point Transit	High Point	High Point, NC
Lakeland Area Mass Transit District	LAMTD	Lakeland, FL
Escambia County Area Transit	ECAT	Pensacola, FL
Johnson City Transit System	Johnson City	Johnson City, TN
City of Huntsville Public Transportation Division	Huntsville	Huntsville, AL
Pasco County Public Transportation	PCPT	Port Richey, FL
Collier Area Transit	CAT	Naples, FL
Bay County Transportation Planning Organization	Bay Trolley	Panama City, FL

Summary Results of Peer Review Analysis

The peer review analysis conducted to assess GoLine's fixed-route service used data from the FTIS, which includes validated NTD data for FY 2015. The indicators and measures used as part of this analysis are the same as those used in the fixed-route trend analysis. A review of these trends is presented by performance measure type, beginning with General Performance Measures and followed by Efficiency Performance Measures and Effectiveness Performance Measures. Combined with the trend analysis conducted for GoLine's fixed-route and paratransit services, the peer review analysis results provide the most complete picture to date of the efficiency and effectiveness of a transit system.

As noted in the trend review, some of the performance measure values for FY 2015 were derived using a simple calculation; because of this, comparisons in the peer analysis should be weighed in consideration that some of the values used for GoLine may not exactly represent its performance during FY 2015.

Peer Review Analysis Summary

The following summarizes the peer review analysis of performance indicators prepared for GoLine:

- General Performance Measures GoLine placed above the peer mean for most general performance measures with three exceptions—passenger miles, total operating expense, and vehicles operated in maximum service. Overall, this can be taken to mean that GoLine is able to provide more to its passengers with fewer resources.
- Effectiveness Measures GoLine placed consistently above the peer mean for most effectiveness measures except for passenger trips per revenue mile. Higher vehicle miles per capita indicates that the supply of service is more than that typically experienced in other similar areas, and higher-than-average vehicle miles between failures may be a product of greater service supply, a greater distance traveled in the system overall, better road conditions, or simply better vehicle care. The three service consumption measures for which GoLine was above the peer average were all between 17% and 42% below the peer mean, indicating that GoLine may service a comparable transit-dependent area and has set its service hours to maximize ridership during each route's daily span.





• Efficiency Measures – The cost efficiency measures provide strong indications of areas of comparative strength for GoLine. For each of the operating expense measures examined, GoLine placed lower than the peer means by at least 5% (per capita) and as much as 41% (per revenue mile). As for vehicle utilization, GoLine is practically on par with the peer mean for revenue miles per vehicle mile, yet its revenue miles per total vehicles is more than 12% above the peer mean, suggesting that it either has a smaller fleet size or simply the vehicles experience higher than average use per vehicle.

Table 6-2 summarizes the peer review analysis of GoLine's existing fixed-route system in terms of the percent that each performance measure departs from the peer mean.

Table 6-2: Summary of GoLine Peer Review Analysis

Indicators/Measures by Type	% Variation from Peer Mean			
General Performance Measur	es			
Passenger Trips	17.98 %			
Passenger Miles	-2.76 %			
Vehicle Miles	28.81 %			
Revenue Miles	15.55 %			
Vehicle Hours	18.16 %			
Route Miles	53.32 %			
Total Operating Expense	-29.71 %			
Vehicles Available in Maximum Service	-11.22 %			
Effectiveness Performance Meas	sures			
Service Supply				
Vehicle Miles per Capita	112.67 %			
Service Consumption				
Passenger Trips per Capita	41.96 %			
Passenger Trips per Revenue Mile	-7.65 %			
Passenger Trips per Vehicle Hour	19.81 %			
Passenger Trips per Revenue Hour	17.86 %			
Quality of Service				
Revenue Miles between Failures	425.02 %			
Efficiency Performance Measures				
Cost Efficiency				
Operating Expense per Capita	-5.03 %			
Operating Expense per Passenger Trip	-35.89 %			
Operating Expense per Passenger Mile	-37.83 %			
Operating Expense per Revenue Mile	-40.97 %			
Operating Expense per Revenue Hour	-25.26 %			
Operating Ratios				
Farebox Recovery Ratio (%)	n/a			
Vehicle Utilization				
Revenue Miles per Vehicle Mile	0.10 %			
Revenue Miles per Total Vehicles	12.13 %			
Fare				
Average Fare	n/a			





SECTION 7 SITUATION APPRAISAL

This section documents the situation appraisal, which assesses the transit operating environment in Indian River County with respect to land use, state and local transportation plans, socioeconomic trends, organizational issues, technology, and 10-year public transportation ridership projections. The situation appraisal serves as the basis for the formulation of Indian River County's transit needs and goals and objectives.

7.1 Review of Plans and Studies

This section reviews transit policies and plans at local, regional, state, and federal levels of government to identify policies or issues that could impact GoLine service. The results of this plans review serves as a component of the situation appraisal. As part of this effort, the following plans and programs were reviewed:

- Federal Plans/Programs
 - o Fixing America's Surface Transportation (FAST) Act
 - Grow America Act
- State Plans/Programs
 - o Florida Transportation Plan: Horizon 2060
 - o State of Florida Transportation Disadvantaged (TD) 5-Year/20-Year Plan
- Regional Plans/Programs
 - o Treasure Coast 2040 Regional Long Range Transportation Plan (RLRTP)
- Local Plans/Programs
 - Transit Plans
 - Indian River County LRTP 2040
 - Indian River County TDP 2013
 - Indian River County TDSP 2013
 - Indian River County PPP 2016
 - Comprehensive Plans
 - City of Fellsmere Comprehensive Plan
 - City of Vero Beach Comprehensive Plan
 - City of Sebastian Comprehensive Plan
 - Indian River County Comprehensive Plan
 - Other
 - White Paper- Site Assessment for the North County Bus Transit Hub

7.2 Summary of Findings

As summary of findings from the review of federal and state plans and programs is presented in Table 7-1, and a summary from reviewing regional and local plans and programs is provided in Table 7-2. A more detailed assessment of each document is provided in Appendix H.





Table 7-1: Summary of Federal and State Plans and Programs

Plan/Program/ Study Reviewed	Most Recent Update	Geography & Responsible/ Partner Agencies	Overview	Key Consideration for the Situation Appraisal
Fixing America's Surface Transportation (FAST) ACT	October 2015	USDOT	Five-year funding for nation's surface transportation infrastructure, including transit systems and rail transportation network. Provides long-term certainty and more flexibility for states and local governments, streamlines project approval processes, and maintains a strong commitment to safety.	 Increases dedicated bus funding by 89% over the life of the bill. Provides both stable formula funding and a competitive grant program to address bus and bus facility needs. Reforms public transportation procurement to make federal investment more cost effective and competitive. Consolidates and refocuses transit research activities to increase efficiency and accountability. Establishes a pilot program for communities to expand transit through the use of public-private partnerships. Provides flexibility for recipients to use federal funds to meet their state of good repair needs. Provides for the coordination of public transportation services with other federally-assisted transportation services to aid in the mobility of older adults and individuals with disabilities.
Grow America Act	2016	USDOT	Six-year surface transportation reauthorization proposal focused on modernizing transportation infrastructure.	 Includes \$115 billion for transit investments and expanded transportation options. Allows and encourages MPOs within the same MSA to consolidate and collaborate Adds new multimodal connectivity performance measures Adds \$4B to TIGER program, and created a "Fixing and Accelerating Surface Transportation" (FAST) grant program to help accelerate the adoption of innovative non-federal funding concepts and the efficient use of existing infrastructure Establishes a pilot program which allows public transportation to use tolling funds for mobility and environmental benefits
Florida Transportation Plan: Horizon 2060 (FTP)	2005	FDOT	Plan, required under Florida Statutes, to make Florida's economy more competitive, communities more livable. Looks at a 50-year transportation planning horizon, calls for a fundamental change in how and where State investments in transportation are made.	Supports the development of state, regional, and local transit services through a series of related goals and objectives, emphasizing new and innovative approaches by all modes to meet the needs today and in the future.
State of Florida Transportation Disadvantaged (TD) 5-Year/20- Year Plan	November 2007	FL CTD	Developed by the CTD, this plan is required under the Florida Statutes and includes the following elements: • Explanation of the Florida Coordinated Transportation System • Five-Year Report Card • Florida Office of Program Policy Analysis and Government Accountability Review • Strategic Vision and Goals, Objectives, and Measures	 The five-year and long-range strategic visions were reviewed and used for guidance and are indicated below. Long-Range Strategic Vision The long-range strategic vision seeks to create a strategy for the Florida CTD to support the development of a universal transportation system with the following features: A coordinated, cost-effective multimodal transportation system delivered through public-private partnerships. A single, uniform funding system with a single eligibility determination process. A sliding scale of fare payment based on a person's ability to pay. Use of electronic fare media for all passengers. Services that are designed and implemented regionally (both inter-county and inter-city) throughout the state. Five-Year Strategic Vision The five-year strategic vision seeks to develop and field-test a model community transportation system for persons who are transportation disadvantaged by incorporating the following features: Statewide coordination of community transportation services using Advanced Public Transportation Systems including Smart Traveler Technology, Smart Vehicle Technology, and Smart Intermodal Systems. Statewide coordination and consolidation of community transportation funding sources. A statewide information management system for tracking passenger eligibility determination. Integration of Smart Vehicle Technology on a statewide multimodal basis to improve vehicle and fleet planning, scheduling, and operations. This effort includes vehicle and ridership data collection, electronic fare media, and geographic information system (GIS) applications. Development of a multimodal transportation network to optimize the transportation system as a whole using Smart Intermodal Systems. This feature would be availa



Table 7-2: Summary of Regional and Local Plans and Programs

Plan/Program/ Study Reviewed	Most Recent	Geography & Responsible/ Partner	Overview	Key Consideration for the Situation Appraisal
	Update	Agencies		
Treasure Coast 2040 Regional Long Range Transportation Plan (RLRTP)	2017	Martin County MPO, St. Lucie County MPO, Indian River County MPO	25 year guidance for federal and state regional funding towards projects valued by the Treasure Coast region.	 TCTC endorsed several goals for the 2040 Treasure Coast RLRTP: Provide a safe, connected, and efficient multimodal transportation system for regional movement of people and goods Support economic prosperity through targeted regional transportation investments that preserve the existing system, while expanding modal options Currently five routes of the 3 public transit providers has a regional impact. Five regional transit needs were identified, only one (1) of which has impacts for Indian River County US 1 Bus Rapid Transit (BRT) – rapid transit bus system along US 1 Corridor from Hobe Sound to Sebastian
Indian River County 2040 LRTP	2015	Indian River County MPO	20-year guide for transportation improvements within urbanized area, updated every 5 years. Provides year-by-year methods to reach goals; must be consistent with State and federal requirements to maintain funding.	GoLine has expanded the number of routes and service hours since the 2035 LRTP Plan, with 16 GoLine routes. Service improvements recommended include: • Extension of weekday operations • Extension of Saturday operations • Extension of Sunday operations • Realignment of Route 11. Recommended capital improvements include: • Bus shelters and fleet upgrades and expansions Long-term need projects recommended include • Increased frequency to one bus every 30 minutes on Routes 1, 2, 3, 4, and 8 • New route connecting Fellsmere and Sebastian to Barrier Island via CR 512, US 1 and CR 510 Causeway • New route on A1A from Village Beach Market to CR 510 Causeway
Indian River County 2014–2023TDP Major Update	2013	Indian River County MPO	A strategic assessment and planning document for GoLine transit service, updated every 5 years.	Presented one goal of the County's 10-year vision for transit, and seven objectives: • Goal: Provide safe, efficient, effective and accessible public transportation Objectives: • Increase Transit Ridership and Enhance System Performance • Improve Cost Efficiency • Improve Safety • Increase Transit Funding and Revenue • Increase Accessibility • Improve Transit Quality of Service Improve Transit Service Coverage and Coverage
Indian River County 2013 TDSP	2013	Indian River County MPO	Federally-required program, annually updated tactical plan jointly developed by designated Planning Agency and local Community Transportation Coordinator; contains development, service, and quality assurance components to address the needs of the transportation disadvantaged	The following goal has been developed as part of the TDSP: To ensure that efficient, safe, and convenient transportation is available twenty-four (24) hours a day, seven (7) days a week to health care, employment, education, shopping, social services, and other life sustaining activities for citizens who are unable to transport themselves, or to purchase transportation because of physical or mental disability, income status, or age.



Plan/Program/ Study Reviewed	Most Recent Update	Geography & Responsible/ Partner Agencies	Overview	Key Consideration for the Situation Appraisal
Indian River County 2016 Public Participation Plan (PPP)	2011	Indian River County MPO	Framework of public participation activities for MPO programs that are consistent with Federal and State guidance on MPO public participation.	Details the public outreach strategies required for the Transit Development Plan; outlining the public participation activities the major updates, minor updates, and other recurring activities.
City of Vero Beach Comprehensive Plan	2015	City of Vero Beach	Primary policy document concerning land use, transportation, and other planning matters for Vero Beach.	Regarding transit, the City will make provisions for a safe, convenient and efficient multi-modal transportation system; support the County in its provision of public transit service in the urban area; support one-hour headways on all fixed routes; support the MPO for coordination transportation disadvantaged services; and coordinate with the MPO on whether transit improvements should be included in the project priorities submitted to FDOT for state and federal funding, on an annual basis.
City of Sebastian Comprehensive Plan	2009	City of Sebastian	Primary policy document concerning land use, transportation, and other planning matters for Sebastian.	Regarding transit, the City's transportation system will be coordinated with the work plans and programs of Indian River County, FDOT, the Florida Transportation Plan, and the Indian River County Metropolitan Planning Organization.
City of Fellsmere Comprehensive Plan	2009	City of Fellsmere	Primary policy document concerning land use, transportation, and other planning matters for Fellsmere.	Aims to ensure an integrated multimodal transportation system; effective multi-agency coordination on planning and development with Indian River County and Indian River County MPO; effective and integrated land use, site and building design standards for public transit corridors, should fixed-route daily public transit services become available in Fellsmere; coordination of transit planning and land use planning processes; efficient and effective public transit service which provides linkages between transit and significant attractors; integration of transportation alternatives and ease of transfer between modes.
Indian River County Comprehensive Plan	2010	Indian River County	Guides development, land use decisions, preservation of existing transportation infrastructure, and transportation improvements.	Regarding transit, the plan states Indian River County shall coordinate with all applicable government agencies to provide efficient and accessible public transportation for all users through 2030; maintain its fixed-route system; and establish land use guidelines to ensure accessibility to public transit throughout the County.
White Paper – Site Assessment for the North County Bus Transit Hub	2017	Indian River County MPO	Identified potential site locations, evaluate sites using a two-tiered approach, and provided recommendations for the preferred site for the North County Transit Hub.	Identified a preferred short-term and a long-term alternative site: Short-Term − Vacant Lot at 9455 CR 512/Sebastian Boulevard





7.3 Regional Coordination

Treasure Coast Regional Planning Council

The Treasure Coast Regional Planning Council (TCRPC) is one of the area's only regional agencies in which elected officials and appointed leaders gather to discuss and address complex issues facing the region, develop strategic responses for addressing them, and build consensus for creating and accomplishing regional goals. The Council was created in 1976 through an interlocal agreement between Indian River, St Lucie, Martin, and Palm Beach counties and currently provides local and regional comprehensive plan, urban design, planning, emergency preparedness, economic development, and transportation planning assistance, among other services. The TCRPC currently operates with the mission of promoting the health, safety, and general welfare in the citizenry of the four counties it represents and planning for the future development of the region that will maintain a high quality of life and economic competitiveness.

The Strategic Regional Policy Plan for the four-county region was last updated in 1995 and includes recommendations and guidance that uses New Urbanism and Smart Growth principles to guide development and growth. Outside of the Strategic Regional Policy Plan, the TCRPC has not issued any major plans or updates to the future of the region.

Treasure Coast Transportation Council

The Treasure Coast Transportation Council is an administrative entity created by an interlocal agreement between the Indian River, St Lucie, and Martin County MPOs in April 2006 to provide a formal mechanism for coordinating regional transportation planning on the Treasure Coast. Meetings are held bi-annually. The TCTC serves as the final reviewing and adopting entity for the Regional Long Range Transportation Plan (RLRTP) and provides the mechanism through which the M/TPOs can jointly pursue State funding opportunities.

7.4 Situation Appraisal

Requirements for a 10-year TDP update in Florida include the need for a situation appraisal of the environment in which the transit agency operates. The purpose of this appraisal is to help develop an understanding of the transit operating environment in Indian River County in the context of the following elements:

- Socioeconomic Trends
- Travel Behavior
- Land Use
- Organization Issues
- Technology
- Funding
- Regional Transit Issues

The assessment and resulting implications and considerations re drawn from the following resources:





- Review of relevant plans, studies, and programs prepared at all levels of government
- Results of technical evaluations performed as part of GoLine planning process
- Discussions with GoLine and Indian River County MPO staff
- Outcomes of public outreach activities

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

Socioeconomics Trends

To better assess the impact of the growth in population and employment on public transportation needs, it is important to understand the trends and markets that could be impacted by or may benefit from improved or continued public transportation services.

- The *Florida Statistical Abstract*, prepared by BEBR at the University of Florida, indicates that the county population will reach 178,300 by 2030 and 201,800 by 2045, increases of 29% and 46%, respectively, from the 2010 base year.
- As is typical in Florida coastal communities, the highest population densities are in the coastal areas of the county. Much of the projected growth in population and density is anticipated to occur north of Lakewood Park, along Highland Drive SW and 43rd Ave, and to the north of 53rd Ave near Bent Pine Golf Club
- Age demographics in the area have not changed significantly over the past 15-year period and are anticipated to remain stable through 2030. Of particular consideration, Indian River County has a larger proportion of older adults than the statewide average and will continue to increase as a total share of the county population through 2045. Older adults may be more likely to use public transportation as the aging process begins to limit their ability or preference to drive. The majority of transportation disadvantaged trips in the county were made by older adults, with the potential TD population growing over 10% the past 15 years. These residents are located primarily in Orchid and Indian River Shores.
- Existing employment in Indian River County is densest and concentrated primarily along the coastal areas, particularly in Vero Beach along 82nd Ave between Indian River Mall and Vero Beach Outlets, along College Lane, in Wabasso west of US-1, and along SR 60. Growth in employment is projected to grow in areas where it already exists.
- Indian River County is experiencing growth in ethnic diversity, with the Hispanic or Latino populations almost doubling in size during the last 15 years. A small amount of growth was seen in the Black or African American community during the previous 15-year period. In addition, families below the poverty level grew around 3% during the 15-year period, from 6% to 9% of the total county population. This growth represents a potentially growing market of traditionally transit-oriented populations.





In light of current socioeconomic trends and indicators in the county, most of the core areas of the county that are considered transit-supportive today in terms of traditional and discretionary markets are currently being served by GoLine. However, there are still a few areas, primarily on the barrier island, with populations from traditional transit markets that currently are not served by GoLine

Implications – Traditional and discretionary markets are anticipated to grow consistent with the overall population growth within the county. GoLine should continue to target its base ridership, which consists of traditional bus users, while making efforts to grow ridership in discretionary riders. GoLine's continued success will depend on its ability to tailor services that will expand its ridership base and capture new transit markets and riders.

Travel Behavior

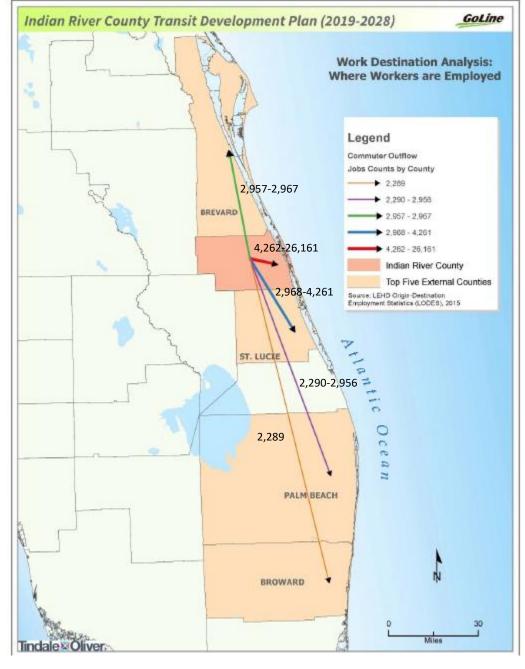
The analysis of trends and statistics for travel behavior in Indian River County indicate the following:

- Driving alone is the most frequently used mode for traveling to work, with more than 80% of all commuters. The second most used mode of traveling to work is carpooling, with just over 10% of all commuters. Only 0.3% of all commuters take public transit, 1.1% walk, and 0.4% bicycle to work.
- A review of regional travel behavior for commuters indicates that the majority of residents work within Indian River County (see Map 7-1). Between 3,000 and 4,200 workers commute to St. Lucie County, around 2,300 commute to Brevard County, around 3,000 commute to Broward County, and around 3,000 commute to Palm Beach County. According to the US Census Bureau's 2000 Census, 82% of county residents worked within the county.
- In contrast, a smaller share of workers commute into Indian River County. Around 1,000 workers commute from Palm Beach County, 4,200 from St. Lucie County, around 2,500 from Brevard County, and 848 from Orange County.

Implications – GoLine will continue to be challenged by the need to provide local and regional service to those who are dependent on public transportation to access work and other essential services. Although the majority of workers are employed within the county, there is a continued need to provide regional transit services and access to work, shopping, and other services. As traditional transit markets and transit-oriented demographics continue to grow in the county, as well as those who have cars but wish to ride transit for personal and environmental reasons, transit does and will need to have the opportunity to become an integral part of travel behavior in Indian River County.







Map 7-1: Work Destination Analysis

Land Use

A review of current and merging land uses was conducted, with particular attention paid to how the County and municipalities have developed land-use strategically to aid in reshaping its land use to increase mobility, transit-oriented or transit-supportive uses, and overall quality of life for its residents.



