

City of Gainesville

**Regional Transit System (RTS)
Five-Year Major Update of the
Ten-Year Transit Development Plan
FY2020 – FY2029**

Final

September 2019

Gainesville.
MOBILITY



Table of Contents

Contents

1.0 Introduction.....	1-1
1.1 Objectives of this Plan.....	1-1
1.1.1 TDP Requirements	1-1
1.2 Organization of the Report	1-3
2.0 Baseline Conditions.....	2-1
2.1 Service Area Description	2-1
2.2 Population Profile	2-3
2.2.1 Population Trends.....	2-5
2.2.2 Projected Population and Dwelling Unit Growth	2-5
2.3 Demographic and Travel Behavior Characteristics	2-10
2.3.1 Student Population	2-10
2.3.2 Age Distribution.....	2-13
2.3.3 Income and Poverty	2-16
2.3.4 Household Vehicle Availability	2-18
2.3.5 Transportation Disadvantaged	2-20
2.4 Commuting Patterns.....	2-20
2.4.1 Means of Travel to Work.....	2-27
2.4.2 Major Employers.....	2-27
2.4.3 Employment Density.....	2-28
2.5 Future Land Use and Development Activities.....	2-30
2.6 Roadway Characteristics	2-32
2.7 Market Assessment	2-33
2.7.1 Discretionary Market Assessment	2-33
2.7.2 Transit Orientation Index.....	2-33
2.8 Plans Review and Regional Trends in Transit.....	2-39
2.8.1 Florida Transportation Plan: Horizon 2060.....	2-39
2.8.2 2040 Long Range Transportation Plan	2-39
2.8.3 SR 26 / University Avenue Multimodal Emphasis Corridor Study	2-39
2.8.4 Go Enhance RTS Study.....	2-40

2.8.5	City of Gainesville Streetcar Feasibility Study	2-40
2.8.6	University of Florida Partnerships and Programs.....	2-40
2.8.7	Alachua County Mobility Plan.....	2-41
2.8.8	Self-Driving Vehicle Research and Testing.....	2-41
2.8.9	Incorporating Safety into Transportation Planning	2-41
2.8.10	Pedestrian Safety Assessment in Proximity to Transit Stops and Facilities.....	2-42
2.8.11	Multimodal Level of Service Report (2017)	2-42
2.8.12	Santa Fe State College Downtown Campus (2019).....	2-43
2.8.13	University of Florida Transportation & Parking Strategic Plan	2-44
2.8.14	Plans and Studies Summary.....	2-44
3.0	Inventory of Existing Services and Resources	3-1
3.1	Governance and Funding.....	3-1
3.2	Existing Services Inventory	3-2
3.2.1	Fixed-Route Services.....	3-2
3.2.2	Paratransit Services	3-17
3.2.3	Public and Private Transportation Providers	3-18
4.0	Trend Analysis and Peer System Review	4-19
4.1	Peer System Selection	4-20
4.2	Fixed Route General Performance Indicators.....	4-21
4.2.1	Service Area Population.....	4-21
4.2.2	Passenger Trips (Ridership)	4-21
4.2.3	Passenger Miles	4-22
4.2.4	Vehicle Miles	4-22
4.2.5	Revenue Miles.....	4-23
4.2.6	Vehicle Hours.....	4-24
4.2.7	Route Miles	4-24
4.2.8	Total Operating Expense.....	4-24
4.2.9	Total Employee FTEs.....	4-25
4.2.10	Vehicles Operated in Maximum Service	4-25
4.2.11	Total Gallons Consumed.....	4-26
4.3	Fixed Route Effectiveness Measures.....	4-26

4.3.1	Vehicle Miles Per Capita	4-26
4.3.2	Passenger Trips Per Capita	4-27
4.3.3	Passenger Trips Per Revenue Mile.....	4-27
4.3.4	Passenger Trips Per Revenue Hour	4-28
4.3.5	Revenue Miles Between Failures	4-28
4.4	Fixed Route Efficiency Measures	4-29
4.4.1	Operating Expense Per Capita	4-29
4.4.2	Operating Expense Per Passenger Trip	4-29
4.4.3	Operating Expense Per Passenger Mile	4-30
4.4.4	Operating Expense Per Revenue Mile.....	4-30
4.4.5	Operating Expense Per Revenue Hour	4-31
4.4.6	Farebox Recovery (%)	4-31
4.4.7	Revenue Miles Per Vehicle Mile.....	4-32
4.4.8	Revenue Miles Per Total Vehicles	4-32
4.4.9	Vehicle Miles Per Gallon	4-33
4.4.10	Average Fare	4-33
4.5	Summary Results of Fixed-Route Peer and Trend Analysis.....	4-35
4.5.1	Trend Analysis Summary	4-35
4.5.2	Peer System Analysis Summary	4-35
4.6	Demand Response (Paratransit) Peer and Trend Analysis.....	4-36
4.6.1	Demand Response General Performance Indicators	4-36
4.6.2	Demand Response Effectiveness Measures	4-39
4.6.3	Demand Response Efficiency Measures	4-40
4.7	Demand Response Peer and Trend Conclusions.....	4-43
5.0	Public Involvement	5-1
5.1	Public Participation Requirements	5-1
5.2	Public Participation Overview of Activities	5-2
5.3	2019 RTS On-Board Survey	5-3
5.3.1	Survey Approach	5-3
5.3.2	On-Board Survey Summary Results	5-4
5.3.3	Travel Characteristics	5-4

5.3.4	On-Board Survey Summary	5-11
5.4	2019 Attitudinal and Service Evaluation Survey	5-12
5.4.1	Usage and Service Evaluation	5-12
5.4.2	Demographics	5-16
5.4.3	Attitudinal and Service Evaluation Survey Summary.....	5-19
5.6	2019 Online Survey.....	5-20
5.6.1	Service Evaluation.....	5-20
5.6.2	Mobility Needs.....	5-24
5.6.3	Online Survey Summary	5-26
5.7	Final Findings and Conclusions	5-27
6.0	Situation Appraisal.....	6-28
6.1	Local and Regional Plans.....	6-28
6.1.1	Florida Transportation Plan: Horizon 2060.....	6-28
6.1.2	2040 Long Range Transportation Plan.....	6-28
6.1.3	SR 26 / University Avenue Multimodal Emphasis Corridor Study	6-29
6.1.4	Go Enhance RTS Study.....	6-29
6.1.5	City of Gainesville Streetcar Feasibility Study	6-30
6.1.6	University of Florida Partnerships and Programs.....	6-30
6.1.7	Alachua County Mobility Plan.....	6-31
6.1.8	Self-Driving Vehicle Research and Testing.....	6-31
6.1.9	Incorporating Safety into Transportation Planning	6-31
6.1.10	Pedestrian Safety Assessment in Proximity to Transit Stops and Facilities.....	6-32
6.1.11	Multimodal Level of Service Report (2017)	6-32
6.1.12	Santa Fe State College Downtown Campus (2019).....	6-33
6.1.13	University of Florida Transportation & Parking Strategic Plan	6-34
6.2	Socioeconomic Trends	6-36
6.3	Land Use	6-37
6.4	Organization	6-41
6.5	Travel Behavior and Trends.....	6-43
6.6	Ridership and Performance Trends.....	6-44
6.7	Technology	6-44

6.7.1	Electronic Fare Payment Systems	6-44
6.7.2	Mobile Applications for Real-Time Information.....	6-45
6.7.3	Transit Signal Priority	6-45
6.7.4	Bus Technology and Connected Vehicles	6-45
6.7.5	Transportation Network Companies (TNCs).....	6-45
6.7.6	Bicycle and Scooter Sharing Companies	6-46
6.8	Public Involvement	6-46
7.0	Transit Demand Assessment.....	7-1
7.1	TBEST Overview	7-1
7.2	Model Inputs / Assumptions and Limitations	7-1
7.2.1	Transit Network.....	7-2
7.2.2	Socioeconomic Data	7-2
7.2.3	Special Generators.....	7-2
7.3	TBEST Model Limitations.....	7-3
7.4	Baseline Ridership Analysis	7-3
7.5	Forecast Ridership Analysis	7-7
8.0	Alternatives Development and Evaluation.....	8-1
8.1	Development of Alternatives	8-1
8.2	Service	8-5
8.2.1	Improvements to Existing Routes	8-5
8.2.2	New Service	8-6
8.3	Technology	8-9
8.4	Capital/Infrastructure	8-10
8.5	Policy/Other	8-11
8.6	Evaluation of Alternatives.....	8-12
8.7	Alternatives Evaluation Results Summary	8-13
9.0	Goals, Objectives, and Initiatives.....	9-1
9.1	Vision	9-1
9.2	Mission	9-1
9.3	Goals and Objectives.....	9-1
	Goal 1: Provide an Equitable, Accessible, Dynamic, Safe, Customer Responsive, Publicly Engaged, and Performance Driven Transit System	9-1

Objective 1.1	9-1
Initiatives for Objective 1.1:	9-1
Objective 1.2	9-2
Initiatives for Objective 1.2:	9-2
Objective 1.3	9-2
Initiatives for Objective 1.3:	9-2
Objective 1.4	9-2
Initiatives for Objective 1.4:	9-3
Objective 1.5	9-3
Initiatives for Objective 1.5:	9-3
Objective 1.6	9-4
Initiatives for Objective 1.6:	9-4
Objective 1.7	9-4
Initiatives for Objective 1.7:	9-5
Goal 2: Be Good Stewards of Public Resources.	9-5
Objective 2.1	9-5
Initiatives for Objective 2.1:	9-5
Objective 2.2	9-5
Initiatives for Objective 2.2:	9-6
Objective 2.3	9-6
Initiatives for Objective 2.3:	9-6
Objective 2.4	9-7
Initiatives for objective 2.4:.....	9-7
Objective 2.5	9-7
Initiatives for Objective 2.5:	9-7
10.0 10-Year Transit Plan	10-1
10.1 The 10-Year Plan.....	10-1
10.1.1 Service Improvements	10-1
10.1.2 Capital and Infrastructure Improvements	10-3
10.1.3 Technology Improvements.....	10-4
10.1.4 Policy Improvements	10-4

10.2	10-Year TDP Finance Plan	10-5
10.2.1	Operating Cost Assumptions	10-5
10.2.2	Capital Cost Assumptions	10-6
10.2.3	Revenue Assumptions	10-6
10.2.4	10-Year Cost/Revenue Summary	10-6
10.3	10-Year TDP Implementation Plan	10-10
11.0	Appendices	11-12
Appendix A – Farebox Recovery Ratio Report.....		11-12
	Current Farebox Recovery Ratio.....	11-12
	Prior Year Fare Studies, Changes, and Proposed Future Year Changes	11-12
	Strategies that will Affect the Farebox Recovery Ratio	11-12
Appendix B – Public Participation Plan.....		11-13
	Introduction	11-13
	Project Background	11-13
	Public Engagement Activities	11-13
	Project Kick-off Meeting.....	11-14
	Bi-monthly Review Committee meetings	11-14
	Public Workshops.....	11-14
	Passenger Survey	11-14
	Online Survey	11-15
	Stakeholder Interviews	11-15
	Discussion Group Workshops	11-16
	Public Workshops/Meetings	11-16
	Draft and Final TDP Presentations	11-17
	Social Media	11-17
	Schedule of Activities	11-18
	Public Engagement Documentation	11-18
Appendix C – Public Involvement Materials.....		11-20
	Online Non-User Survey.....	11-20
	On-Board Survey	11-25
	Bus Operator Survey	11-35

Public Workshop Comment Card	11-37
Public and Stakeholder Meeting Notices, Agendas, Materials	11-38
Appendix D – Peer Performance Indicators	11-60
Appendix E – Performance Monitoring Program	11-65
Performance Measures and Indicators	11-65
Evaluation Methodology and Process.....	11-65

List of Figures

Figure 4-1: RTS Peer and Trend Comparison for Service Area Population.....	4-21
Figure 4-2: RTS Peer and Trend Comparison for Passenger Trips	4-22
Figure 4-3: RTS Peer and Trend Comparison for Passenger Miles	4-22
Figure 4-4: RTS Peer and Trend Comparison for Vehicle Miles.....	4-23
Figure 4-5: RTS Peer and Trend Comparison for Revenue Miles	4-23
Figure 4-6: RTS Peer and Trend Comparison for Vehicle Hours	4-24
Figure 4-7: RTS Peer and Trend Comparison for Route Miles.....	4-24
Figure 4-8: RTS Peer and Trend Comparison for Total Operating Expense	4-25
Figure 4-9: RTS Peer and Trend Comparison for Total Employee FTEs.....	4-25
Figure 4-10: RTS Peer and Trend Comparison for Vehicles Available for Maximum Service.....	4-26
Figure 4-11: RTS Peer and Trend Comparison for Total Gallons Consumed.....	4-26
Figure 4-12: RTS Peer and Trend Comparison for Vehicle Miles Per Capita	4-27
Figure 4-13: RTS Peer and Trend Comparison for Passenger Trips Per Capita.....	4-27
Figure 4-14: RTS Peer and Trend Comparison for Passenger Trips Per Revenue Mile	4-28
Figure 4-15: RTS Peer and Trend Comparison for Passenger Trips Per Revenue Hour.....	4-28
Figure 4-16: RTS Peer and Trend Comparison for Revenue Miles Between Failures.....	4-29
Figure 4-17: RTS Peer and Trend Comparison for Operating Expense Per Capita	4-29
Figure 4-18: RTS Peer and Trend Comparison for Operating Expense Per Passenger Trip	4-30
Figure 4-19: RTS Peer and Trend Comparison for Operating Expense Per Passenger Mile	4-30
Figure 4-20: RTS Peer and Trend Comparison for Operating Expense Per Revenue Mile	4-31
Figure 4-21: RTS Peer and Trend Comparison for Operating Expense Per Revenue Hour	4-31
Figure 4-22: RTS Peer and Trend Comparison for Farebox Recovery (%)	4-32
Figure 4-23: RTS Peer and Trend Comparison for Revenue Miles Per Vehicle Mile	4-32
Figure 4-24: RTS Peer and Trend Comparison for Revenue Miles Per Total Vehicles	4-33
Figure 4-25: RTS Peer and Trend Comparison for Vehicle Miles Per Gallon	4-33
Figure 4-26: RTS Peer and Trend Comparison for Average Fare	4-34
Figure 4-27: RTS Peer and Trend Demand Response Passenger Trips	4-37
Figure 4-28: RTS Peer and Trend Demand Response Revenue Miles	4-37
Figure 4-29: RTS Peer and Trend Demand Response Total Operating Expense	4-38
Figure 4-30: RTS Peer and Trend Demand Response Passenger Miles	4-38
Figure 4-31: RTS Peer and Trend Demand Response Revenue Hours	4-39

Figure 4-32: RTS Peer and Trend Demand Response Passenger Trips Per Capita	4-40
Figure 4-33: RTS Peer and Trend Demand Response Passenger Trips Per Revenue Hour	4-40
Figure 4-34: RTS Peer and Trend Demand Response Operating Expense Per Passenger Trip	4-41
Figure 4-35: RTS Peer and Trend Demand Response Operating Expense Per Revenue Mile	4-42
Figure 4-36: RTS Peer and Trend Demand Response Operating Expense Per Revenue Hour	4-42
Figure 4-37: RTS Peer and Trend Demand Response Average Fare	4-43
Figure 5-1: Transfers.....	5-5
Figure 5-2: How Many Days per Week Do You Ride the Bus?	5-5
Figure 5-3: How Many Days per Week Do You Usually Make This Trip?	5-6
Figure 5-4: Fare Used.....	5-7
Figure 5-5: Alternative Mode Choice.....	5-8
Figure 5-6: Travel from Home	5-9
Figure 5-7: Travel from Work	5-9
Figure 5-8: Travel from School.....	5-9
Figure 5-9: Travel from Medical	5-10
Figure 5-10: Travel from Recreation	5-10
Figure 5-11: Travel from Shopping	5-10
Figure 5-12: Travel from Errands	5-11
Figure 5-13: How long have you been using RTS bus service?	5-13
Figure 5-14: How many days per week do you ride the bus?	5-13
Figure 5-15: What is the most important reason you ride the bus?	5-14
Figure 5-16: Please rate the following aspects of your most recent bus ride.	5-15
Figure 5-17: If RTS provided “premium” express or limited stop bus service, would you use that service?	5-15
Figure 5-18: How do you prefer to receive information about RTS service, schedules and changes? ..	5-16
Figure 5-19: what is the range of your total household income for 2018?	5-17
Figure 5-20: How many working cars, vans, and/or light trucks do you have in your household?	5-18
Figure 5-21: How many licensed drivers are in your household, including yourself?	5-18
Figure 5-22: What is your experience with the existing public transportation system (RTS) and related mobility services?	5-21
Figure 5-23: What is your opinion of existing RTS service?	5-21
Figure 5-24: Do you think RTS is effective, convenient, easy to use?	5-22
Figure 5-25: Do we need more service and/or more service options?	5-22
Figure 5-26: Do you feel existing services covers the areas you need to travel to regularly?	5-23
Figure 5-27: Do we need to communicate more to the community about mobility options?	5-23
Figure 5-28: Should the City invest more into expanding mobility services?	5-24
Figure 5-29: Should Mobility Enhancements be focused to benefit all, or should improvements be focused on the underserved?	5-25
Figure 5-30: What is your perception of mobility needs for persons in Gainesville who do not have access to an automobile or choose not to drive?	5-25
Figure 6-1: Department of Mobility Organization Chart	6-41
Figure 6-2: Department of Mobility Organization Chart	6-42

Figure 7-1: TBEST Interface (Total Stop-Level Ridership)	7-2
--	-----

List of Maps

Map 2-1: Gainesville RTS Service Area	2-2
Map 2-2: Population per Acre (ACS, 2017)	2-4
Map 2-3: Population Growth 2019-2028 (MTPO)	2-7
Map 2-4: Dwelling Unit Growth 2019-2028 (MTPO)	2-8
Map 2-5: Employment Growth 2019-2028 (MTPO).....	2-9
Map 2-6: Undergraduate Students (ACS, 2017).....	2-11
Map 2-7: Graduate Students (ACS, 2017)	2-12
Map 2-8: Population Below Age 17 (ACS, 2017)	2-14
Map 2-9: Population Above Age 65 (ACS, 2017)	2-15
Map 2-10: Households in Poverty (ACS, 2017)	2-17
Map 2-11: Zero Vehicle Households (ACS, 2017).....	2-19
Map 2-12: Where Workers Who Live in Gainesville are Employed, by City (LEHD, 2015)	2-23
Map 2-13: Where People Who Work in Gainesville Live, by City (LEHD, 2015)	2-24
Map 2-14: Where Workers Who Live in Alachua County are Employed, by City (LEHD, 2015)	2-25
Map 2-15: Where People Who Work in Alachua County Live, by City (LEHD, 2015).....	2-26
Map 2-16: Employment Density 2019 (MTPO)	2-29
Map 2-17: Future Land Use Map.....	2-31
Map 2-18: Density Threshold Assessment 2019 (MTPO)	2-35
Map 2-19: Density Threshold Assessment 2028 (MTPO)	2-36
Map 2-20: Traditional Transit Orientation Index (ACS, 2017).....	2-37
Map 2-21: Adjusted Transit Orientation Index (ACS, 2017).....	2-38
Map 2-22: Transit Level of Service	2-43
Map 2-23: Proposed Bicycle and Pedestrian Zone	2-44
Map 3-1: RTS System Map.....	3-3
Map 6-1: Transit Level of Service (2017)	6-33
Map 6-2: Proposed Bicycle and Pedestrian Zone	6-34
Map 6-3 : UF Transportation Strategic Plan – Proposed Transit Routes	6-35
Map 6-4: Future Land Use Map	6-40
Map 8-1: New Service Alternatives	8-2
Map 8-2: Existing Service Alternatives.....	8-3
Map 8-3: Realignment Alternatives	8-4
Map 8-4: Proposed Streetcar Stations and Service Area	8-8
Map 8-5: Proposed Employee-Focused Park and Ride Locations and Transit Routes	8-10
Map 8-6: Final Alternatives Results, Existing Service Improvements.....	8-14
Map 8-7: Final Alternatives Results, Realignments.....	8-15
Map 8-8: Final Alternatives Results, New Services.....	8-16

List of Tables

Table 2-1 Gainesville Population Profile (ACS, 2017)	2-3
Table 2-2 Regional Population and Density (ACS, 2017)	2-3
Table 2-3: Population Trends for Nearby Municipalities (ACS, 2017)	2-5
Table 2-4: Population Forecasts 2010-2040 (MTPO)	2-6
Table 2-5: Dwelling Unit Forecasts 2010-2040 (MTPO)	2-6
Table 2-6: Student Enrollment (ACS, 2017)	2-10
Table 2-7 Gainesville vs. Florida Age Composition (ACS, 2017)	2-13
Table 2-8: Florida vs. Gainesville Household Income (ACS, 2017)	2-16
Table 2-9: Household Vehicle Availability (ACS, 2017)	2-18
Table 2-10: Transportation Disadvantaged (Alachua County TDSP, 2017)	2-20
Table 2-11: Journey to Work for Alachua County and City of Gainesville – Residents (LEHD, 2015)	2-21
Table 2-12: Journey to Work for Alachua County and City of Gainesville – Employment (LEHD, 2015) ...	2-21
Table 2-13: Commute Mode Share – (ACS, 2017)	2-27
Table 2-14: Gainesville Major Employers – (CAFR, 2017)	2-28
Table 2-15: Roadways Operating with an Unacceptable Level of Service (LOS)	2-32
Table 3-1: Fixed Route Service Length and Stops	3-4
Table 3-2: Summary of Weekday Service Operating Characteristics (City – Spring 2019)	3-5
Table 3-3: Summary of Weekday Service Operating Characteristics (City – Spring 2019)	3-6
Table 3-4: Summary of Weekday Service Operating Characteristics (City – Spring 2019)	3-7
Table 3-5: Summary of Weekday Operating Characteristics (Campus/Later Gator – Spring 2019)	3-8
Table 3-6: Summary of Saturday Operating Characteristics (City – Spring 2019)	3-9
Table 3-7: Summary of Saturday Operating Characteristics (Campus & Later Gator – Spring 2019)	3-10
Table 3-8: Summary of Sunday Operating Characteristics (City – Spring 2019)	3-11
Table 3-9: Summary of Sunday Operating Characteristics (Campus & Later Gator)– Spring 2019)	3-12
Table 3-10: Inventory of Existing RTS Fixed-Route Vehicles	3-12
Table 3-11: Fixed Route Length and Stop Characteristics	3-13
Table 3-12: Fixed Route Length and Stop Characteristics	3-14
Table 3-13: Fixed Route Length and Stop Characteristics	3-15
Table 3-14: Fixed Route Length and Stop Characteristics	3-16
Table 3-15: Inventory of RTS Paratransit Vehicle Fleet	3-17
Table 3-16: Inventory of Private Transportation Providers that Serve Gainesville	3-18
Table 4-1: Previous TDP Peers	4-20
Table 4-2: Demand Response Peer/Trend Performance Review Measures	4-36
Table 5-1: How did you get to the bus stop?	5-6
Table 5-2: How will you get to your final destination?	5-6
Table 5-3: Fare Used	5-7
Table 5-4: Fare Used	5-14
Table 5-5: Your age is:	5-16
Table 5-6: You identify as:	5-17
Table 5-7: What Types of mobility services would you like? (check all that apply)	5-26

Table 5-8: How should we pay for expanded mobility services? (check all that apply)	5-26
Table 7-1: RTS Annualized Weekday Ridership and Growth Rates	7-4
Table 7-2: RTS Annualized Saturday Ridership and Growth Rates	7-6
Table 7-3: RTS Annualized Sunday Ridership and Growth Rates.....	7-7
Table 8-1: Service Improvement Evaluation Criteria.....	8-12
Table 8-2: Technical Ranking – Service Improvements Evaluation	8-13
Table 10-1: RTS Projected 10-Year Operating Costs, Revenues, Unfunded Needs	10-8
Table 10-2: RTS Projected 10-Year Capital Costs, Revenues, Unfunded Needs	10-9
Table 10-3: Proposed 10-Year Implementation Plan.....	10-11
Table D-1: Peer Agency Fixed Route General Performance Indicators (2017 NTD).....	11-60
Table D-2: Peer Agency Fixed Route Effectiveness Measures (2017 NTD)	11-61
Table D-3: Peer Agency Fixed Route Efficiency Measures (2017 NTD)	11-62
Table D-4: Peer Agency Demand Response General Performance Indicators (2017 NTD)	11-63
Table D-5: Peer Agency Demand Response Effectiveness Measures (2017 NTD)	11-63
Table D-6: Peer Agency Demand Response Efficiency Measures (2017 NTD).....	11-64

1.0 Introduction

The City of Gainesville City Commission currently provides a city transportation system program through the Gainesville Regional Transit System (RTS) consisting of fixed-route bus and demand-response paratransit services. RTS provides fixed-route service to the greater Gainesville area, with additional express routes serving small cities and towns in Alachua County.

This major Transit Development Plan (TDP) update was initiated by the City of Gainesville to update RTS' TDP for the 10-year period from FY2020 through 2029. This TDP represents the transit agency's vision for public transportation in its service area during this time period and, at the same time, functions as the strategic guide for public transportation in the community. A major TDP update also allows transit agencies to outline actions to be taken in the following years and set goals for subsequent years.

1.1 Objectives of this Plan

The main objective of this study is to update the TDP for RTS services in Gainesville and Alachua County, as currently required by Florida law. Upon completion, this TDP will result in a 10-year plan for transit and mobility needs, cost and revenue projections, and community transit and mobility goals, objectives, and policies.

1.1.1 TDP Requirements

The Florida Department of Transportation (FDOT) formally adopted the current requirements for TDPs on February 20th, 2007. Major requirements of the regulation include the following:

- Major updated must be completed every 5 years, covering a 10-year planning horizon.
- A Public Involvement Plan (PIP) must be developed and approved by FDOT or consistent with the approved Metropolitan Planning Organization (MPO) public participation plan.
- FDOT, the Regional Workforce Development Board, 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 services (10-year annual projections) using the planning tools provided by FDOT or a demand estimation technique approved by FDOT.

The Florida Legislature added an additional requirement for them TDP is 2007 with the adoption of House Bill 985. The legislation amended Florida Statutes (F.S.) 341.071, requiring transit agencies to, "...specifically address potential enhancements to productivity and performance which would have the effect of increasing farebox recovery ratios." FDOT subsequently issued guidance requiring the TDP and each annual update to include a one- to two-page summary report as an appendix to the full major or annual TDP report on the farebox recovery ratio and strategies implemented and planned to approve it.

Public Involvement Process		TDP Section
✓	Public Involvement Plan (PIP) drafted	Appendix B
✓	PIP approved by FDOT	Appendix B
✓	TDP includes description of Public Involvement Process	Section 5
✓	Provide notification to FDOT	Appendix B
✓	Provide notification to Regional Workforce Board	Appendix B
Situation Appraisal		
✓	Land Use	Section 6
✓	State and Local Transportation Plans	Section 6
✓	Other governmental actions	Section 6
✓	Socioeconomic Trends	Section 6
✓	Organizational Issues	Section 6
✓	Technology	Section 6
✓	10-Year Annual Projections of Transit Ridership (TBEST)	Section 7
✓	Land Use and Urban Design Assessment on Transit	Section 6
✓	Calculate Farebox Recovery Ratio	Appendix A
Mission and Goals		
✓	Vision	Section 9
✓	Mission	Section 9
✓	Goals	Section 9
✓	Objectives	Section 9
Alternative Courses of Action		
✓	Develop and Evaluate Alternative Strategies and Actions	Section 8
✓	Benefits and costs of each Alternative	Section 8, Section 10
✓	Financial Alternatives	Section 10
Implementation Program		
✓	10-Year Implementation Program	Section 10
✓	Maps indicating areas to be served	Section 10
✓	Maps indicating types and levels of service	Section 10
✓	Monitoring program to Track Performance Measures	Appendix E
✓	10-Year Capital and Operating Finance Plan	Section 10
✓	Capital Acquisition or Construction Schedule	Section 10
✓	Anticipated Revenues by Source	Section 10
Relationship with Other Plans		
✓	Consistent with Florida Transportation Plan	Section 2, Section 6
✓	Consistent with Local Government Comprehensive Plans	Section 2, Section 6
✓	Consistent with Gainesville MTPO long-range Transportation Plan	Section 2, Section 6
✓	Consistent with Regional Transportation Goals and Objectives	Section 2, Section 6
Submission		
✓	Adopted by City of Gainesville City Commission (10/03/2019)	
✓	Submitted to FDOT	

1.2 Organization of the Report

Section 2 presents the **Baseline Conditions**; this section summarizes existing conditions and demographic characteristics within RTS' service area. Baseline conditions establish the context for the delivery of transit services in Gainesville and provide background information needed to understand RTS' operating environment. A service area description, demographic characteristics, land use information, commuting patterns and roadway conditions are presented. Information and data reflect the most recent information available at the time of preparation of this plan.

Section 3 presents the **Existing Transit Conditions**; this section provides an overview of the existing transportation services and facilities within the RTS Service Area. Transportation services in the City are composed of RTS, the City's fixed-route bus system; paratransit services, which include door-to-door transportation disadvantaged services and complementary Americans with Disabilities Act (ADA) transportation services; and a variety of private transportation service providers.

Section 4 presents the **Peer and Trend Analysis**; this section assesses how efficiently RTS provides fixed-route and paratransit service and how effectively those services meet the needs of its customers. A trend analysis is a tool used to evaluate changes in performance over a given timeframe, and a peer analysis provides a comparison between RTS and transit agencies of similar characteristics during a single year. Taken together, these analyses provide important insights into the financial and operational health of an organization.

Section 5 presents the results of the **Public Involvement Process**; the section provides the details and conclusions of the variety of public involvement that took place over the course of the TDP update. This includes on-board surveys, online surveys, non-user surveys, public workshops, stakeholder engagement, review committees, and a variety of other public outreach.

Section 6 is the **Situation Appraisal**, which reviews the context and treatment of transit at local and regional levels of government. Various transportation planning and programming documents are summarized, and issues that could impact RTS' services and performance are noted, followed by a synthesis of previous efforts in the TDP, which assesses the operating environment for RTS with respect to socioeconomic trends, land use, organization attributes, performance trends, technology and public involvement.

Section 7 presents the results of a **Transit Demand Assessment**, summarizing the various demand and mobility needs assessments conducted as part of the TDP. The assessment techniques for forecasting ridership using TBEST are summarized, followed by the results of each analysis.

Section 8, **Alternatives Development**, presents the development of potential transit improvements for the 10-year transit plan. The proposed improvements for transit service represent the community needs for the next 10 years and were developed without consideration of funding constraints. Once the improvements are prioritized using the evaluation process in the full TDP, they will be used to develop the 10-year implementation and financial plans, which will be presented in the full TDP report.

Section 9 presents the 10-year **Goal, Objectives, and Initiatives**; the proposed goals and objectives are intended to better incorporate a more holistic perspective on mobility consistent with the new City of Gainesville Department of Mobility.

Section 10 presents the **10-Year Finance Plan**; this section presents the recommended 10-year transit plan, including financial and implementation plans for RTS. Existing and proposed improvements to transit services, capital and infrastructure, technology, and policy improvements are summarized first. Following, a summary of the assumptions for capital and operating costs and revenues used in developing the TDP are explicated, with an accompanying financial plan for the 10-year horizon period. Finally, the 10-year implementation plan program is defined.

2.0 Baseline Conditions

This chapter summarizes the Baseline Conditions for Gainesville RTS through four major sections. This includes a review of the existing conditions, including a physical description of the study area, a population profile, demographics, and economic and journey-to-work characteristics. It also includes a review of new developments and tourism information. The information compiled and presented in this section provides the basis for more-detailed analysis in subsequent tasks of the TDP. Land use trends, major transit trip generators and attractors, economic factors, existing roadway conditions, and major employers are also explored.

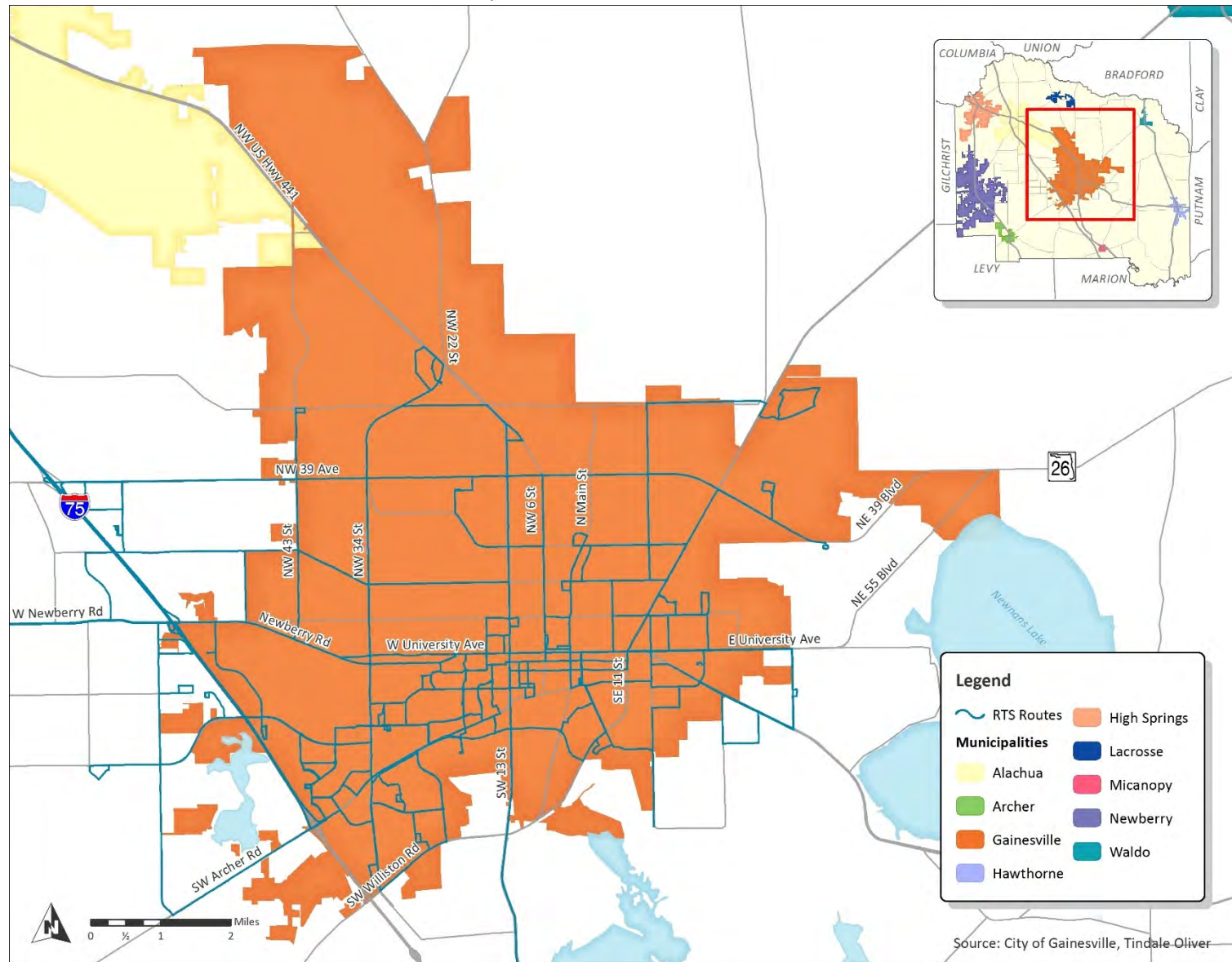
This section summarizes existing conditions and demographic characteristics within RTS' service area. Baseline conditions establish the context for the delivery of transit services in Gainesville and provide background information needed to understand RTS' operating environment. A service area description, demographic characteristics, land use information, commuting patterns and roadway conditions are presented. Information and data reflect the most recent information available at the time of preparation of this plan.

2.1 Service Area Description

The City of Gainesville is located in Alachua County in north central Florida and is the county seat. Alachua County is bordered on the south by Levy and Marion Counties, on the west by Gilchrist County, on the north by Columbia, Union, and Bradford counties, and on the east by Putnam County. The city is heavily influenced by the presence of colleges and universities. With about 130,000 residents, the population is most densely settled in the city's southern central portions.

Map 2-1 presents a physical representation of the city and its transit network within the context of Alachua County and surrounding counties. Map 2-1 focuses on the RTS fixed route network within the City of Gainesville and parts of Alachua County. To better understand the study area conditions and demographic characteristics of the City of Gainesville, a review of pertinent information was conducted as part of the TDP update process. The primary sources for this information include the U.S. Census Bureau, American Community Survey (ACS), University of Florida's Bureau of Economic and Business Research (BEBR), Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area, FDOT and City of Gainesville.

Map 2-1: Gainesville RTS Service Area



2.2 Population Profile

Population information from the U.S. Census and ACS was used to develop a population profile for the study area. Table 2-1 shows the population levels for Gainesville and Florida. Data from the decennial Census and ACS show that the population of Gainesville increased from 95,447 in 2000 to 129,394 in 2017, a growth of 35.6% over the 17-year period. Growth remained steady during this time; however, Gainesville's population growth during this period was slightly lower than the population growth of Florida as a whole. A similar trend is true for the increase in number of households, while the increase in number of workers is considerably lower than statewide trends.

Table 2-1 Gainesville Population Profile (ACS, 2017)

Population Data	2000		2010		2017		% Change (2000-2017)	
	Gainesville	Florida	Gainesville	Florida	Gainesville	Florida	Gainesville	Florida
Persons	95,447	15,982,824	124,354	18,801,310	129,394	20,278,447	35.6%	26.9%
Households	37,279	6,337,929	48,800	7,420,802	48,993	7,510,882	31.4%	18.5%
Number of Workers (employed)	44,249	7,221,000	56,559	8,159,000	59,955	9,018,570	35.5%	24.9%
Persons per Household	2.6	2.5	2.5	2.5	2.6	2.7	3.2%	7.1%
Workers per Household *	1.2	1.1	1.2	1.1	1.2	1.2	3.1%	5.4%
Persons per Square Mile	1,557	298	2,028	351	2,110	378	35.6%	26.9%
Workers per Square Mile*	722	135	923	152	978	168	35.5%	24.9%

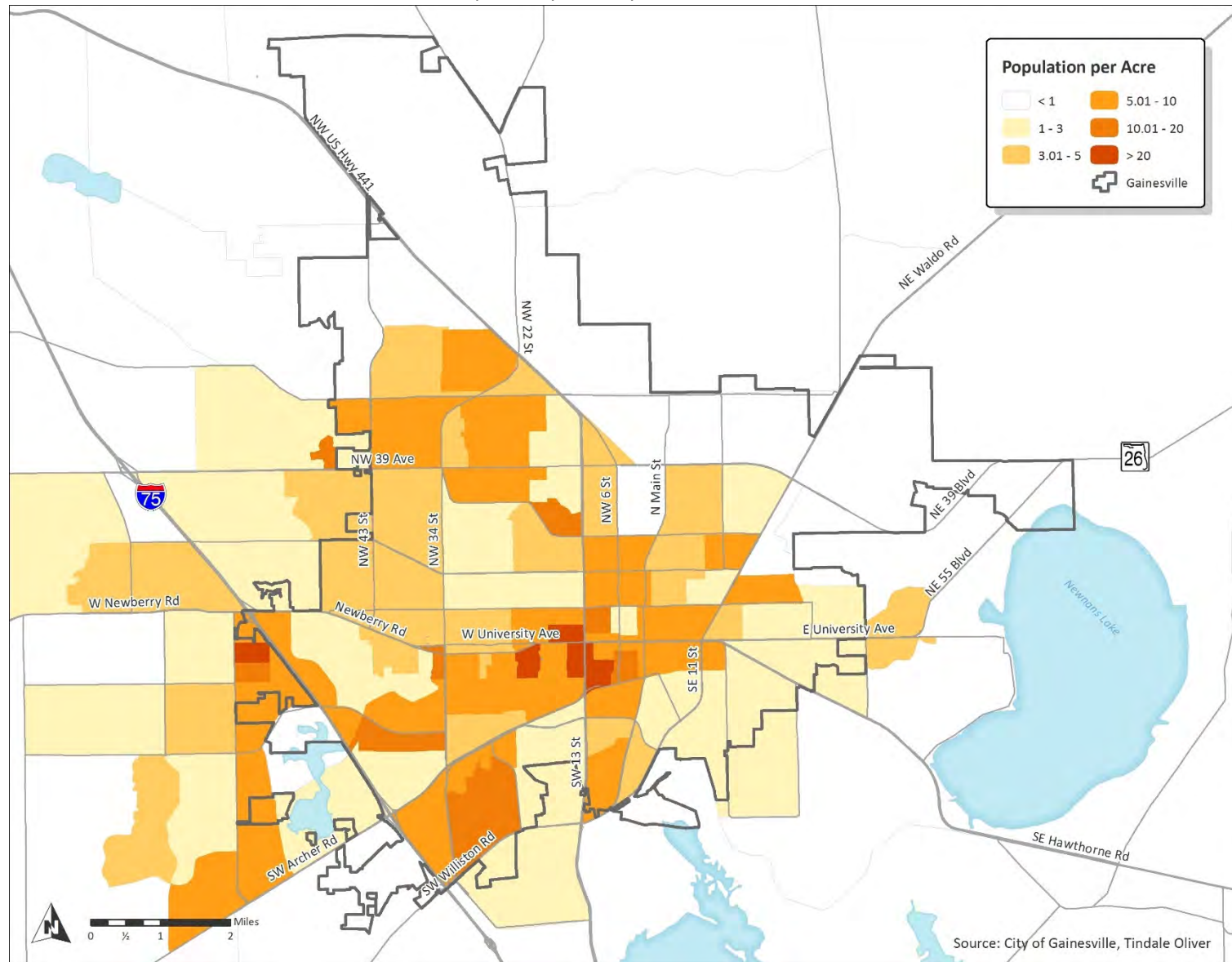
Table 2-2 shows that the City of Gainesville is significantly denser than the remainder of Alachua County. In fact, the density is seven times greater within Gainesville city limits.

Table 2-2 Regional Population and Density (ACS, 2017)

Location	Population	Density (Persons per Square Mile)
Gainesville	129,394	2,110.5
Alachua County	259,865	297.0

Map 2-2 demonstrates the population per acre by census block group. The highest densities occur in areas adjacent to the University of Florida campus as well as along major roadways. Areas beyond Gainesville's city limits show a dramatic decrease in density, consistent with Table 2-2.

Map 2-2: Population per Acre (ACS, 2017)



2.2.1 Population Trends

Table 2-3 presents the population and population change between 2000 and 2017 for municipalities in Alachua County. Total short-term growth (2010 through 2017) in the area averages at 5%. Gainesville's growth trend is positive, with more rapid growth occurring prior to 2010. Among Alachua County's municipalities, Gainesville's population is by far the largest.

Table 2-3: Population Trends for Nearby Municipalities (ACS, 2017)

Municipality	2000	2010	2017	% Change (2000- 2010)	% Change (2010- 2017)	% Change (2000- 2017)
Gainesville	95,447	124,354	129,394	30.3%	4.1%	35.6%
Alachua	6,098	9,059	9,676	48.6%	6.8%	58.7%
Archer	1,289	1,118	1,252	-13.3%	12.0%	-2.9%
Hawthorne	1,415	1,417	1,862	0.1%	31.4%	31.6%
High Springs	3,863	5,350	5,764	38.5%	7.7%	49.2%
LaCrosse	143	360	363	151.7%	0.8%	153.8%
Micanopy	653	600	573	-8.1%	-4.5%	-12.3%
Newberry	3,316	4,950	5,615	49.3%	13.4%	69.3%
Waldo	821	1,015	751	23.6%	-26.0%	-8.5%

2.2.2 Projected Population and Dwelling Unit Growth

The Metropolitan Transportation Planning Organization (MTPo) for the Gainesville Urbanized Area created socioeconomic growth estimates for the 2010-2040 period. Estimates include population, dwelling units, and employment. The MTPo 2010 estimates are based on the NE Florida Regional Planning Model – which was used to estimate the 2040 population and dwelling units for purposes of regional planning. Forecasted estimates for 2040 are meant to match the 2010 percent of total county population by geographic area. For example, Gainesville's 2010 estimated population was 53.0% of Alachua County's total. Therefore, the 2040 Gainesville population forecast also accounts for 53.0% of the 2040 total county population estimate. Consequently, estimated growth rates for Alachua's jurisdictions and towns are assumed to be equal to the growth rate county-wide - around 23.5% for the 30-year period. Forecasted estimates for 2040 are assumed to be equal to the 2010 shares of population and dwelling units for each jurisdiction or town. The MTPo and ACS employ differing methods of projection and estimation, accounting for discrepancies in population values between Table 2-3 and Table 2-4.

Map 2-3 depicts the forecasted percentage increase in population for Gainesville and its outlying areas between 2019 and 2028. Very high rates of growth are expected in the Innovation District neighborhoods near UF. High growth rates are also expected in north Gainesville and west of I-75. Note that growth rates are not necessarily reflective of absolute growth. For example, the area above US 441 has a growth rate of 53%, but absolute growth is only 256 persons.

Table 2-4: Population Forecasts 2010-2040 (MTPO)

Location	2010 Estimate	2019 Estimate	2040 Estimate	Percent Change
Alachua	10,619	11,367	13,111	23.5%
Archer	1,756	1,880	2,168	23.5%
Gainesville	131,113	140,348	161,897	23.5%
Hawthorne	2,528	2,706	3,121	23.5%
High Springs	7,761	8,307	9,582	23.5%
LaCrosse	1,343	1,438	1,658	23.5%
Micanopy	849	909	1,048	23.4%
Newberry	6,708	7,174	8,262	23.2%
Waldo	1,585	1,697	1,957	23.5%
Unincorporated	83,074	88,925	102,576	23.5%
Total	247,336	264,755	305,400	23.5%

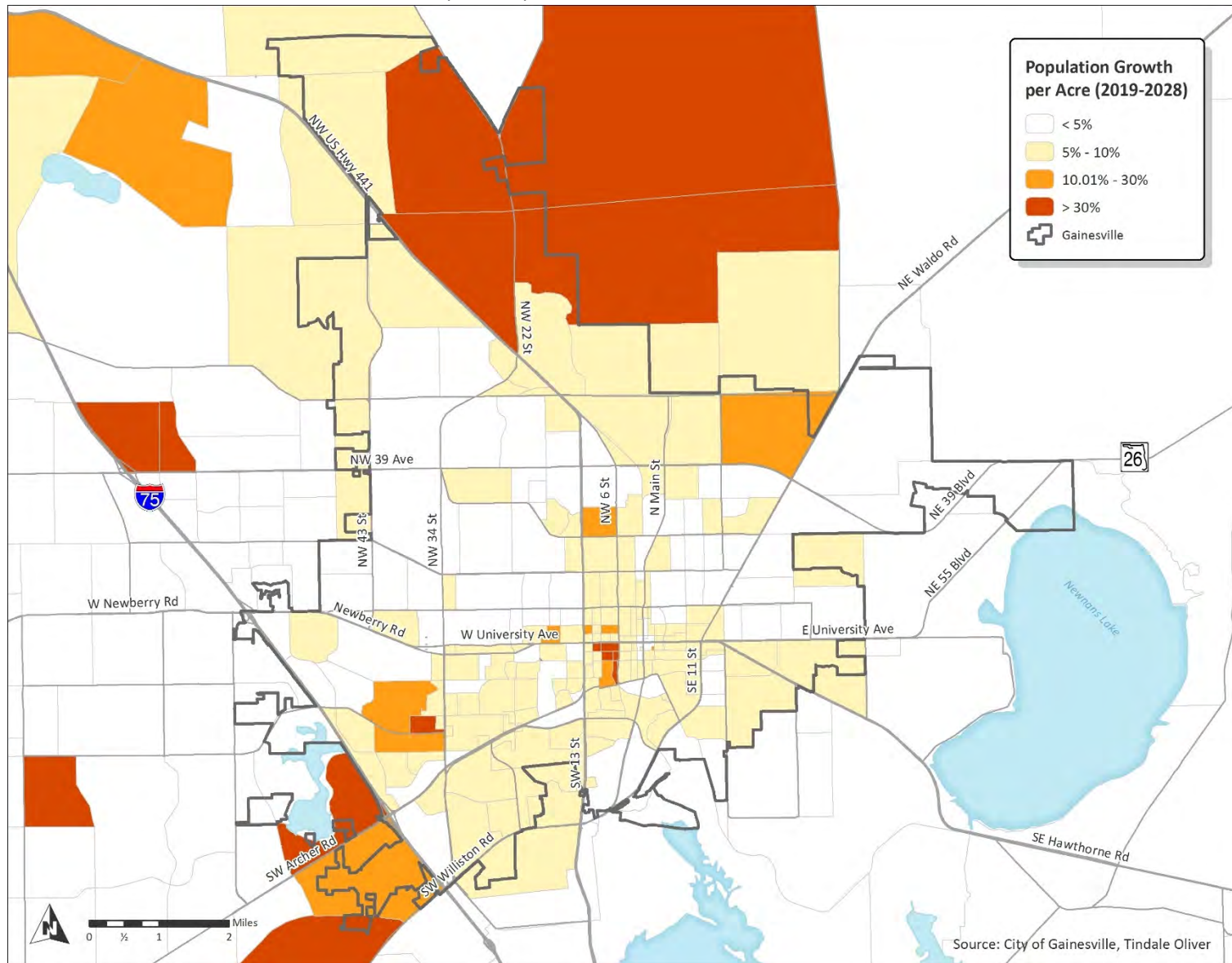
Dwelling unit forecasts from the MTPO are also based on US Census Bureau data. Consistent with the population forecasts, dwelling unit forecasts maintain the same proportions for 2010 estimates as 2040 estimates. 2010 dwelling units for Gainesville account for 53.8% of the county's total units, as do the 2040 estimates. Dwelling units in Gainesville are forecasted to increase by 11,719 units during the 30-year period.

Table 2-5: Dwelling Unit Forecasts 2010-2040 (MTPO)

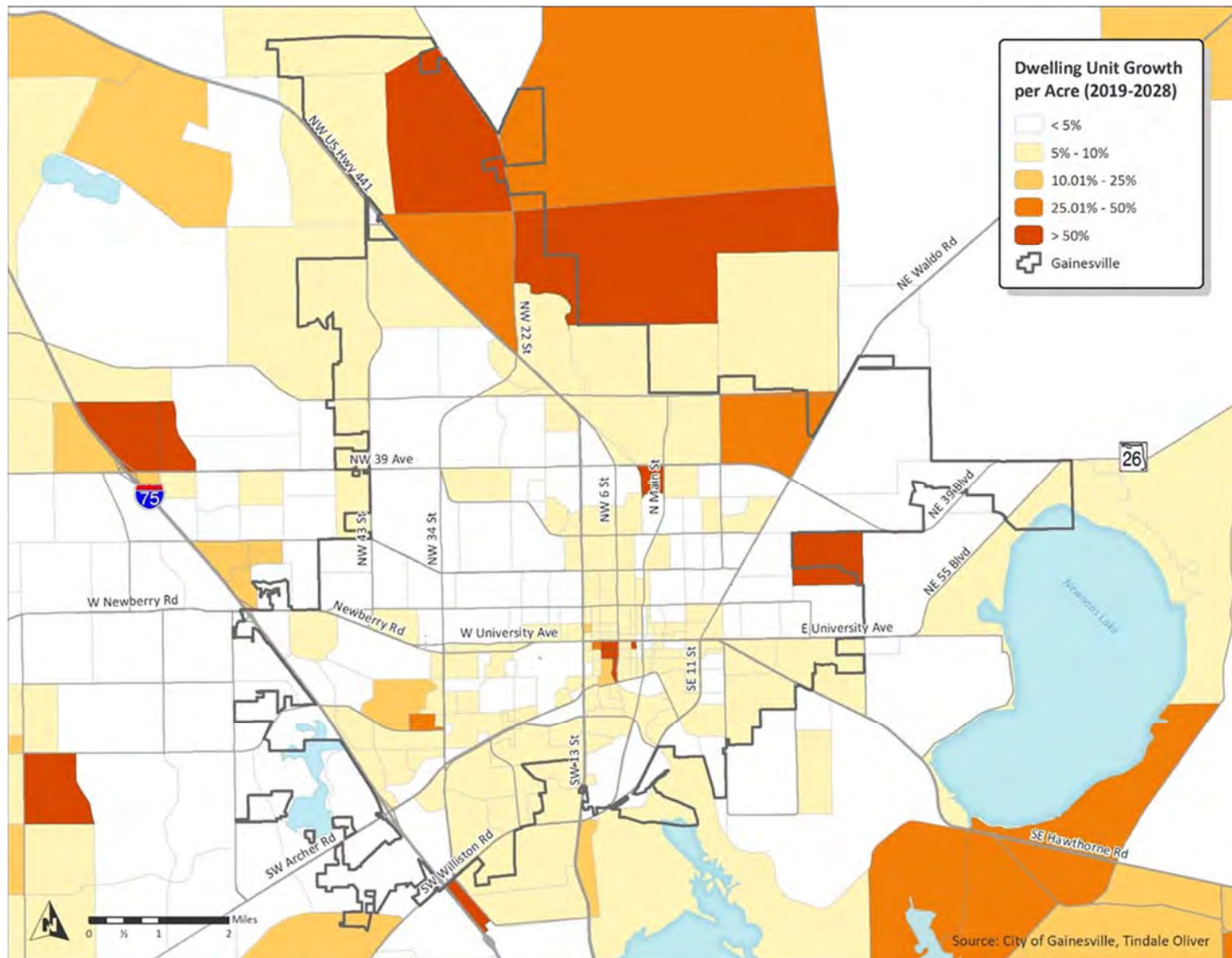
Location	2010 Estimate	2019 Estimate	2040 Estimate	Percent Change
Alachua	4,753	5,028	5,670	19.3%
Archer	807	854	963	19.3%
Gainesville	60,716	64,232	72,435	19.3%
Hawthorne	1,238	1,310	1,477	19.3%
High Springs	3,371	3,566	4,022	19.3%
La Crosse	592	626	706	19.3%
Micanopy	454	480	542	19.4%
Newberry	2,820	2,983	3,364	19.3%
Waldo	743	786	886	19.3%
Unincorporated	37,272	39,430	44,465	19.3%
Total	112,766	119,295	134,530	19.3%

Map 2-4 depicts forecasted dwelling unit growth rates in Gainesville and its surrounding areas. High growth rates in dwelling units seem to correspond with high population growth rates from Map 2-3. Employment growth rates from the same MTPO forecast are shown in Map 2-5. See Section 2.6 for a Density Threshold Analysis which provides a composite of dwelling units per acre and employment density.

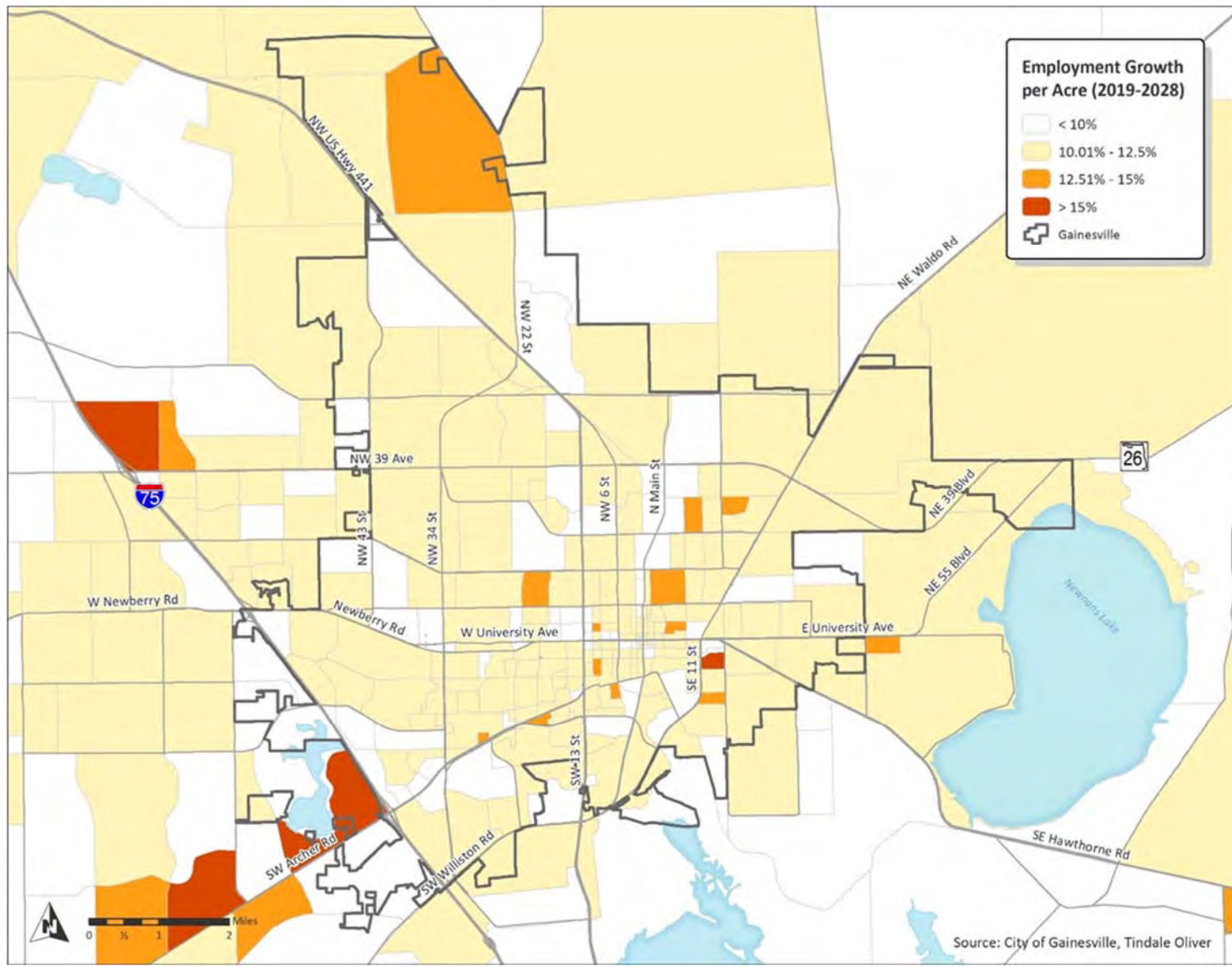
Map 2-3: Population Growth 2019-2028 (MTP0)



Map 2-4: Dwelling Unit Growth 2019-2028 (MTPO)



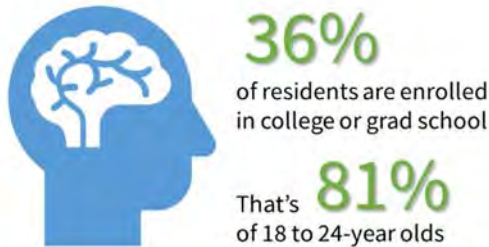
Map 2-5: Employment Growth 2019-2028 (MTP0)



2.3 Demographic and Travel Behavior Characteristics

2.3.1 Student Population

Table 2-6: Student Enrollment (ACS, 2017)



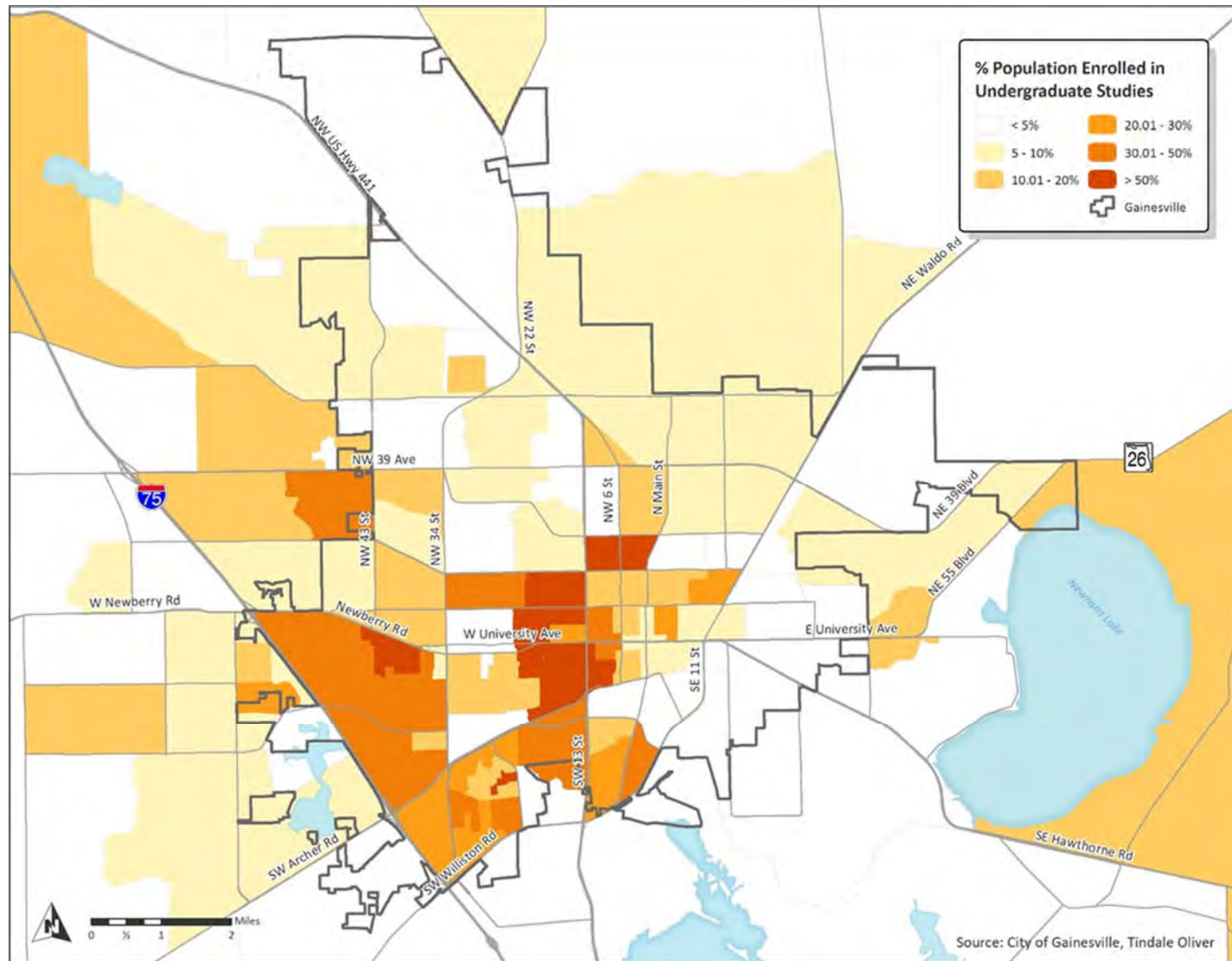
Gainesville is home to multiple higher education institutions, namely the University of Florida and Santa Fe College. The University of Florida reported its 2017 main campus enrollment (excluding online students) as 52,992. Santa Fe College reported an unduplicated headcount for the 2017-2018 school year as 20,924. Enrollment statistics for both schools do not necessarily reflect the number of students residing in Gainesville, however. The Census Bureau estimates

45,938 residents are enrolled as college or graduate students, accounting for 36% of Gainesville's total population.

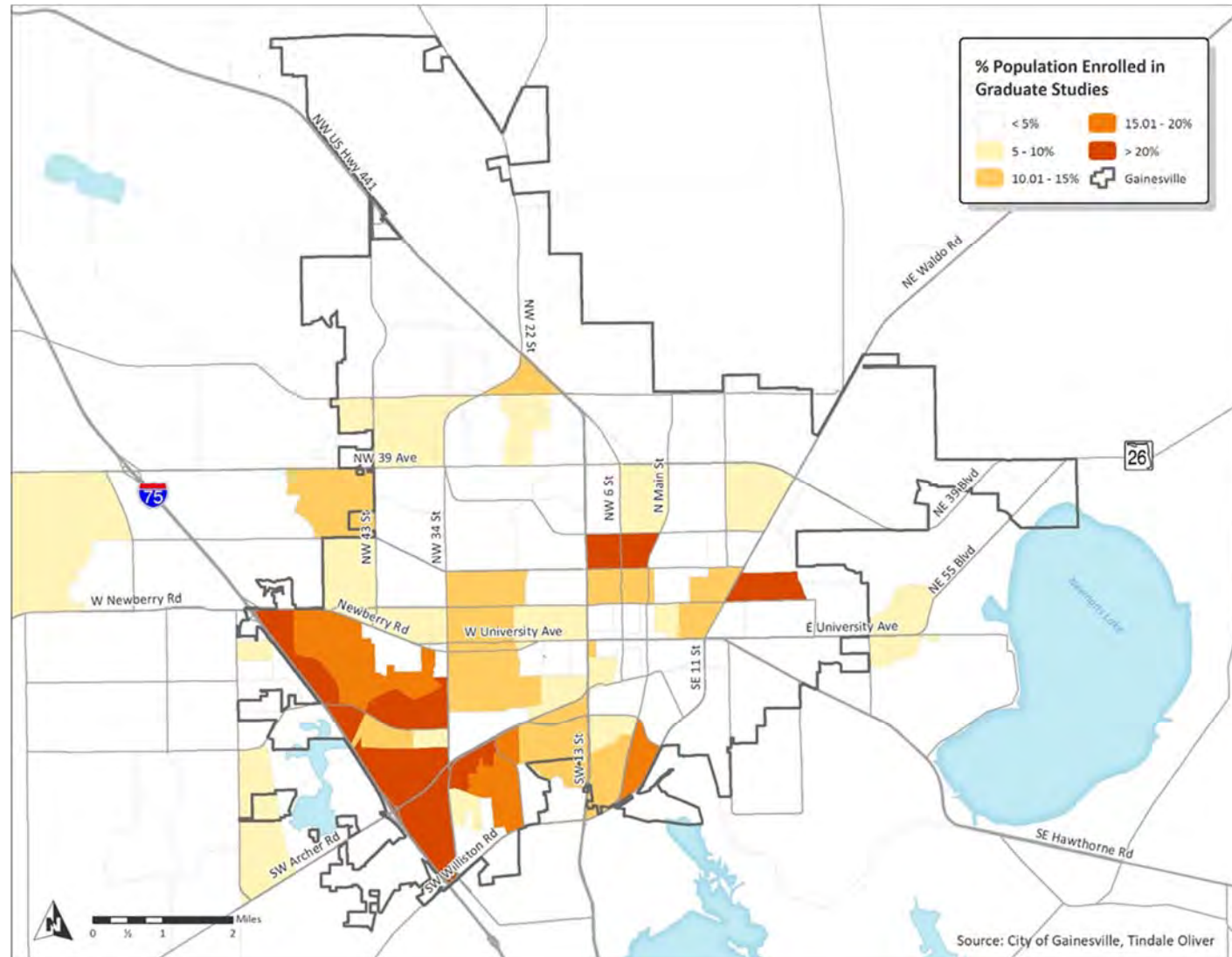
Map 2-6 and

Map 2-7 outline the primary areas where undergraduate and graduate students reside within the city. Undergraduate students are primarily located in the immediate vicinity of the University of Florida main campus, in neighborhoods like University Park, College Park, Fifth Avenue, and Sugarfoot. Student housing follows main corridors like Archer Road, 13th Street, and 34th Street. Graduate students are distributed further west, with high concentrations along Archer Road and west of 34th Street.

Map 2-6: Undergraduate Students (ACS, 2017)



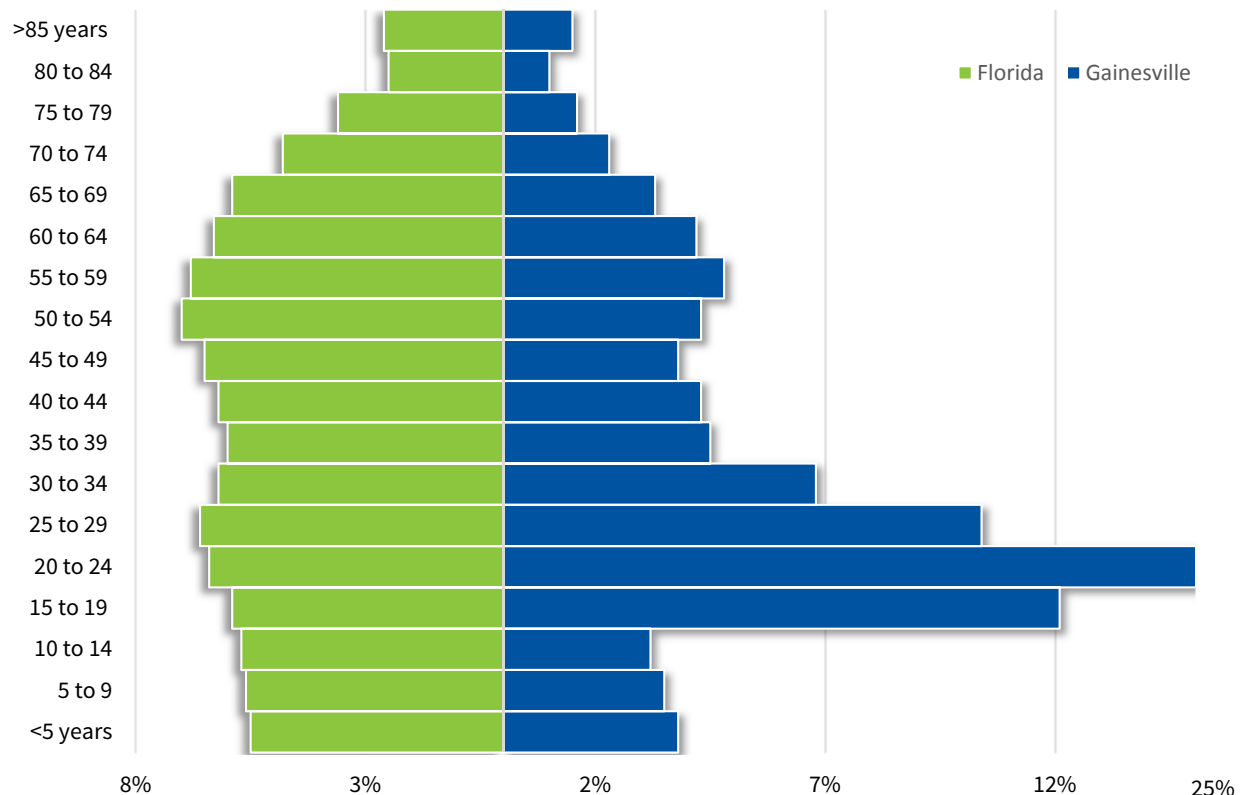
Map 2-7: Graduate Students (ACS, 2017)



2.3.2 Age Distribution

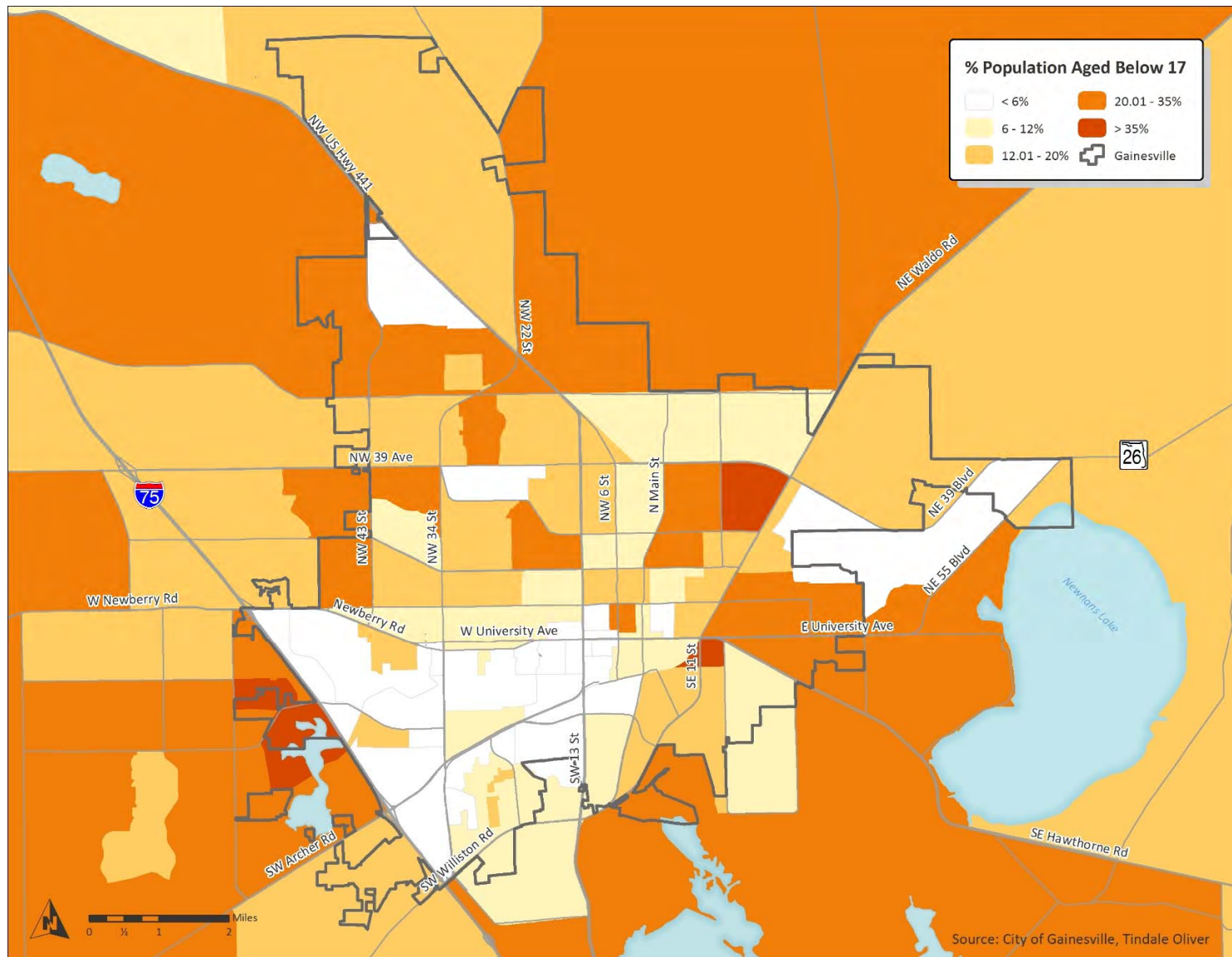
Gainesville's age distribution is vastly different from the state of Florida as a whole. Florida has a fairly even distribution amongst its age groups 64 and younger, tapering off as the age increases above 65. Gainesville's age cohorts between 15 and 29 are far higher than Florida's. The 20 to 24 age group proportion for Gainesville is nearly four times as large as the state's own. This extreme spike in young adults is unsurprising given the strong presence of postsecondary educational institutions in the area.

Table 2-7 Gainesville vs. Florida Age Composition (ACS, 2017)

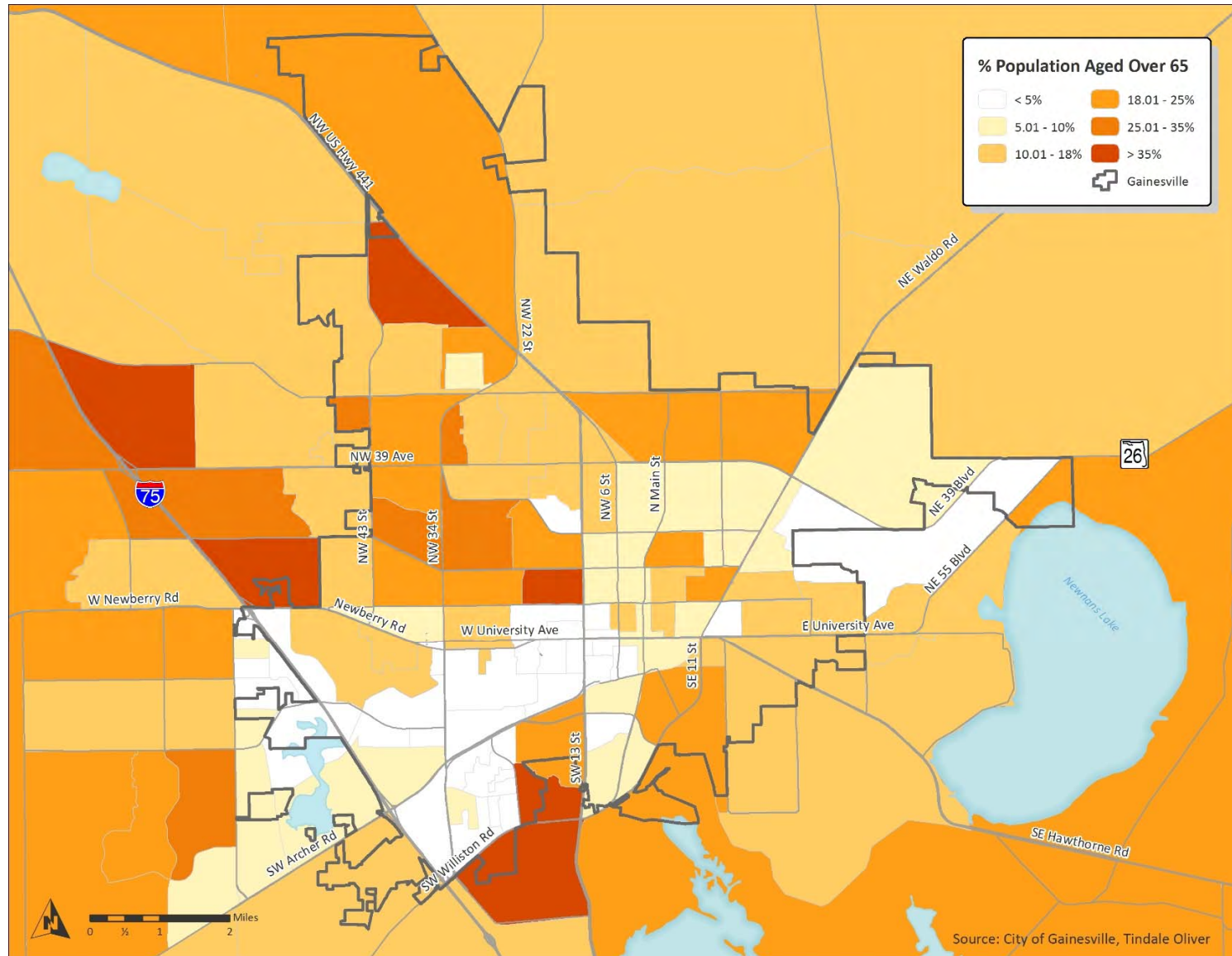


Map 2-8 and Map 2-9 show the distribution of young and older populations in the City of Gainesville and its surrounding area. It is worth noting, based on the strong correlation between these age cohorts and mobility need, that the concentration of youths and elderly are located primarily outside the City boundary in more suburban settings where traditional transit is most difficult to access. This would indicate a demand for alternative mobility solutions in the suburban areas.

Map 2-8: Population Below Age 17 (ACS, 2017)



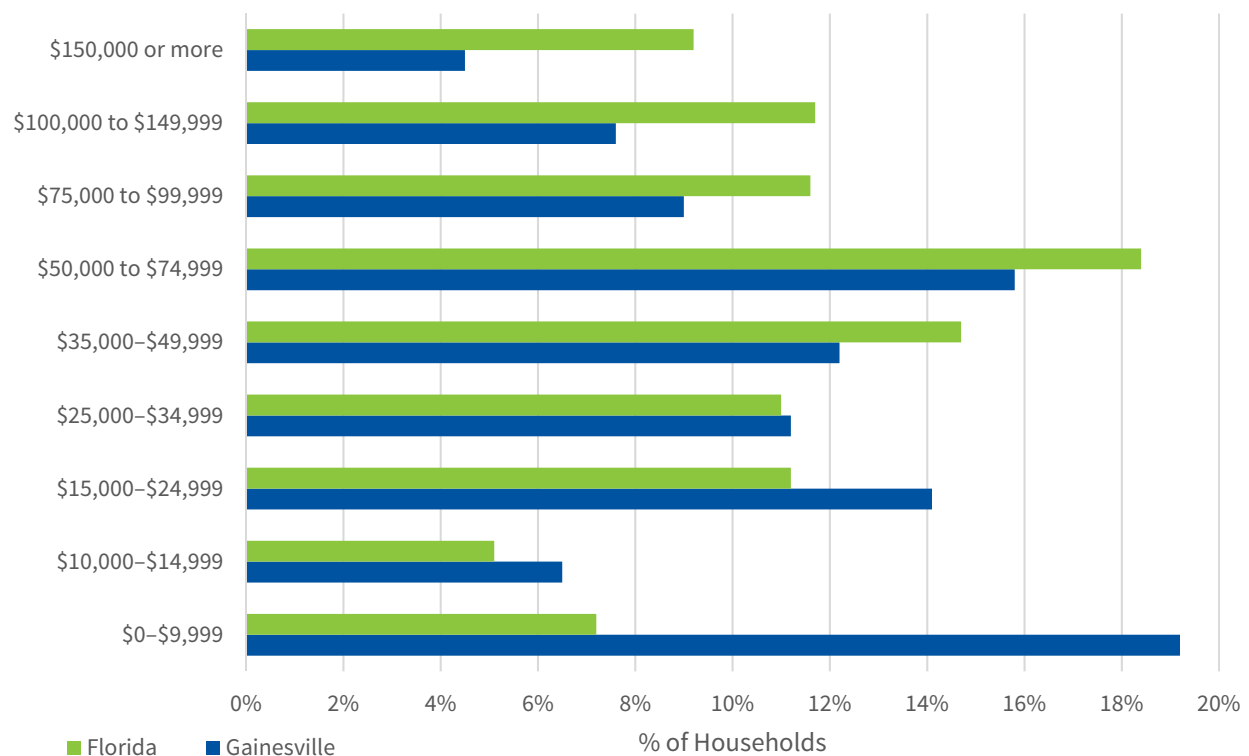
Map 2-9: Population Above Age 65 (ACS, 2017)



2.3.3 Income and Poverty

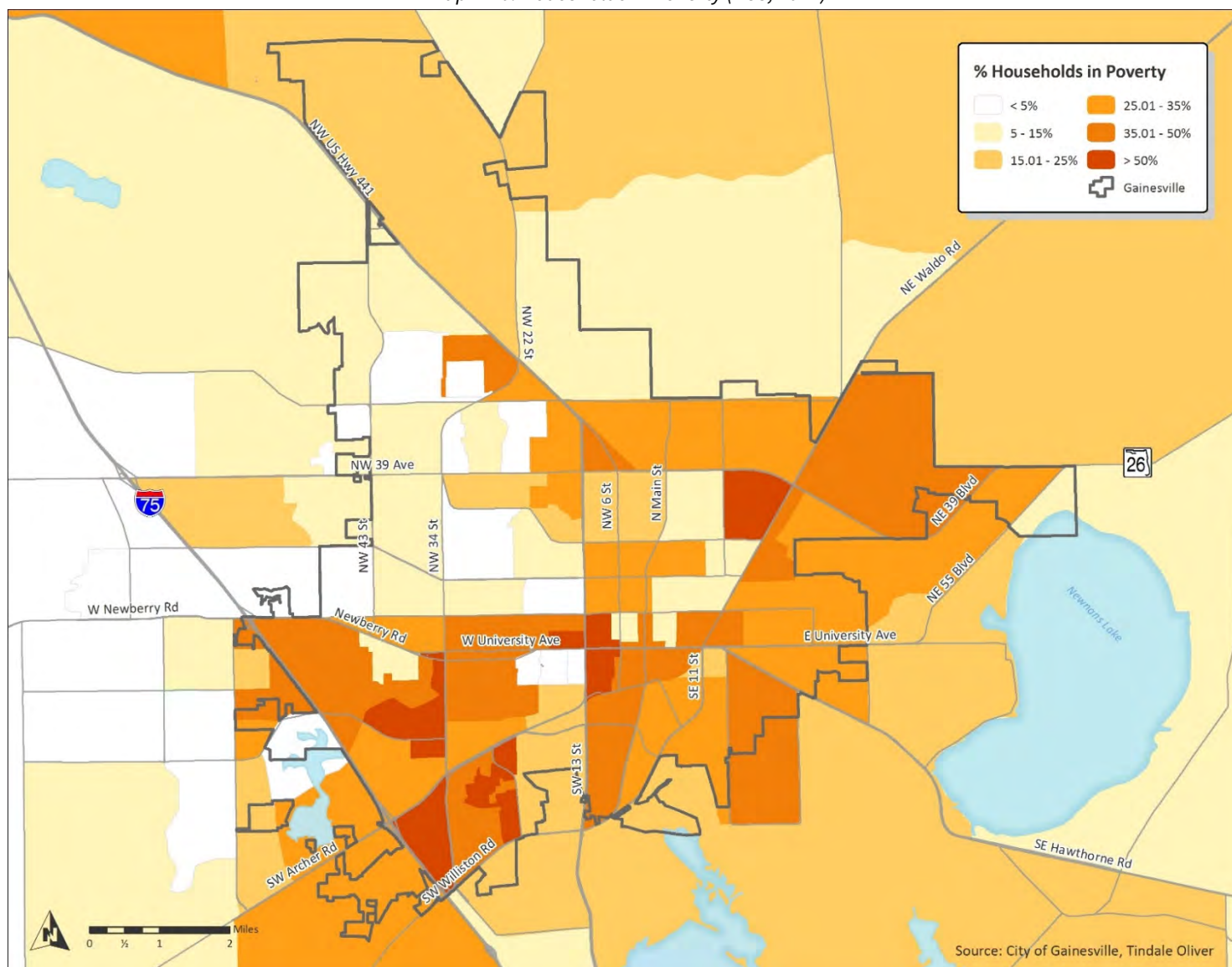
Household income in Gainesville, shown in *Table 2-8*, is similar to that of Florida in the low-middle ranges between \$25,000 and \$99,000. However, at low and high ends of the income spectrum, Gainesville has far more households in the lowest income bracket and fewer in the high brackets. Nearly one-fifth of Gainesville households find themselves in the lowest possible income bracket. Household income is an insufficient metric to determine poverty since households vary in size and nature. The Census Bureau assesses poverty by comparing a household's income over a 12-month period to the poverty threshold (a monetary value) specific to the size of the household. The larger the household, the higher the threshold a household must meet to be considered above the defined poverty line. Similarly, the high concentration of students and young adults (often not employed full-time) may contribute to the large skew toward the bottom end of the income bracket.

Table 2-8: Florida vs. Gainesville Household Income (ACS, 2017)



Map 2-10 illustrates concentrations of individuals in poverty throughout the city. Some student areas, like Fifth Avenue and University Heights, are highlighted as high-poverty. Note that these student areas may not necessarily be economically disadvantaged in the traditional sense, despite being low-income. Possible supplemental resources like grants, scholarships, loans, or family support are common aids for students. High percentages of poverty are visible to the southwest in communities like Sugarfoot and Phoenix. Census blocks east along Waldo Road show moderate levels of poverty as well. Given the high correlation between poverty and mobility demand, mobility solutions, traditional and emerging, will be investigated for areas with a higher share of low-income households.

Map 2-10: Households in Poverty (ACS, 2017)



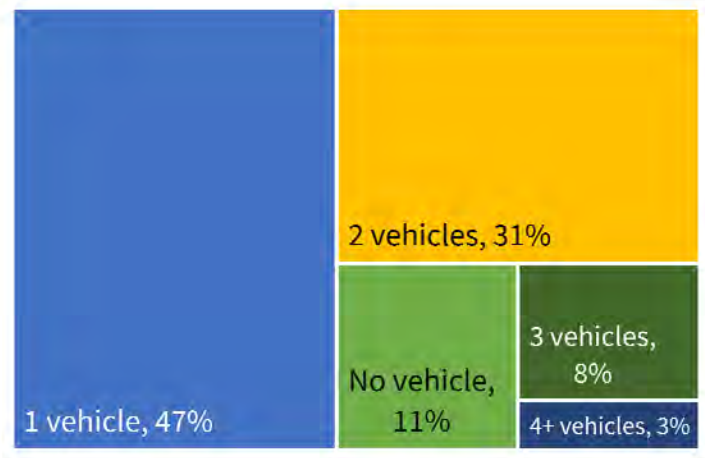
2.3.4 Household Vehicle Availability

Areas with a large percentage of households lacking access to a personal vehicle increase the importance of public transit. *Table 2-9* shows the household vehicle ownership in Gainesville. Most households have access to one or two vehicles (78%). 11% have no vehicles. These households, regardless of size, may benefit from access to public transit.

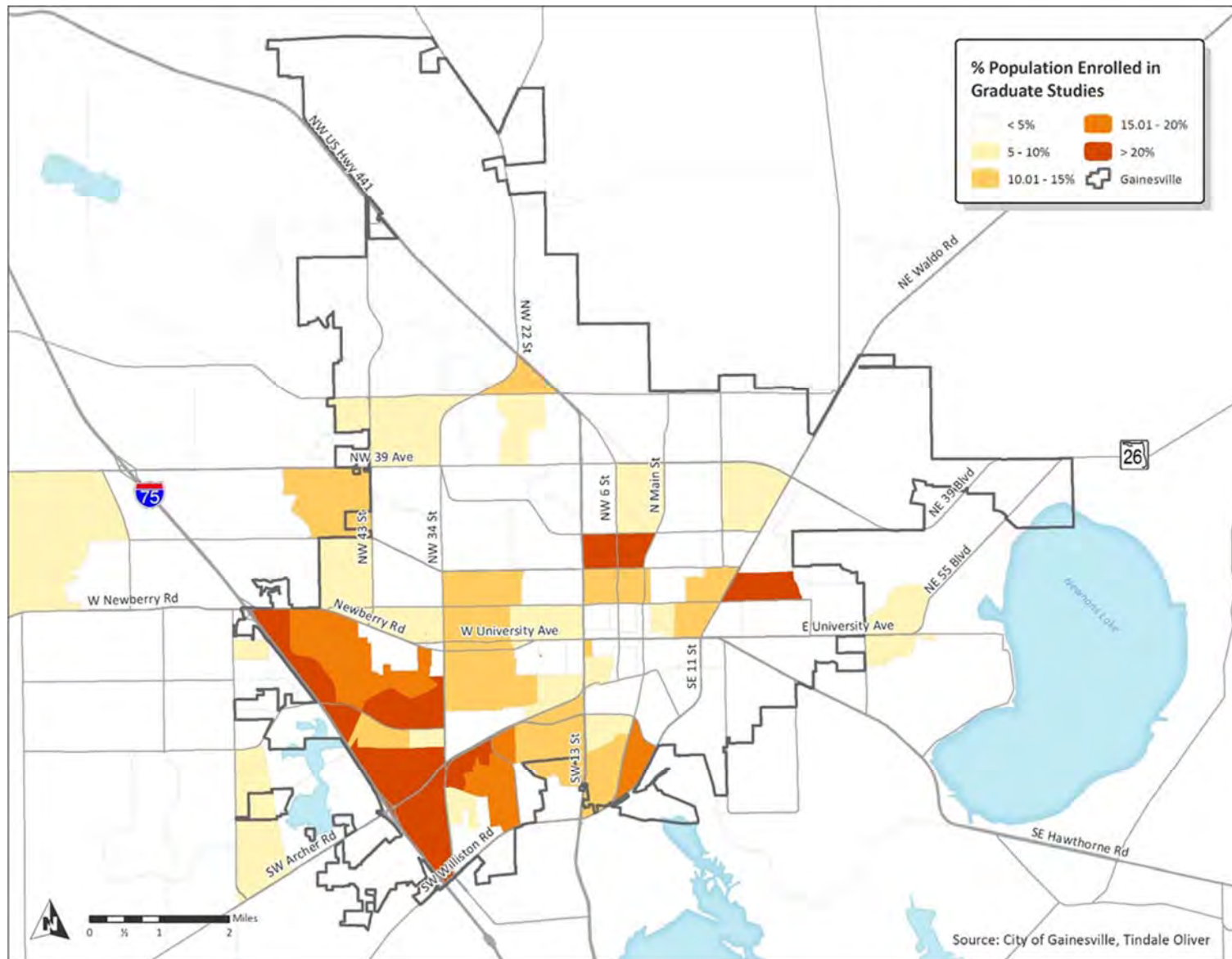
Map 2-11 illustrates the percentage of households that do not own a vehicle, by census block group. High percentages of zero vehicle households are prevalent throughout the Gainesville area, while the northern outskirts of the city tend to own at least one vehicle.

The concentration of zero vehicle households within the City is consistent with the student population, income, and age data. These data suggest emphasis on policies supporting walkable communities, as well as provision of transit and mobility services. RTS has already introduced a microtransit “Last Mile, First Mile” pilot program (also known as Microbus 600 and 601) that is set to operate for three years connecting areas of southeast Gainesville to the downtown Rosa Parks station. Currently, ridership on these microbuses is performing well.

Table 2-9: Household Vehicle Availability (ACS, 2017)



Map 2-11: Zero Vehicle Households (ACS, 2017)



2.3.5 Transportation Disadvantaged

The estimated number of transportation disadvantaged (TD) residents in Alachua County is shown in *Table 2-10*. According to the 2017-2018 Alachua County Transportation Disadvantaged Service Plan (TDSP), 86,298 individuals are estimated to be TD in 2019. The most vulnerable TD sub-group (G – elderly, disabled, low income) accounts for 1,345 or 1.5% of all TD individuals. All TD sub-groups are estimated to experience a growth in numbers between the present and 2025. This growth suggests both growing mobility demand and an emphasis on serving both general public and ADA demand.

Table 2-10: Transportation Disadvantaged (Alachua County TDSP, 2017)

General TD Population Forecast	2019	2020	2021	2022	2023	2024	2025
E - Estimate non-elderly/disabled/low income	4,483	4,528	4,574	4,620	4,666	4,713	4,761
B - Estimate non-elderly/disabled/not low income	4,812	4,861	4,909	4,959	5,009	5,059	5,110
G - Estimate elderly/disabled/low income	1,345	1,358	1,372	1,386	1,400	1,414	1,428
D - Estimate elderly/disabled/not low income	10,518	10,624	10,731	10,839	10,948	11,059	11,170
F - Estimate elderly/non-disabled/low income	430	434	439	443	447	452	457
A - Estimate elderly/non-disabled/not low income	21,813	22,033	22,254	22,479	22,705	22,934	23,165
C - Estimate low income/not elderly/not disabled	42,897	43,329	43,766	44,206	44,651	45,101	45,555
Total general TD population	86,298	87,167	88,045	88,932	89,826	90,732	91,646
Total population	253,274	255,825	258,401	261,003	263,631	266,286	268,968

2.4 Commuting Patterns

The OnTheMap web-based mapping and reporting application developed by the US Census uses Longitudinal Employer-Household Dynamic (LEHD) Origin-Destination Employment Statistics to map and report where workers are employed and where they live. The application provides companion reports on age, earnings, industry distributions, race, ethnicity, educational attainment, and sex. It is a unique application for mapping the travel patterns of workers and identifying small-area workforce

characteristics. A variety of data sources are used to generate the outputs for the application including census and ACS data – the dataset is recent as of 2015.

Table 2-11: Journey to Work for Alachua County and City of Gainesville – Residents (LEHD, 2015)

Alachua County - Residents	Count	Share
Workers Living in Alachua County	93,967	
Workers Living in Alachua County but Employed Outside County	23,362	24.9%
Workers Living and Employed in Alachua County	70,605	75.1%
City of Gainesville - Residents	Count	Share
Workers Living in City of Gainesville	43,981	
Workers Living in City of Gainesville but Employed Outside City	17,630	40.1%
Workers Living and Employed in City of Gainesville	26,351	59.9%

Workers living in Alachua County primarily remain in Alachua County for work (75%), and workers living in Gainesville primarily remain in the City for work (60%), indicating commutes for residents are primarily intra-county and intra-city.

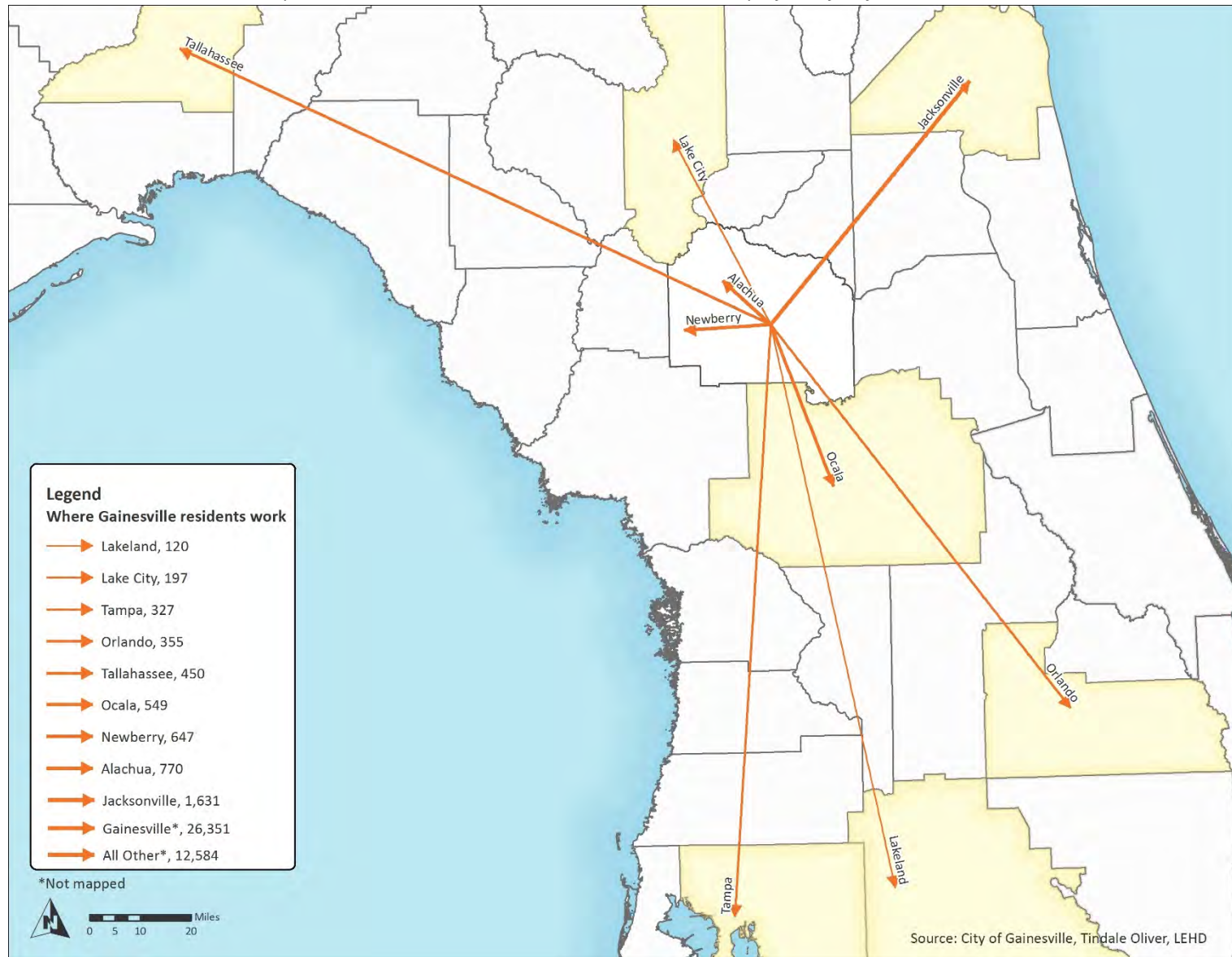
Table 2-12: Journey to Work for Alachua County and City of Gainesville – Employment (LEHD, 2015)

Alachua County - Employment	Count	Share
Employed in Alachua County	116,533	
Employed in Alachua County but Lives Outside County	45,928	39.4%
Employed and Living in Alachua County	70,605	60.6%
City of Gainesville - Employment	Count	Share
Employed in City of Gainesville	82,574	
Employed in City of Gainesville but Lives Outside City	56,223	68.1%
Employed and Living in City of Gainesville	26,351	31.9%

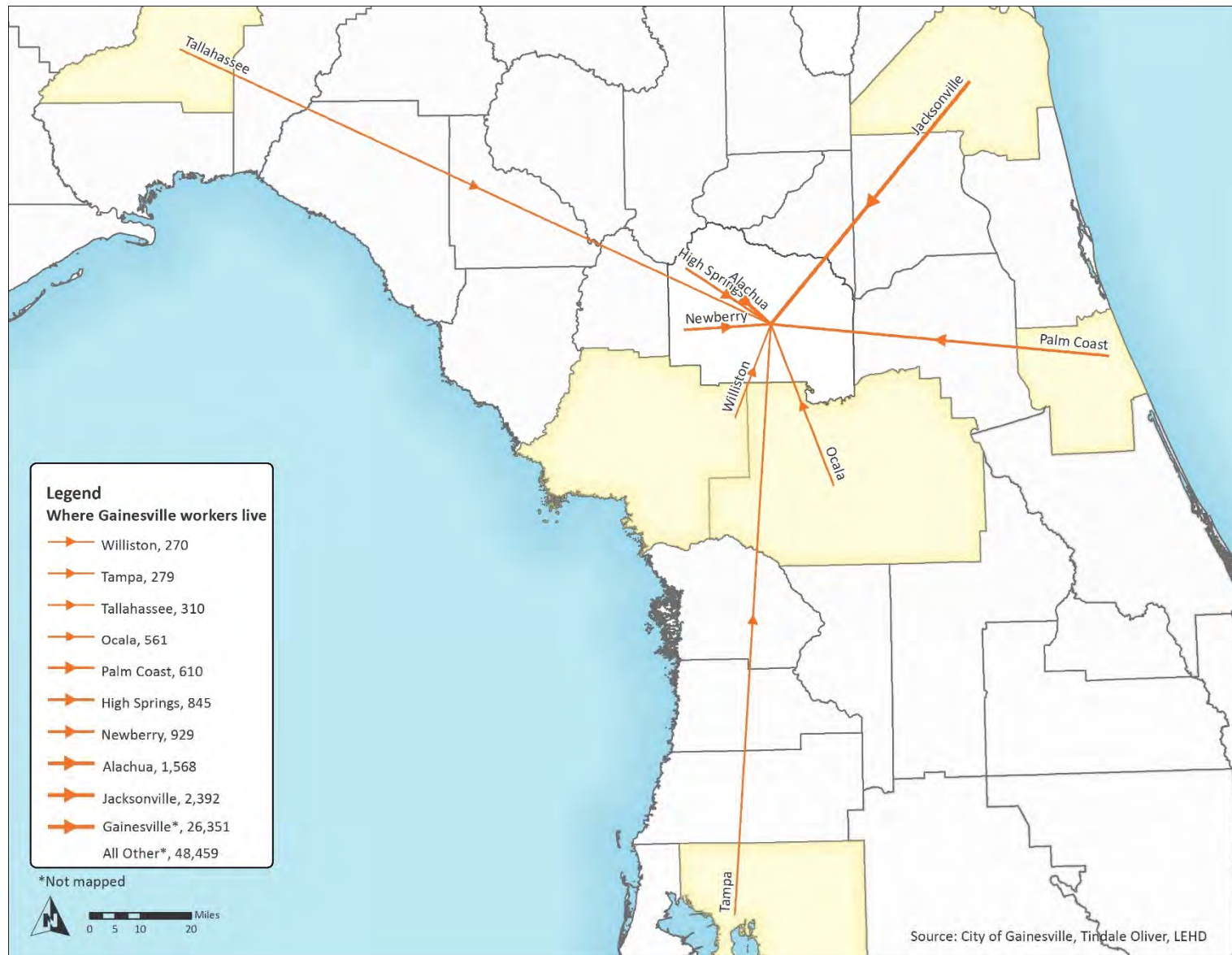
Examining where people live who are employed in the City of Gainesville reveals that the majority of those employed in Gainesville live outside the city (68%). When the lens is flipped, a different story appears. While the majority of those employed in Alachua County also live within the County (60%), there are 45,928 people who are employed in the County but live outside the County. This is approximately equal to the total number of workers living in the City of Gainesville. Similarly, there are 56,223 people who are employed in the City who live outside the City. The number of people who are employed in the City of Gainesville is nearly double the number of workers living in Gainesville. While the location of workers and their jobs seems correlated, there are also a significant amount of people who are employed in the County but live outside the County. There is an even larger proportion of people who are employed in the City of Gainesville but live outside the City.

More detailed commuter flow maps are provided as *Map 2-12* through *Map 2-15*. These maps show home and work commuter flows for the County and the City where the home or work location is outside the County or the City.

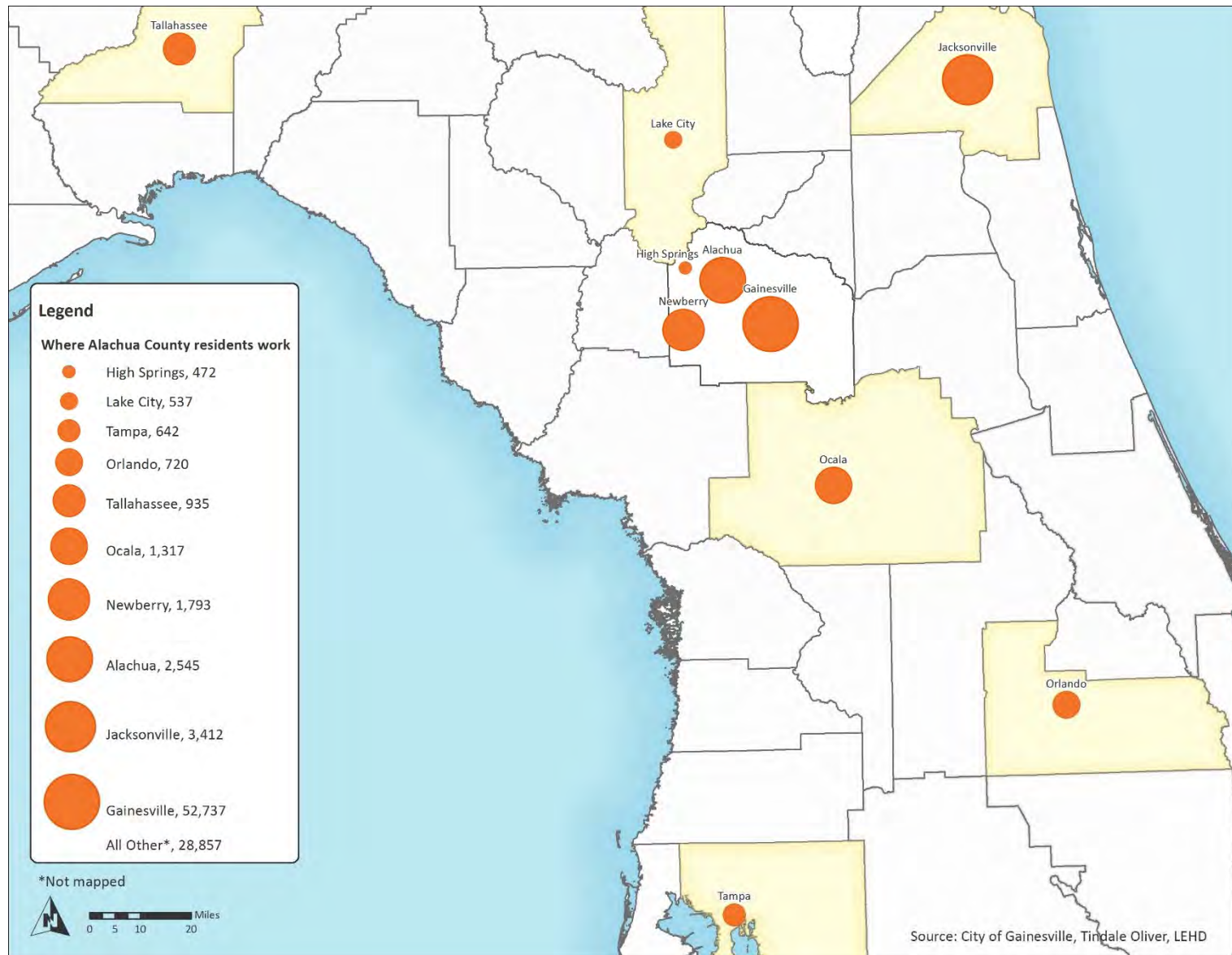
Map 2-12: Where Workers Who Live in Gainesville are Employed, by City (LEHD, 2015)



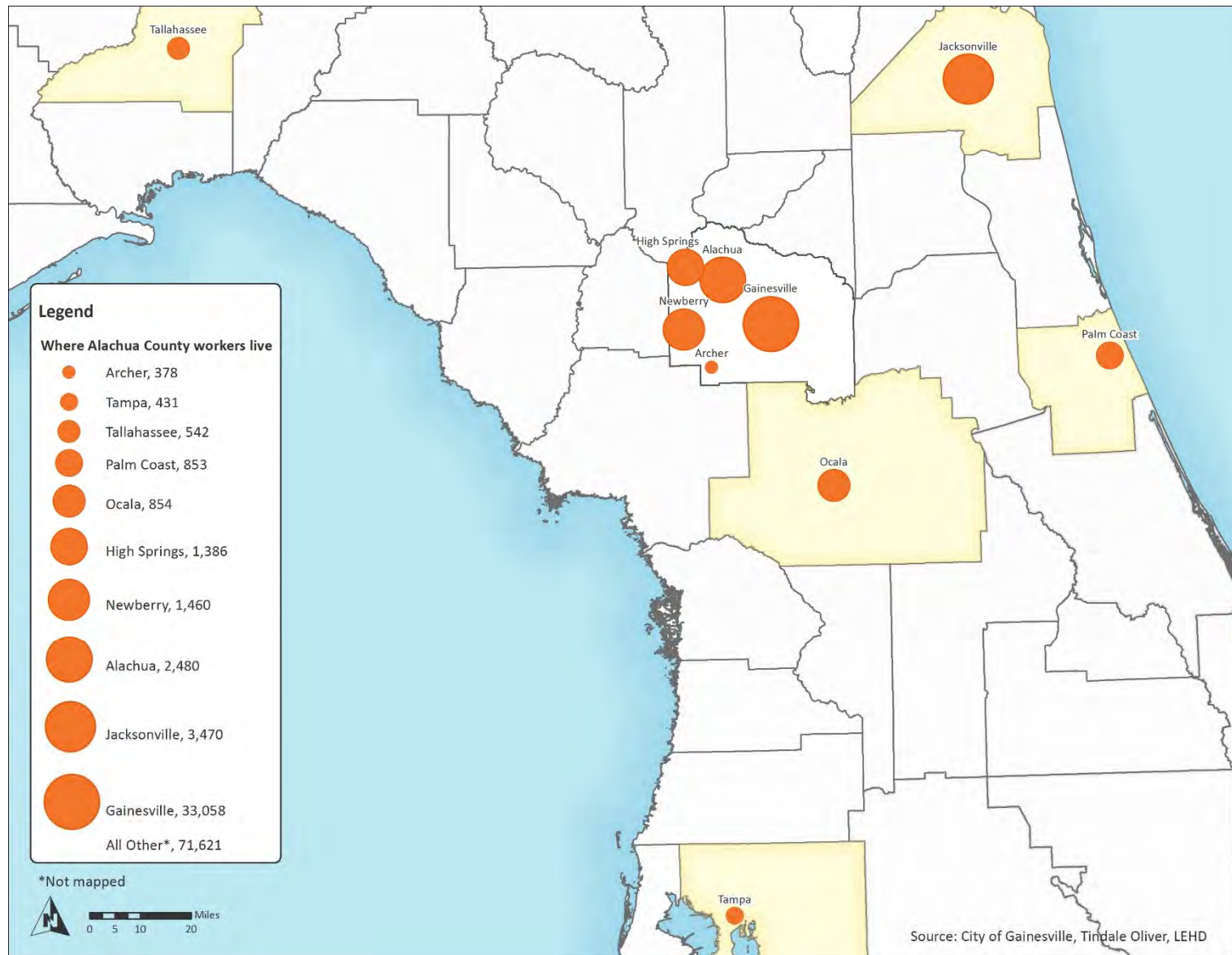
Map 2-13: Where People Who Work in Gainesville Live, by City (LEHD, 2015)



Map 2-14: Where Workers Who Live in Alachua County are Employed, by City (LEHD, 2015)



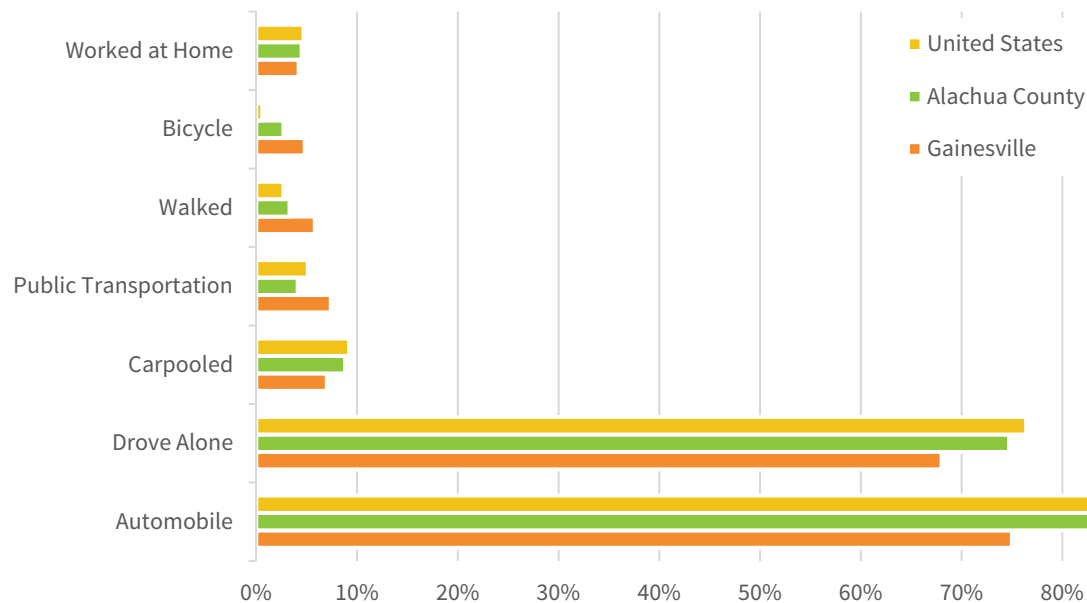
Map 2-15: Where People Who Work in Alachua County Live, by City (LEHD, 2015)



2.4.1 Means of Travel to Work

Like most of the US, Gainesville and Alachua County workers mostly drive a car to work alone. However, Gainesville has a higher use of alternative modes such as walking, bicycling, and public transit. In fact, the share of bicycle commuters is eight times higher than the state average and the share who walk is two times higher than the US average. *Table 2-13* outlines the commute mode share for Gainesville, Alachua County, and the US in 2017.

Table 2-13: Commute Mode Share – (ACS, 2017)



2.4.2 Major Employers

The largest employer in Gainesville is the University of Florida, which employs over one-fifth of all workers. The University of Florida is followed by UF Health and the VA Medical Center which employ 12,705 and 6,127 people, respectively. The number and proportion of employees at the University of Florida have more than doubled since 2008. *Table 2-14* shows the city's top 10 major employers, which collectively account for 45% of all employment.

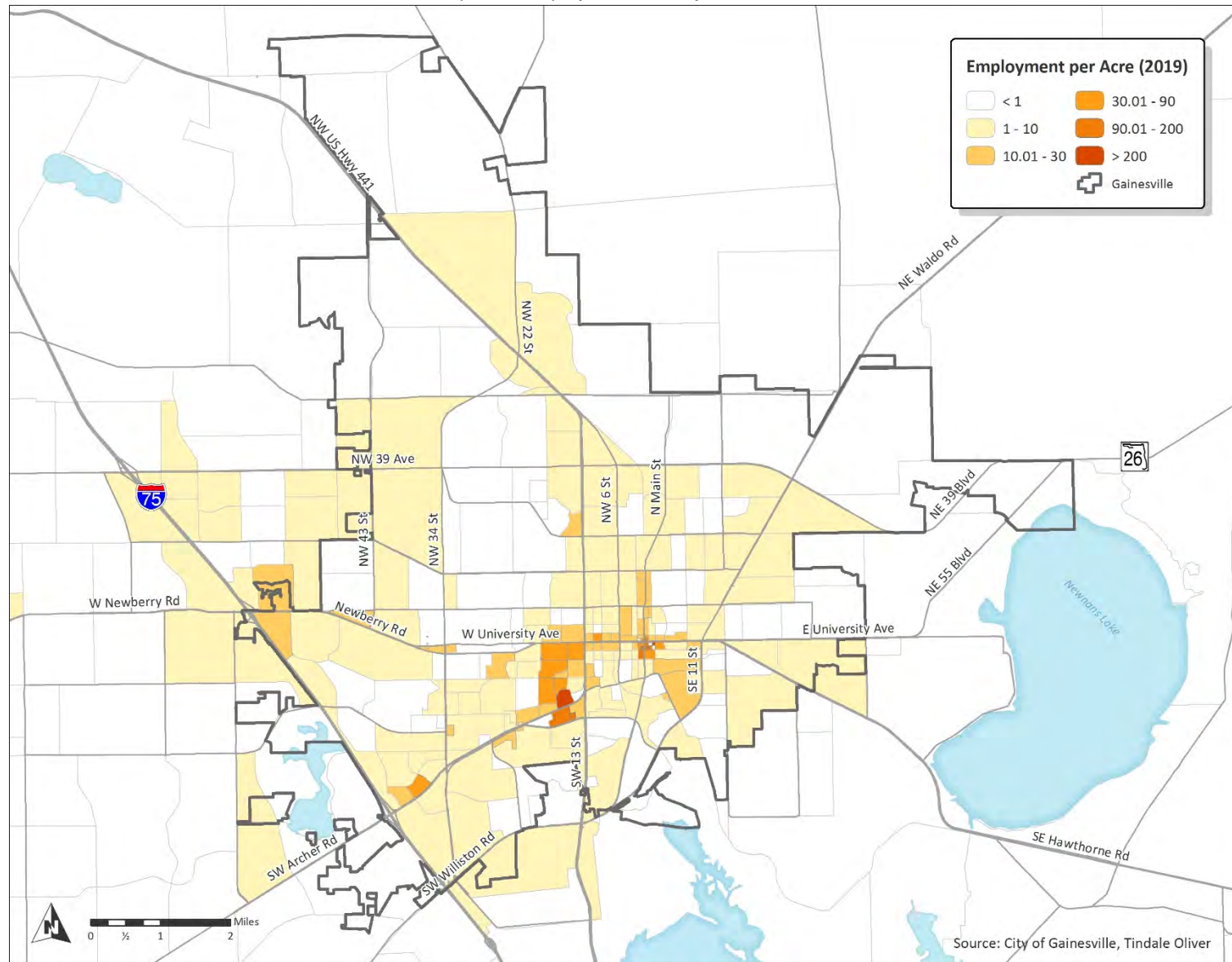
Table 2-14: Gainesville Major Employers – (CAFR, 2017)

Employer	Rank	Employees	% of Total City Employment
University of Florida	1	27,567	21.43%
UF Health	2	12,705	9.88%
VA Medical Center	3	6,127	4.76%
Alachua County School Board	4	3,904	3.04%
City of Gainesville	5	2,072	1.61%
North Florida Regional Medical Ctr.	6	2,000	1.56%
Gator Dining Services	7	1,200	0.93%
Nationwide Insurance	8	960	0.75%
Alachua County	9	809	0.63%
Publix Supermarkets	10	780	0.61%
Total	-	58,124	45.19%

2.4.3 Employment Density

Map 2-16 illustrates the 2019 employment densities by Traffic Analysis Zone (TAZ) for Gainesville using base year employment data provided by the North Central Florida Regional Planning Council (NCFRPC) Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area Year 2040 Long Range Transportation Plan. Areas with the highest employment density are primarily around the University of Florida, medical centers, as well as the corridor towards downtown. Note that employment densities in excess of 10 persons per acre suggest higher transit ridership potential.

Map 2-16: Employment Density 2019 (MTPO)



2.5 Future Land Use and Development Activities

A review of emerging land uses and developments was conducted for the baseline conditions assessment.

There are over 100 development projects currently listed by the City of Gainesville Planning and Development Services Department, ranging in completion status from under-review to complete. The types of development also range from small-scale lighting upgrades and single-family housing projects, to hospitals and other major developments. Since the completion of the prior TDP, multiple major developments have broken ground. Mixed-use projects like Butler Town Center and Celebration Pointe are nearing completion and have opened dozens of opportunities for additional retail, commercial, shopping, and recreation uses. These developments included major anchor stores which are typically strong activity generators.

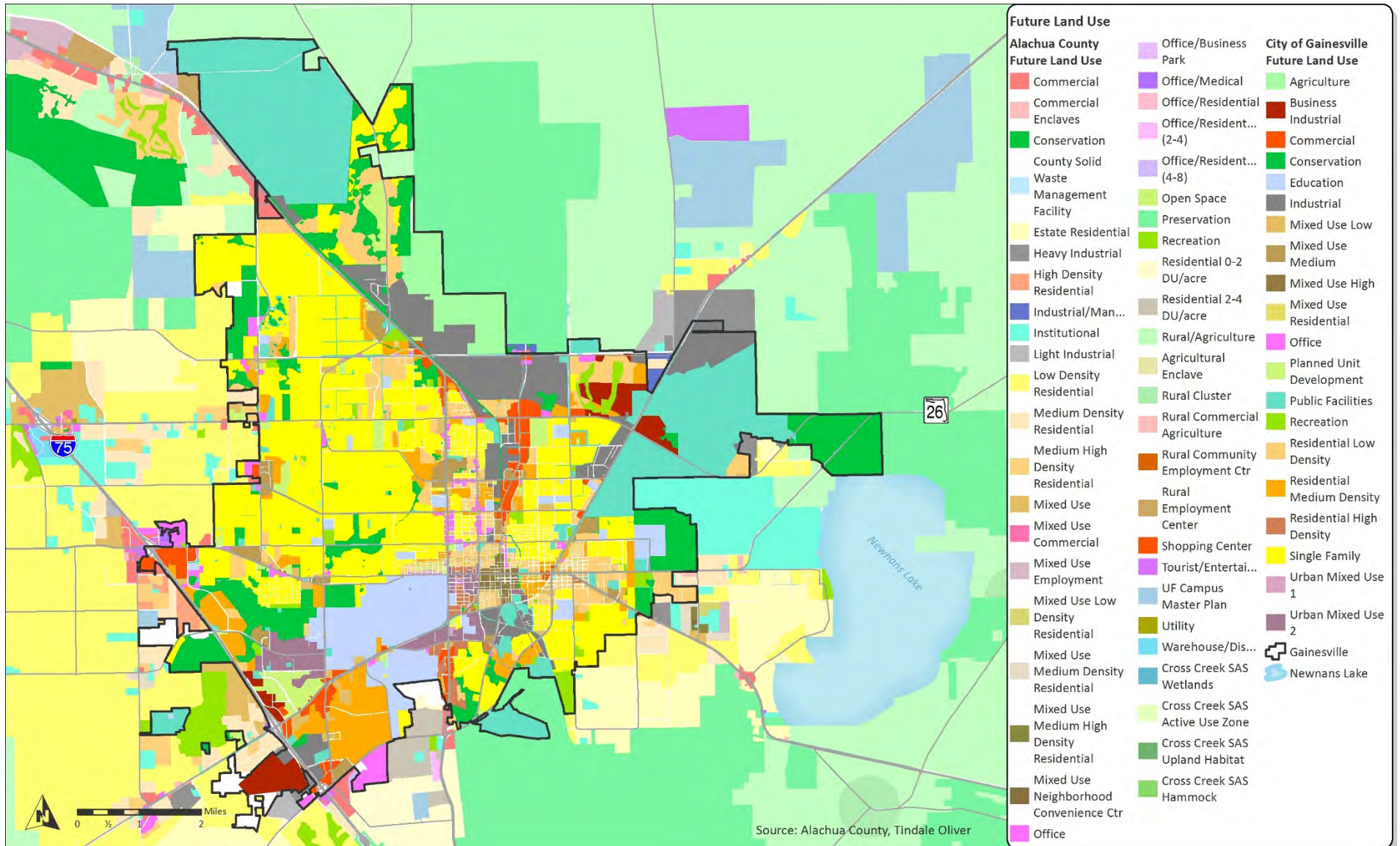
Currently in development are two additional mixed-use projects, Markets West located off Tower Road and North Florida Regional Medical near West Newberry Road. North Florida Regional Medical is approved to create medical and residential uses. Markets West is approved for a total of 15,000 sq. ft. of mostly commercial and medical uses.

Multi-family residential developments continue to rise in the vicinity of the University of Florida campus. A number of multi-story mixed use residential projects have been approved or constructed since the prior TDP, including units like The Standard, Hub on Campus, and Hub 2. In addition to these multi-family mixed-use projects under development, several other large single family residential subdivisions were recently approved, such as Finley Woods Phase II near SW Williston Road.

Future land use codes within the city are displayed on *Map 2-17*. Large swaths of single family residential dominate the west-northwest area of the city. The University of Florida and its accompanying properties are clearly visible in the south-central area bounded by roads like 13th Street and University Avenue.

Note, that mixed use and higher density developments are best for convenient and cost-effective walkable, bikeable, and transit mobility options. Single family residential and suburban low density commercial and retail development are not conducive to walkable, bikeable, and transit mobility options. As transit and mobility services are changing through the application of technology, opportunities to improve mobility and access to mobility through new and emerging service delivery strategies will be developed. This is especially relevant for hard-to-serve places where land use and roadway connectivity hinder traditional transit service. RTS is already testing emerging services with applications like microtransit and the autonomous vehicle pilot currently in development. Concepts for transit improvements and alternative mobility service strategies will be developed and discussed in a subsequent Transit Alternatives and Situational Appraisal reports.

Map 2-17: Future Land Use Map



2.6 Roadway Characteristics

Table 2-15 depicts roadways operating at unacceptable level of service (LOS) in Gainesville in 2016 and 2017. LOS is a measure that describes the quality of traffic service along a given roadway segment. A large component in evaluating a roadway's LOS is the volume of cars compared to the design capacity of the roadway. As this ratio approaches 1.0, congestion increases and travel speeds decrease, resulting in diminished levels of service. Additional factors, such as the number of lanes, travel speed and density of traffic, contribute to formulating LOS scores, a scale of "A" (free-flow) to "F" (failing with significant delays).

Table 2-15: Roadways Operating with an Unacceptable Level of Service (LOS)

Roadway Facility	From	To	2016 AADT*	2016 LOS	2017 AADT*	2017 LOS	2017 MSV*
SW 2 Avenue [SR 26A]	SW 34 Street [SR 121]	University Ave	12,100	F	12,950	F	12,480
NW 34 Street [SR 121]	University Ave	NW 16 Ave	19,100	F	24,450	F	16,380
Archer Road [SR 24]	SW 91 Street	SW 75 Street	20,500	F	20,500	F	17,010
Archer Road [SR 24]	GMA Boundary	SW 91 Street	16,000	D	16,250	F	16,200
NW 23 Ave	NW 98 Street	NW 55 Street	16,078	F	16,078	F	14,040
SW 75 Street / Tower Road	Archer Road	SW 8 Ave	16,968	F	16,968	F	14,040
SW 20 Ave	SW 75 Street	SW 62 Blvd	19,442	F	19,442	F	14,040
N Main Street	N 8 Ave	N 16 Ave	15,976	F	15,976	F	14,740
NW 39 Ave	NW 110 Terrace	NW 98 Street	17,326	F	17,326	F	14,040
SW 24 Ave	SW 91 Street	SW 75 Street	14,330	D	14,330	F	13,320
NW 83 Street	NW 23 Ave	NW 39 Ave	18,874	F	18,874	F	14,740
NW 8 Ave	NW 22 Street	NW 6 Street	14,502	E	15,292	F	14,740
SW 62 Blvd	SW 20 Ave	NW 1 Place	18,544	F	18,544	F	14,040

Source: 2018 Multimodal Level of Service Report.

*MSV: Maximum Service Volume

*AADT: Annual Average Daily Traffic

Eventual deterioration of roadway LOS throughout Gainesville's roadway system will impact facets of RTS service and likely result in service delays, diminished on-time performance, and higher operating costs to maintain transit service levels due to slower operating speeds. However, congestion indicates

an opportunity to improve transit and alternative travel modes where infrastructure and supportive land use policies can be established to facilitate attractive non-auto travel modes.

2.7 Market Assessment

The mobility market assessment includes an evaluation from two perspectives—the discretionary transit market and the traditional transit market, the two predominant rider markets for bus transit service and alternative mobility options. Analytical tools for conducting each market analysis include a Density Threshold Assessment (DTA) for the discretionary market and a Transit Orientation Index (TOI) for the traditional market. These tools can be 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 below. Due to the geography of the data (census block groups) these analyses are conducted at a countywide scale; however, the map scale is centered on the City of Gainesville.

2.7.1 Discretionary Market Assessment

The discretionary market refers to potential riders living in higher-density areas of the county that may choose to use transit as a commute or transportation alternative. The DTA conducted used industry standard thresholds to identify the areas within Gainesville that experience transit-supportive residential and employee density levels. Dwelling unit and employment data provided by Gainesville MTPo from year 2019 to 2040 were used to conduct the DTA. Three density thresholds were developed to indicate whether an area contains sufficient density to sustain some level of fixed-route transit operations:

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

Comparing the DTA in 2019 to the DTA in 2028, *Map 2-18* and *Map 2-19*, we see modestly increased infill residential and employment densities downtown and in surrounding areas of Gainesville.

2.7.2 Transit Orientation Index

A traditional transit market refers to population segments that historically have had a higher propensity to use transit and be dependent on public transit for their transportation needs. Traditional transit users include older adults, youth, and households that are low-income and/or have zero vehicles. A TOI assists in identifying areas of the county where a traditional transit market exists. To create the TOI for this analysis, demographic ACS 2017 5-Year Estimates were compiled at the census block group level and categorized according to each block group’s relative ability to support transit based on the prevalence of specific demographic characteristics. Four population and

demographic characteristics that are traditionally associated with the propensity to use transit were used to develop the TOI and include:

- Proportion of population age 65 and over (older adults)
- Proportion of population age 10–17 (youth)
- Proportion of population below poverty level (\$25,750 for family of four)
- 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 1, 2, 3, or 4 (with 1 being low and 4 being very high) in their respective levels of transit orientation. Census block groups with a population density less than 100 people per square mile are removed from the analysis, only retaining extended urban areas in the analysis.

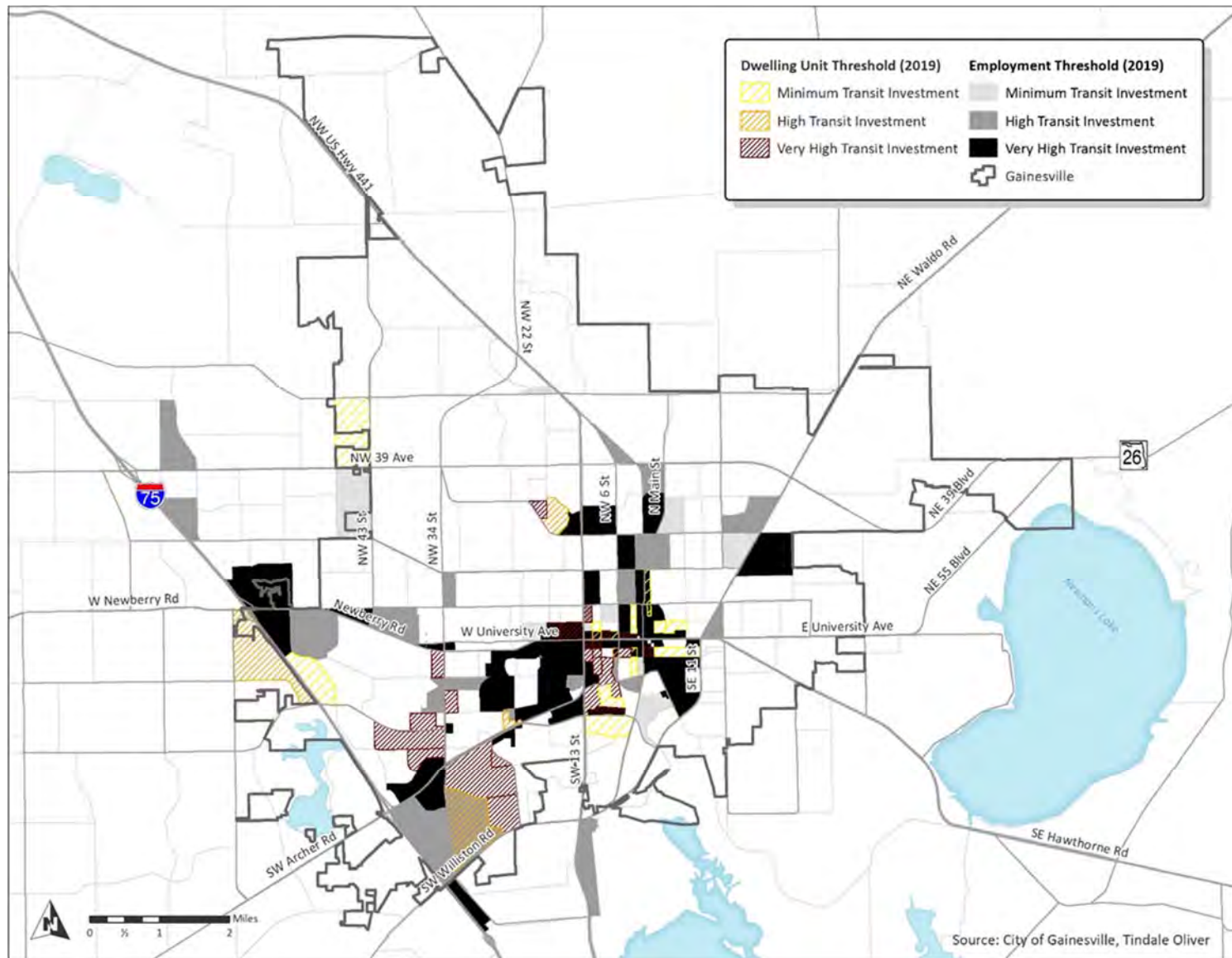
An additional adjusted version of the TOI was also generated to reflect the unique demographics of Gainesville. This adjusted version reduces the influence of the youth population and adds college-aged individuals to the index. This adds the following characteristic to the list:

- Proportion of population aged 18-24 (college-aged)

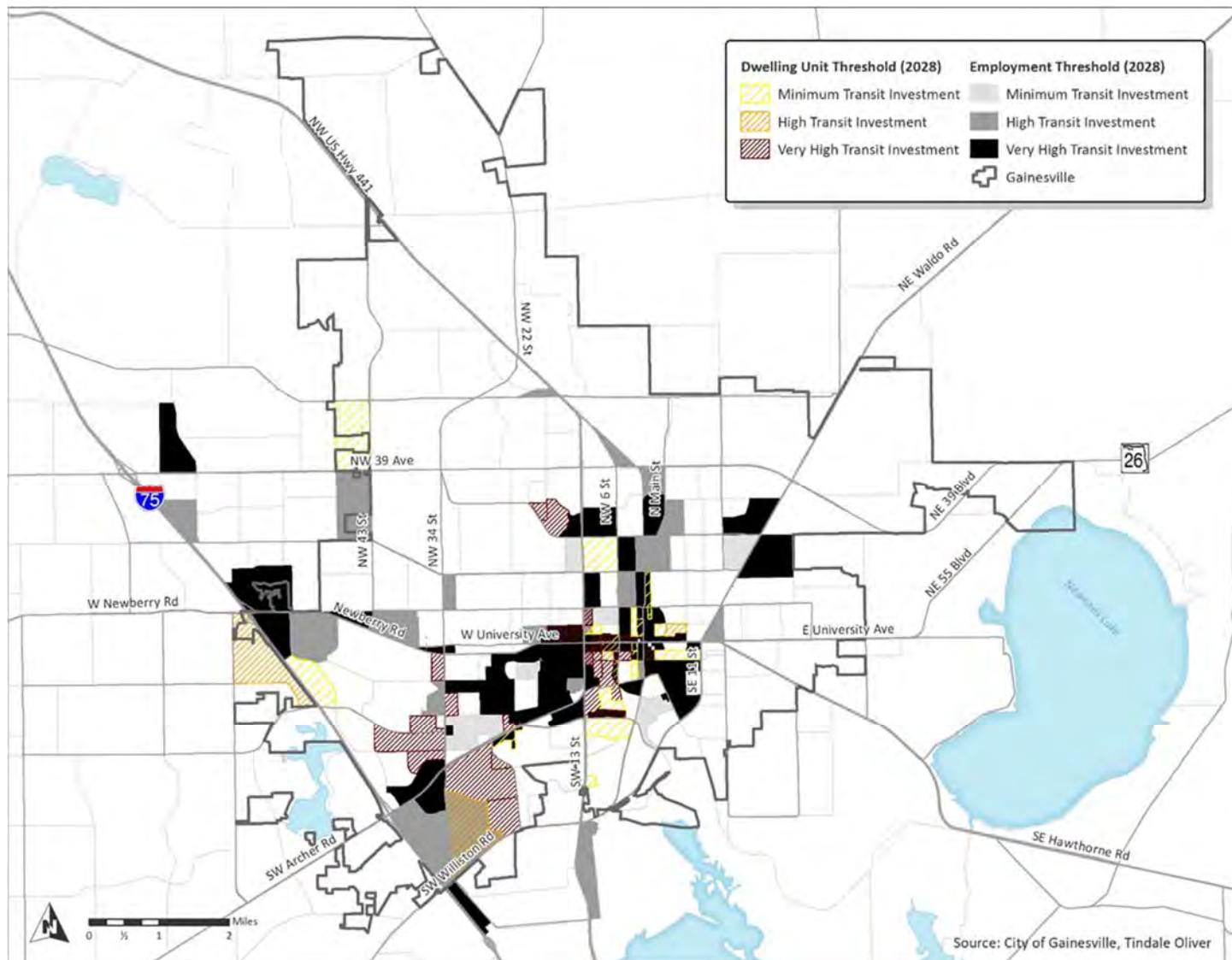
Map 2-20 and *Map 2-21* illustrate the traditional and adjusted TOI, reflecting areas throughout the county with varying traditional market potential, centered on the City of Gainesville. Also shown is the existing transit route network to exhibit how well RTS routes covers those areas. *Map 2-21* uses the same inputs as *Map 2-20*, but additionally considers the factor of college-aged individuals. Therefore, the two maps primarily identify the same areas are transit supportive. Both maps identify areas along I-75, especially bounded by Archer Road and Williston Road as being medium to high TOI. The northeast areas of Gainesville from downtown toward the Waldo Road and 39th Boulevard axis also stand out as medium to very high TOI in both analyses. These areas will be targeted for additional mobility strategies during Transit Alternatives development and the Situational Appraisal.

The addition of the college-aged cohort in *Map 2-21* reflects a significant increase in transit propensity in areas scoring medium and high on the transit orientation index in downtown and areas surrounding UF facilities and along Archer Rd, south on 34th Street, and east on University Avenue.