- Although Indian River County's 2030 Comprehensive Plan promotes the creation of mixed-use developments, there are no mixed-use designations in the 2030 Future Land Use map. Nonetheless, a handful of areas are designated as medium density residential along SR 60 between the highways, and higher densities are allowed north of Vero Beach along 45th St, south of Vero Beach along US-1, and north of Sebastian along the coast.
- In Vero Beach, the majority of commercial land uses is designated along Highway
 AIA and Ocean Dr, as well as north of 17th St along Indian River Blvd near the center
 of Vero Beach. In addition, the central area of the municipality is designated for
 mixed uses along US-1 south of Aviation Blvd and north of 17th St, coincide with
 GoLine's current route network.
- Indian River Shores, Orchid, and Fellsmere are zoned primarily for low-density single-family residential, with little to no mention of transit-oriented development. Some areas of the towns and city have medium to high density residential zones, with commercial fronting the major roadways.
- Sebastian has riverfront mixed-use zoning surrounding the US-1 CRA boundary.

Implications – GoLine, the Indian River County MPO, Indian River County, and the local municipalities must continue to participate and coordinate with ongoing efforts that encourage a transit-oriented land use framework, with the aim of creating a vibrant mixed-use environment that supports transit use. Currently, Indian River County has made efforts to include transit-oriented or transit-supportive land uses as part of its Comprehensive Plan, and it is essential to collaborate with local jurisdictions for effective community buy-in and to create and support a vision to ensure that land development policies and land development codes require and provide for the mix of uses that supports adequate levels of transit service.

Organizational Structure and Considerations

The Indian River County MPO is the designated legislative agency responsible for transportation planning in Indian River County and is housed within the County's Community Development Department. SRA is the designated CTC for the County and currently provides and operates the GoLine fixed-route system. In addition, SRA is responsible for the provision of all public transportation services including paratransit, demand-responsive service, and TD services.

The fixed-route service was established in 1994 and, since 2007, SRA has operated its fixed-route services under the GoLine name. Community Coach is SRA's door-to-door transit system, which provides transportation for riders with no other means of transportation, including those who use wheelchairs, walkers, canes, service animals, and other mobility aids.

Implications – GoLine should continue to assess the transit system and network in its effort to increase service and management efficiencies. Periodic efforts, which can be conducted





as part of a Comprehensive Operations Analysis or an internal assessment more limited in scale, could help identify whether any operations or management efficiencies could be gained. Such efforts could also guide the County and transit provider to policy decisions and a clear vision for the future of GoLine.

Technology

GoLine has continued to implement new technology to enhance the overall transit experience for its users. GoLine currently uses a GPS Tracker that provides real-time bus arrival and departure information based on route, address, or current location using the free smartphone application *RouteShout*. Real-time bus information provides an enhanced transit user experience and is at the cutting edge of transit technology. GoLine uses automatic passenger counters to obtain ridership data.

Future considerations for improved technology and data collection could include automatic passenger counters, automated voice announcements systems for stops, queue jump lane technologies, and priority signals. In addition, many transit agencies are increasingly opting to use alternative fuel vehicles, which tend to be more fuel-efficient and environmentally-friendly.

GoLine currently provides very little information to the public about its organization and purpose on its website. In conjunction with the County, GoLine should develop a more robust website platform that provides an overview of the organization and its overall system and services.

Implications – Agencies invest in technology improvements to enhance the rider experience while on board and sometimes off-board, but they may not market such additions adequately, leaving rider unaware of their existence. For example, RouteShout may go unnoticed unless it is communicated to riders. Real-time bus tracking or Wi-Fi services on buses may attract youth and discretionary riders. GoLine could consider additional marketing of new technologies so existing and potential riders are aware of their existence and can take advantage of the benefits they offer.

GoLine should consider the implementation of additional technologies such as APCs, voice announcement systems, and other software upgrades that could enhance its quality of service, ridership data, and performance monitoring efforts.

Funding

Securing a dedicated long-term funding source for public transportation services is a goal that many providers of transit service aspire to achieve. Currently, the major portion of GoLine's transit operations are funded by a mix of federal, State, and local funds allocated on a year-by-year basis. GoLine's capital program is funded primarily through State and federal dollars.

The GoLine system is unique in that the services provided to public transit users are free – no farebox revenue is collected for any fixed-route and paratransit services. As a result, a





major source of revenue for most peer systems is nonexistent for the GoLine system. As GoLine ridership continues to grow and costs and expenses increase along with it, the system could consider flex routes, transportation networking companies, and enhanced screening for paratransit eligibility. Other revenue sources to be considered include public-private partnerships with local institutions.

Of particular concern is the major growth seen in ADA paratransit services provided by GoLine, which, given the fixed-routes free service, must also be provided free of charge for the user. As the number of trips has increased, so have the costs associated with providing the mandatory service, funding for which comes from the GoLine's fixed-route services.

Implications – To maintain or expand services, funding levels will need to increase, particularly if ADA paratransit trip demand continues to grow at a similar pace as the last five years. A variety of innovative and typical funding methods are available to help GoLine maintain and expand its services, including a fare for fixed-route service, advertising, public-private partnerships, Multimodal Tax Increment Financing (TIF) districts, and/or allocating a percentage of multimodal impact fees generated by new development to transit capital or operating improvements.

Regional Coordination and Transit Issues

The TCTC recently adopted the 2040 Treasure Coast Regional LRTP, which created a singular long-term transportation plan for the regional transportation network of Indian River, St. Lucie, and Martin counties, with a 25-year planning horizon. The plan creates a regional overlay and combined the regional projects from the local transportation plans for the three-county area to create the singular long-term vision. Several major regional transit projects also were identified through the Regional LRTP, including a US 1 Bus Rapid Transit (BRT) project, an I-95 Express Bus, a Turnpike Express Bus, and an extension of the Tri-Rail System to Fort Pierce. Of the major regional transit projects identified through the Regional LRTP, only one, the US-1 BRT project, provides regional connectivity for GoLine and Indian River County.

Continued coordination among the three counties is essential for improving connectivity and accessibility between them and for the overall economic vitality of the region. Identifying funding sources and competing for federal and State dollars to fund major regional transit projects through programs such as TRIPS will require continued coordination and dedication from the three M/TPOs, counties, and local jurisdictions.

Implications – As the Treasure Coast region grows in population and total number of jobs, travel times and congestion will certainly increase, requiring improved formal coordination on planning activities, particularly on the coordination of transportation and land use, within the region. GoLine should continue to pursue regional coordination and projects that improve the accessibility of residents to essential and major destinations within the region.





SECTION 8 TRANSIT DEMAND ASSESSMENT

This section summarizes the demand and mobility needs assessment conducted as part of this major TDP update for GoLine. Three assessment techniques were used to assess demand for transit services in Indian River County, which include:

- Discretionary Market Assessment
- Traditional Market Assessment
- · Forecast ridership analysis using transit planning modeling

A summary of the assessment techniques is presented, followed by the results of each analysis. When combined with the situation appraisal, performance reviews, and public involvement feedback, the demand assessment yields the building blocks for evaluation the transit needs for the next 10 years.

8.1 Market Assessment

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

Discretionary Market

The discretionary market refers to potential riders living in higher density areas of the county that may choose to use transit as a commuting or transportation alternative. A Density Threshold Assessment (DTA) was conducted based on industry standard relationships to identify those areas of Indian River County that will experience transit-supportive residential and commercial density levels in 2026. Three levels of density thresholds were developed to indicate if an area contains sufficient densities to sustain efficient fixed-route transit operations:

- *Minimum* Reflects minimum population or employment densities to consider basic fixed-route transit services (i.e., fixed-route bus service).
- *High* Reflects high population or employment densities that may be able to support higher levels of transit investment than areas that meet only the minimum density threshold (i.e., increased frequencies, express bus).
- Very High Reflects very high population or employment densities that may be able to support higher levels of transit investment than areas that meet the minimum or high density thresholds (i.e., premium transit services, etc.).

Table 8-1 presents the density thresholds for each of the noted categories.





Table 8-1: Transit Service Density Thresholds

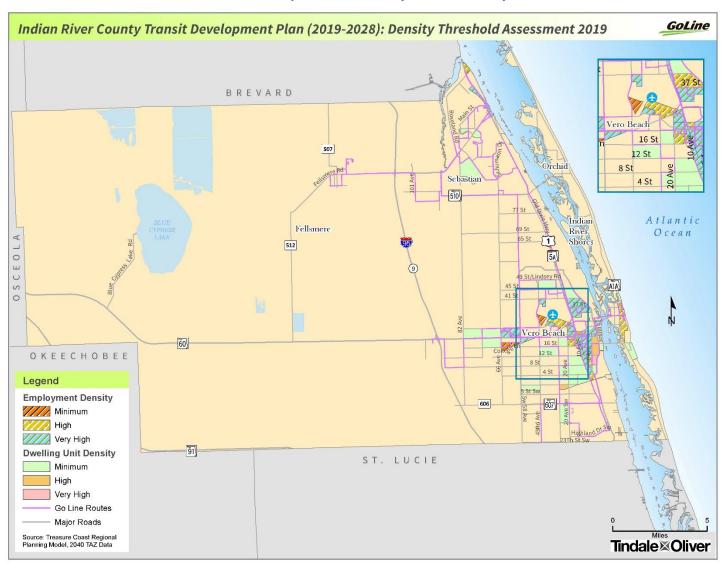
Transit Investment	Population Density Threshold	Employment Density Threshold
Minimum	5 dwelling units/acre	< 4 employees/acre
High	6–7 dwelling units per acre	5–6 employees/acre
Very High	≥ 7 dwelling units/acre	≥ 7 employees/acre

Map 8-1 and Map 8-2 illustrate the 2019 and 2028 DTAs and show the existing GoLine transit route network to indicate how well GoLine covers the areas of the county that are considered transit-supportive, i.e., areas supporting at least a minimum investment in transit. As shown, the GoLine transit system covers the areas of Indian River County with higher levels of transit supportive densities.

The 2019 DTA analysis indicates that the discretionary transit market is principally residential-based, with high and very high employment density thresholds primarily in Vero Beach. In reviewing the 2028 DTA, the locations of the discretionary market are expected to change minimally in Sebastian along Main St, with a small area reflecting a minimum dwelling unit density threshold in 2028. Another area of change is in Vero Beach along US 1 around 37th St, where the employment density is expected to grow from the high to very high threshold.

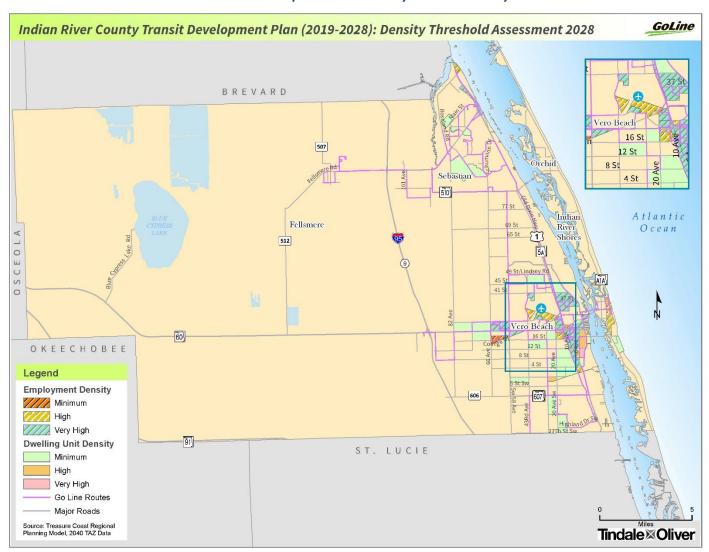






Map 8-1: 2019 Density Threshold Analysis





Map 8-2: 2028 Density Threshold Analysis



Traditional Market

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

A Transit Orientation Index (TOI) assists in identifying areas of the county where a traditional transit market exists. To create the TOI for this analysis, five-year demographic data estimates from the 2011–2015 Five-Year ACS estimates were compiled at the census tract level (the most detailed level of data available from ACS) and categorized according to each tract's relative ability to support transit based on the prevalence of specific demographic characteristics. Five population and demographic characteristics that are traditionally associated with the propensity to use transit were used to develop the TOI:

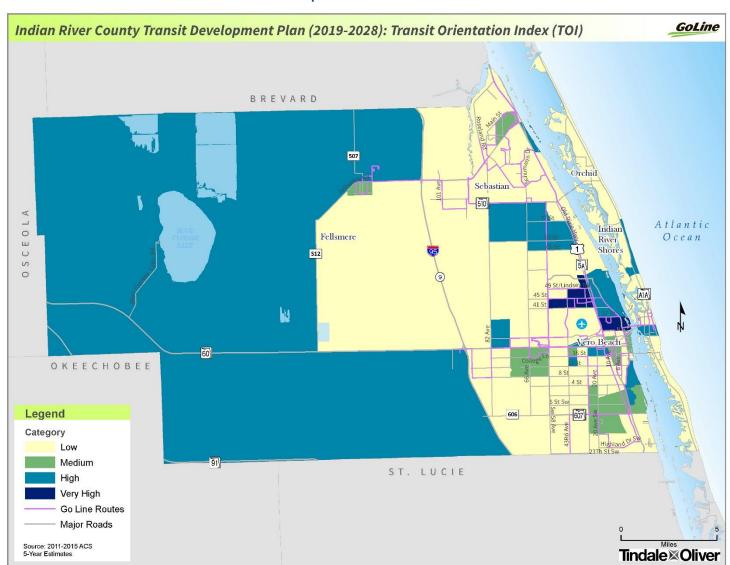
- Population density (persons per square mile)
- Proportion of the population age 60 and over (older adults)
- Proportion of the population under age 15 (youth)
- Proportion of the population below the poverty level (\$25,000 for a family of 4)
- Proportion of households with no vehicles (zero-vehicle households)

Using data for these characteristics and developing a composite ranking for each census tract, each area was ranked as "Very High," "High," "Medium," "Low," or "Very Low" in their respective levels of transit orientation.

Map 8-3 illustrates the TOI prepared for Indian River County, reflecting areas with varying traditional market potential. Also shown is the existing transit route network to show how well GoLine covers those areas. Based on this analysis, Wabasso and Gifford have the highest transit orientation, followed by Vero Beach. The existing bus routes align fairly well with the highest transit orientation areas.







Map 8-3: Transit Orientation Index



8.2 Forecast Ridership Analysis

T-BEST is a comprehensive transit analysis and ridership-forecasting model that can simulate travel demand at the individual route level. The software was designed to provide near-term and mid-term forecasts of transit ridership consistent with the needs of transit operational planning and TDP development. In producing model outputs, T-BEST also considers the following:

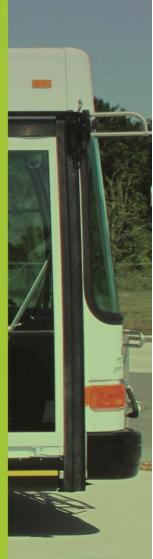
- Transit network connectivity The level of connectivity between routes within a bus network—the greater the connectivity between bus routes, the more efficient the bus service becomes.
- Spatial and temporal accessibility Service frequency and distance between stops—
 the larger the physical distance between potential bus riders and bus stops, the
 lower the level of service utilization. Similarly, less frequent service is perceived as
 less reliable and, in turn, utilization decreases.
- *Time-of-day variations* Peak-period travel patterns are accommodated by rewarding peak service periods with greater service utilization forecasts.
- Route competition and route complementarities Competition between routes is considered. Routes connecting to the same destinations or anchor points or that travel on common corridors experience decreases in service utilization. Conversely, routes that are synchronized and support each other in terms of service to major destinations or transfer locations and schedule benefit from that complementary relationship.

The following section outlines the model input and assumptions, describes the T-BEST scenario performed using the model, and summarizes the ridership forecasts produced by T-BEST.

Model Inputs / Assumptions and Limitations

T-BEST uses various demographic and transit network data as model inputs. The inputs and the assumptions made in modeling the GoLine system in T-BEST are presented below. The GoLine model used the recently-released T-BEST Land Use Model structure (T-BEST Land Use Model 2016), which is supported by parcel-level data developed from the Florida Department of Revenue (DOR) statewide tax database. The DOR parcel data contains land use designations and supporting attributes that allow the application of Institute of Transportation Engineers (ITE)-based trip generation rates at the parcel level as an indicator of travel activity.

It should be noted, however, that the model is not interactive with roadway network conditions. Therefore, ridership forecasts will not show direct sensitivity to changes in roadway traffic conditions, speeds, or roadway connectivity.





Transit Network

The transit route network for all existing GoLine routes was created to reflect 2017 conditions, the validation year for the model. General Transit Feed Specification (GTFS) data for GoLine as of December 4, 2017, were obtained from the Florida Transit Data Exchange (FTDE) as the base transit system. Data include:

- Route alignments
- Route patterns
- Bus stop locations
- Service spans
- Existing headways during peak and off-peak periods (frequency at which a bus arrives at a stop—e.g., one bus every 60 minutes)

The GTFS data were verified to ensure the most recent bus service spans and headways; edits were made as needed. Transfer locations were manually coded in the network properties.

Socioeconomic Data

The socioeconomic data used as the base input for the T-BEST model were derived from ACS Five-Year Estimates (2012–2016), Bureau of Labor Statistics, Bureau of Economic Analysis, 2015 InfoUSA employment data, and 2015 parcel-level land use data from the Florida DOR. Using the data inputs listed above, the model captures market demand (population, demographics, employment, and land use characteristics) within ¼ mile of each stop.

T-BEST uses a socioeconomic data growth function to project population and employment data. Using the Treasure Coast Regional Planning Model socioeconomic data forecasts developed for the latest 2040 LRTP, population and employment growth rates were calculated. Population and employment data are hard-coded into the model and cannot be modified by end-users. As applied, the growth rates do not reflect fluctuating economic conditions as experienced in real time.

Special Generators

Special generators were identified and coded into T-BEST to evaluate the opportunity for generating high ridership. Indian River County special generators include the following:

- Indian River Mall Transit Hub (shopping mall)
- Gifford Health Center Transit Hub (transfer center)
- Main Transit Hub (transfer center)
- IG Center Transit Hub (transfer center)
- Indian River State College Mueller Campus (university)
- Vero Beach Outlets (shopping mall)
- Indian River State College Main Campus (university)





T-BEST Model Limitations

It has long been a desire of FDOT to have a standard modeling tool for transit demand that could be standardized across the state, similar to the Florida Standard Urban Transportation Model Structure (FSUTMS) model used by metropolitan planning organizations in developing long range transportation plans (LRTPs). However, whereas T-BEST is an important tool for evaluating improvements to existing and future transit services, model outputs do not account for latent demand for transit that could yield significantly higher ridership, In addition, T-BEST cannot display sensitivities to external factors such as an improved marketing and advertising program, changes in fare service for customers, fuel prices, parking supply, walkability and other local conditions and, correspondingly, model outputs may over-estimate demand in isolated cases.

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

Ridership Forecast

Using these inputs, assumptions, and 2017 route level ridership data obtained from Indian River County, the T-BEST model was validated. Using the validation model as the base model, T-BEST ridership forecasts for this TDP major update planning starting year (2019) and horizon year (2028) were developed. The generated annual ridership forecasts reflect the estimated level of service utilization if no changes were to be made to any of the fixed-route services.

Table 8-2 shows the projected number of annual riders by route in 2019 and 2028 and average annual ridership growth rates from 2019 to 2028 derived from T-BEST.





Table 8-2: GoLine Baseline Annualized Ridership and Growth Rates (2019–2028)

Route	Average Annual Ridership, 2019	Average Annual Ridership, 2028	Absolute Change, 2019–2028	Average 10-Year Growth Rate, 2019–2028
Route 1	74,665	78,573	3,908	5.23%
Route 2	208,040	221,677	13,637	6.55%
Route 3	58,725	61,316	2,591	4.41%
Route 4	111,826	120,233	8,407	7.52%
Route 5	73,977	82,892	8,915	12.05%
Route 6	79,891	87,918	8,027	10.05%
Route 7	85,655	91,202	5,547	6.48%
Route 8	141,550	153,500	11,950	8.44%
Route 9	122,336	137,460	15,124	12.36%
Route 10	101,753	127,250	25,497	25.06%
Route 11	35,506	38,501	2,995	8.44%
Route 12	56,489	61,025	4,536	8.03%
Route 13	49,523	56,545	7,022	14.18%
Route 14	106,012	119,281	13,269	12.52%
Route 15	10,800	11,379	579	5.36%
Total	1,316,748	1,448,752	132,004	10.03%

^{*} Based on T-BEST model

Forecast Ridership Analysis

Based on the T-BEST model results, maintaining the status quo will result in a moderate increase in GoLine transit ridership for all routes over time. According to the projections, overall average annual ridership is expected to increase by 10% by 2028, an annual growth rate of about 1%. The model results show that the most significant ridership growth in the existing GoLine network will occur on the following routes within the next 10 years:

- Route 5
- Route 9
- Route 10
- Route 13
- Route 14

For GoLine to increase its market share for transit, service expansion will need to strategically occur in growing areas. The service improvements identified in this plan, in other transit planning efforts, and from the public feedback received combined will provide better transit services for the service area.

As previously noted, the work completed in Sections 2-11 of this report provides the framework for identifying the community's transit vision and goals for the next 10-years and the alternatives needed to get there. The goals, alternatives, and resulting 10-year financial plan for the 10-year TDP are presented in the remainder of this report.





SECTION 9 GOALS AND OBJECTIVES

Goals and objectives are an integral part of any transportation plan because they provide the policy direction to achieve the Community's vision. The goals and objectives presented in this section were prepared based on the review and assessment of existing conditions, feedback and comments received during the public involvement process, and a review of local and regional transportation planning documents.

9.1 GoLine Purpose/Mission Statement

Currently, GoLine does not have a consistent or objective purpose or mission statement to serve as a guiding overarching statement of intent. It is recommended that GoLine and the County work together to develop a mission statement for the agency. Peer agencies such as Pasco County Public Transportation (PCPT) have developed far-reaching purpose statements in recent years to aid them in guiding their goals and objectives as well as aiding the overall community in an equitable efficient manner. The development of such could significantly aid the public in understanding why their transit system is important and essential.