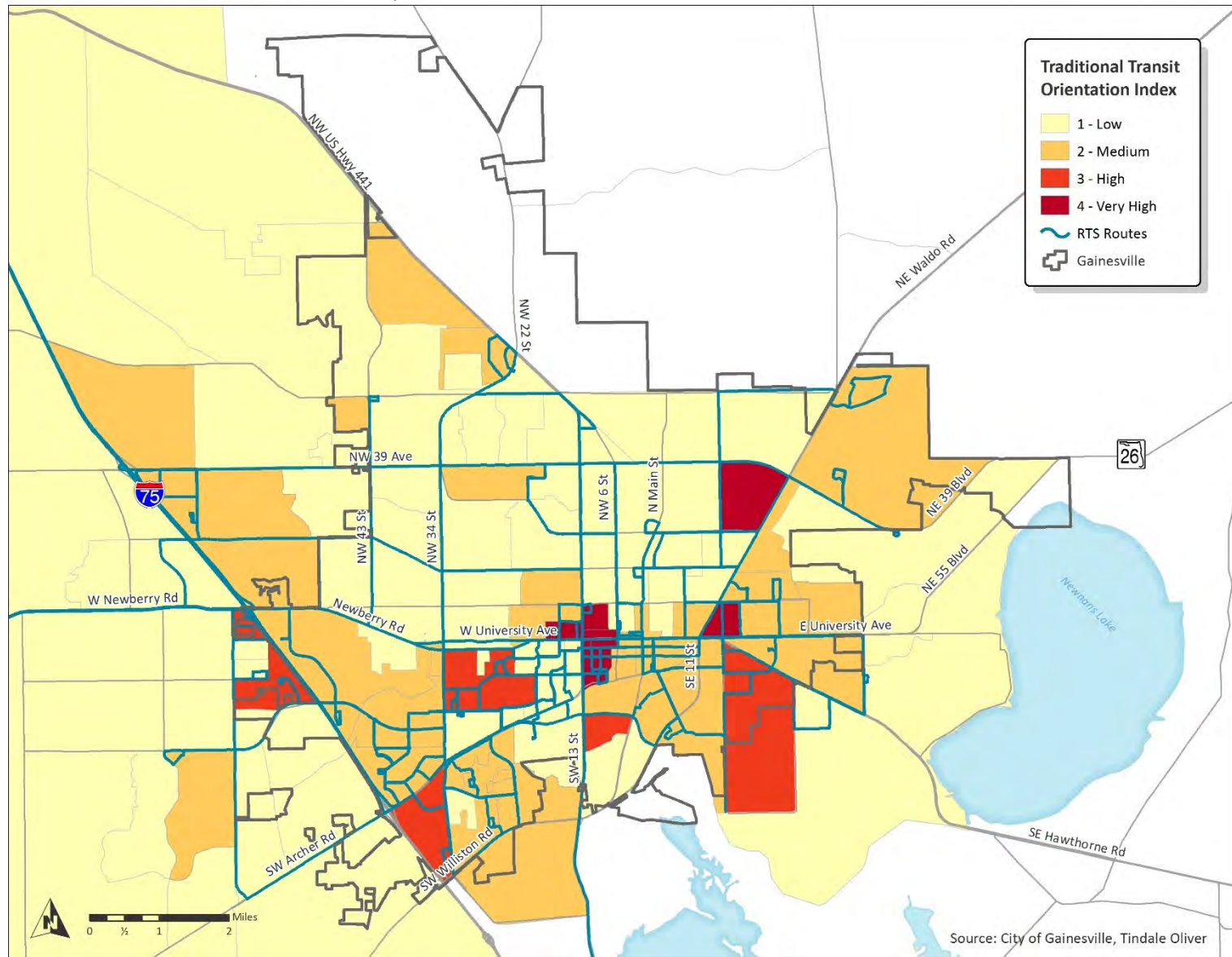
Map 2-18: Density Threshold Assessment 2019 (MTPO)



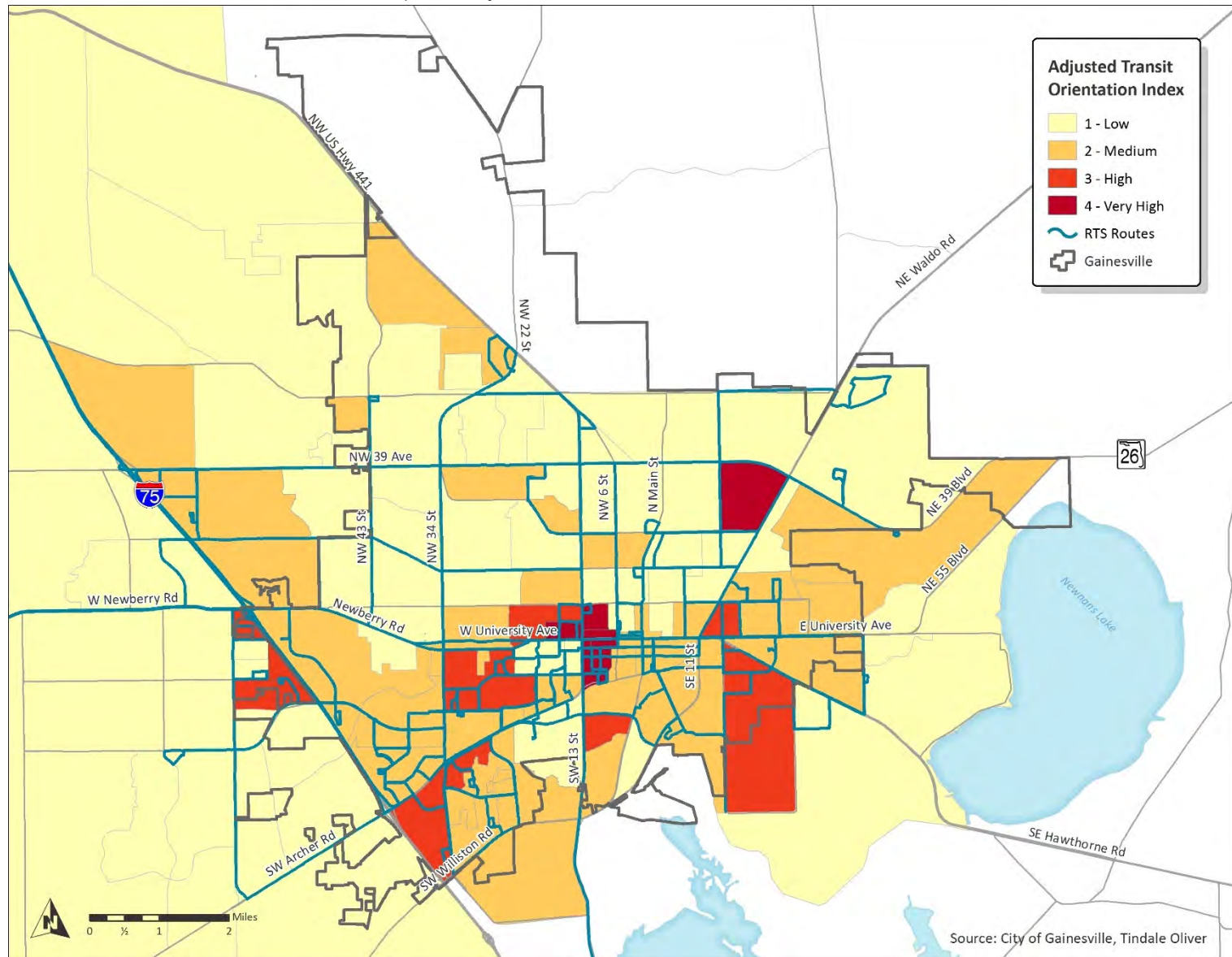
Map 2-19: Density Threshold Assessment 2028 (MTP0)



Map 2-20: Traditional Transit Orientation Index (ACS, 2017)



Map 2-21: Adjusted Transit Orientation Index (ACS, 2017)



2.8 Plans Review and Regional Trends in Transit

2.8.1 Florida Transportation Plan: Horizon 2060

The Florida Transportation Plan (FTP): Horizon 2060 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 needs today and in the future. The plan looks at a 50-year transportation planning horizon and calls for fundamental change in how and where State investments in transportation are made – with a major goal of making Florida’s economy more competitive and communities more livable.

2.8.2 2040 Long Range Transportation Plan

The Gainesville Urbanized Area Metropolitan Transportation Planning Organization (MTPO) adopted their 2040 Long Range Transportation Plan (LRTP) on October 5, 2015. The MTPO has completed a Request for Qualifications (RFQ) for the 2045 LRTP Update and work by a consultant is underway.

Like most LRTPs, the plan strives to create a balanced multi-modal network, including a Needs Plan which identified a proper balance of all modes and mobility options while considering future challenges and trends. Initially, the LRTP was developed with 2 alternatives: the New Corridors emphasis alternative, and the Existing Corridors emphasis alternative. Based on these two alternatives, Alternative 3, a Hybrid Needs Network was developed which blended the best elements from the first two alternatives. This Alternative was intended to serve as the basis for evaluation and selection of the final Year 2040 Needs Plan.

The 2040 Needs Plan developed from Alternative 3 identified a range of needed Transit projects. Needs included increasing weekday and weekend frequencies and operating hours on City routes, providing intercity transit services to/from the various municipalities and jurisdictions within Alachua County but outside the City of Gainesville, the construction of a Transit Center at Santa Fe College, and various Park and Ride facilities scattered around the county. Various other Intelligent Transportation Systems (ITS) projects were identified, as well as bicycle and pedestrian facilities and safety improvements, and roadway capacity improvements. The 2040 Needs Plan does not address all congestion issues that were identified by 2040.

2.8.3 SR 26 / University Avenue Multimodal Emphasis Corridor Study

The MTPO’s SR 26 / University Avenue Multimodal Emphasis Corridor Study, adopted in 2014, identified a list of viable transportation projects that would benefit the multimodal operations and safety of University Avenue between Gale Lemerand Drive and Waldo Road. Nine projects were selected to move forward, with additional planning-level cost estimates for projects and refinements provided. Enhancements primarily includes raised medians, enhanced pedestrian crossings, and striping. In addition to these projects, corridor-wide enhancements to transit shelters and benches were identified. Several stops were identified which were constrained, but shelters could be added if bus bulb-outs were constructed or the curb extended into the gore area of the roadway. Generally, these improvements would provide enhanced comfort and security for transit riders, and further encourage the use of transit along University Avenue. Two new signals are under design as part of this

process: one at the intersection of West University Avenue and NW 16th Street and another at the intersection of West University Avenue and NW 19th Street.

2.8.4 Go Enhance RTS Study

The 2014 *Go Enhance RTS Study* is a re-examination of the RTS 2010 *Rapid Transit Feasibility Study* and aimed to determine whether a premium transit improvement should be pursued in a designated east-west corridor serving the City of Gainesville and Alachua County. The study examined no-build, build, and transportation systems management (TSM) alternatives with two routing alternatives: Corridor A and Corridor B. A draft locally preferred alternative (LPA) was developed which recommended a TSM strategy with limited stop service along Corridor A. This alternative was shown to have higher ridership growth compared to investments made than the exclusive bus lanes, articulated vehicles, enhanced station, and off-board fare collection assumed with the build alternative. Reevaluation of the feasibility of New Starts/Small Starts major capital investment strategy with Bus Rapid Transit (BRT) as the preferred premium transit mode was recommended to be completed in 2025 to assess whether BRT is a viable option for federal funding.

2.8.5 City of Gainesville Streetcar Feasibility Study

The Streetcar Feasibility Study examined the potential of a fixed guideway streetcar system within the urban core of Gainesville. The study included project conceptualization, preliminary right-of-way screening, economic development assessment, ridership estimation, vehicle technology assessment, proposed operating plan, cost estimates, and a funding and financing analysis. While the study did not make a specific recommendation as to whether a streetcar system should be pursued, it did recommend an alignment from Rosa Parks station north along SE 3rd St, and westbound along SW 2nd Ave with a terminus at SW 12th St.

The study ultimately recommends potential next steps that should be conducted if a community decision is made to move forward on the implementation of the streetcar, which includes further public outreach efforts, land use and economic development analysis, ridership analysis, and a deeper dive into the engineering details of the project, among others.

2.8.6 University of Florida Partnerships and Programs

As a strong activity generator, UF has partnerships with multiple transportation providers to serve its users. UF and RTS developed a partnership in 1998 through a transportation fee approved by the State Legislature that allows students unlimited prepaid access to RTS services through a fee included in every student's tuition. As of the 2018-2019 academic year, students pay \$9.44 per credit hour for unlimited access to RTS services. The UF transportation fee has been steadily increasing year-over-year – increasing nearly \$3 per credit hour since the 2009-2010 academic year when it was \$6.79.

Uber and UF have partnered to provide services through the UF Safe Rides program. This program is aimed at offering students safe, affordable, reliable rides around town, especially for late night service within a designated zone. The designated zone encompasses the university's main campus, downtown, and midtown areas, with a few blocks of buffer in each direction. Discounted rides are offered Wednesday through Saturday from 9PM to 3AM. Funded by student Transportation Access

Fees, the promotion has been incredibly popular to the point where a reduction in discount has been necessary to maintain fiscal responsibility.

Bike programs like Gator Gears and Departmental Bike Share encourage alternative modes of transportation for students and faculty. The Gator Gears program is offered only to students and charges a modest fee by semester, two semesters, or annual rental. The rental includes any cost of maintenance and comes with a helmet. The Departmental Bike Share Program refurbishes abandoned bicycles from the campus and offers them to university departments to share.

In addition, services like Zip Car (car share rental), Zimride/Carpool Program, UF Campus Cab (point-to-point advance scheduled transportation), and Student Nighttime Auxiliary Patrol (late night on-demand point-to-point student transportation) are offered at UF.

2.8.7 Alachua County Mobility Plan

Alachua County Commission had adopted amendments to its Comprehensive Plan which aim to reduce vehicle miles travelled (VMT), reduce the use of single-occupant automobile use, decrease greenhouse gas emissions, and increase mode share for bicycling, walking, and transit. The Comprehensive Plan amendments achieve this through providing enhanced transportation mobility options in coordination with land use changes that bring services and jobs closer to residents, and incentivizing development densities and intensities that are transit supportive.

Features of this plan include an alternative concurrency management system which enables developments to satisfy their transportation mitigation obligations through multimodal transportation contributions, incentives for transit-oriented developments (TOD) and traditional neighborhood design (TND), and a financially feasible multimodal infrastructure plan to meet the needs of future growth and transportation demand within the Urban Cluster Boundary (UCB).

2.8.8 Self-Driving Vehicle Research and Testing

In 2017, the City of Gainesville announced it has teamed up with UF and FDOT to research, develop, and test autonomous, connected vehicles and human-operated vehicles synced to traffic signals on campus and city streets. This is the first program in the state to involve cooperation between a city, university, and FDOT – and could eventually lead to “connected” RTS busses and/or campus shuttles. The funding comes from a US DOT grant that will provide up to \$2.75 million per year over a five-year span towards researching and testing these transportation options – with FDOT “cost-sharing” up to \$1.5 million per year. In addition, the city is identifying corridors on which to test connected and autonomous vehicles such as 34th Street. Given the City’s relatively slow traffic speeds and high volume of pedestrians, bicyclists, and a heavily used transit system – it has been identified as an ideal place for testing such technologies.

2.8.9 Incorporating Safety into Transportation Planning

The MPTO, in coordination with the North Central Florida Regional Planning Council, and with funding support from FTA, USDOT, and FHWA, developed the Incorporating Safety into Transportation Planning Technical Memorandum in December of 2013. The report primarily aims to strengthen the foundation for identifying and solving safety issues in the MPTO LRTP. This is

accomplished through analysis of motor vehicle crashes on the roadway network and the identification and evaluation of various strategies and countermeasures to improve safety through a data driven approach supported by performance measures and metrics.

Ultimately, the report recommended the following steps for formalizing safety in the planning process:

1. Include safety experts on planning committees
2. Incorporate safety into goals and objectives
3. Identify safety issues
4. Establish safety performance measures
5. Collect and analyze safety data
6. Utilize safety as a decision factor
7. Monitor and evaluate the effectiveness of safety programs and projects

While the report covers safety generally, it does not specifically address the safety of transit users, how to evaluate transit safety, or specific measures for enhancing the safety of these users. A follow up report, addressed in the next section, addresses pedestrian safety in proximity to transit stops and facilities.

2.8.10 Pedestrian Safety Assessment in Proximity to Transit Stops and Facilities

The MPTO, in coordination with the North Central Florida Regional Planning Council, and with funding support from FTA, USDOT, and FHWA developed the Pedestrian Safety Assessment in Proximity to Transit Stops and Facilities Report in September of 2015. Of the State Highway Safety Plan, this report focuses on emphasis area 3. Vulnerable Road users and 8. Traffic Data. The report provides an analysis of pedestrian crashes near transit stops but found that pedestrian crashes do not appear to occur more frequently near transit stops. The majority of pedestrian crashes occur on some of the most heavily travelled roadway segments in the City. The following three reasons were identified as reasons for pedestrian crashes at transit stops:

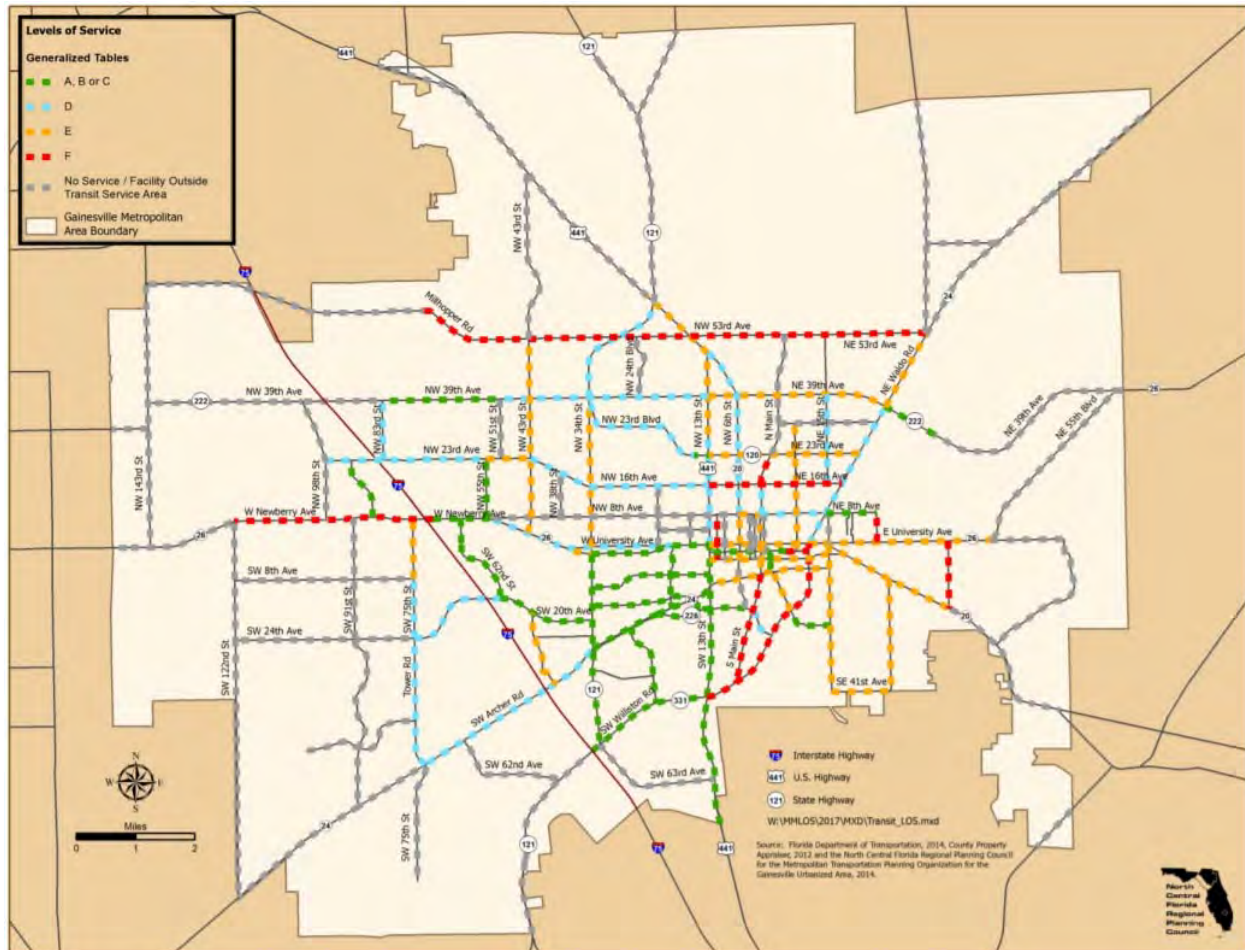
1. Bus passenger walked in front of stopped bus and was hit.
2. Pedestrian exits bus at bus stop and after bus have departed, runs across road and was hit.
3. Bus pulling up to bus stop hits pedestrian with bus door.

Pedestrian Roadway Safety Audits were being conducted for roadway segments with high volumes of pedestrian activity and crashes at the time of the report, and transit stops were included in this process. The report ultimately recommended these safety audits continue in area with high pedestrian activity and crashes to continue to address safety needs and concerns as they arise.

2.8.11 Multimodal Level of Service Report (2017)

The 2017 Multimodal Level of Service Report employed a two-tiered level of service roadway facility analyses. Tier One analyses utilized the FDOT Generalized Tables. Tier Two analysis was required for all “distressed” arterials – where current traffic uses 85% or more of the maximum service volume for the adopted level of service for that roadway. Bicycle, pedestrian, and transit levels of service analyses also employ a two-tiered approach – which uses FDOT’s LOSPLAN software.

Map 2-22: Transit Level of Service



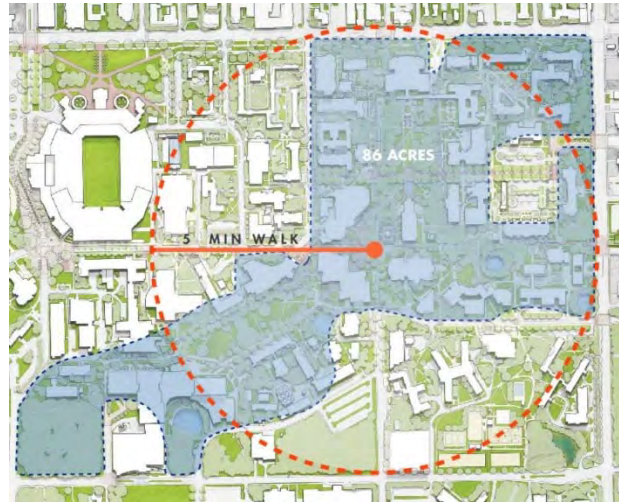
2.8.12 Santa Fe State College Downtown Campus (2019)

Santa Fe State College has plans to combine and consolidate certain functions and programs at the downtown campus. The downtown campus also serves as a place for training and support for low income, at-risk, and other community programs. Mobility services to facilitate access to the downtown campus from suburban campuses and participating schools and community organizations will be required. Since 2011, Santa Fe State College charges its students (from all campuses) a three dollar per credit hour transportation access fee.

2.8.13 University of Florida Transportation & Parking Strategic Plan

The Transportation and Parking Strategic Plan was finalized in 2018, providing context and visioning for development of the University's transportation network and infrastructure for the next 10 or more years. The report's recommendations are meant to improve the safety and efficiency of the current transportation system; position the university for future transportation and parking needs; and strengthen community partnerships. Creating a Bicycle and Pedestrian Zone (BPZ) in the core campus area, employing parking management strategies, identifying facility improvements for alternative modes of transportation, and curbing scooter use are some recommendation to improve safety and efficiency. The BPZ is recommended to restrict all vehicular access to Union Road and Newell Drive north of Inner Road, with limited access along Buckman Drive. Existing vehicular traffic, transit routes, and service vehicles that rely on Newell Drive to serve the campus core would be redirected around the new BPZ. In order to strengthen to community partnerships, the Plan is looking to collaborate more with Gainesville RTS to improve transit efficiency. In addition, multiple campus routes, and some off-campus connector routes are listed in the Plan's recommendations to enhance connectivity.

Map 2-23: Proposed Bicycle and Pedestrian Zone



2.8.14 Plans and Studies Summary

Based on the review of the above plans and studies, the overriding emphasis common to all of these include: improved investment in transit and alternative mobility services and infrastructure; providing real choice in travel alternatives to the automobile; improving safety for pedestrians and bicyclists, augmenting access to mobility to better connect persons to access to opportunities; and developing land use and design guidelines to transition to more walkable communities.

3.0 Inventory of Existing Services and Resources

This section provides an overview of the existing transportation services and facilities within the RTS Service Area. Transportation services in the City are composed of RTS, the City's fixed-route bus system; paratransit services, which include door-to-door transportation disadvantaged services and complementary Americans with Disabilities Act (ADA) transportation services; and a variety of private transportation service providers. Under new leadership and departmental philosophy and direction, the City of Gainesville created the Department of Mobility which brings together the RTS bus network, traffic management, transportation planning, bike/pedestrian initiatives, and the Vision Zero program to re-imagine and deploy the future of mobility.

This evaluation identifies areas of good performance and areas that present an opportunity for improvement. The following components are included in this section:

- Governance and Funding
- Existing Transit Services Inventory
 - o Fixed-Route
 - o Paratransit
 - o Vehicle Fleet
 - o Private Transportation Providers

3.1 Governance and Funding

The RTS bus network operates as part of the Department of Mobility and consists of fixed-route bus lines connecting the City of Gainesville, the University of Florida (UF) Campus, and unincorporated parts of Alachua County, and is the only fixed-route public transit service provider in Alachua County. The system is governed by the Gainesville City Commission, who also oversees all other City departments. RTS shares resources with other City of Gainesville departments. This allows RTS to maintain lower administrative staffing and overhead costs, which can be seen in performance measures such as the ratio of employees to revenue miles. As the agency grows, this governance structure may prove challenging, especially if it were to expand to service other municipalities in Alachua County.

While RTS is governed and managed through the City, the agency received funding from a variety of sources including UF, Santa Fe College (SFC), Alachua County, FDOT, and the Federal Transit Administration (FTA). Of these revenue sources, UF provides the largest source of funding. This diverse funding base results in a high farebox ratio; approximately half of RTS' operating costs are recovered through fares and fees. RTS has a highest farebox ratio in the state as a result and serves as a model for other transit agencies.

According to the 2017 National Transit Database, the RTS service area totals 76 square miles and a service area population of 163,990. In addition to the fixed-route services offered by RTS, the City provides contracted complementary paratransit services for the area within Gainesville or within $\frac{3}{4}$ -mile of an RTS fixed-route bus line, as required by Federal Law. In FY2017, RTS had 302 full-time

employees, including 210 bus operators, 45 administrative employees, and 42 maintenance employees. RTS maintains a fleet of 131 buses, operating 111 buses in maximum service on 42 weekday fixed routes. Late-night and weekend bus service are offered, although at lower service levels than peak weekday service. RTS maintains one transit center, the Rosa Parks Transit Center in Downtown Gainesville. Several other facilities function as transfer centers but lack the basic transit transfer center infrastructure. The largest of these facilities is located on the UF Campus, with additional transfer centers at the Oaks Mall, Butler Plaza, and SFC. RTS recently finished constructing a modern operational and maintenance facility south of Downtown Gainesville.

3.2 Existing Services Inventory

This section reviews the services that RTS provides in Gainesville and to the unincorporated parts of Alachua County. RTS directly operates fixed-route service and purchases paratransit services from the Community Transportation Coordinator (CTC). The paratransit services include door-to-door transportation disadvantaged services and ADA transportation services.

3.2.1 Fixed-Route Services

The RTS bus system, as of Spring 2019, is shown in **Error! Reference source not found..** The majority of RTS service converges in Downtown Gainesville and UF and serve as the anchor for most of the services – most routes connect in one of these two places. Regular one-way fares are \$1.50, with half-fares available to groups such as veterans, youths, and persons with disabilities. Children 40 inches tall or shorter, or roughly the height of the farebox, ride RTS for free when accompanied by an adult. Students attending UF and SF pay for unlimited rides with their student ID as part of student fees incorporated into their tuition. Services operate 7 days per week, with weekday spans of approximately 20 hours or less and headways ranging from 9 minutes to 105 minutes.

RTS operates City and Campus bus service. For campus routes, the service characteristics (route pattern, frequency, span) may vary over the course of the service day and seasonally during breaks in the University of Florida class schedules. The RTS routes are classified as described in Tables 3-1 through 3-9.

Map 3-1: RTS System Map

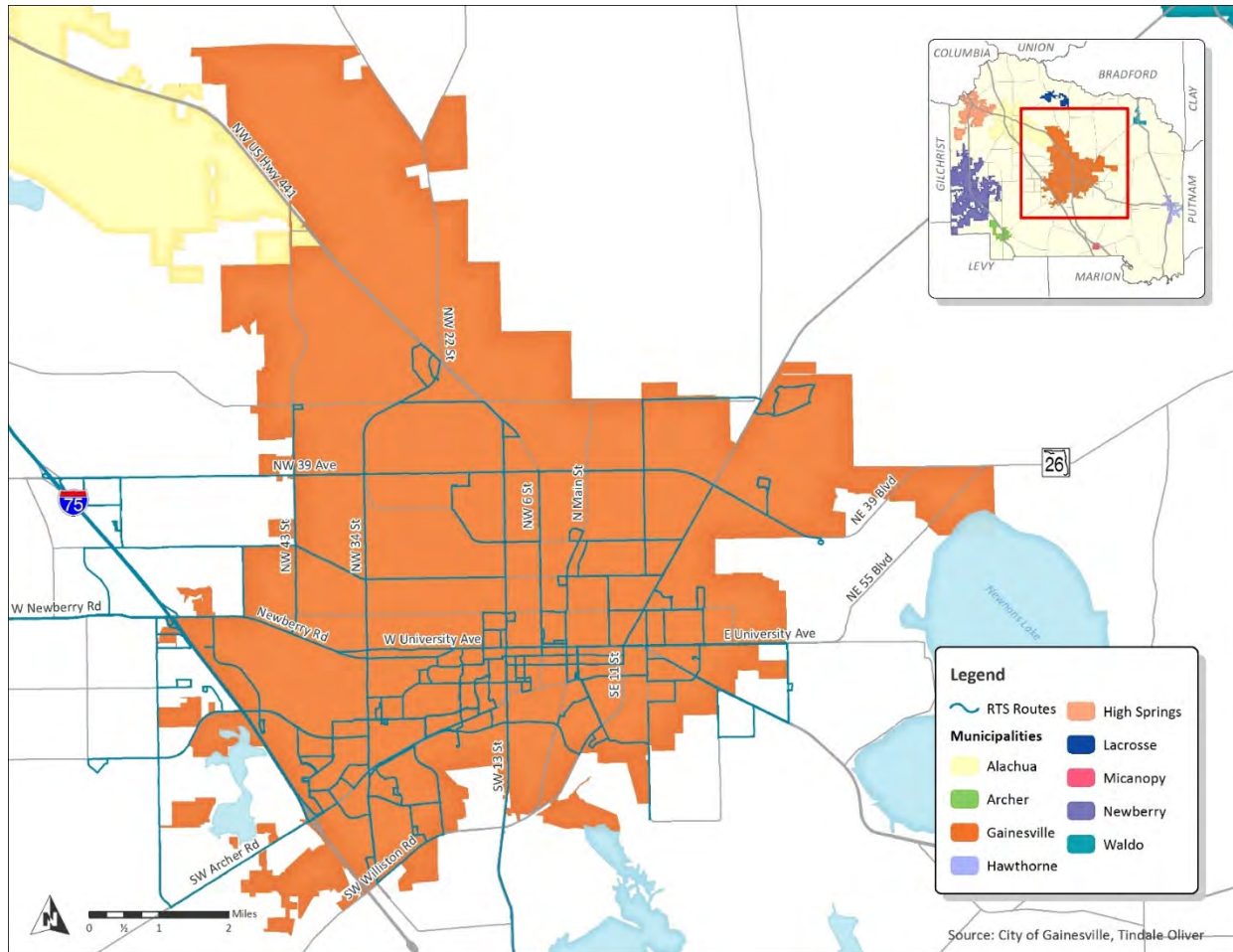


Table 3-1: Fixed Route Service Length and Stops

Route	Description	Total Length (mi)	Total Stops	Stops per Mile
1	Downtown Station to Butler Plaza	11.7	60	5.13
2	Downtown Station to Walmart Supercenter (NE 12 AVE)	13.1	54	4.12
3	Downtown Station to N Main Post Office	14.6	64	4.38
5	Downtown Station to Oaks Mall	12.8	65	5.08
6	Downtown Station to N Walmart Supercenter	15.5	67	4.32
7	Downtown Station to Eastwood Meadows	24.5	130	5.31
8	UF Health to N Walmart Supercenter	17.9	92	5.14
9	Reitz Union To Hunters Run	7.7	45	5.84
10	Downtown Station to Santa Fe College	17.1	77	4.50
11	Downtown Station to Eastwood Meadows	25.4	124	4.88
12	Reitz Union to Butler Plaza Transfer Station	9.3	47	5.05
13	Beaty Towers to Cottage Grove Apts.	12.4	76	6.13
15	Downtown Station to NW 13 Street/NW 23 Avenue	14.3	74	5.17
16	Beaty Towers to Sugar Hill	13.5	68	5.04
17	Beaty Towers to Downtown Station	5.7	26	4.56
19	Reitz Union to SW 23 Terrace/SW 35 Place	5.8	25	4.31
20	Reitz Union to Oaks Mall	16.7	76	4.55
21	Reitz Union to Cabana Beach	10.2	41	4.02
23	Oaks Mall to Santa Fe College	8.3	31	3.73
24	Downtown Station to Job Corps	19.5	67	3.44
25	UF Commuter Lot to Airport	40.9	157	3.84
26	Downtown Station to GNV Airport	23.4	81	3.46
27	Downtown Station to Walmart Supercenter(NE 12 AVE)	12.5	54	4.32
28	The Hub to Butler Plaza TS	9.8	48	4.90
29	Kiwanis Park to Beaty Towers	7.3	44	6.03
33	Butler Plaza to Midtown	9.8	46	4.69
34	The Hub to Lexington Crossing	10.4	48	4.62
35	Reitz Union to SW 35 Place	10.1	49	4.85
36	The Hub to Williston Plaza	11.1	59	5.32
37	Reitz Union to Butler Plaza	11.2	53	4.73
38	The Hub to Gainesville Place	7.4	35	4.73
39	Santa Fe College to GNV Airport	22.0	79	3.59
40	The Hub to Hunters Crossing	13.6	55	4.04
43	UF Health to Santa Fe College	20.6	95	4.61
46	Reitz Union to Downtown Station	4.4	25	5.68
75	Oaks Mall to Butler Plaza	28.8	122	4.24
76	Santa Fe College to Haile Market Square	16.4	55	3.35
77	Santa Fe to Cabana Beach	15.1	38	2.52
117	Park-N-Ride 2 (34th Street) to Reitz Union	5.0	28	5.60

118	Park-N-Ride 1 (Cultural Plaza) to The Hub	4.8	25	5.21
119	Family Housing to The Hub	4.8	29	6.04
120	West Circulator (Frat Row to The Hub)	2.4	15	6.25
121	The Hub to Commuter Lot	2.9	18	6.21
122	UF North/South Circulator	10.8	54	5.00
125	Lakeside	4.6	27	5.87
126	UF East/West Circulator (Lakeside to Sorority Row)	6.3	38	6.03
127	East Circulator (Turlington Hall to Sorority Row)	2.2	18	8.18
128	Lake Wauburg Shuttle	21.9	51	2.33
300	Later Gator A (Downtown Station to Sorority and Fraternity Rows)	9.4	50	5.32
301	Later Gator B (Downtown Station to Lexington)	14.1	80	5.67
302	Later Gator C (Downtown Station to Oaks Mall)	15.8	79	5.00
303	Later Gator D (Downtown Station to SW 13 Street)	11.8	64	5.42
305	Later Gator F (Downtown Station to Butler Plaza)	11.2	59	5.27
600	Microtransit	16.1	4	0.25
711	Downtown Station to Eastwood Meadows	14.3	72	5.03
901	Express Lake City	81.5	6	0.07
902	Express Trenton	56.7	6	0.11
800X	Santa Fe to Butler Plaza Transfer Station	18.0	4	0.22

3.2.1.1 Fixed-Route Service Schedule and Ridership

RTS provides fixed-route service seven days per week, with reduced levels of weekend service and evening service throughout the system. RTS adjusts its service schedule and routing three times a year to reflect population fluctuations associated with UF semester changes -for Spring, Summer, and Fall semesters.

Table 3-2: Summary of Weekday Service Operating Characteristics (City – Spring 2019)

Rte	Description	First Trip	Last Trip	AM Peak	Mid-day	PM Peak	Evening	Late Night
1	Downtown Station to Butler Plaza Transfer Station	5:43 AM	10:30 PM	15	16	15	30	60
2A	Downtown Station to NE Walmart Supercenter	6:05 AM	7:33 PM	60	60	60	60	0
2B	Downtown Station to NE Walmart Supercenter	6:05 AM	7:33 PM	60	60	60	60	0
3	Downtown Station to N Main Post Office	9:30 AM	5:00 PM	60	60	60	60	0
5	Downtown Station to Oaks Mall	6:00 AM	2:00 AM	20	24	24	30	30

Table 3-3: Summary of Weekday Service Operating Characteristics (City – Spring 2019)

Rte	Description	First Trip	Last Trip	AM Peak	Mid-day	PM Peak	Evening	Late Night
6	Downtown Station to N Walmart Supercenter	6:00 AM	7:26 PM	60	60	60	60	0
7	Downtown Station to Eastwood Meadows	6:00 AM	7:30 PM	60	60	60	60	0
8	UF Health to N Walmart Supercenter	5:47 AM	10:38 PM	30	30	31	38	0
9	Reitz Union to Hunters Run	6:25 AM	1:40 AM	11	11	12	20	40
10	Downtown Station to Santa Fe	7:00 AM	7:02 PM	35	35	35	60	0
11A	Downtown Station to Eastwood Meadows	5:30 AM	7:30 PM	60	30	30	60	0
11B	Downtown Station to Eastwood Meadows	9:30 AM	5:00 PM	60	60	60	60	0
12	Reitz Union to Butler Plaza Transfer Station	6:20 AM	2:45 AM	13	13	15	25	25
13	Beaty Towers to Cottage Grove Apartment	6:30 AM	12:14 AM	10	10	10	15	30
15	Rosa Parks Transfer Station to SW 13th St	5:27 AM	10:27 PM	30	35	35	60	60
16	Beaty Towers to Sugar Hill	6:36 AM	12:16 AM	34	34	34	34	30
17	Beaty Towers to Rosa Parks Transfer Station	6:29 AM	7:31 PM	34	34	34	34	0
19	Reitz Union to SW 23rd Terrace	8:10 AM	10:18 AM	32	0	0	0	0
20	Reitz Union to Oaks Mall	6:00 AM	1:30 AM	12	12	12	15	30
21	Reitz Union to Cabana Beach	6:57 AM	7:44 PM	13	13	13	26	0
23	Oaks Mall to Santa Fe	7:27 AM	10:03 PM	28	22	22	30	0
24	Downtown Station to Job Corps	6:35 AM	5:00 PM	120	120	120	0	0
25	UF Commuter Lot to Airport	7:20 AM	5:38 PM	65	65	65	0	0
26	Downtown Station to Airport	6:00 AM	8:30 PM	60	60	60	60	0
27	Downtown Station to NE Walmart Supercenter	7:30 AM	18:00	120	120	120	120	0
28	The Hub to Butler Plaza Transfer Station	7:36 AM	5:36 PM	13	13	18	0	0
29	Beaty Towers to Kiwanis Park	7:21 AM	5:45 PM	40	40	40	0	0

33	Butler Plaza Transfer Station to Midtown	6:50 AM	1:50 AM	15	15	15	30	30
34	The Hub at Lexington Crossing	6:45 AM	12:40 AM	20	20	20	25	50

Table 3-4: Summary of Weekday Service Operating Characteristics (City – Spring 2019)

Rte	Description	First Trip	Last Trip	AM Peak	Mid-day	PM Peak	Evening	Late Night
35	Reitz Union to SW 35th Place	6:35 AM	1:47 AM	10	10	12	25	34
36	The Hub to Williston Plaza	6:50 AM	5:52 PM	30	30	60	0	0
37	Reitz Union to Butler Plaza Transfer Station	7:05 AM	6:24 PM	13	26	30	0	0
38	The Hub to Gainesville Place	6:45 AM	10:00 PM	10	10	10	42	0
39	Santa Fe to Airport	8:00 AM	5:00 PM	60	60	60	0	0
40	The Hub to Hunters Crossing	6:54 AM	6:16 PM	30	30	66	0	0
43	UF Health to Santa Fe	6:03 AM	7:09 PM	30	30	30	0	0
46	Reitz Union to Rosa Parks Transfer Station	7:10 AM	5:37 PM	15	15	30	0	0
75	Oaks Mall to Butler Plaza Transfer Station	5:45 AM	7:25 AM	40	60	60	0	0
76	Santa Fe to Haile Market Square	7:25 AM	5:00 PM	60	60	60	0	0
77	Santa Fe to Cabana Beach	7:25 AM	3:13 PM	55	55	0	0	0
711	Downtown Station to Eastwood Meadows	8:00 PM	10:30 PM	0	0	0	60	0
800X	Butler Plaza Transfer Station to Santa Fe	7:30 AM	5:00 PM	60	60	60	0	0
901X	Express Service from Lake City thru Alachua to Butler Plaza Transfer Station	6:00 AM	6:15 PM	45	0	45	0	0
902X	Express Service from Trenton thru Newberry to Butler Plaza Transfer Station	6:15 AM	6:25 PM	45	0	45	0	0

Table 3-5: Summary of Weekday Operating Characteristics (Campus/Later Gator – Spring 2019)

Rte	Description	First Trip	Last Trip	AM Peak	Mid-day	PM Peak	Evening	Late Night
117	Reitz Union to Park and Ride #2 SW 34 Street	7:05 AM	7:04 PM	32	32	32	0	0
118	The Hub to Cultural Plaza	5:00 AM	7:03 PM	13	7	7	0	0
119	The Hub to Family Housing	7:00 AM	5:11 PM	30	30	30	0	0
120	The Hub to Fraternity Row	7:00 AM	7:00 PM	9	9	9	0	0
121	The Hub to Commuter Lot	7:00 AM	6:14 PM	10	10	10	0	0
122	UF North/South Circulator	7:34 AM	5:00 PM	30	30	30	0	0
125	The Hub to Lakeside	7:15 AM	5:30 PM	15	15	15	0	0
126	Sorority to Lakeside	6:55 PM	2:55 AM	0	0	0	10	20
127	East Circulator	7:00 AM	7:19 PM	20	20	20	0	0
A	Sorority Row to Rosa Parks Transfer Station	8:30 PM	3:11 AM	0	0	0	11	11
B	SW Gainesville to Rosa Parks Transfer Station	8:50 PM	2:53 AM	0	0	0	20	20
C	Oaks Mall to Rosa Parks Transfer Station	8:30 PM	2:55 AM	0	0	0	25	25

Table 3-6: Summary of Saturday Operating Characteristics (City – Spring 2019)

Route	Description	First Trip	Last Trip	AM Peak	Mid-day	PM Peak	Evening	Late Night
1	Downtown Station to Butler Plaza Transfer Station	6:00 AM	6:33 PM	30	22	22	0	0
2	Downtown Station to NE Walmart Supercenter	7:00 AM	5:28 PM	60	60	60	0	0
5	Downtown Station to Oaks Mall	7:00 AM	2:00 AM	30	30	30	30	30
6	Downtown Station to N Walmart Supercenter	8:00 AM	4:28 PM	120	120	120	0	0
8	UF Health to N Walmart Supercenter	7:20 AM	6:40 PM	80	80	80	0	0
10	Downtown Station to Santa Fe	7:00 AM	5:33 PM	120	120	120	0	0
12	Reitz Union to Butler Plaza Transfer Station	7:20 AM	9:03 PM	48	24	25	48	0
13	Beaty Towers to Cottage Grove Apartment	7:45 AM	6:15 PM	60	60	60	0	0
15	Rosa Parks Transfer Station to SW 13th St	7:00 AM	5:25 PM	60	60	60	0	0
16	Beaty Towers to Sugar Hill	7:15 AM	6:15 PM	60	60	60	0	0
20	Reitz Union to Oaks Mall	7:00 AM	8:50 PM	60	20	20	20	0
25	UF Commuter Lot to Airport	7:27 AM	4:35 PM	65	65	65	0	0
33	Butler Plaza Transfer Station to Midtown	7:50 AM	8:20 PM	60	30	30	60	0
35	Reitz Union to SW 35th Place	7:31 AM	7:15 PM	44	44	44	44	0
37	Reitz Union to Butler Plaza Transfer Station	8:36 AM	8:39 PM	44	44	44	44	0
75	Oaks Mall to Butler Plaza Transfer Station	5:30 AM	6:33 PM	120	120	120	0	0
711	Downtown Station to Eastwood Meadows	7:00 AM	7:00 PM	60	60	60	0	0

Table 3-7: Summary of Saturday Operating Characteristics (Campus & Later Gator – Spring 2019)

Rte	Description	First Trip	Last Trip	AM Peak	Mid-day	PM Peak	Evening	Late Night
126	Sorority to Lakeside	10:55 AM	12:15 AM	0	40	40	20	20
128	Reitz Union to Lake Wauburg	9:30 AM	5:00 PM	60	60	60	0	0
A	Sorority Row to Rosa Parks Transfer Station	8:30 PM	3:11 AM	0	0	0	11	11
B	SW Gainesville to Rosa Parks Transfer Station	8:50 PM	2:53 AM	0	0	0	20	20
C	Oaks Mall to Rosa Parks Transfer Station	8:30 PM	2:55 AM	0	0	0	25	25
D	Cottage Grove Apartments to Rosa Parks Transfer Station	0	0	0	0	0	30	30
F	Butler Plaza to Rosa Parks Transfer Station	0	0	0	0	0	30	30

Table 3-8: Summary of Sunday Operating Characteristics (City – Spring 2019)

Rte	Description	First Trip	Last Trip	AM Peak	Mid-day	PM Peak	Evening	Late Night
1	Downtown Station to Butler Plaza Transfer Station	10:00 AM	5:30 PM	30	30	30	0	0
5	Downtown Station to Oaks Mall	10:00 AM	5:30 PM	60	60	60	0	0
8	UF Health to N Walmart Supercenter	10:00 AM	5:20 PM	80	80	80	0	0
12	Reitz Union to Butler Plaza Transfer Station	9:51 AM	5:58 PM	46	46	46	0	0
13	Beaty Towers to Cottage Grove Apartment	10:45 AM	5:45 PM	60	60	60	0	0
15	Rosa Parks Transfer Station to SW 13th St	10:00 AM	5:25 PM	60	60	60	0	0
16	Beaty Towers to Sugar Hill	10:15 AM	5:36 PM	60	60	60	0	0
20	Reitz Union to Oaks Mall	10:00 AM	5:30 PM	30	30	30	0	0
25	UF Commuter Lot to Airport	9:47 AM	4:35 PM	65	65	65	0	0
33	Butler Plaza Transfer Station to Midtown	10:20 AM	5:20 PM	60	60	60	0	0
35	Reitz Union to SW 35th Place	10:06 AM	5:47 PM	44	44	44	0	0
37	Reitz Union to Butler Plaza Transfer Station	10:24 AM	5:35 PM	44	44	44	0	0
75	Oaks Mall to Butler Plaza Transfer Station	9:30 AM	4:30 PM	120	120	120	0	0
711	Downtown Station to Eastwood Meadows	10:00 AM	5:30 PM	60	60	60	0	0

Table 3-9: Summary of Sunday Operating Characteristics (Campus & Later Gator)– Spring 2019)

Rte	Description	First Trip	Last Trip	AM Peak	Mid-day	PM Peak	Evening	Late Night
126	Sorority to Lakeside	10:55 AM	12:15 AM	0	40	40	20	20

Table 3-10 provides the RTS vehicle fleet inventory for buses used in existing services.

Table 3-10: Inventory of Existing RTS Fixed-Route Vehicles

Number of Vehicles	Year	Manufacturer	Model	Length (Ft)	Vehicle Locator	Passenger Counter	Signal Priority	Talking Bus
1	2000	Gillig	G21D102N4	40	Yes	No	No	No
1	2000	Gillig	STD Low Floor	35	Yes	No	No	No
11	2001	Gillig	Phantom	35	Yes	No	No	No
8	2001	Gillig	Phantom	40	Yes	No	No	Yes
1	2002	Gillig	Phantom	40	Yes	No	No	No
5	2002	Gillig	Phantom	40	Yes	No	No	No
3	2004	Gillig	Phantom	40	Yes	No	No	Yes
7	2005	Gillig	Phantom	40	Yes	No	No	Yes
4	2006	Gillig	Phantom	40	Yes	Yes	No	Yes
10	2006	Gillig	Low Floor BRT	40	Yes	No	No	No
5	2007	Gillig	Phantom	40	Yes	Yes	No	Yes
12	2007	Gillig	G27D102N4	40	Yes	Yes	No	Yes
1	2007	Gillig	G29D102N4	40	Yes	Yes	No	No
4	2009	Gillig	G27D102N4	40	Yes	Yes	No	Yes
17	2010	Gillig	G27D102N4	40	Yes	Yes	No	Yes
6	2011	Gillig	G27D102N4	40	Yes	Yes	No	Yes
2	2012	Gillig	G30D102N4	40	Yes	Yes	No	Yes
6	2012	Gillig	G27D102N4	40	Yes	Yes	No	Yes
3	2013	Gillig	Low Floor BRT	40	Yes	Yes	No	Yes
2	2015	Gillig	G27D102N4	40	Yes	Yes	No	Yes
7	2016	Gillig	Low Floor	40	Yes	Yes	No	Yes
4	2017	Ford	Glaval	40	No	Yes	No	No
10	2018	Gillig	Low Floor	40	Yes	Yes	No	Yes

3.2.1.2 Revenue Hours Percentage Allocation

RTS receives a portion of its operating funds through several public partnerships. Entities with an agreement with RTS contribute funding as a function of the number of revenue hours provided to that entity, which is based on either jurisdictional revenue mileage, base service levels prior to the 1998 UF agreement, or a combination of the two. Tables 3-11 through 3-14 show the portion of route mileage and stops that are within each entity, which is used as a basis for calculating the amount of funding each entity contributes.

Table 3-11: Fixed Route Length and Stop Characteristics

Route	Description	County	City	UF	SF	County	City	UF	SF
		Mileage Portion				Stops Portion			
1	Downtown Station to Butler Plaza	0%	79%	21%	0%	0%	73%	27%	0%
2	Downtown Station to Walmart Supercenter (NE 12 AVE)	14%	86%	0%	0%	9%	91%	0%	0%
3	Downtown Station to N Main Post Office	0%	100%	0%	0%	0%	100%	0%	0%
5	Downtown Station to Oaks Mall	0%	81%	19%	0%	0%	85%	15%	0%
6	Downtown Station to N Walmart Supercenter	0%	100%	0%	0%	0%	100%	0%	0%
7	Downtown Station to Eastwood Meadows	40%	60%	0%	0%	42%	58%	0%	0%
8	UF Health to N Walmart Supercenter	0%	89%	11%	0%	0%	84%	16%	0%
9	Reitz Union to Hunters Run	0%	38%	62%	0%	0%	47%	53%	0%
10	Downtown Station to Santa Fe College	23%	73%	1%	2%	17%	79%	1%	3%
11	Downtown Station to Eastwood Meadows	12%	88%	0%	0%	13%	87%	0%	0%
12	Reitz Union to Butler Plaza Transfer Station	0%	74%	26%	0%	0%	72%	28%	0%
13	Beaty Towers to Cottage Grove Apts.	30%	47%	23%	0%	32%	50%	18%	0%
15	Downtown Station to NW 13 Street/NW 23 Avenue	0%	100%	0%	0%	0%	100%	0%	0%
16	Beaty Towers to Sugar Hill	0%	83%	17%	0%	0%	82%	18%	0%
17	Beaty Towers to Downtown Station	0%	80%	20%	0%	0%	77%	23%	0%
19	Reitz Union to SW 23 Terrace/SW 35 Place	0%	41%	59%	0%	0%	32%	68%	0%

Table 3-12: Fixed Route Length and Stop Characteristics

Route	Description	County	City	UF	SF	County	City	UF	SF
		Mileage Portion				Stops Portion			
20	Reitz Union to Oaks Mall	0%	57%	43%	0%	0%	55%	45%	0%
21	Reitz Union to Cabana Beach	0%	52%	48%	0%	0%	41%	59%	0%
23	Oaks Mall to Santa Fe College	65%	30%	0%	5%	58%	35%	0%	6%
24	Downtown Station to Job Corps	5%	95%	0%	0%	3%	97%	0%	0%
25	UF Commuter Lot to Airport	0%	79%	21%	0%	0%	73%	27%	0%
26	Downtown Station to GNV Airport	1%	99%	0%	0%	1%	99%	0%	0%
27	Downtown Station to Walmart Supercenter(NE 12 AVE)	0%	100%	0%	0%	0%	100%	0%	0%
28	The Hub to Butler Plaza TS	0%	45%	55%	0%	0%	40%	60%	0%
29	Kiwanis Park to Beaty Towers	0%	84%	16%	0%	0%	82%	18%	0%
33	Butler Plaza to Midtown	0%	43%	57%	0%	0%	39%	61%	0%
34	The Hub to Lexington Crossing	0%	61%	39%	0%	0%	60%	40%	0%
35	Reitz Union to SW 35 Place	0%	66%	34%	0%	0%	67%	33%	0%
36	The Hub to Williston Plaza	0%	51%	49%	0%	0%	51%	49%	0%
37	Reitz Union to Butler Plaza	0%	70%	30%	0%	0%	68%	32%	0%
38	The Hub to Gainesville Place	0%	65%	35%	0%	0%	57%	43%	0%
39	Santa Fe College to GNV Airport	29%	69%	0%	2%	30%	67%	0%	3%
40	The Hub to Hunters Crossing	0%	82%	18%	0%	0%	75%	25%	0%
43	UF Health to Santa Fe College	31%	46%	21%	2%	25%	51%	22%	2%
46	Reitz Union to Downtown Station	0%	62%	38%	0%	0%	64%	36%	0%
75	Oaks Mall to Butler Plaza	70%	30%	0%	0%	74%	26%	0%	0%
76	Santa Fe College to Haile Market Square	44%	54%	0%	2%	47%	49%	0%	4%

Table 3-13: Fixed Route Length and Stop Characteristics

Route	Description	County	City	UF	SF	County	City	UF	SF
		Mileage Portion				Stops Portion			
77	Santa Fe to Cabana Beach	51%	39%	0%	10%	18%	68%	0%	13%
117	Park-N-Ride 2 (34th Street) to Reitz Union	0%	9%	91%	0%	0%	14%	86%	0%
118	Park-N-Ride 1 (Cultural Plaza) to The Hub	0%	0%	100%	0%	0%	0%	100%	0%
119	Family Housing to The Hub	0%	0%	100%	0%	0%	0%	100%	0%
120	West Circulator (Frat Row to The Hub)	0%	0%	100%	0%	0%	0%	100%	0%
121	The Hub to Commuter Lot	0%	0%	100%	0%	0%	0%	100%	0%
122	UF North/South Circulator	0%	35%	65%	0%	0%	35%	65%	0%
125	Lakeside	0%	0%	100%	0%	0%	0%	100%	0%
126	UF East/West Circulator (Lakeside to Sorority Row)	0%	17%	83%	0%	0%	24%	76%	0%
127	East Circulator (Turlington Hall to Sorority Row)	0%	47%	53%	0%	0%	56%	44%	0%
128	Lake Wauburg Shuttle	71%	15%	15%	0%	29%	33%	37%	0%
300	Later Gator A (Downtown Station to Sorority and Fraternity Rows)	0%	37%	63%	0%	0%	46%	54%	0%
301	Later Gator B (Downtown Station to Lexington)	0%	61%	39%	0%	0%	64%	36%	0%
302	Later Gator C (Downtown Station to Oaks Mall)	0%	59%	41%	0%	0%	59%	41%	0%
303	Later Gator D (Downtown Station to SW 13 Street)	16%	52%	33%	0%	19%	56%	25%	0%
305	Later Gator F (Downtown Station to Butler Plaza)	0%	78%	22%	0%	0%	73%	27%	0%
600	Microtransit	24%	76%	0%	0%	50%	50%	0%	0%
711	Downtown Station to Eastwood Meadows	22%	78%	0%	0%	25%	75%	0%	0%
901	Express Lake City***	52%	11%	0%	0%	33%	33%	0%	0%

Table 3-14: Fixed Route Length and Stop Characteristics

Route	Description	County	City	UF	SF	County	City	UF	SF
		Mileage Portion				Stops Portion			
902	Express Trenton***	52%	16%	0%	0%	33%	33%	0%	0%
800X	Santa Fe to Butler Plaza Transfer Station	49%	49%	0%	2%	0%	50%	0%	50%

***Allocation does not add up to 100%, portion of routes are outside of Alachua County

3.2.2 Paratransit Services

ADA Complementary Paratransit Service provides door-to-door service to paratransit certified people on an appointment basis. Service requests must be placed 24 hours before the trip is required and typically match RTS' hours of operation. Reservations are taken by MV Transportation, the designated Community Transportation Coordinator (CTC). As the CTC, MV Transportation is responsible for providing or arranging all ADA services in Alachua county. MV Transportation, a private for profit entity, was selected as the County CTC in July, 2013 through a competitive selection process. The agency centrally coordinates rides and provide direct transportation services to the transportation disadvantaged. MV Transportation does not contract out any of their transportation services, and no other transportation disadvantaged providers are recognized in the Transportation Disadvantaged Service Plan (TDSP)

The Alachua County Transportation Disadvantaged Service Board, responsible for providing direction and guidance to the CTC regarding the coordination of transportation services, includes representatives from public, private, and non-profit transportation and human services providers as well as the general public. The most recent TDSP, approved in May 2017, was developed through input of the TD Service Board.

Table 3-15: Inventory of RTS Paratransit Vehicle Fleet

Vehicle Year	Make	Model	Total Count
2014	Chevy	Express Crusader	2
2015	Chevy	3500 Champion	1
2015	Chevrolet	Crusader	4
2016	Ford/Glaval	E450 Econoline Cutaway	4
2016	Ford/Glaval	E450 Econoline Cutaway	8
2017	Ford	E450 Econoline Cutaway	1

3.2.3 Public and Private Transportation Providers

There are a variety of public and private agencies, companies, and organizations who provide transportation services throughout the County. These primarily include charter services as well as long distance bus companies such as Red Coach and Greyhound. Since the development of the last TDP, Transportation Network Companies (TNCs) such as Uber and Lyft have become a significant provider of transportation services in major urban areas across the globe. In a similar vein, bicycle and scooter share companies have become a popular provider of transportation options. Uber and Lyft both operate in Alachua County, while Zagster is the sole bicycle share company in the City.

Table 3-16: Inventory of Private Transportation Providers that Serve Gainesville

Private Transportation Provide	Service Area Coverage/Destinations	Days	Address/Website
Uber	Transportation Network Company	Every day	https://www.uber.com/
Lyft	Transportation Network Company	Every day	https://www.lyft.com/
Zagster	Bicycle Share Company	Every day	http://bike.zagster.com/gainesville/
Red Coach USA	Gainesville to Miami (Tampa)	Every day	3975 NW South River Dr., Miami FL 33142, www.redcoachusa.com
Greyhound	To/from Gainesville	Mon–Sun	101 NE 23rd Ave., Gainesville FL 32609, www.greyhound.com
Megabus	Gainesville to Miami (Tampa)	Every day	us.megabus.com
A Candies Coachworks	Charter Service		Gainesville FL, candiescoachworks.com
Annett Bus Lines	Charter Service		Ocala FL, annettbuslines.com
Legendary Coaches	Charter Service		Gainesville FL, legendarycoaches.com
Stagecoach Transportation	Charter Service		Ocala FL, stagecoachtransportation.com
Holiday Coach Lines	Charter Service		Gainesville FL, holidaycoachlines.com
The Ride Solution	Palatka	Mon–Fri	220 North 11th St., Palatka FL 32177, www.theridesolution.com
GMG Transports	Gainesville to SE Fla.	Varies	www.gmgtrans.com
Miami Bus Service	Gainesville to S Fla.	Thurs–Sun	www.miamibusservice.com

4.0 Trend Analysis and Peer System Review

A trend and peer analysis was conducted to assess how efficiently RTS provides fixed-route and paratransit service and how effectively those services meet the needs of its customers. A trend analysis is a tool used to evaluate changes in performance over a given timeframe, and a peer analysis provides a comparison between RTS and transit agencies of similar characteristics during a single year. Taken together, these analyses provide important insights into the financial and operational health of an organization.

This section presents a summary of key findings of trend and peer analyses of RTS' fixed-route and demand-response operations. To complete these analyses, various performance measures were derived from the most recently available National Transit Database (NTD) data. The trend analysis was conducted over a five-year period (FYs 2013–2017), and the peer analysis was conducted for FY 2017. FY 2017 NTD data were used for the peer analysis because FY 2018 data were not available for all agencies at the time of this analysis.

For both the peer and trend analyses, three categories of indicators and performance measures were analyzed:

- *General Performance Measures* indicate overall levels of service supplied and consumed, as well as general financial and service area characteristics.
- *Service Effectiveness Measures* indicate how many passengers are served per unit of service provided, how well an agency deploys its resources, and the degree to which service is provided within the service area.
- *Service Efficiency Measures* indicate the extent to which cost efficiency is achieved, or the costs in relation to units of service provided and benefits realized.

The trend and peer system analyses are organized by the type of measure or indicator and include statistics, figures, and tables to illustrate RTS' performance over the past five years (trend), and how RTS compares to the selected peer cohort. The following sections provide a summary of the peer selection process, a definition of the selected performance measures, highlights by performance measure, and finally a summary of key findings. Performance metrics and the data units collected are standard measures within the transit industry. An appendix is provided that includes a set of comparative tables for fixed route peers and metrics and for paratransit peers and metrics. These tables are useful in providing a side-by-side comparison of RTS to its peers.

4.1 Peer System Selection

The peer review provides an opportunity for RTS to compare its system-wide effectiveness and efficiency indicators with other peer transit systems to determine how well RTS is performing compared to similar and “aspirational” transit agencies. Typical TDP peer groups comprise six to eight other agencies. Selected performance indicators, effectiveness measures, and efficiency measures are then used to illustrate the performance of RTS’ fixed-route system relative to the peer group. This TDP retains the same peer group as the prior 2015-2024 TDP. The prior peer selection was conducted using 2012 NTD data available from the Florida Transit Information System (FTIS) database. The FTIS contains a reporting module that identifies peers from data within the NTD based on agency similarity across several variables, including:

- College population
- Service area population
- Service area population density
- Passenger trips
- Operating expense
- Revenue miles
- Average speed
- Vehicles operated in maximum service

Peers were first identified by filtering to those systems in which the college population is greater than 40% of the service area population. The list was further refined based on similarities across the other variables listed above and comparisons in prior TDPs for historic purposes.

Table 4-1 includes the peers that were used in the previous TDP that are recommended to be included as peers for both fixed route and demand response service in this TDP.

Table 4-1: Previous TDP Peers

2015 Peer Agency	Location
Lane Transit District (LTD)	Eugene, OR
Centre Area Transportation Authority (CATA Ride)	State College, PA
City of Tallahassee (StarMetro)	Tallahassee, FL
Athens Transit System (The Bus)	Athens, GA
Capital Area Transportation Authority	Lansing, MI
Ann Arbor Transportation Authority (TheRide)	Ann Arbor, MI
Champaign-Urbana Mass Transit District (MTD)	Urbana, IL

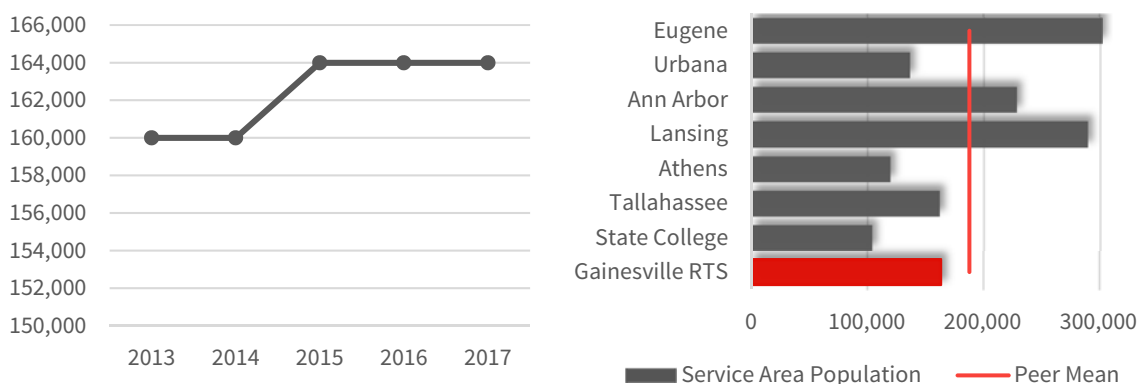
4.2 Fixed Route General Performance Indicators

General performance indicators are used to gauge the overall system operating performance. Appendix D provides an overview of some general agency characteristics for Gainesville RTS and its peer group. Figure 4-1 through Figure 4-11 present the performance indicators of RTS from FY 2013 through FY 2017 (trend analysis) as well as its performance relative to the selected peer systems (peer analysis).

4.2.1 Service Area Population

Service area population and density are a measure of potential demand for service and are determined using a $\frac{3}{4}$ -mile buffer from the service. Most agencies do not update this figure on an annual basis, explaining the lack of changes at some data points in Figure 4-1. Based on the NTD data, RTS' service area population increased from 160,000 in 2013 to 163,990 in 2017, a modest approximate 3% increase. The RTS service area population is 13% below the peer mean.

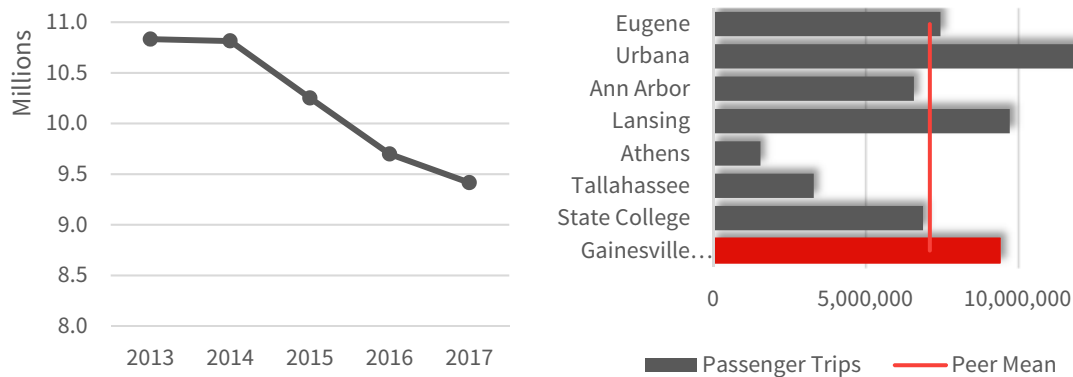
Figure 4-1: RTS Peer and Trend Comparison for Service Area Population



4.2.2 Passenger Trips (Ridership)

Passenger trips, or ridership, are the number of passengers who board public transit vehicles which are counted each time they board the vehicles, no matter how many vehicles they transfer to. It is a measure of the market demand for the service. The total number of passenger trips in Gainesville decreased from approximately 10.8 million in 2013 to 9.4 million in 2017, a 13% decrease. This decrease in passenger trips contrasts with the slight population increase the service area experienced in the same time frame. Ridership decline has been seen consistently in the transit industry since the end of the great recession. Gainesville RTS ridership is 32% above the peer mean of about 7 million trips. Higher ridership performance is positive.

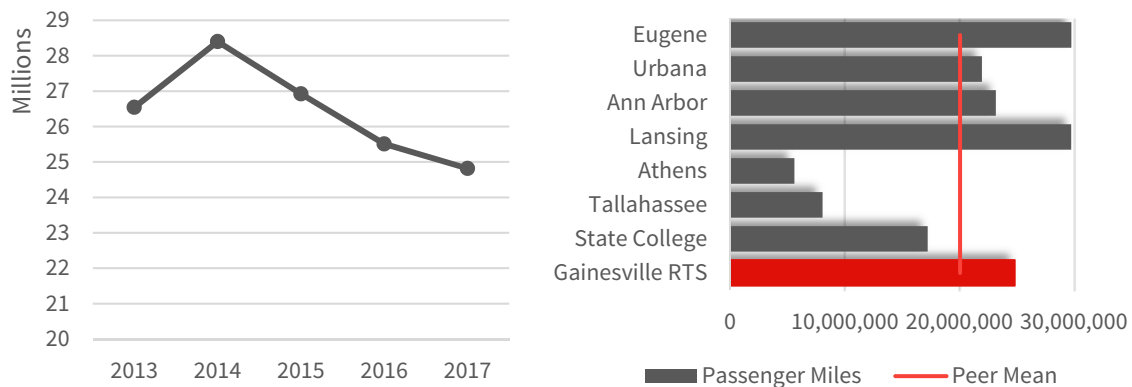
Figure 4-2: RTS Peer and Trend Comparison for Passenger Trips



4.2.3 Passenger Miles

Passenger miles are a measure of passengers served over miles of service operated. Passenger miles are calculated through randomized and statistically valid survey sampling that counts elapsed miles traveled for each passenger boarding and alighting. For RTS, passenger miles have steadily decreased after 2014, from a peak of 28.4 million in 2014 to 24.8 million in 2017. Overall, passenger miles have decreased by 7% from 2013 to 2017. RTS compares favorably to the peer mean. Higher passenger miles is a positive metric.

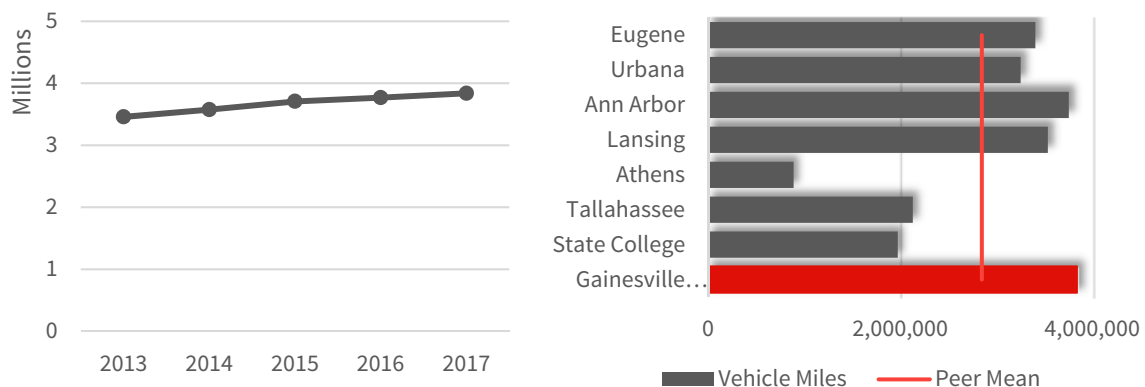
Figure 4-3: RTS Peer and Trend Comparison for Passenger Miles



4.2.4 Vehicle Miles

Vehicle miles are the miles that the transit vehicles travel while in revenue service plus deadhead miles. This is a measure of how much service coverage is provided or the supply of service. RTS' total vehicle miles of service increased 11% overall, from 3.5 million in 2013 to 3.8 million in 2017. RTS' vehicle miles are 35% higher than the peer mean. Vehicle miles are a measure of service provided. Vehicle miles as a metric by itself is not positive or negative but should be viewed in relation to productivity and cost-effectiveness measures.

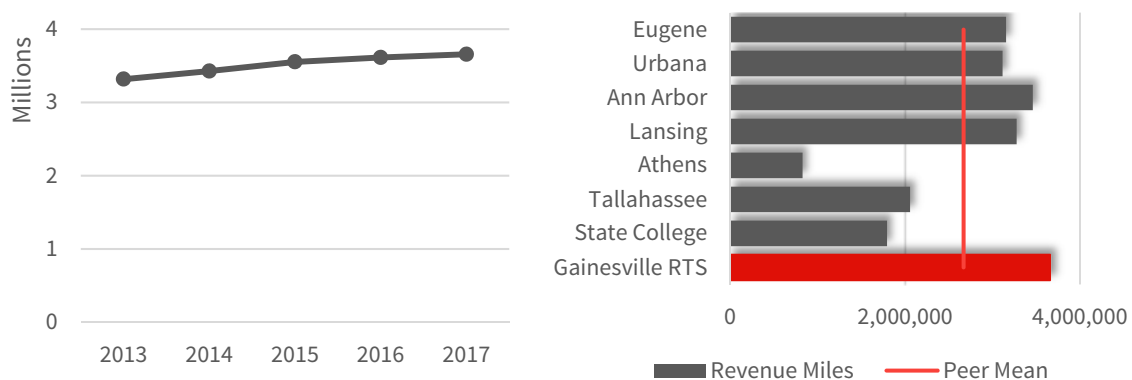
Figure 4-4: RTS Peer and Trend Comparison for Vehicle Miles



4.2.5 Revenue Miles

Revenue miles are the total number of miles that the public transit service is scheduled for or that are actually operated while in revenue service. This excludes miles traveled when passengers are not on board (deadhead travel), training operations, and charter services. Revenue miles increasing faster than total vehicle miles generally indicates a positive operational trend and points to a decreasing proportion of deadhead miles over time relative to total miles. RTS experienced an increase in revenue miles of 10% between 2013 and 2017. RTS' revenue miles is 37% higher than the peer mean. Revenue miles is a measure of service provided and should be slightly lower than vehicles miles to reflect efficiency in service. Revenue miles as a metric by itself is not positive or negative but should be viewed in relation to productivity and cost-effectiveness measures.

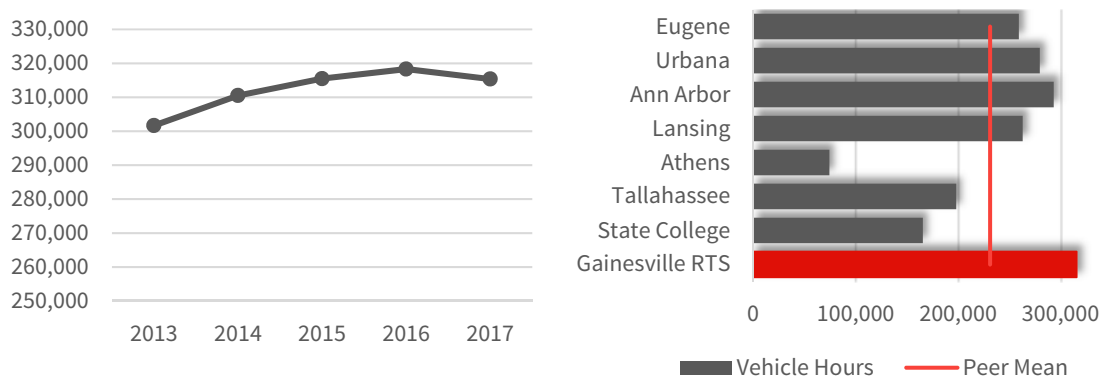
Figure 4-5: RTS Peer and Trend Comparison for Revenue Miles



4.2.6 Vehicle Hours

Vehicle hours are the total hours of travel of a transit vehicle is being operated, including both revenue service and deadhead travel. RTS has had a plateauing increase in vehicle hours, with an overall 5% increase in vehicle hours from 2013 to 2017. RTS' vehicle hours metric is 37% higher than the peer mean. Vehicle hours are a measure of service provided. Vehicle hours as a metric by itself is not positive or negative but should be viewed in relation to productivity and cost-effectiveness measures.

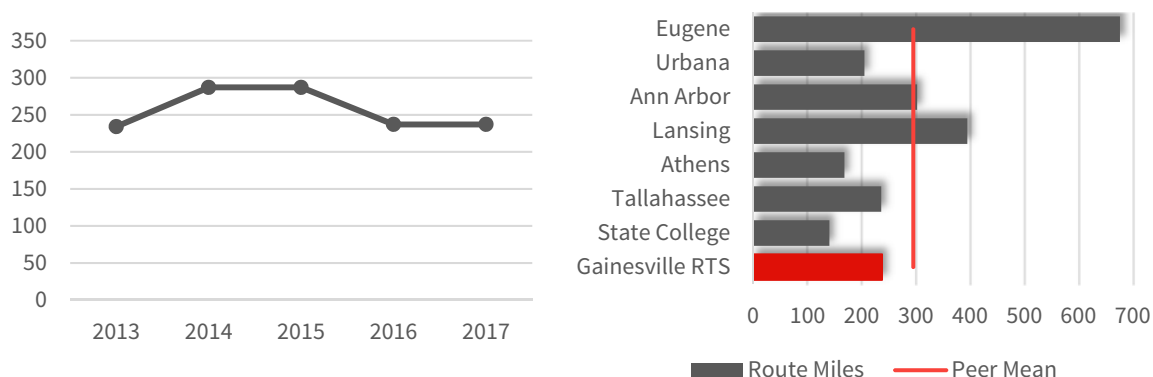
Figure 4-6: RTS Peer and Trend Comparison for Vehicle Hours



4.2.7 Route Miles

Route miles represent the total length of all routes in the network. Route miles for RTS have remained very steady from 2013 to 2017, increasing from 234 to 237 route miles. RTS is 20% below the peer mean of 295 route miles. Route miles are a measure of the linear extent of the transit network.

Figure 4-7: RTS Peer and Trend Comparison for Route Miles

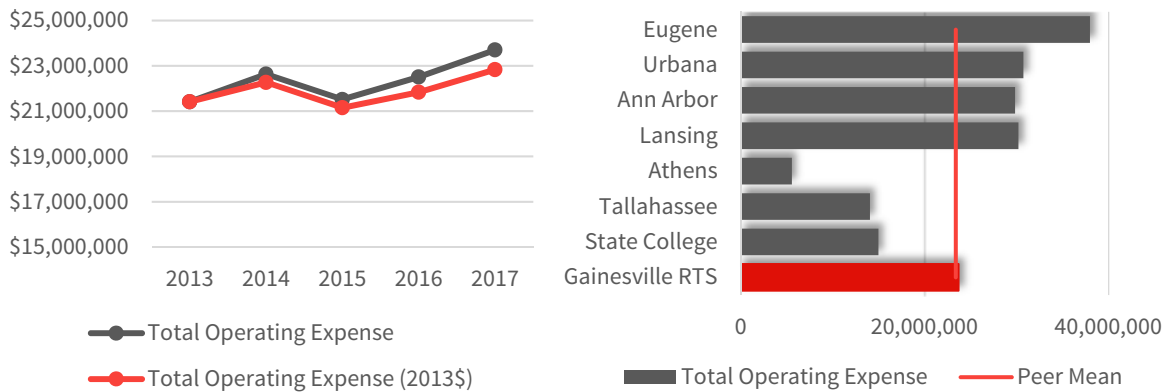


4.2.8 Total Operating Expense

Total operating expense includes all costs associated with operating the transit agency (i.e., vehicle operations, maintenance, and administrative costs). RTS' total operating expense increased by 11% in 2013 to 2017. However, when considering the effects of inflation, the actual total operating expense measured in 2013 dollars increased by 7% in the five-year period. This indicates that overall operating

expenses increased annually. The total operating expense for RTS is approximately 1% above the peer mean.

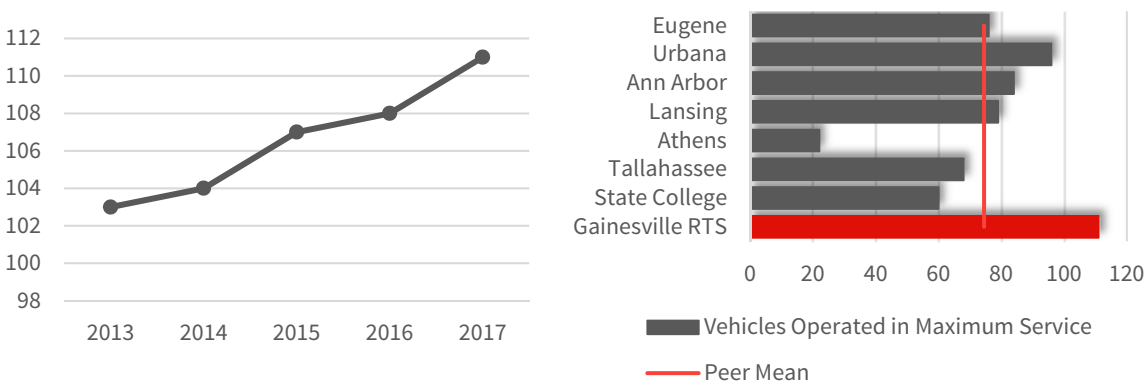
Figure 4-8: RTS Peer and Trend Comparison for Total Operating Expense



4.2.9 Total Employee FTEs

Employee Full Time Equivalents (FTEs), typically based on a 40-hour week, increased steadily through 2016, before taking a dip in 2017. Overall, employee FTEs increased by 5% in the five-year period, with the 2017 value lying 30% above the peer mean of 209 total employee FTEs. The number of FTEs is relevant to the ability to cover work required for administration, maintenance, and operations. By itself this metric is not meaningful but in context with operating costs and cost per trip metrics it informs evaluation of efficiency and cost-effectiveness.

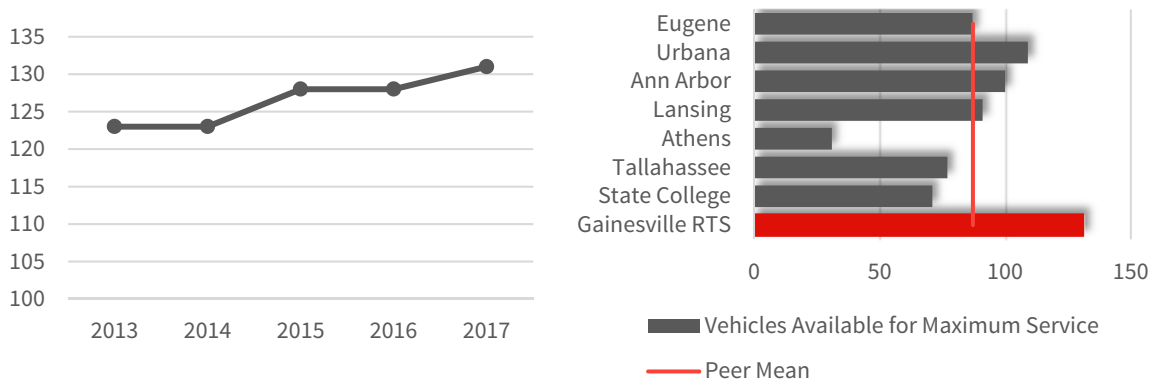
Figure 4-9: RTS Peer and Trend Comparison for Total Employee FTEs



4.2.10 Vehicles Operated in Maximum Service

Vehicles operated in maximum service (VOMS) are a measure of the fleet required to operate at the peak of full service. RTS has increased its supply of vehicles operating in maximum service from 103 vehicles in 2013 to 111 in 2017, an approximate 8% increase. RTS lies 49% above the group mean of 75 vehicles. VOMS are an important metric when assessing fleet size but it is directly related to the network structure, number of routes, and frequency of service of each transit agency and therefore somewhat academic in terms of peer comparison.

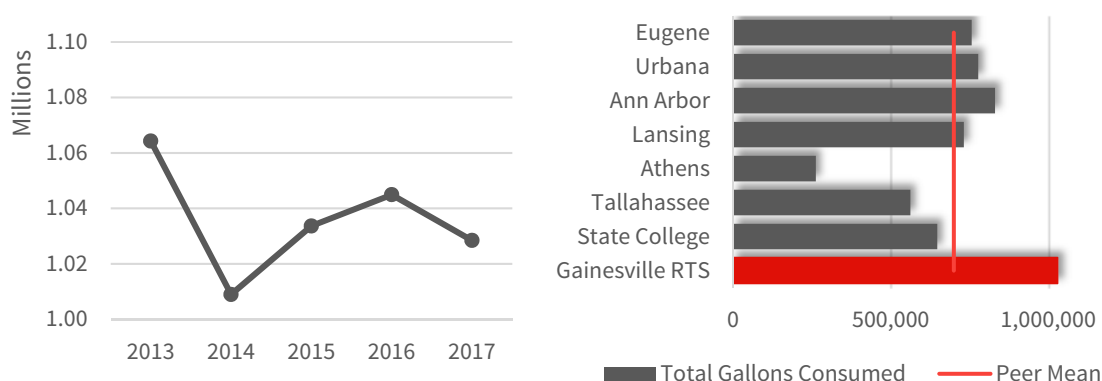
Figure 4-10: RTS Peer and Trend Comparison for Vehicles Available for Maximum Service



4.2.11 Total Gallons Consumed

RTS' gas consumption has fluctuated since 2013, but overall has decreased by 3% in the five-year period. For this performance measure, RTS lies 47% above the group mean. Generally, fuel consumption is tied to vehicle miles of service and type of vehicle power employed.

Figure 4-11: RTS Peer and Trend Comparison for Total Gallons Consumed



4.3 Fixed Route Effectiveness Measures

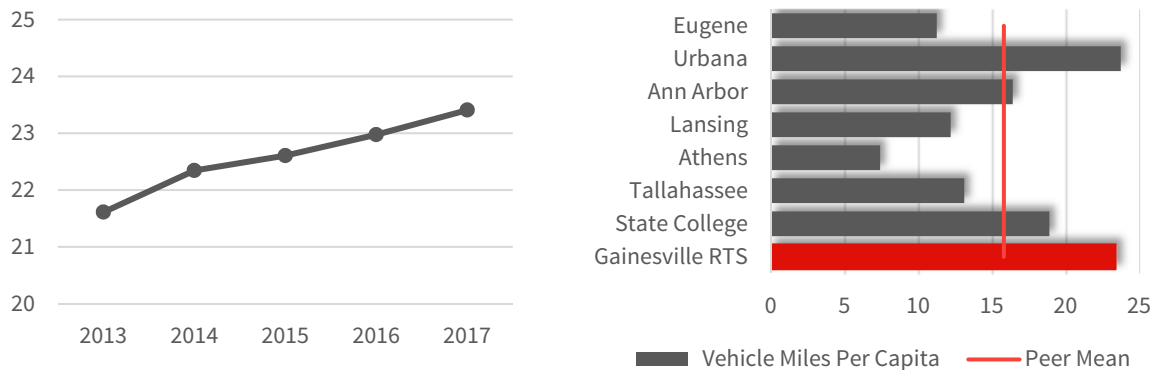
Effectiveness measures indicate the extent to which service-related goals are being met. Appendix D provides an overview of effectiveness measures for Gainesville RTS and its peer group. Effectiveness measures include service supply, service consumption, and quality of service and are represented by variables such as vehicle miles per capita, passenger trips per revenue hour, and average age of fleet. Figure 4-12 through Figure 4-16 present the trend and peer analysis for these effectiveness performance indicators.

4.3.1 Vehicle Miles Per Capita

Vehicle miles per capita are derived from the total system vehicle miles divided by the service area population within a ¾-mile distance of service provided. They measure the supply of service provided based on the population of the service area. For RTS, vehicle miles per capita experienced an increase from a low of 21.6 miles per capita to a high of 23.4 in 2017, a growth of 8%. Vehicle miles per capita for RTS are 48% higher than the peer group mean, an indication that the supply of service is less than

what is typically experienced by peer agencies. This means RTS operates more service per capita than its peers and offers residents better access to transit within the service area.

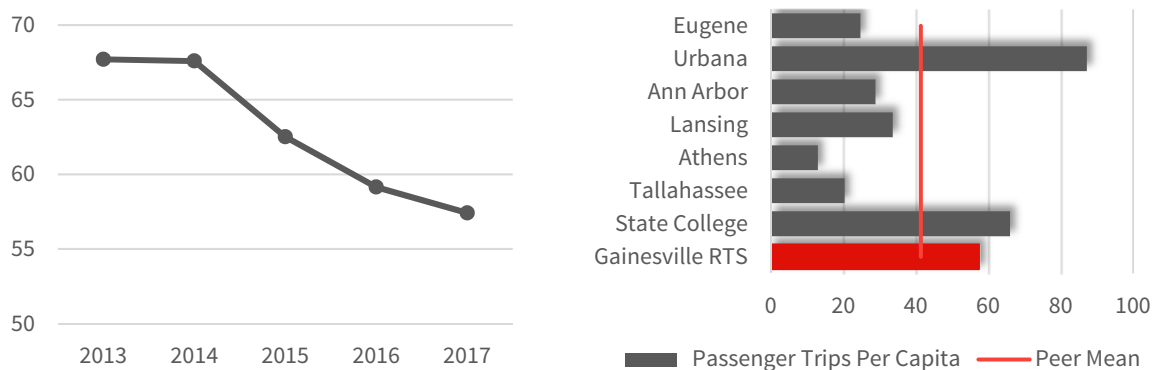
Figure 4-12: RTS Peer and Trend Comparison for Vehicle Miles Per Capita



4.3.2 Passenger Trips Per Capita

Passenger trips per capita are calculated by dividing the total transit boardings by service area population. This measure of service effectiveness quantifies transit utilization within the service area. Passenger trips per capita in Gainesville experienced moderate 15% decrease between 2013 and 2017. Despite this decreasing trend, RTS ranks third in the peer group, 39% above the mean. It is desirable that trips per capita are high, meaning greater utilization of the service.

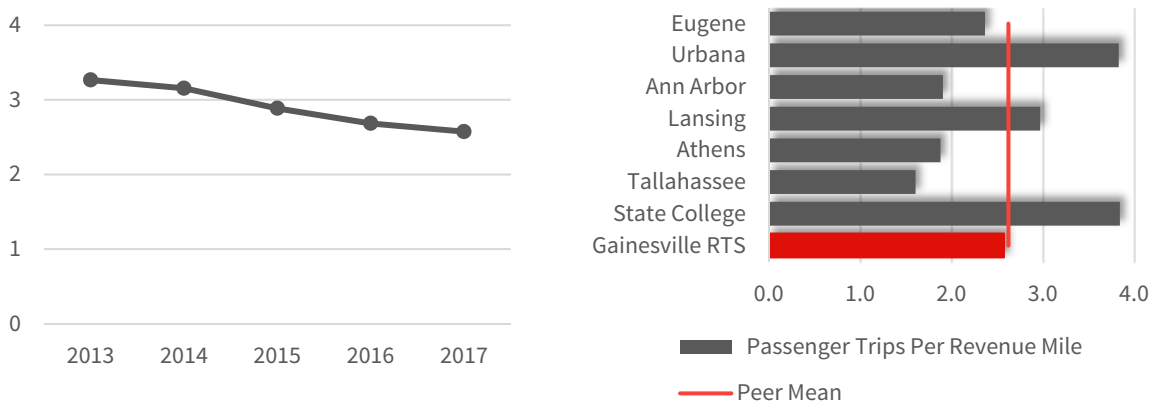
Figure 4-13: RTS Peer and Trend Comparison for Passenger Trips Per Capita



4.3.3 Passenger Trips Per Revenue Mile

Passenger trips per revenue mile are calculated by dividing transit boardings by revenue miles. They are a measure of the productivity of the revenue service provided. In Gainesville, passenger trips per revenue mile experienced a decrease of 21% during the five-year period, indicating that the agency experienced lessening ridership productivity during the time period. At the same time, revenue miles increased, thus weakening the measure of productivity since gains in ridership were not seen in equal parts. It is desirable for this metric to be high meaning greater utilization of the service per unit of service supplied. RTS lies 2% below the peer mean for this metric, indicating a comparable performance to its peers.

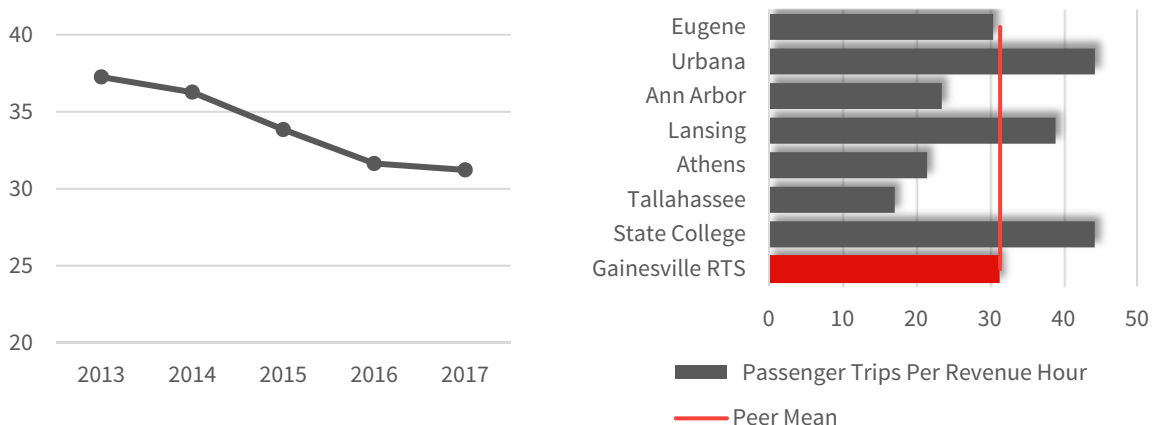
Figure 4-14: RTS Peer and Trend Comparison for Passenger Trips Per Revenue Mile



4.3.4 Passenger Trips Per Revenue Hour

Passenger trips per revenue hour are a measure used to quantify productivity and service consumption and can help evaluate the amount of resources consumed in providing service. From 2013 to 2017, RTS' passenger trips per revenue hour decreased by 16%. The decline in passenger trips per revenue hours is consistent with the increase in revenue miles and hours of service without corresponding increase in ridership. RTS lies almost exactly at the peer mean for this metric. It is desirable for this metric to be high, reflecting greater utilization of the service per unit of service provided.

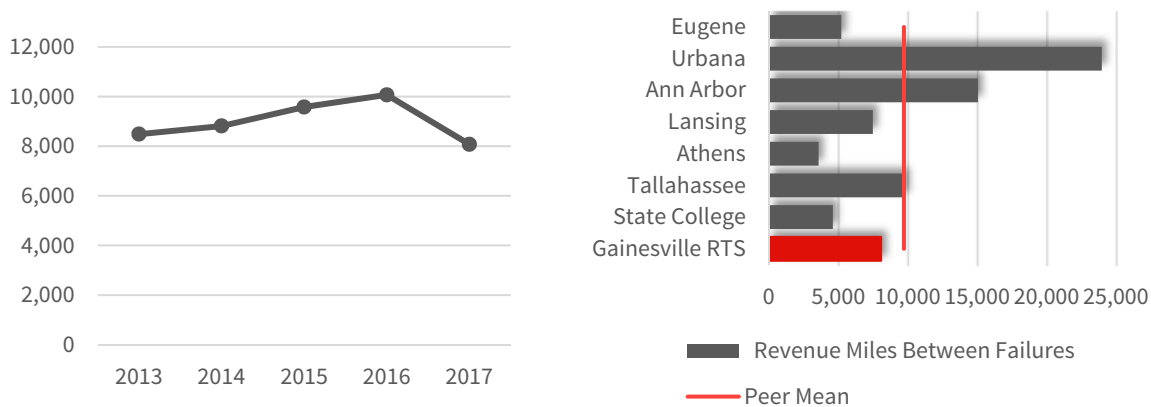
Figure 4-15: RTS Peer and Trend Comparison for Passenger Trips Per Revenue Hour



4.3.5 Revenue Miles Between Failures

Revenue miles between vehicle failures reflect service reliability in terms of quality of vehicle maintenance. A higher number of revenue miles between system failures indicates higher quality of vehicle maintenance and/or a newer vehicle fleet. This measure also reflects on the quality of the passenger experience, fewer failures equates to better, more reliable service. For RTS, this effectiveness measure peaked at 10,066 revenue miles per road call in 2013 and then dipped to 8,074 in 2017, suggesting a recent decline in effective service per person for transit services in Gainesville. RTS lies 17% below the peer mean.

Figure 4-16: RTS Peer and Trend Comparison for Revenue Miles Between Failures



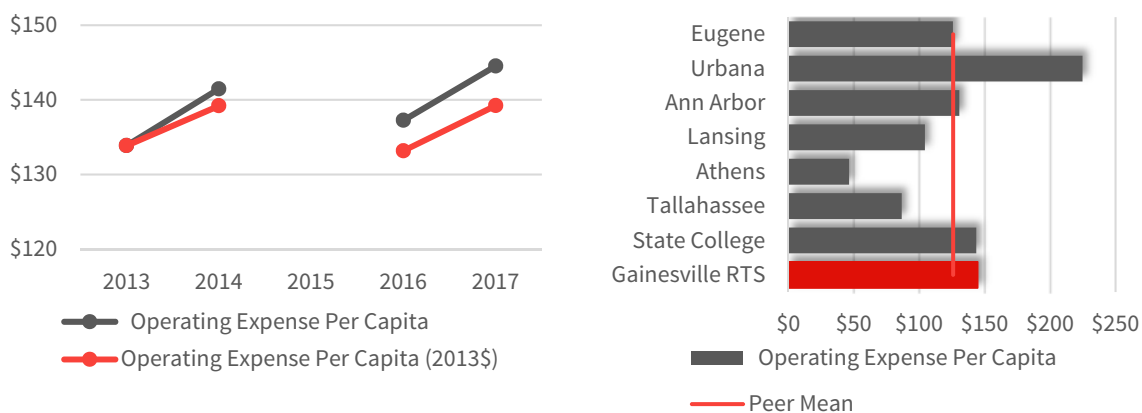
4.4 Fixed Route Efficiency Measures

Efficiency measures focus on costs and other measures of efficiency, this section provides an overview of efficiency measures for Gainesville RTS and its peer group. Figure 4-17 through Figure 4-26 present the efficiency measures for RTS' peer review and trend analysis. Similarities between RTS and the peers in this category may be related to the peer selection process, which is largely based on transit service characteristics. The following section summarizes the trend and peer analysis by efficiency measure type.

4.4.1 Operating Expense Per Capita

Operating expense per passenger trip measures the investment in transporting providing public transport relative to the population within the service area. RTS did not report this metric for 2015. When excluding inflation, the operating expense per capita for Gainesville increased from \$133.85 in 2013 to \$139.23 in 2017, an increase of 4%. RTS lies 15% above the peer group mean. This metric is more complex in that while a higher cost reflects a greater investment in transit, it must be viewed in context of direct costs per unit of service relative to peers.

Figure 4-17: RTS Peer and Trend Comparison for Operating Expense Per Capita

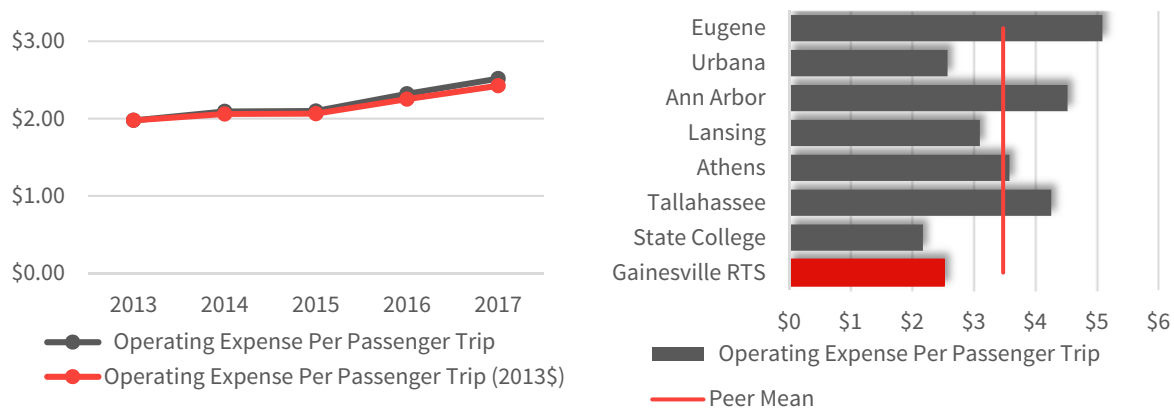


4.4.2 Operating Expense Per Passenger Trip

Operating expense per passenger trip measures the efficiency of transporting riders, the cost of operations relative to the resulting ridership, and reflects on how service is delivered and the market

demand for the service. The operating expense per passenger trip in Gainesville increased from \$1.98 in 2013 to \$2.43 (2013 dollars) in 2017, 23% overall. Gainesville RTS ranks 28% below the peer group mean. The goal is to minimize cost per passenger trip and RTS is doing well compared to peers.

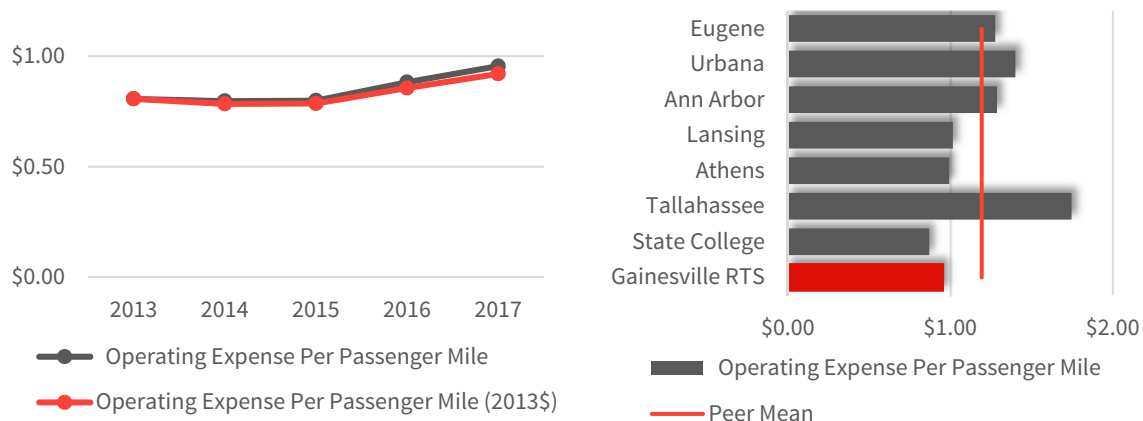
Figure 4-18: RTS Peer and Trend Comparison for Operating Expense Per Passenger Trip



4.4.3 Operating Expense Per Passenger Mile

Operating expense per passenger mile measures the impact of ridership, average trip length, and operating cost. RTS' operating expense per passenger mile experienced slight fluctuations between 2013 and 2017, a 14% increase (in 2013 dollars). RTS is 20% below the peer mean for this measure. The goal is to minimize cost per passenger miles and RTS is doing well compared to peers.

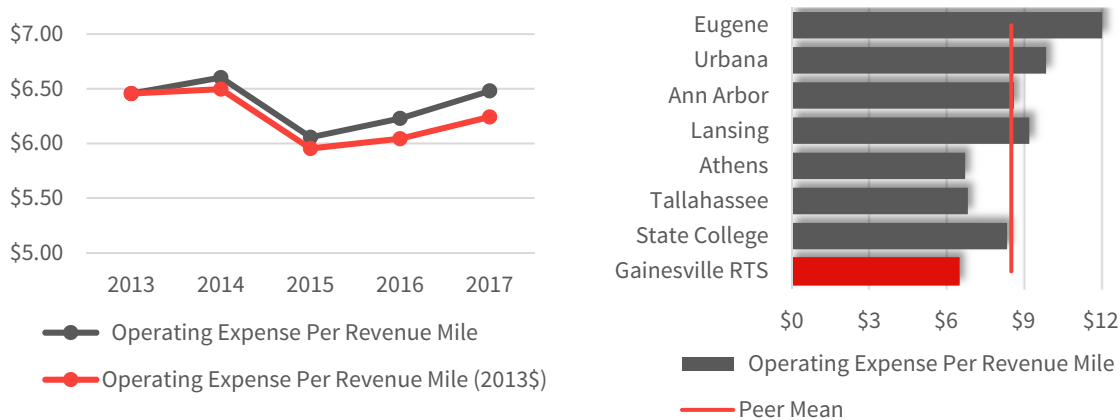
Figure 4-19: RTS Peer and Trend Comparison for Operating Expense Per Passenger Mile



4.4.4 Operating Expense Per Revenue Mile

Operating expense per revenue mile indicates how efficiently a transit service is delivered. Overall the metric has remained stable with a slight dip across the five-year period, decreasing by a value of \$0.20 or 3% (in 2013 dollars). RTS lies 24% below the peer mean, indicating more efficient transit service delivery than its peers for this measure. The goal is to minimize cost per revenue mile and RTS is doing well compared to peers.

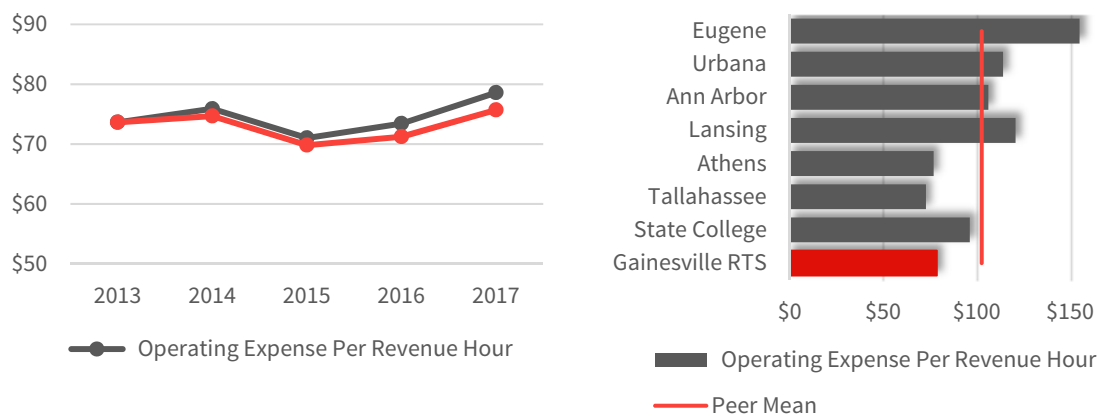
Figure 4-20: RTS Peer and Trend Comparison for Operating Expense Per Revenue Mile



4.4.5 Operating Expense Per Revenue Hour

This metric uses operating expense divided by total annual revenue hours; a key comparative measure which factors out vehicle speed. RTS' operating expense per revenue hour experienced a dip in 2015 followed by gradual increases resulting in a net increase of 3%. RTS lies 23% below the peer mean. The goal is to minimize cost per revenue hour and RTS compares well to peers.

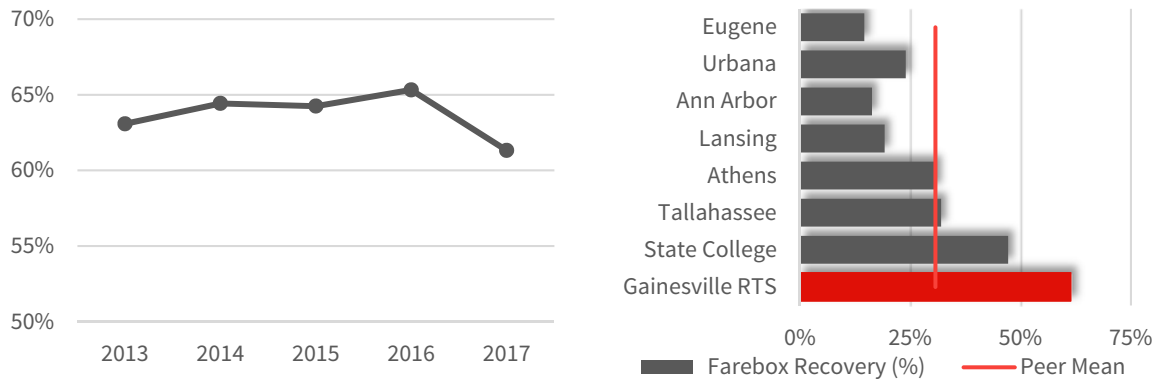
Figure 4-21: RTS Peer and Trend Comparison for Operating Expense Per Revenue Hour



4.4.6 Farebox Recovery (%)

Farebox recovery (ratio) is a measure of the percent of the transit system's total operating expenses that are funded with fares paid by passengers and is calculated by dividing the total fare revenue collected by the total operating expenses. RTS' farebox recovery has declined from 63% in 2013 to 61% in 2017, or 3% over the five-year period. Despite this small decline, the farebox recovery for RTS is approximately double that of the peer group mean. This high recovery rate reflects student transportation fees within student tuition at that pay for student passes for students at Santa Fe College and the University of Florida. The goal is to increase farebox recovery, meaning more of the costs are absorbed by users.

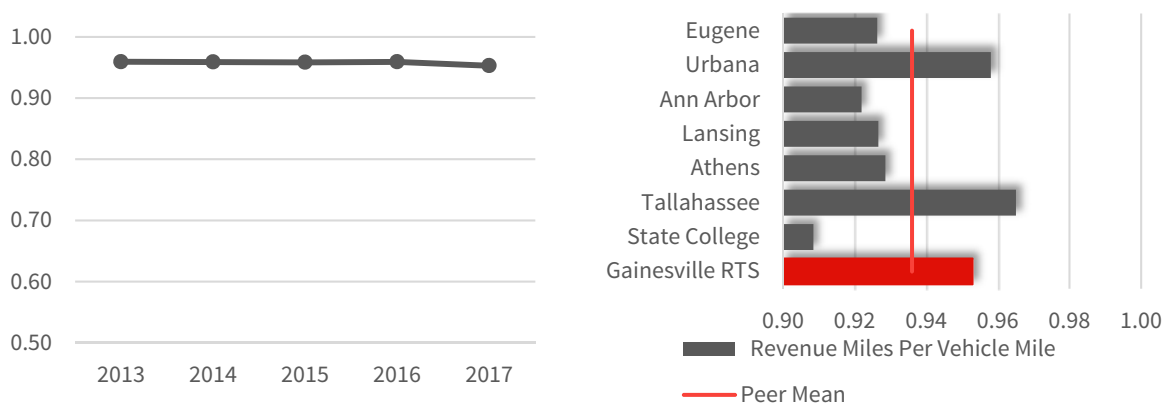
Figure 4-22: RTS Peer and Trend Comparison for Farebox Recovery (%)



4.4.7 Revenue Miles Per Vehicle Mile

Revenue miles per vehicle miles are a measure of vehicle utilization. A higher ratio of revenue miles traveled to total vehicle mile generally indicates higher system productivity. For RTS, the revenue miles per vehicle mile remained stable, between 0.96 and 0.95 over the five-year period, with a net decline of less than 1%. Revenue miles per vehicle mile for RTS is 2% above the peer group mean, which indicates a near average use of fixed-route bus vehicles within the peer group mean. The goal is to maximize the ratio of operations in revenue service to total operations and RTS is doing well compared to peers.

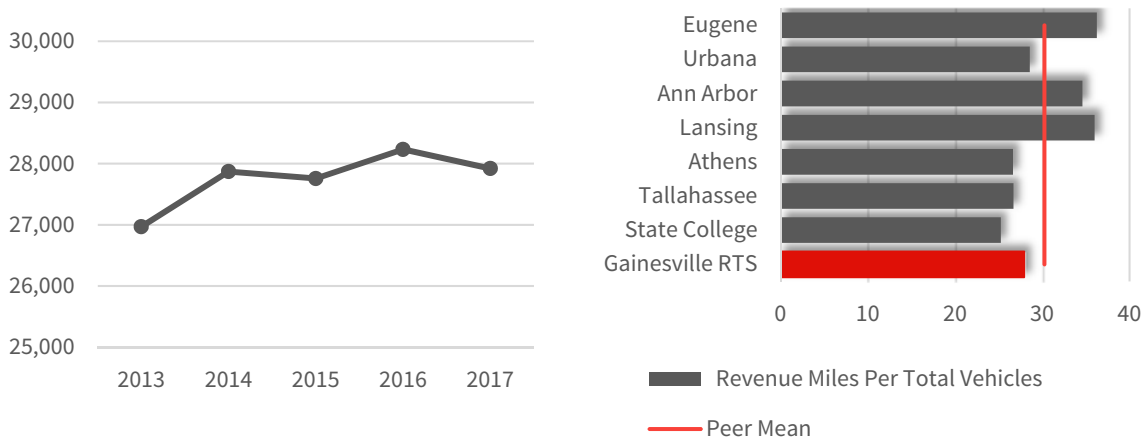
Figure 4-23: RTS Peer and Trend Comparison for Revenue Miles Per Vehicle Mile



4.4.8 Revenue Miles Per Total Vehicles

Revenue miles per total vehicles are another measure of vehicle utilization. RTS experienced an overall increase of approximately 4% over the five-year period. RTS ranks 8% below the peer mean of 30,248 revenue miles per total vehicles. Interpretation of this metric is complex as it must be taken in context of the fleet size, revenue miles, and age of fleet.

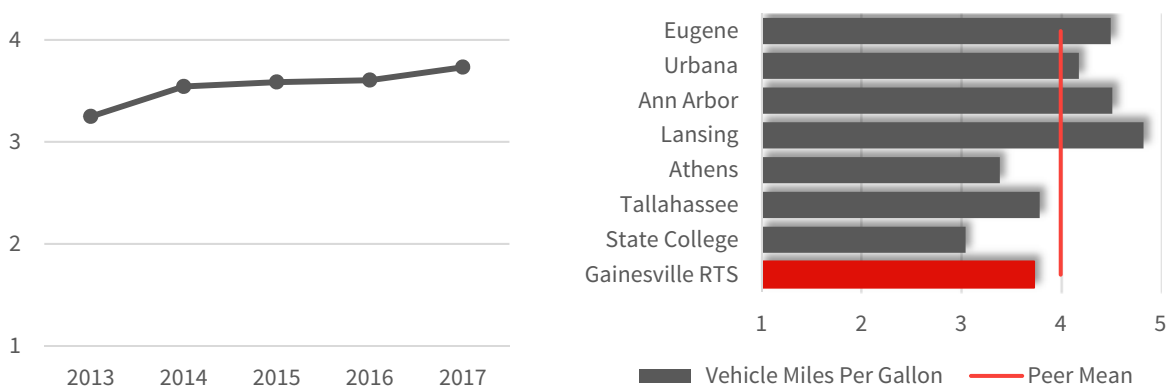
Figure 4-24: RTS Peer and Trend Comparison for Revenue Miles Per Total Vehicles



4.4.9 Vehicle Miles Per Gallon

Vehicle miles per gallon, or the ratio between fuel consumed and distance traveled, are an indication of fuel efficiency and apply only to diesel- and gasoline-powered vehicles. For RTS, vehicle miles per gallon (or fuel efficiency) increased during the five-year period, from 3.2 in 2013 to 3.7 in 2017, or 15% overall. RTS lies 7% below the peer mean. It is desirable to maintain a higher fuel economy, i.e., more miles per gallon.

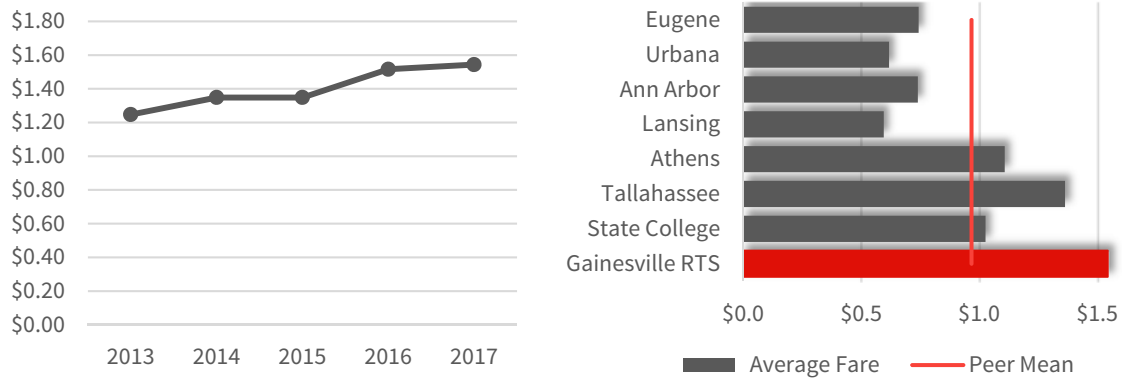
Figure 4-25: RTS Peer and Trend Comparison for Vehicle Miles Per Gallon



4.4.10 Average Fare

Average fare is calculated by dividing total passenger fare revenue collected by ridership. The average can be lowered by systems that offer free transfers or discounted/free rides. RTS's average fare increased from \$1.25 in 2013 to \$1.54 in 2017, or 24% overall. The mean average fare for the peer systems is \$0.97, which ranks RTS' average fare 59% above its peer systems. This means on average, RTS riders pay a higher fare than the peers.

Figure 4-26: RTS Peer and Trend Comparison for Average Fare



4.5 Summary Results of Fixed-Route Peer and Trend Analysis

As previously discussed, an analysis of RTS' fixed-route bus service from 2013 through 2017 was conducted using the most recent year NTD data available. Although the trend analysis is only one aspect of an overall transit performance evaluation, when combined with the peer review analysis, the results provide a starting point for understanding the efficiency and effectiveness of a transit system.

4.5.1 Trend Analysis Summary

Service Supply – Vehicle miles per capita (service supply) increased by 8% through 2017, indicating that RTS services increased during the analysis period. However, the increase of service supply did not translate to increased ridership productivity, as manifested in service consumption.

Service Consumption – Passenger trips per capita, per revenue mile, and per revenue hour have shown a decrease over the five-year period. This trend indicates that RTS has been declining in system effectiveness over the last five years, a trend consistent with national averages.

Quality of Service – The number of system vehicle failures has increased over the five-year period, while the revenue miles between failures has decreased. However, this trend was not linear and included periods of improvement as well as decline. This indicates opportunity to improve service reliability.

Cost Efficiency – All cost efficiency metrics experienced a net increase during the trend analysis. This indicates that RTS may be experiencing overall increased costs in operation, associated with more units of service operated and increase cost per unit of service, as well as impacts due to a dip in passenger trips and passenger miles.

4.5.2 Peer System Analysis Summary

General Performance Measures – RTS consistently placed approximately above the peer mean for most general performance measures (passenger trips, passenger miles, vehicle miles, etc.). Given that the service area size and population are smaller than the peer mean, this indicates provision of a robust transit system to its users.

Effectiveness Measures – RTS ranked near the mean or better compared to peers for all effectiveness measures except mile between failure. Vehicle miles per capita for RTS are approximately 48% above the peer group mean, indicating that the supply of service is greater than typically experienced in other similar areas. Passenger trips per revenue mile and passenger trips per revenue hour are near the peer group mean, within a 2% margin, indicating that ridership levels are meeting the group average. Revenue miles between failures have decreased by 5%, indicating a generally consistent quality of service.

Efficiency Measures – The efficiency measures reflect positively for RTS compared to peers. For example, RTS' operating expense per capita is 15% above the peer group mean, and its operating expense per passenger trip is 28% below the group mean. The operating expense per revenue mile is 24% below the peer group mean. RTS' farebox recovery is approximately twice the peer group mean; the average fare charged is 59% above the peer group mean. Revenue miles per vehicle mile for RTS is

2% above the peer group mean, which indicates a higher average utilization of fixed-route bus vehicles.

4.6 Demand Response (Paratransit) Peer and Trend Analysis

RTS' demand response service was likewise compared to peers based on a subset of standardized metrics. Where applicable, it considered the same performance, effectiveness, and efficiency manners. Table 4-2 outlines the performance measures used in the Demand Response Peer and Trend Analysis.

Table 4-2: Demand Response Peer/Trend Performance Review Measures

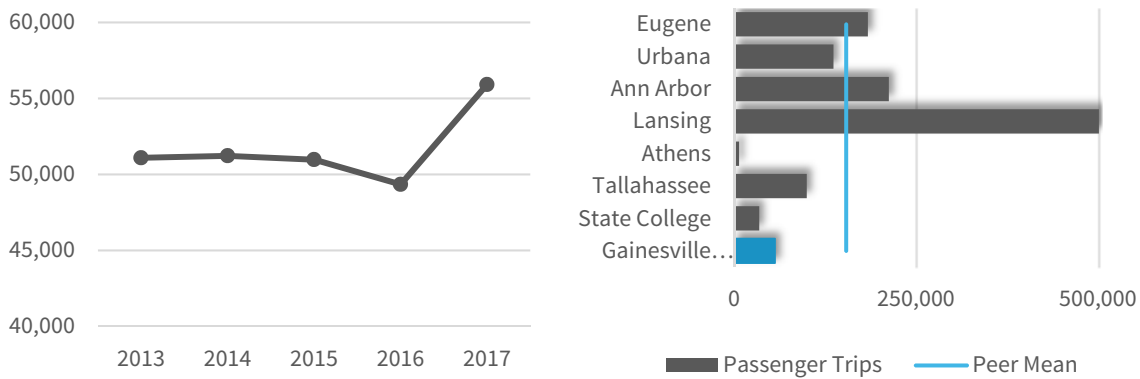
General Performance Indicators	Effectiveness Measures	Efficiency Measures
Passenger Trips	Passenger Trips Per Capita	Operating Expense Per Passenger Trip
Revenue Miles	Passenger Trips Per Revenue Hour	Operating Expense per Revenue Mile
Total Operating Cost		Operating Expense Per Revenue Hour
Passenger Miles		Average Fare
Revenue Hours		

4.6.1 Demand Response General Performance Indicators

The appendix provides an overview of general performance indicators for Gainesville RTS and its peer group. The following summarizes observed trends among the performance measures, shown in *Figure 4-27* through *Figure 4-31*.

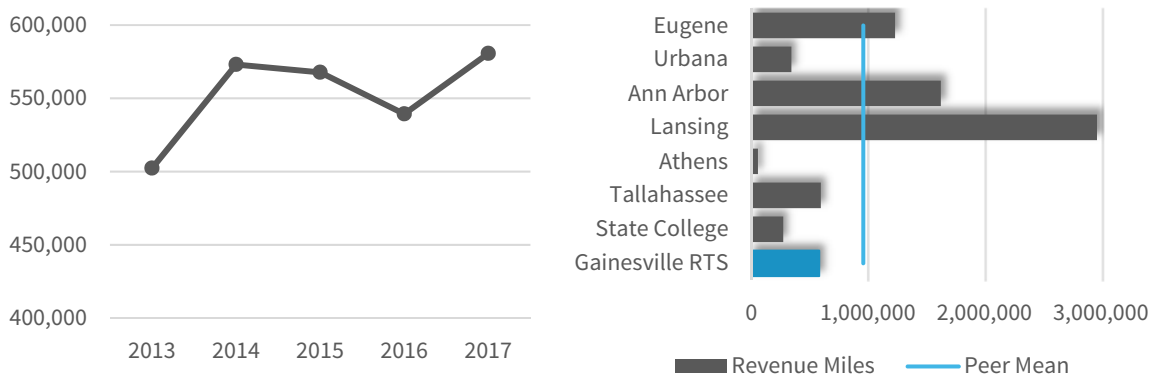
- Gainesville RTS ranks below the peer mean for all general performance indicators. This is consistent with lower demand and units of service supplied in Gainesville compared to peers. Lansing reports numbers about twice as high as any other agency except revenue hours, which shows that the peer mean is being skewed by its high values. Without a direct comparison of the age and disability profiles of each peer, further comparative analyses are limited.
- The total number of passenger trips increased by 9% from 2013 to 2017. This contrasts with RTS' fixed-route service's decrease in passenger trips during the same period. Demand response ridership was experiencing a gradual decrease in ridership before a spike of 6,579 in 2017. Despite Gainesville's vastly younger population and lower percent of persons aged 64 and above compared to Florida and the nation, the increase in demand responsive service is reflective of the impact of a marked increase in aging population.
- Passenger miles and revenue miles increased by 9% and 16%, respectively. Both metrics experienced a noticeable increase in 2017, which is consistent with growing demand.
- Although the graph in *Figure 4-29* depicts a relatively linear and slight growth trend in total operating expenses, there has been a 29% growth (in 2013 dollars). This is consistent with a growth in demand.
- Revenue hours reported a 27% increase between 2013 and 2017, also consistent with growing demand.

Figure 4-27: RTS Peer and Trend Demand Response Passenger Trips



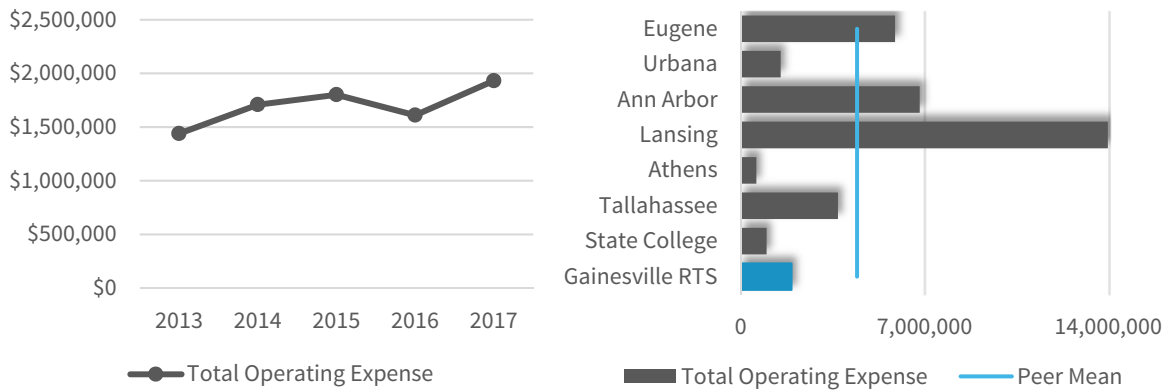
RTS rates 64% lower in the number of demand response trips served compared to its peers. This may be related to the high student age population and generally younger population of Gainesville. Statistically demand response service demand is correlated with the population over 64 and the percentage of persons with disabilities. The spike in passengers between 2016 and 2017 is noteworthy.

Figure 4-28: RTS Peer and Trend Demand Response Revenue Miles



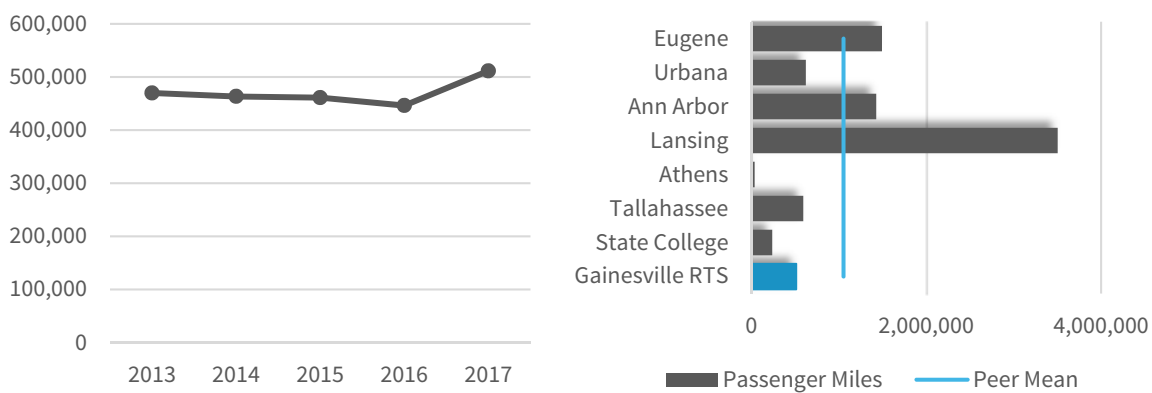
RTS rates 40% lower compared to peers in the number of revenue miles of service. This is consistent with lower demand and the increase in revenue miles is consistent with an uptick in demand.

Figure 4-29: RTS Peer and Trend Demand Response Total Operating Expense



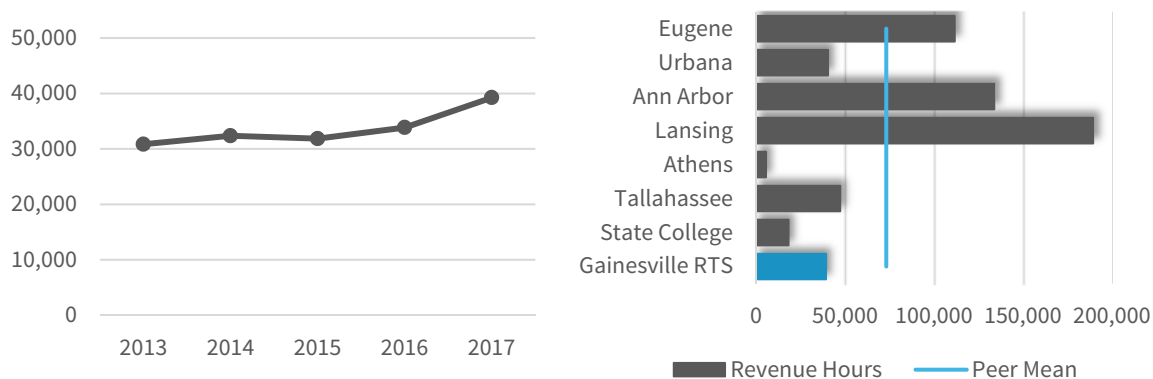
RTS reflects a 56% lower cost for demand responsive services than peers which is consistent with lower demand and lower units of service supplied.

Figure 4-30: RTS Peer and Trend Demand Response Passenger Miles



RTS reflects a 51% lower number of passenger miles of demand responsive services than peers which is consistent with lower demand and lower units of service supplied.

Figure 4-31: RTS Peer and Trend Demand Response Revenue Hours



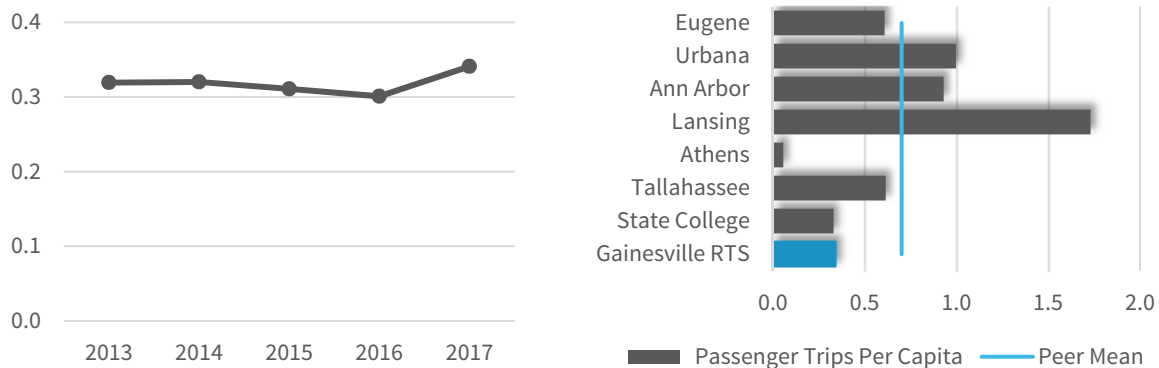
RTS revenue hours of service have increased slightly but consistently since 2013, a trend consistent with the growth shown in demand and service supply. RTS revenue hours of service are 46% lower than the peer average.

4.6.2 Demand Response Effectiveness Measures

Table D-5 (Appendix) provides an overview of effectiveness measures for Gainesville RTS and its peer group. Selected effectiveness measures are presented in *Figure 4-32* and *Figure 4-33*. Observed trends are summarized as follows.

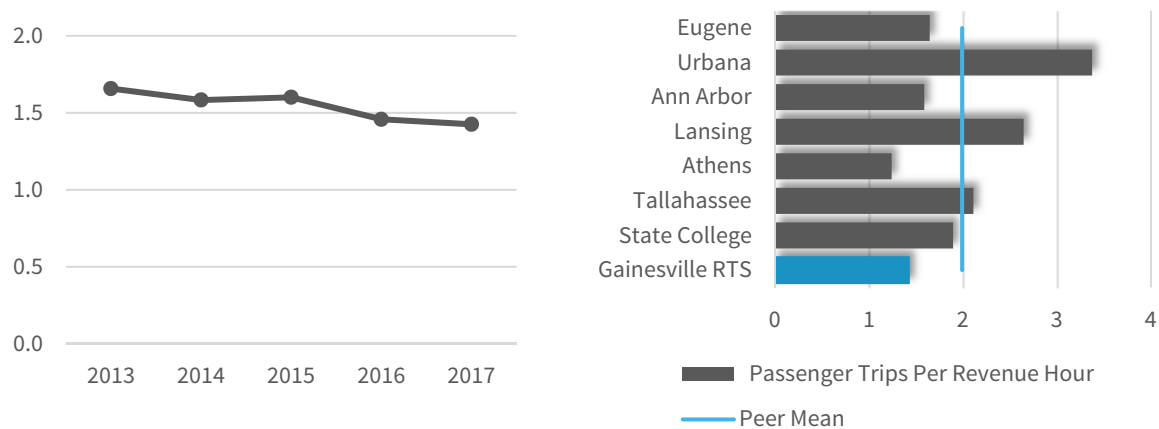
- Gainesville RTS scores below the peer group mean for effectiveness measures. This is largely due to the lower average age in Gainesville. An older population is positively correlated with higher demand responsive transportation need.
- Passenger trips per capita have increased by 7%. This is consistent with the growth in ridership and passenger miles during the same timeframe, especially for 2017. It is also reflective of the national trend of growth in the number and share of population aged 64 and over. While the percentage of persons 64 and over is lower than the state and national averages, the numbers are growing and are reflected in this trend.
- Passenger trips per revenue hour have decreased by 14% during the five-year time frame. The increase in revenue hours, 27% over the five-year period, is reflective of increasing demand for service. However, the trend shows the productivity and vehicle utilization of RTS demand responsive service are not keeping pace as demand is added. RTS should take measure to improve service delivery productivity, likely through more efficient scheduling.

Figure 4-32: RTS Peer and Trend Demand Response Passenger Trips Per Capita



The RTS trend for passenger trips per capita shows an increase which is consistent with national trends primarily driven by the significant growth in the percentage of population aged 64 and over which is highly correlated with increase in persons with disabilities and need for mobility services. Compared to peers, RTS is 51% low in terms of passenger trips provided per capita. The lower average age in Gainesville is reflected in this score.

Figure 4-33: RTS Peer and Trend Demand Response Passenger Trips Per Revenue Hour



RTS productivity and vehicle utilization, as measured by passengers per revenue hour, has decreased over the five-year period. More efficient scheduling may be an opportunity for RTS to increase service delivery productivity. Compared to peers, RTS is 29% below the mean passenger trips per revenue hour. The high average productivity by Urbana, over three passengers per revenue hour, skews the mean for the peer group. The desire is to increase productivity, i.e., increase number of passenger trips per revenue hour of service provided.

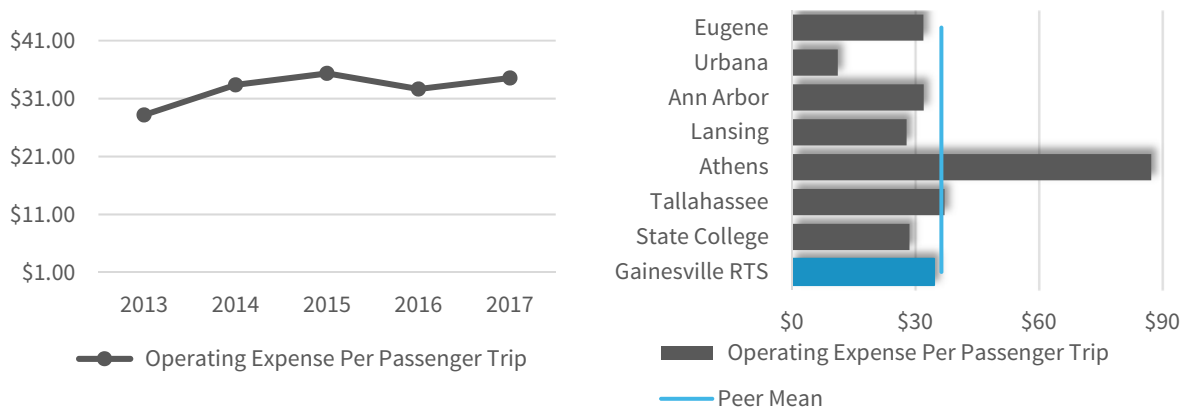
4.6.3 Demand Response Efficiency Measures

The appendix provides an overview of efficiency measures for Gainesville RTS and its peer group. Efficiency measures are presented in Figure 4-34 through

Figure 4-37.

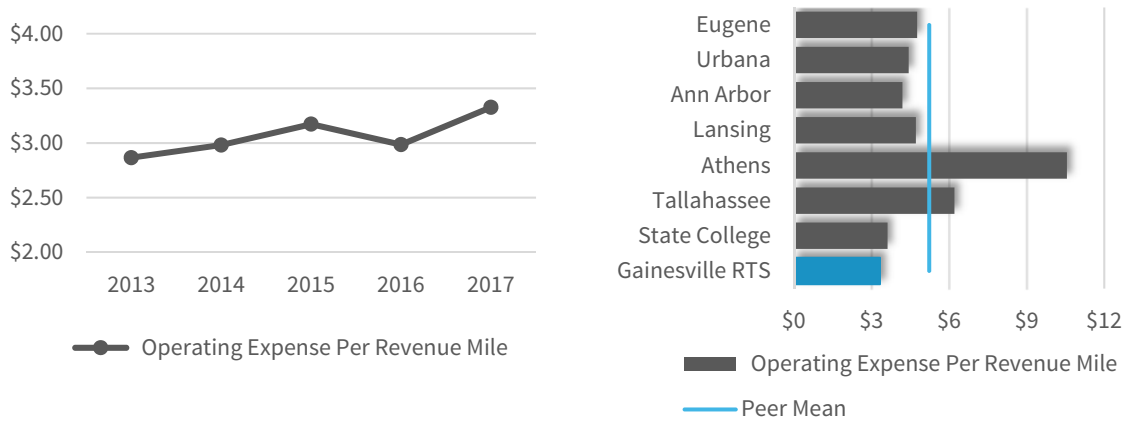
- All operating expense metrics increased between 2013 and 2017 and scored below the peer group mean, which would indicate more efficient operation than the peer group and a desirable goal.
- Operating expense per passenger trip increased by 18% (in 2013 dollars) over the five-year period, but the growth has not been linear. There have been periods of dips and spikes, with 2017 being a spike.
- Operating expense per revenue mile and operating expense per revenue hour increased by 12% and 2%, respectively (in 2013 dollars).
- The average fare has stayed nearly identical to its value five years ago, save for some slight fluctuation in the intermediate years. It currently lies at \$2.96. This is 20% above the peer mean.