9.2 Goals and Objectives

Based on assessment of the GoLine system, public involvement activities, and a review of the goals and objectives from the previous GoLine TDP, the goals and objectives for the 10-year planning horizon are presented in Tables 9-1 through 9-5.

Table 9-1: Goal 1 Objectives and Strategies

Goal 1: Enhance the	e quality and quantity of service.
Objective 1.1	Increase transit ridership from ~1 million riders in 2015 to ~1.5 million riders by 2025.
Strategy 1.1.1	Expand service hours and increase frequency on higher ridership routes.
Strategy 1.1.2	Explore opportunities to provide new service as demand arises by both fixed-route and alternative service delivery methods.
Strategy 1.1.3	Identify and address transportation needs of transit-oriented populations in the county.
Strategy 1.1.4	Strive to enhance the interconnectivity of the regional transportation system – provide regional connections.
Strategy 1.1.5	Enhance the user-friendliness of customer information and expand its availability.
Strategy 1.1.6	Distribute schedules, system information, and new <i>RouteShout</i> application through community associations and clubs and to residents and visitors through public places.
Objective 1.2	Achieve on time performance of 95% or better.
Strategy 1.2.1	Maintain vehicle replacement program.
Strategy 1.2.2	Perform periodic comprehensive operational analyses, review results from on-board surveys to optimize scheduling by route.
Strategy 1.2.3	Continuously work to improve working conditions for all GoLine employees.





Table 9-2: Goal 2 Objectives and Strategies

	ensus and community support for maintaining stable and sustainable or countywide public transportation services with reasonable growth
Objective 2.1	Use quantitative analyses to demonstrate the cost effectiveness of GoLine Services in operations reports, advisory committee meetings, and Indian River County Commission meetings.
Strategy 2.1.1	Maintain and seek to enhance existing performance monitoring program.
Strategy 2.1.2	Pursue additional grants for service development for both local and regional services.
Strategy 2.1.3	Identify and evaluate other opportunities to enhance revenues.
Strategy 2.1.4	Implement efficiency improvements where appropriate that consider financial impacts of ADA and paratransit requirements.
Strategy 2.1.5	Evaluate flexible service delivery methods to shift trips onto fixed-route network from high ADA trip origin areas.
Objective 2.2	Maintain or increase the local investment in GoLine operations.
Strategy 2.2.1	Maintain a high-performance system that demonstrates continued value of local investment through performance measures and reports.
Strategy 2.2.2	Maintain an annual budget levels that at least maintains the investment in public transportation proportionate to the investment in all transportation modes.

Table 9-3: Goal 3 Objectives and Strategies

Goal 3: Pursue coordination activities with the region, other jurisdictions, and transportation providers.								
Objective 3.1	Implement and continue regional coordination and public involvement components in all relevant aspects of the transportation planning process.							
Strategy 3.1.1	Ensure cooperation, coordination, and consistency with all local, regional, and State plans for the future provision of public transit service in Indian River County.							
Strategy 3.1.2	Develop an ongoing public involvement process through surveys with riders, discussion groups, public workshops, and interviews with passengers, drivers, and the non-riding public.							
Strategy 3.1.3	Identify areas for cooperative efforts with neighboring county transit systems.							





Table 9-4: Goal 4 Objectives and Strategies

Goal 4: Enhance the	Goal 4: Enhance the accessibility of transit services.								
Objective 4.1	Strive to ensure accessibility at all transit facilities within 10 years for all								
	residents of the county.								
	Conduct a bus stop accessibility study to assess and prioritize								
Strategy 4.1.1	improvements across the network with an assessment of the impacts those								
	improvements could have on ADA and paratransit trip demand.								
Stratomy 4.1.2	Continue to improve infrastructure, including benches, shelters, and								
Strategy 4.1.2	signage, and overall accessibility at bus stops and transit stations.								
Stratomy 4.1.2	Ensure all new transit infrastructure meets accessibility requirements								
Strategy 4.1.3	(ADA).								
	Coordinate with local, county, or State agencies and utilities to ensure								
Strategy 4.1.4	adequate sidewalk access to bus stops and transit stations; remove								
	obstructions from sidewalk areas that may compromise accessibility.								
Strategy 4.1.5	Revise ADA certification and recertification process from three-year								
Strategy 4.1.5	recertification to one-year recertification.								
Stratogy 4.1.6	Continue to meet federal requirements for a ¾-mile paratransit ADA buffer								
Strategy 4.1.6	around all fixed-route service.								
Stratogy 4.1.7	Develop, initiate, and maintain an effective education program on ADA								
Strategy 4.1.7	certification and paratransit and fixed-route programs.								

Table 9-5: Goal 5 Objectives and Strategies

Goal 5: Pursue transit-friendly land use strategies and land development regulations.							
Objective 5.1	Review all land development codes, regulations, and proposals on a rolling basis to ensure that transit-friendly and transit-supportive development is encouraged and codified.						
Strategy 5.1.1	Support the use of development incentives for developers and major employers to support and promote public transportation (e.g., impact fee credits to developers for transit amenities, reimbursement programs for employees using transit).						
Strategy 5.1.2	Improve connectivity of sidewalks and bicycle facilities along existing and future public transportation corridors.						
Strategy 5.1.3	Coordinate with local jurisdictions, planning agencies, and the development community to encourage transit-supportive development patterns and investments.						
Strategy 5.1.4	Support community initiatives that align affordable housing with transit service.						
Strategy 5.1.5	Work with owners of bus stops and adjacent owners to improve accessibility and location for improved accessibility.						





SECTION 10 TRANSIT ALTERNATIVES

This section identifies potential transit improvements developed for the TDP based on public input and technical analyses. The proposed unfunded improvements, or alternatives, for fixed-route service represent transit projects for the future without consideration of funding constraints. These improvements do not establish a financial commitment for Indian River County; rather, they have been developed for transit planning purposes only and do not reflect the actual budget or expenses of GoLine. Section 11 presents the financial plan to continue and maintain existing service plus the financial plan associated with identified prioritized improvements from this section.

10.1 Alternatives Identification

The alternatives identified in this TDP consist of improvements to maintain existing service levels and making underperforming routes more efficient. The alternatives reflect transit needs identified by the community and have been developed based on information gathered through the following methods:

- Public workshops/discussion groups Outreach was geographically dispersed and conducted at several locations around the county to gather input from the public regarding alternatives that could be considered for the next 10 years.
- Transit surveys An on-board survey targeting bus passengers was conducted as part of the TDP planning process to obtain input from riders, and an online survey was conducted to gather input from both riders and non-riders.
- Interviews —Interviews were conducted with policy leaders and agency/community representatives to gather input on GoLine's role in the community, economic development goals and funding policy, transit service, technology and infrastructure needs, potential future investment in transit, among others.
- Transit demand assessment —An assessment of transit demand and needs was
 conducted for Indian River County. These technical analyses, together with the
 baseline conditions assessment, performance reviews, and the situation appraisal
 conducted previously, also were used in developing the list of transit alternatives by
 identifying areas that have characteristics shown to be supportive of transit.

The improvement alternatives developed for Indian River County as part of this TDP development process are grouped into four main categories:

- Service Improvements
- ADA Recertification Process Revisions
- Capital/Infrastructure
- Policy/Other





Service Improvements

Service improvements include enhancements to existing routes to address performance, increase service frequency and hours, and address the overall financial sustainability of GoLine and Community Coach service. These potential service improvements are summarized below.

Modify ADA Complementary Service for Ambulatory Passengers

As previously discussed in Section 2, the annual ADA ambulatory trips provided and their annual operating costs have increased significantly over the past several years. Given current cost overruns and long-term financial infeasibility of continuing to provide ambulatory and ADA paratransit services free of charge, this is unsustainable. If the increase in ADA trips continues, local funding will need to increase or current funding will need to be reallocated from fixed-route to ADA service during the next budget cycle.

Another option is to reduce the cost of providing ADA ambulatory trips by transitioning trunk-lines with flex feeders and paratransit trips; rather than providing "door-to-door" service for ADA ambulatory trips, "door-to-GoLine" service could be provided. This should lead to a reduced demand for ADA paratransit trips and, in many cases, reduce the length of ADA trips and decrease the cost per mile and overall cost of the trip. Potential service modifications where ADA service would connect to flex feeders for Go-Line Service include:

- Main Transit Hub
- Intergenerational Center
- Indian River Mall
- Gifford Health Center
- North County Hub

Modify Service on Lower-Performing Routes

A more detailed review of daily boardings by route indicates that routes 11 and 13, which currently run weekdays on 60-minute frequencies, are under-performing during specific times of the day or in whole. Potential service modifications for these routes could increase productivity as follows:

• Convert routes 11 and 13 to peak-hour express only service – Convert Route 11 to peak-hour only service from 7:00–11:00 AM and 3:00–7:00 PM weekdays, eliminating both fixed-route and paratransit trips from 11:00 AM–3:00 PM and minimizing the number of bus stops along US 1 between Sebastian and Vero Beach, which historically is a low-ridership area. Based on the T-BEST scenario estimate shown in Table 10-1, implementing these changes is estimated to result in a 35% reduction in annual total weekday boarding for the route, a reduction of about 13,440 weekday riders. Annual weekday system ridership would decrease by 1.1% (around 14,200 riders). These estimates are likely higher than what would occur in the network based on existing ridership and the fact that the impact has the effect of decreasing ridership throughout the network. The actual impacts of this change





would affect only 16 boardings between the two routes, which, when annualized, equals 4,000 boardings.

From follow-up discussions with MPO staff and discussion at the May 9, 2018, MPO Board meeting, this alternative was expanded to include conversion of Route 13 to peak-hour service; however, given the timing of this additional alternative, T-BEST ridership estimates were not completed for Route 13.

Convert Route 13 to partial flex-route – Convert part of Route 13, as shown in
Figure 10-1, from fixed-route to flex-route, providing deviated fixed-route service
and curb-site service connections to transit. Providing flex service in this area would
eliminate under-performing fixed-route service and the requirement to provide ADA
trips along the flex-route portion. Weekend ridership would see no impact. This
alternative also was identified from discussions at the May 9, 2018, MPO Board
meeting, so T-BEST ridership estimates were not completed for this alternative.

To Beach and September 1997

Figure 10-1: Route 13 Flex Service Concept

Extend Weekday Service Hours and Increase Frequency on Select Routes

The 2040 LRTP Cost Feasible Plan identified extending weekday operations to 8:00 PM and Saturday operations to 7:00 PM in the short-term and increasing frequency to 30 minutes for select routes. For this alternative, ridership was modeled if weekday service is extended to 10:00 PM for routes 2, 4, 5, 7, 8, 9, 10, and 14 and frequency doubled on routes 2, 8, and 9 for both weekday and weekend service. These routes were chosen because they are highest-performing routes (particularly following PM peak service hours), serve areas where people both live and work, and will better serve employees in the service industry who often work later hours.

The estimated weekday and weekend ridership impacts are summarized in depicted in Tables 10-2 and 10-3, respectively. As shown, these service improvements collectively could improve weekday ridership by 22.5% and weekend ridership by 56% system-wide. Ridership on Route 2 is estimated to increase 45% weekdays and 230% on weekends. Ridership on Route 8 is estimated to increase 47% on weekdays and 46% on weekends. Ridership on Route 9 is estimated to increase 49% on weekdays and nearly 42% on weekends.





Table 10-1: Route 11 Peak Hour Service Only – Weekday Ridership

	Additional	D	irect Boarding	S	Trar	nsfer Boardi	ngs	To	otal Boarding	S			
Route	Boardings (+\-)	2019	2028	% Change	2019	2028	% Change	2019	2028	% Change			
1	-9	66,474	66,474	0%	1,451	1,442	-0.60%	67,925	67,916	0%			
2	-94	180,368	180,290	0%	14,681	14,665	-0.10%	195,049	194,955	0%			
3	162	55,397	55,558	0.30%	1,138	1,139	0.10%	56,535	56,697	0.30%			
4	99	101,585	101,715	0.10%	3,409	3,378	-0.90%	104,994	105,093	0.10%			
5	-1,318	69,924	68,809	-1.60%	2,256	2,053	-9%	72,180	70,862	-1.80%			
6	-82	73,376	73,332	-0.10%	5,406	5,367	-0.70%	78,781	78,699	-0.10%			
7	0	75,346	75,346	0%	6,186	6,186	0%	81,532	81,532	0%			
8	54	131,108	131,162	0%	2,651	2,651	0%	133,758	133,812	0%			
9	-8	120,103	120,095	0%	9,256	9,256	0%	129,358	129,350	0%			
10	-6	110,986	110,980	0%	5,691	5,691	0%	116,677	116,671	0%			
11	-13,440	36,445	23,591	-35.30%	2,056	1,469	-28.60%	38,501	25,061	-34.90%			
12	379	51,628	51,951	0.60%	2,617	2,672	2.10%	54,245	54,624	0.70%			
13	0	53,807	53,807	0%	2,738	2,738	0%	56,545	56,545	0%			
14	0	95,838	95,838	0%	9,124	9,124	0%	104,961	104,961	0%			
15	0	11,025	11,025	0%	354	354	0%	11,379	11,379	0%			
Total	-14,263	1,233,410	1,219,973	-1.1%	69,014	68,185	-1.2%	1,302,420	1,288,157	-1.1%			





Table 10-2: Extend Weekday Service Hours on All Routes and Double Frequencies on Routes 2, 3, and 8 – Weekday Ridership

	Additional	D	irect Boarding	gs	Trai	nsfer Boardi	ngs	To	otal Boarding	s
Route	Boardings (+\-)	2019	2028	% Change	2019	2028	% Change	2019	2028	% Change
1	-261	66,474	66,155	-0.50%	1,451	1,510	4.10%	67,925	67,664	-0.40%
2	87,846	180,368	251,149	39.20%	14,681	31,746	116.20%	195,049	282,895	45%
3	3,521	55,397	58,262	5.20%	1,138	1,794	57.60%	56,535	60,056	6.20%
4	8,106	101,585	108,599	6.90%	3,409	4,502	32.10%	104,994	113,100	7.70%
5	3,613	69,924	72,308	3.40%	2,256	3,484	54.40%	72,180	75,793	5%
6	1,008	73,376	73,825	0.60%	5,406	5,964	10.30%	78,781	79,789	1.30%
7	14,692	75,346	87,507	16.10%	6,186	8,717	40.90%	81,532	96,224	18%
8	63,200	131,108	186,998	42.60%	2,651	9,960	275.70%	133,758	196,958	47.20%
9	63,768	120,103	166,515	38.60%	9,256	26,610	187.50%	129,358	193,126	49.30%
10	17,780	110,986	124,332	12%	5,691	10,124	77.90%	116,677	134,457	15.20%
11	569	36,445	36,964	1.40%	2,056	2,107	2.50%	38,501	39,070	1.50%
12	916	51,628	52,472	1.60%	2,617	2,689	2.80%	54,245	55,161	1.70%
13	3,348	53,807	56,832	5.60%	2,738	3,061	11.80%	56,545	59,893	5.90%
14	24,794	95,838	117,726	22.80%	9,124	12,029	31.80%	104,961	129,755	23.60%
15	4	11,025	11,025	0%	354	358	1.10%	11,379	11,383	0%
Total	292,904	1,233,410	1,470,669	19.2%	69,014	124,655	80.6%	1,302,420	1,595,324	22.5%





Table 10-3: Double Frequencies on Routes 2, 3, and 8 – Weekend Ridership

	Additional	D	irect Boarding	gs	Tra	nsfer Boardi	ngs	T	otal Boarding	S
Route	Boardings (+\-)	2019	2028	% Change	2019	2028	% Change	2019	2028	% Change
1	-7	1,730	1,723	-0.40%	28	28	0%	1,758	1,751	-0.40%
2	29,038	11,849	38,980	229%	739	2,646	258.10%	12,588	41,626	230.70%
3	179	2,184	2,359	8%	76	80	5.30%	2,260	2,439	7.90%
4	239	7,064	7,302	3.40%	139	140	0.70%	7,203	7,442	3.30%
5	-1	5,022	5,021	0%	42	42	0%	5,064	5,063	0%
6	204	4,119	4,321	4.90%	198	202	2%	4,318	4,522	4.70%
7	622	4,308	4,873	13.10%	263	320	21.70%	4,571	5,193	13.60%
8	4,311	9,015	12,994	44.10%	317	649	104.70%	9,332	13,643	46.20%
9	1,628	3,632	4,819	32.70%	198	638	222.20%	3,830	5,458	42.50%
10	133	4,771	4,833	1.30%	228	297	30.30%	4,998	5,131	2.70%
11	0	0	0	0%	0	0	0%	0	0	0%
12	14	3,143	3,156	0.40%	62	63	1.60%	3,205	3,219	0.40%
13	0	0	0	0%	0	0	0%	0	0	0%
14	569	6,320	6,838	8.20%	449	501	11.60%	6,770	7,339	8.40%
15	0	0	0	0%	0	0	0%	0	0	0%
Total	36,929	63,157	97,219	53.9%	2,739	5,606	104.7%	65,897	102,826	56%





Implement a Fare

Given existing long-term financial sustainability, the implementation of a fare for fixed-route and paratransit services may need to be explored. To understand the impact of the implementation of a fare on the overall system, a ridership analysis using T-BEST was run with both a \$0.50 and \$1.00 fare per trip. Appendix I includes the potential ridership impacts if a \$0.50 or \$1.00 fare was implemented. T-BEST estimates a 3.4% decrease in weekday ridership and 2.4% decrease in weekend ridership. For the \$1.00 fare scenario, T-BEST is estimated to decrease ridership by 6.7% weekdays and 4.1% weekends. However, given fare decreases experienced by other similarly-sized transit systems in Florida that have decreased or eliminated fares, it is believed that the T-BEST estimates are very low and a more realistic ridership loss is likely in the 25-40% range. In addition, the fare implementation costs would likely exceed any fare revenues.

ADA Recertification Process Revisions

Community Coach has recently undergone processes to help improve its recertification process that includes the engagement of a third-party contractor to better screen applicants and ensure qualifications are met. It also has undertaken steps to ensure that there is not an accessible path to and from existing transit service from the trip origin/destination, but is more of a longer-term strategy. To further help address cost increases for Community Coach service, primarily due to the increase in ADA ambulatory trips, the current certification process could be revised to better ensure that service is provided to those who should be certified as eligible. The certification process should include a screening mechanism to identify temporary conditions that require use of ADA service versus long-term or permanent conditions. The screening process also should identify accessibility issues that are related to the location/conditions of bus stops that prevent a rider from using fixedroute service. To better ensure that ADA service is used by persons who remain eligible, the current recertification process should be shortened to one year, except for persons who found to have a permanent disability or other long-term condition; for these cases, the recertification process should remain at three years. A one-year certification process will ensure that persons with temporary conditions or who have bus-stop related accessibility issues remain eligible. Following one year, the rider must reinitiate the process to become recertified.

Capital/Infrastructure

Bus Stop Accessibility Study/Prioritization

GoLine should explore undertaking an ADA accessibility study to evaluate the compliance of its bus stops system-wide. This will identify ADA compliance issues with bus stop boarding and alighting areas, accessible paths to bus stops, and other infrastructure (benches, shelters, etc.). An ADA accessibility study can identify potential low-cost "quick-fix" improvements to bus stops to address compliance issues as well as order-of-magnitude cost estimates to address more complex compliance issues. Such a study would help GoLine prioritize bus stop ADA compliance issues in both high-demand areas and based on severity





of issue. In absence of such a study, GoLine should identify a prioritization method to address identified bus stop ADA compliance issues at the highest ridership stops.

Coordination with Local Agencies for Bus Stop Improvements

GoLine should coordinate with local agencies, including Indian River County, cities, and the Indian River County School Board, to improve accessibility to bus stops through better sidewalk connections and bus stop location improvements. Inter-agency coordination can help prioritize the areas where mutual interests are shared for enhanced accessibility. Additionally, as investments are made near existing transit service, the relocation of bus stops should be something that the transit agency considers if infrastructure improvements can be used for locating accessible bus stops.

Policy/Other

Public-Private Partnerships

The County should explore partnerships with Transportation Network Companies (TNCs) such as Uber and Lyft and evaluate on-demand services provisions where low ridership exists and where first/last mile connections may be better suited to be made via automobile.

Comprehensive Operational Analysis

To deliver service more efficiently and find improvements that can increase the financial sustainability of GoLine, a COA is recommended to determine where fixed-route service can be modified from a network perspective. These modifications can be done through alignment changes, span of service modifications, service frequency modification, or can be changes to how service is provided. This could include more on-demand service that can assist in shifting ADA trips to fixed-route by providing better accessible connections to the fixed-route network.

10.2 Service Alternatives Evaluation

This section summarizes the evaluation process and considerations for service alternatives and improvements to the current system and leads into the development of a cost-affordable and phased strategic implementation plan. The alternatives developed through the TDP process were specifically designed to address the community's vision for transit in Indian River County over the next 10 years, balanced with the financial realities of the GoLine transit system. The alternatives focused on the following core ideas that stemmed from public outreach, agency concerns, and financial projections. Specific emphasis was considered in the sustainability of GoLine service as expressed in visioning and discussion workshops with the MPO Board and Committees. With this background, the service improvements were prioritized with consideration of the following criteria:

 Aligns with the community vision of the 2040 LRTP—Consideration of the longterm vision for transit in the 2040 LRTP should be given when evaluating the alternatives in this TDP, as this 10-year plan provides the foundation from which to





build and grow service over time that was vetted publically and by elected officials. Continuing to operate a strong and financially-sustainable service that maximizes geographic coverage, service hours, and frequency will better address the mobility needs of riders and provide a transportation option that is more accessible to a larger cross section of the community.

- Supported by the TDP public outreach process—The outreach process indicated that the main priority of the community was extending service hours to provide greater access to jobs and entertainment later into the weekday evenings and Saturdays. Focusing future growth and service modifications to reflect these priorities will be important to responding to the needs of GoLine riders.
- Improves operations/service efficiency and/or has a positive impact ADA costs and service delivery—In order to preserve existing service levels and coverage, improvements are needed to maximize operational efficiency for both fixed-route and ADA paratransit service. The continued growth of ambulatory ADA trips related to the fixed-route system is financially unsustainable; therefore, alternatives must address how these services can be provided more efficiently through operational improvements, policy changes, and service delivery. This approach to prioritize more efficient delivery is in line with the priority related to financial stability for the long-term vision of the system.

Based on the above criteria, the alternatives presented earlier in this section have been evaluated and prioritized for consideration in GoLine's 10-year Financial Plan. The remainder of this section provides each alternative in priority order and a narrative to support this evaluation process.

Convert Route 11 to Peak Limited Express Service (recommended)

This recommendation provides a service delivery that matches the existing demand on the route during peak hours, but increases service efficiency by eliminating less efficient service during mid-day hours and reducing the number of stops along US 1 between Sebastian and Vero Beach, which is a low-ridership area. This improvement will reduce operating costs and allow financial resources to be reallocated to different needs of the transit network. While converting this route to express service would no longer require that ADA service be provided, there are an extremely low number of ADA riders (<10) within the ¾-mile service area of Route 11 that are not also within a ¾-mile service area of another GoLine route and would therefore continue to be provided the ADA service option. Therefore, this alternative is not estimated to have any measurable reduction to ADA costs; however, the cost savings estimated by reducing the midday service and eliminating stops along US 1 between Sebastian and Vero Beach to provide express-style service will greatly benefit other services throughout the network and provide commuting riders more direct access to and from their employment.





Convert Route 13 to Flex Service (recommended)

This recommendation will provide a similar service to the ADA service currently provided and allow for some ambulatory passengers to transition from ADA paratransit to the flex service. This will also reduce the cost of ADA service provided in the area by providing riders with an accessible connection to other transit services at the Indian River Mall. This option improves operational/service efficiency and positively impacts ADA costs and service delivery. It is estimated that the cost effects of converting the route segment from fixed-route to flex service will be neutral or minimal.

ADA Recertification Process Improvements (recommended)

As ADA service costs continue to rise, addressing the recertification process is critical. Ensuring that each ADA recipient is using the appropriate service, has met the necessary requirements, and does not have an accessible path to-and-from the closest fixed-route transit service is essential. Ensuring that the recertification process is regularly reviewed and updated, as appropriate, and corresponds to the needs of the passenger based on their specific condition will help ensure that riders are utilizing the appropriate service and that GoLine resources are being properly allocated throughout the community.

Extend Evening Service and Increase Frequencies on Select Routes

Meeting mobility needs by increasing frequencies on the highest performing routes and providing better employment access for workers with late-day shifts, it is recommended that 30 minute frequencies be provided and service be extended later into the evening on select routes. This aligns with both the goals outlined in the 2040 LRTP Cost Affordable Plan and the feedback from the community during this TDP update process. Throughout the evaluation of GoLine services for this TDP, it was determined that the geographic coverage of the current network is adequate and that service improvements should focus on improving frequencies and extending service hours, where appropriate, to provide better job access to hospitality and service-oriented jobs that are not typically on a traditional work day schedule. However, increasing frequencies and providing later evening service as proposed will require additional service hours for both fixed-route and also ADA service (for extended service hours only). These improvements will also require additional revenue vehicles be purchased. While these alternatives improve service delivery, they do result in higher operating and capital costs for the 10-year plan.

Extend Saturday Service Hours and Add Sunday Service

While not explicitly modeled in T-BEST as an alternative, extending Saturday service hours from 7:00 AM to 7:00 PM for select routes and adding Sunday service from 8:00 AM to 3:00 PM is also identified as a longer-term need.





SECTION 11 10-YEAR SERVICE AND FINANCIAL PLAN

This section presents the cost feasible 10-Year Service and Financial Plan, which outlines the capital and operating costs associated with maintaining existing service levels. The plan also assumes implementation of recommended service modifications to improve efficiency and reduce costs over the 10-year TDP planning timeframe. Later in this section, the 10-Year Needs Plan is also presented, which includes unfunded alternatives to increase service hours and frequencies previously identified in Section 10. Based on the current funding constraints, unfunded service improvements will not be implemented without securing additional revenue sources or until cost savings from implemented service modifications reach levels where they can continuously fund these improvements.

11.1 Cost and Revenue Assumptions

Numerous assumptions were made to project transit costs and revenues over the 10-year period for this TDP. The assumptions made for operating and capital costs and revenues for service are based on a variety of factors, including historical data, current budgets, and discussions with Indian River County staff. These assumptions are summarized below and have been incorporated into the Cost Affordable Plan (Table 11-1).

Operating Cost Assumptions

Maintain Existing Service

The annual operating costs for GoLine and Community Coach services assumed in the TDP are based on the last 12 months of available financial data (March 2017-February 2018). These data were used to capture more recent trends of cost increases experienced, particularly for Community Coach service and result in an estimated \$3.05 million annual operating cost for fixed-route service and \$1.67 million annual operating cost for paratransit service. The 10-year Plan assumes that TD costs will increase at the same pace that TD revenues are assumed to increase to fund additional TD trips being brokered. Therefore a higher TD cost than historically experienced is assumed in this plan. From this, the total paratransit costs are assumed to be \$1.9 million to account for the higher TD costs in the base plan year. In reviewing historical data, costs for GoLine and Community Coach have outpaced annual inflation rates. To be conservative in projecting future operating costs, an annual inflation rate of 2.5% is used to project fixed-route operating costs over the 10-year planning period (starting in FY 2019), while an annual inflation rate of 4% is used to project annual paratransit operating costs.

Service Modifications

Route 11 Peak Express Service—The fixed-route cost savings estimated from eliminating mid-day service on Route 11 is estimated by multiplying the average fixed-route operating cost per hour over the last 12 months of available data by the number of hours service will be reduced each day, then annualized over the number of service weekdays per year. This results in an estimated base year cost reduction of \$57,400. As previously mentioned, converting this route to express service would no longer require that ADA service be





provided; however, there are an extremely low number of ADA riders (<10) within the ¾-mile service area of Route 11 that are not also within a ¾-mile service area of another GoLine route. Since nearly all ADA riders would continue be served, no cost reduction in ADA service is assumed for this alternative.

Route 13 Flex Service—For fixed-route service, it is assumed that the cost impacts from converting the identified portion of Route 13 from fixed-route to flex service will be neutral. With flex route service, ADA service is no longer required within a ¾-mile buffer of the flex portion of Route 13. To estimate the cost savings by providing flex route service, the number of client addresses affected by this service modification were reviewed. This review found that, of the 3,000 average monthly trip origins, approximately 9% (or 270 trips) would be affected. The annualized number of trips reduced (estimated at 3,240), is then multiplied by the Community Coach operating cost per passenger trip based on data for the last 12 years. From this, a base year ADA cost reduction of \$108,200 is estimated from this service modification.

ADA Recertification Process Revisions and Other Strategies—In addition to the ADA screening improvements and recertification process revisions discussed in Section 10, other strategies to be implemented include "door-to-GoLine" services where ADA passengers can make connections to accessible fixed-route service. To account for the cost benefits of implementing these strategies over time, the 10-Year Plan assumes a phased ADA cost reduction of 2%, 5%, 10%, and 15% over the first four years of the plan.

Capital Cost Assumptions

Capital costs for vehicles and other expenditures are based on information provided by the Indian River County MPO and included in the County's 2017 TDP financial plan update, with the exception hub improvements, which are recommended based on discussions with MPO staff. The capital cost assumptions included in the 10-Year Plan assume a base year of FY 2018 (from the 2017 TDP update) and are described below.

Vehicle Replacement

Vehicle replacement and acquisition are important components of transit capital and can affect system effectiveness and quality of service. The number of replacement buses to maintain existing services and included in the 10-Year Plan is determined based on the County's vehicle replacement plan. Costs for fixed-route and paratransit vehicles are based on costs included in the County's vehicle replacement costs and are in-line with current costs experienced by other Florida transit agencies for similar vehicles. For fixed-route services, this plan assumes a base year unit cost of \$425,000 for heavy buses, \$150,000 for large cutaway vehicles, and \$100,000 for medium cutaway vehicles. For Community Coach services, a base year unit cost of \$75,000 for small cutaway vehicles. Capital costs in the 10-year plan are escalated at 1.7% based on the CPI. Appendix J presents the vehicle replacement program incorporated into the cost affordable 10-Year Plan.





ADA Bus Stop/Safety Improvements

Improvements can be implemented to improve safety and ADA accessibility and increase connectivity to the pedestrian network, enhancing rider's use of the system. The 10-Year Plan assumes annual funding for ADA accessibility and safety improvements at a base year cost of \$50,000. As previously noted, it is recommended that the County consider conducting an ADA accessibility study to assess and prioritize ADA and other safety improvements across the network. Such a study can also assess the impacts that implementing such improvements could have on ADA service demand.

Transit Hub Improvements

The main transit hub, North County Transit Hub, and Intergenerational Center are new facilities. Future assessment for one additional transit hub, which could include relocation or expansion of an existing hub, is included in the capital program over the 10-year period.

Bus Stop Infrastructure

Providing and improving infrastructure at bus stops, including benches, shelters, bicycle storage facilities, and other infrastructure not only enhances the existing rider's experience at bus stops, but can also be attractive to potential riders. The 10-Year Plan assumes annual funding for bus stop infrastructure at a base year cost of \$50,000.

Other Miscellaneous Capital

Other annual miscellaneous capital needs identified for the 10-Year Service and Financial Plan include the following (base year costs shown in parentheses): miscellaneous stop improvements (\$5,000), computers (\$10,000), radios (\$5,000), bus wraps (\$20,000), bus stops signs (\$5,000), and security equipment (\$24,000).

Revenue Assumptions

Federal, state and local operating and capital revenues identified in the FY 2018 Indian River County budget for GoLine and Community Coach services and Indian River MPO TIP for FYs 2018 – 2022 have been included as revenue for both operating and capital as follows:

- Federal revenue sources: Section 5307, 5311 and 5310 funds for operating and Section 5307, 5310, and 5339 funds for capital
- State revenue: State Block Grant funds, FDOT service development funds, FDOT corridor funds, and Florida CTD TD funds
- Local funds: Indian River County general fund, other miscellaneous revenue (client co-pays/donations, advertising revenue, etc.)

FDOT Corridor Grant funds noted below are used to fund GoLine Route 15, which provides regional service from Indian River County to the Indian River State College main campus in Fort Pierce. To remain eligible for FDOT grant funding in future years, it will be necessary to implement service improvements that enhance the regional route. Potential enhancements to the regional route include modifying the route alignment or adding new stops.





There is currently no fare collected for transit service in Indian River County and, based on discussions with County policy leaders, the fare-free system will continue into the future. Therefore, no farebox revenue is included in the 10-Year Plan.

Federal Section 5307 urbanized area formula funds can be used for operating expenses and capital expenditures. The majority of funds are used for operating-related expenditures, including preventative maintenance, with the balance available for capital. This trend is expected to continue over the 10-year period; however, the Cost Affordable Plan assumes 85% of the FY 2018 revenues will be received. The 10-year Plan also assumes that \$75,000 of TD funds will shift to capital on an annual basis. Both of these assumptions allow Indian River County to maintain a reasonable fund balance.

Base year (FY 2018) revenue is assumed to escalate at a rate of 1.7% per year based on the CPI.

11.2 10-Year Service and Financial Plan (Cost Affordable Plan)

The cost affordable 10-Year Service and Financial Plan shown in Table 11-1 provides a summary level overview of the operating costs for the 10-year period totaling approximately \$53.7 million and the capital expenditures totaling approximately \$8.4 million. Based on the revenues identified, the plan can be funded and still provide an overall carryover for reserve funds of \$1.5 million, an increase over the starting FY 2019 reserve balance of \$1.15 million.

As shown in this table, it is anticipated that operating costs of the existing system with no service modifications would be approximately \$3 million more than available operating revenue (accounting for transfers of operating revenue to capital) over the 10-year period, providing further support that maintaining the current system is not financially feasible over time. Both cost and revenues included in this table are based on the assumptions previously noted and may, in reality, fluctuate from what is estimated. The 10-Year Plan assumes the current local investment averaging 19% per year will continue over the entire planning period. While not inherently assumed in the financial plan, a policy could be considered to ensure that the local investment for transit capital and operations (including sidewalk and access improvements) remains proportional in future years to the local investment made for roadway capital and operations/maintenance. The service modifications being implemented are designed to preserve the existing service as much as possible while providing some potential cost savings that may be realized over time. These modifications will assist in reducing costs by shifting some ADA trips to the Flex Services and reducing service hours on one of the fixed routes. However, the financial impact of those savings will need to be evaluated on an annual basis due to rising costs that could potentially negate any or all of the estimated savings from these service changes.

Map 11-1 illustrates the improvements identified in the 10-Year Plan.





Table 11-1: 10-Year Service and Financial Plan (Cost Affordable)

Cost/Revenue Description	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	10-Year Total
OPERATING AND CAPITAL COSTS											
Operating Costs											
Maintain Existing Service	\$4,941,442	\$5,093,394	\$5,250,282	\$5,412,274	\$5,579,545	\$5,752,277	\$5,930,657	\$6,114,879	\$6,305,144	\$6,501,663	\$56,881,557
Service Modifications	(\$183,254)	(\$215,686)	(\$269,582)	(\$327,483)	(\$337,907)	(\$348,682)	(\$359,820)	(\$371,332)	(\$383,233)	(\$395,537)	(\$3,192,516)
Total Operating Costs	<i>\$4,758,188</i>	<i>\$4,877,709</i>	\$4,980,700	<i>\$5,084,791</i>	<i>\$5,241,638</i>	<i>\$5,403,595</i>	<i>\$5,570,837</i>	<i>\$5,743,546</i>	\$5,921,911	\$6,106,126	\$53,689,041
Capital Costs		•	-		•			•	·		
Replacement Vehicles	\$155,113	\$157,734	\$1,390,133	\$163,111	\$829,336	\$168,670	\$1,629,449	\$523,259	\$1,182,449	\$180,365	\$6,379,620
Other Transit Capital	\$174,760	\$177,714	\$180,717	\$183,771	\$295,618	\$190,035	\$193,247	\$196,513	\$199,834	\$203,211	\$1,995,421
Total Capital Costs	\$329,873	<i>\$335,448</i>	\$1,570,850	<i>\$346,882</i>	\$1,124,954	<i>\$358,706</i>	\$1,822,696	<i>\$719,772</i>	<i>\$1,382,283</i>	<i>\$383,576</i>	\$8,375,041
Total Costs	\$5,088,061	\$5,213,157	\$6,551,551	\$5,431,674	\$6,366,592	\$5,762,300	\$7,393,533	\$6,463,318	\$7,304,194	\$6,489,702	\$62,064,082
				ODEDATING AND	CARTTAL REVEN	ur					
ODED ATTING DEVENUES	T T	T		OPERATING AND	CAPITAL REVEN	UE			I		
OPERATING REVENUES											
Federal Control 5207	+1 527 040	÷1 CE4 E27	+1 602 100	±1 710 022	±1 720 040	±1.700.0E1	+1 700 151	±1 020 FF7	+1 000 177	±1 001 010	417 FCF 244
Section 5307	\$1,627,040	\$1,654,537	\$1,682,499	\$1,710,933	\$1,739,848	\$1,769,251	\$1,799,151	\$1,829,557	\$1,860,477	\$1,891,919	\$17,565,211
Section 5307 Preventative Maintenance	\$725,558	\$737,820	\$750,289	\$762,969	\$775,863	\$788,975	\$802,309	\$815,868	\$829,656	\$843,677	\$7,832,986
Section 5311	\$68,132	\$69,284	\$70,455	\$71,645	\$72,856	\$74,087 \$165,067	\$75,339	\$76,613	\$77,907	\$79,224	\$735,543
Section 5310	\$152,535	\$155,113	\$157,734	\$160,400	\$163,111	\$165,867	\$168,670	\$171,521	\$174,420	\$177,367	\$1,646,739
State	+542.420	±524.000	+E20 C10	+520 505	±5.40.70.4	÷557.070	+EC7 407	+576.007	+E06 740	±505.554	+F F20 C20
FDOT State Block Grants	\$513,128	\$521,800	\$530,618	\$539,585	\$548,704	\$557,978	\$567,407	\$576,997	\$586,748	\$596,664	\$5,539,628
FDOT - Service Development	\$300,000	\$305,070	\$310,226	\$315,468	\$320,800	\$326,221	\$331,735	\$337,341	\$343,042	\$348,839	\$3,238,742
FDOT - Corridor	\$120,909	\$122,953	\$125,031	\$127,144	\$129,292	\$131,477	\$133,699	\$135,959	\$138,257	\$140,593	\$1,305,315
State - TD Commission Funds	\$350,827	\$358,023	\$365,342	\$372,783	\$380,351	\$388,046	\$395,872	\$403,830	\$411,922	\$420,151	\$3,847,146
Local											
Existing County General Funds	\$1,108,173	\$1,126,901	\$1,145,946	\$1,165,312	\$1,185,006	\$1,205,033	\$1,225,398	\$1,246,107	\$1,267,166	\$1,288,581	\$11,963,623
Client Co-Pay/Donations, Other	\$17,592	\$17,890	\$18,192	\$18,499	\$18,812	\$19,130	\$19,453	\$19,782	\$20,116	\$20,456	\$189,924
Total Operating Revenue	\$4,983,895	\$5,069,390	\$5,156,330	\$5,244,740	\$5,334,644	\$5,426,067	\$5,519,035	\$5,613,574	\$5,709,711	\$5,807,472	\$53,864,857
Total Operating Cost	\$4,758,188	\$4,877,709	\$4,980,700	\$5,084,791	\$5,241,638	\$5,403,595	\$5,570,837	\$5,743,546	\$5,921,911	\$6,106,126	\$53,689,041
Net Operating (Contingency/Need)	\$225,707	\$191,681	\$175,630	\$159,949	\$93,006	\$22,472	(\$51,802)	(\$129,972)	(\$212,200)	(\$298,654)	\$175,817
Net with No Service Modifications	\$42,453	(\$24,004)	(\$93,952)	(\$167,534)	(\$244,901)	(\$326,210)	(\$411,622)	(\$501,305)	(\$595,433)	(\$694,191)	(\$3,016,699)



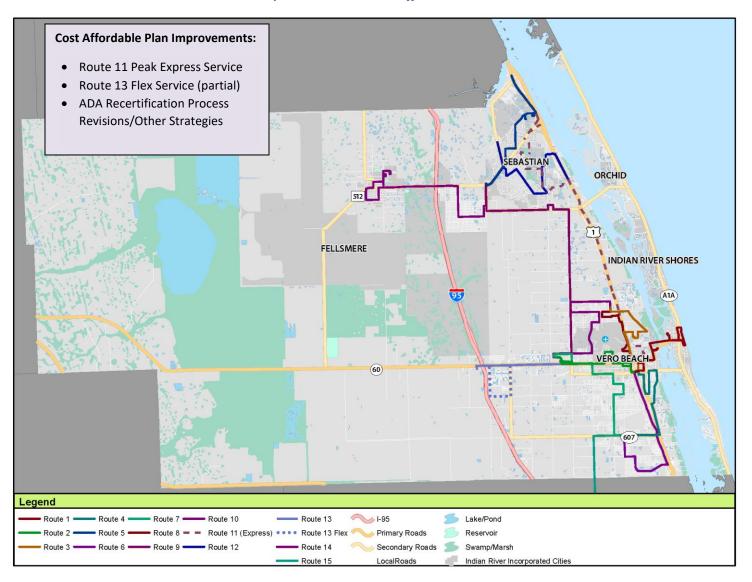
Cost/Revenue Description	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	10-Year Total			
	OPERATING AND CAPITAL REVENUE (CONT'D)													
CAPITAL REVENUES														
Federal 5307 for Capital	\$444,541	\$452,054	\$459,694	\$467,462	\$475,362	\$483,396	\$491,565	\$499,873	\$508,321	\$516,911	\$4,799,180			
Federal 5339	\$203,380	\$206,817	\$210,312	\$213,867	\$217,481	\$221,156	\$224,894	\$228,695	\$232,560	\$236,490	\$2,195,651			
Federal 5310/State	\$68,641	\$69,801	\$70,980	\$72,180	\$73,400	\$74,640	\$75,902	\$77,184	\$78,489	\$79,815	\$741,032			
Local	\$7,627	\$7,756	\$7,887	\$8,020	\$8,156	\$8,293	\$8,434	\$8,576	\$8,721	\$8,868	\$82,337			
State - TD Commission Funds	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$750,000			
Total Capital Revenue	\$799,189	\$811,427	\$823,873	\$836,529	\$849,399	\$862,486	\$875,795	\$889,328	\$903,090	\$917,085	\$8,568,200			
Total Capital Cost	\$329,873	\$335,448	\$1,570,850	\$346,882	\$1,124,954	\$358,706	\$1,822,696	\$719,772	\$1,382,283	\$383,576	\$8,375,041			
Net Capital (Contingency/Need)	\$469,315	\$475,979	(\$746,977)	\$489,647	(\$275,555)	\$503,780	(\$946,902)	\$169,556	(\$479,193)	\$533,509				
Use of Reserve Fund for Capital	\$1,150,000	\$2,095,294	<i>\$1,348,317</i>	\$1,837,964	\$1,562,409	\$2,066,189	\$1,119,287	\$1,288,844	\$809,651	<i>\$1,343,160</i>	\$1,343,160			
		•		TOTAL COST	S VS. REVENUES		•							
Total Revenue	\$5,783,084	\$5,880,817	\$5,980,203	\$6,081,269	\$6,184,043	\$6,288,553	\$6,394,830	\$6,502,902	\$6,612,801	\$6,724,557	\$62,433,057			
Total Cost	\$5,088,061	\$5,213,157	\$6,551,550	\$5,431,673	\$6,366,592	\$5,762,301	\$7,393,533	\$6,463,318	\$7,304,194	\$6,489,702	\$62,064,082			
Net Total (Contingency/Need)	\$695,022	\$667,660	(\$571,347)	\$649,596	(\$182,549)	\$526,252	(\$998,704)	\$39,584	(\$691,393)	\$234,855	\$368,976			
%Local Government Share of Total Revenue	19%	19%	19%	19%	19%	19%	19%	19%	19%	19%	19%			
Resulting Carry Forward/Reserve Funds											\$1,518,977			

Notes:

- 1. Federal, state and local operating and capital revenues identified in the FY 2018 Indian River County budget for GoLine and Community Coach services and Indian River MPO FY 2018-FY 2022 Transportation Improvement program (TIP).
- 2. While discussions with Indian River County MPO staff indicate that preventative maintenance costs have increased considerably in recent years due to various circumstances and may not continue at the same level as FY 2018, to be conservative this trend is carried out through the 10-year plan to ensure enough money for preventative maintenance is included.
- 3. Federal Section 5307 urbanized area formula funds can be used for operating expenses and capital expenditures. The majority of funds are used for operating-related expenditures, including preventative maintenance, with the balance available for capital. As FY 2018 Section 5307 revenues received by Indian River County were higher than past years, the Cost Affordable Plan assumes that 85% of FY 2018 Section 5307 revenue remains available and the balance after funding operating and capitalized maintenance costs is available for capital.
- 4. State TD Revenue-Assume \$75,000 transferred to capital annually.
- 5. Base year (FY 2018) revenue is assumed to escalate at a rate of 1.7% per year based on the annual average CIP index for the last 10 years.