Figure 4-34: RTS Peer and Trend Demand Response Operating Expense Per Passenger Trip



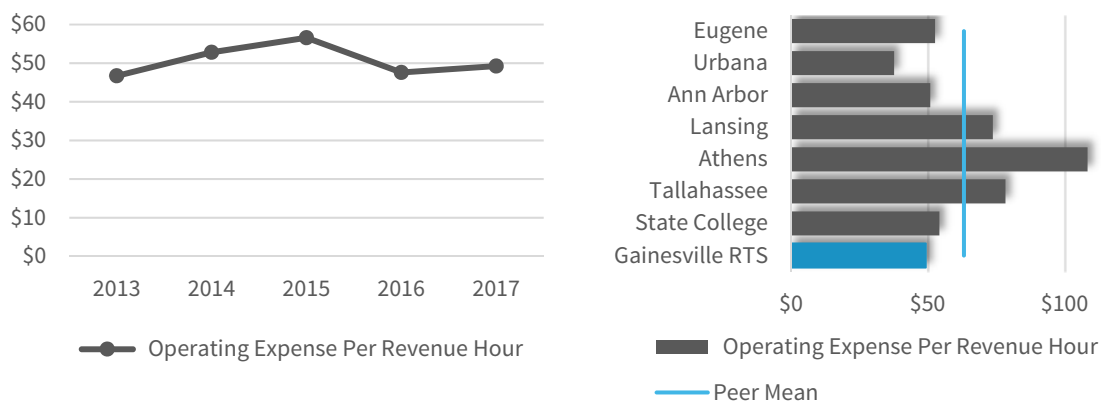
RTS operating expense per passenger trip increased slightly over the period and is just below the mean for the peer group. Cost per passenger trip is a key performance metric. The goal is to keep costs per trip low and RTS is 5% below the peer mean. However, the high cost of Athens Transit skews the mean higher.

Figure 4-35: RTS Peer and Trend Demand Response Operating Expense Per Revenue Mile



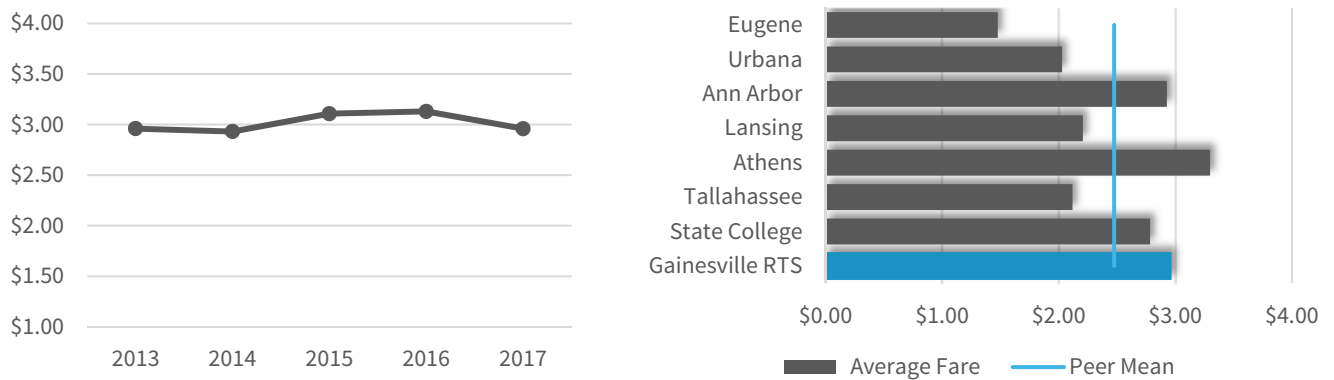
The cost of RTS service provision on a per unit basis increased over the period. The goal is to keep unit costs lower. However, RTS costs are 36% lower than the peer group.

Figure 4-36: RTS Peer and Trend Demand Response Operating Expense Per Revenue Hour



RTS has done a good job of containing operating cost per revenue hour over the period. The goal is to keep service unit costs low and RTS is 22% below the mean for the peer group.

Figure 4-37: RTS Peer and Trend Demand Response Average Fare



RTS charges 20% more for demand responsive service than the mean for the peer group. This reflects a policy decision in favor of greater reliance on user fees to pay for service.

4.7 Demand Response Peer and Trend Conclusions

Gainesville compares favorably to its peers in most measures. Operating costs and operating costs per unit of service are lower than the peer group. The units of service operated, and the number of passengers carried, are lower than the peer group. This is consistent with a lower population and share of population that typically demands paratransit service. Gainesville is overwhelmingly young, both due to high student population and lower percentage of seniors compared to Florida and the nation. Gainesville charges more for demand responsive services than the peer mean. Noteworthy is the growing trend in demand for paratransit service in Gainesville and the need for RTS to improve efficiency in scheduling to increase productivity and cost-effectiveness.

5.0 Public Involvement

This section provides an overview of public participation requirements from Federal and State rules and requirements and summarizes public outreach activities performed as part of the development of RTS' 2024 TDP Major Update.

5.1 Public Participation Requirements

Florida Rule 14-73.001 requires that the creation of a TDP include public input. This was facilitated for this TDP through the review and approval of a formal TDP-specific PIP by the local FDOT district ("the Department," as referenced in the rule) prior to the onset of the planning process. Pertinent language from the rule is provided below:

The TDP preparation process shall include opportunities for public involvement as outlined in a TDP public involvement plan, approved by the Department, or the local Metropolitan Planning Organization's (MPO) Public Involvement Plan. — Florida Rule 14-73.001

The objectives of public outreach for TDP updates are outlined in FDOT's *TDP Update Manual* and include:

- Educate the public and present information by promoting proactive and early public involvement.
- Solicit input from the public throughout the planning process by gathering full and complete information from the public.
- Integrate feedback received from the public into the Transit Development Plan, Situation Appraisal, Mission and Goals, and Alternatives Analysis.
- Monitor and improve the public involvement process.

Other applicable state and federal requirements for RTS's public outreach efforts relating to this major TDP update include:

- Provide reasonable opportunity for comment to citizens, affected public agencies, representatives of public transportation employees, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, providers of freight transportation services, and other interested parties. – *Florida Rule 14-73.001 and Section 5303, MAP-21*
- Hold any public meetings at convenient and accessible locations and times. – *Section 5303, MAP-21*
- Employ visualization techniques to describe plans. – *Section 5303, MAP-21*
- Make public information available in electronically accessible format and means, such as the World Wide Web, as appropriate to afford reasonable opportunity for consideration of public information. – *Section 5303, MAP-21*

- Include opportunities for public involvement, review, and comment during the development of mission, goals, and objectives, during the development of alternatives, and during development of the 10-year implementation program. – *Florida Rule 14-73.001*
- Advise FDOT, the regional workforce board, and MPO of all public meetings where the TDP is to be presented or discussed. – *Florida Rule 14-73.001*
- Give FDOT an opportunity to review and comment on the TDP during the development of the mission, goals, objectives, alternatives, and ten-year implementation program. – *Florida Rule 14-73.001*
- Solicit comments from the regional workforce boards. – *Florida Statutes Section 341.052*

5.2 Public Participation Overview of Activities

The approved public involvement plan outlines techniques that would be used to facilitate public input during the creation of the TDP. Public participation activities were conducted based on two categories – direct involvement and information distribution.

Direct involvement activities included those where active participation was solicited from the public. The direct involvement activities targeted both transit riders who are most affected by the service and non-riders who are representative of the population across the RTS service area.

Information distribution techniques provided information to interested parties about the TDP process and upcoming events. These techniques assisted in reaching a larger audience and gave opportunities for a more diverse pool of the community with varying interest levels to be included in the TDP process.

Direct involvement activities included the following:

- A **Review Committee** consisting of representatives from the city and county government, FDOT, MTPO, and CareerSource Florida was asked for input at specific points in the development process.
- **Stakeholder interviews** were conducted of City and County Commissioners, the Gainesville City Manager, and others.
- **On-board survey analysis** of an RTS-conducted board survey that resulted in the collection of over 2,400 surveys (results described below).
- **An attitudinal/service evaluation survey analysis** was included as a separate component of the on-board survey, which resulted in the collection of over 950 surveys. These surveys were conducted by on-board riders separate from the travel characteristics section.
- **An online non-user survey analysis** was conducted and disseminated through the RTS website and City of Gainesville website which resulted in over 200 survey results.
- A **discussion group workshop** was conducted to gather insight from representatives of groups whose constituents have a propensity to use transit.
- **Open house public workshops** (two) were hosted by RTS to collect input on potential COA and TDP alternative improvements and goals and objectives.

Information distribution techniques included the follow:

- **Legal advertisements** of meetings/workshops were noticed in the local newspapers (*Gainesville Guardian and Sun*) and posted to City of Gainesville websites (www.cityofgainesville.org).
- **Direct contact with state and local agency representatives**, including FloridaWorks, the MTPO, and FDOT, who were advised of all public meetings and discussions regarding the TDP via email or other similar communication.
- **RTS website and Facebook page** advertised meetings/workshops (RTS website—go-rts.com and Facebook page—www.facebook.com/regionaltransportationsystem).
- **Informational postings**, which included visual representation of plan information, such as map documents, display boards, and other visual formats for display at public workshops and on buses and other RTS facilities, such as the Rosa Parks Downtown Station.
- **Electronic communication** via a database of interested parties (stakeholders), which included email addresses, physical addresses, and/or telephone numbers, which was kept updated for the duration of the TDP process. This was used for notifications of meetings, events, and other reminders that were sent out for upcoming events.

5.3 2019 RTS On-Board Survey

An on-board survey of all RTS fixed-route buses was conducted by the COA consultant group in Spring 2019 to collect rider trends, travel characteristics, and identify potential future service improvements and policies. The on-board survey took place between Thursday, February 21st, 2019 and Tuesday, February 26th, 2019. To allow for enough valid survey responses that will support statistical rigor of the results (95% CL, $\pm 10\%$ MOE), yet accommodate the desired budget goal, the survey effort covered around 25 percent of RTS's scheduled fixed-route bus trips.

Unlike previous years, the travel characteristics section of the on-board surveys was split from the service evaluation portion. Riders were asked information about their particular trip by surveyors and referred to a website via QR Code to complete the service evaluation portion of the survey. This was done to maximize the amount of travel information collected by on-board surveyors. In previous years the service evaluation and trip characteristics portions of the on-board survey were combined, which often resulted in incomplete surveys, and patrons who were not interested in reporting their trip information more than once due to the length of the surveying process.

5.3.1 Survey Approach

Trained survey personnel approached all patrons on surveyed RTS bus runs; using a tablet, surveyors asked patrons information about their trip. After the survey was completed, surveyors referred patrons to the service evaluation portion of the survey. To incentivize patrons to take the service evaluation portion, surveyors informed patrons that those who provided their cell phone number at the end of the service evaluation survey were entered to win one of several gift cards. A copy of both survey instruments is included in Attachment A and Attachment B respectively.

An orientation session was conducted for surveyors prior to boarding their first bus. The orientation included instructions about their duties and responsibilities during the survey and allowed trainers to address any issues of concerns that surveyors had about the process.

At the end of the on-board survey process, the data was downloaded and manually cleaned and edited for anomalies and errors.

5.3.2 On-Board Survey Summary Results

This section documents the results of the on-board survey analysis, which is organized into two major categories:

- Travel Characteristics – questions about individual trip attributes.
- Customer Service and Opinions – questions about potential service improvements and customer service preferences.
- Demographic Characteristics – questions about who is using the system.

5.3.3 Travel Characteristics

Travel characteristics questions were designed to ask patrons about their individual trip attributes and trip behavior. Questions were asked about the following:

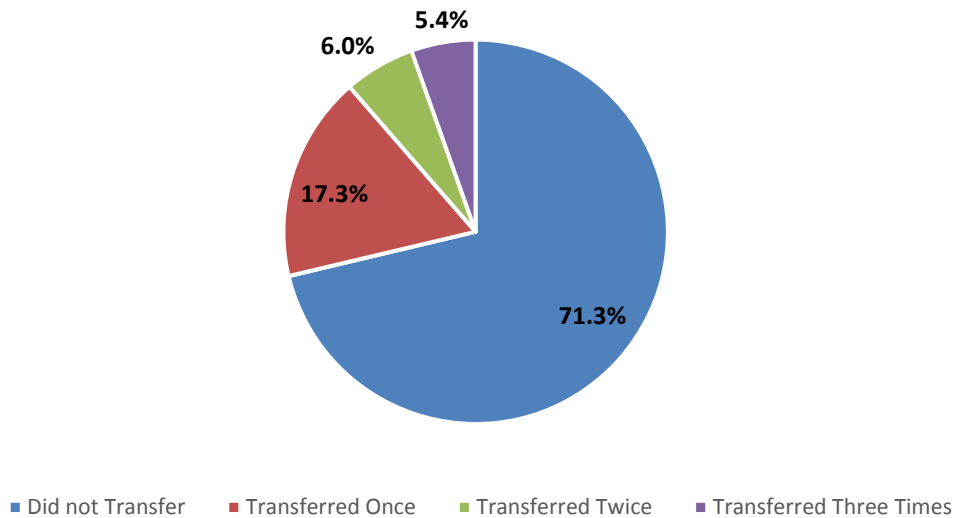
- Trip origin
- Trip destination
- Trip frequency
- Transit stop/station access and final destination egress mode
- Transfers
- Mode choice
- Fare type

5.3.3.1 Transfers

There were 2,428 total trip surveys reported in varying degrees of completeness. Of the 2,428 trip surveys, 2,326 reported route information.

Of those who reported transfer and route information, 71.3% did not transfer during their trip and 17.3% transferred only once. This seems to indicate that the existing routes and services provide enough access to patrons' final destinations that frequent transfers are not necessary.

Figure 5-1: Transfers



5.3.3.2 Usage

After gathering information regarding transfers and route usage the patrons were using, surveyors asked questions regarding how often the patron rode the bus per week (Figure 5-2) and how often the patron made that particular trip per week (Figure 5-3). Over 70% of respondents ride the bus five or more days per week and over 50% of respondents make the particular trip at the time of survey five or more times per week.

Figure 5-2: How Many Days per Week Do You Ride the Bus?

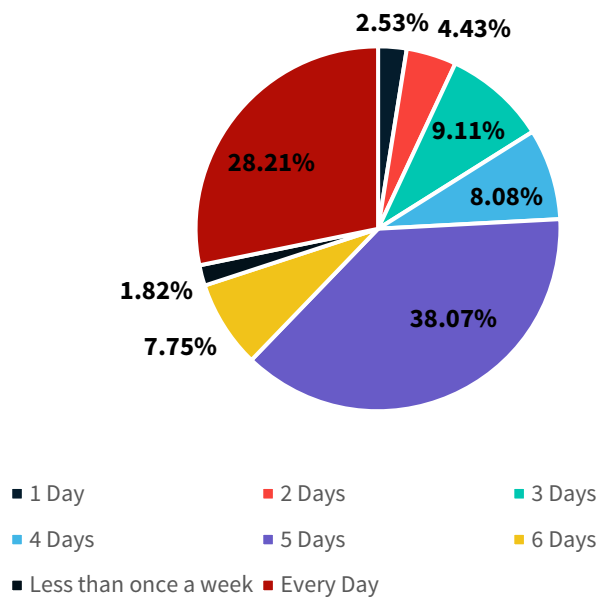
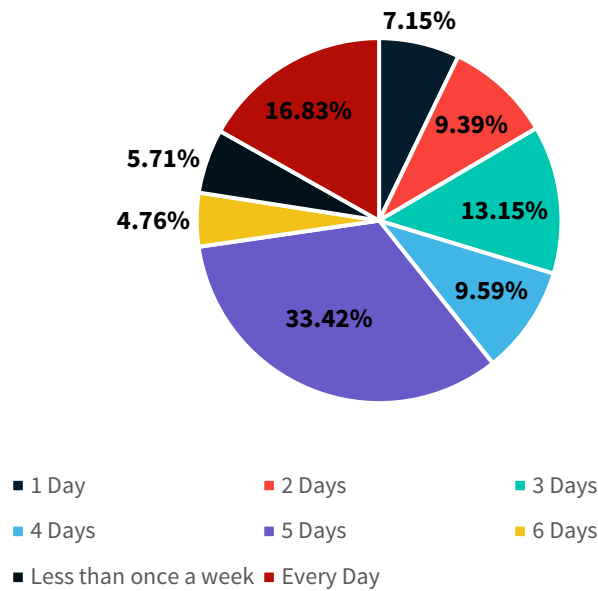


Figure 5-3: How Many Days per Week Do You Usually Make This Trip?



5.3.3.3 Travel To and From Bus Stops and Stations

Information regarding travel to and from bus stops and station is essential for ensuring an integrated, safe, and complete multimodal transportation system. About 90% of respondents walked both to the bus stop or station and walked from the bus stop or station to their destination. Meanwhile, nearly 7% of respondents arrived at the bus stop or station via RTS' park and ride lots. Around 2% of respondents used a bicycle to access the bus and to arrive at their destination once they deboarded.

Table 5-1: How did you get to the bus stop?

How did you get to the bus stop?	Count	Percentage
Walk	2138	88.97%
Bike	53	2.21%
Scooter/Skateboard	12	0.50%
Park and Ride	162	6.74%
Drop Off	38	1.58%

Table 5-2: How will you get to your final destination?

How will you get to your final destination?	Count	Percentage
Walk	2195	91.08%
Bike	50	2.07%
Scooter/Skateboard	10	0.41%
Park and Ride	88	3.65%
Drop Off	67	2.78%

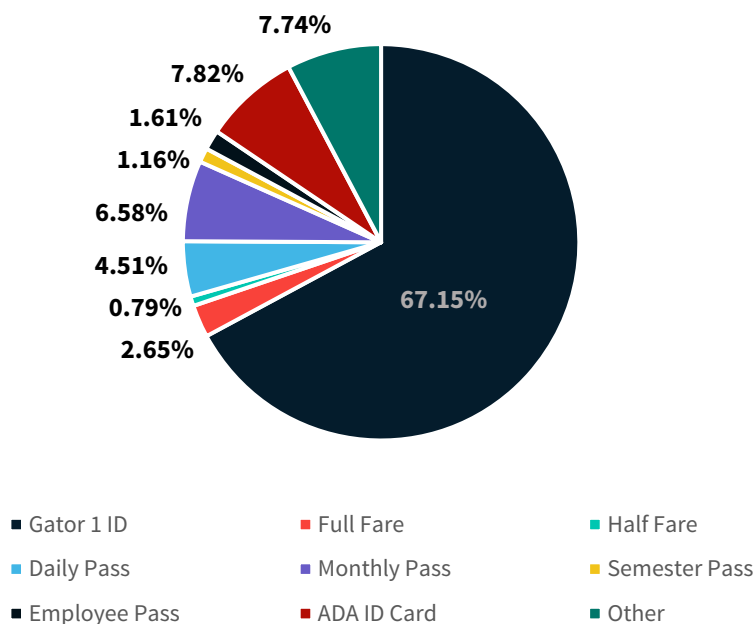
5.3.3.4 Fare Choice

Most respondents (67.15%) to the on-board survey were either students or faculty at the University of Florida and used their Gator 1 ID as their fare payment to board an RTS bus. The second most reported fare used was an ADA ID Card (7.82%).

Table 5-3: Fare Used

Fare	Count	Percentage
Gator 1 ID	1623	67.15%
Full Fare	64	2.65%
Half Fare	19	0.79%
Daily Pass	109	4.51%
Monthly Pass	159	6.58%
Semester Pass	28	1.16%
Employee Pass	39	1.61%
ADA ID Card	189	7.82%
Other	187	7.74%

Figure 5-4: Fare Used

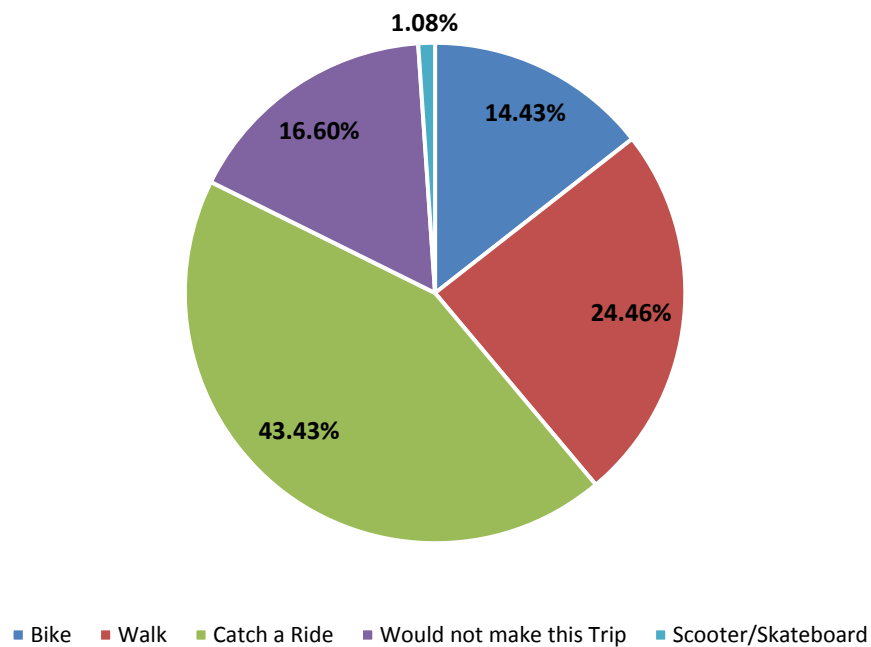


5.3.3.5 Alternative Mode Choice

Respondents were asked how they would make their current trip if the bus system was not available (Figure 5-5: Alternative Mode Choice). Most respondents (43%) indicated they would catch a ride with either a friend or via a Transportation Network Company (TNC). Nearly 25% indicated they would walk as their alternative mode, and nearly another 15% indicated they would ride a bicycle or scooter/skateboard. Over 15% of respondents stated they would not make this trip if the bus system were not available – indicating a large portion of respondents are transit dependent, whether by not

having access to an alternative mode or other constraints that would prevent them from making their trip.

Figure 5-5: Alternative Mode Choice



5.3.3.6 Travel Patterns

The most commonly reported trip was from home to school, and the second most commonly reported trip was from school to home. These results are congruous with the information obtained from the fare choice question, which revealed that nearly 70% of respondents were using a Gator 1 ID to board the bus. Outside of roundtrips between school and home, roundtrips between work and home were the second most reported type of round trip.

Generally, trips between shopping, recreation, errands and medical purposes were the least reported type.

Figure 5-6: Travel from Home

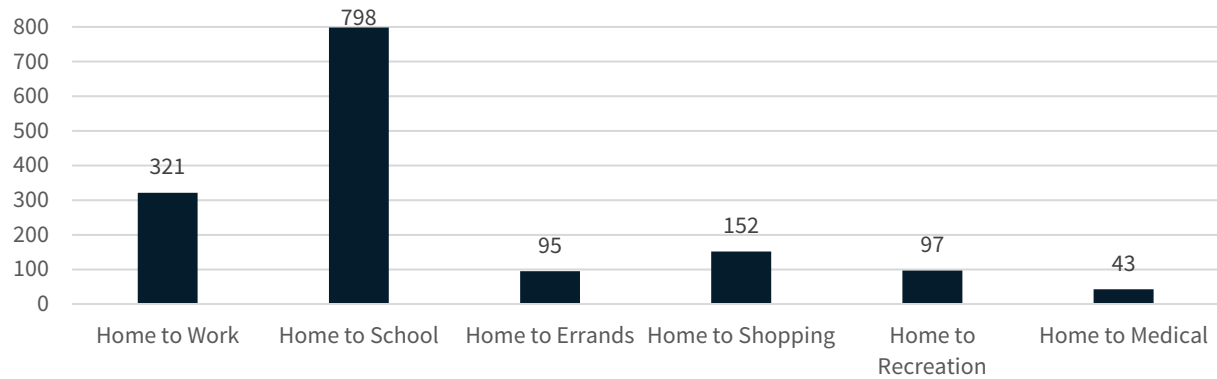


Figure 5-7: Travel from Work

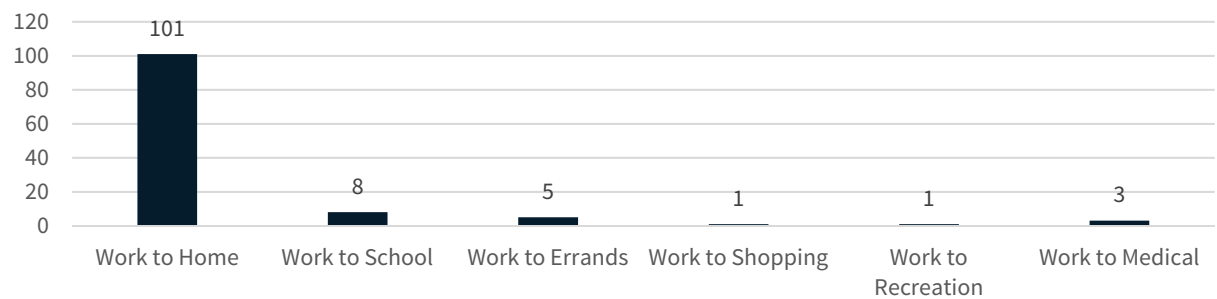


Figure 5-8: Travel from School

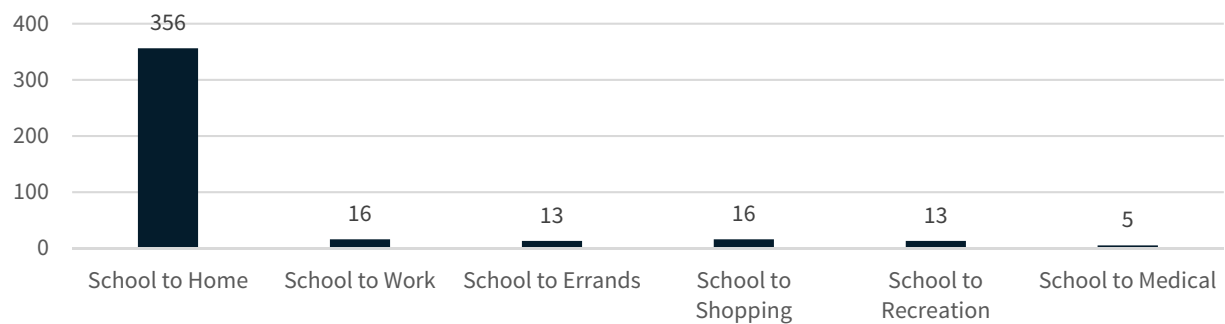


Figure 5-9: Travel from Medical

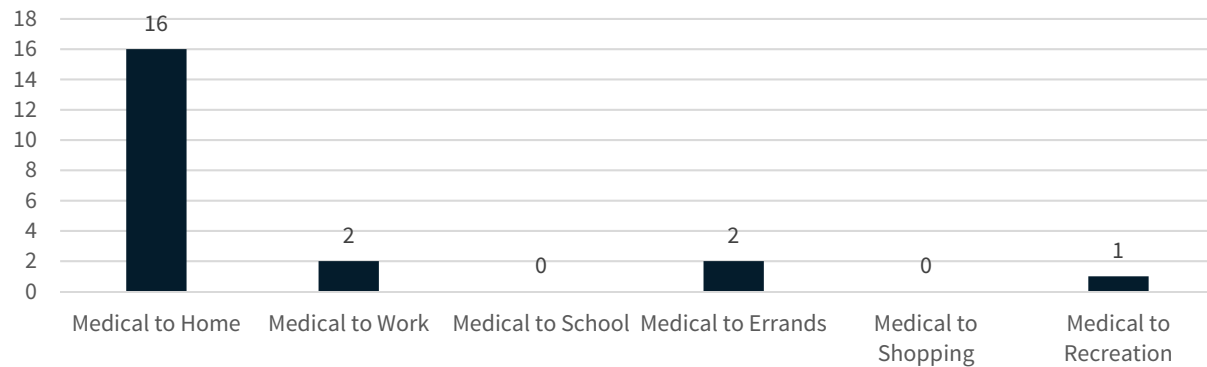


Figure 5-10: Travel from Recreation

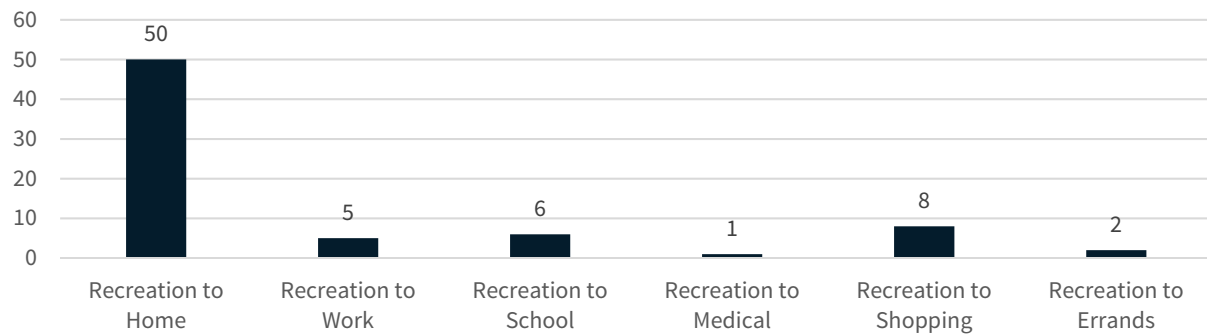


Figure 5-11: Travel from Shopping

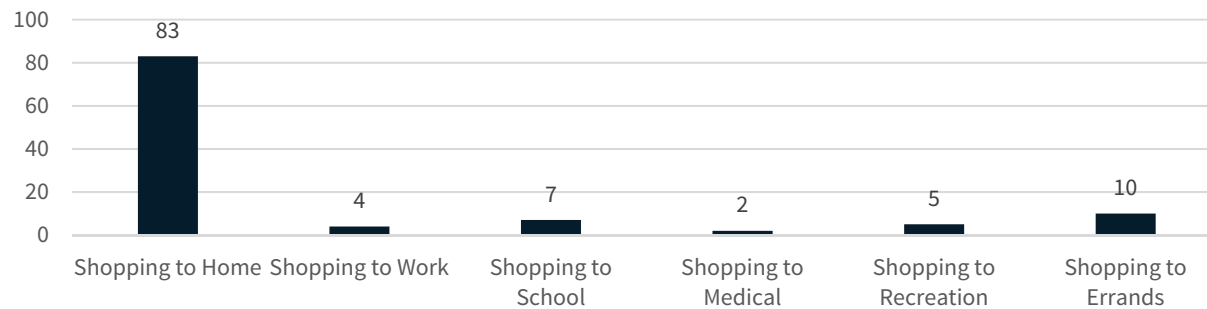
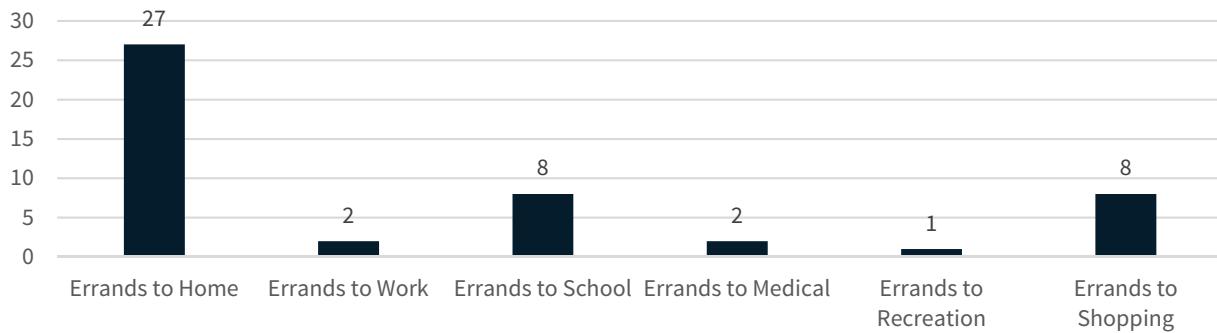


Figure 5-12: Travel from Errands



5.3.4 On-Board Survey Summary

The following conclusions can be drawn from the responses to the on-board survey:

- Most survey takers and riders are UF students whom display similar travel characteristics.
- The primary trip destinations are between work, home, and school.
- Most people access RTS' services by walking, and travel to their destination by walking once off the bus.
- Over 75% of respondents ride the bus five or more times per week and 50% make the same trip five or more times per week.
- 16% of respondents would not make their trip if RTS was not available – indicating a decent size transit dependent population.

5.4 2019 Attitudinal and Service Evaluation Survey

The service evaluation characteristics, attitudinal, and demographic questions were conducted separately from the travel characteristics portion of the on-board survey process. Patrons were referred to this portion of the survey via website and QR Code. To incentivize patrons to take the survey, a random chance at winning one of several gift cards was offered to those who provided their phone number at the end of the survey. A total of 941 people took the attitudinal and service evaluation portion of the survey, the results of which are displayed below.

5.4.1 Usage and Service Evaluation

The following section displays the usage and service evaluation portion of the online survey. Overall, the usage portion of the survey indicated most respondents are well acquainted with RTS' services – with over 50% of survey respondents indicating they have been riding RTS for over 2 years and nearly 15% having ridden the bus for longer than 5 years. In addition, around 70% of survey respondents state they ride the bus five or more days per week. The most widely cited reasons for choosing to ride RTS is the expense and difficulty of finding parking (28%) followed by riders not having a car (23%).

In addition to general usage information, riders were asked to evaluate several areas of RTS' services and performance, the results of which are shown in Figure 5-16: Please rate the following aspects of your most recent bus ride. The highest rated areas of RTS' performance for these questions, based on the total of Very Good and Good rating was the courteousness of RTS' bus drivers, how safe riders felt waiting for the bus, and the directness of RTS' routes to patron's destinations. The worst ranked areas of RTS' services by survey takers was the availability of shade at bus stops followed by the on-time performance of their bus.

Users were asked to evaluate their propensity to use premium or limited-stop bus services if they were offered – nearly 20% indicated they would use the service if it was offered, a little over 60% indicated they would maybe use the service, and around 20% stated they would not use the service.

Figure 5-13: How long have you been using RTS bus service?

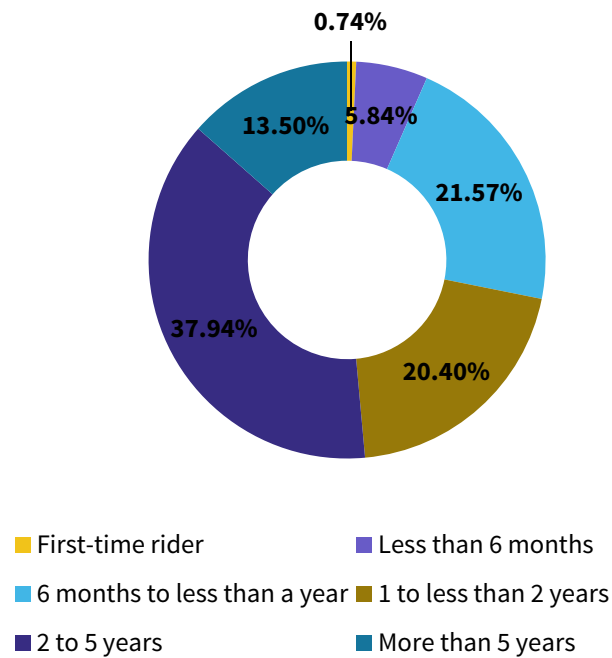


Figure 5-14: How many days per week do you ride the bus?

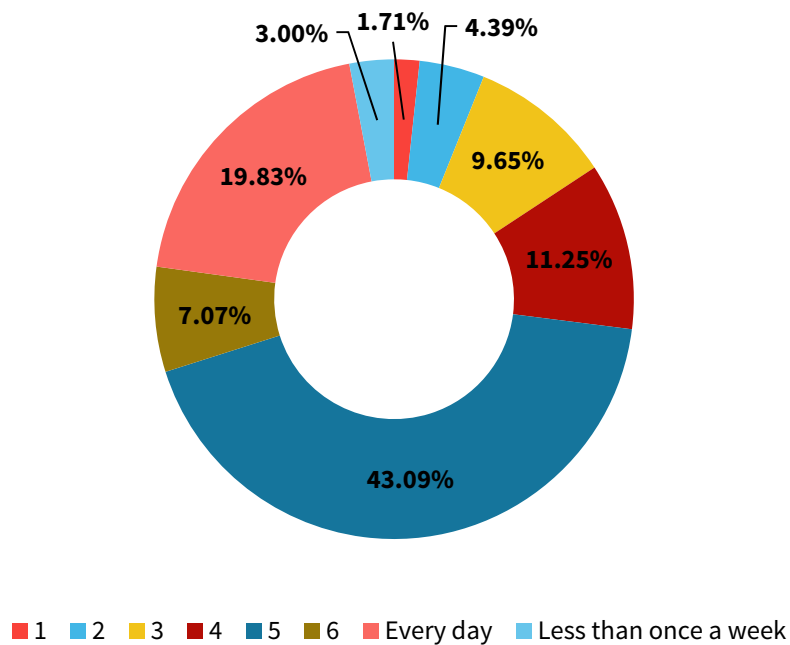


Figure 5-15: What is the most important reason you ride the bus?

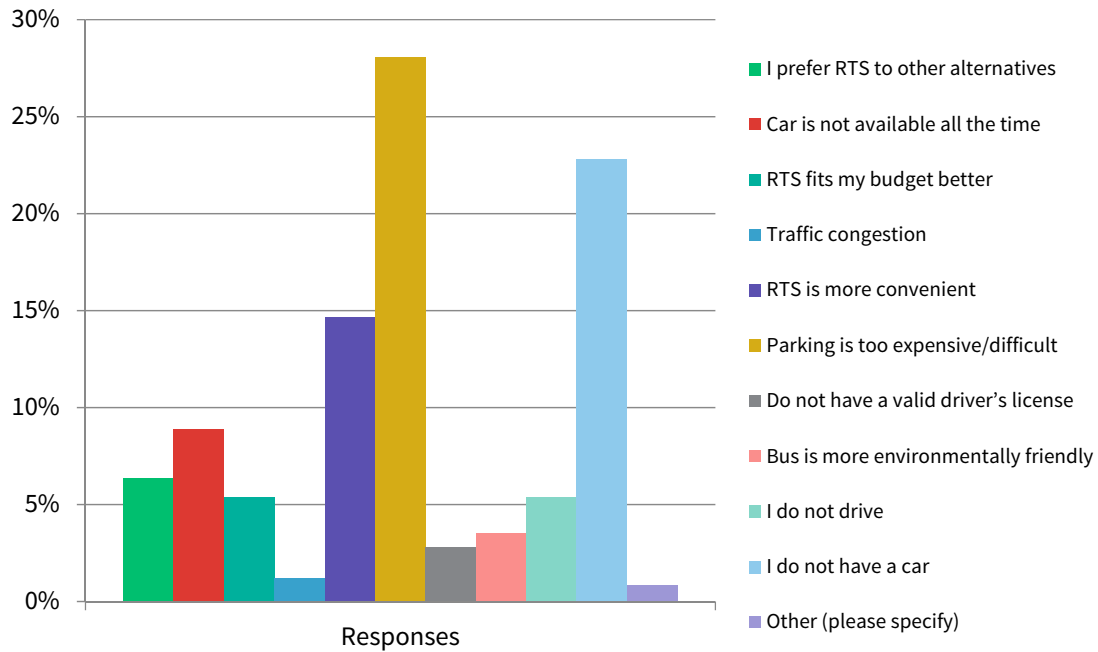


Table 5-4: Fare Used

Answer Choices	Responses	
Gator 1 ID	84.76%	695
Full Fare	1.22%	10
Half Fare	0.37%	3
Daily Pass	1.34%	11
Monthly Pass	3.29%	27
Semester Pass	0.73%	6
Employee Pass	1.46%	12
ADA ID Card	2.93%	24
Other	3.90%	32
	Answered	820

Figure 5-16: Please rate the following aspects of your most recent bus ride.

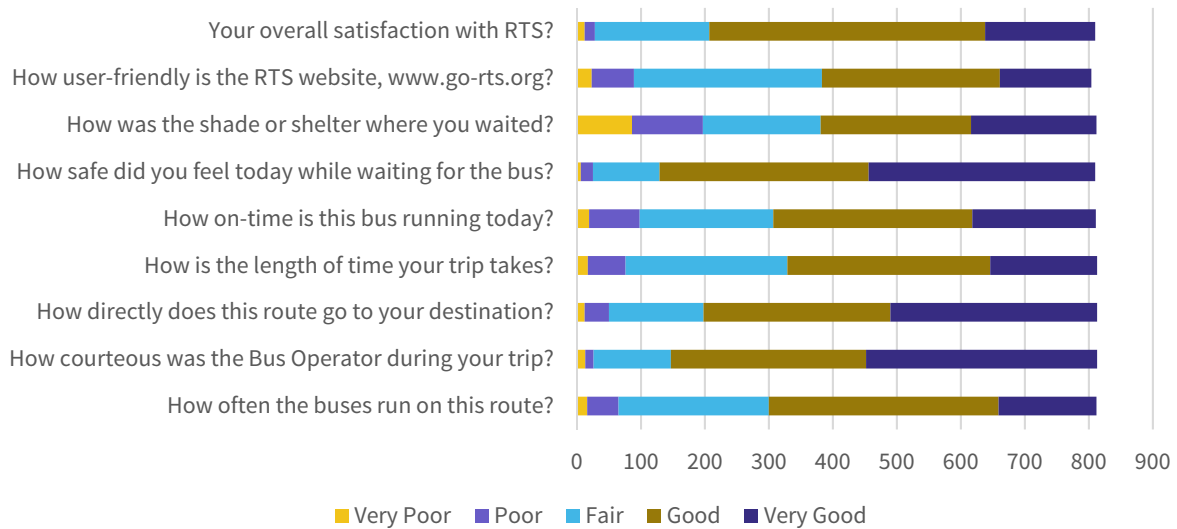


Figure 5-17: If RTS provided “premium” express or limited stop bus service, would you use that service?

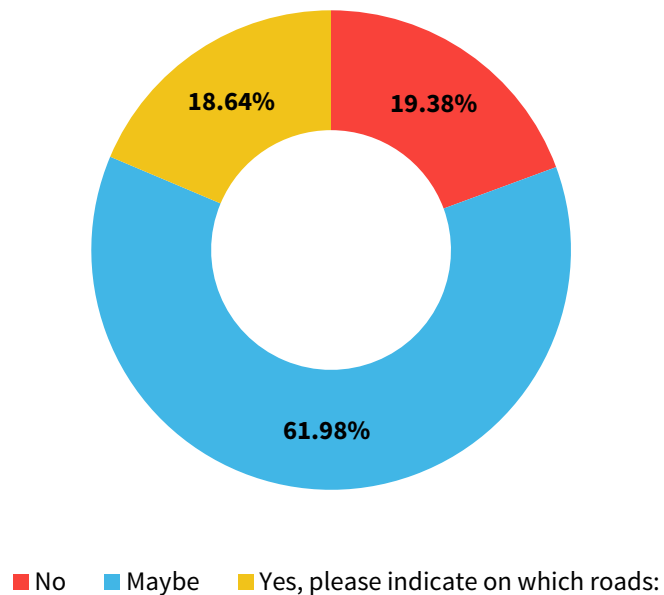
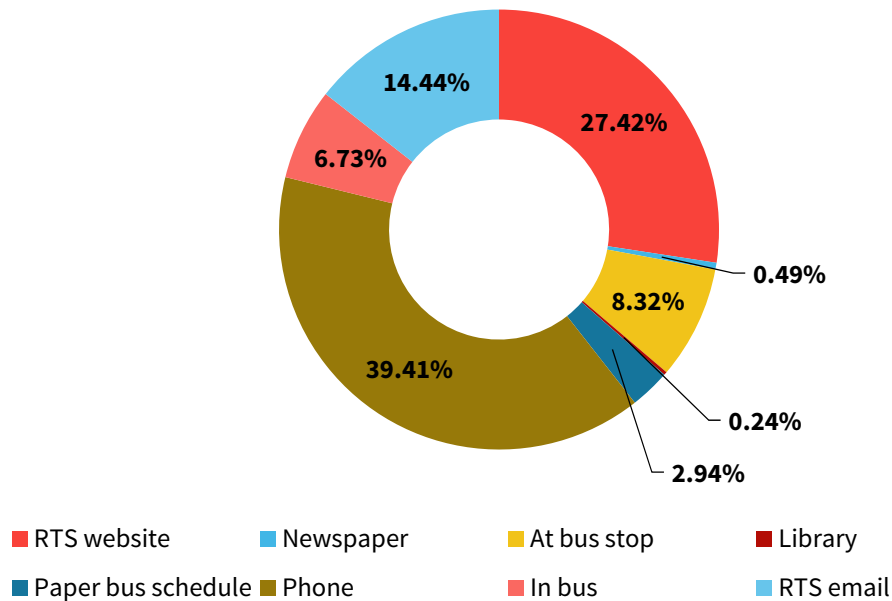


Figure 5-18: How do you prefer to receive information about RTS service, schedules and changes?



5.4.2 Demographics

The Attitudinal and Service Evaluation survey also captured demographic information of the survey takers. The majority of respondents were in the 18-24 age range and predominately identified as female. Around 55% of survey respondents stated they have an annual household income under \$30,000. Similarly, nearly 35% of survey respondents live in a zero-vehicle household and 42% live in a single-vehicle household.

Table 5-5: Your age is:

Answer Choices	Responses	
17 or under	0.37%	3
18-24	68.22%	558
25-34	18.09%	148
35-44	6.23%	51
45-54	3.91%	32
55-64	2.44%	20
65-74	0.73%	6
Over 74	0.00%	0
	Answered	818

Table 5-6: You identify as:

Answer Choices	Responses	
Male	36.56%	298
Female	62.70%	511
Other	0.74%	6

Figure 5-19: what is the range of your total household income for 2018?

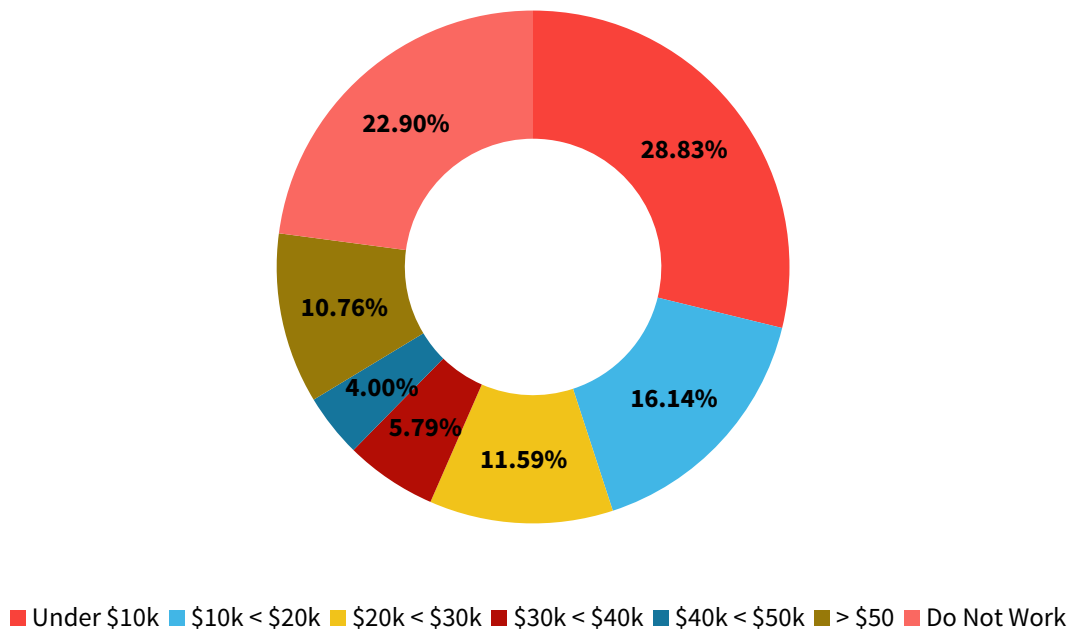


Figure 5-20: How many working cars, vans, and/or light trucks do you have in your household?

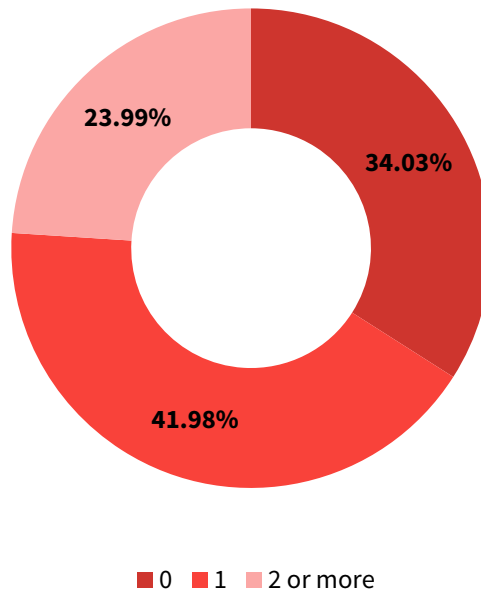
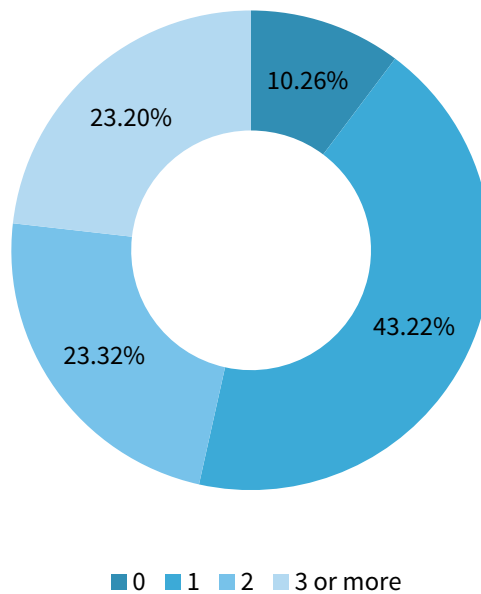


Figure 5-21: How many licensed drivers are in your household, including yourself?



5.4.3 Attitudinal and Service Evaluation Survey Summary

The following conclusions can be drawn from the responses to the attitudinal and service evaluation survey:

- A large proportion of survey takers are UF students in the 18-24 age range.
- Around 35% of respondents live in zero-vehicle households, and 55% of respondents live in a household with an annual income of \$30,000 or less.
- Survey takers primarily ride the bus to avoid the cost and difficulty of finding parking (UF students), or because they do not have access to a vehicle (transit dependent).
- Survey respondents were interested in the premium or limited-stop express service option, with 60% indicating they would maybe use the service, and nearly 20% indicating they would use the service. The most recommended roads were Archer Road and 13th Street.
- The highest rated areas of RTS' performance for these questions, based on the total of Very Good and Good rating was the courteousness of RTS' bus drivers, how safe riders felt waiting for the bus, and the directness of RTS' routes to patron's destinations.
- The worst ranked areas of RTS' services by survey takers was the availability of shade at bus stops followed by the on-time performance of their bus.

5.6 2019 Online Survey

As part of the Public Involvement Plan, an online survey of the general public was conducted to help better understand the needs and concerns of those whom especially do not currently use the RTS services, and other members of the public. Development of the online survey was closely coordinated with Department of Mobility staff to ensure that survey objectives were met. The online survey was posted on the City of Gainesville and RTS' websites and distributed via email and social media outlets as well as mailing lists available to the City. The survey was conducted from April to the end of June 2019 and had over 200 responses. The survey primarily focused on service evaluation and assessment as well as perceived mobility needs and demands. While the survey was intended to evaluate the perceptions of non-users, the majority of survey takers (65%) use the RTS system.

5.6.1 Service Evaluation

The service evaluation portion of the online survey focused on non-user perceptions of RTS' system. Of the survey respondents, 13% do not ride the buses, while nearly 65% indicated they use the RTS system. The 20% of respondents who answered "other" typically stated they previously used RTS but now either drive, walk, or bicycle or only use RTS on occasion.

The general opinion of 35% of survey takers is that RTS' services are good, while 24% of survey takers indicated RTS' services are NOT good. The 21% of survey respondents who indicated "other" generally stated service was OK but could be improved.

Respondents were more specifically asked if they felt RTS' services were effective, convenient, and easy to use – to which 38% responded yes and 33% responded no. Those who answered other stated the services could be significantly improved and offered suggestions for improvements. 85% of respondents stated RTS needs expanded services and service options and 55% stated that RTS' existing services do not cover the areas that where they regularly need to travel. 86% of survey respondents stated that RTS needs to more regularly communicate with the communities of Gainesville about mobility options.

Figure 5-22: What is your experience with the existing public transportation system (RTS) and related mobility services?

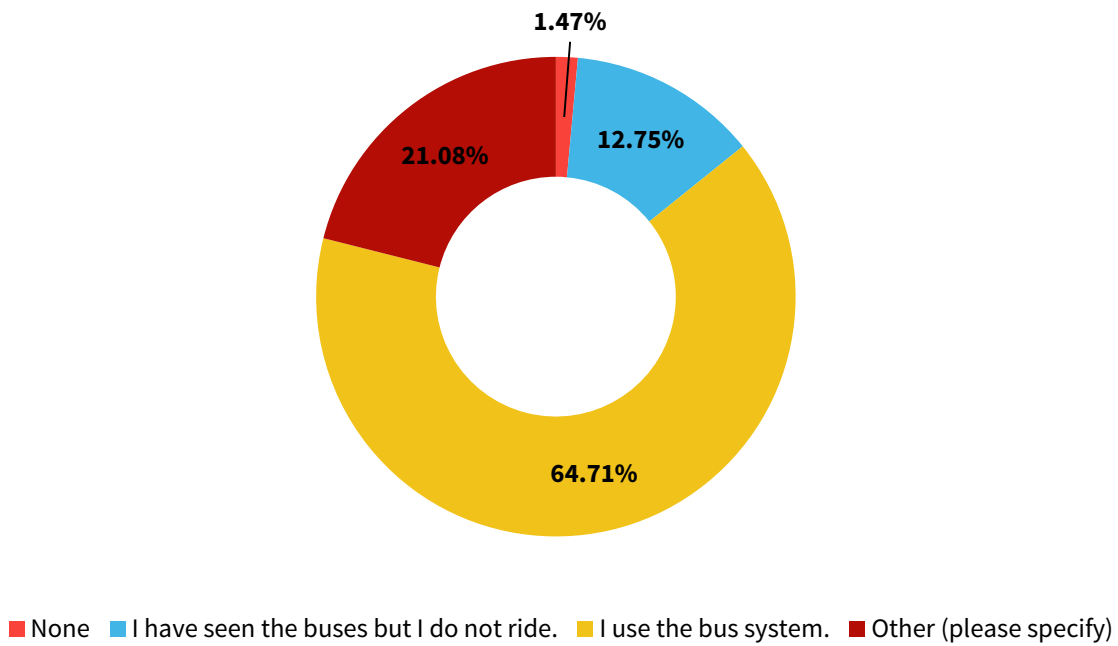


Figure 5-23: What is your opinion of existing RTS service?

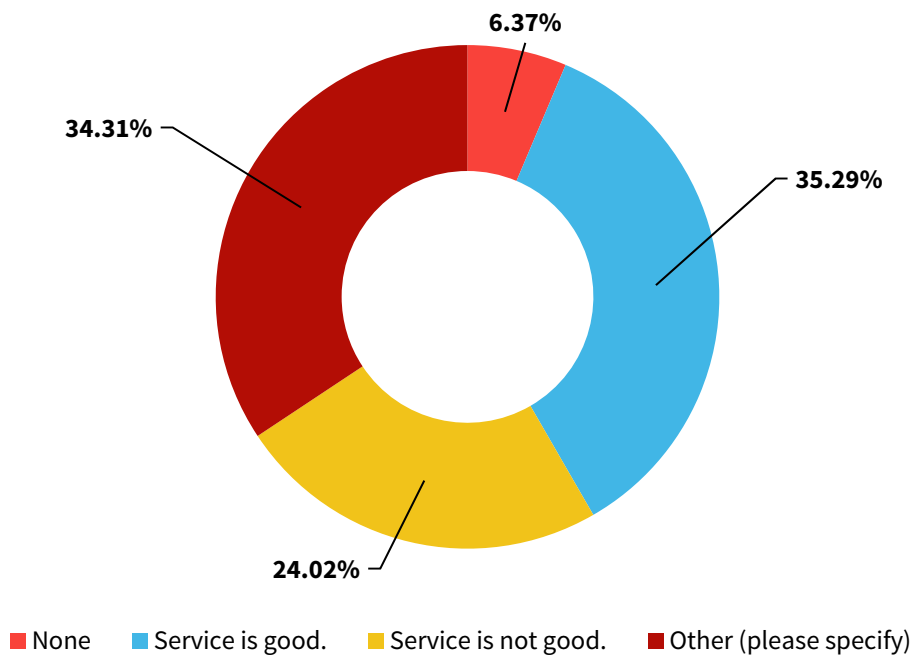


Figure 5-24: Do you think RTS is effective, convenient, easy to use?

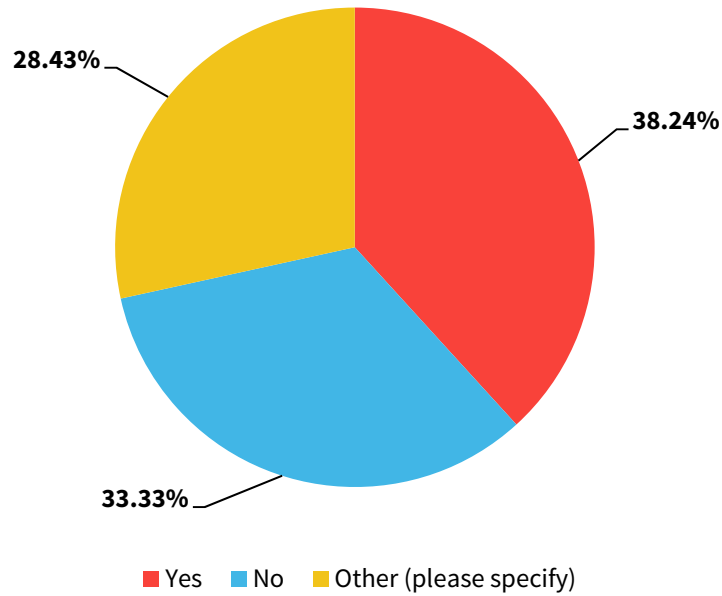


Figure 5-25: Do we need more service and/or more service options?

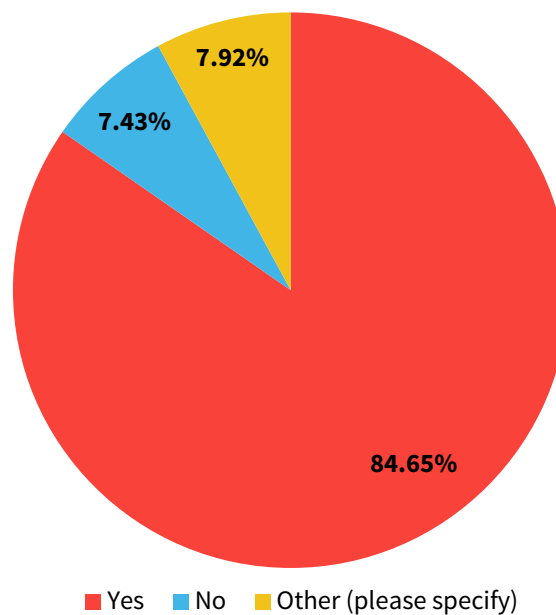


Figure 5-26: Do you feel existing services covers the areas you need to travel to regularly?

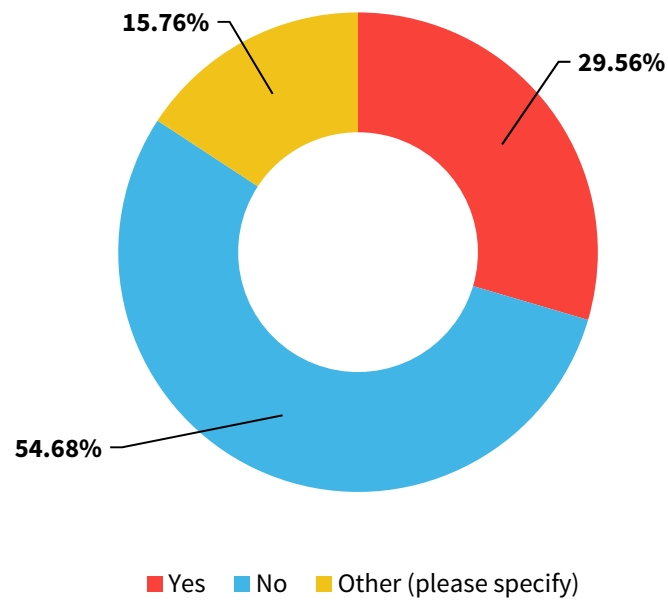
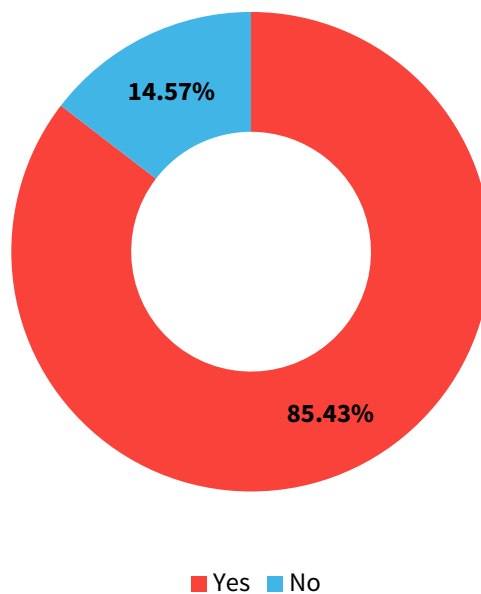


Figure 5-27: Do we need to communicate more to the community about mobility options?



5.6.2 Mobility Needs

Following questions regarding existing RTS services, survey takers were asked to assess the mobility needs and provide recommendations for future RTS improvements and expansions.

Survey results found that the majority of respondents, 72%, felt that the mobility needs of those without an automobile are not met and 94% of respondents supported expanding mobility services. Respondents were asked which services they would like to see improved, the results of which are shown in Table 5-7. The most supported service improvements were higher frequency routes, bus service to new areas, more signage and shelters at bus stops, and an enhanced bus network. Respondents supported raising revenue for these improvements through business partnerships, roadway funds, and parking fees.

Figure 5-28: Should the City invest more into expanding mobility services?

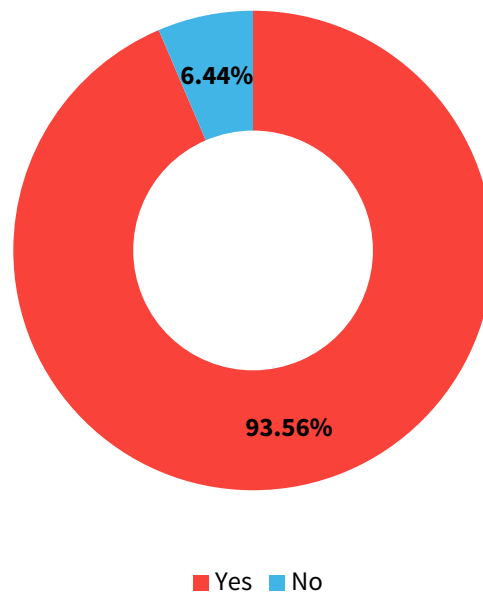


Figure 5-29: Should Mobility Enhancements be focused to benefit all, or should improvements be focused on the underserved?

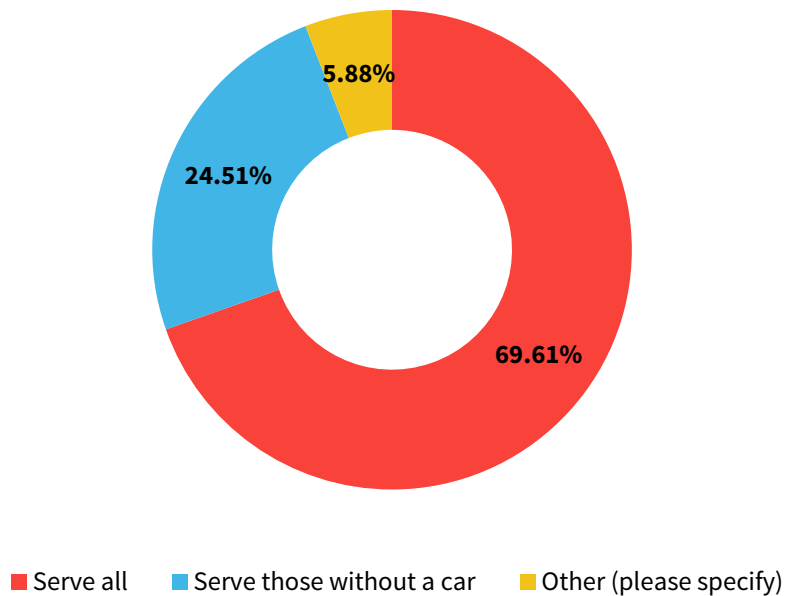


Figure 5-30: What is your perception of mobility needs for persons in Gainesville who do not have access to an automobile or choose not to drive?

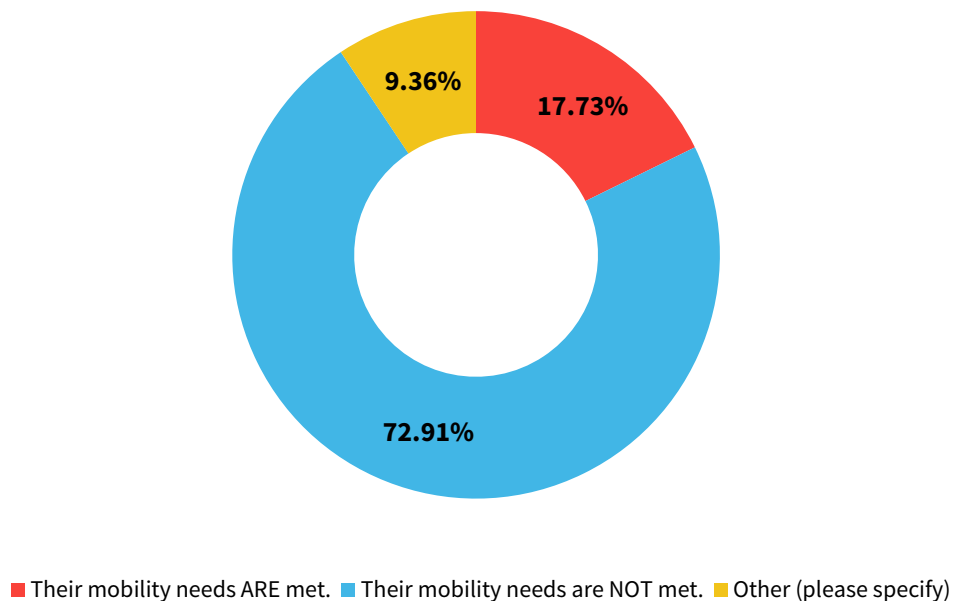


Table 5-7: What Types of mobility services would you like? (check all that apply)

Answer Options	Responses
More bus service – cover new areas	66.01%
High frequency bus service – bus comes by more often	75.37%
Enhanced bus network – buses running on main roads and complemented by neighborhood shuttles	57.14%
More infrastructure for pedestrians and bicyclists	54.19%
More shelters, better signage and service information, transfer hubs	63.05%
Mobility-on-demand services	27.59%
More scooter and bike-share service	25.62%
A combination of the above	40.39%
Other (please specify)	14.29%

Table 5-8: How should we pay for expanded mobility services? (check all that apply)

Answer Options	Responses
User fees	44.61%
Make service free	31.86%
Use parking fees	59.80%
Use roadway funds	59.31%
Increase local taxes	40.69%
Create partnerships with businesses	71.57%
Other (please specify)	10.78%

5.6.3 Online Survey Summary

The following conclusions can be drawn from the responses to the online survey:

- 35% of survey takers state that RTS' services are good, while 24% of survey takers indicated RTS' services are NOT good. The 21% of survey respondents who indicated "other" generally stated service was OK but could be improved.
- 73% of respondents felt that the mobility needs of those without an automobile are not being met.
- 55% stated that RTS' existing services do not cover the areas that where they regularly need to travel.
- 86% of survey respondents stated that RTS needs to more regularly communicate with the communities of Gainesville about mobility options.
- The most supported service improvements were higher frequency routes, bus service to new areas, more signage and shelters at bus stops, and an enhanced bus network.

- The most widely supported methods of raising revenues to support improvements is creating partnerships with businesses, followed by using roadway funds and parking fees.
 - Business partnerships could take the form of creating **subscription agreements** with a major business or group of businesses for service within an area. The goal of this approach is for the employers to both encourage a targeted number of employees to ride the service and for RTS, to fund the cost of the service up to an agreed upon dollar amount that is mutually acceptable to RTS and the participating businesses.
 - Another option could create **mobility districts** within which businesses agree to contribute funding to support enhanced mobility services. Examples of these are found in Atlanta in the form of Commercial Improvement Districts. These entities can be established formally as special taxing districts and “improvements” including transportation as the purpose for which funds are generated and programmed to be spent. These entities can also be formed voluntarily through quasi-public transportation or commercial improvements districts such as Transportation Management Associations or Transportation Management Initiatives.

5.7 Final Findings and Conclusions

Key conclusions from this research are described below and inform the recommendations for transit improvements within this TDP.

- RTS patrons are primarily students travelling between school and home, or transit dependent persons relying on RTS for access to essential destinations and services.
- Generally, patrons feel that RTS’ services could be improved – many patrons felt their mobility needs were not being met.
- A significant majority of survey respondents stated that RTS needs to more regularly communicate with the communities of Gainesville about mobility options.
- A significant majority of bus riders walk to and from their bus stop – making sidewalk access and network of major importance. The new Mobility Department has the opportunity to make large strides in integrating sidewalk network improvements with connections to bus stops.
- Specific transit service recommendations included higher frequency routes, bus service to new areas, more signage and shelters at stops, and enhanced bus network connectivity.
 - Offering better weekend service and less reductions in service during the off-school season were also major comments.
- Support for premium limited stop service was mixed – but respondents who said they would ride such a service identified Archer Road and 13th Ave as the two corridors that would be best served.

6.0 Situation Appraisal

6.1 Local and Regional Plans

A supportive component of the TDP Update is a review of recent transit policies and programs. This section reviews transit policies at the regional and local levels. Various transportation planning and programming documents are summarized, with an emphasis on projects and issues that may have implications for public transportation in Alachua County.

The following local and regional plans were reviewed to understand current transit policies and plans with potential implications for RTS' services, and to help the TDP become a plan that will guide local transportation decision-making:

- Florida Transportation Plan: Horizon 2060 (FTP)
- 2040 Long Range Transportation Plan
- SR 26 / University Avenue Multimodal Emphasis Corridor Study
- Go Enhance RTS Study
- City of Gainesville Streetcar Feasibility Study
- University of Florida Partnerships and Programs
- Alachua County Mobility Plan
- Self-Driving Vehicle Research and Testing
- Incorporating Safety into Transportation Planning
- Pedestrian Safety Assessment in Proximity to Transit Stops and Facilities
- Multimodal Level of Service Report (2017)
- Santa Fe State College Downtown Campus (2019)
- University of Florida Transportation & Parking Strategic Plan

6.1.1 Florida Transportation Plan: Horizon 2060

The Florida Transportation Plan (FTP): Horizon 2060 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 needs today and in the future. The plan looks at a 50-year transportation planning horizon and calls for fundamental change in how and where State investments in transportation are made – with a major goal of making Florida's economy more competitive and communities more livable.

6.1.2 2040 Long Range Transportation Plan

The Gainesville Urbanized Area MTPo adopted their *2040 Long Range Transportation Plan* (LRTP) on October 5, 2015. The MTPo has completed a Request for Qualifications (RFQ) for the 2045 LRTP Update and work by a consultant is underway.

Like most LRTPs, the plan strives to create a balanced multi-modal network, including a Needs Plan which identified a proper balance of all modes and mobility options, while considering future challenges and trends. Initially, the LRTP was developed with two alternatives, a New Corridors emphasis alternative, and the Existing Corridors emphasis alternative. Based on these two

alternatives, Alternative 3, a Hybrid Needs Network was developed which blended the best elements from the first two alternatives. This Alternative was intended to serve as the basis for evaluation and selection of the final Year 2040 Needs Plan.

The 2040 Needs Plan developed from Alternative 3 identified a range of transit projects. Needs included increasing weekday and weekend frequencies and operating hours on City routes, providing intercity transit services to/from the various municipalities and jurisdictions within Alachua County but outside the City of Gainesville, the construction of a Transit Center at Santa Fe College, and various Park and Ride facilities scattered around the county. Various other Intelligent Transportation Systems (ITS) projects were identified, which align with recommendations from the Go Enhance RTS Study.

6.1.3 SR 26 / University Avenue Multimodal Emphasis Corridor Study

The MTPO's SR 26 / University Avenue Multimodal Emphasis Corridor Study, adopted in 2014, identified a list of viable transportation projects that would benefit the multimodal operations and safety of University Avenue between Gale Lemerand Drive and Waldo Road. Nine projects were selected to move forward, with additional planning-level cost estimates for projects and refinements provided.

Enhancements include raised medians, enhanced pedestrian crossings, and striping. In addition to these projects, corridor-wide enhancements to transit shelters and benches were identified. Several stops with space constraints were identified, but shelters could be added if bus bulb-outs were constructed or the curb extended into the gore area of the roadway. Generally, these improvements would provide enhanced comfort and security for transit riders, and further encourage the use of transit along University Avenue. Two new signals are under design as part of this process: one at the intersection of West University Avenue and NW 16th Street and another at the intersection of West University Avenue and NW 19th Street.

The recommendations of this study support and enhance RTS' services and amenities, providing enhanced pedestrian and bicycle connectivity and safety to, from, and around RTS' stops along SR 26.

6.1.4 Go Enhance RTS Study

The 2014 *Go Enhance RTS Study* is a re-examination of the *RTS 2010 Rapid Transit Feasibility Study* and aimed to determine whether a premium transit improvement should be pursued in a designated east-west corridor serving the City of Gainesville and Alachua County. The study examined no-build, build, and transportation systems management (TSM) alternatives with two routing alternatives.

A draft locally preferred alternative (LPA) was developed which recommended a TSM strategy with limited stop service traversing from the Oaks Mall along SW 62nd Blvd to SW 20th Ave to Archer Rd past the UF campus, through downtown and NE along Waldo Rd to the Airport. This alternative was shown to have higher ridership growth compared to investments made than the exclusive bus lanes, articulated vehicles, enhanced station, and off-board fare collection assumed with the build alternative. The recommended alternative calls for a premium limited stop service with queue jump lanes and transit signal priority (TSP) enhancements along the recommended alignment. The

proposed implementation would be rolled out in two phases, ultimately operating at 10-minute headways at the peak hour on weekdays with an 18 hours service span.

Reevaluation of the feasibility of New Starts/Small Starts major capital investment strategy with Bus Rapid Transit (BRT) as the preferred premium transit mode was recommended to be completed in 2025 to assess whether BRT is a viable option for federal funding. A more detailed corridor level reevaluation of this study, with requisite considerations for TSP and queue jump lanes as well as impacts of elimination of on-street parking along critical sections of the corridor is recommended. RTS may consider advancing a Transit Concepts and Alternatives Review (TCAR) study to obtain an appropriate level of analysis be completed to assess viable alternatives.

6.1.5 City of Gainesville Streetcar Feasibility Study

The Streetcar Feasibility Study examined the potential of a fixed guideway streetcar system within the urban core of Gainesville. The study included project conceptualization, preliminary right-of-way screening, economic development assessment, ridership estimation, vehicle technology assessment, proposed operating plan, cost estimates, and a funding and financing analysis. While the study did not make a specific recommendation as to whether a streetcar system should be pursued, it did recommend an alignment from Rosa Parks station north along SE 3rd Street, and westbound along SW 2nd Avenue before crossing over SW 13th Street to Union Road and ending at the intersection of Newell Drive and McCarthy Drive on the UF campus.

The study ultimately recommends potential next steps that should be conducted if a community decision is made to move forward on the implementation of the streetcar, which includes further public outreach efforts, land use and economic development analysis, ridership analysis, and a deeper dive into the engineering details of the project, among others.

6.1.6 University of Florida Partnerships and Programs

As a strong activity generator, UF has partnerships with multiple transportation providers to serve its users. UF and RTS developed a partnership in 1998 through a transportation fee approved by the State Legislature that allows students unlimited prepaid access to RTS services through a fee included in every student's tuition. As of the 2018-2019 academic year, students pay \$9.44 per credit hour for unlimited access to RTS services. The UF transportation fee has been steadily increasing year-over-year – increasing nearly \$3 per credit hour since the 2009-2010 academic year when it was \$6.79.

Uber and UF have partnered to provide services through the UF Safe Rides program. This program is aimed at offering students safe, affordable, reliable rides around town, especially for late night service within a designated zone. The designated zone encompasses the university's main campus, downtown, and midtown areas, with a few blocks of buffer in each direction. Discounted rides are offered Wednesday through Saturday from 9PM to 3AM. Funded by student Transportation Access Fees, the promotion has been incredibly popular to the point where a reduction in discount has been necessary to maintain fiscal responsibility.

Bike programs like Gator Gears and Departmental Bike Share encourage alternative modes of transportation for students and faculty. The Gator Gears program is offered only to students and

charges a modest fee by semester, two semesters, or annual rental. The rental includes any cost of maintenance and comes with a helmet. The Departmental Bike Share Program refurbishes abandoned bicycles from the campus and offers them to university departments to share.

In addition, services like Zip Car (car share rental), Zimride/Carpool Program, UF Campus Cab (point-to-point advance scheduled transportation), and Student Nighttime Auxiliary Patrol (late night on-demand point-to-point student transportation) are offered at UF.

6.1.7 Alachua County Mobility Plan

Alachua County Commission had adopted amendments to its Comprehensive Plan which aim to reduce vehicle miles travelled (VMT), reduce the use of single-occupant automobile use, decrease greenhouse gas emissions, and increase mode share for bicycling, walking, and transit. The Comprehensive Plan amendments achieve this through providing enhanced transportation mobility options in coordination with land use changes that bring services and jobs closer to residents, and incentivizing development densities and intensities that are transit supportive.

Features of this plan include an alternative concurrency management system which enables developments to satisfy their transportation mitigation obligations through multimodal transportation contributions, incentives for transit-oriented developments (TOD) and traditional neighborhood design (TND), and a financially feasible multimodal infrastructure plan to meet the needs of future growth and transportation demand within the Urban Cluster Boundary (UCB).

The goals and objectives of this plan and other recommendations would directly support RTS' service through providing increased transit-supportive densities and controlling sprawl. RTS is in the position to support Alachua County's Mobility Plan through providing alternatives to single occupancy vehicle use and reducing VMT's and GHG emissions through high-capacity transit services. In addition, providing high-quality infrastructure surrounding stops and stations such as enhanced crosswalks and bicycle racks can further increase the mode share for bicycling, walking, and transit.

6.1.8 Self-Driving Vehicle Research and Testing

In 2017, the City of Gainesville announced it has teamed up with UF and FDOT to research, develop, and test autonomous, connected vehicles and human-operated vehicles synced to traffic signals on campus and city streets. This is the first program in the state to involve cooperation between a city, university, and FDOT – and could eventually lead to “connected” RTS busses and/or campus shuttles. The funding comes from a US DOT grant that will provide up to \$2.75 million per year over a five-year span towards researching and testing these transportation options – with FDOT “cost-sharing” up to \$1.5 million per year. In addition, the city is identifying corridors on which to test connected and autonomous vehicles such as 34th Street. Given the City's relatively slow traffic speeds and high volume of pedestrians, bicyclists, and a heavily used transit system – it has been identified as an ideal place for testing such technologies.

6.1.9 Incorporating Safety into Transportation Planning

The MPTO, in coordination with the North Central Florida Regional Planning Council, and with funding support from FTA, USDOT, and FHWA, developed the Incorporating Safety into

Transportation Planning Technical Memorandum in December of 2013. The report primarily aims to strengthen the foundation for identifying and solving safety issues in the MPTO LRTP. This is accomplished through analysis of motor vehicle crashes on the roadway network and the identification and evaluation of various strategies and countermeasures to improve safety through a data driven approach supported by performance measures and metrics.

Ultimately, the report recommended the following steps for formalizing safety in the planning process:

8. Include safety experts on planning committees
9. Incorporate safety into goals and objectives
10. Identify safety issues
11. Establish safety performance measures
12. Collect and analyze safety data
13. Utilize safety as a decision factor
14. Monitor and evaluate the effectiveness of safety programs and projects

While the report covers safety generally, it does not specifically address the safety of transit users, how to evaluate transit safety, or specific measures for enhancing the safety of these users. A follow up report, addressed in the next section, addresses pedestrian safety in proximity to transit stops and facilities.

6.1.10 Pedestrian Safety Assessment in Proximity to Transit Stops and Facilities

The MPTO, in coordination with the North Central Florida Regional Planning Council, and with funding support from FTA, USDOT, and FHWA developed the Pedestrian Safety Assessment in Proximity to Transit Stops and Facilities Report in September of 2015. Of the State Highway Safety Plan, this report focuses on emphasis area 3. Vulnerable Road users and 8. Traffic Data. The report provides an analysis of pedestrian crashes near transit stops but found that pedestrian crashes do not appear to occur more frequently near transit stops. Most pedestrian crashes occur on some of the most heavily travelled roadway segments in the City. The following three reasons were identified as reasons for pedestrian crashes at transit stops:

4. Bus passenger walked in front of stopped bus and was hit.
5. Pedestrian exits bus at bus stop and after bus has departed, runs across road and was hit.
6. Bus pulling up to bus stop hits pedestrian with bus door.

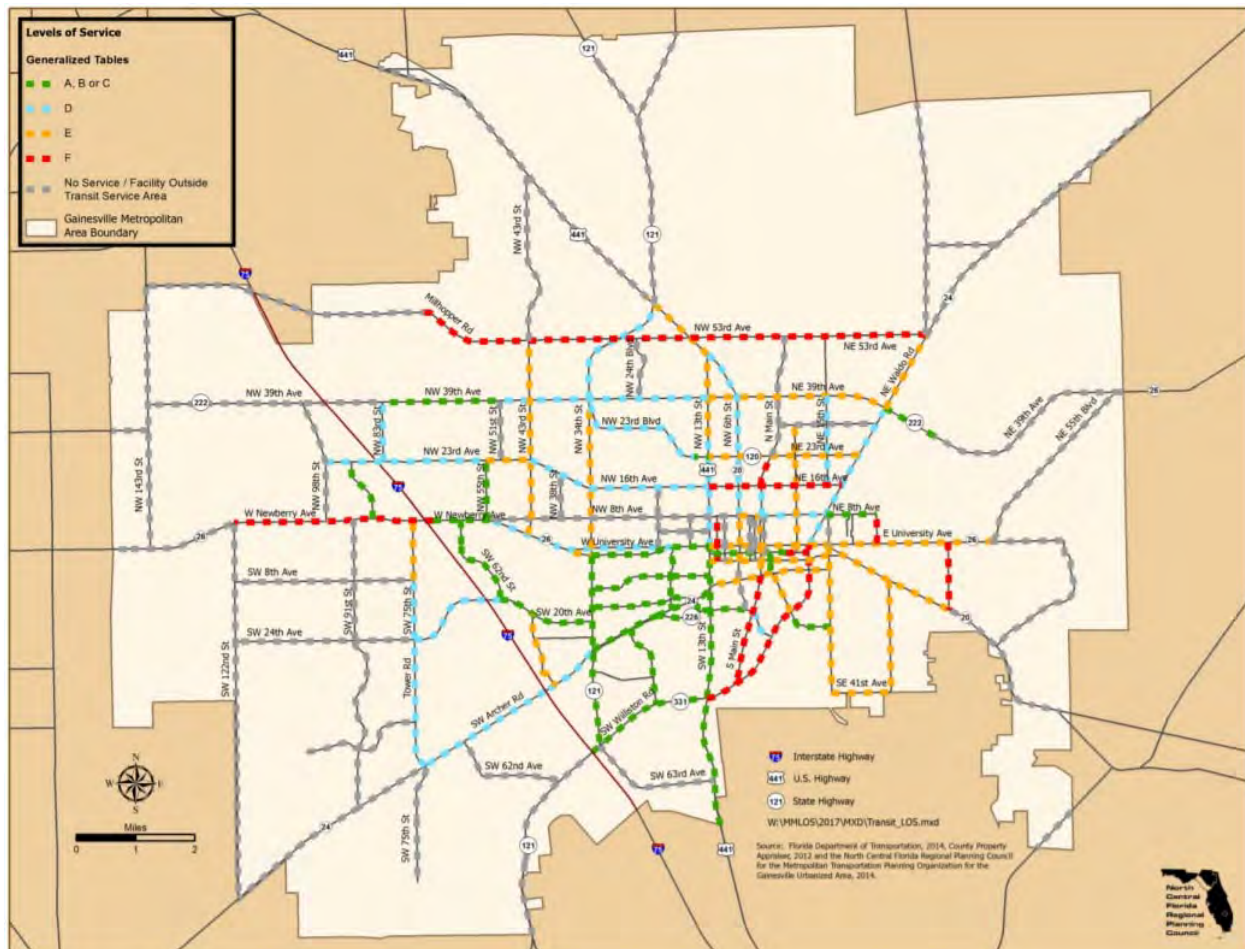
Pedestrian Roadway Safety Audits were being conducted for roadway segments with high volumes of pedestrian activity and crashes at the time of the report, and transit stops were included in this process. The report ultimately recommended these safety audits continue in area with high pedestrian activity and crashes to continue to address safety needs and concerns as they arise.

6.1.11 Multimodal Level of Service Report (2017)

The 2017 Multimodal Level of Service Report employed a two-tiered level of service roadway facility analyses. Tier One analyses utilized the FDOT Generalized Tables. Tier Two analysis was required for all “distressed” arterials – where current traffic uses 85% or more of the maximum service volume for

the adopted level of service for that roadway. Bicycle, pedestrian, and transit levels of service analyses also employ a two-tiered approach – which uses FDOT’s LOSPLAN software. Map 2-1 illustrates 2017 transit level of service.

Map 6-1: Transit Level of Service (2017)



6.1.12 Santa Fe State College Downtown Campus (2019)

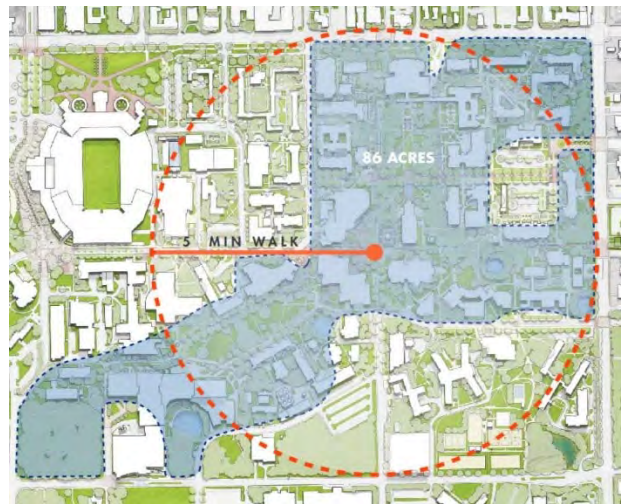
Santa Fe State College has plans to combine and consolidate certain functions and programs at the downtown campus. The downtown campus also serves as a place for training and support for low income, at-risk, and other community programs. Mobility services to facilitate access to the downtown campus from suburban campuses and participating schools and community organizations will be required.

Since 2011, Santa Fe State College charges its students (from all campuses) a three dollar per credit hour transportation access fee. This is used to fund free bus service for all Santa Fe students on RTS when a student shows a student ID.

6.1.13 University of Florida Transportation & Parking Strategic Plan

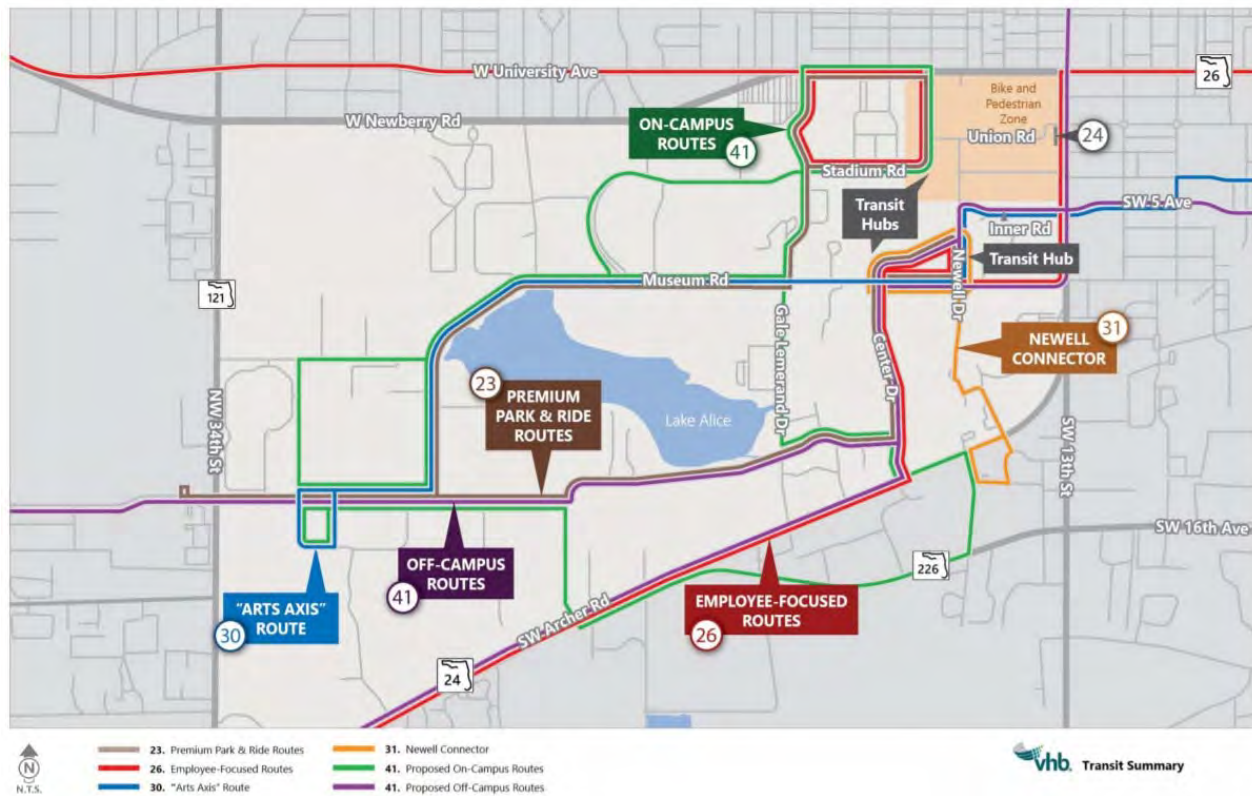
The Transportation and Parking Strategic Plan was finalized in 2018, providing context and visioning for development of the University's transportation network and infrastructure for the next 10 or more years. The report's recommendations are meant to improve the safety and efficiency of the current transportation system; position the university for future transportation and parking needs; and strengthen community partnerships. Creating a Bicycle and Pedestrian Zone (BPZ) in the core campus area, employing parking management strategies, identifying facility improvements for alternative modes of transportation, and curbing scooter use are some recommendation to improve safety and efficiency.

Map 6-2: Proposed Bicycle and Pedestrian Zone



The BPZ is recommended to restrict all vehicular access to Union Road and Newell Drive north of Inner Road, with limited access along Buckman Drive. Existing vehicular traffic, transit routes, and service vehicles that rely on Newell Drive to serve the campus core would be redirected around the new BPZ. In order to strengthen to community partnerships, the Plan suggests greater collaboration with Gainesville RTS to improve transit efficiency. In addition, multiple campus routes, and some off-campus connector routes are proposed in the Plan's recommendations to enhance connectivity. See Map 2-3.

Map 6-3 : UF Transportation Strategic Plan – Proposed Transit Routes



Implications

Based on the review of the above plans and studies, the overriding emphasis common to all of these include:

- improved investment in transit and alternative mobility services and infrastructure;
- providing real choice in travel alternatives to the automobile;
- improving safety for pedestrians and bicyclists;
- augmenting access to mobility to better connect persons to access to opportunities; and
- developing land use and design guidelines to transition to more walkable communities.

These major plan, policy, and infrastructure projects and programs, when implemented, will directly impact route alignments in the short term, and will likely increase transit demand in the long term.

6.2 Socioeconomic Trends

The analysis of population, employment, and other socioeconomic and demographic indicators for the RTS service area provides a variety of insights for use in developing the current transit plan. It is important to recognize the key market and trends of not only the City of Gainesville but Alachua County as a whole. Understanding the unique needs of the neighborhoods and communities, as well as the full rural-to-urban transect will be essential for ensuring equitable and useful services for all of Alachua County and Gainesville's population.

Census data show the highest densities per acre concentrated in and around the UF area of Gainesville, with pockets of high densities spread around the University and some west of I 75 between Archer Rd and Newberry Road. The areas of highest population and dwelling unit per acre growth over the next 10 years are spread across Gainesville, with most being on key corridors, University Avenue between NW 13th Street and Main Street and growth downtown along NW 6th St. Areas of growing population densities and higher development intensities will both support and create demand for higher frequency premium transit services. Employment along various portions of NW 23rd Avenue and within the UF campus are projected to increase to levels that require high transit investment.

The age distribution of Gainesville, compared to the state-wide averages, skews heavily towards college-aged populations, where nearly 25% of the City's population are aged 20-24. These populations are primarily concentrated in the City itself, close to campus. In contrast, the population in the below 17 category and above 65 are heavily concentrated in the outskirts of the City. The concentration of persons above age 65 in the outskirts of the City will have significant implications on mobility demand and increase challenges for the provision of ADA paratransit services.

The City of Gainesville will continue to see population and employment growth mostly within and near the University, downtown, and key corridors like Archer Road and NW 23rd Avenue.

Household income in the City of Gainesville skews heavily below poverty line, with nearly 20% of households earning under \$10,000 annually (compared to only ~7% state-wide). The lower income brackets in Gainesville are significantly above the state-wide averages for the same income ranges. The low-income households are spread across the City, with heavy concentrations east of SW 3rd St and south of Newberry Rd. As a traditionally transit-dependent population, ensuring accessible and frequent transit service in these areas is essential for supporting the spatial and economic mobility of these groups. The incidents of zero-vehicle households statistically overlap with areas of low-income households. A 2018 Bureau of Economic and Business Research (BEBR) report on *Understanding Racial Inequity in Alachua County* provides further insight into the transit needs and transportation burdens of Alachua's most vulnerable residents. The report recommends improving multi-modal transportation corridors and incentivizing public transportation and/or ride sharing programs to better link job and activity centers to households and neighborhoods with low vehicle ownership rates, low transit ridership rates, and/or households with high transportation costs as a percentage of total household income.

Implications

The high proportion of student and low-income population presents unique opportunities to provide efficient transit services that connect residents to education and employment destinations. Existing high levels of transit service generally overlap areas of transit-oriented populations and areas meeting high dwelling unit and employment thresholds, except for the east side of Gainesville, where some areas have a high percentage of zero-vehicle households. Finally, the ability to access jobs from low-income areas and areas with a high concentration of zero-vehicle households such as East Gainesville will continue to be critical in ensuring opportunities for the community as whole. Transit level of service and coverage in East Gainesville should be increased to offer improved access to mobility and a more equitable distribution of service in low income and minority areas.

Development occurring in the outskirts of the core Gainesville area will increase demand for transit but will cause challenges in providing efficient and effective transit services – particularly in areas where the roadway network and low density development are not conducive to traditional fixed route services. The increase in the population aged over 64 in these areas also portends the increased demand for high cost paratransit services. Developing a strategy to serve lower density and difficult to access areas with efficient, convenient, and cost-effective mobility services is an important community need.

6.3 Land Use

To better assess the impact of local land use conditions and policies on public transportation needs, it is important to identify the current and future areas of the county that may benefit the most from the provision of public transportation services. Currently, the University of Florida and Downtown sit in the center of the town's activity. Major commercial areas and corridors include the Butler Plaza, the Oakwood Mall area, Newberry Road, 13th Street, and Archer Road.

Future development will create new demands for transportation, including for transit. There are over 100 development projects currently listed by the City of Gainesville Planning and Development Services Department, ranging in status from under-review to complete. The types of development range from small-scale lighting upgrades and single-family housing projects, to hospitals and other major developments. Since the completion of the prior TDP, multiple major developments have broken ground. Mixed-use projects like Butler Town Center and Celebration Pointe are nearing completion and have opened dozens of opportunities for additional retail, commercial, shopping, and recreation uses. These developments included major anchor stores which are typically strong activity and trip generators.

Currently in development are two additional mixed-use projects, Markets West located off Tower Road and North Florida Regional Medical near West Newberry Road. North Florida Regional Medical is approved to create medical and residential uses. Markets West is

Many areas of the City are experiencing increased density, including mixed use development. Mixed use development provides opportunities to replace single occupancy vehicle trips with other modes such as walking due to the proximity of services and improved walkability.

approved for a total of 15,000 sq. ft. of mostly commercial and medical uses.

Multi-family residential developments continue to rise in the vicinity of the University of Florida campus and downtown. Several multi-story mixed use residential projects have been approved or constructed since the prior TDP, including units like The Standard, Hub on Campus, and Hub 2. In addition to these multi-family mixed-use projects under development, several other large single-family residential subdivisions were recently approved, such as Finley Woods Phase II near SW Williston Road. Other notable developments that are in construction or will be shortly include:

- a. Newberry Park - 300 MF Units
- b. Tioga Town Center 6 & 7 - 144 Total MF Units
- c. Veve Apartments (Arbor Greens MF) - 260 MF Units
- d. GWR Jonesville TND - 240 MF Units
- e. Thornton Place – 87 MF Senior Living Units
- f. West End Unit C - 75 Attached Units
- g. Tara West End - 58 Attached Units

Future land use within the city is illustrated on Map 2-17. Large swaths of single family residential dominate the west-northwest area of the city. The University of Florida and its accompanying properties are clearly visible in the south-central area bounded by roads like 13th Street and University Avenue where there are more intensive uses

Implications

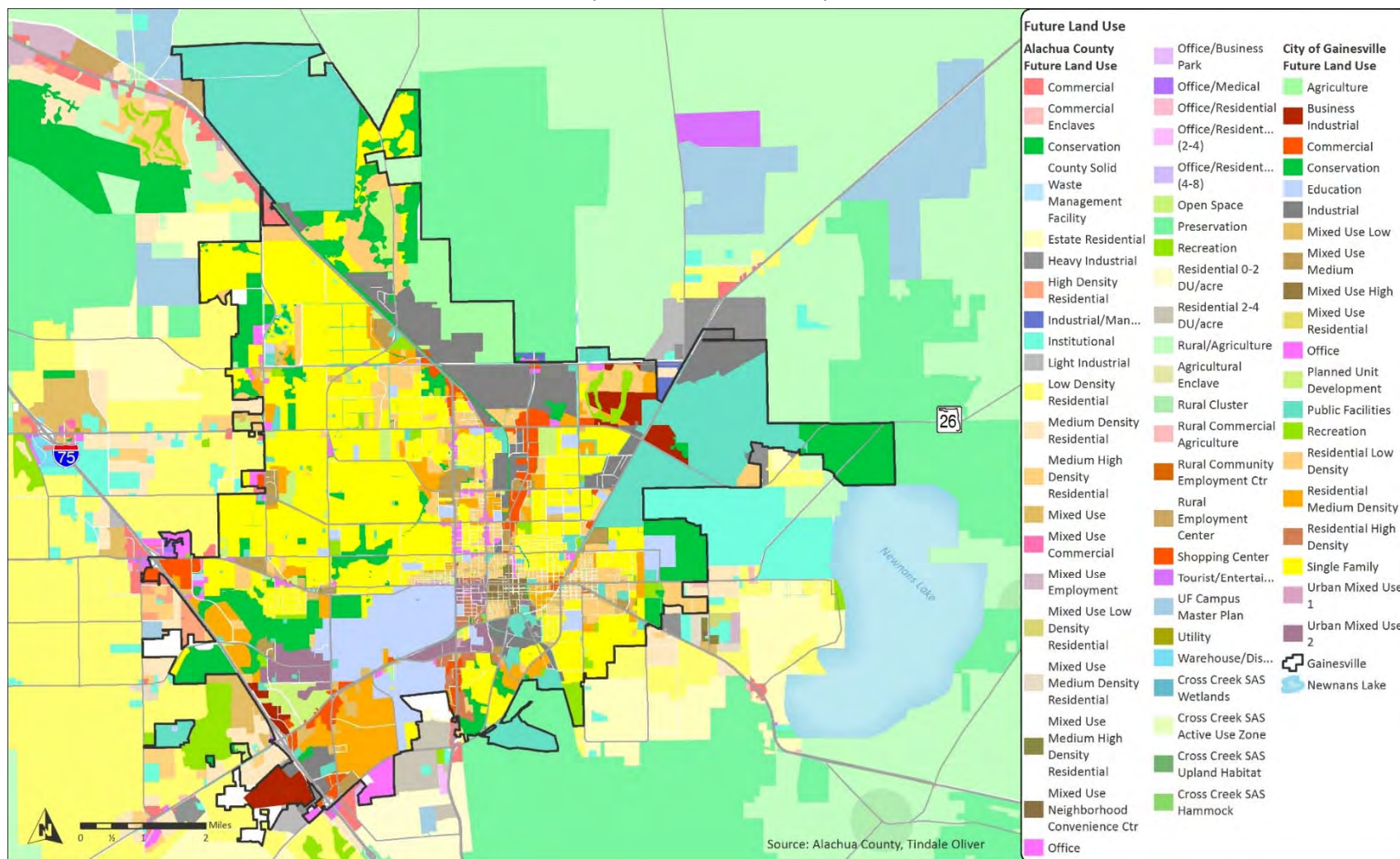
The growing trend in mixed-use and higher density provides opportunities in the provision of transit service. Mixed use and higher density developments are best for convenient and cost-effective walkable, bikeable, and transit mobility options. Many of these areas are already serviced by transit, but as density and development intensity continue to grow surrounding the University, RTS may have challenges providing sufficient service frequency to serve demand. The primary challenge posed for RTS will be to operate and maintain reliable high frequency operations without transit preferential treatments such as TSP, queue jumps, and bus lanes. Providing frequent service to upcoming mixed use and higher density developments will be a major opportunity for RTS to grow transit ridership and better serve the needs and demands of the City. City and County land use planning activities should increase coordination with RTS to explore and support transit use. Developers and developments could be offered offsets and other incentives to enhance transit opportunities.

The sprawling suburban pattern of development seen in the outskirts of the city, and to the area west of I-75 present a challenging environment in which to provide productive transit services due to both constrained operations along congested corridors and due to hard to serve land uses. While single family residential and suburban low density commercial and retail development are not conducive to walkable, bikeable, and transit mobility options, there are opportunities to improve mobility and access to mobility through new and emerging service delivery strategies, particularly as transit and mobility services are changing through the application of technology. This is especially relevant to access hard-to-serve places where land use and roadway connectivity hinder traditional transit

service. RTS is already testing emerging services with applications like microtransit and the autonomous vehicle pilot currently in development. For improved operations along congested corridors, the application of transit preferential treatments as noted above, are required. RTS has already studied high capacity transit alternatives and has concepts that would improve transit running times and reliability along congested corridors. Concepts for alternative mobility service strategies for these areas will be developed and discussed in a subsequent Transit Alternatives report.

At a regional level, given the urbanization trends outside of the City of Gainesville and Alachua County, RTS has the opportunity to increase existing express services, such as Route 902, to incorporated and unincorporated parts of the Alachua County where demand is demonstrated.

Map 6-4: Future Land Use Map



6.4 Organization

The RTS bus network operates as part of the Department of Mobility and consists of fixed-route bus lines connecting the City of Gainesville, the University of Florida (UF) Campus, and unincorporated parts of Alachua County, and is the only fixed-route public transit service provider in Alachua County. The system is governed by the Gainesville City Commission, who also oversees all other City departments. Figure 6-1 and Figure 6-2 illustrate the Department of Mobility's organization structure.

While RTS is governed and managed through the City Department of Mobility, the agency receives funding from a variety of sources including UF, Santa Fe College (SFC), Alachua County, City of Gainesville, FDOT, and the Federal Transit Administration (FTA). Of these revenue sources, UF provides the largest source of funding, which affects service distribution, structure, and intensity. This diverse funding base results in a high farebox ratio; approximately half of RTS' operating costs are recovered through fares and fees. RTS has a highest farebox ratio in the state as a result and serves as a model for other transit agencies.

Figure 6-1: Department of Mobility Organization Chart

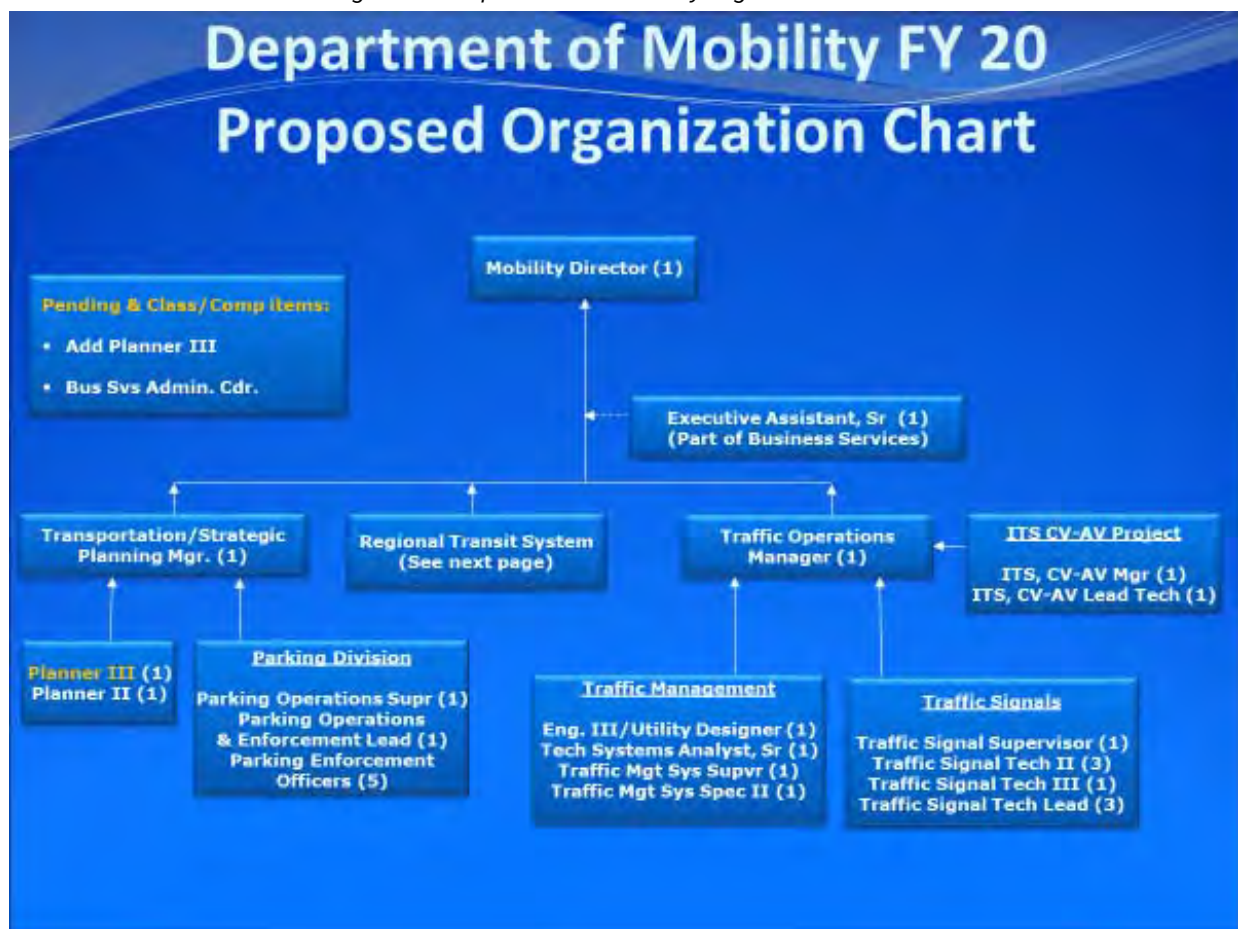


Figure 6-2: Department of Mobility Organization Chart



Implications

The Department of Mobility, and RTS as the central operating component of non-auto-based mobility in Gainesville, is in a stronger position to advocate for and augment policy and investments in a multimodal mobility strategy. As the agency grows, this governance structure enables the City to develop policy and improvement priorities that will yield more sustainable mobility solutions. To the extent mobility options are more challenging as demand extends further out from the City and into the County, developing and maintaining strong relationships with the County and other municipalities becomes more important. Developing a focused and collaborative strategy for mobility within the region will pose challenges for the City and for the region. A strong regional mobility plan and cost and revenue sharing partnerships will be essential to address and develop efficacious regional transportation solutions. Continued coordination with local governments, especially in areas of land use and transportation planning, including on-street parking management issues, will be key in providing seamless transportation and continued funding for any future services outside the City of Gainesville and Alachua County.

6.5 Travel Behavior and Trends

The parking management strategies at UF coupled with the limited number of corridors that connect the region to Gainesville contribute to the high levels of congestion seen on key corridors such as Archer Road, 13th Street and Newberry Drive.

The city is divided by I-75, with limited roads providing access to both sides of the city: West Newberry Road, Archer Road, SW 20th Avenue, NW 39th Avenue and SW Williston Road. The area west of the I-75 is primarily low density residential with limited connectivity. This land development pattern and the draw that the University of Florida and UF Health Hospital bring, results in the high congestion experienced along segments of SW 2 Avenue, NW 34th Street, Archer Road, Tower Road, and NW 39th Avenue.

While RTS has attempted to address the ongoing issue of congested roadways, bus capacity and bus bunching by adding increased service frequency, however over-capacity conditions and bus bunching during peak periods still exist, particularly for the on-campus routes. RTS has further attempted to address this through examining the implementation of premium transit services along frequently traveled corridors and alternative modes such as a Streetcar. While these projects have not been implemented, they serve as possible solutions to address increased density and demand on the transit system.

While the majority of RTS' service is within the City of Gainesville and Alachua County, the agency operates two routes outside of Alachua County – an express bus to Lake City and an express bus to Trenton. Examining worker and commuter flows, a significant amount of people who work in Alachua County live in Alachua County. Of the cities within Alachua County, the majority of workers in the City of Gainesville commute from the City of Alachua (1,632), the City of Newberry (966) and the City of High Springs (870) (LODES 2015). The major out of county commuters come from Ocala and Jacksonville. Inter-county commuters primarily come from the incorporated areas of Alachua County (i.e., Alachua, Mulberry, and High Springs). Generally, there is not significant demand for regional transit outside of the Alachua County.

Implications

In general, most transit routes are oriented to the University of Florida campus and the Downtown. For RTS to increase ridership levels significantly, an overall increase in transit service in the east-west and north-south direction will be needed to service other destinations. The constraints of the roadway network combined with the parking management strategies of the UF present opportunities for providing premium transit service with dedicated transit lanes such as bus rapid transit and light rail on highly traveled corridors. Improved travel speeds provided such premium transit will make transit service more competitive with the single-occupant automobile and improve the people-carrying capacity of congested corridors like Archer Road. In addition to premium transit services, enhanced transit infrastructure has the potential to improve boarding times if level boarding transit stops are provided at key transit stops.

While the demand for regional transportation is not as high as that of local transportation, RTS will continually be challenged by the need to provide services locally and regionally to those depending on public transportation to access work, medical, shopping and educational services.

6.6 Ridership and Performance Trends

Like most of the transit agencies across the U.S., RTS has seen declines in overall ridership for the past five years. From 2013 to 2017, total ridership has declined 13% from 10.8 million passenger trips to 9.4 million passenger trips. Declining ridership is a major challenge for transit agencies, especially in areas where decreased ridership has been used to justify service cuts, further decreasing ridership numbers. As transportation network companies (TNC) and other economic and technological trends continue to put pressure on the public transit system, innovative solutions and collaborate partnerships will be essential for maintaining existing ridership and growing future ridership.

In spite of declining ridership on fixed-route services, RTS has seen a growing demand for demand response or ADA Paratransit trips and subsequent increases in costs for providing those required services. As the elderly and transportation disadvantaged population continues to grow and concentrate in areas outside of the City of Gainesville, paratransit trip demand and costs are anticipated to increase. RTS is providing non-ADA paratransit demand response services, so distinction needs to be drawn between the two types of service. The east Gainesville microtransit service and similar services will be demand response beginning fall 2019.

Implications

The increase in automobile ownership, growing economy and the artificially low price of TNCs among other major local, regional, and national factors are resulting in declining ridership. This highlights the need to expand services and improve travel time with premium transit services, particularly to avoid the common occurrence of the transit “death-spiral” where declining ridership justifies service reductions which serves to cause further decline in ridership. In addition, providing effective and efficient paratransit service will be a challenge moving forward particularly as the baby-boomer generation ages into retirement – creating a growing transportation disadvantaged population.

6.7 Technology

RTS utilizes several technological resources that enhance the delivery of their transit services. RTS is in the process of implementing additional technology projects to enhance the overall transit experience for its patrons.

6.7.1 Electronic Fare Payment Systems

The current RTS fixed-route system provides cash and magnetic stripe fare cards. The types of fare cards available for purchase include:

- One-Way Pass
- All-day Pass
- Monthly Pass
- Semester Pass

These passes are provided at varying rates for students, paratransit eligible individuals, seniors, children, veterans and active duty military, Medicaid and Medicare recipients, City and GRU employees, and UFHealth Hospital employees. There is an opportunity for the introduction of weekly pass for transit users – which may prove particularly beneficial for those who cannot afford a monthly pass – but use transit frequently enough that All-Day passes prove to not be cost-effective.

6.7.2 Mobile Applications for Real-Time Information

In 2008, RTS launched the TransLoc real-time information application, or Gator Locator, and webpage for their fixed-route system, showing the real-time location of every bus operating. This application allows users to zoom in to see bus stop locations and estimated time of arrivals for busses serving that specific stop.

Future opportunities include integrating mobile fare payment systems into the TransLoc application to reduce boarding times and provide alternative methods of payment.

6.7.3 Transit Signal Priority

RTS' Go Enhance RTS Study from 2014 examined the feasibility of implementing premium transit services along a major east-west corridor in the City. The study ultimately recommended a TSM strategy with limited-stop service along a preferred alternative. The TSM strategy focuses on technology-based improvements with minor infrastructure to create a premium transit service. The system relies on transit signal priority at major intersections and queue jump lanes to increase headways. While the premium transit service proposed by the study has yet to be implemented, transit signal priority remains a major infrastructure improvement that could yield significant returns on investment in terms of improved running times, increased headways, and reduced vehicle demand. RTS may consider advancing a Transit Concepts and Alternatives Review (TCAR) study to obtain an appropriate level of analysis be completed to assess viable alternatives of applied TSP and queue jump lanes along key congested corridors, such as Archer, the BRT alignment, University, and Newberry.

6.7.4 Bus Technology and Connected Vehicles

In 2017, the City of Gainesville announced it has teamed up with UF and FDOT to research, develop, and test autonomous, connected vehicles and human-operated vehicles synced to traffic signals on campus and city streets. This is the first program in the state to involve cooperation between a city, university, and FDOT – and could eventually lead to “connected” RTS busses and/or campus shuttles. Connected or autonomous RTS busses and/or campus shuttles help reduce operating costs associated with driver salaries, allowing for the reallocation of resources to other routes and expanded service such as increased frequency or a larger service area.

6.7.5 Transportation Network Companies (TNCs)

Transportation Network Companies, or TNCs, are a new technology that offers a demand response type of service delivery using contractors operating their personal vehicles. TNCs are generally competitors to transit providers and have been considered as part of the declining transit ridership nationwide. Nonetheless, some transit agencies, such as PSTA in Pinellas County, Florida have proactively partnered with TNCs, attempting to create complementary and supporting relationships.

These agreements typically focus on providing first-mile and last-mile service and reaching new transit markets and areas that typically could not be afforded by traditional transit service and cost or performance metrics associated with operating that service. RTS' service area, which included significant portions of low-density housing which does not support traditional fixed-route service could benefit from coordination and agreements with TNCs to provide paratransit trips for ambulatory passengers and first-mile and last-mile connections to the fixed-route system.

6.7.6 Bicycle and Scooter Sharing Companies

Similar to TNCs, bicycle and scooter-sharing companies are a new service which make available bicycle and scooters on a short-term basis through the use of a mobile phone or other application. Users typically borrow a bike from a "dock" and return it to another dock belonging to the same system; some service providers have dockless systems, where users can pick up and drop off a bike anywhere. This new technology and service has rapidly expanded to cities across the world. This service facilitates one-way rides to work, education, shopping, and other services and have generally resulted in a reduction of traffic congestion where users are choosing to ride a shared bicycle instead of making car trips. Many public transit agencies have partnered with these bicycle and scooter sharing companies to offer mobility packages and other first-mile/last-mile options for users. Upon addressing issues related to safety, there is a major opportunity for RTS' to collaborate with these companies to place shared bicycles at major bus stops and transfer locations to facilitate mobility to and from these locations.

Implications

In the information age, transportation technology is a rapidly changing environment which has already had serious impacts on the public transit industry. It will be essential moving forward for RTS' to continuously monitor changing trends in transportation technology and identify opportunities for collaboration where the overall mobility of Gainesville and Alachua County can be bolstered. In addition, RTS' should monitor transportation technology which may further disrupt the efficient and effective provision of their services.

6.8 Public Involvement

Several events have been conducted to date aimed at facilitating public involvement from area residents and transit users. These events included an onboard survey, and online survey, a mobility discussion group workshop, and stakeholder interviews. In addition, the TDP Review Committee convened to review initial findings, needs, and alternatives. These events generated and evaluated a wide range of ideas for the existing service and for future transit enhancements. A public meeting is scheduled in July 2019 as well as additional Review Committee meetings. Several specific ideas, concerns, and recommendations emerged from TDP public outreach, including the following:

- Service to Haile Plantation, Santa Fe, and East Gainesville is not sufficient (frequent response)
- East Gainesville is lacking service (popular response)
 - Residents like the microbus but the service needs better advertisement
- Airport routes need improvement (a few responses)
- Route to Celebration Point (one response)

- Northwest Gainesville is lacking service
 - More evening service in NW
 - Millhopper area needs better service
 - Service needs to reach NW 53rd Ave (popular response)
- SW 24th Ave and Tower Rd. have insufficient connectivity. Transfers would make trips to UF campus/Oaks Mall take forever
- Not enough service west of I-75 (frequent response)
- Route 75 should run later and more frequently (frequent response)
- Route 77 to Santa Fe is not available after 3pm (one response)
- Issues with bus bunching along certain corridors and on certain routes (Routes 20 and 21)

Most ideas, concerns, and recommendations from citizens and transit users centered on providing more frequent service, expanded service for unmet demand in East and Northwest Gainesville communities, fewer restrictions on service during summer months, and longer service hours for existing routes.

For the service evaluation and on-board survey portion of the public involvement process, several major insights were identified. These include:

- Around 75% of riders surveyed ride the bus 5 or more days per week
- Nearly 80% of riders surveyed use their Gator 1 ID to pay the RTS fare
- Only 20% of riders surveyed would use premium express or limited stop bus service if it was provided, while 60% would maybe use this type of service
- The most important improvements rider surveyed identified were more frequent service, more benches and other bus stop amenities, and later service
- Nearly 90% of riders surveyed walked to get to the bus stop and will walk to their destination
- The most common trip is from home to school and vice-versa

Implications

The major themes that emerged from the public involvement process to date focus on the need for more weekend service, fewer restrictions on service during summer months, more frequent service on certain routes, improved bus stop amenities, and improved access to and from bus stops. Generally, developing a transit system that serves the needs of the entire community and not only the needs of the UF and Santa Fe campuses will be a major opportunity for improving RTS' system, particularly during the summer months when services are drastically cut while most of UF's student population are out of town. As opportunities and funding to expand transit service come up, RTS should consider passenger travel needs such as later service, Sunday service, connections to destinations on major north-south corridors, routes serving Santa Fe College, as well as major destinations and neighborhoods with little transit service.

7.0 Transit Demand Assessment

The purpose of this section is to summarize the demand and mobility needs assessment conducted as part of the 10-year TDP for RTS. When combined with the baseline conditions assessment, performance reviews, and findings from public outreach and relevant plan reviews, the demand assessment yields the building blocks for evaluating the transit needs for the next 10 years.

Transit demand and mobility needs were assessed using a Ridership Demand Assessment. This assessment projects ridership demand for existing fixed-route transit network to gauge route-level and system-wide demand, assuming the maintenance of 2019 transit service levels and facilities (10-year Status Quo Scenario). The Ridership Demand Assessment is supplemented by the market assessment that was conducted as a part of Baseline Conditions.

7.1 TBEST Overview

The ridership projections were prepared using Transit Boardings Estimation and Simulation Tool (TBEST Version 4.5), the FDOT-approved ridership estimation software for TDPs. TBEST is a comprehensive transit analysis and ridership-forecasting model capable of simulating travel demand at the individual route level. The software was designed to provide near- and mid-term forecasts of transit ridership consistent with the needs of transit operational planning and TDP development. In producing model outputs, TBEST considers the following:

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

7.2 Model Inputs / Assumptions and Limitations

TBEST uses various demographic and transit network data as model inputs. The inputs and the assumptions made in modeling RTS' system in TBEST are presented below. The model used the recently released TBEST Land Use Model structure (TBEST Land Use Model 2018), which is supported by parcel-level data developed from the Florida Department of Revenue (DOR) statewide tax database. DOR parcel data contain 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.

7.2.1 Transit Network

The transit route network for all existing RTS routes was created to reflect 2019 conditions, the validation year for the model. Spring 2019 General Transit Feed Specification (GTFS) data for RTS was obtained from the transit agency 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)

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

7.2.2 Socioeconomic Data

The socioeconomic data used as the base input for the TBEST model were derived from American Community Survey (ACS) Five-Year Estimates (2017), the Bureau of Labor Statistics, the Bureau of Economic Analysis, 2015 InfoUSA employment data and 2018 parcel-level land use data from the Florida Department of Revenue. Using the data inputs listed above, the model captures market demand (population, demographics, employment and land use characteristics) within ¼ mile of each stop.

TBEST uses a socioeconomic data growth function to project population and employment data. Using the 2040 socioeconomic data forecasts developed for the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area, 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.

7.2.3 Special Generators

Special generators were identified and coded into TBEST to evaluate the opportunity for generating high ridership. RTS' special generators include the following, among others:

- Shopping Mall
 - o Butler Plaza, Oaks Mall
- University
 - o University of Florida (main campus), Santa Fe College (main campus)
- Hospital
 - o UF Health, Shands Hospital, Meridian Behavioral Healthcare, North

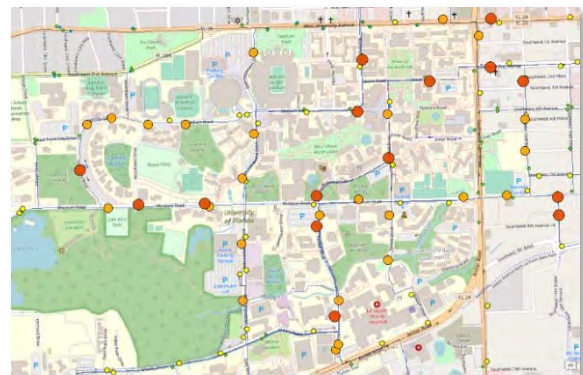


Figure 7-1: TBEST Interface (Total Stop-Level Ridership)

Florida Regional Medical Center, Shands Eastside Community Practice, VA Hospital

- Airport
 - Gainesville Regional Airport
- Transfer Hub
 - Reitz Student Union, Rosa Parks Downtown Station, The Hub, Butler Plaza, Oaks Mall

7.3 TBEST 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 TBEST is an important tool for evaluating improvements to existing and future transit services, model outputs do not account for latent demand for transit that could yield significantly higher ridership. In addition, TBEST cannot display sensitivities to external factors such as an improved marketing and advertising program, changes in fare service for customers, fuel prices, parking supply, competing transportation service providers, walkability and other local conditions; correspondingly, model outputs may overestimate demand in isolated cases. As the model cannot interact with roadway network conditions, ridership forecasts will not show direct sensitivity to changes in roadway traffic conditions, travel time comparisons to traffic or roadway connectivity.

Although TBEST provides ridership projections at the route and bus stop levels, its strength lies more in its ability to facilitate relative comparisons of ridership productivity. As a result, model outputs are not absolute ridership projections, but, rather, are comparative for evaluation in actual service implementation decisions. TBEST has generated interest 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 to integrate sound planning judgment and experience when interpreting TBEST results.

7.4 Baseline Ridership Analysis

Using these inputs, assumptions, and 2018 route level ridership data obtained from RTS, the TBEST model was validated. Using the 2019 validation model as the base model, TBEST ridership forecasts for this TDP major update planning starting year (2019) and horizon year (2029) were developed. The generated annual ridership forecasts for these scenarios reflect the estimated level of service utilization if no changes were to be made to any of the fixed-route services. As mentioned in the previous section, TBEST is known to overestimate demand in isolated cases. Model results for RTS are impressive and should be interpreted with sound planning judgment.

Table 7-1 shows the projected number of status quo forecast riders annually by route in 2019 and 2029 derived from TBEST.

Table 7-1: RTS Annualized Weekday Ridership and Growth Rates
with Status Quo Forecast, 2019–2029*

Route	Route Description	2019 Boardings	2029 Boardings	Absolute Change	Percent Change
1	Downtown Station to Butler Plaza	624,495	795,509	171,014	27.4%
2	Downtown Station to Walmart Supercenter	73,950	88,798	14,848	20.1%
3	Downtown Station to N Main Post Office	29,835	35,437	5,602	18.8%
5	Downtown Station to Oaks Mall	402,645	530,989	128,344	31.9%
6	Downtown Station to N Walmart Supercenter	98,685	119,656	20,971	21.3%
7	Downtown Station to Eastwood Meadows	86,445	102,650	16,205	18.7%
8	UF Health to N Walmart Supercenter	321,300	417,351	96,051	29.9%
9	Reitz Union to Hunters Run	660,195	846,524	186,329	28.2%
10	Downtown Station to Santa Fe College	128,265	182,275	54,010	42.1%
11	Downtown Station to Eastwood Meadows	128,265	152,251	23,986	18.7%
12	Reitz Union to Butler Plaza Transfer Station	620,415	758,930	138,515	22.3%
13	Beaty Towers to Cottage Grove	504,390	602,422	98,032	19.4%
15	Downtown Station to NW 13 St	265,455	325,294	59,839	22.5%
16	Beaty Towers to Sugar Hill	129,030	152,562	23,532	18.2%
17	Beaty Towers to Downtown Station	140,250	169,724	29,474	21.0%
19	Reitz Union to SW 23 Ter	18,360	22,965	4,605	25.1%
20	Reitz Union to Oaks Mall	1,016,685	1,245,402	228,717	22.5%
21	Reitz Union to Cabana Beach	478,890	602,119	123,229	25.7%
23	Oaks Mall to Santa Fe College	115,260	132,626	17,366	15.1%
24	Downtown Station to Job Corps	12,495	15,964	3,469	27.8%
25	UF Commuter Lot to Airport	74,970	101,972	27,002	36.0%
26	Downtown Station to Airport	159,630	188,524	28,894	18.1%
27	Downtown Station to Walmart Supercenter	11,730	14,441	2,711	23.1%
28	The Hub to Butler Plaza Transfer Station	263,670	345,076	81,406	30.9%
29	Kiwanis Park to Beaty Towers	96,135	143,637	47,502	49.4%
33	Butler Plaza to Midtown	536,010	715,917	179,907	33.6%
34	The Hub to Lexington Crossing	344,505	458,373	113,868	33.1%
35	Reitz Union to SW 35 Pl	811,155	988,978	177,823	21.9%

36	The Hub to Williston Plaza	148,920	190,822	41,902	28.1%
37	Reitz Union to Butler Plaza	253,980	308,547	54,567	21.5%
38	The Hub to Gainesville Place	989,910	1,307,874	317,964	32.1%
39	Santa Fe College to Airport	30,600	38,201	7,601	24.8%
40	The Hub to Hunters Crossing	50,490	64,804	14,314	28.4%
43	UF Health to Santa Fe College	247,350	294,911	47,561	19.2%
46	Reitz Union to Downtown Station	239,190	335,320	96,130	40.2%
75	Oaks Mall to Butler Plaza	235,110	266,663	31,553	13.4%
76	Santa Fe College to Haile Market Square	50,235	60,385	10,150	20.2%
77	Santa Fe to Cabana Beach	37,740	44,924	7,184	19.0%
117	Park-N-Ride 2 to Reitz Union	120,360	147,061	26,701	22.2%
118	Park-N-Ride 1 to The Hub	600,525	781,854	181,329	30.2%
119	Family Housing to The Hub	74,460	99,300	24,840	33.4%
120	West Circulator (Frat Row to The Hub)	321,045	429,627	108,582	33.8%
121	Hub to Commuter Lot	72,165	92,770	20,605	28.6%
122	UF North/South Circulator	128,010	167,231	39,221	30.6%
125	Lakeside	219,810	287,875	68,065	31.0%
126	UF East/West Circulator	91,035	102,575	11,540	12.7%
127	UF East Circulator	462,570	690,578	228,008	49.3%
128	Lake Wauberg Shuttle**	n/a	n/a	n/a-	n/a
300	Later Gator A	13,515	15,232	1,717	12.7%
301	Later Gator B	30,345	33,768	3,423	11.3%
302	Later Gator C	48,705	55,506	6,801	14.0%
303	Later Gator D**	n/a	n/a	n/a	n/a
305	Later Gator F**	n/a	n/a	n/a	n/a
600	Microtransit	8,160	9,648	1,488	18.2%
601	Microtransit	7,140	8,605	1,465	20.5%
711	Downtown Station to Eastwood Meadows	10,710	13,466	2,756	25.7%
901X	Express Lake City	4,647	4,697	50	1.1%
902X	Express Trenton	255	290	35	13.7%
800X	Santa Fe to Butler Plaza Transfer Station	23,715	25,248	1,533	6.5%
Totals		12,673,812	16,137,100	3,463,288	27.3%

* Based on T-BEST model

**Saturday service only

Table 7-2: RTS Annualized Saturday Ridership and Growth Rates
with Status Quo Forecast, 2019–2029*

Route	Route Description	2019 Boardings	2029 Boardings	Absolute Change	Percent Change
1	Downtown Station to Butler Plaza	44,825	81,414	36,589	81.6%
2	Downtown Station to Walmart Supercenter	7,370	9,179	1,809	24.5%
5	Downtown Station to Oaks Mall	34,705	58,579	23,874	68.8%
6	Downtown Station to N Walmart Supercenter	4,675	6,109	1,434	30.7%
8	UF Health to N Walmart Supercenter	11,770	15,998	4,228	35.9%
10	Downtown Station to Santa Fe College	5,885	8,700	2,815	47.8%
12	Reitz Union to Butler Plaza Transfer Station	30,195	42,105	11,910	39.4%
13	Beaty Towers to Cottage Grove	5,940	7,567	1,627	27.4%
15	Downtown Station to NW 13 St	19,580	26,046	6,466	33.0%
16	Beaty Towers to Sugar Hill	5,170	6,283	1,113	21.5%
20	Reitz Union to Oaks Mall	54,615	76,296	21,681	39.7%
25	UF Commuter Lot to Airport	9,130	14,203	5,073	55.6%
33	Butler Plaza to Midtown	10,120	14,698	4,578	45.2%
35	Reitz Union to SW 35 Pl	24,640	31,489	6,849	27.8%
37	Reitz Union to Butler Plaza	14,190	19,300	5,110	36.0%
126	UF East/West Circulator	17,050	25,766	8,716	51.1%
128	Lake Wauberg Shuttle	6,830	9,365	2,535	37.1%
300	Later Gator A	6,490	13,638	7,148	110.1%
301	Later Gator B	6,105	11,110	5,005	82.0%
302	Later Gator C	11,825	20,334	8,509	72.0%
303	Later Gator D	1,485	2,766	1,281	86.3%
305	Later Gator F	4,400	7,544	3,144	71.5%
711	Downtown Station to Eastwood Meadows	10,835	13,177	2,342	21.6%
Totals		347,830	521,666	173,836	50.0%

* Based on T-BEST model

Table 7-3: RTS Annualized Sunday Ridership and Growth Rates
with Status Quo Forecast, 2019–2029*

Route	Route Description	2019 Boardings	2029 Boardings	Absolute Change	Percent Change
1	Downtown Station to Butler Plaza	19,525	30,600	11,075	56.7%
8	UF Health to N Walmart Supercenter	9,790	13,430	3,640	37.2%
12	Reitz Union to Butler Plaza Transfer Station	11,495	15,064	3,569	31.0%
13	Beaty Towers to Cottage Grove	2,970	3,505	535	18.0%
15	Downtown Station to NW 13 St	9,955	12,434	2,479	24.9%
16	Beaty Towers to Sugar Hill	1,540	1,801	261	16.9%
20	Reitz Union to Oaks Mall	22,440	28,218	5,778	25.7%
25	UF Commuter Lot to Airport	4,950	6,843	1,893	38.2%
33	Butler Plaza to Midtown	16,170	22,194	6,024	37.3%
35	Reitz Union to SW 35 Pl	9,515	11,894	2,379	25.0%
37	Reitz Union to Butler Plaza	7,975	10,549	2,574	32.3%
126	UF East/West Circulator	11,055	15,307	4,252	38.5%
711	Downtown Station to Eastwood Meadows	7,865	8,702	837	10.6%
Totals		135,245	180,541	45,296	33.5%

* Based on T-BEST model

7.5 Forecast Ridership Analysis

Based on the TBEST model results shown in Table 7-1, Table 7-2, and Table 7-3, maintaining the status quo will result in a high ridership increase system-wide in weekday, Saturday, and Sunday scenarios by 27%, 50%, and 33.5%, respectively. Weekday ridership is estimated to reach 16,137,100 by 2029 using current system services. The model results show that the most significant weekday ridership growth rate may occur on the following routes within the next 10 years:

- Route 29 Kiwanis Park to Beaty Towers (49.4%)
- Route 127 UF East Circulator (49.3%)
- Route 10 Downtown Station to Santa Fe College (42.1%)
- Route 46 Reitz Union to Downtown Station (40.2%)

Within the next 10 years, model results show that the most significant Saturday ridership growth rate based on the current RTS network may occur on the following routes:

- Route 300 Later Gator A (110.1%)
- Route 303 Later Gator D (86.3%)
- Route 301 Later Gator B (82%)
- Route 1 Downtown Station to Butler Plaza (81.6%)

Estimated Sunday ridership growth rates between 2019 and 2029 are highest for:

- Route 1 Downtown Station to Butler Plaza (56.7%)
- Route 126 UF East/West Circulator (38.5%)
- Route 25 UF Commuter Lot to Airport (38.2%)
- Route 33 Butler Plaza to Midtown (37.3%)
- Route 8 UF Health to N Walmart (37.2%)

The service improvements identified in the following section, in other transit planning efforts, and from the public feedback received combined provides a blueprint for potential transit improvements for the service area.

8.0 Alternatives Development and Evaluation

This section identifies potential transit improvements for RTS' 10-year TDP. The proposed improvements, referred to as alternatives, represent the transit needs for the next 10 years and were developed without consideration of funding constraints.

The identified service improvements are prioritized using an evaluation process that considers public outreach and benefits. The resulting prioritized list of improvements will then be used to develop the 10-year implementation and financial plans, which will be presented in the full RTS 2019–2029 TDP draft. As the City of Gainesville and its surrounding areas continues to grow, these prioritized transit needs will assist RTS to select and implement service improvements as funding becomes available.

8.1 Development of Alternatives

The RTS 2019–2029 TDP transit alternatives consist of improvements that enhance existing RTS services and expand transit service to new areas. The alternatives reflect the transit needs of the community and have been developed based on information gathered through the following methods:

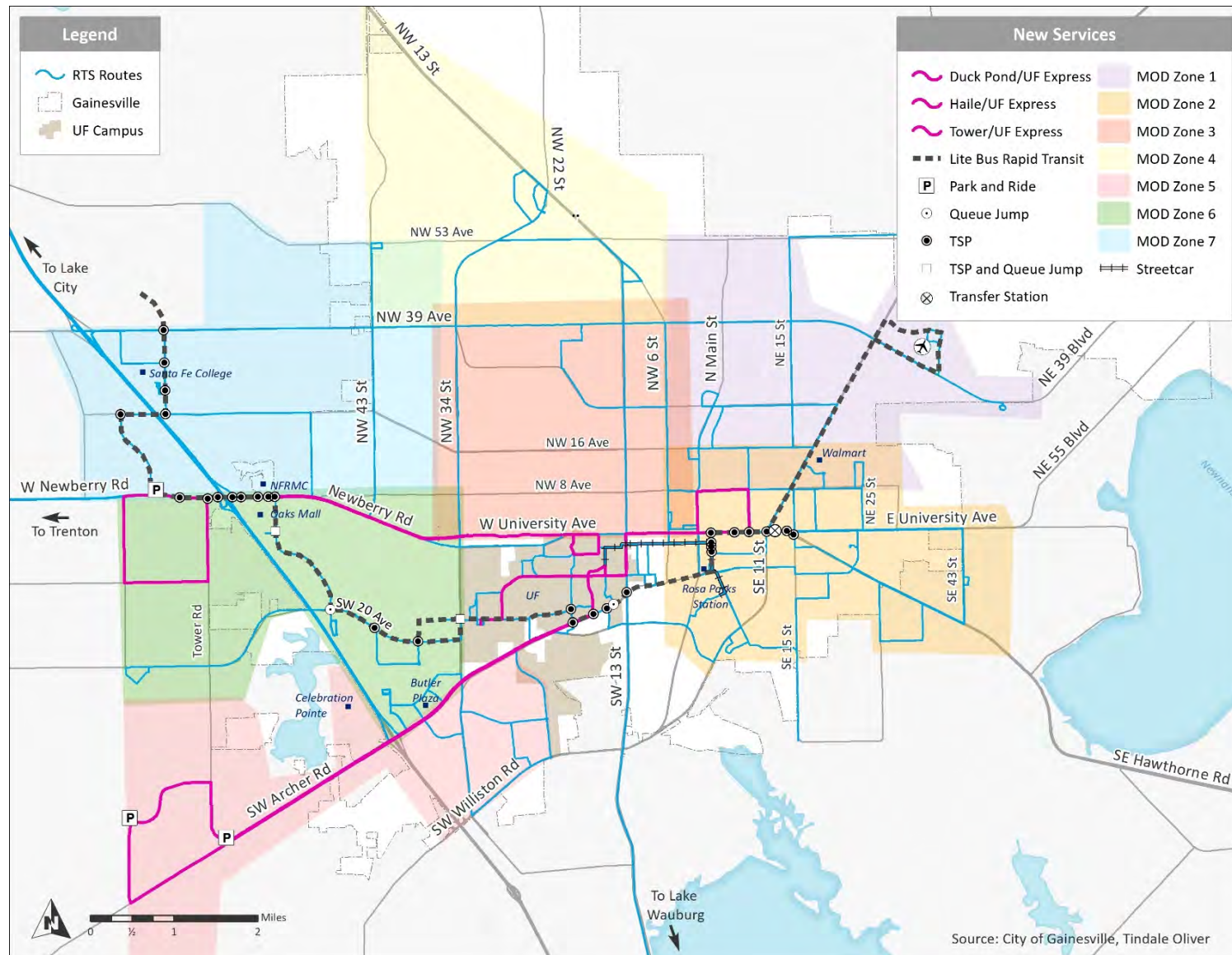
- **Public outreach** - Multiple techniques were used to obtain substantive public input on transit needs throughout the RTS TDP planning process. An on-board survey, key person/stakeholder interviews, a well-participated mobility discussion group workshop, public meetings, and Review Committee meetings were or will be conducted to gather input from the public, stakeholders, elected officials, and the community regarding what alternatives should be considered for the next 10 years.
- **Transit demand assessment** – As presented previously, an assessment of transit demand and needs also was conducted for Alachua County. The assessment included the use of various GIS-based analysis tools. These technical analyses, together with the baseline conditions assessment and performance reviews previously conducted, were used to help identify areas with transit-supportive characteristics when developing the list of transit alternatives.
- **Situation appraisal** – RTS' 10-year TDP is required by state law to include a situation appraisal of the environment in which the transit agency operates. This helps to develop an understanding of RTS' operating environment in the context of key elements as specified in the TDP Rule. The implications from the situation appraisal findings were considered in identifying potential transit alternatives.