Map 11-1: 10-Year Cost Affordable Plan





11.3 10-Year Needs Plan

The 10-Year Needs Plan includes the capital and operating plan identified in the 10-year Service and Finance Plan plus the estimated costs for the following unfunded alternatives:

Extend Weekday Service on Select Routes—In addition to the eight routes modeled in T-BEST for this alternative in Section 10, Routes 1 and 6 are also considered for extended weekday hours based on discussions with County staff. However, rather than extending service hours until 10:00 PM as initially modeled, the Needs Plan includes weekday service hours until 9:00 PM to better reflect the community's service needs. For fixed-route service, the number of service hours added if extending operations until 9:00 PM weekdays for the proposed 10 routes (Routes 1, 2, 4, 5, 6, 7, 8, 9, 10, & 14) is annualized, then multiplied by the fixed-route cost per revenue hour. This alternative also assumes that the increased frequencies proposed for Routes 2, 8, and 9 would also occur during the extended service hours. An estimated base year fixed-route cost of \$430,400 is needed to provide this additional service. Since this alternative would extend weekday service hours, ADA service hours must also be offered during the same period within a \%-mile of the routes. As ADA service is provided based on the demand for service and not on a fixed cost-per-hour basis like fixed-route service, the costs for the increased ADA service is calculated by multiplying the estimated cost of the fixed-route service by the ratio of the annual Community Coach operating cost to the annual fixed-route operating cost (55%). An estimated base year ADA cost increase of \$235,700 is needed to provide this additional service.

Extend Saturday Service on Select Routes—The Needs Plan also includes extending Saturday service hours for select routes. Those 10 routes identified for extended weekday service until 9:00 PM (Routes 1, 2, 4, 5, 6, 7, 8, 9, 10, & 14) are recommended to have extended Saturday hours in addition to Route 13, which services both the Indian River Mall and Vero Beach Outlets. This alternative assumes Saturday service hours would be 7:00 AM to 7:00 PM (Saturday service is currently provided from 8:00 AM to 5:00 PM) with 60 minute frequencies for all routes except for Routes 2, 8, and 9, which would operate at 30 minute frequencies. The cost for this service is calculated in a manner similar to the extended weekday service hour cost and is estimated at a base year cost of \$121,000 for fixed-route service and \$66,000 for required ADA service.

Add Sunday Service—The Needs Plan also considers adding Sunday service from 8:00 AM to 3:00 PM for all routes except Routes 11 and 15 at 60 minute headways. The cost for this service is calculated in a manner similar to the extended weekday and Saturday service hours and is estimated at a base year cost of \$261,100 for fixed-route service and \$143,000 for required ADA service.

Increase Frequencies on Select Routes—The same approach as used to calculate the costs for extending service hours is used to calculate the cost of increasing weekday and Saturday frequencies to 30 minute headways on Routes 2, 8, and 9. From this, an estimated base year fixed-route cost of \$637,000 is needed to provide this additional service. This alternative





does not expand service hours or coverage and therefore no additional ADA service is required.

Additional Vehicles for Service Improvements—Additional vehicles that would be required to extend weekday service hours and/or increase frequencies on select routes are included in the capital cost assumptions of the Needs Plan. These vehicles are in addition to replacing existing vehicles that have reached their useful life during the 10-year planning horizon that are already included in the 10-Year Service and Financial Plan.

Revenues—No additional revenue for operating is assumed in the Needs Plan; however, as previously noted, based on the current funding constraints, unfunded service improvements noted above will not be implemented without securing additional revenue sources or until cost savings from implemented service modifications reach levels where they can be used to fund increased service hours and frequencies. For capital needs, 100% of the Section 5307 revenue received in FY 2018 is assumed to be carried forward in the 10-Year Needs Plan to fund the purchase of vehicles required for new/expanded service. Other grant opportunities, such as additional Section 5339 funding for buses and bus facilities and FDOT safety grants, are potential revenue sources that can be explored for additional funding, if needed.

As shown in Table 11-2, if the above improvements are implemented (in addition to the service modifications included in the cost affordable 10-Year Service and Financial Plan), it is anticipated operating costs will be approximately \$21.4 million more than available operating revenue. Due to the assumption that the remaining Section 5307 revenue will be available for capital, the 10-Year Needs Plan assumes that all capital needs can be funded and the available fund balance will increase to \$3.4 million at the end of the 10-year period. This results in an overall deficit of \$18 million total required to implement the 10-Year Needs Plan.





Table 11-2: 10-Year Service and Financial Plan (Needs)

Cost/Revenue Description	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	10-Year Total
OPERATING AND CAPITAL COSTS											
Operating Costs											
Maintain Existing Service	\$4,941,442	\$5,093,394	\$5,250,282	\$5,412,274	\$5,579,545	\$5,752,277	\$5,930,657	\$6,114,879	\$6,305,144	\$6,501,663	\$56,881,557
Service Modifications											
Route 11 Peak Hour Express Only	(\$57,387)	(\$58,821)	(\$60,292)	(\$61,799)	(\$63,344)	(\$64,928)	(\$66,551)	(\$68,215)	(\$69,920)	(\$71,668)	(\$642,925)
Extend Weekday Service to 8 PM or 9 PM on select routes	\$430,400	\$441,160	\$452,189	\$463,494	\$475,081	\$486,958	\$499,132	\$511,611	\$524,401	\$537,511	\$4,821,938
Extend Saturday Service 7 am to 7 pm on Select Routes	\$120,512	\$123,525	\$126,613	\$129,778	\$133,023	\$136,348	\$139,757	\$143,251	\$146,832	\$150,503	\$1,350,143
Add Sunday Service 8 am to 3 pm	\$261,109	\$267,637	\$274,328	\$281,186	\$288,216	\$295,421	\$302,807	\$310,377	\$318,137	\$326,090	\$2,925,309
Increase Frequency on Routes 2, 8 & 9 (existing service only)	\$636,992	\$652,917	\$669,240	\$685,971	\$703,120	\$720,698	\$738,716	\$757,184	\$776,113	\$795,516	\$7,136,468
Route 13 Flex Savings	(\$108,184)	(\$110,889)	(\$113,661)	(\$116,503)	(\$119,415)	(\$122,401)	(\$125,461)	(\$128,597)	(\$131,812)	(\$135,108)	(\$1,212,031)
Extend Weekday Service to 8 PM or 9 PM on select routes	\$235,692	\$245,120	\$254,925	\$265,122	\$275,727	\$286,756	\$298,226	\$310,155	\$322,561	\$335,464	\$2,829,746
Extend Saturday Service 7 am to 7 pm	\$65,994	\$68,634	\$71,379	\$74,234	\$77,203	\$80,292	\$83,503	\$86,843	\$90,317	\$93,930	\$792,329
Add Sunday Service 8 am to 3 pm	\$142,987	\$148,706	\$154,654	\$160,840	\$167,274	\$173,965	\$180,924	\$188,161	\$195,687	\$203,515	\$1,716,713
ADA Recertification/Other Strategies	(\$17,683)	(\$45,975)	(\$95,629)	(\$149,181)	(\$155,148)	(\$161,354)	(\$167,808)	(\$174,520)	(\$181,501)	(\$188,761)	(\$1,337,560)
Total Operating Costs	\$6,651,875	\$6,825,408	\$6,984,029	\$7,145,417	\$7,361,282	\$7,584,033	\$7,813,902	\$8,051,127	\$8,295,959	\$8,548,653	<i>\$75,261,685</i>
Capital Costs	<u>.</u>	·				·	·		<u>.</u>		
Replacement Vehicles	\$3,231,518	\$157,734	\$1,069,333	\$489,332	\$829,336	\$168,670	\$1,629,449	\$697,679	\$1,182,449	\$180,365	\$9,635,866
Other Transit Capital	\$174,760	\$177,714	\$180,717	\$183,771	\$295,618	\$190,035	\$193,247	\$196,513	\$199,834	\$203,211	\$1,995,421
Total Capital Costs	\$3,406,278	<i>\$335,448</i>	\$1,250,050	\$673,104	\$1,124,954	<i>\$358,706</i>	\$1,822,696	\$894,192	\$1,382,283	<i>\$383,576</i>	<i>\$11,631,287</i>
Total Costs	\$10,058,153	\$7,160,856	\$8,234,079	\$7,818,521	\$8,486,236	\$7,942,739	\$9,636,598	\$8,945,319	\$9,678,242	\$8,932,229	\$86,892,972
			OPE	RATING AND CAPI	TAL REVENUE						
OPERATING REVENUES											
Federal											
Section 5307	\$1,627,040	\$1,654,537	\$1,682,499	\$1,710,933	\$1,739,848	\$1,769,251	\$1,799,151	\$1,829,557	\$1,860,477	\$1,891,919	\$17,565,211
Section 5307 Preventative Maintenance	\$725,558	\$737,820	\$750,289	\$762,969	\$775,863	\$788,975	\$802,309	\$815,868	\$829,656	\$843,677	\$7,832,986
Section 5311	\$68,132	\$69,284	\$70,455	\$71,645	\$72,856	\$74,087	\$75,339	\$76,613	\$77,907	\$79,224	\$735,543
Section 5310	\$152,535	\$155,113	\$157,734	\$160,400	\$163,111	\$165,867	\$168,670	\$171,521	\$174,420	\$177,367	\$1,646,739
State											
FDOT State Block Grants	\$513,128	\$521,800	\$530,618	\$539,585	\$548,704	\$557,978	\$567,407	\$576,997	\$586,748	\$596,664	\$5,539,628
FDOT - Service Development	\$300,000	\$305,070	\$310,226	\$315,468	\$320,800	\$326,221	\$331,735	\$337,341	\$343,042	\$348,839	\$3,238,742
FDOT - Corridor	\$120,909	\$122,953	\$125,031	\$127,144	\$129,292	\$131,477	\$133,699	\$135,959	\$138,257	\$140,593	\$1,305,315
State - TD Commission Funds	\$350,827	\$358,023	\$365,342	\$372,783	\$380,351	\$388,046	\$395,872	\$403,830	\$411,922	\$420,151	\$3,847,146



Cost/Revenue Description	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	10-Year Total
Local											
Existing County General Funds	\$1,108,173	\$1,126,901	\$1,145,946	\$1,165,312	\$1,185,006	\$1,205,033	\$1,225,398	\$1,246,107	\$1,267,166	\$1,288,581	\$11,963,623
Client Co-Pay/Donations, Other	\$17,592	\$17,890	\$18,192	\$18,499	\$18,812	\$19,130	\$19,453	\$19,782	\$20,116	\$20,456	\$189,924
Total Operating Revenue	\$4,983,895	\$5,069,390	\$5,156,330	\$5,244,740	\$5,334,644	\$5,426,067	\$5,519,035	\$5,613,574	\$5,709,711	\$5,807,472	\$53,864,857
Total Operating Cost	\$6,651,875	\$6,825,408	\$6,984,029	\$7,145,417	\$7,361,282	\$7,584,033	\$7,813,902	\$8,051,127	\$8,295,959	\$8,548,653	\$75,261,685
Net Operating (Contingency/Need)	(\$1,667,980)	(\$1,756,018)	(\$1,827,699)	(\$1,900,677)	(\$2,026,638)	(\$2,157,966)	(\$2,294,867)	(\$2,437,553)	(\$2,586,248)	(\$2,741,181)	(\$21,396,827)
OPERATING AND CAPITAL REVENUE (CONT'D)											
CAPITAL REVENUES											
Federal 5307 for Capital	\$938,154	\$954,009	\$970,131	\$986,527	\$1,003,199	\$1,020,153	\$1,037,394	\$1,054,926	\$1,072,754	\$1,090,883	\$10,128,129
Federal 5339	\$203,380	\$206,817	\$210,312	\$213,867	\$217,481	\$221,156	\$224,894	\$228,695	\$232,560	\$236,490	\$2,195,651
Federal 5310/State	\$68,641	\$69,801	\$70,980	\$72,180	\$73,400	\$74,640	\$75,902	\$77,184	\$78,489	\$79,815	\$741,032
Local	\$7,627	\$7,756	\$7,887	\$8,020	\$8,156	\$8,293	\$8,434	\$8,576	\$8,721	\$8,868	\$82,337
State - TD Commission Funds	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$750,000
Total Capital Revenue	\$1,292,801	\$1,313,382	\$1,334,311	\$1,355,593	\$1,377,235	\$1,399,243	\$1,421,623	\$1,444,381	\$1,467,523	\$1,491,057	\$13,897,149
Total Capital Cost	\$3,406,278	\$335,448	\$1,250,050	\$673,104	\$1,124,954	\$358,706	\$1,822,696	\$894,192	\$1,382,283	\$383,576	\$11,631,287
Net Capital (Contingency/Need)	(\$2,113,477)	\$977,934	\$84,261	\$682,490	\$252,281	\$1,040,537	(\$401,074)	\$550,189	\$85,240	\$1,107,481	
Use of Reserve Fund for Capital	\$1,150,000	<i>\$14,457</i>	<i>\$98,718</i>	<i>\$781,208</i>	<i>\$1,033,489</i>	\$2,074,026	<i>\$1,672,953</i>	<i>\$2,223,142</i>	<i>\$2,308,382</i>	<i>\$3,415,863</i>	<i>\$3,415,863</i>
TOTAL COSTS VS. REVENUES											
Total Revenue	\$6,276,696	\$6,382,772	\$6,490,641	\$6,600,333	\$6,711,879	\$6,825,310	\$6,940,658	\$7,057,955	\$7,177,234	\$7,298,529	\$67,762,006
Total Cost	\$10,058,153	\$7,160,856	\$8,234,079	\$7,818,521	\$8,486,236	\$7,942,739	\$9,636,598	\$8,945,319	\$9,678,242	\$8,932,229	\$86,892,972
Net Total (Contingency/Need)	(\$3,781,457)	(\$778,084)	(\$1,743,438)	(\$1,218,187)	(\$1,774,357)	(\$1,117,429)	(\$2,695,941)	(\$1,887,364)	(\$2,501,008)	(\$1,633,700)	(\$19,130,965)
%Local Government Share of Total Revenue	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%
Resulting Carry Forward/Reserve Funds											(\$17,980,964)

Notes:

- 1. Federal, state and local operating and capital revenues identified in the FY 2018 Indian River County budget for GoLine and Community Coach services and Indian River MPO FY 2018-FY 2022 Transportation Improvement program (TIP).
- 2. While discussions with Indian River County MPO staff indicate that preventative maintenance costs have increased considerably in recent years due to various circumstances and may not continue at the same level as FY 2018, to be conservative this trend is carried out through the 10-year plan to ensure enough money for preventative maintenance is included.
- 3. Federal Section 5307 urbanized area formula funds can be used for operating expenses and capital expenditures. The majority of funds are used for operating-related expenditures, including preventative maintenance, with the balance available for capital. Although FY 2018 Section 5307 revenues received by Indian River County were higher than past years, the Needs Plan assumes 100% of FY 2018 Section 5307 revenue remain available and the balance after funding operating and capitalized maintenance costs is available for capital.
- 4. State TD Revenue-Assume \$75,000 transferred to capital annually.
- 5. Base year (FY 2018) revenue is assumed to escalate at a rate of 1.7% per year based on the annual average CIP index for the last 10 years.

Indian River County | Transit Development Plan





Appendix A: Public Involvement Plan





Indian River County

Transit Development Plan

Public Involvement Plan

August 2017





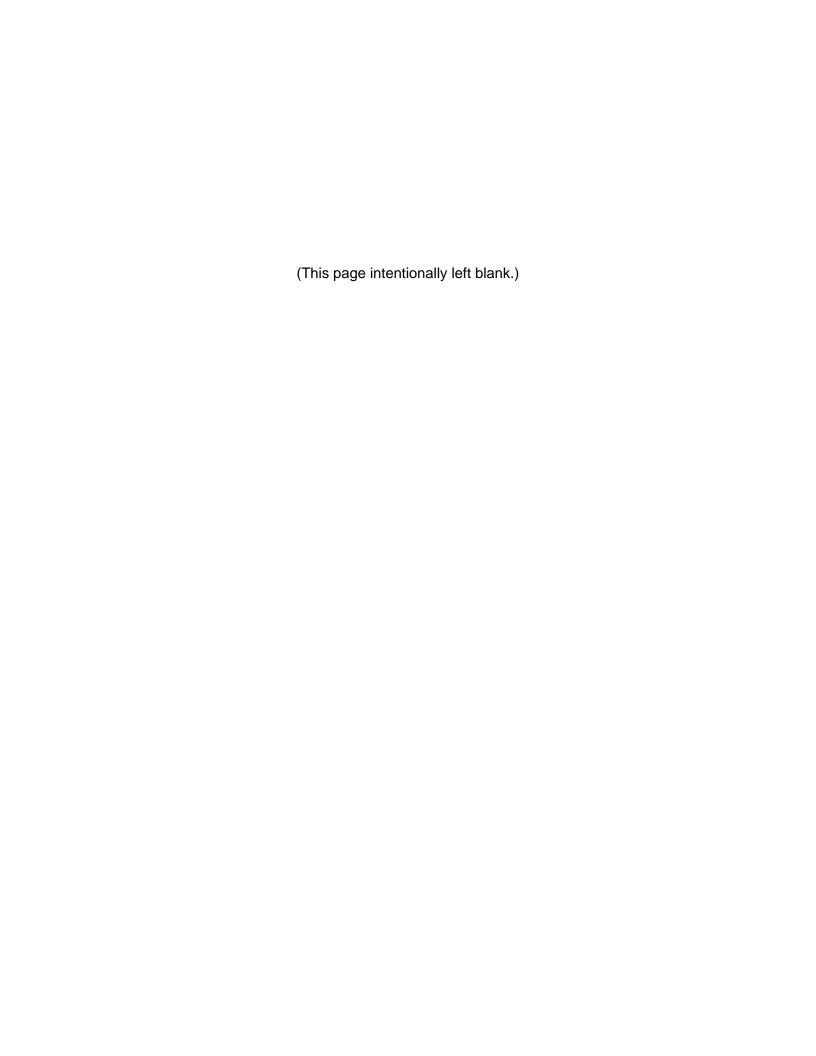
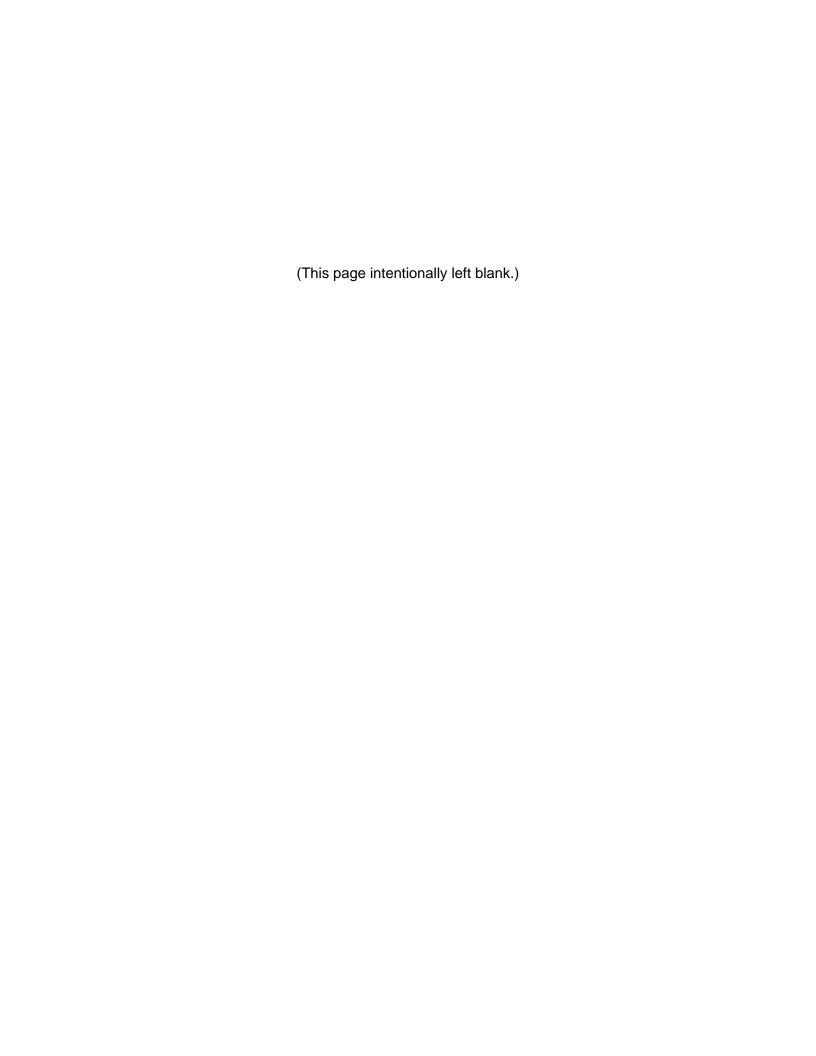




TABLE OF CONTENTS

Table of Contents	i
Introduction	1
Project Team	2
Stakeholders and general public	3
Stakeholders	3
General Public	4
Public Involvement Objectives	4
Public Involvement Activities	4
Branding and Campaign	4
Stakeholder Interviews	5
On-board Survey	5
Direct Public Engagement	5
Public Survey	6
Operator and Dispatcher Interviews	6
Presentations	6
Schedule	6







INTRODUCTION

GoLine, the transit agency serving Indian River County, is preparing its 10-year transit development plan (TDP), which will provide a guide for development of the transit system over the next 10 years. As required by state statute, GoLine is undergoing a major update to its TDP, which is required every five years. The update covers 2019-2028.