Based on these methods, alternatives were identified and grouped into four categories:

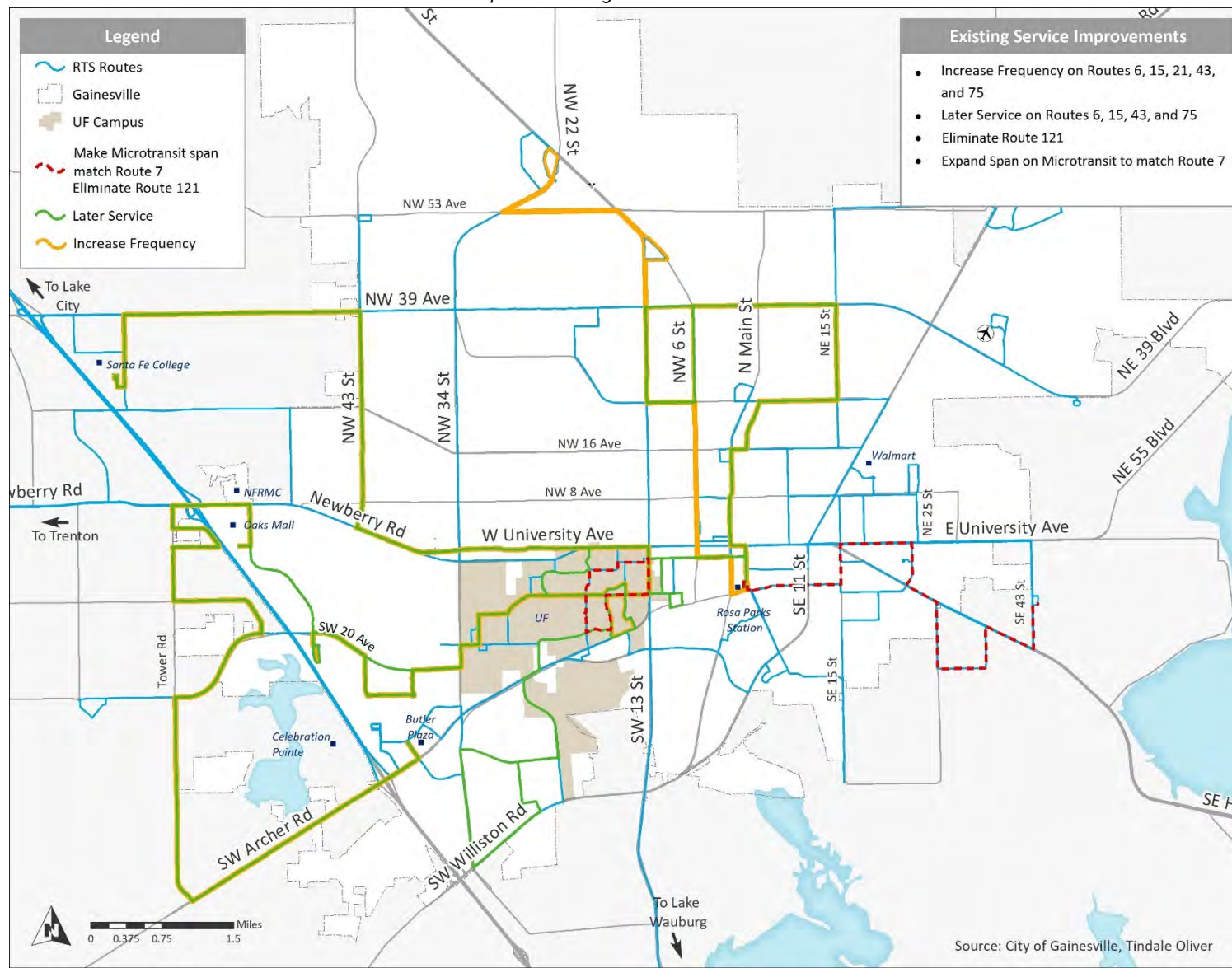
- Service
- Capital/Infrastructure
- Technology
- Policy/Other

Specific improvements identified within each category are summarized and depicted in Maps 8-1, 8-2, and 8-3.

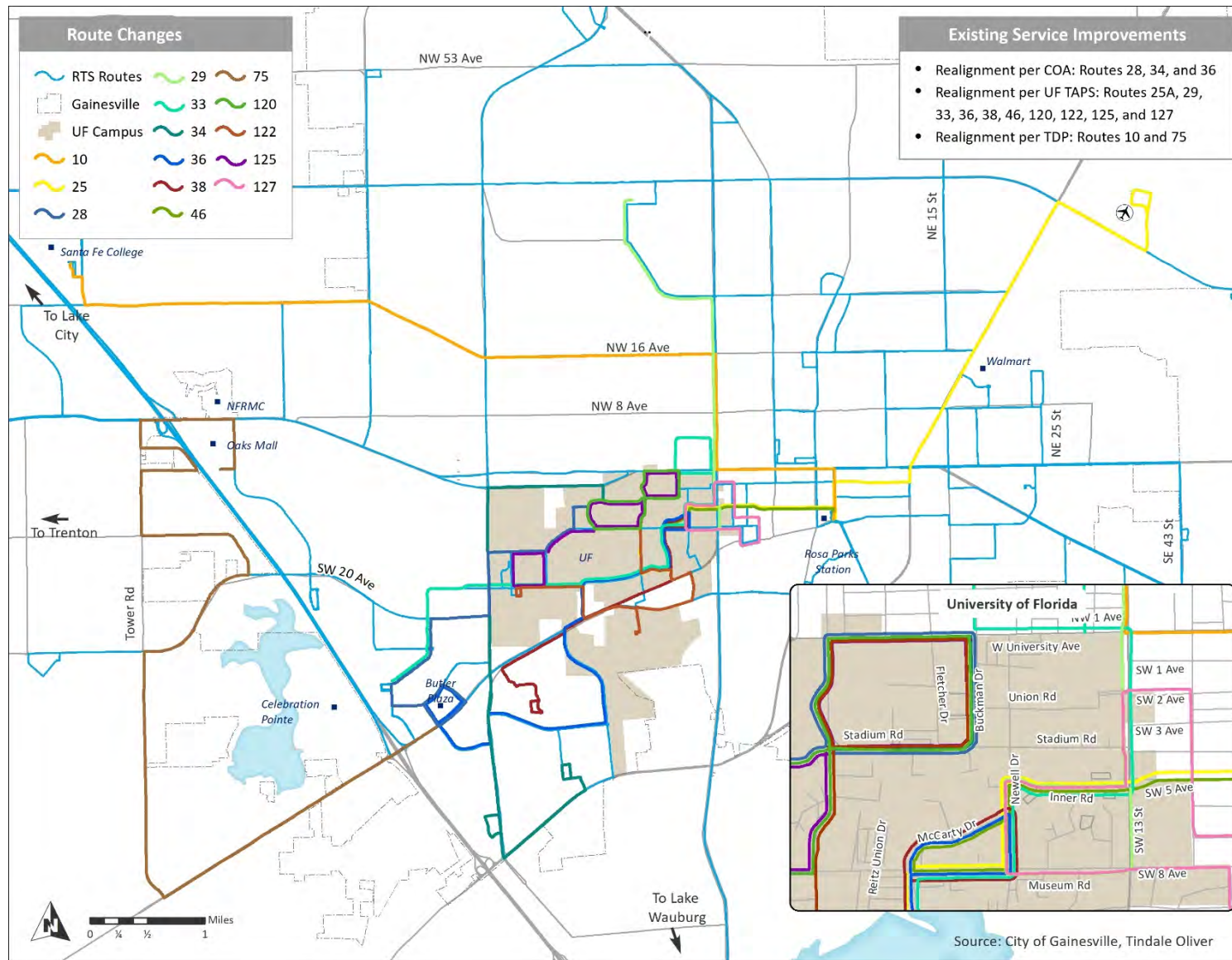
Map 8-1: New Service Alternatives



Map 8-2: Existing Service Alternatives



Map 8-3: Realignment Alternatives



8.2 Service

Service improvements include enhancements to existing routes related to frequency, extended service hours, and/or additional days of service. This category also includes service expansion, including new routes/modes for operating in areas not currently served RTS.

8.2.1 Improvements to Existing Routes

Expanding hours and increasing frequencies of existing bus routes are significant needs identified through the public outreach efforts. Needed improvements and increased efficiencies to the existing fixed route network include:

- **Improve Frequency on Selected Routes** – It is recommended that enhanced frequencies are applied to routes with the highest ridership and/or serve as key connectors where transit level of service does not meet demand, including the following:
 - **Double frequency on Routes 6 and 21** – Current headways are 60 minutes for Route 6, and 16 minutes for Route 21. The Comprehensive Operations Analysis (COA) recommends that these headways be improved to 30 minutes and 8 minutes, respectively.
 - **Increase frequency on Routes 15, 43, and 75** – Current headways are 30–60 minutes for Route 15, 30 minutes for Route 43, and 40–60 minutes for Route 75. The TDP recommends that the frequencies for these three routes be improved at a minimum during all travel periods.
- **Later Service on Routes 6, 15, 43, and 75** – Based on the results of the on-board survey, charrette, interviews, and COA recommendations, a need for adding later service was identified as a priority. Route 6 and 43 are extended to 10 PM. Route 15 is extended from 11 PM to midnight. Route 75 is extended from 8 PM TO 11 PM.
- **Expand Microtransit Service Span** - Route 7 service is currently being supplemented with a promising microtransit solution that operates during the morning and afternoon peak periods. The microtransit runs between East Gainesville and the Rosa Parks Downtown Station and are performing so well in extending access to transit it is recommended that the span of service for these be extended to operate during the same span as the Route 7.
- **Realign Routes** – Due to a proposed bicycle/pedestrian-only zone on the UF campus, multiple routes intersecting this zone are proposed for realignment by the UF Transportation & Parking Strategic Plan (2018). Additionally, other routes have been realigned to better accommodate new developments and optimize operations.
 - **Realign Routes 25A, 29, 33, 36, 38, 46, 120, 122, 125, and 127 per UF Bicycle Pedestrian Zone** – The Bicycle Pedestrian Zone is proposed in the northeast corner of the main UF campus. This area is bounded by Buckman Road to the west, University Avenue to the north, 13th Street to the east, and Inner Road to the south. Effectively, this removes Union Road and a portion of Newell Drive and Stadium Road from servicing RTS vehicles (or any other motorized vehicles). Most of these routes are to be redirected via Inner Road or Buckman Road to avoid the Bicycle Pedestrian Zone.

- o **Realign Route 10** – Route 10 runs from the Rosa Parks Downtown Station to Santa Fe College. The proposed realignment moves a small portion of the route from SW 4th Avenue to University Avenue in order to serve Santa Fe College’s downtown location.
- o **Realignments Routes 28, 34, and 36 per COA** – The COA recommends realignments for these routes to increase efficiency. The southern portion of Route 28, currently described as The Hub to Butler Plaza, is realigned via Plaza Boulevard and includes a new path through Butler Plaza. Route 34, currently The Hub to Lexington Crossing, is realigned at its southern end to remain on SW 34th Street all the way to Williston Road. This removes a former route deviation into apartment complexes adjacent to SW 34th Street. Route 36, currently described as The Hub to Williston Plaza, is realigned to no longer serve Williston Plaza at its south, and instead terminates at Butler Plaza. The northern portion of Route 36 remains similar to its current alignment.
- o **Realign and extend Route 33** – Route 33 starting Fall 2019 will be realigned at the intown end to no longer loop along NW 14th Street and NW 5th Avenue. The route will run east on W. University Avenue and south on SW 13th Street to complete the turnback outbound along Newel Drive. Route 33 will also be extended from Butler Plaza west along the new SW 40th Boulevard overpass to Celebration Pointe.
- o **Realign Route 75** – Route 75 runs from Oaks Mall to Butler Plaza. The proposed realignment improves route efficiency due to a road construction project on SW 8th Avenue which allows the route to continue through the Linton Oaks area uninterrupted, as opposed to currently doubling back on itself due to a dead-end.
- **Remove Service on Route 121** – The UF Transportation & Parking Strategic Plan (2018) proposes numerous route changes, largely due to the exclusive bicycle/pedestrian zone. As a result, the Plan suggests that Route 121 be removed when the zone is implemented because its service becomes redundant with other on and off-campus routes after the new changes.

8.2.2 New Service

The following describes the new service alternatives considered for RTS and the Gainesville community.

1. **Mobility on Demand** – An expansion of the microtransit demonstration, MOD will use on-demand information, real-time data, and predictive analysis to provide travelers with transportation choices that best serve their needs and circumstances. MOD service is requested via mobile app, a website, or by calling RTS. The MOD service is designed to localized mobility (e.g.: home to grocery store) and to provide connections to the fixed route transit network for longer trips (e.g.: home to bus stop to catch bus downtown). MOD is designed to work well in areas where fixed-route service may not be close by, or where customers have limited mobility access to bus stops, or where the necessary infrastructure is not available for people to safely or conveniently access bus stops. MOD service is designed to operate as a point-to-point service in response to customer requests (immediate or scheduled

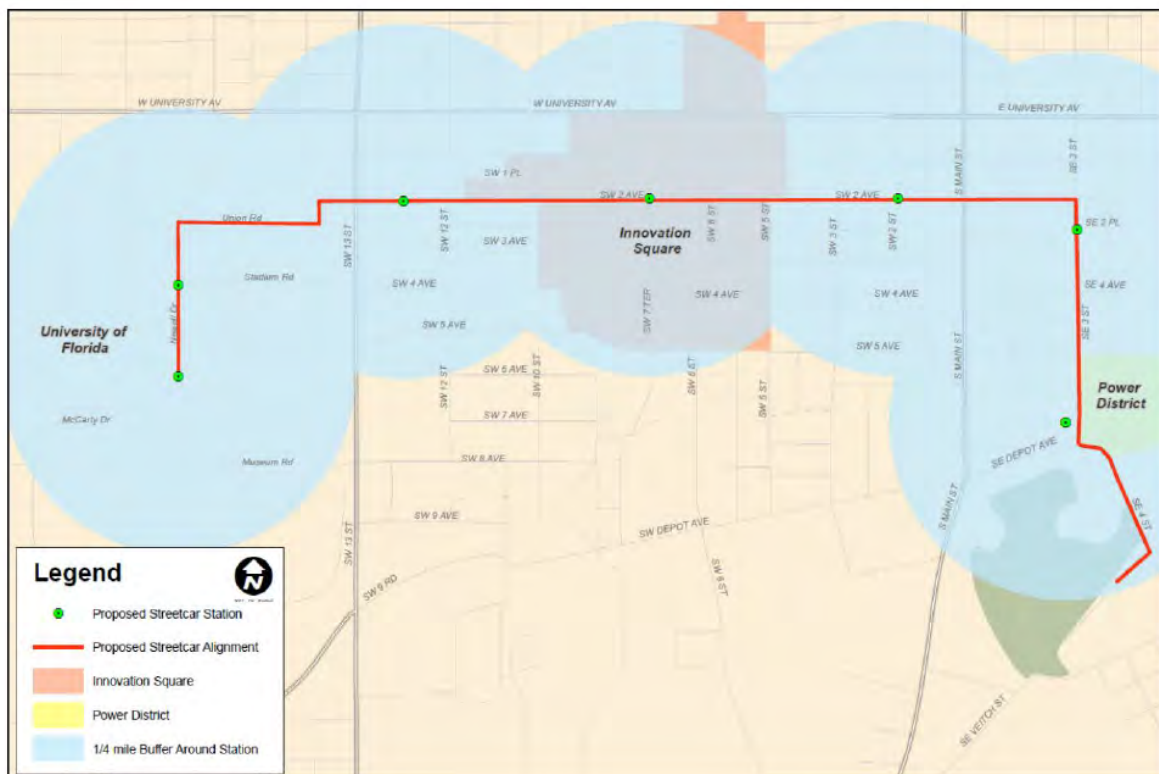
for a future time). When considering MOD service, input from public involvement, demographic characteristics, and the nature of the existing route network were considered. Many neighborhoods in the proposed MOD zones have dead-ends and non-uniform street grids, diminishing connectivity and walkability to bus stops. MOD zones are intended fulfill unmet needs in these areas. In addition, MOD service is intended to be accessible by all, general public and ADA eligible persons. It therefore can be used to meet growing demand for ADA service and may serve as a replacement of traditional ADA service. Travel may be accommodated within a zone and may overlap into adjacent zones to complete short trips that cannot be served conveniently by fixed route. The following zones have been identified and are not placed in any order of priority. Priority for deployment will be made by RTS based on market demand and funding availability.

- o **MOD Zone 1** — This MOD zone covers northeast Gainesville, including Gainesville Regional Airport, Grace Marketplace, and Gainesville Shopping Center. The area is bounded to the north by NE 53rd Avenue and NE 8th Avenue to the south. It shares the NW 6th Street corridor with MOD Zone 3 and NE 8th Avenue with MOD Zone 2.
- o **MOD Zone 2** — This zone covers east Gainesville from NE 6th Street to SE 43rd Street, including main thoroughfares such as Waldo Road, Hawthorne Road, and E University Avenue. Areas of interest include Walmart Supercenter, Depot Park, the Exchange Plaza, and Downtown. MOD Zone 2 intersects with MOD Zones 1 and 3.
- o **MOD Zone 3** — This centrally located MOD zone operates from NE 39th Avenue to W University Avenue and includes Midtown, Plaza Verde, the NW 13th Street corridor, and the NW 34th Street corridor. MOD Zone 3 intersects MOD Zones 1, 2, 4, 6, and 7.
- o **MOD Zone 4** — This northernmost MOD zone is located directly north of MOD Zone 3, mostly bounded by NW 39th Avenue and US-441. Major thoroughfares include NW 34th Street, US-441, and NW 39th Avenue. The neighborhoods of Northwood, Springtree, and Applewood currently have limited access to transit. Though the area is mostly residential, the commercial area near Northwood Plaza is a likely destination.
- o **MOD Zone 5** — This southwestern MOD zone covers both residential and commercial areas such as Haile Plantation, Arredondo, Kanapaha, Phoenix, Plaza Centro, Tower Square, and Celebration Point. Major corridors include Archer Road, Tower Road, and SW 34th Street. It intersects with MOD Zone 6 to the north.
- o **MOD Zone 6** — MOD Zone 6 covers western portions of Gainesville on both sides of I-75, bounded by Newberry Road and SW 20th Avenue to the north and south. The area extends to capture Butler Plaza. Areas of interest include the Oaks Mall, Newberry Square, and Royal Park Plaza. MOD Zone 6 intersects MOD Zone 7 to the north, MOD Zone 5 to the south, and MOD Zone 3 to the northeast.
- o **MOD Zone 7** — This northwestern MOD zone is located west of MOD Zone 3 (NW 43rd Street) and north of MOD Zone 6 (NW 8th Avenue). This zone covers North Florida Regional Medical Center, Santa Fe College, Millhopper Plaza, Newberry Square, and

Hunter's Crossing. Neighborhoods in this area house students attending the nearby college and experience gaps in transit service. Public outreach and involvement suggest that Santa Fe College needs stronger linkages to other areas of Gainesville as well as more functional service provisions to meet the varied needs of residents.

2. **Commuter Express Service** – To enable UF employees and other users to travel expediently between home and work, three new routes are recommended by the UF Transportation & Parking Strategic Plan (2018). These routes are suggested to be limited-stop express and operate every 30 minutes from 7 AM to 7 PM. The routes proposed are:
 - o **Employee Express to Tower Road** – The service would operate between Tower Road and The Hub. The alignment would run primarily along Newberry Road/University Avenue in order to service bottlenecked areas.
 - o **Employee Express to Duck Pond** – The service would operate between the Cultural Plaza and the Duck Pond neighborhood in northeast Gainesville.
 - o **Employee Express to Haile Plantation** – The service would operate between the Reitz Union and Haile Plantation, via Archer Road. Service will launch Fall 2019.
3. **UF Campus Streetcar** – The City of Gainesville Streetcar Feasibility Study assessed the potential viability of implementing a streetcar system to connect three major activity centers within the urban core of the City of Gainesville in order to accommodate future growth. The preferred alignment is illustrated in Map 8-4.

Map 8-4: Proposed Streetcar Stations and Service Area



Source: City of Gainesville Streetcar Feasibility Study (2014)

4. **Bus Rapid Transit Lite** - The Go Enhance RTS Study recommended a premium limited stop service operating at 10-minute headways peak and 15-minute off-peak on weekdays and an 18-hour service span with queue jump lanes and transit signal priority enhancements. Bus lanes at critical sections of the roadways and enhanced bus stops at stops with high ridership locations are also desired. The study recommends implementing the service in two phases:
 - o Phase 1: Oaks Mall to Five Points Transfer Station via SW 62nd Blvd, SW 20 Av, Hull Road, Archer Road, SW Depot Ave, to University Ave.
 - o Phase 2: Oaks Mall to Santa Fe College via Newberry Road and NW 833rd St.
 Long term, the service would operate at 10-minute headways weekdays with an 18-hour or more service span.
5. **Revise Routes as Needed** - RTS will continue to collaborate with its partners to develop service changes to improve mobility and operations in response to changes in the form of new developments, in-fill development, and new and improved roadways.

8.3 Technology

The following describes the technology improvements considered for RTS and the Gainesville community.

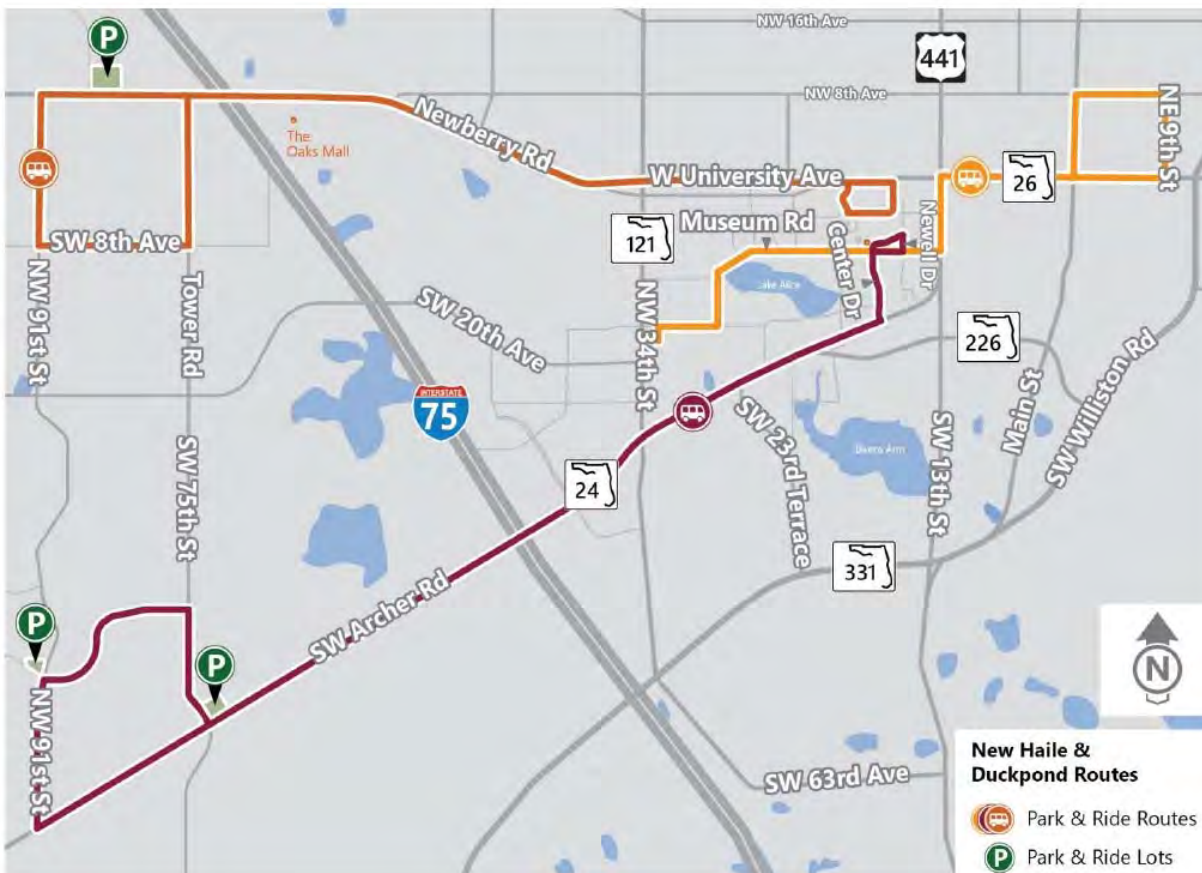
- **Safe Ride Home App** – After regularly scheduled fixed-route bus service ends and when ridership demand does not support extending service hours, the riders may use a mobile app to access ride-hailing services provided by transportation network companies (TNCs). This service should continue and may be combined on the same platform with proposed MOD services throughout the service area.
- **Mobility on Demand App** – With the proposed MOD Zone base services, RTS should obtain a dynamic scheduling platform to facilitate ride hailing and optimized trip assignments to vehicles and pick-up and drop-off sequencing. The MOD App could also be combined with or used in conjunction with the Safe Ride Home program.
- **Transit Signal Priority (TSP) and Queue Jump** –TSP and Queue Jump lanes were recommended in the Go Enhance RTS study, in conjunction with the BRT Lite service. TSP is an operational and technological strategy that facilitates and prioritizes the movement of transit vehicles through traffic-signal controlled intersections. Strategies include green phase extension, early green phase, and bus queue jump bypass lanes. These strategies should be implemented in the most congested corridors to improve on-time performance for the proposed BRT Lite service. A total of 33 TSP and Queue Jump locations were identified and are illustrated in Map 4-1. It is recommended that RTS identify 16 priority locations for implementing TSP and Queue Jump for implementation.
- **AV Circulator Pilot Project** - The City of Gainesville developing an autonomous transit shuttle system to operate as a connector between downtown Gainesville and the UF campus along SW 2nd Ave near Innovation Square – with an expansion to Rosa Parks Station and eventually UF. Contingent on implementation and evaluation, consideration of the impacts on transit

operations will be needed to avoid redundancy with existing routes and to accommodate connections to this service.

8.4 Capital/Infrastructure

- **Park and ride lots** – Several park and ride lots were identified in the Go Enhance RTS Study (2014) and UF Transportation & Parking Strategic Plan (2018) to compliment the express routes and Lite BRT service (see Map 8-5). These locations include:
 - **Newberry Village Lot** – to service proposed BRT-Lite route
 - **Newberry Road Lot** – to service proposed Employee Express to Tower Road route
 - **NW 91st Street Lot** – to service proposed Employee Express to Haile Plantation route
 - **SW 75th Street Lot** – to service the Employee Express to Haile Plantation route.

Map 8-5: Proposed Employee-Focused Park and Ride Locations and Transit Routes



Source: UF Transportation and Parking Strategic Plan

- **Five Points Transfer Station**– The City has focused on the redevelopment of the east side where many African American residents live. *Plan East Gainesville* identified a variety of improvements including BRT and the Five Points Station at the intersection of University Avenue and Waldo Road as key transportation linkages. To service the proposed BRT Lite route, a station should be constructed at SE Hawthorne Road and SE 11th Street/Waldo Road.

- **Provide More Bicycle and Sidewalk Connections** – The need for improvements to sidewalk and bicycle infrastructure connections to bus stops emerged from stakeholder interviews, the mobility discussion group workshop, and the Review Committee meeting. While many of RTS’ services operate in areas where sidewalks are already installed, this is not always the case for more residential areas. Additionally, it is important to ensure adequate sidewalk connections to future redevelopment projects as the cost of incorporating sidewalks and accommodations for transit, such as a boarding and alighting area or bus turn-out lanes, are much less costly if installed upfront.

8.5 Policy/Other

The following describe the policy related and other considerations for RTS and the City to help improve mobility and access to mobility over the next ten years.

- **Fare Policy Study** – RTS is exploring the implementation of a free fare policy for older adults over the age of 65 and youth under age 17. RTS will need to study the impacts of the fare policy change to revenue streams and potential environmental justice impacts and ensure Title VI compliance. Review of this proposed policy suggests that a Title VI disproportionate burden will be triggered and need to be mitigated.
- **Improved Access to Mobility** – RTS is experiencing a growth in paratransit demand due to natural aging of the population, particularly the effect of the Baby Boomer generation as this cohort ages beyond the point of 65 years old. This is a national trend that it coupled with high percentage of this cohort residing in and aging in place in suburban locations. To address the growth in paratransit demand and to provide easy access to mobility for all residents, RTS is considering developing a Mobility-on-Demand (MOD) service strategy. The MOD concept is a modern, real-time version of general public dial-a-ride services and will introduce a strategy for RTS to more cost-effectively serve ADA paratransit demand as well as connecting a larger segment of the population to transit, thus reducing the need for reliance on the private automobile.
- **Regional Priority Corridor Improvements** – RTS has an opportunity to partner with Alachua County, the MTPO, Florida Department of Transportation, the University of Florida, and other major businesses and institutions to program traffic engineering solutions to congestion along key travel corridors. Targeting and implementing transit signal priority with queue jump lanes at key intersections along these travel corridors will afford significant improvements in transit reliability, travel time reductions, and operating cost savings while providing a real incentive for commuters to use transit.

8.6 Evaluation of Alternatives

The evaluation of service alternatives considered public input, potential to serve traditional and discretionary transit markets, expected service productivity, and expected cost effectiveness.

Table 8-1: Service Improvement Evaluation Criteria

Category	Criteria	Measure of Effectiveness	Relative Weighting	Overall Category Weight
Public Outreach	Public Input	Level of interest in specific alternatives (Very High, High, Moderate, Low)	20%	20%
Transit Markets	Traditional Market	Percent of corridor in “High” or “Very High” TOI	20%	40%
	Discretionary Market	Percent of corridor in areas that meet the “high/very high” DTA tier for employment or dwelling unit density	20%	
	Urban/Regional Market	Connectivity to urban markets adjacent counties	0%	
Productivity	Productivity	Trips per hour (T-BEST-generated trips and revenue hours of service)	20%	40%
Efficiency	Cost Efficiency	Cost per trip (including new trips)	20%	
Total			100%	100%

The model results are presented below in tabular form ranked from highest score to lowest. The results of the technical evaluation reflect the composite impacts of demand modeling, service productivity, cost-effectiveness, ability to serve transit markets, and public input. In addition, public policy considerations beyond what is quantified and modeled are applied in ranking priorities.

The overall priorities for operations improvements reflect the following strategy:

- Improve service span and frequency on existing services
- Continue development of microtransit with the expansion and enhancement of the concept as reflected in the mobility-on-demand service overlay zones strategy
- Deploy route realignments as recommended in the previous TDP and COA and do so consistent with the changes included in the UF TAPS plan
- Plan, design, and fund an initial segment of the proposed BRT-Lite service

The above priorities are presented in the context of funding availability and budget approval by the City Commission.

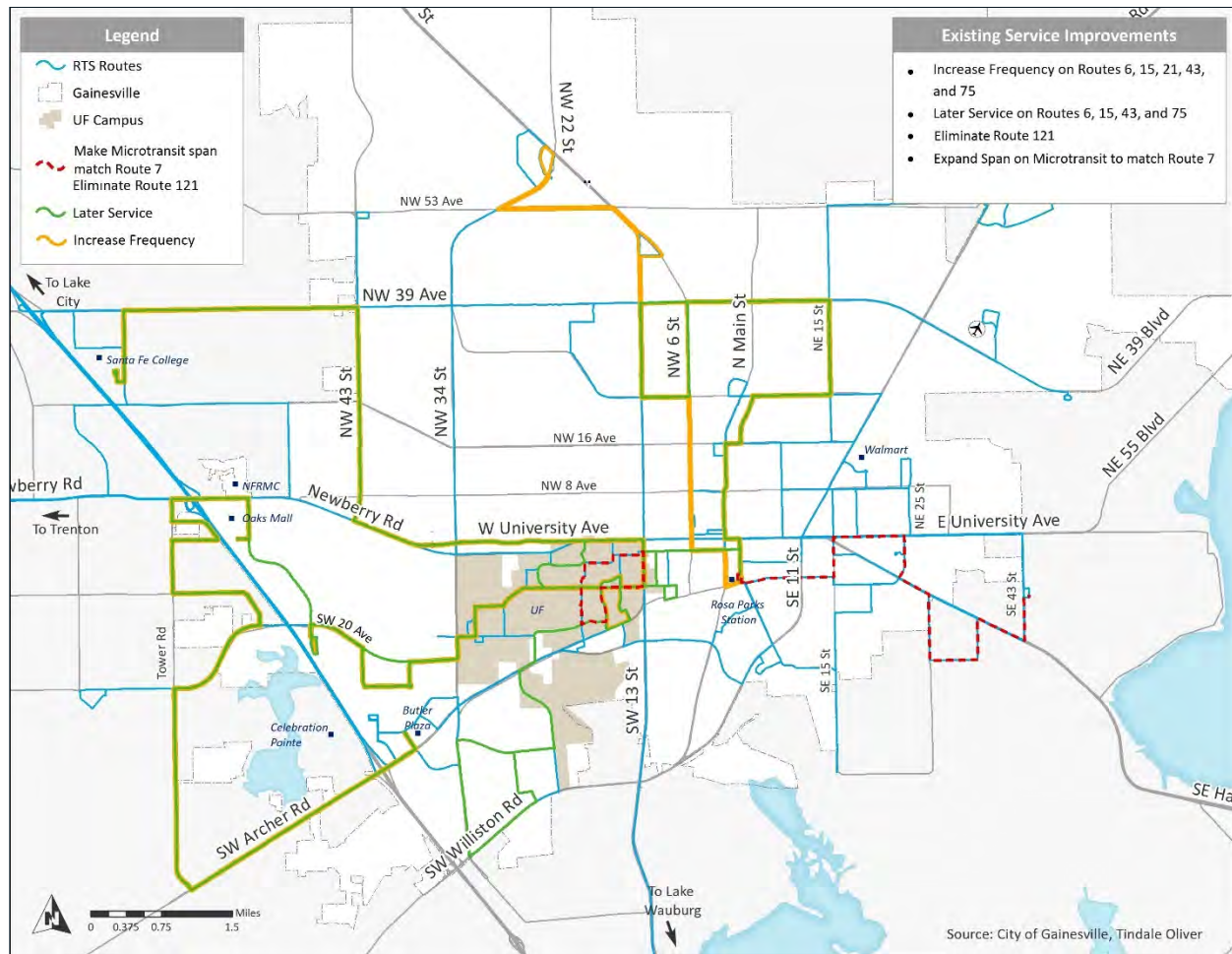
Table 8-2: Technical Ranking – Service Improvements Evaluation

Proposed Operational Improvement Ordered by Rank	Score	Rank
Double Frequency Route 21	5.40	1
Realign Route 28 per COA	5.40	1
Realign Route 34 per COA	5.40	1
Realign Route 36 per COA	5.40	1
BRT Light (Route 20, 21 and 77 ridership added)	5.40	1
Double Frequency Route 15 after 6pm	5.00	6
Maintain 30 min headway for Route 75	5.00	6
Later Service Route 15 (till midnight)	5.00	6
601 Increase Span to Match Route 7	4.20	9
Double Frequency Route 6 - Weekday only	4.20	10
600 Increase Span to Match Route 7	4.20	10
Later Service Route 6 (till 10 pm)	4.20	10
Realign Route 10 per TDP	4.20	10
Realign Route 75 per TDP	4.20	10
Decrease Route 43 Headway 30 to 20 mins	3.80	15
Later Service Route 75 (till 11pm)	3.80	15
MOD 3	3.60	17
Later Service Route 43 (till 10 pm)	3.40	18
MOD 1	3.20	19
MOD 2	3.20	19
MOD 5	3.20	19
MOD 6	3.20	19
Duck Pond/UF Express	2.80	23
Tower/UF Express	2.80	23
MOD 4	2.80	25
MOD 7	2.80	25

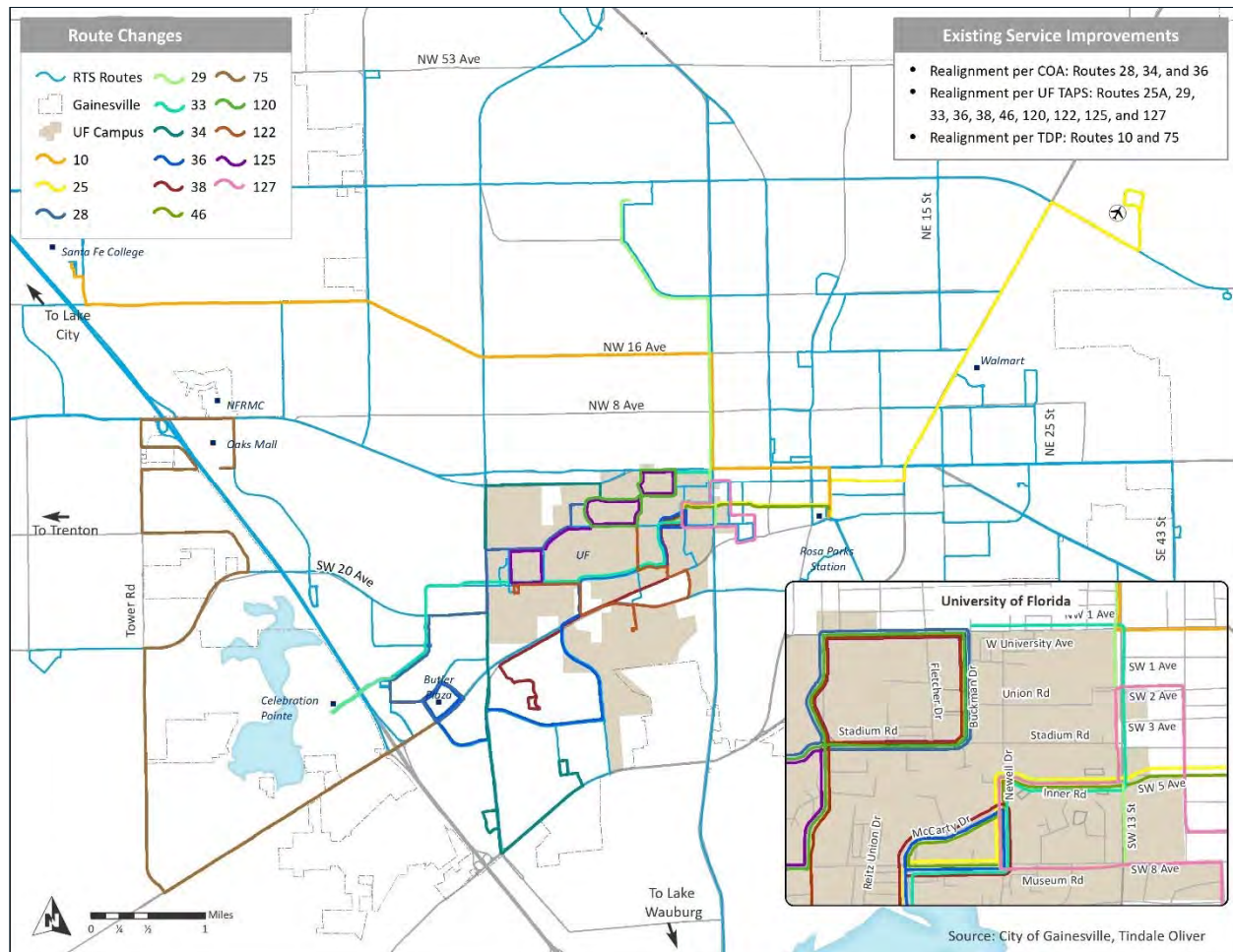
8.7 Alternatives Evaluation Results Summary

The following maps reflect the proposed service improvements. Service improvements were prioritized largely based on improving service span and service frequency on existing routes. This was followed by realigning routes consistent and coincident with the UF TAPS plan and recommendations from the previous TDP and COA.

Map 8-6: Final Alternatives Results, Existing Service Improvements

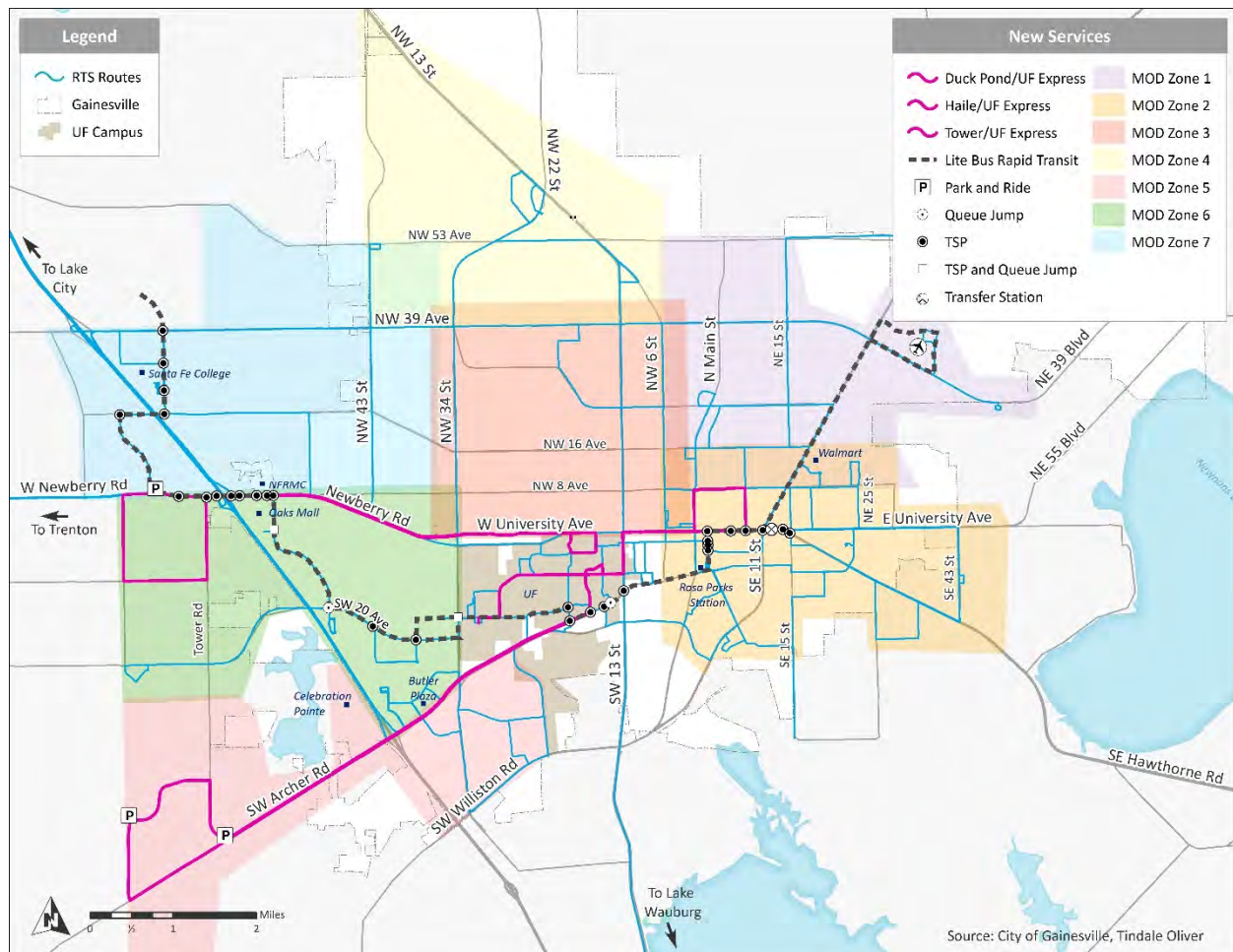


Map 8-7: Final Alternatives Results, Realignments



In addition, certain new services ranked high. These included the expansion of the service span for the existing microtransit service (Routes 600 and 601) as well as continuation and expansion of the microtransit concept in the form of mobility-on-demand zones to overlay the fixed route network and improve access to mobility and connection to transit for areas not well served by fixed route. This initiative had strong policy support. The development of BRT-Lite in conjunction with capital cost investments in transit signal priority and queue jump lanes also carried strong public and policy support.

Map 8-8: Final Alternatives Results, New Services



Capital projects were ranked based primarily on policy and technical considerations. Capital projects for transit tend to be advanced based on both policy and availability of funding. The follow projects were prioritized for advancement in the event funding is secured:

- Invest in replacing aging vehicles and reduce the average age of the fleet
- East Gainesville Transit Center,
- Transit Signal Priority (TSP) and Queue Jump Lanes to improve key intersections along the major corridors of Archer, W. University, and Newberry.
- The BRT-Lite project was prioritized for development as strategic sections of major corridors are upgraded with TSP and queue jump lanes.

9.0 Goals, Objectives, and Initiatives

RTS and the City are in the process of updating the Vision, Mission, and associated strategies for the new Department of Mobility. Therefore, the existing RTS Vision and Mission statements are presented below, unchanged from the previous TDP. The goals and objectives offered below reflect the thinking and sentiment observed through workshops with RTS and City staff as well as feedback from the Review Committee, Stakeholders, and the public. The updated goals and objectives were reviewed and approved by RTS and City staff. New Vision and Mission statements will be included in the next annual TDP update.

9.1 Vision

The City of Gainesville RTS Vision reads as follows:

To be the transportation mode of choice for the Gainesville Metropolitan area.

9.2 Mission

The City of Gainesville RTS Mission statement reads as follows:

To enhance the quality of life in our community by providing safe, courteous, equitable, reliable, and energy-efficient transportation services.

9.3 Goals and Objectives

The proposed goals and objectives reflect a continuation and update of goals and objective contained in the previous TDP. The proposed goals and objectives are intended to better incorporate a more holistic perspective on mobility consistent with the new City of Gainesville Department of Mobility.

Goal 1: Provide an Equitable, Accessible, Dynamic, Safe, Customer Responsive, Publicly Engaged, and Performance Driven Transit System

Objective 1.1: Increase public outreach and marketing efforts to educate citizens, the electorate, and visitors about the benefits, availability, and characteristics of existing and planned transit services.

Initiatives for Objective 1.1:

- Initiative 1.1.1: Continue to attend community events or organization meetings (such as UF football games, Spring Garden Festival, Alachua County Youth Fair, etc.) and Chamber of Commerce meetings to share information about RTS's existing and planned services to integrate the public's ideas into future planning efforts and funding sources.
- Initiative 1.1.2: Work in coordination with local organizations to participate in job fairs to increase knowledge about the transit system and transit careers
- Initiative 1.1.3: Promote transit services through mixed media, such as Facebook (no less than three weekly posts), Twitter, and Instagram (no less than one weekly post).
- Initiative 1.1.4: Maintain and regularly update the website with current service and schedule information. Clearly display trip planning services such as Google Trip Planner and TransLoc.

- Initiative 1.1.5: Use mixed media including Facebook, Twitter, and the RTS website to update the public on current service and schedule changes when they occur.
- Initiative 1.1.6: Continue to use Census, ACS, and other socioeconomic and demographic datasets to identify transit dependent communities and facilities in transit dependent areas where targeted outreach, education, and public input can be conducted.

Objective 1.2: Follow federal, State, and local regulations and other best practices regarding public involvement to properly solicit citizen feedback on all RTS services, plans, and projects.

Initiatives for Objective 1.2:

- Initiative 1.2.1: Conduct public meetings on a per-semester basis to discuss enhancements in service and other major initiatives, such as the Transit Development Plan (TDP), fare changes, and Program of Projects. Develop standardized material for communicating changes.
- Initiative 1.2.2: Conduct an on-board survey every 5 years as part of major TDP updates to monitor changes in user demographics, travel behavior characteristics, user satisfaction, and validate Automatic Passenger Count (APC) information. Use survey findings to update TDP, as appropriate.
- Initiative 1.2.3: Create and place a customer comment card on RTS buses and website to acquire citizen feedback. Place another card in the operations building for driver feedback. Where contact information is given, provide a response within 1 week.
- Initiative 1.2.4: Engage annually with minority, low-income, disabled, and other vulnerable and protected populations and with organizations which provide services to protected and vulnerable populations to discuss transportation needs and improvements.

Objective 1.3: Provide an open and communicative internal agency culture which ensures staff safety, security, and recognizes the outstanding work of RTS' employees.

Initiatives for Objective 1.3:

- Initiative 1.3.1: Develop and implement an employee recognition program that highlights an outstanding employee each quarter, as selected by his/her peers.
- Initiative 1.3.2: Hold meetings of Planning and Operations per semester and prior to the implementation of any service changes to discuss mutual concerns, questions, plans, recommendations, etc.
- Initiative 1.3.3: Publish an internal RTS newsletter that includes staff profiles three times per year.
- Initiative 1.3.4: Continue to post internal updates and memoranda at key locations throughout RTS facilities and online through RTS' website.
- Initiative 1.3.5: Continue to evaluate driver safety and security concerns, complaints, and incidents. Develop a database for tracking and categorizing driver safety and security concerns and incidents. Address recurring driver safety and security concerns, complaints, and incidents in a proactive manner with best practice safety and security measures.

Objective 1.4: Develop metrics that track and address safety and customer complaint incidents in order to promote good customer service and public safety.

Initiatives for Objective 1.4:

- Initiative 1.4.1: Track and reduce the number of accidents per 100,000 revenue miles. Establish a baseline and set a target goal to be achieved by 2030.
- Initiative 1.4.2: Track and reduce the number of complaints per 100,000 riders. Establish a baseline and set a target goal to be achieved by 2030.
- Initiative 1.4.3: Track and reduce customer service complaints per 1,000 riders on fixed route trips. Establish a baseline and set a target goal to be achieved by 2030.
- Initiative 1.4.4: Continue to annually submit a list to Traffic Operations Division of the top 20% of active stops (by ridership) at intersections to encourage installation of appropriate signage and signalization.
- Initiative 1.4.5: Continue operator and maintenance safety training program hours during summer.
- Initiative 1.4.6: Ensure that 100% of new hires take mandatory National Incident Management System (NIMS) compliance courses within 90 days of hire.
- Initiative 1.4.7: Discourage drunk driving by providing Gator Aider and Later Gator service commensurate with demand to and from areas identified by UF.
- Initiative 1.4.8 Monitor performance and compliance against the RTS Systems Safety Plan (SSP) on a monthly basis, track trends, and adjust operations, practices, policies as needed to improve safety performance.
- Initiative 1.4.9: Use digital messaging in vehicle to remind passengers to practice safe riding habits (i.e., hold on when the bus is moving, tell the driver a bike is being retrieved, etc.)

Objective 1.5: Provide equitable, balanced, and accessible transit services, including improved access and services to Title VI, transit-dependent, and ADA passengers.

Initiatives for Objective 1.5:

- Initiative 1.5.1: Provide convenient access to RTS schedules for the visually impaired.
- Initiative 1.5.2: Update the ADA paratransit guide annually.
- Initiative 1.5.3: Continue to make audible announcements to disseminate information to visually impaired, LEP, and low-literacy riders on RTS vehicles and at major transfer centers.
- Initiative 1.5.4: Continue to explore opportunities to partner with Transportation Network Companies (TNCs) and assess the feasibility of using TNCs to provide a portion paratransit trips where and when it improves service quality, is more cost-effective than RTS directly operated solutions, and meets the needs of the client and trip. Assure extended partnerships with TNCs comply with ADA, Title VI, Section 14-90, and other relevant regulations.
- Initiative 1.5.5: Examine the feasibility of providing deviated fixed-route or mobility-on-demand services in areas where demand is not sufficient for fixed-route service but demonstrates demand for localized mobility, First-Mile/Last-Mile (FMLM) connections, demand for paratransit service, and demand by transportation disadvantaged populations.
- Initiative 1.5.6: Ensure that all bus-stops are ADA accessible and prioritize wheelchair-based bus stop amenities and improvements (e.g., waiting pads) where wheelchair usage is highest.
- Initiative 1.5.7: Annually submit a list to Public Works of the top 20% of stops (by ridership) that lack sidewalk connections for consideration when developing their work program.

Submit a making the case argument for improving ADA accessibility at these high priority locations.

- Initiative 1.5.8: Manage an equitable bus stop maintenance and improvement program to maintain the aesthetic quality of and financial investment in bus stop amenities and transit infrastructure across the community. Provide standards for customer amenities (pad, shelter, bench, etc.) at bus stops based on ridership, routes serving the stop, sidewalk and bike access, adjacent land use, and Title VI protected population characteristics.
- Initiative 1.5.9: Provide a system map at all stops with multiple routes, where possible.
- Initiative 1.5.10: Continue to update the Title VI and LEP Plan every 3 years per FTA Requirements.

Objective 1.6: Improve the quality and convenience of transit services provided to passengers in the Gainesville Metropolitan area.

Initiatives for Objective 1.6:

- Initiative 1.6.1: Provide transit service for a minimum of 14 hours per day on 80% of fixed route services, excluding Later Gator and campus routes.
- Initiative 1.6.2: Provide a minimum of 20-minute peak hour frequencies as a standard for all areas within a ½-mile of all high-density residential areas, as described in the City of Gainesville’s UMU-1, UMU-2 zoning, H-1, and RH-2 zoning. Measure and monitor compliance through GIS mapping of aggregate peak route frequencies for routes traversing these zones.
- Initiative 1.6.3: Use park-and-ride facilities at key locations along major corridors to support Alachua County mobility plan without hindering ability to increase densities.
- Initiative 1.6.4: Continue to explore the use of flexible and mobility-on-demand services such as deviated fixed-routes, point deviation, and general public demand response to reach areas in the community where fixed-route services are not feasible and/or are cost prohibitive.
- Initiative 1.6.5: Explore opportunities to leverage advances in mobility-on-demand services to provide localized mobility, FMLM connections to fixed route, and service increasing demand for ADA paratransit services.
- Initiative 1.6.6: Identify opportunities to coordinate with Transportation Network Companies (TNCs) and Bicycle/Scooter Sharing Companies to provide supporting and FMLM options and services around RTS services and stops.
- Initiative 1.6.7: Improve existing transit services and implement new transit services consistent with the 10-year transit needs identified in the most recent TDP update.
- Initiative 1.6.8: Identify opportunities to provide premium transit services including BRT characteristics such as: bus lanes, queue jumps, TSP, and enhanced stations in areas where there is enough demand, density, and right-of-way for such infrastructure.
- Initiative 1.6.9: Identify locations and feasibility of implementing a Mobility Hub strategy for projects where multi-modal transportation options are available near major bus transfer locations. Locations are expected to be identified via a pending study.

Objective 1.7: Implement and expand Intelligent Transportation System (ITS) to better identify and serve areas of transit demand.

Initiatives for Objective 1.7:

- Initiative 1.7.1: Continue development of ITS Plan and adoption of technology to support service planning, operations analysis, operations management, service delivery, customer information, fare payment, and leverages Mobility as a Service (MaaS) and open architecture.
- Initiative 1.7.2: Monitor new fare collection system (fare boxes) toward improved revenue collection and riders fare type data. Complete acquisition and deployment of other fare media options such as mobile pay.
- Initiative 1.7.3: Monitor use of APCs and enhance data collection and analysis from APCs to improve operations performance (e.g.: on-time performance) and understanding of ridership activity. Target full fleet deployment of APCs within fiscal capacity.
- Initiative 1.7.4: Continue to maintain and enhance a bus stop, route, and facilities inventory using Geographic Information Systems (GIS) and other technologies.
- Initiative 1.7.5: Study and plan for how RTS will respond to and/or incorporate connected/autonomous vehicles.
- Initiative 1.7.6: Continue to explore opportunities to improve travel times, headways, and on-time performance through the implementation of transit signal priority technology along heavily trafficked corridors.

Goal 2: Be Good Stewards of Public Resources.

Objective 2.1: Promote sustainability, public health, and reduce environmental impacts through sustainable and environmentally friendly infrastructure, amenities, technology, partnerships, policies, and business practices.

Initiatives for Objective 2.1:

- Initiative 2.1.1.: Examine opportunities to develop a system-wide Sustainability Plan and subsequent performance measures with the goal of achieving entry-level status in the APTA Sustainability Commitment Program.
- Initiative 2.1.2: Continue to maintain a list of recyclable materials in Maintenance, including yearly quantities of materials recycled and establish targeted reductions based on current quantities.
- Initiative 2.1.3: Ensure compliance with city adopted Transit Asset Management Plan (TAMP), as required by FTA.
- Initiative 2.1.4: As support vehicles reach obsolescence, replace with hybrid vehicles (if financially feasible).
- Initiative 2.1.5: Examine the feasibility of transitioning the fixed-route fleet to all-electric or electric-hybrid vehicles and the required infrastructure to support such a transition.
- Initiative 2.1.6: Promote and encourage the use of bicycles and other forms of micro-mobility to access RTS services. Create a metric to evaluate bicycle and other micro-mobility-based bus stop amenity needs (e.g., bike racks and bike share) and provide said amenities where usage is highest.
- Initiative 2.1.7.: Encourage greater use of bike share as means of accessing transit.

Objective 2.2: Continue to create relationships, partnerships, and coordinate with key local, regional, state, and national partners and stakeholders to promote and coordinate transit and multi-modal mobility services and improvements.

Initiatives for Objective 2.2:

- Initiative 2.2.1.: Continue to support Alachua County’s Mobility Plan, UF Transportation and Parking Strategic Plan and land use planning and regulations that facilitate pedestrian, bicycle, micro-mobility and transit ridership such as small street blocks, connectivity, placement of parking to the side or rear of buildings, wide sidewalks, protected and buffered bicycle facilities, and shared-use pathways.
- Initiative 2.2.2: Continue the development review process and provide feedback on City of Gainesville and Alachua County development projects and plans to support the Mobility Plan. Prioritize comments and feedback on development projects along or near major transportation corridors and opportunities for transit amenity improvements.
- Initiative 2.2.3: Ensure consistency with the long-term planning efforts of relevant local and state agencies, governments, and organizations, especially Alachua County and the City of Gainesville Comprehensive Plans.
- Initiative 2.2.4: Continue to partner with educational institutions including Alachua County Public Schools to create a culture of transit ridership and explore workforce training opportunities.
- Initiative 2.2.5.: Share information yearly with the University of Florida and Santa Fe College regarding route performance, service concerns, and other opportunities for service revisions and/or improvements.
- Initiative 2.2.6: Explore opportunities to coordinate and collaborate with Transportation Network Companies (TNCs) to provide supporting and FMLM options and services that support RTS and its customers where and when it is productive and cost-effective.
- Initiative 2.2.7: Explore opportunities to coordinate and collaborate with bicycle and scooter sharing companies and provide safe FMLM options and services around major RTS bus stations and stops.
- Initiative 2.2.8: Coordinate with the City, County, UF, SF College and FDOT to prioritize and implement improvements to multimodal, sidewalk, and transit facilities when the City, County, and FDOT are designing roadway improvements (resurfacing and other improvements).

Objective 2.3: Increase and diversify revenue sources.

Initiatives for Objective 2.3:

- Initiative 2.3.1: Maintain advertising revenue’s current share of budget while seeking to increase said revenue by 2% each year.
- Initiative 2.3.2: Request and maximize financial support from the City of Gainesville, Alachua County, UF, SF College, the MTPO, FDOT, and FTA on an annual basis.
- Initiative 2.3.3: Monitor fare revenue and ridership to assure Title VI equity compliance.
- Initiative 2.3.4: Continue existing partnership for revenue/cost sharing (UF, Santa Fe, etc.) and add partnership with major employers and institutions.
- Initiative 2.3.5: Target grant programs through State, Federal, and other sources to identify and secure funding for existing services (capital and operating) and for emerging and innovative transportation research (e.g.: MOD sandbox, IMI Grant Program, etc.)

Objective 2.4: Develop a performance monitoring program that recognizes mobility demand, service design, service delivery, and performance metrics within the service area.

Initiatives for objective 2.4:

- Initiative 2.4.1: Monitor and measure mobility demand (general public and ADA) within the service area to recognize on-going changes in demand and to understand changes in transportation need overall and by service type.
- Initiative 2.4.2: Monitor and measure service performance metrics by service type (fixed route, paratransit, MOD, etc.) monthly using key operations performance metrics (e.g.: revenue hours, revenue miles, ridership, riders per revenue hour, cost per trip, etc.) to understand how well demand is being met and how well services are being supplied.
- Initiative 2.4.3: On a quarterly basis examine holistically the trends in mobility need and how services are meeting these needs. Identify opportunities to improve service delivery and strategies to more holistically service demand more efficiently and cost-effectively.
- Initiative 2.4.4: Maintain an overall average on-time performance (i.e., bus arrives at stop no more than 1 minute early or 5 minutes late) of 85% on all fixed-route services and 95% on-time for paratransit services with pick-ups arriving within 15 minutes of schedule pick-up time.
- Initiative 2.4.5: Maintain or Increase transit ridership annually; coordinate with UF Transportation Plan to leverage use of transit to access campus.
- Initiative 2.4.6: Conduct a COA every 5 years to inform major updates to the TDP and identify means to improve operations.

Objective 2.5: Maintain the transportation system in a state of good repair.

Initiatives for Objective 2.5:

- Initiative 2.5.1: Evaluate rolling stock and equipment and comply with city-adopted metrics and current RTS TAMP.
- Initiative 2.5.2: Increase the average number of revenue miles between failures by 2% per year to meet peer average of 10,000 revenue miles between failures by 2030.
- Initiative 2.5.3: Maintain an up to date Transit Asset Management Plan (TAMP) to ensure all capital assets remain within state of good repair.
- Initiative 2.5.4: Follow industry guidelines for preventive maintenance and practices on vehicles and capital facilities to assure extended lifecycle of RTS assets.

10.0 10-Year Transit Plan

This section presents the recommended 10-year transit plan, including financial and implementation plans for RTS. Existing and proposed improvements to transit services, capital and infrastructure, technology, and policy improvements are summarized first. Following, a summary of the assumptions for capital and operating costs and revenues used in developing the TDP are explicated, with an accompanying financial plan for the 10-year horizon period. Finally, the 10-year implementation plan program is defined.

10.1 The 10-Year Plan

The recommended improvements included in the 10-year TDP are the result of an extensive public outreach program that included stakeholder workshops, public meetings, on-board and user surveys, and a variety of other elements as well as data evaluation and processing. The improvements identified fall into the categories of Service Improvements, Capital and Infrastructure Improvements, Technology Improvements, and Policy Improvements. These are described in further detail below.

10.1.1 Service Improvements

10.1.1.1: Existing Services

- Double Frequency Route 6 - Weekday only
 - Recommendations for frequency improvements came from extensive public outreach, particularly on-board survey results.
- Double Frequency Route 15 after 6 PM
 - Recommendations for frequency improvements came from extensive public outreach, particularly on-board survey results.
- Double Frequency Route 21
 - Recommendations for frequency improvements came from extensive public outreach, particularly on-board survey results.
- Improve Route 43 frequency from every 30 minutes to every 20 minutes
 - Recommendations for frequency improvements came from extensive public outreach, particularly on-board survey results.
- Provide consistent 30 minute frequency on Route 75
- 600 extend service span to match Route 7
 - Extending the service span for Route 600 to match Route 7 will facilitate ease of transfers and create a reliable link between local and express services.
- 601 extend service span to match Route 7
 - Extending the service span for Route 601 to match Route 7 will facilitate ease of transfers and create a reliable link between local and express services.
- Later Service Route 6 (until 10 pm)
 - Later service on this Route will allow transit users who work or attend school late to reach their final destinations.
- Later Service Route 15 (until midnight)

- Later service on this Route will allow transit users who work or attend school late to reach their final destinations.
- Later Service Route 43 (until 10 pm)
 - Later service on this Route will allow transit users who work or attend school late to reach their final destinations.
- Later Service Route 75 (until 11pm)
 - Later service on this Route will allow transit users who work or attend school late to reach their final destinations.
- Eliminate Route 121
 - It was recommended this route be eliminated coincident with improvements identified in the UF TAPS Transportation and Parking Strategic Plan Report. With proposed changes associated with the UF TAPS plan, Route 121 becomes redundant.
- Realign routes per COA and TDP
 - The most recent Comprehensive Operations Analysis recommended the following route realignments: Route 28, Route 34, Route 36.
 - The last TDP recommended the following route realignments: Route 10, Route 75.
- Realign routes per UF TAPS Transportation and Parking Strategic Plan
 - The University of Florida's Transportation and Parking Services Transportation and Parking Strategic Plan recommended the following route realignments: Routes 25A, 29, 33, 36, 38, 46, 120, 122, 125, 127. The realignment of these routes in the long-term will facilitate the creation of a bicycle and pedestrian only zone on the UF Campus.

10.1.1.2: Add New Services

- BRT Light
 - Various versions and alignments of a Bus Rapid Transit (BRT) line in the greater Gainesville area have been proposed over the past decade. The recommended alternative proposed in the Go Enhance RTS Study includes a TSM alternative phased in two parts. The system relies on queue jumps and transit signal priority technology to ensure reliable travel times.
- Duck Pond/UF Express
 - This route, proposed in the UF TAPS Transportation and Parking Strategic Plan, is intended to serve UF employees and students in the Duck Pond area. As an express route, it will provide reliable travel times through limited stops.
- Haile/UF Express
 - This route, proposed in the UF TAPS Transportation and Parking Strategic Plan, was implemented with the Fall 2019 service change and is intended to serve UF employees and students in the Haile Plantation area to provide reliable travel times through limited stops.
- Tower/UF Express
 - This route, proposed in the UF TAPS Transportation and Parking Strategic Plan, is intended to serve UF employees and students along Tower Road. As an express route, it will provide reliable travel times through limited stops.

- MOD Services
 - Seven Mobility-on-Demand zones are proposed for the greater Gainesville area. These services are designed to be a continuation and enhancement of the existing microtransit service and to expand the concept to additional areas to allow persons to request door-to-door local mobility (e.g.: home to Publix) and door-to-bus stop (e.g.: home to fixed route for longer trips) services and increase overall access to transit. The services are available to all and will augment ADA paratransit service as demand continues to grow. The MOD services are accessed in real-time via phone and web app or by calling RTS. Rides can be requested for immediate service and can be scheduled for a future time and date.

10.1.2 Capital and Infrastructure Improvements

- Vehicle Replacement
 - The existing average age of the RTS fleet is high compared to best practices and FTA guidelines for vehicle replacement. Investing in replacement vehicles will reduce the age of the fleet, improve service reliability, and reduce vehicle maintenance costs.
- Queue Jumps
 - The implementation of queue jump lanes along the proposed BRT-Lite Route and the UF Express routes will facilitate reliable travel times and provide for a truly premium bus service along majorly congested corridors. The benefits will derive to all transit in corridors where queue jumps are deployed at key intersections. Queue jumps should be implemented in conjunction with transit signal priority technology.
- East Side Transfer Station
 - The East Side Transfer Station was proposed during the BRT-Lite GO Enhance RTS Report. The new transfer center will provide an important transportation mobility hub to serve East Gainesville. Funds have been programmed for the design/construction of the facility in past financial plans, but revenues have not been allocated.
- Bus Stop Infrastructure
 - Bus stop infrastructure improvements are included in the TDP Financial Plan based upon the existing annual allocation for such improvements. Many comments received during the public outreach process focused on improved bus stop amenities and facilities, particularly shelters.
- ADA Improvements
 - ADA improvements are an essential component of facilitating transit accessibility. The TDP Financial Plan includes the existing annual allocation for such improvements.
- Recurring Facilities Upgrades
 - Funding for ongoing facilities maintenance and upgrades are included in the financial plan as is consistent with state of good repair requirements.
- Microtransit Service Development
 - This line item in the TDP Financial Plan allocates continuing service development funds (operations) for the existing microtransit service (Routes 600 and 601) through

2021. Funds are also requested in the TDP to continue microtransit development and enhancement through the proposed Mobility-on-Demand service and zones.

10.1.3 Technology Improvements

- Transit Signal Priority
 - The implementation of transit signal priority (TSP) along the proposed BRT-Lite Route will facilitate reliable travel times for the BRT-Lite service as well as UF Express services and local bus routes that use traverse the major roadways along the BRT corridor. TSP interacts with the phasing of traffic signals at designated intersections to allow transit vehicles to advance through the intersection (with an extended green phase as the vehicle approaches the intersection) and permit transit vehicles an advanced green (a green light for the transit vehicles in a queue jump lane to provide a few seconds lead time for the transit vehicles to clear the intersection before the general purpose lanes). TSP in combination with queue jump lanes will significantly improve transit reliability, reduce travel times for transit, and increase throughput along the corridor. TSP offers premium bus service along majorly congested corridors.
- Technology Projects
 - RTS continues to investigate and assess the benefits of technology to improve existing services, operations, and processes. Projects involving improvements to fare collection, enhancing real time service information, app based systems to support mobility-on-demand and more robust data collection, and scheduling systems are included in this list.
- Technology Projects – Recurring
 - RTS has existing legacy systems that require maintenance and upgrades. Funding for systems maintenance and upgrades in included in the TDP.