The Public Involvement Plan provides an overview of the public outreach activities that will be undertaken as part of the TDP process. The PIP is designed to comply with TDP state statutory requirements, complement the Indian River Metropolitan Planning Organization's (MPO) Public Participation Plan (PPP), and abide by the desires of MPO and transit agency staff. Rule 14-73.001 requires that the TDP preparation include the following activities:

- A PIP approved by the Florida Department of Transportation (FDOT) or the local MPO's PIP, approved by both the Federal Transit Administration and Federal Highway Administration;
- Established time limits for comments on the TDP;
- Description of the process used and the public involvement activities undertaken;
- Solicitation of comments from FDOT, MPO, and the regional workforce development board (i.e., CareerSource Research Coast) on the mission, goals, objectives, alternatives and 10-year implementation program;
- Notification of all public meetings where the TDP is presented or discussed to FDOT,
 MPO, and the regional workforce development board.

Relevant requirements from the overall public participation strategy set out in the Indian River MPO PPP include an effort to gather input proactively and an increase in the use of social media. Specific to TDPs, the MPO requires documentation of public participation, notification of the media, seeking out of innovative methods to engage with the public, and will consider all public feedback. MPO staff want to ensure that public involvement activities efficiently use resources to gather input.

Title VI of the Civil Rights Act

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

Environmental Justice

Title VI of the 1964 Civil Rights Act and the 1994 U.S. Department of Transportation (DOT) Order on Environmental Justice requires that the transportation planning process seek to





identify the needs of low-income and minority populations. The MPO is committed to enhancing public involvement activities to identify and address the needs of minority and low-income populations in making transportation decisions.

Limited English Proficiency (LEP)

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

Special Accommodations

Persons who require special accommodations under the Americans with Disabilities Act (ADA) or persons who require translation service to participate in public meeting activities are requested to notify the MPO at least 48 hours prior to workshops or meetings. Requests for alternative format materials or translation should be made in advance to accommodate the development and provision of these materials. GoLine public meeting notices will include the contact number for MPO staff and the deadline date for requesting special accommodations at workshops or meetings.

PROJECT TEAM

The following have been identified as components of the project team.

- Executive Team: The Executive Committee will manage the project on behalf of Indian River MPO. The Executive Committee's primary role is to provide strategic direction and approval to the Consultant Team. The Executive Committee will coordinate with the Consultant Team on at least a bi-monthly basis, approve major deliverables, coordinate and review all materials for presentation to the Review Committee, and generally oversee the project's progression. The Executive Team members include Brian Freeman (MPO), Phil Matson (MPO), and Karen Deigl (Senior Resource Association).
- Consultant Team: The Consultant Team will conduct day-to-day study activities and manage the study schedule and budget. It will report to the Executive Team on a bimonthly basis and the Review Committee on a periodic basis. The Consultant Team will be overseen by Richard Dreyer from Tindale-Oliver & Associates, Inc. (TOA). The team will be supported by Laura Everitt, Tara Crawford, Christopher Restrepo, among other Tindale Oliver employees.





 Review Members: To ensure the project proceeds in adherence with local objectives and needs, coordination will occur with a representative from the Florida Department of Transportation –District 4 and CareerSource Research Coast to review, provide comment, and be interviewed for the study.

Table 1 lists key team members by organizational affiliation.

Table 1: Key Team Members

Team Member	Organization	Title/Role
Executive Team		
Brian Freeman	MPO	Senior Planner
Phil Matson	MPO	Staff Director
Karen Deigl	Senior Resource Association	President/CEO
Consultant Team		
Richard Dreyer	Tindale Oliver	Principal
Review Members		
Jayne Pietrowski	FDOT D4	FDOT Reviewer
Jay Lundy	CareerSource Research Coast	Stakeholder

STAKEHOLDERS AND GENERAL PUBLIC

Outreach will focus on two distinct groups: stakeholders and the general public.

Stakeholders

Stakeholders are typically more informed regarding transportation issues and are viewed as having a particular stake in the decisions made with regard to transportation. The term "stakeholders" refers to groups such as the following:

- Elected officials,
- Workforce development boards,
- Bicycle and pedestrian groups,
- Commuter support groups,
- Health and human services organizations,
- City and county staff and agencies (including bus operators),
- Neighborhood associations,
- Service and community organizations,
- Organizations representing the transportation disadvantaged (e.g., older adults, persons with disabilities, minority groups, the disenfranchised, etc.),
- Non-profit organizations,
- Chambers of Commerce and economic development organizations,
- Small and large business owners,
- Professional associations,
- School and university representatives,





- Tourism representatives,
- Media representatives, and
- State and federal agencies (e.g., environmental, planning, or transportation agencies).

General Public

Outreach to the general public ensures that there is opportunity for everyone to participate in shaping transportation decisions in Indian River County, whether they are identified as a particular stakeholder or not. To engage the public, the project includes activities like an online survey and public listening sessions.

PUBLIC INVOLVEMENT OBJECTIVES

This project's public involvement objectives include the following:

- To develop a multi-faceted communication model that will keep the general public and all stakeholder groups informed about the status of the project.
- To clearly define the TDP purpose and objectives early in the process.
- To identify and document the concerns, issues, and needs from the key stakeholders.
- To provide stakeholders with baseline information about the current state of GoLine and keep them fully informed throughout the study.
- To encourage participation of all stakeholder groups within the project area while paying special attention to underserved communities.
- To use established community infrastructure (i.e., farmer's markets, shopping centers, and sports arenas) as an opportunity to engage the community and get community input.
- To provide frequent opportunities and a consistent access point for community input.
- To identify tools to gather information from stakeholders who cannot participate in meetings, such as via emails, questionnaires, telephone survey, Facebook, Twitter, other social networking tools, etc.
- To respond to community questions and comments when requested and contact information is provided.

PUBLIC INVOLVEMENT ACTIVITIES

The following public involvement activities will be undertaken during the TDP development process. Each public involvement activity type indicates the timeframe for its completion. These timeframes may be adjusted, in consultation with Indian River MPO staff, to ensure the most appropriate timing for the project. See Figure 1 for the project schedule overview.

Branding and Campaign

The Consultant team will develop a campaign strategy to generate public awareness of the planning effort and increase participation. To meet the campaign goal of increased public awareness, there are a variety of strategies and objectives developed including:

Develop logos and color scheme for branding campaign.





- Develop information and education for passengers, the general public, and staff.
- Engage with social media followers by providing content through websites and social media sites.

Schedule: Ongoing

Stakeholder Interviews

The Consultant Team will conduct up to 10 stakeholder interviews. The Consultant will work with MPO staff to identify and recruit appropriate individuals to interview. The Consultant will conduct the interviews using an interview script that will be developed in consultation with MPO staff.

Schedule: Completed by November 2017

On-board Survey

The Consultant Team will conduct an on-board survey of 100% of GoLine's scheduled fixed-route bus trips to obtain information related to the attitudes, preferences, and habits of current riders for market research purposes. In addition, the survey form will draw on GoLine's most recent survey questionnaire to promote consistency of questions. The on-board survey is expected to cover a sample of all routes and runs for all times of day for a representative weekday and Saturday of service. The survey will accommodate both English and Spanish languages, as necessary.

Schedule: Completed by December 2017

Direct Public Engagement

The Consultant Team will work with the Executive Team to identify events and opportunities for connecting with members of the public. Events could include farmers markets or other gatherings providing opportunity to connect with large segments of the population. Other opportunities could include coordinating with a local food bank to talk with constituents as they pass through the facility. The Consultant Team will use these events and opportunities to both educate the public as well as gather input. To the extent people are willing to participate, the Consultant Team will record public input to allow decision makers to hear directly from the public.

If events and opportunities are not readily identifiable in the necessary timeframe, the Consultant Team will substitute discussion group workshops instead. These workshops typically involve a smaller group of participants (8–12 persons) in an intimate meeting setting that promotes more in-depth discussion about issues and needs. To generate interest and participation, the Consultant will work with MPO staff to identify and invite potential participants to each workshop. Potential workshop candidates may include members from the business, health, social service, and education communities, as well as local chambers of commerce, the Hotel/Motel Association, and active stakeholder groups.

Schedule: Completed by March 2018





Public Survey

The Consultant will conduct a survey of the general public to obtain information related to the attitudes, preferences, and goals of the community related to public transit services. The survey will be available online, through social media, and in a hard copy version. Access to the online version will be via links on the MPO, GoLine, and other websites as available. The hard copy will be provided at workshops, listening sessions, via bus pass outlets, and through partnering agencies. These will have a location and/or mail in process for collection.

Schedule: Completed by December 2017

Operator and Dispatcher Interviews

The Consultant will conduct interviews of a representative group of GoLine operators and dispatchers. As the first line of contact and interaction with GoLine riders, bus operators and dispatchers tend to understand the needs and concerns of the system users and can provide input into understanding comments received on surveys and through workshops.

Schedule: Completed by November 2017

Presentations

A user-friendly, graphical presentation will be developed to support the communication and adoption of the TDP. Presentations will be made to the following entities:

- MPO Board,
- MPO Technical Advisory Committee, and
- MPO Citizens Advisory Committee.

Schedule: Completed by September 1, 2018.

SCHEDULE

The schedule has been developed to ensure completion and approval of the TDP by the Indian River MPO Board by September 1, 2018. Figure 1 displays the anticipated schedule.

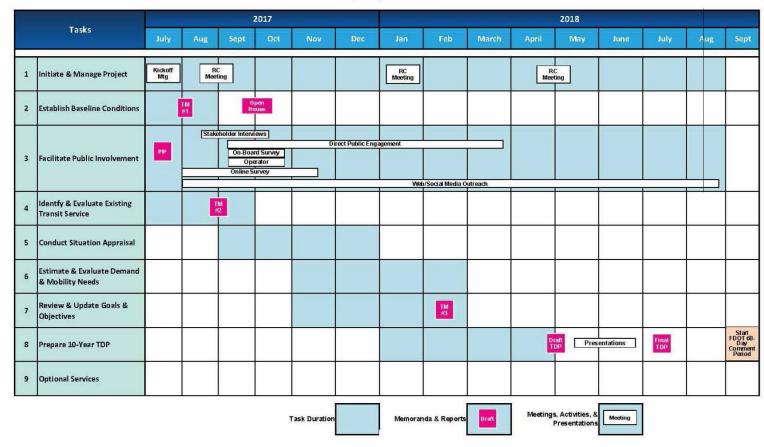




Figure 1 PROJECT SCHEDULE

Indian River Transit Development Plan

Prepared by Tindale Oliver





RICK SCOTT GOVERNOR 3400 West Commercial Boulevard Fort Lauderdale, FL 33309 MIKE DEW SECRETARY

July 2, 2018

Mr. Brian Freeman Senior Transportation Planner Indian River County MPO 1801 27th Street Vero Beach, FL 32960

SUBJECT: Transit Development Plan Public Involvement Plan (TDP PIP) Compliance
Determination

2001111111

Dear Mr. Freeman:

As previously communicated via e-mail, the Florida Department of Transportation (The Department), has reviewed and approves the Indian River County's 2019-2028 TDP PIP and finds that the agency has satisfied its obligations pursuant to the requirements of Chapter 14-73 of the Florida Administrative Code.

The Department's District Four TDP contact is Jayne Pietrowski and can be reached at 954-777-4661. If you have any questions or comments regarding the results of the TDP PIP review process, please do not hesitate to call.

Sincerely,

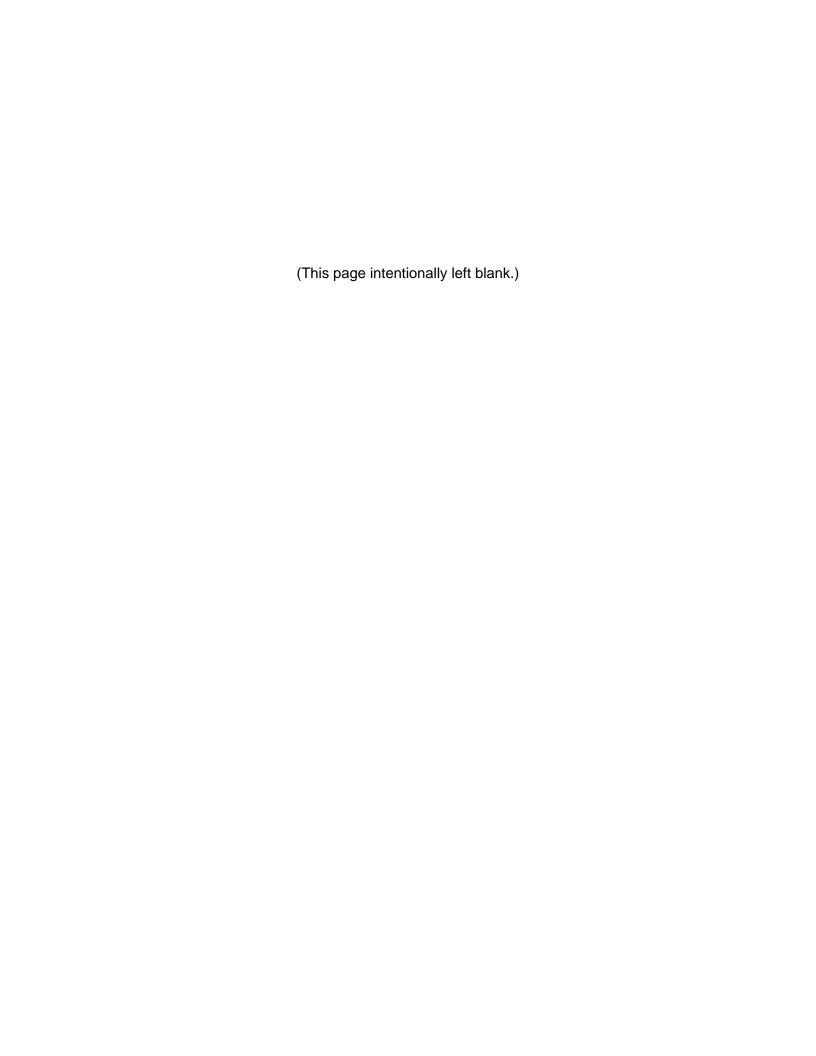
Amie Goddeau, P.E.

District Modal Development Administrator

District Four

AG/jap

cc: File





Appendix B: On-Board Survey Instrument





APPENDIX B – ONBOARD SURVEY INSTRUMENT

Dear Transit Customer

The Senior Resource Association is planning for the future. As part of this plan, we need information about your trip and your opinions to help improve bus services in years to come. Your participation in the attached survey is totally *voluntary*. If you do not wish to participate, please return the blank form to the surveyor on the bus. Your responses to this survey will be combined with responses of other riders and will not in any way identify you *personally*. Thank you for helping GoLine improve services for you!

1. Please list, in order, all the routes you are using on this trip: (please select only ONE) _____Route 6 11____Route 11 __Route 1 2 Route 2 7 Route 7 12 Route 12 3 Route 3 Route 8 13 Route 13 4____Route 4 9_____Route 9 14 Route 14 s____Route 5 10____Rotue 10 15 Route 15 2. Where did you come from before you got on the bus for THIS trip? 1 Home 5 Doctor/Dentist Work Shopping/Errands 3 School 7 Visiting/Recreation 4____College 8_____ Other (Please specify) 3. How did you get to the bus for THIS trip? (please select only one) Walked 3 blocks or less Bicycle 2_____Walked more than 3 blocks s____Taxi _____Drove miles (please estimate) 6______I requested a special pickup 4. Where are you going on THIS trip? (please select only your FINAL destination) ____Home s_____Doctor/Dentist 2____Work Shopping/Errands 3 School 7_____Visiting/Recreation 4 College 8 Other (Please specify)





Walk 3 blocks or less	4Bicycle
2Walk more than 3 block	-
Drivemiles (please estimate)	6Other(Please specify)
	us? (Please select only ONE)
1About 1 day per week	
22 or 3 days per week	4Once or twice a month
•	reason you ride the bus? (select only ONE)
1I don't drive	5Parking is difficult/expensive
2Car is not available	6Bus is more convenient
3Bus is more economica	7I don't have a valid driver's license
4Traffic is too bad	8Other: (please specify)
How would you make this	p if not by bus? (Please
select only ONE)	
1Drive	sTaxi
2Ride with someone	Wouldn't make the trip
3Bicycle	7Other(please specify)
4Walk	
How long have you been	sing GoLine services?
1This is my first day	42 years to 5 years
2Less than 6 months	sMore than 5 years
36 months to 2 years	6(Please specify
Your gender is	
Your gender is 1Male 2Female	3Prefer not to say





11.	Your a	ge is				
	1	_19 or under	4	_40 to 49	7	_65 or older
	2	_20 to 29	5	_50 to 59		
	3	30 to 39	6	_60 to 64		
12.	Your et	hnic heritage is	(Pleas	e 🥙 G only ONI	E)	
	1	_White	4	_Asian		
	2	_Black	5	_Native Americ	an	
	3	_Hispanic	6	_Other	(Pleas	e specify)
13		s the range of y Less than \$10,				
		_\$10,000 to \$19				
		\$20,000 to \$29		J V-1	5,000 OI OV	Ci
14	-	nave a valid driv		nse?		
15	If there v	was a fare, how	much w	ould you be wi	lling to pa	y for a ride?
16.		any working ve		cars, vans, and	or light du	ıty trucks are
	00	None 1	One	2Two	3	_Three or more
17. 1	How satis	sfied are you wi	th each o	of the following:	?:	

	Please circle the number that best reflects your opinion	Very Satisfied		Neutral		Very Unsatisfied
Α	Your overall satisfaction with GoLine	5	4	3	2	1
В	Frequency of service (how often runs)	5	4	3	2	1
С	Your ability to get where you want to go using the bus	5	4	3	2	1
D	How easy it is to transfer between buses	5	4	3	2	1
Ε	How regularly buses arrive on time	5	4	3	2	1





	Please circle the number the best	Very Satisfied		Neutral		Very Unsatisfied
	reflects your opinion	· · · ·		ZS.		*
F	The time it takes to make a trip by bus	5	4	3	2	1
G	How easy it is to get bus route and schedule information	5	4	3	2	1
н	How easy it is to use bus route and schedule information	5	4	3	2	1
- 1	The time of the day the earliest buses run on weekdays	5	4	3	2	1
J	The time of the day the latest buses run on weekdays	5	4	3	2	1
К	The time of the day the earliest buses run on Saturdays	5	4	3	2	1
L	The time of the day the latest buses run on Saturdays	5	4	3	2	1
М	How clean the buses are	5	4	3	2	1
N	How to clean the shelters are	5	4	3	2	1
0	How clean the stops are	5	4	3	2	1
Р	Safety at the bus stop	5	4	3	2	1
Q	The number of designated stops along the route	5	4	3	2	1
R	Temperature inside the buses	5	4	3	2	1
S	The bus driver's ability to drive the bus	5	4	3	2	1
Т	The bus driver's courtesy	5	4	3	2	1
U	The bus driver's knowledge of the transit system and routes	5	4	3	2	1

18. From the list in question 17 (A – U), identify the three most important improvements that would make GoLine Transit work better for you:

4	3	2
I	Z	J





Appendix C: Online Survey Instrument





APPENDIX C – ONLINE SURVEY INSTRUMENT

Question 1	Responses
Have you or a member of your household used GoLine transit services? (select all that apply)	Yes, I have used GoLine
	No, I have never used GoLine
	No, I was not aware that public transit service is available in Indian River County
	Other (please specify)

Question 2	Responses
How often do you use GoLine	Never
services?	
	Rarely
	A few times per month
	A few times per week
	5 days per week

Question 3	Response
Have you used public transit service outside of Indian River County?	Yes, while living in another city
	Yes, while visiting another city
	No, I have never used public transportation
	Other (please specify)

Question 4	Response
What type of trips do you use goLine for? (select all that apply)	Work
	School - College/University
	School - High School/Middle School
	Shopping
	Medical Appointments
	Government Office Access
	Social or Recreational Outings
	Religious Events





I have no current plans to use public transit
Other (please specify)

Question 5	Response
Please indicate how strongly	Strongly Agree / Agree/ Neutral / Disagree / Strongly
you agree or disagree with the	Disagree
following statements.	
	Public transit saves me money
	Public transit saves me time
	Public transit provides a convenient transportation
	option
	Public transit takes me where I want to go
	Public transit is an environmentally friendly means of
	transportation
	Public transit allows me to use my time wisely and do
	other things while I travel
	Public transit promotes a healthier lifestyle
	Public transit is a good idea for others but not for me

 Question 6
 Response

 My primary occupation is
 Agricultural or Forestry

 College Student
 Educational Provider

 High School/Middle School Student
 Industrial/Factory Worker

 Military
 Service (restaurant, hotel, etc) or Retail Provider

 Professional/Office
 Retired

 Unemployed
 I do not work outside of the home

 Other (please specify)

Question 7	Response
Age	Under 16
	16-24
	21-25
	26-30
	31-35
	36-45





46-55
56-65
Over 65
Do not wish to answer

Question 8	Response
Please provide the best range that reflects your individual yearly income	Less than \$10,000
	\$10,000-14,999
	\$15,000-24,999
	\$25,000-34,999
	\$35,000-44,999
	\$45,000-54,999
	\$55,000-74,999
	Over \$75,000
	Do not wish to answer

Question 9	Response
Please tell us about your	
household	
Including you, how many	
people live in your house?	
Including you, how many	
people are under 16 years old?	
Including you, how many are	
over 65 years old?	

Question 10	Response
Which best describes your race/ethnic group?	
	American Indian/Alaska Native
	Asian
	Black/African American
	White/Caucasian
	Other (please specify)
	Do not wish to answer

Occasion 44	Danis	
Question 11	Response	
Quicotion		





Do you identify as Hispanic/Latino?	Yes
	No
	Do not wish to answer

Question 12	Response
What is your HOME zip code?	
	Other (please specify)

Question 13	Response
What is your WORK/SCHOOL zip code?	
	Other (please specify)

Question 14	Response
Join our list for study updates and public meeting notifications by entering your e-mail address below.	





Appendix D: Bus Operator Survey Questions



Bus Operator & Dispatchers Survey

Please take a few moments to answer the following questions. This survey is part of an effort to improve GoLine services. Please do NOT put your name or other identifying information on the survey.

1. The following is a list of possible complaints riders may voice to bus
operators/dispatchers. Please read the list of common complaints below carefully and \underline{mar}
the 3 complaints that you hear most frequently from riders.
need more frequent service
need more later service. Until what time?
bus doesn't go where I want
need better sidewalk connections to bus stops
bus is late
need express service. Where?
bus leaves stop too early
need better connections to other counties. Where?
bus is not clean
need more bus shelters/benches
bus is not comfortable
bus schedule too hard to understand
safety/security at bus stop
fare is too high
safety/security onboard bus
other (please specify)

- 2. Do you think these complaints are valid? Please explain.
- 3. What do riders like about GoLine? Please <u>list the **3 compliments** that you hear most frequently from riders.</u>





- 4. Do you know of any safety or operating problems on any routes? Please explain.
- 5. Provide any specific service improvements to GoLine bus routes. Include information for routes that you drive and that you don't drive. Examples of service improvements include improving bus running times, adding new destinations, improving service frequency, combining services with other GoLine routes, etc.

Route	Service Improvement/Comment				

- 6. What do you like best about being a GoLine operator?
- 7. Use the space below to provide any other comments that could help improve GoLine service.

THANKS FOR YOUR HELP!





Appendix E: Stakeholder Interview Script

2019-2028 Indian River Transit Development Plan (TDP) Update

BACKGROUND INFORMATION

- A TDP is a strategic guide for public transportation development in the County.
- The TDP:
 - Evaluates existing services,
 - o Reviews demographic information of riders and their travel behaviors,
 - Gauges public perception through accessible activities for the general public and interested parties, and
 - o Reviews performance of the local system.
- It is a ten-year implementation plan which provides recommendations on:
 - How, where, when, and if new transit services should be introduced to the transit system, and,
 - Adjusting, removing, or improving aspects of the transit system that may not be adequately serving the public or that is not meeting performance measures
- Finally, a ten-year financial plan is constructed as part of the TDP that:
 - Estimates costs of existing and new services, and,
 - Projects known and potential revenues.
- TDPs can be very useful as they provide a review of the current transit system, recommendations for improvements, and outlines the cost of improvements.
- TDPs are not budgets or CIPs and do not necessarily bind decision-makers to
 elements of the TDP. However, great effort is put into developing a comprehensive
 overview of the transit system and planning for the future needs of the general
 public that can:
 - Help residents, businesses, and elected officials understand transit needs,
 - Use transit to improve/manage congestion in the local area,
 - o Promote sustainable and environmentally friendly transportation, and
 - Improve overall quality of life of residents.
- Candid discussions and continued participation from stakeholders in the transit development process allows:
 - Decision-makers to become more knowledgeable about the transit planning process and,
 - The County to construct and support a plan that not only has input from the local public, private and government sector, but helps foster consensus in the decision-making process ("everyone is on the same page").





GENERAL PERCEPTIONS:

- What agency or stakeholder group do you represent? Do you personally have any experience with the transit services provided by GoLine; if so, to what extent?
- What is your perception of transit's role in the community today? Should that role be evolving?
- How much awareness of and support for transit is there in the community? Have the levels of awareness and support changed over time?
- What do you believe GoLine is doing well?
- What do you believe GoLine can do better?

VISION:

- Are there areas currently not served or under-served by transit that should receive a higher priority? If so, where?
- What changes are needed in the transit system to serve new riders and meet community goals? Specify where? Why?
 - Examples: Increased service frequency, later service, premium transit services, ride hailing apps, park-and-ride lots combined with express bus service
- Should GoLine be looking at add new areas for transit service (more coverage), or should it keep or scale back existing coverage and focus on better service (higher frequency)?
- Do you believe that transit can affect future economic development in the County and its surrounding areas? If so, what role do you believe that transit can play in improving economic vitality?
- How important should earlier and later hours of service be?
- How important is the GoLine role in providing service to those without other transportation options and individuals with disabilities?
- What should GoLine's priorities be for the next 10 years?
- Are there any City, County or other land use policies that should be changed to help the transit system reach its goals? Or to increase the availability and/or location of multifamily housing?
 - Example: Changing current land use and/or zoning requirements to enable increased densities and more intense land uses.
- Do you believe technology changes will impact transit service in Indian River County? (ridesharing services, autonomous vehicles, and more online services reducing trip needs)
- Any other thoughts or comments you would like to share?





Appendix F: Vehicle Inventory

Appendix 1: Verliele inventory								
Vehicle #	Year	Make	Model	Mileage (07/15)	Passengers (Seats / Wheelchairs)	Service		
186	2004	Ford	16' Turtle Top	326,556	11-2	GoLine		
188	2005	Ford	16' Turtle Top	162,494	11-2	Community Coach		
191	2005	Ford	16' Turtle Top	194,661	11-2	Community Coach		
192	2006	Ford	16' Turtle Top	175,765	11-2	Community Coach		
194	2006	Ford	16' Turtle Top	189,530	11-2	Community Coach		
196	2005	Ford	16' Turtle Top	187,560	11-2	Community Coach		
197	2005	Ford	16' Turtle Top	171,007	11-2	Community Coach		
198	2006	Ford	16' Turtle Top	141,642	11-2	Community Coach		
200	2006	Chevy	31' Glaval	321,176	24-2	GoLine		
202	2007	Chevy	16' Turtle Top	458,843	11-2	GoLine		
203	2007	Chevy	16' Turtle Top	496,374	11-2	GoLine		
205	2007	Chevy	16' Turtle Top	228,612	11-2	Community Coach		
206	2007	Chevy	16' Turtle Top	203,740	11-2	Community Coach		
207	2007	Chevy	16' Turtle Top	241,130	11-2	Community Coach		
208	2007	Chevy	31' Glaval	246,750	24-2	GoLine		
209	2007	Chevy	31' Glaval	283,026	24-2	GoLine		
210	2007	GMC	31' Glaval	227,530	24-2	GoLine		
210	2009	GMC	31' Glaval	282,884	24-2			
212	2009	GMC	31' Glaval	•	24-2	GoLine GoLine		
213	2009			240,706	9-2			
		Chevy	16' Turtle Top	160,962	9-2	Community Coach		
214	2009	Chevy	16' Turtle Top	165,034		Community Coach		
215	2009	Chevy	16' Turtle Top	191,251	9-2	Community Coach		
216	2009	Chevy	16' Turtle Top	183,213	9-2	Community Coach		
217	2009	Chevy	16' Turtle Top	185,102	9-2	Community Coach		
218	2009	GMC	31' Glaval	290,981	24-2	GoLine		
220	2009	GMC	31' Glaval	340,177	24-2	GoLine		
221	2009	GMC	31' Glaval	370,593	24-2	GoLine		
222	2009	GMC	31' Glaval	292,448	24-2	GoLine		
225	2010	Dodge	Caravan	105,756	6-2	Community Coach		
226	2010	Dodge	Caravan	89,920	6-2	Community Coach		
227	2010	Dodge	Caravan	95,225	6-2	Community Coach		
228	2013	Int'l	27' Champion	171,365	16-2	GoLine		
229	2013	Int'l	27' Champion	176,709	16-2	GoLine		
230	2013	Int'l	27' Champion	137,094	16-2	GoLine		
231	2013	Int'l	27' Champion	171,165	16-2	GoLine		
232	2013	Gillig	29' Low Floor Bus	198,329	28-2	GoLine		
233	2013	Gillig	35' Low Floor Bus	131,637	32-2	GoLine		
234	2013	Gillig	35' Low Floor Bus	138,144	32-2	GoLine		
235	2012	VPG	MV1	38,370	3-1	Community Coach		
237	2012	VPG	MV1	25,996	3-1	Community Coach		
238	2012	VPG	MV1	33,543	3-1	Community Coach		
239	2013	Ford	Champion	28,951	16-2	Community Coach		
241	2015	Gillig	29' Low Floor Bus	138,430	28-2	GoLine		
242	2015	Gillig	29' Low Floor Bus	130,224	28-2	GoLine		
243	2015	Ford	16' Turtle Top	21,333	11-2	Community Coach		
244	2015	Ford	16' Turtle Top	30,517	11-2	Community Coach		
245	2015	Gillig	29' Low Floor Bus	23,540	28-2	GoLine		
246	2016	Ford	24' Turtle Top	3,901	16-2	GoLine		
247	2016	Ford	24' Turtle Top	4,478	16-2	GoLine		
248	2016	Ford	24' Turtle Top	2,786	16-2	GoLine		





Appendix G:

Trend Analysis and Peer Review





Appendix H: Plans Review

Review of Local Plans and Documents

This section presents the findings from the review of select existing federal, regional, and local plans and programs to identify relevant transit policies with potential implication that may influence transit operations, infrastructure, and policy for GoLine service. Findings from this review will help to ensure that development of the TDP is consistent with other local planning efforts and will help Indian River County to better understand its transit operating environment.

Federal Plans

FAST Act

The Fixing America's Surface Transportation (FAST) Act was signed into law on December 4, 2015, and supports funding through 2020 for public transportation. Although there is an annual funding increase from the previous long-term transportation bill (Moving Ahead for Progress in the 21st Century – MAP-21), this increase is subject to the annual appropriation process through Congress. Several changes of interest include the following:

- Advertising and concession revenue can now be used to cover the non-federal share for projects.
- Allows for discretionary spending on a project-specific basis of the Bus and Bus Facilities program which was previously eliminated in MAP-21 with a portion set aside for low- to no-emission vehicles and facilities.
- Long range plans must consider facilities to support intercity transportation.
- Retains the formula funding for the State of Good Repair program.
- Reduces the maximum federal New Starts share from 80% to 60% for Section 5309.

Other initiatives from FAST include:

- Availability of \$5.3 million in competitive grants for transportation options that
 would increase mobility and access to health services through FTA's Rides to
 Wellness Demonstration and Innovative Coordinated Access and Mobility Grants.
- Availability of \$60 million per year in competitive grants for the deployment, installation, and operation of advanced transportation technologies through the Advanced Transportation and Congestion Management Technologies Deployment Program. This program could be used for implementation of a universal smart card, dynamic ridesharing opportunities to support services for elderly and transportation disadvantaged individuals, advanced safety systems, and other advanced mobility offerings.
- Availability of \$268 million for the procurement of new vehicles and replacement of aging fleets and facilities through the 5339 Bus and Bus Facilities program. Of that amount, \$55 million has been earmarked for low- or no-emission bus procurement.





 Availability of \$275 million in 2016 to support transit-oriented developments (TOD) through the Transportation Infrastructure Finance and Innovation Act (TIFIA). Of that amount, 25% is reserved for projects in rural areas.

Grow America Act

The Grow America Act was proposed in federal FY 2016 with a budget of \$478 billion as a six-year surface transportation reauthorization proposal focused on modernizing transportation infrastructure. This bill included a \$115 billion for transit investments and expanded transportation options. The funding bill also included funds for transit improvements aimed at reducing fleet breakdowns in an effort to reduce delays and increase customer reliability. The Grow America Act also included language to strengthen regional coordination and decision making. For Florida specifically, the Grow America Act included approximately \$2.2 billion in highway funding and \$538 million in transit funding, significant increases over transportation bills with flat funding.

State Plans/Programs

2060 Florida Transportation Plan

The 2060 Florida Transportation Plan (FTP) was finalized in December 2010 with a 50-year horizon and is currently being updated. This document creates a shared vision for the future of transportation in Florida and its goals, objectives, and strategies to achieve the vision during the 50-year timeframe. The plan calls for a profoundly different transportation system from today's system, including the following:

- A statewide, multimodal transportation system that supports Florida's economic and livability goals by providing better connectivity to both urban and rural areas.
- Greater reliance on public transportation systems for moving people, including statewide passenger rail network and enhanced transit systems in Florida's major urban areas.
- A statewide, multimodal system of trade gateways, logistics centers, and transportation corridors to position Florida as a global hub for commerce and investment.
- An evolving air and space transportation system enabling Florida to remain a global leader for moving people and cargo between Florida and destinations in other states, nations, and orbit.
- A new generation of infrastructure, vehicles, fuels, and technologies to enable travel with fewer crashes, reduced delay, and fewer emissions.

Based on these core values of the 2060 FTP, public transportation plays an important role in shaping the Florida's transportation systems in the future. This implicates the necessities for Space Coast Area Transit to comply with the 2060 FTP by implementing more rigorous public transportation development approach.





State of Florida Transportation Disadvantaged (TD) 5-Year/20-Year Plan

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

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

The five-year and long-range strategic visions were reviewed and used for guidance and are indicated below.

Long-Range Strategic Vision

The long-range strategic vision seeks to create a strategy for the Florida CTD to support the development of a universal transportation system with the following features:

- A coordinated, cost-effective multimodal transportation system delivered through public-private partnerships.
- A single, uniform funding system with a single eligibility determination process.
- A sliding scale of fare payment based on a person's ability to pay.
- Use of electronic fare media for all passengers.
- Services that are designed and implemented regionally (both inter-county and intercity) throughout the state.

Five-Year Strategic Vision

The five-year strategic vision seeks to develop and field-test a model community transportation system for persons who are transportation disadvantaged by incorporating the following features:

- Statewide coordination of community transportation services using Advanced Public Transportation Systems including Smart Traveler Technology, Smart Vehicle Technology, and Smart Intermodal Systems.
- Statewide coordination and consolidation of community transportation funding sources.
- A statewide information management system for tracking passenger eligibility determination.
- Integration of Smart Vehicle Technology on a statewide multimodal basis to improve vehicle and fleet planning, scheduling, and operations. This effort includes vehicle and ridership data collection, electronic fare media, and geographic information system (GIS) applications.





 Development of a multimodal transportation network to optimize the transportation system as a whole using Smart Intermodal Systems. This feature would be available in all areas of the state via electronic access.

Regional and Local Plans/Programs

Treasure Coast 2040 Regional Long Range Transportation Plan (RLRTP)

The 2040 Treasure Coast RLRTP creates a regional overlay of the tri-county area and combined the regional projects from the local transportation plans to create an integrated long-term transportation plan and network for the region. The RLRTP has a 25-year planning horizon, and provides guidance for Federal and State regional funding for projects needed or valued by Treasure Coast citizens and the overall region. The Regional Multimodal Transportation System component of the RLRTP was based on the original regional network established in the 2030 RLRTP, with projects added that were since identified based on the multimodal needs assessment performed for the three individual 2040 LRTPs, to create the 2040 Regional Needs Assessment.





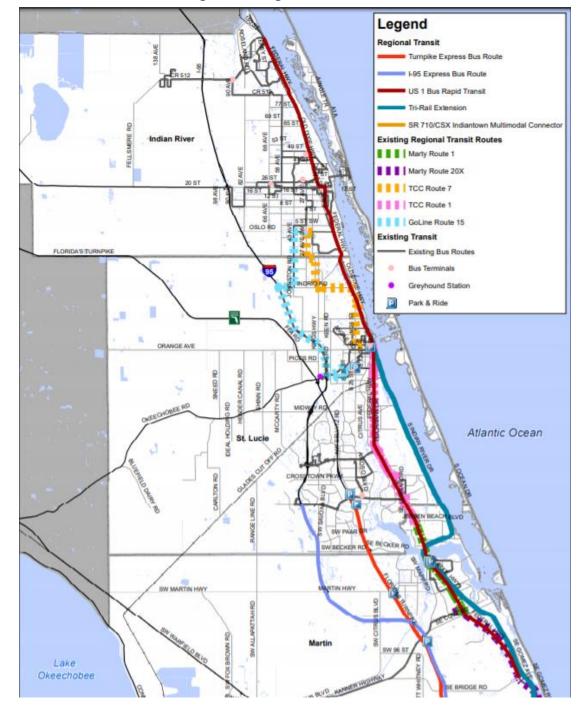


Figure H-1: Regional Transit Needs



Indian River County 2040 LRTP Update

The 2040 LRTP Update is the fundamental planning document for the long-range transportation system development in Indian River County. The LRTP serves as a plan to identify and prioritize multimodal transportation improvements over a 25-year planning horizon that may be pursued by the MPO and will use federal and state funds. The plan must be "cost feasible"; therefore, financial resources that will cover the cost of the projects must be identified. The MPO has assumed local gas tax collections, transportation impact fees, and the Local Option Sales Tax (LOST) as a portion of the projected revenues included in the LRTP Cost Feasible Plan.

The goals and applicable objectives developed for the development and evaluation of transportation improvement alternatives include:

Goal 1: A connected, responsive, aesthetically pleasing, and efficient transportation system that meets the needs of Indian River County residents, visitors, and businesses.

Goal 2: A transportation system that provides travel alternatives which enhance mobility for people and freight.

- Objective 2.01 Maintain Transit Quality and LOS "A" for reliability.
- **Objective 2.02** Maintain Transit Quality and LOS "B" for Service Coverage.
- **Objective 2.03** Expand weekday hours of service to 12 hours a day on at least one bus route every two years during the period from 2020 to 2040 so that all weekday bus routes operate at least 12 hours per day by 2040.
- **Objective 2.07** Increase the efficiency and convenience of connecting multiple modes by adding an average of one shelter or transfer facility per year through 2040.

Goal 3: A transportation system that is sensitive to the natural and social environment.

Goal 4: A safe transportation system for Indian County residents, visitors, and businesses.

Goal 5: A transportation system that is preserved and maintained through adequate investment and management of the infrastructure.

The GoLine has expanded the number of routes and service hours since the 2035 LRTP Plan, in response to rapid increase in transit ridership over the period. Service improvements recommended include extension of weekday operations, Saturday operations, and Sunday operations, and a realignment for Route 11. Recommended capital improvements included bus shelters and fleet upgrades and expansions. Long-term need projects recommended include increased frequency to one bus every 30 minutes on Routes 1, 2, 3, 4, and 8; new route connecting Fellsmere and Sebastian to Barrier Island via CR 512, US 1, and CR 510 Causeway; and the new route on A1A from Village Beach Market to CR 510 Causeway.





Brevard County Atlantic Ocean CR 510 65TH ST 49TH ST STH ST 12TH ST 8TH ST 4TH ST 1ST ST SW 5TH ST SW OSLO RD Legend **Aspirational Routes** Existing GoLine Routes Proposed Route 9 Potential Bus Shelter Aspirational Route 1 Route 10 Improve Headways to 30 Minutes Aspirational Route 2 Fellsmere - Sebastian - Barrier Route 11 Aspirational Village Circulator Route 12 SR A1A Connector Route 13 Route 11 Realignment Route 14

Figure H-2: Local Transit Needs Projects

Route 15
Route 16

Route 8 -



Indian River County 2035 LRTP

The 2035 LRTP is the fundamental planning document for the long-range transportation system development in Indian River County. The projects included in the LRTP will use federal and state funds and may be pursued by the MPO over the next 25 years. The plan must be "cost feasible"; therefore, financial resources that will cover the cost of the projects must be identified. The MPO has assumed local gas tax collections, transportation impact fees, and the Local Option Sales Tax (LOST) as a portion of the projected revenues included in the LRTP Cost Feasible Plan.

Service improvements were recommended for 10 of the 14 existing GoLine routes:

- Reduce headway to 30 minutes on five routes (1, 2, 3, 4, 8)
- Extend operating hours on 10 routes (1, 2, 3, 4, 5, 7, 8, 9, 10, 11)
- Provide Saturday service on three routes (5, 7, 10)

Indian River County Comprehensive Plan

Indian River County has goals, objectives and policies within its Transportation and Future Land Use Elements of the county comprehensive plan relative to the promotion and support of transit use.

The County has an objective to acquire right-of way for all county collector and arterial roads and all mass transit corridors within the urban area as identified in the 2030 Cost Feasible Long Range Transportation Plan (Objective 3 – Transportation Element). To meet this objective, the County plans to implement Complete Streets principles to include roadway redesigns that address public transportation needs in the planning, programming, design, construction, and maintenance of all County roadways (Policy 4.10 – Transportation Element).

The County will coordination all transportation requirements, procedures, and improvements with applicable governmental agencies involving transit, including participation in Regional Transit Authority activities with the Treasure Coast T/MPOs and the Brevard MPO, and with FDOT and the Florida East Coast Railroad (FEC) on future passenger rail service (Policies 6.6 and 6.7-Transportation Element).

The County is committed to having adequate transit services through 2030 and maintaining its fixed route system (Objective 7 and Policy 7.2 – Transportation Element). This will be maintained through the adoption of a "B" level of service for transit quality within the County (Policy 7.1-Transportation Element). The County adopted the MPO's Transit Development Plan, and committed funding for transit services (Policies 7.3, 7.4, 7.5, 7.6, and 7.7 – Transportation Element).

The County has a policy to establish land use guidelines for development in support of jobshousing balance in exclusive public transit corridors to ensure accessibility to public transit, in the event that corridors are established. (Policy 8.4 – Transportation Element). The County is likewise committed to ensure adequate transit access to the three public use





airports, passenger rail station, transit transfer points, intermodal facilities, and for all future county aviation and intermodal facility expansion (Policies 9.2 and 9.4-Transportation Element).

For future development, the County has committed to providing transit for compact, energy efficient and low density development (Policy 1.39 – Future Element); to promote diversity of development (Policy 5.6 – Future Element); and in support of traditional neighborhood design (TND) communities (Policy 18.1 – Future Element).

The County is committed to providing a level of service of 60 minutes on all fixed routes (Policy 3.8 – Future Element)

Indian River County 2013 Transit Development Plan (TDP)

As part of the system's transit planning process, the MPO is required to complete a major update of its TDP every five years. The most recent major update of the TDP was completed in 2013, providing a strategic guide for public transportation in Indian River County for a 10-year period, from FY 2014 through FY 2023. This TDP assessed the performance of existing services, reviewed demographic and travel behavior characteristics of the service area, summarized local transit policies, developed proposed transit enhancements, and prepared a 10-year implementation plan for fixed-route transit services. The TDP concluded a 10-year financial plan (projected costs and revenue through FY 2016 that provided guidance for GoLine during and beyond the 10-year planning horizon, along with the capital and operating costs and revenues required to successfully execute the implementation plan.

The TDP was developed to meet the requirements for Indian River's 10-year vision for transit services. The goal developed to identify the action in which the MPO must take in order to implement the TDP is presented below:

Goal: It is the goal of Indian River County to ensure that efficient, safe, and convenient transportation is available 24 hours a day, 7 days a week to health care, employment, education, shopping, social services, and other life sustaining activities for citizens who are unable to transport themselves, or to purchase transportation because of physical or mental disability, income status, or age.

- Objective 1 Increase Transit Ridership and Enhance System Performance
- Objective 2 Improve Cost Efficiency
- Objective 3 Improve Safety
- Objective 4 Increase Transit Funding and Revenue
- Objective 5 Increase Accessibility
- Objective 6 Improve Transit Quality of Service
- Objective 7 Improve Transit Service Coverage and Coverage





Indian River County 2013 Transportation Disadvantaged Service Plan (TDSP)

As part of the system's transit planning process, the MPO is required to complete a major update of its TDSP every five years. The most recent update of the TDSP was completed in 2013–2014, providing a strategic guide for paratransit services in Indian River County for a 10-year period, from FY 2014 through FY 2023. The TDSP assessed the service area profile and demographics; conducted a service analysis; developed goals, objectives and strategies; developed an Implementation Plan, performed an assessment of operations; evaluated service standards and the evaluation process; and summarized the expenses and trip rates for FY 2011–12.

The TDSP was developed in coordination with the TDP, to meet the requirements for Indian River's 10-year vision for paratransit services. The goal developed to identify the action in which the CTC, the Local Coordinating Board (LCB), and/or the Designated Official Planning Agency (DOPA) must take in order to implement the TDSP is presented below:

Goal: It is the goal of Indian River County to ensure that efficient, safe, and convenient transportation is available 24 hours a day, 7 days a week to health care, employment, education, shopping, social services, and other life sustaining activities for citizens who are unable to transport themselves, or to purchase transportation because of physical or mental disability, income status, or age.

- Objective 1 Designation and Evaluation of the CTC
- Objective 2 Reliability
- Objective 3 Local Revenue
- Objective 4 Safety
- Objective 5 Coordination
- Objective 6 Service Effectiveness
- Objective 7 Cost Efficiency/Effectiveness
- Objective 8 Vehicle Utilization
- Objective 9 Waiting Time
- Objective 10 Public Relations
- Objective 11 Prioritization
- Objective 12 Eligibility
- Objective 13 Utilization of Transit System
- Objective 14 On –time Performance
- Objective 15 Complaint Quality of Service
- Objective 16 Accumulated No –Shows

Indian River County 2016 Public Participation Plan (PPP)

The Public Participation Plan was developed consistent with revised Federal and State guidance on MPO public participation. The Plan indicates that public participation is accommodated at public committee meetings with distribution of meeting agendas and/or





work products to be completed through the MPO's communication strategies. The strategies include:

- The MPO may establish special consensus-building workshops, charrettes, discussion groups, or other public meetings during the course of project development. These meetings may be held at various locations throughout the county as appropriate.
- The MPO will include a public participation section documenting the public participation for the project as a component of final reports for projects.
- To provide information in a concise and understandable format, the MPO will produce an Executive Summary of major improvements for major projects.
- MPO staff will inform the media of upcoming projects so that interested citizens and officials may have the opportunity to become involved as early as possible.
- The MPO will make available draft scopes of work and draft work products for public review at MPO offices.
- MPO staff will seek out innovative methods to inform the public of project activities and allow the public to review and comment on project reports. This may include postings to the MPO Web Site, publication in the proposed MPO newsletter, and the preparation of periodic special edition newsletters, reports or flyers pertaining to the project.
- In developing major projects, the MPO will abide by FDOT's Community Impact Assessment methodology and its stated principles of informing, educating and including the public in the decision making process.
- MPO staff will consider all public feedback obtained during the course of its major projects when undertaking related recurring activities.

City of Vero Beach Comprehensive Plan

The City of Vero Beach has goals, objectives and policies within its Traffic Circulation Element of its comprehensive plan relative to the promotion and support of transit use.

The City has an objective for the provisions for a safe, convenient and efficient multi-modal transportation system. The City intends to support the County in its authorization and provision of public transit service throughout the urban area (Policy 3.5). This will be supported through the level of service standard on one-hour headways on all fixed transit routes (Policy 3.6). The City will coordinate with the MPO, through its technical advisory committee, to assess whether transit improvements should be included in the project priorities submitted to FDOT for State and federal funding, on an annual basis (Policy 3.7). The City will also support the MPO for coordinated transportation disadvantaged services (Policy 3.8).





In relation to land use compatibility, the City shall establish land use guidelines for development in exclusive public transit corridors to assure transit access where such corridors are established (Policy 6.6).

In relation to intermodal facilities, the City shall ensure adequate access to transit transfer points and other intermodal facilities by supporting roadway and transit improvements (Policy 8.2). The City will review transit development plans to ensure adequate bicycle, pedestrian, transit, and auto access and circulation within related facilities (Policy 8.3).

City of Sebastian Comprehensive Plan

The City of Sebastian has goals, objectives and policies within its Transportation Element of its comprehensive plan relative to the promotion and support of transit use.

The City's transportation system will be coordinated with the work plans and programs of Indian River County, FDOT, the Florida Transportation Plan, and the Indian River County Metropolitan Planning Organization. The City will use County and State numerical indicators for measuring the achievement of City mobility goals which include annual transit trips per capita (Policy 1.4.3). The City shall design all major roadways as complete transportation corridors incorporating bicycle and pedestrian features, and planning for transit features to start creating a true multi-modal system (Policy 1.6.1). By 2014, in coordination with the Indian River County MPO, the City shall evaluate the need for additional public transit routes in conjunction with the Indian River Transit GoLine bus system and major trip generators and attractors; and update the land development regulations to include site and building design standards for development in exclusive public transit corridors to assure the accessibility of new development to public transit (Policies 1.6.14 and 1.6.15). The City will coordinate roadway and transit service improvements with the future needs of the Sebastian Municipal Airport (Policy 1.8.6).

City of Fellsmere Comprehensive Plan

The City of Fellsmere has goals, objectives, and policies within its Transportation Element of its Comprehensive Plan relative to the promotion and support of transit use.

The City shall ensure an integrated multimodal transportation system (Goal A). The City shall coordinate and plan for land use, site and building design standards for public transit corridors to accommodate development patterns and design compatible with bus transit and assure the accessibility of existing infill and new development to public transit and coordinate in the transit planning and land use planning processes (Policy A-2.3 and A-2.4). In addition, the City shall coordinate with Indian River County and the County's transit provider for the provision of efficiency public transit services based upon existing and proposed major trip generators and attractors, safe and convenient public transit, land uses, the accommodation of special needs of transportation disadvantaged, and to encourage the ease of transfer between mass transit and all other modes (Objective A-4 and subsequent policies). Internally, the City shall coordinate the goals, objectives, and policies of the Transportation Element of the Comprehensive Plan with the Future Land Use Element of





Comprehensive Plan to ensure and maintain internal consistency, and to ensure that new development and redevelopment remain in areas accessible to Indian River County transit systems (Objective A-6).

White Paper – Site Assessment for the North County Bus Transit Hub

A white paper was developed for the Indian River County MPO to provide a site assessment for the North County Transit Hub. It includes the identification of potential site locations, an evaluation of identified sites using a two-tiered approach, and recommendations for the preferred site. A major objective of this study was to identify and prioritize candidate sites for a new transit hub in the North County area. The study identifies the preferred site locations for short- and long-term implementation, which considers community concerns and future community development.

The study identified a preferred site for implementation within the next 18–24 months, and one additional potential alternative site identifies for implementation 8–10 years into the future if needed. The preferred short-term site was the Vacant lot at 9455 CR 512/Sebastian Boulevard, which provides the best options for development in the short term. Should a need arise or when CR 510 is widened in the future, the long-term site located at Vacant land in CR 510 Curve, which would allow for an expanded transit hub should the demand arise in the future.

The recommendations were for the Indian River County MPO to work with its local and State partners to develop the short-term North County Transit Hub, to coordinate with FDOT and Indian River County, and to begin community engagement. Any major or significant changes to routing in this area should consider the long-term option prior to implementation.





Appendix I:

T-BEST Fare Scenario Results





Table I-1: Implement a \$0.50 Fare – Weekday Ridership

	Additional	Direct Boardings			Tra	nsfer Boardi	ngs	To	tal Boardings	
Route	Boardings (+\-)	2019	2028	% Change	2019	2028	% Change	2019	2028	% Change
1	-2,147	66,474	64,363	-3.20%	1,451	1,415	-2.50%	67,925	65,778	-3.20%
2	-6,532	180,368	175,118	-2.90%	14,681	13,400	-8.70%	195,049	188,517	-3.30%
3	-1,719	55,397	53,808	-2.90%	1,138	1,008	-11.40%	56,535	54,816	-3%
4	-3,173	101,585	98,492	-3%	3,409	3,329	-2.30%	104,994	101,821	-3%
5	-2,043	69,924	68,104	-2.60%	2,256	2,033	-9.90%	72,180	70,137	-2.80%
6	-2,609	73,376	70,909	-3.40%	5,406	5,263	-2.60%	78,781	76,172	-3.30%
7	-2,571	75,346	72,994	-3.10%	6,186	5,967	-3.50%	81,532	78,961	-3.20%
8	-4,676	131,108	126,510	-3.50%	2,651	2,572	-3%	133,758	129,082	-3.50%
9	-4,110	120,103	116,146	-3.30%	9,256	9,102	-1.70%	129,358	125,248	-3.20%
10	-4,651	110,986	107,382	-3.20%	5,691	4,644	-18.40%	116,677	112,026	-4%
11	-1,449	36,445	35,155	-3.50%	2,056	1,897	-7.70%	38,501	37,052	-3.80%
12	-1,746	51,628	49,936	-3.30%	2,617	2,563	-2.10%	54,245	52,499	-3.20%
13	-1,719	53,807	52,178	-3%	2,738	2,649	-3.30%	56,545	54,826	-3%
14	-4,130	95,838	91,954	-4.10%	9,124	8,876	-2.70%	104,961	100,831	-3.90%
15	-411	11,025	10,622	-3.70%	354	346	-2.30%	11,379	10,968	-3.60%
Total	-43,686	1,233,410	1,193,671	-3.2%	69,014	65,064	-5.7%	1,302,420	1,258,734	-3.4%



Table I-2: Implement a \$0.50 Fare – Weekend Ridership

	Additional	Direct Boardings			Tra	nsfer Boardi	ings	Total Boardings		
Route	Boardings (+\-)	2019	2028	% Change	2019	2028	% Change	2019	2028	% Change
1	-146	5,006	4,860	-2.90%	28	28	0%	5,034	4,888	-2.90%
2	-497	11,849	11,487	-3.10%	739	603	-18.40%	12,588	12,091	-3.90%
3	-48	2,184	2,137	-2.20%	76	74	-2.60%	2,260	2,212	-2.10%
4	-176	7,064	6,890	-2.50%	140	138	-1.40%	7,204	7,028	-2.40%
5	-84	5,022	4,940	-1.60%	42	41	-2.40%	5,064	4,980	-1.70%
6	-94	4,119	4,029	-2.20%	200	196	-2%	4,319	4,225	-2.20%
7	-83	4,308	4,228	-1.90%	263	260	-1.10%	4,571	4,488	-1.80%
8	-272	9,015	8,801	-2.40%	318	259	-18.60%	9,332	9,060	-2.90%
9	-92	3,632	3,574	-1.60%	198	164	-17.20%	3,830	3,738	-2.40%
10	-85	4,771	4,741	-0.60%	228	172	-24.60%	4,998	4,913	-1.70%
11	0	0	0	0%	0	0	0%	0	0	0%
12	-40	3,143	3,104	-1.20%	62	61	-1.60%	3,205	3,165	-1.20%
13	0	0	0	0%	0	0	0%	0	0	0%
14	-59	6,320	6,270	-0.80%	449	441	-1.80%	6,770	6,711	-0.90%
15	0	0	0	0%	0	0	0%	0	0	0%
Total	-1,676	66,433	65,061	-2.1%	2,743	2,437	-11.2%	69,175	67,499	-2.4%



Table I-3: Implement a \$1.00 Fare – Weekday Ridership

	Additional	D	irect Boarding	gs	Trai	nsfer Boardi	ngs	To	tal Boardings	
Route	Boardings (+\-)	2019	2028	% Change	2019	2028	% Change	2019	2028	% Change
1	-4,118	66,474	62,430	-6.1%	1,451	1,378	-5%	67,925	63,807	-6.1%
10	-8,131	110,986	103,969	-6.3%	5,691	4,577	-19.6%	116,677	108,546	-7%
11	-3,172	36,445	33,959	-6.8%	2,056	1,371	-33.3%	38,501	35,329	-8.2%
12	-4,121	51,628	48,275	-6.5%	2,617	1,849	-29.3%	54,245	50,124	-7.6%
13	-3,440	53,807	50,612	-5.9%	2,738	2,493	-8.9%	56,545	53,105	-6.1%
14	-7,605	95,838	88,642	-7.5%	9,124	8,715	-4.5%	104,961	97,356	-7.2%
15	-963	11,025	10,079	-8.6%	354	337	-4.8%	11,379	10,416	-8.5%
2	-12,258	180,368	169,991	-5.8%	14,681	12,800	-12.8%	195,049	182,791	-6.3%
3	-3,471	55,397	52,072	-6%	1,138	992	-12.8%	56,535	53,064	-6.1%
4	-6,442	101,585	95,325	-6.2%	3,409	3,227	-5.3%	104,994	98,552	-6.1%
5	-4,300	69,924	66,234	-5.3%	2,256	1,646	-27%	72,180	67,880	-6%
6	-5,273	73,376	68,528	-6.6%	5,406	4,981	-7.9%	78,781	73,508	-6.7%
7	-5,585	75,346	70,476	-6.5%	6,186	5,471	-11.6%	81,532	75,947	-6.9%
8	-9,514	131,108	122,067	-6.9%	2,651	2,177	-17.9%	133,758	124,244	-7.1%
9	-9,247	120,103	112,186	-6.6%	9,256	7,925	-14.4%	129,358	120,111	-7.1%
Total	-87,640	1,233,410	1,154,845	-6.4%	69,014	59,939	-13.1%	1,302,420	1,214,780	-6.7%



Table I-4: Implement a \$1.00 Fare – Weekend Ridership

	Additional	Direct Boardings			Tra	nsfer Board	ings	Total Boardings		
Route	Boardings (+\-)	2019	2028	% Change	2019	2028	% Change	2019	2028	% Change
1	-274	5,006	4,733	-5.5%	28	27	-3.6%	5,034	4,760	-5.4%
10	-114	4,771	4,714	-1.2%	228	170	-25.4%	4,998	4,884	-2.3%
11	0	0	0	0%	0	0	0%	0	0	0%
12	-77	3,143	3,068	-2.4%	62	60	-3.2%	3,205	3,128	-2.4%
13	0	0	0	0%	0	0	0%	0	0	0%
14	-114	6,320	6,221	-1.6%	449	435	-3.1%	6,770	6,656	-1.7%
15	0	0	0	0%	0	0	0%	0	0	0%
2	-741	11,849	11,251	-5%	739	597	-19.2%	12,588	11,847	-5.9%
3	-96	2,184	2,091	-4.3%	76	73	-3.9%	2,260	2,164	-4.2%
4	-346	7,064	6,723	-4.8%	140	135	-3.6%	7,204	6,858	-4.8%
5	-163	5,022	4,861	-3.2%	42	40	-4.8%	5,064	4,901	-3.2%
6	-156	4,119	3,971	-3.6%	200	193	-3.5%	4,319	4,163	-3.6%
7	-163	4,308	4,153	-3.6%	263	256	-2.7%	4,571	4,408	-3.6%
8	-466	9,015	8,611	-4.5%	318	255	-19.8%	9,332	8,866	-5%
9	-160	3,632	3,510	-3.4%	198	160	-19.2%	3,830	3,670	-4.2%
Total	-2,870	66,433	63,907	-3.8%	2,743	2,401	-12.5%	69,175	66,305	-4.1%



Appendix J:

Vehicle Replacement Plan





Table J-1: Fixed-Route Vehicle Replacement Program

Year	Vehicle Type	# Vehicles	Vehicle Replacement Cost	Total Cost
FY 2021	Heavy Duty Bus	2	\$454,467	\$908,933
F1 2021	Medium Cutaway	3	\$106,933	\$320,800
FY 2023	Large Cutaway	4	\$165,867	\$663,469
FY 2025	Heavy Duty Bus	3	\$485,976	\$1,457,928
FY 2026	Medium Cutaway	3	\$116,278	\$348,839
FY 2027	FY 2027 Heavy Duty Bus		\$502,541	\$1,005,082
Total		17	N/A	\$4,705,052

Notes:

- 1. Total cost is rounded based on the number of vehicles multiplied by the replacement cost per vehicle.
- 2. Assumes a FY 2018 base cost of \$425,000 for the heavy duty bus, \$150,000 for the medium cutaway vehicle, and \$100,000 for the large cutaway bus inflated at 1.7% per year.

Table J-2: Paratransit Vehicle Replacement Program

Year	Vehicle Type	# Vehicles	Vehicle Replacement Cost	Total Cost
FY 2019	Small Cutaway	2	\$77,556	\$155,113
FY 2020	Small Cutaway	2	\$78,867	\$157,734
FY 2021	Small Cutaway	2	\$80,200	\$160,400
FY 2022	Small Cutaway	2	\$81,555	\$163,111
FY 2023	Small Cutaway	2	\$82,934	\$165,867
FY 2024	Small Cutaway	2	\$84,335	\$168,670
FY 2025	Small Cutaway	2	\$85,764	\$171,521
FY 2026	Small Cutaway	2	\$87,209	\$174,420
FY 2027	Small Cutaway	2	\$88,6847	\$177,367
FY 2028	Small Cutaway	2	\$90,182	\$180,365
Total		20	N/A	\$1,674,568

Notes:

- 1. Total cost is rounded based on the number of vehicles multiplied by the replacement cost per vehicle.
- 2. Assumes a FY 2018 base cost of \$75,000 per vehicle inflated at 1.7% per year.





Appendix K:

Transit Asset Management Plan





With the adoption of MAP-21, MPOs are required to establish performance targets for the management of transit assets. The following tables summarize the required performance measures for Indian River County as well as the current status of each performance measure. Transit vehicles have a useful life benchmark of 4-12 years, based on the vehicle type. The performance measure for vehicles is the percent of vehicles that are within their respective useful life benchmark.

Transit Vehicles and Equipment

	Asset Class			Vehicle Age (Years)	Useful Life	% Exceeding ULB (including spare vehicles)			
Asset Category		Individual Assets	# of Vehicles		Benchmark (Years)	FY 19 Target	Current Status (Active Fleet)	Current Status (Active + Spares)	
	Bus	2013 Gillig	3	5	12				
	(BU)	2015 Gillig	2	3	12	25%	0%	0%	
Davisanus	, ,	2016 Gillig	1	2	12				
Revenue Vehicles		2004 Turtle Top	2	14	5				
(Fixed Route)	Cutaway	2009 Glaval	6	9	5				
	Bus (CU)	2013 Champion	4	5	7	50%	0%	35%	
		2016 Turtle Top	5	2	5				
		2018 Champion	4	0	7				





				Vehicle	Useful Life	% Exceeding	ULB (including s	pare vehicles)
Asset Category	Asset Class	Individual Assets	# of Vehicles	Age (Years)	Benchmark (Years)	FY 19 Target	Current Status (Active Fleet)	Current Status (Active + Spares)
		2005 Turtle Top	3	13	5		45%	
		2006 Turtle Top	3	12	5	67%		
		2007 Turtle Top	3	11	5			68%
	Cutaway Bus (CU)	2009 Turtle Top	4	9	5			
		2013 Champion	1	5	5			
Revenue		2015 Turtle Top	2	3	5			
Vehicles (Demand		2017 Champion	1	1	5			
Response)		2017 Turtle Top	1	1	5			
		2018 Champion	1	0	5			
	Van	2010 Braun Entervan	3	8	4		0%	
	(VN)	2012 MV1	3	6	4	67%		86%
	(***)	2018 Braun Entervan	1	0	4			
Equipment	Truck	2014 Chevrolet	1	4	8	50%	0%	0%





Transit facilities are rated using the Transit Economic Requirements Model (TERM) Scale. The TERM scale has a range of 1 to 5, with 5 representing facilities in the best condition. A TERM rating of 3.0 represents a facility in adequate condition. Each facility is assigned a rating based on its condition.

Facilities

Asset Category	Asset Class	Individual Assets	Condition Assessment – TERM Rating	FY 19 Target (% Under TERM 3.0)	Current Status	Notes
Faciltiies	Administrative/ Maintenance	Transit Administration & Maintenance Facility	5.0	0%	0%	Constructed in 2012
	Passenger	ssenger Main Transit Hub		0%	0%	Constructed in 2017