10.1.4 Policy Improvements

The following describe the policy related considerations recommended for RTS and the City to pursue help improve mobility and access to mobility over the next ten years.

- **Fare Policy Study** – RTS is exploring the implementation of a free fare policy for older adults over the age of 65 and youth under age 17. RTS will need to study the impacts of the fare policy change to revenue streams and potential environmental justice impacts and ensure Title VI compliance. Review of this proposed policy suggests that a Title VI disproportionate burden will be triggered and need to be mitigated.
- **Improved Access to Mobility** – RTS is experiencing a growth in paratransit demand due to natural aging of the population, particularly the effect of the Baby Boomer generation as this cohort ages beyond the point of 65 years old. This is a national trend that is coupled with a high percentage of this cohort who reside in and are aging in place in suburban locations. To address the growth in paratransit demand, and to provide easy access to mobility for all residents, RTS should consider developing a Mobility-on-Demand (MOD) service strategy. The

MOD concept is a modern, real-time version of general public dial-a-ride services and will introduce a strategy for RTS to more cost-effectively serve ADA paratransit demand as well as connecting a larger segment of the population to transit, thus reducing the need for reliance on the private automobile.

- **Regional Priority Corridor Improvements** – RTS has an opportunity to partner with Alachua County, the MTPO, Florida Department of Transportation, the University of Florida, and other major businesses and institutions to program traffic engineering solutions to congestion along key travel corridors. Targeting and implementing transit signal priority with queue jump lanes at key intersections along these travel corridors will afford significant improvements in transit reliability, travel time reductions, and operating cost savings while providing a real incentive for commuters to use transit.

10.2 10-Year TDP Finance Plan

A finance plan was developed to facilitate the implementation of the proposed RTS TDP Improvements. Cost, revenue, and policy assumption used to develop the financial plan are presented followed by a summary of costs and revenue projections for RTS over the horizon year of the TDP. The summary includes annual costs for the proposed service improvements, as well as technology, capital, and policy improvements within the next 10 years with supporting revenues that are reasonable expected to be available for such improvements.

10.2.1 Operating Cost Assumptions

Numerous assumptions were made to forecast transit operating costs from 2019 through 2028. Service performance data from RTS, discussion with RTS staff, other Florida TDPs, and other factors contributed to the assumptions that were used as the base of the Financial Plan. The key operating cost assumptions are summarized below:

- Fixed-Route Operating Costs per Revenue Hour was \$78.58 based on 2017 NTD Data – and inflated to 2019 dollars for the Finance Plan. The inflated Operating Cost per Trip was assumed to be \$81.05
- Paratransit Operating Cost per Trip for Contracted Services was \$34.55 based on 2017 NTD Data – and inflated to 2019 dollars for the Finance Plan. The inflated Operating Cost per Trip was assumed to be \$35.63
- Microtransit Operating Cost per Trip was assumed to be \$35.63 based on inflated Paratransit Operating Costs per Trip.
- An annual inflation rate of 1.6% for operating costs was assumed based on a 10-year average of the Consumer Price Index (CPI).
- Annual Fixed Route Operating Costs were assumed to be the 2017 operating costs inflated to 2019 dollars. The same methodology was applied for Paratransit (\$1,992,480).

10.2.2 Capital Cost Assumptions

Similarly, several assumptions were made to support the cost projections for the capital, infrastructure, and technology needed to support the implementation of the TDP. These capital cost assumptions are summarized below

- Fixed Route Vehicle Costs are assumed at \$500,000 per vehicle based on RTS' FY18/19 Budget.
- Paratransit and Cutaway Microtransit vehicle unit costs were assumed to be \$85,000 based on RTS' FY18/19 Budget.
- BRT-Lite Vehicle Unit Costs were assumed to cost \$580,000 based upon the Fixed Route Vehicle Costs with an adjustment for premium technology and branding.
- Support and Relief Vehicle Costs were assumed to be \$45,000 per unit based upon RTS' FY18/19 Budget.
- The Capital Costs Inflation Rate is assumed to be 2.5% while the Capital Revenue Inflation Rate is assumed to be 1.5%
- A 15-year useful life assumption was applied to fixed-route busses for the bus replacement plan – with a maximum of 10 busses replaced per year. Vehicle life-cycle assumptions were based on input from staff. The buses replaced under this program are intended for the existing fixed route system. The existing finance plan calls for replacement of 100 buses, 45 paratransit vans, and 53 support vehicles.
- The plan also includes the purchase of 8 buses for BRT-Lite, 6 buses for Express services, and 7 cutaways for Mobility of Demand Services.
- Funds are allocated annually to improve bus stop infrastructure for transit services and to upgrade existing facilities to meet ADA accessibility requirements, where appropriate, based on estimates from RTS staff.

10.2.3 Revenue Assumptions

Basic revenue base assumptions were made to be consistent with a continuation of funding levels, escalated for inflation (using the CPI), based on RTS' most recent budget (2019) which includes FDOT and FTA grants for operating and capital expenses, farebox revenues, city and county funds, and funding from the University of Florida and Santa Fe College.

10.2.4 10-Year Cost/Revenue Summary

Table 10-1 summarizes the annual operating costs and supporting revenues for the RTS TDP. As shown, it would cost \$349,184,682 to operate the RTS TDP over the next 10 years (FY2020-FY2029). The estimated revenues over the same period amount to \$293,466,577 for an operating revenue deficit of \$55,718,106 (unfunded services).

The operating costs would continue to be funded with a mix of local, state, and federal sources and fare revenues generated by existing and new transit services. The TDP operating plan assumes continuation of existing funding levels plus consumer price index. The operating revenues expected over the 10-year period are as follows:

- | | |
|------------------------------|---------------|
| • Federal Formula and Grants | \$ 19,888,163 |
| • State Funds | \$ 34,031,044 |

• Fares	\$ 13,087,631
• Local sources	\$226,459,739
• Unfunded Needs	\$ 55,718,106

The unfunded operating needs represents service costs in excess for estimated growth in existing operating revenue sources. Additional operations will not be approved unless adequate funding sources are available for the additional services. RTS annual budget is subject to approval by the City Commission.

Table 10-2 summarizes the annual capital costs and supporting revenues for the projects included in the TDP. The 10-year capital cost estimate is \$138,291,411 to support the necessary fleet and capital infrastructure investments. The estimated 10-year revenue estimated needed to fund capital is \$94,531,600. The cumulative unfunded capital need is estimated to be \$45,533,958. This amount includes an estimated unfunded rollover of \$1,774,147 from 2019.

10-year capital needs are estimated as follows:

• New and Replacement Vehicles	\$ 95,082,871
• TSP/Queue Jump Facilities	\$ 16,050,000
• East Side Transfer Center	\$ 4,006,925
• Bus Stop Infrastructure	\$ 5,861,000
• ADA Improvements	\$ 5,000,000
• Technology Projects	\$ 10,723,000
• Recurring Facilities Upgrades	\$ 1,567,615
• Total Capital Costs	\$138,291,411

The capital costs would continue to be funded with a mix of local, state, and federal sources generated by existing and new transit services. The TDP operating plan assumes continuation of existing funding levels plus consumer price index. The capital revenues expected over the 10-year period are as follows:

• Federal Grants	\$ 80,058,345
• State Funds	\$ 8,155,898
• Local Sources	\$ 6,317,356
• Total Sources	\$ 94,531,600
• Unfunded Needs	\$ 45,533,958

RTS capital projects are approved by the City Commission subject to available funding from federal, state, and other sources.

Table 10-1: RTS Projected 10-Year Operating Costs, Revenues, Unfunded Needs

Operating Cost/Revenue	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	10-Year Total
Operating Costs												
Maintain Existing Fixed-Route	\$24,444,820	\$24,825,425	\$25,211,957	\$25,604,507	\$26,003,170	\$26,408,039	\$26,819,212	\$27,236,787	\$27,660,864	\$28,091,544	\$28,528,929	\$266,390,435
Maintain Existing Service - Paratransit	\$1,992,480	\$2,023,503	\$2,055,009	\$2,087,006	\$2,119,500	\$2,152,501	\$2,186,015	\$2,220,052	\$2,254,618	\$2,289,722	\$2,325,373	\$21,713,299
Improvements to Existing Routes	\$0	\$2,641,304	\$2,682,429	\$2,724,194	\$2,766,610	\$2,809,686	\$2,781,445	\$2,824,752	\$2,868,733	\$2,913,399	\$2,958,761	\$27,971,314
New Services	\$492,111	\$499,774	\$507,555	\$817,639	\$1,137,256	\$1,466,628	\$5,382,111	\$5,465,911	\$5,551,015	\$5,637,444	\$5,725,219	\$32,190,552
Complementary ADA Paratransit for New Services	\$0	\$0	\$0	\$0	\$0	\$0	\$178,181	\$180,955	\$183,772	\$186,634	\$189,540	\$919,081
Total Operating Cost	\$26,929,411	\$29,990,006	\$30,456,951	\$31,233,347	\$32,026,536	\$32,836,854	\$37,346,964	\$37,928,456	\$38,519,002	\$39,118,743	\$39,727,822	\$349,184,682
Operating Revenues												
Federal 5307	\$1,800,000	\$1,828,026	\$1,856,488	\$1,885,394	\$1,914,749	\$1,944,562	\$1,974,839	\$2,005,587	\$2,036,814	\$2,068,527	\$2,100,734	\$19,615,722
Federal 5310	\$25,000	\$25,389	\$25,785	\$26,186	\$26,594	\$27,008	\$27,428	\$27,855	\$28,289	\$28,730	\$29,177	\$272,441
FDOT Grants (5310, 5311, 5316, 5317)	\$1,292,610	\$1,312,736	\$1,333,175	\$1,353,933	\$1,375,014	\$1,396,422	\$1,418,165	\$1,440,246	\$1,462,670	\$1,485,444	\$1,508,572	\$14,086,377
FDOT Block Grant Funds	\$1,830,185	\$1,858,681	\$1,887,621	\$1,917,011	\$1,946,859	\$1,977,171	\$2,007,956	\$2,039,220	\$2,070,970	\$2,103,215	\$2,135,963	\$19,944,667
Existing Paratransit Fare Revenue	\$165,464	\$168,040	\$170,657	\$173,314	\$176,012	\$178,753	\$181,536	\$184,362	\$187,233	\$190,148	\$193,109	\$1,803,164
Alachua County Contribution	\$873,121	\$886,715	\$900,522	\$914,543	\$928,782	\$943,243	\$957,930	\$972,845	\$987,992	\$1,003,375	\$1,018,997	\$9,514,944
City of Gainesville Contribution	\$3,035,107	\$3,082,364	\$3,130,356	\$3,179,096	\$3,228,594	\$3,278,863	\$3,329,915	\$3,381,762	\$3,434,416	\$3,487,890	\$3,542,196	\$33,075,453
University of Florida Contribution	\$13,936,785	\$14,153,781	\$14,374,155	\$14,597,961	\$14,825,251	\$15,056,080	\$15,290,503	\$15,528,576	\$15,770,356	\$16,015,901	\$16,265,268	\$151,877,833
Santa Fe College Contribution	\$1,049,892	\$1,066,239	\$1,082,840	\$1,099,700	\$1,116,822	\$1,134,211	\$1,151,871	\$1,169,806	\$1,188,019	\$1,206,517	\$1,225,302	\$11,441,328
Fare Revenue from Existing Services	\$1,035,498	\$1,051,621	\$1,067,994	\$1,084,623	\$1,101,511	\$1,118,661	\$1,136,079	\$1,153,768	\$1,171,732	\$1,189,976	\$1,208,503	\$11,284,467
Other Local Revenues	\$1,885,749	\$1,915,110	\$1,944,928	\$1,975,211	\$2,005,965	\$2,037,198	\$2,068,917	\$2,101,130	\$2,133,845	\$2,167,069	\$2,200,810	\$20,550,182
Total Operating Revenue	\$26,929,411	\$27,348,702	\$27,774,521	\$28,206,971	\$28,646,153	\$29,092,174	\$29,545,139	\$30,005,157	\$30,472,337	\$30,946,791	\$31,428,633	\$293,466,577
Annual Revenues Minus Costs	(\$0)	(\$2,641,304)	(\$2,682,429)	(\$3,026,376)	(\$3,380,383)	(\$3,744,681)	(\$7,801,825)	(\$7,923,300)	(\$8,046,665)	(\$8,171,952)	(\$8,299,189)	(\$55,718,106)
Rollover from Previous Year	\$0	(\$0)	(\$2,641,305)	(\$5,323,734)	(\$8,350,110)	(\$11,730,494)	(\$15,475,174)	(\$23,277,000)	(\$31,200,299)	(\$39,246,965)	(\$47,418,917)	
Operating Surplus/Shortfall (Cumulative)	(\$0)	(\$2,641,305)	(\$5,323,734)	(\$8,350,110)	(\$11,730,494)	(\$15,475,174)	(\$23,277,000)	(\$31,200,299)	(\$39,246,965)	(\$47,418,917)	(\$55,718,106)	(\$55,718,106)

Table 10-2: RTS Projected 10-Year Capital Costs, Revenues, Unfunded Needs

Capital Costs/Revenue	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	10-Year Total
Capital Costs												
Vehicles	\$7,190,000	\$7,298,000	\$8,347,216	\$8,448,207	\$9,443,119	\$11,647,848	\$14,472,974	\$8,142,497	\$8,553,188	\$8,873,171	\$9,856,651	\$95,082,871
Replacement Fixed Route Buses	\$5,000,000	\$5,125,000	\$5,253,125	\$5,384,453	\$5,519,064	\$5,657,041	\$5,798,467	\$5,943,429	\$6,092,014	\$6,244,315	\$6,400,423	\$57,417,332
Replacement Vans – Paratransit	\$510,000	\$0	\$178,606	\$457,679	\$1,125,889	\$96,170	\$591,444	\$0	\$207,128	\$530,767	\$1,305,686	\$4,493,369
Replacement of Support Vehicles	\$180,000	\$461,250	\$189,113	\$193,840	\$546,387	\$203,653	\$208,745	\$213,963	\$219,313	\$224,795	\$230,415	\$2,691,475
Preventative Maintenance	\$1,500,000	\$1,537,500	\$1,575,938	\$1,615,336	\$1,655,719	\$1,697,112	\$1,739,540	\$1,783,029	\$1,827,604	\$1,873,294	\$1,920,127	\$17,225,199
New and Expanded Services	\$0	\$0	\$703,919	\$613,828	\$408,411	\$3,513,023	\$5,937,630	\$0	\$0	\$0	\$0	\$11,176,810
New and Expanded Paratransit	\$0	\$174,250	\$446,516	\$183,071	\$187,648	\$480,848	\$197,148	\$202,077	\$207,128	\$0	\$0	\$2,078,687
Other Capital/Infrastructure	\$3,286,100	\$7,002,325	\$6,777,800	\$7,250,100	\$3,730,100	\$3,730,100	\$3,730,100	\$3,730,100	\$3,730,100	\$1,730,100	\$1,797,715	\$43,208,540
TSP/Queue Jump Treatments	\$2,050,000	\$2,050,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$0	\$0	\$16,050,000
East Side Transfer Station	\$0	\$330,725	\$156,200	\$3,520,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,006,925
Bus Stop Infrastructure	\$586,100	\$586,100	\$586,100	\$586,100	\$586,100	\$586,100	\$586,100	\$586,100	\$586,100	\$586,100	\$586,100	\$5,861,000
ADA Improvements	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$5,000,000
Technology Projects	\$0	\$3,385,500	\$3,385,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,771,000
Recurring Facilities Upgrades	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$217,615	\$1,567,615
Technology Projects - Recurring	\$0	\$0	\$0	\$494,000	\$494,000	\$494,000	\$494,000	\$494,000	\$494,000	\$494,000	\$494,000	\$3,952,000
Total Costs	\$10,476,100	\$14,300,325	\$15,125,016	\$15,698,307	\$13,173,219	\$15,377,948	\$18,203,074	\$11,872,597	\$12,283,288	\$10,603,271	\$11,654,366	\$138,291,411
Capital Revenues												
FL-90-X889 (5307)	\$80,856	\$82,069	\$83,300	\$84,549	\$85,818	\$87,105	\$88,411	\$89,738	\$91,084	\$92,450	\$93,837	\$878,360
FL-2017-008 (STP FLEX)	\$83,916	\$85,175	\$86,452	\$87,749	\$89,065	\$90,401	\$91,757	\$93,134	\$94,531	\$95,949	\$97,388	\$911,602
FL-2018-041-00 (5339)	\$945,000	\$959,175	\$973,563	\$988,166	\$1,002,989	\$1,018,033	\$1,033,304	\$1,048,803	\$1,064,535	\$1,080,504	\$1,096,711	\$10,265,783
FL-2018-073-00 (5339)	\$240,196	\$243,799	\$247,456	\$251,168	\$254,935	\$258,759	\$262,641	\$266,580	\$270,579	\$274,638	\$278,757	\$2,609,312
FL-2018-094-00 (5339)	\$4,038,013	\$4,098,583	\$4,160,062	\$4,222,463	\$4,285,800	\$4,350,087	\$4,415,338	\$4,481,568	\$4,548,792	\$4,617,024	\$4,686,279	\$43,865,995
FDOT Capital Grants	\$750,778	\$762,040	\$773,470	\$785,072	\$796,848	\$808,801	\$820,933	\$833,247	\$845,746	\$858,432	\$871,309	\$8,155,898
Local Capital Match	\$581,534	\$590,257	\$599,111	\$608,098	\$617,219	\$626,477	\$635,874	\$645,413	\$655,094	\$664,920	\$674,894	\$6,317,356
Total Capital Revenues	\$8,701,953	\$8,832,482	\$8,964,970	\$9,099,444	\$9,235,936	\$9,374,475	\$9,515,092	\$9,657,818	\$9,802,686	\$9,949,726	\$10,098,972	\$94,531,600
Annual Revenues Minus Costs	(\$1,774,147)	(\$5,467,843)	(\$6,160,046)	(\$6,598,863)	(\$3,937,284)	(\$6,003,473)	(\$8,687,982)	(\$2,214,779)	(\$2,480,603)	(\$653,546)	(\$1,555,394)	(\$43,759,811)
Rollover from Previous Year	\$0	(\$1,774,147)	(\$7,241,990)	(\$13,402,036)	(\$20,000,899)	(\$23,938,182)	(\$29,941,655)	(\$38,629,637)	(\$40,844,416)	(\$43,325,019)	(\$43,978,564)	
Capital Surplus/Shortfall (Cumulative)	(\$1,774,147)	(\$7,241,990)	(\$13,402,036)	(\$20,000,899)	(\$23,938,182)	(\$29,941,655)	(\$38,629,637)	(\$40,844,416)	(\$43,325,019)	(\$43,978,564)	(\$45,533,958)	(\$45,533,958)

10.3 10-Year TDP Implementation Plan

The proposed implementation phasing for operating improvements and capital projects is presented in Table 10-3. Table 10-3 also identifies the unfunded operating and capital needs for the 10-year period.

Since estimated existing funding sources fall short of estimated operating costs for the existing fixed route and paratransit services, new services proposed are considered unfunded. For the 10-year period, operating needs are unfunded by an estimated \$55,718,106. The operating shortfall for the first 5-year period is \$15,475,174 or an average of \$3,095,035 per year. The operating shortfall grows in the second 5-year period to \$40,242,932 or an average of \$8,048,586 annually. This increase in unfunded needs is related to proposed service improvements planned for the second 5-year period which include BRT-Lite, express services, mobility on demand expansion, and increased operating costs associated with the expanded transit network.

For the 10-year period, capital needs are unfunded by an estimated \$45,533,958. The capital shortfall for the first 5-year period is \$29,941,655 or an average of \$5,988,331 per year. The capital shortfall in the second 5-year period is estimated to be \$15,592,303 or an average of \$3,118,461 annually. This reflects an estimated unfunded rollover from 2019 and significant investments in capital costs associated with the East Side Transfer Center, BRT-Lite vehicles, and TSP/Queue Jump facilities occurring in the first 5-year period which would need to be in place prior to new services programmed for period years 6-10.

RTS and the City will identify funding sources for specific projects (capital and operating) over the 10-year period to advance the program priorities identified in this TDP.

Table 10-3: Proposed 10-Year Implementation Plan

Service Improvements	Description	Annual Operating Cost	10-Year Operating Cost	10-Year Capital Cost
		(2019\$)	(2019\$)+CPI	(2019\$)+CPI
Maintain Existing Service				
Maintain Existing Fixed-Route Service	Maintain Existing Fixed-Route Service	\$24,444,820	\$266,390,435	\$77,334,006
Maintain Existing Paratransit Service	Maintain Existing Paratransit Service	\$1,992,480	\$21,713,299	\$4,493,369
Phase 1 (2020 - 2024)				
Increase frequencies: Route 6 Route 15 Route 21 Route 43 Route 75	Double frequency on Route 6 - weekday Double frequency on Route 15 - evening Double frequency on Route 21 Increase frequency 30 to 20 min - Route 43 30 minute frequency - Route 75	\$233,753 \$102,523 \$832,489 \$266,560 \$334,226	\$19,283,899	\$1,448,286
Increase service span: Route 600/601 - Microtransit Route 6 Route 15 Route 43 Route 75	Expand span on Microtransit to match Route 7 Later service Route 6 - until 10PM Later service Route 15 - until Midnight Later service Route 43 - until 10PM Later service Route 75 - until 11PM	\$246,056 \$ 92,271 \$ 88,170 \$174,289 \$230,472	\$9,058,740	\$1,448,286
New Mobility on Demand Service (MOD)	Add MOD zones (seven) to overlay fixed route network and provide on-demand local mobility and first/last-mile connections; serves the general public; augments growing paratransit demand	\$1,009,732	\$7,565,194	\$645,496
Phase 2 (2025 - 2029)				
Replace Route 121 Realign routes per UF TAPS Realign routes per TDP and COA	Replace with other service improvements Realign Routes 25A, 29, 38, 46, 120, 122, 125, 127, 10, 28, 33, 34, 36, 75	(\$393,689) \$328,074	(\$371,326)	\$0
BRT-Lite Service	BRT light service along Newberry, Archer, West University with TSP and Queue Jump treatments	\$2,419,548	\$13,692,629	\$5,315,356
New Express Service	Duck Pond/UF Express Tower/UF Express	\$984,223	\$5,569,883	\$2,319,387
Additional Paratransit Service	ADA paratransit service to cover additional service and demand	\$162,406	\$919,081	\$2,078,687
Other Capital Projects (2020-2029)				
TSP/Queue Jump Treatments				\$16,050,000
East Side Transfer Station				\$4,006,925
Bus Stop Infrastructure				\$5,861,000
ADA Improvements				\$5,000,000
Technology Projects				\$10,723,000
Recurring Facilities Upgrades				\$1,567,615
Costs and Revenue Summary		10-Year Cost	10-Year Revenue	Unfunded
Operating Needs	Total operating costs less estimated revenue	\$349,184,682	\$293,466,577	(\$55,718,106)
Capital Needs	Includes estimated unfunded rollover from 2019	\$138,291,411	\$94,531,600	(\$45,533,958)

11.0 Appendices

Appendix A – Farebox Recovery Ratio Report

Current Farebox Recovery Ratio

Farebox recovery (ratio) refers to the percent of a transit system's total operating expenses that are funded with fares paid by passengers and is calculated by dividing the total fare revenue collected by the total operating expenses. This value is reported by transit agencies to NTD using a standardized equation, as required for FTA grant recipients. The farebox recovery ratio for RTS, the public transportation provider for the City of Gainesville, was 56.9% in 2017. The large farebox recovery ratio is primarily a result of partnerships between the University of Florida, Santa Fe College, and RTS.

Prior Year Fare Studies, Changes, and Proposed Future Year Changes

RTS' fares were last increased in 2009 when the cost of a single range increased from \$1.00 to \$1.50 and all-day passes increased from \$2.00 to \$3.00. In addition to the on-board farebox University of Florida's and Santa Fe College students pay a transportation fee per credit hour the rate of which is renegotiated on a multi-year basis and is included as part of farebox revenues.

RTS is currently looking to examine the impacts of making fares free for Persons age 65 or older and students age 17 and under.

Strategies that will Affect the Farebox Recovery Ratio

The following is a list of strategies that RTS will employ to further improve the farebox recovery ratio:

- Continuously monitor performance to determine of adjustments need to be made.
- Minimize costs required to operate and administer transportation services.
- Determine the most cost-effective service type given the characteristic of major transportation corridors, latent demand, routings, coverage areas, and modes.
- Engage the public to refine service and better meet the needs of customers.
- Improve attractiveness of transit service to riders through the dissemination of real-time bus location information.
- Improve attractiveness of transit service to riders through premium transit services.
- Evaluate fare structure to analyze opportunities for improved partnerships with the University of Florida, Santa Fe College, Shand's Hospital, and other major institutions.

Appendix B – Public Participation Plan

Introduction

A simple, yet key ingredient, of any good public outreach effort is the effectiveness of listening and how that information is incorporated into the study process. The most effective plans include activities and methods oriented specifically to the project study area and an understanding of the local and regional character. The City of Gainesville and the Consultant Team recognize the importance of public engagement and have developed strategies to engage the public, stakeholders and agencies involved in the development of the Transit Development Plan (TDP). The Public Involvement Plan (PIP) for this project includes proven outreach efforts that go beyond “the minimum requirements”. Our team has identified a menu of opportunities to provide the public information, listen to their concerns and suggestions, and find ways to incorporate solutions into the TDP.

Project Background

The City of Gainesville Department of Mobility (DOM), selected the Tindale Oliver Team (Team) to update the Transit Development Plan (TDP) to establish a refreshed framework for the future growth of transit in the community, as provided by the City’s transit system, Regional Transit System (RTS), and ensure safe, convenient, and accessible public transportation for all residents, workers, and visitors in Gainesville and the greater region. An integral part of the TDP is the PIP, which acts as a guide for educating, gaining input from and disseminating information to the public and stakeholders. Based on the Team’s prior proposed approach and the City’s RFP, it is envisioned that the PIP will include:

- Project kick-off meeting – February 1, 2019
- Bi-monthly Steering Committee meetings
- Public Workshops/Meetings (2)
- Passenger Survey (1)
- Online Survey (1)
- Stakeholder Interviews (10)
- Discussion Group Workshops (2)
- Draft and Final Presentations (6)

Public Engagement Activities

The following content is a TDP-specific PIP that presents the public engagement activities that will be used to collect stakeholder and public input, and to educate and inform the community about the study and, ultimately, its results. Following are summaries of the activities that are envisioned to be included, some of which (as noted) will be completed by DOM staff, others to be provided by the Team. Public involvement activities have been designed to encourage participation throughout the entire TDP process. Our Team has identified methods of communication that best serve the needs of Gainesville, but is flexible enough to make changes, if necessary, to ensure maximum feedback. Our goal is to reach and hear from as many people and organizations as possible to ensure that their voices are heard.

Project Kick-off Meeting

Our Team will participate in the project kick-off meeting with DOM staff to discuss project elements, objectives, schedule, and to identify specific the elements of the TDP, including discussion of the public outreach and involvement activities. It is also our intent, with staff guidance, to confirm activities and milestones, if feasible, and identify members of the project Steering Committee and stakeholders. The primary purpose of the meeting will be to ensure that DOM staff and the Team are “on the same page” regarding the overall scope, goals, and desired deliverables for the overall TDP effort. This will help ensure the success of the project once it has begun.

Bi-monthly Review Committee meetings

A Review Committee will be established to guide the update process and provide insight and input on project information and upcoming tasks. We have planned to conduct bi-monthly review committee meetings throughout the TDP effort. In an effort with DOM staff, we will identify committee members and invite them to represent their organization. This committee will be advisory in nature, but we may engage them in transit mobility visioning exercises, if feasible.

Given the anticipated makeup of the Committee, since the understanding of local conditions should include knowledge of the perceptions and attitudes of community decision-makers and stakeholders towards transit, a workshop with this group will be held in conjunction with the first meeting so participants can weigh in on existing service gaps and unmet mobility needs as a group.

Public Workshops

Two public workshops will be held at key milestones early in the study process to educate attendees about the TDP effort and collect input on gaps and unmet needs. With input from the Team and DOM staff will plan and schedule each meeting. To maximize opportunities for citizen participation, the venues will be in areas that provides bus access and may even piggyback on other community events to ensure a good turnout. We will hold the meetings at times to best accommodate a variety of work and personal schedules. There will be a comment period open for one week before and one week after each public meeting (7 days) where the public can submit comments, questions, and concerns via email, phone call, and written letters without being required to attend the public workshops. FDOT, the Metropolitan Transportation Planning Organization, and CareerSource North Central Florida will be notified at least one week (7 days) in advance of the public workshops.



Passenger Survey

A passenger survey will be conducted of RTS fixed-route bus patrons on-board RTS vehicles to obtain information related to the demographics, attitudes, preferences, and habits of current riders for market research purposes (i.e., the survey will not be specifically geared for model input or validation).

To allow for enough valid survey responses that will support statistical rigor of the results (95% CL, $\pm 10\%$ MOE), yet accommodate the desired budget goal, it is proposed that the survey effort will cover up to 25 percent of RTS's scheduled fixed-route bus trips. The on-board survey methodology and implementation will be coordinated closely with DOM staff to ensure that study objectives are met, and data collection efforts are efficiently integrated with RTS operations. In addition, the survey form will be developed in conjunction with DOM staff and will draw on RTS's most recent survey questionnaire to promote consistency of questions and response cohorts. This will facilitate subsequent comparative analysis of results over time. Prior to beginning the on-board survey process, our staff will meet with RTS operations staff to ensure a clear understanding of the methodology, process, and timeframe. We also will provide survey notices for RTS to distribute to its bus operators and on board its buses to notify patrons of the upcoming event.

Online Survey

Our Team will conduct an online survey of the general public to help better understand their needs and concerns and, especially, persons who do not currently use the RTS services. Development of the online survey will be coordinated closely with DOM staff to ensure that survey objectives are met. We have had a lot of success using Survey Monkey on similar projects, so we would likely use this same tool for the TDP. Because considerable thought will be put into the questions, the online survey will elicit responses useful to DOM staff and RTS services.

The online survey will be posted on the City website and distributed via any current email/social media outlets and mailing lists available to the City.

Stakeholder Interviews

Our Team, working with DOM staff, will identify stakeholders and conduct up to ten stakeholder interviews in person or by phone. The purpose for the stakeholder interviews is to capture the best understanding of local conditions, knowledge, perceptions and attitudes of the community towards mobility needs and transit services. Stakeholder interviews will be scheduled during planned trips to Gainesville and via phone depending on convenience for each stakeholder. Comments will be solicited from the regional Workforce Board, CareerSource of North Central Florida.

Discussion Group Workshops

DOM staff will conduct two invitation-based discussion group workshops using a set of questions prepared by our Team to educate and elicit dialog with participants about mobility needs and services.

The purpose of the workshops is to obtain additional input into the TDP process by selected groups. Participants will work in smaller groups (10–12 persons) to permit more in-depth and candid discussion about issues and needs. The workshops will be held at accessible venues coinciding with RTS’s existing service area.



One workshop will focus on existing transit riders. The other will focus on the needs and interests of the business, health, community/social services, seniors and students. Participants will be identified by DOM staff. DOM staff will be responsible for securing the sites selected, advertising and promoting the meetings, and summarizing the input received.

Public Workshops/Meetings

After completion of the early assessment of existing conditions and services, the Team will schedule and conduct a public workshop to introduce the TDP purpose and schedule. This meeting will be intended to inform the public of existing conditions and findings and to solicit ideas from the public concerning transit and mobility needs within the Gainesville community.

A second public workshop will be held following completion of the draft TDP. The intent of this meeting is to present the public with our initial findings and recommendations for 5-year and 10-year service and capital improvements for transit and mobility services within the Gainesville community. This meeting will be designed to facilitate engagement and dialog to hear the attitudes, concerns, and desires of the community regarding the draft TDP. The public will have an opportunity to review the draft Transit Development Plan prior to the workshop.

The purpose of the meetings is to receive comments and answer questions. We will coordinate with DOM staff to schedule the meetings at a venue appropriate that will maximize opportunities for citizen participation. Like the community workshops, the venues will be located in an area that provides bus access. The second meeting may occur in conjunction with a City Commission meeting at which the TDP will be reviewed. DOM staff will be responsible for securing the sites selected, advertising and promoting the meetings. There will be a comment period open for one week before and one week after each public meeting (7 days) where the public can submit comments, questions, and concerns via email, phone call, and written letters without being required to attend the public workshops/meetings. FDOT, the Metropolitan Transportation Planning Organization, and CareerSource North Central Florida will be notified at least one week (7 days) in advance of the public workshops.

Logistics/Format

Depending on the information to be presented, the meetings could be an informal event using a “station” format, where participants could come and go at their leisure. Staff would be available for questions. If a more formal event is appropriate, we would develop a PowerPoint presentation that would be presented, followed by a Question & Answer period. We will discuss the best possible format with DOM staff and the Review Committee when the time is appropriate.

Draft and Final TDP Presentations

After completion of the draft TDP, our Team will schedule and conduct six (6) presentations at the direction of DOM staff. For this purpose, we will develop a user-friendly, graphical presentation to support the communication and adoption of the TDP. The presentation file will be available for use by DOM staff beyond the adoption of the TDP. The audiences for the presentations may include:

- Transit Agency Advisory Board
- Gainesville City Commission
- Alachua County Board of Commissioners
- MTPO Board
- MTPO Technical Advisory Committee
- MTPO Citizens Advisory Committee
- CareerSource North Central Florida (Region 9 workforce board)

Methods of Public Notice

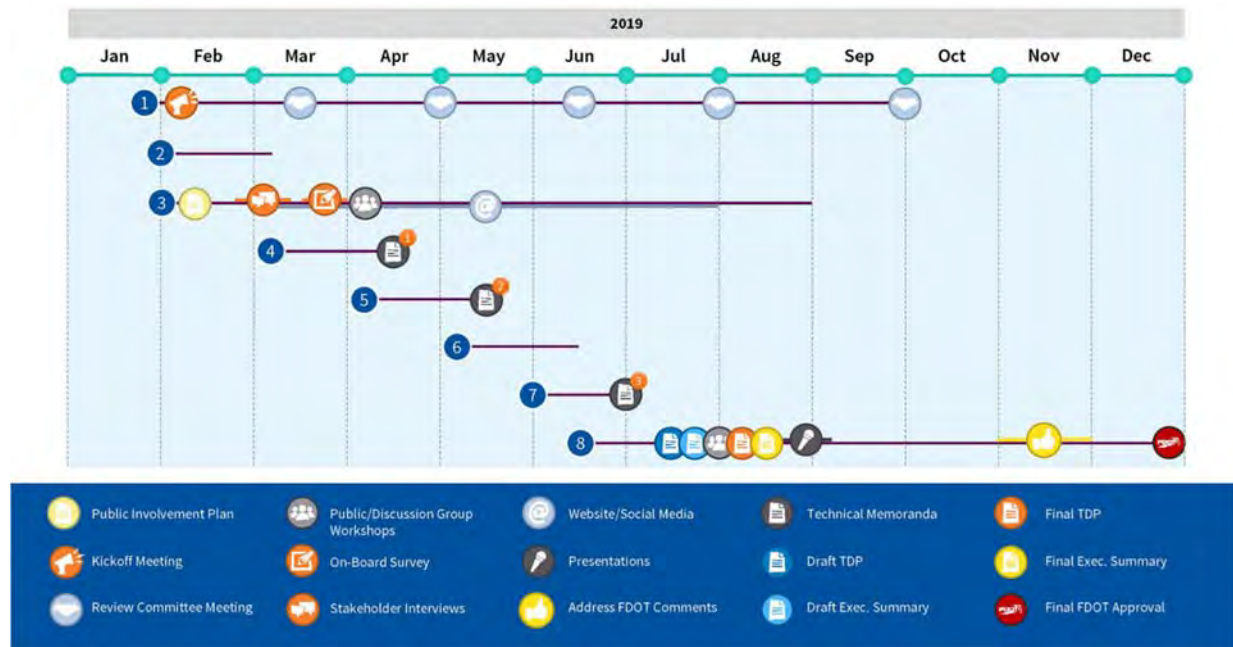
To advertise/notice the meetings, it is suggested that the DOM staff prepare and distribute a press release to local media, post the announcement on their web site, Twitter and Facebook pages and develop a postcard to be distributed to all stakeholders, provided on buses and at all government buildings and major organizations/institutions in the area. Utilizing the memberships of the business community, the University of Florida, the student population, civic and community associations, and neighborhood associations would serve as an effective way to announce the meetings. The strategy for outreach will be developed in collaboration with DOM staff and the Review Committee. FDOT, the Metropolitan Transportation Planning Organization, and CareerSource North Central Florida will be notified at least one week (7 days) in advance of the Draft and Final TDP Presentations.

Social Media

The use of social media is cost-effective and can reach a large segment of population who are younger, trendy, and more prone to becoming involved in an issue that affects their community. Both social media and the City’s web site should be used appropriately to raise awareness about the project and to provide opportunities for the public to comment and used as a mean to provide information and notice the public meetings and community workshops. Our Team will help prepare project information to be posted and uploaded.

Schedule of Activities

The public engagement activities will be coordinated to fit with the overall project schedule, as shown in the table below.



Public Engagement Documentation

The documentation of public engagement activities creates a summary of outreach activities and commitments made as a result of the outreach activities. Access to the documentation allows the public to see that their input was evaluated and considered. We will include a summary of the public engagement activities in the Final TDP.



Florida Department of Transportation

RON DESANTIS
GOVERNOR

2198 Edison Avenue
Jacksonville, FL 32204-2730

KEVIN J. THIBAUT, P.E.
SECRETARY

June 11, 2019

Jesus Gomez
Director
Gainesville Regional Transit System
34 Southeast 13 Road
Gainesville, Florida 32601

Re: Gainesville RTS 2020-2029 Transit Development Plan Major Update – Public Involvement Plan: Letter of Compliance

Dear Mr. Gomez,

The Florida Department of Transportation, District Two has reviewed your agency's Transit Development Plan Major Update – Public Involvement Plan (PIP). We find the PIP to be in compliance with Chapter 14-73, Florida Administrative Code.

Thank you and your team for addressing our comments. If you have any questions or concerns, please contact me at (904) 360-5414 or email theodis.perry@dot.state.fl.us.

Sincerely,

Theodis L. Perry, Jr.
Urban Transit Coordinator
District Two

cc: Doreen Joyner-Howard (FDOT); Janell Damato (FDOT); Sandra Collins (FDOT); Niki Overstreet (FDOT); Mari Schwabacher (FDOT); Santanu Roy (HDR)

www.dot.state.fl.us

Appendix C – Public Involvement Materials

Online Non-User Survey

Gainesville.
MOBILITY

Mobility Survey

1. What is your perception of mobility needs for persons in Gainesville who do not have access to an automobile or choose not to drive?

- ☐ Their mobility needs ARE met.
- ☐ Their mobility needs are NOT met.
- ☐ Other (please specify)

2. For persons who **choose** not to drive, do you think this market is growing, staying about the same, or decreasing?

- ☐ Growing
- ☐ Staying the same
- ☐ Decreasing

3. For persons who **choose** not to drive, how might mobility options be improved and made safer? Think about the needs and rights of bicyclists and pedestrians. Check all that apply.

- ☐ Add more bicycle and pedestrian lanes and facilities.
- ☐ Improve marketing and signage to bicycle and pedestrian lanes and facilities.
- ☐ Slow speed in adjacent traffic lanes.
- ☐ Improve markings and signage for pedestrian crossings.
- ☐ Other (please specify)

4. For persons who **do not have access** to a vehicle, do you think this market is growing, staying about the same, or decreasing?

- ☐ Growing
- ☐ Staying the same
- ☐ Decreasing

5. For persons who **do not have access** to a vehicle, how does reduced access to mobility impact these individuals? Think about the need to get to access school, work, education, health care, life needs, social, recreational needs. Check all that apply.

- ☐ It has no impact.
- ☐ It limits their ability to travel to essential needs.
- ☐ It limits their economic opportunities.
- ☐ Other (please specify)

6. How does reduced access to mobility impact the community and local economy? Check all that apply.

- ☐ It has no impact.
- ☐ It limits opportunity to access goods and services.
- ☐ It limits economic activity and potential earnings.
- ☐ Other (please specify)

7. What is your understanding of and experience with the existing public transportation system (RTS) and related mobility services in the area?

- ☐ None
- ☐ I have seen the buses but I do not ride.
- ☐ I use the bus system.
- ☐ Other (please specify)

8. What is your opinion of existing RTS service?

- ☐ None
- ☐ Service is good.
- ☐ Service is not good.
- ☐ Other (please specify)

9. Do you think RTS is effective, convenient, easy to use?

- ☐ Yes
- ☐ No
- ☐ Other (please specify)

10. Do we need more service and/or more service options?

- ☐ Yes
- ☐ No
- ☐ Other (please specify)

11. Do we need to communicate more to the community about mobility options?

- ☐ Yes
- ☐ No

Please explain:

12. Do you feel the existing service covers the areas you need to travel to regularly?

- ☐ Yes
- ☐ No
- ☐ Other (please specify)

13. What types of mobility services would you like? Check all that apply.

- ☐ More bus service – cover new areas
- ☐ High frequency bus service – bus comes by more often
- ☐ Enhanced bus network – buses running on main roads and complemented by neighborhood shuttles
- ☐ More infrastructure for pedestrians and bicyclists
- ☐ More shelters, better signage and service information, transfer hubs
- ☐ Mobility-on-demand services
- ☐ More scooter and bike-share service
- ☐ A combination of the above
- ☐ Other (please specify)

14. Should the City invest more into expanding mobility services?

- ☐ Yes
- ☐ No

15. Should mobility enhancements be focused to benefit all, or should improvements be focus on the underserved?

- ☐ Serve all
- ☐ Serve those without a car
- ☐ Other (please specify)

16. How should we pay for expanded mobility services? Check all that apply.

- ☐ User fees
- ☐ Make service free
- ☐ Use parking fees
- ☐ Use roadway funds
- ☐ Increase local taxes
- ☐ Create partnerships with businesses
- ☐ Other (please specify)

On-Board Survey



RTS Survey - 2019 Mobility

Trip-Survey

List all the routes you are using on this trip, in the order you are using them.

2. 1st Route

3. 2nd Route

4. 3rd Route

5. 4th Route

6. Where are you coming from?

- | | |
|-------------------------------|----------------------------------|
| ☐ Home | ☐ Recreation |
| ☐ Work | ☐ Shopping |
| ☐ School | ☐ Errands |
| ☐ Medical | |

7. Where are you going to?

- | | |
|-------------------------------|----------------------------------|
| ☐ Home | ☐ Recreation |
| ☐ Work | ☐ Shopping |
| ☐ School | ☐ Errands |
| ☐ Medical | |

8. What is the address or name of the place, business or building you're coming from?

9. What is the address or name of the place, business or building you're going to?

10. How did you get to your first bus stop?

- | | |
|--|---|
| ☐ Walk | ☐ Park & Ride |
| ☐ Bike | ☐ DropOff (taxi/Uber/Lyft/friend) |
| ☐ Scooter/Skateboard | |

11. How will you get to your final destination?

- | | |
|--|---|
| ☐ Walk | ☐ Park & Ride |
| ☐ Bike | ☐ DropOff (taxi/Uber/Lyft/friend) |
| ☐ Scooter/Skateboard | |

12. How many days a week do you typically ride the bus?

- | | |
|-------------------------|---|
| ☐ 1 | ☐ 5 |
| ☐ 2 | ☐ 6 |
| ☐ 3 | ☐ Every day |
| ☐ 4 | ☐ Less than once a week |

13. How many days a week do you typically make this trip?

- | | |
|-------------------------|---|
| ☐ 1 | ☐ 5 |
| ☐ 2 | ☐ 6 |
| ☐ 3 | ☐ Every day |
| ☐ 4 | ☐ Less than once a week |

14. How would you make this trip if not by bus?

- | | |
|--|--|
| ☐ Walk | ☐ Catch a ride (taxi/Uber/Lyft/friend) |
| ☐ Bike | ☐ Would not make it |
| ☐ Scooter/Skateboard | |

15. What type of fare did you use to board the bus?

- | | |
|------------------------------------|-------------------------------------|
| ☐ Gator 1 ID | ☐ Semester Pass |
| ☐ Full Fare | ☐ Employee Pass |
| ☐ Half Fare | ☐ ADA ID Card |
| ☐ Daily Pass | ☐ Other |
| ☐ Monthly Pass | |



RTS Survey - 2019 Mobility

Service Evaluation Survey

16. How long have you been using RTS bus service?

- | | |
|--|--|
| ☐ First-time rider | ☐ 1 to less than 2 years |
| ☐ Less than 6 months | ☐ 2 to 5 years |
| ☐ 6 months to less than a year | ☐ More than 5 years |



RTS Survey - 2019 Mobility

17. How many days a week do you ride the bus?

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

☐ 6

☐ Every day

☐ Less than once a week



RTS Survey - 2019 Mobility

18. What type of fare do you typically pay when you board the bus?

- | | |
|------------------------------------|-------------------------------------|
| ☐ Gator 1 ID | ☐ Semester Pass |
| ☐ Full Fare | ☐ Employee Pass |
| ☐ Half Fare | ☐ ADA ID Card |
| ☐ Daily Pass | ☐ Other |
| ☐ Monthly Pass | |

19. Compared to other transportation alternatives available to you, what is the most important reason you ride the bus?

- | | |
|--|--|
| ☐ I prefer RTS to other alternatives | ☐ Parking is too expensive/difficult |
| ☐ Car is not available all the time | ☐ Do not have a valid driver's license |
| ☐ RTS fits my budget better | ☐ Bus is more environmentally friendly |
| ☐ Traffic congestion | ☐ I do not drive |
| ☐ RTS is more convenient | ☐ I do not have a car |
| ☐ Other (please specify) | |

20. Which of the following improvements do you think are most important? You only need to rate your top three choices with 1, 2, 3 - and then you can move on to the next question.

- ☐ More benches and shelters at bus stops
- ☐ Bus service to new areas
- ☐ "Premium" Express or limited stop service
- ☐ Earlier service on existing routes
- ☐ Later service on existing routes
- ☐ More frequent service on existing routes
- ☐ More weekend service
- ☐ Other

21. If you chose Earlier service on existing routes in the question above, which routes? Options: 1, 2, 3, 5, 7, 8, 9, 10, 11, 12, 13, 15, 16, 17, 19, 20, 21, 23, 24, 25, 26, 28, 29, 33, 34, 35, 36, 37, 38, 39, 40, 43, 46, 75, 76, 77, 117, 118, 119, 120, 121, 122, 125, 126, 127, 300, 301, 302, 800, 901X, 902X

22. If you chose Later service on existing routes in the question above, which routes? Options: 1, 2, 3, 5, 7, 8, 9, 10, 11, 12, 13, 15, 16, 17, 19, 20, 21, 23, 24, 25, 26, 28, 29, 33, 34, 35, 36, 37, 38, 39, 40, 43, 46, 75, 76, 77, 117, 118, 119, 120, 121, 122, 125, 126, 127, 300, 301, 302, 800, 901X, 902X

23. If you chose More frequent service on existing routes in the question above, which routes? Options: 1, 2, 3, 5, 7, 8, 9, 10, 11, 12, 13, 15, 16, 17, 19, 20, 21, 23, 24, 25, 26, 28, 29, 33, 34, 35, 36, 37, 38, 39, 40, 43, 46, 75, 76, 77, 117, 118, 119, 120, 121, 122, 125, 126, 127, 300, 301, 302, 800, 901X, 902X

24. If you chose Other in the question above, tell us more:

25. If RTS provided "premium" express or limited stop bus service, would you use that service?

- ☐ No
- ☐ Maybe
- ☐ Yes, please indicate on which roads:

26. How many working cars, vans, and/or light trucks do you have in your household?

- ☐ 0
- ☐ 1
- ☐ 2 or more

27. How many licensed drivers are in your household, including yourself?

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3 or more

28. How do you prefer to receive information about RTS service, schedules and changes?

- | | |
|-----------------------------------|--|
| ☐ RTS website | ☐ Paper bus schedule |
| ☐ Newspaper | ☐ Phone |
| ☐ At bus stop | ☐ In bus |
| ☐ Library | ☐ RTS email |

29. Your age is...

- | | |
|-----------------------------------|-------------------------------|
| ☐ 17 or under | ☐ 45-54 |
| ☐ 18-24 | ☐ 55-64 |
| ☐ 25-34 | ☐ 65-74 |
| ☐ 35-44 | ☐ Over 74 |

30. You identify as...

- ☐ Male
- ☐ Female
- ☐ Other

31. What was the range of your total household income for 2018 (optional)?

- ☐ Under \$10k
 ☐ \$40k < \$50k
☐ \$10k < \$20k
 ☐ > \$50
☐ \$20k < \$30k
 ☐ Do Not Work
☐ \$30k < \$40k

32. What is your home zip code?

33. Please rate the following aspects of your most recent bus ride.

	Very Poor	Poor	Fair	Good	Very Good
How often the buses run on this route?	☐	☐	☐	☐	☐
How courteous was the Bus Operator during your trip?	☐	☐	☐	☐	☐
How directly does this route go to your destination?	☐	☐	☐	☐	☐
How is the length of time your trip takes?	☐	☐	☐	☐	☐
How on-time is this bus running today?	☐	☐	☐	☐	☐
How safe did you feel today while waiting for the bus?	☐	☐	☐	☐	☐
How was the shade or shelter where you waited?	☐	☐	☐	☐	☐
How user-friendly is the RTS website, www.go-rtis.org ?	☐	☐	☐	☐	☐
Your overall satisfaction with RTS?	☐	☐	☐	☐	☐

34. Enter your cell phone number to be entered into a drawing for a \$50 gift card (this will not be used for any marketing purposes or mass texts).

Bus Operator Survey

Gainesville. **MOBILITY**

Bus Operator Survey

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

1. The following is a list of possible complaints riders may voice to bus operators. Please read the list of common complaints and mark 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. From/To? _____ |
| ☐ bus leaves stop too early | ☐ need connections to other counties. Which? _____ |
| ☐ 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 RTS? Please list the 3 compliments you hear most frequently from riders.

4. Do you know of any safety or operating problems on any routes? Please explain.

5. Provide any specific service improvements to RTS bus routes. Include information for routes you drive or know well. Examples of service improvements include improving bus running times, adding new destinations, improving service frequency, combining services with other RTS routes, etc.

Route	Service Improvement/Comment

6. Do you think a premium transit service like bus rapid transit with bus bypass lanes and transit signal priority is needed in Gainesville? If so, which corridors?

7. Do you think a mobility-on-demand RTS service for all residents that connects riders to nearby places (like home to Publix) and to/from RTS bus routes for longer trips (like home to an RTS bus stop to downtown) would help areas that are not directly served by transit? This service would operate as part of the RTS bus network using smaller vehicles to serve areas not easily reached by buses and provide service on request by the riders using a phone app or calling RTS. If so, which areas in Gainesville?

8. Use the space below to provide any other comments that could help improve RTS service.

THANKS FOR YOUR HELP!

Public Workshop Comment Card



Public-Workshop-Survey

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

1. What improvements to existing RTS services would you like?

2. What new transit services or on-demand mobility would you like?

3. What improvements are the highest priority for you?

4. What other comments would you like to share?

THANKS FOR YOUR HELP!

Public and Stakeholder Meeting Notices, Agendas, Materials



GREAT INSIGHTS. GREATER OUTCOMES.



MOBILITY DISCUSSION GROUP WORKSHOP

Business, Health, Community Services, Seniors, Education

RTS Ten-Year Transit Plan

Meeting Date: April 11, 2019 from 10:00 – 12:00

Location: RTS Large Conference Room
34 SE 13th Road, Gainesville, FL 32601

Agenda

1. Welcome & Introductions
2. Workshop Overview
 - a. What's a TDP and why should you care?
 - b. Overview of discussion group purpose and process
3. Overview of Existing Conditions
4. Mobility Discussion Topics
5. Wrap-Up

TAMPA ORLANDO BARTOW FORT LAUDERDALE BALTIMORE SEATTLE

www.tindaleoliver.com



Date: Thursday, April 11, 2019
Time: 10:00 a.m. to 12:00 p.m.
Location: RTS Large Conference Room
34 SE 13th Road
Gainesville, Florida 32601
Attendees: See Appendix A

Meeting Handouts

A copy of the meeting Agenda, and "What is a TDP and why should I care?" handout were distributed to the attendees. Workshop participants were encouraged to discuss their thoughts and concerns regarding the corridor study.

A copy of the meeting handouts is available in Appendix B.

Summary

The following provides a summary of the items discussed at the Workshop:

- Consultant Project Manager, Randall Farwell, opened the meeting by welcoming attendees and thanking attendees for their participation.
- Randall asked everyone, including the project team, to introduce themselves and describe their affiliations.
- Randall guided the Mobility Discussion Group through a PowerPoint presentation. See Appendix (C)
- Randall provided closing remarks. The meeting ended at 12:15 p.m.

Discussion

Discussion included responses to the following questions:

1. What is your perception of mobility needs for persons who do not have access to an automobile or choose not to drive?
 - ✓ Their mobility needs ARE met
Majority of Discussion Group Agreed
 - ✓ Their mobility needs are NOT met
Anne/Emily: Depends on where you live
 - Other (please specify)



2. For persons who *choose* not to drive, do you think this market is growing, staying about the same, or decreasing?
 - ✓ Growing
Discussion Group agreed
Gerry: New development is demanding transit accessibility.
 - Staying the same
 - Decreasing

3. For persons who *choose* not to drive, how might mobility options be improved and made safer? Think about the needs and rights of bicyclists and pedestrians. Check all that apply.
 - ✓ Add more bicycle and pedestrian lanes and facilities
Michael: It would be nice and safer to have bike paths like Hawthorne Trail.
Anne: In between 23rd and 16th make roads safer for bikes, it might keep bikes off the sidewalk. Is it possible to have a bridge from Waldo Road to the MLK Center to improve safety?
 - ✓ Improve markings & signage in bicycle & pedestrian facilities
Ron: I am a cyclist and runner and I think 16th St. needs more street lights. I also think there needs to be more signage because cyclist are not clear where to stop.
 - Slow speed in adjacent traffic lanes
 - Improve markings and signage for pedestrian crossings
 - ✓ Other (please specify)
Gerry: All four above are important. Wendy: Enforce helmet law under 21 years old.

4. For persons who *do not have access* to a vehicle, do you think this market is growing, staying about the same, or decreasing?
 - ✓ Growing
Discussion Group agreed
 - Staying the same
 - Decreasing



5. For persons who *do not have access* to a vehicle, how does reduced access to mobility impact these individuals? Think about the need to get to access school, work, education, health care, life needs, social, recreational needs. Check all that apply.
 - It has no impact
 - ✓ It limits their ability to travel to essential needs
 - ✓ It limits their economic opportunities

Ashley: I think income has a lot to do with this. Minimum wage residents and elderly are on a fixed income.

Gerry: Lack of access can cause poverty. Haile Plantation is not accessible by bus.

 - Other (please specify)

6. How does reduced access to mobility impact the community and local economy? Check all that apply.
 - It has no impact
 - ✓ It limits opportunity to access goods and services

Half the Discussion Group agrees

Ashley: Recently met with the City of Waldo's Mayor and the Mayor wants more options for residents.

 - ✓ It limits economic activity and potential earnings

Half the group agrees

 - Other (please specify)

7. What is your understanding of and experience with the existing public transportation system (RTS) and related mobility services in the area?
 - None
 - ✓ I have seen the buses, but I do not ride
 - ✓ I use the bus system

Ron: I took the bus from 16th to Santa Fe. It took me three different buses to get to my location. Buses gear themselves towards campus, would probably gather more ridership outside of campus.

Ashley: I have seen the same riders that I saw 20 years ago. Some of them have low mental/income capacity.

Emily: Students face the bus being full and they have to wait for the next bus.

 - Other (please specify)

Gerry: I don't mind hopping of the bus and waiting if it stops at a point of interest. Make transition faster and more convenient.

Jesus: The mode share is 6%, 2% without student population.

Justin: Increase mobility hubs.



Jesus: RTS is short on bus drivers

Randy: More drop off, pick up locations and mobility hubs.

8. What is your opinion of existing RTS service?

- None
- ✓ Service is good
- Service is not good
- ✓ Other (please specify)

Wendy: No eastside transfer center, I talked to Jesus about this. I think extended service would help. There is a lack of evening services.

Ron: The buses hold up traffic. Need parking available for people that want to drop off car and ride the bus.

9. Do you think RTS is effective, convenient, and easy to use?

- ✓ Yes
- No
- ✓ Other (please specify)

Emily: Service is good. Convenient yes and no. Buses are often full, need later hours. RTS is effective. It depends on where the student lives weather the bus is convenient.

Gerry: Yes, RTS service is good. Not so convenient or easy to use. Have to make access to neighborhoods.

Ashley: The CADE Museum wanted to be close to RTS for access of the public that is why we built where we did.

Wendy: Lack of benches at the bus stops

Gerry: More advertising/funding for shelters.

Wendy: Commissioners are not onboard with advertisement at shelters.

Ron: Asked for a shelter at one of their properties and there is a lack of funding.

Jesus: CIP Projects \$77 Million, Commissioners approved \$400,000 for bus stop amenities over the next 5 years. We have \$4 million in needs.

10. Do we need more service and/or more service options?

- ✓ Yes
 - Discussion Group agrees
- No
- Other (please specify)



11. Do we need to communicate more to the community about mobility options?

- ✓ Yes
Discussion Group agreed
- No
- ✓ Please explain
Anne- Yes, educate the community more about how RTS works so they advocate better to the Commissioners.
Ashley- Maybe the Citizen Academy can be involved.
Debbie: The Citizen Academy was here yesterday.

12. Do you feel the existing service covers the areas you need to travel to regularly?

- Yes
- No
- ✓ Other (please specify)
Wendy: Need more eastside coverage.
Gerry: More coverage for neighborhoods.

13. What types of mobility services would you like? Check all that apply.

- More bus service – cover new areas
- High frequency bus service – bus comes by more often
- Enhanced network – buses on main roads + neighborhood shuttles
- More infrastructure for pedestrians and bicyclists
- More shelters, better signage, service information, transfer hubs
- Mobility-on-demand services
- More scooter and bike-share service
- ✓ A combination of the above
Discussion Group agreed
- Other (please specify)

14. Should the City invest more into expanding mobility services?

- ✓ Yes
Discussion Group agreed
- No



15. Should mobility enhancements be focused to benefit all, or should improvements be focus on the underserved?

- ✓ Serve all
- ✓ Serve those without a car
- ✓ Other (please specify)

Brad: How does this program provide better access to neighborhoods? I vote for trying to help the access problem in order to get people to work and appointments.

16. How should we pay for expanded mobility services? Check all that apply.

- User fees
- Make service free
- Use parking fees
- Use roadway funds
- Increase local taxes
- Create partnerships with businesses
- ✓ Other (please specify)

Anne: User fee is not my preference because it might put a hardship on people that are already having a hardship.

• Are there any other thoughts or comments for discussion?

Emily: I think it is important for a UF student to be involved during the process.

• Would you like to continue to support the City to develop mobility solutions?

Yes, everyone in the Discussion Group agreed that they would like to stay involved.

• Would you like to receive the draft recommendations from this study and provide your comments?

Yes, Discussion Group agreed

END OF MEETING SUMMARY

This meeting summary was prepared by Karen Harrell, Public Involvement Coordinator. If you feel clarifications are necessary, or if this differs from your understanding, please notify Karen by telephone at 352-257-1651 or by e-mail at Karen.Harrell@qcausa.com within (5) working days upon receipt of this summary.

City of Gainesville
RTS Transit Development Plan

Review Committee #2

07/02/2019

- Introductions
- TDP Overview
- RTS Goals and Objectives
- Situation Appraisal
 - Plans Review
 - Socioeconomic Trends
 - Land Use
 - Department Organization
 - Travel Behavior and Trends
 - Ridership and Performance
 - Technology
- Transit Demand
- Alternatives Development
- Discussion



1.0 Review Committee #2

The Gainesville RTS 2019 Major TDP Update established a Review Committee to guide the update process and provide insight and input on project information, upcoming tasks, and recommendations for service improvements. Review Committees are conducted bi-monthly throughout the TDP effort and committee members have been selected for their knowledge of local conditions and of the perceptions and attitudes of community decision-makers and stakeholders towards transit. The committee is advisory in nature.

This report summarizes the results and discussions from the 2nd meeting of the Review Committee.

1.1 Attendees

- Scott Koons – Executive Director NCFRPC / MTPO
- Thee Perry – FDOT District 2
- Jesus Gomez – City of Gainesville Department of Mobility
- Krys Ochia – City of Gainesville Department of Mobility / RTS
- Meri Schwabacher – MPO Liaison - FDOT District 2
- Mike Escalante – Metropolitan Transportation Planning Organization
- Scott Fox – Director, Transportation and Parking – University of Florida
- Jeff Hays – Transportation Planning Manager – Alachua County
- Karissa Raskin – City of Gainesville Mayors Office
- Donald Shepperd – RTS Citizens Representative
- Joshua Barber – Tindale-Oliver
- Randy Farwell – Tindale-Oliver

1.2 Review Agenda

- Welcome and Introductions
- TDP Overview
- RTS Goals and Objectives
- Situation Appraisal
 - Plans Review
 - Socioeconomic Trends
 - Land Use
 - Department Organization
 - Travel Behavior and Trends
 - Ridership and Performance
 - Technology
 - Transit Demand
- Alternatives Development
- Discussion

1.3 Discussion Results

Review Committee discussion focused primarily on the development of alternatives and service improvements. During the presentation, proposed service improvements were outlined including frequency changes, routing adjustments, the removal of routes, the addition of new routes, and the possibility of implementing premium transit services. The proposed service improvements are outlined in Appendix A, which includes the entire presentation shown to the Review Committee. The bullet points below summarize the results of the discussion.

1.3.1 Service Changes

- The recommended change to eliminate Route 7 in favor of further supporting the microtransit pilot in East Gainesville was opposed by many review committee members. The area has a large Title VI population and community relations with the neighborhood have been tenuous – making the elimination of service a bad idea.
 - It has been proposed convert the Route 7 to an enhanced microtransit service; however, there will need to be further discussion on the changes and steps.
- The proposed route realignments and eliminations based upon the proposed bicycle and pedestrian only zone in the University of Florida campus was supported and no major problems identified with the proposed realignments.
- The proposed service realignment on Tower Road for Route 75 was discussed in context of increased development around the route. As the roadway connectivity in the area increases, we want to ensure that any service changes can be permanent or semi-permanent – requiring little alteration in the future.
 - There was a proposal to split the route in half – and serve some portion with a mobility-on-demand (MOD) service where ridership is low. MOD is a general public on-demand service that responds to requests in real-time.
- There were concerns about the proposed changes to the Later Gator service – the proposed recommendation was start service 30 minutes later than it currently starts. Concerns focused around UF students facing a service gap if they wanted to go out for dinner or other activities at the current 8:30 start time.
- There was no opposition to the elimination of Route 121.
- There were concerns regarding the lost of grant money to provide free RTS passes for Grace Market patrons – these groups still have a need for service but will no longer have the means to access the service.
- The last phase of the microtransit service will provide service to Lamplighter Mobile Homes.

1.3.2 New Services

- There was support among the review committee members for the implementation of the Gu Enhance RTS study which proposed a TSM approach to the implementation of a BRT-lite along a locally preferred alternative routing.
 - The review committee discussed the transit oriented development patterns and projects that the City of Gainesville has codified through land development regulations – as these new projects are built and new ones proposed they will be a major support for the type of premium service proposed.
 - There was discussion about coordinating with traffic operations on proposed queue jump and TSP improvements.
- There was little support for the implementation or any further progress for the Streetcar Study.
- In discussion with the UF Transportation and Parking Manager new road alignments and an enhanced grid network around UF were discussed in the context of the new baseball stadium opening on Research Drive and the connection to 23rd Terrace being established. Future routes and alignments will need to accommodate this increased demand for transportation services, and RTS will have the opportunity to use the new 23rd Terrace connection.
- There was support for the proposed Express services for Duck Pond, Haile, and Tower Road to provide service for new communities along the corridors. These service improvements came from a recent UF study.
- There was discussion about the proposed East Side Transfer Station and continued support for the facility as a long-term improvement.
- Alachua County has been setting aside ROW for the dedicated transit lanes in unincorporated county. There is a need to ensure coordination between the county and the City so dedicated transit lanes can be continuous and most effective.

City of Gainesville
RTS Transit Development Plan

Stakeholder Interviews

Review Draft

July 10, 2019

Gainesville.
MOBILITY

Prepared by

**Tindale
X Oliver**

1.0 Introduction

As part of the RTS TDP Public Involvement effort, a number of stakeholders were identified to provide their perceptions of RTS. These individuals include representatives of the Gainesville City Commission, Greater Gainesville Chamber of Commerce, University of Florida, and FDOT. This document summarizes the key takeaways from the stakeholder interviews. The set of questions provided to the City Commissioners and Greater Gainesville Chamber of Commerce is slightly updated from the questions provided to UF and FDOT, therefore, some feedback is interpreted among question versions to generate a consensus. Table 1-1 shows the stakeholder which completed the survey.

Table 1-1: Stakeholder Interview Respondents

Name	Title/Position
Commissioner Charles Chestnut IV	Commissioner (Chair) Alachua County District 5
Commissioner David Arreola	Commissioner City of Gainesville District 3
Commissioner Adrian Hayes-Santos	Commissioner City of Gainesville District 4
Commissioner Gigi Simmons	Commissioner City of Gainesville District 1
Commissioner Helen Warren	Commissioner (At-Large) City of Gainesville
Commissioner Harvey Ward	Commissioner City of Gainesville District 2
Commissioner Gail Johnson	Commissioner (At-Large) City of Gainesville
Eric Godet	President & CEO, Greater Gainesville Chamber of Commerce
Tom Byron	Assistant Secretary of Intermodal Systems Development FDOT
Dr. Charlie Lane	Senior Vice President Strategic Operations (University of Florida)

2.0 Survey Question Summaries

2.1 Question 1: Are you currently aware of Regional Transit System (RTS) and its services?

All 10 respondents stated that they were aware of RTS and its services. Some added that they were familiar with the high student ridership and other new initiatives such as the first-mile last-mile microtransit pilot.

2.2 Question 2: Is the public perception of RTS good, satisfactory, or poor?

Most respondents feel public perception of RTS is positive, with some providing mixed responses. Positive comments point out that students' needs are served well. On the other hand, some people may feel that the services are insufficient, especially in outlying areas. Figure 2-1 shows the number of respondents and their general answer for Question 2.

Figure 2-1: Question 2 Responses and Count
(Is the public perception of RTS good, satisfactory, or poor?)



2.3 Question 3: What should be the highest priority for public transportation services in Gainesville?

The majority of stakeholders felt that Gainesville's highest priority for public transportation should be getting people to vital activities. This includes work, school, shopping, services, and even social needs. Others felt that providing the highest level of transit service should be the highest priority. One respondent felt that serving those with a transit need is most important. Note that this question was only presented to seven stakeholders.

- Getting people to vital activities (e.g. work, school, goods, services), 4 responses
- Delivering ideal transit service (e.g. consistent times), 2 responses
- Reaching those that need transit most, 1 response

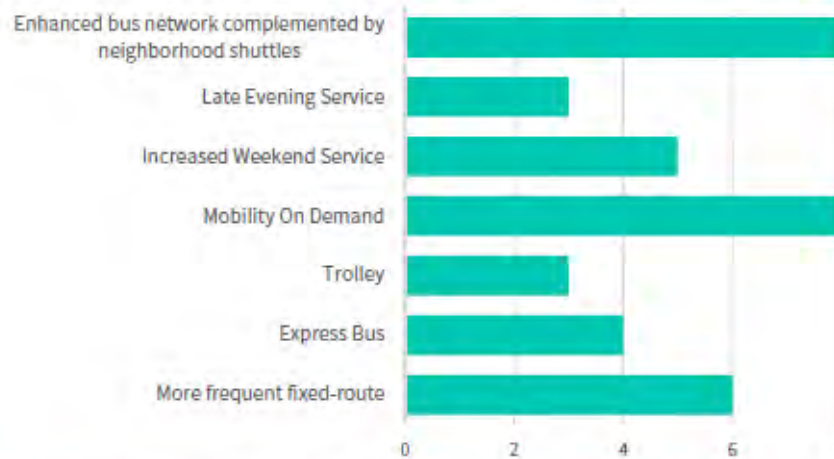
2.4 Question 4: Is there a need for additional transit or mobility service in Gainesville?

All 10 respondents agreed that there is an additional need for transit or mobility services in Gainesville. Some specific comments pointed to east/southeast Gainesville's growing transit demand. Other responses pointed out paratransit as a specific area of focus.

2.5 Question 5: What type of transit/mobility services would you like to see more of in the Gainesville area?

Respondents were able to list types of transit/mobility services they wanted to see more of. The most popular responses were enhanced bus network complemented by neighborhood shuttles, and mobility-on-demand. These were followed by more frequent fixed-route service and increased weekend service. Other responses are listed in Figure 2-2. Miscellaneous comments included an interest in autonomous vehicle technology and expanded variations of the microtransit pilot in areas of need.

Figure 2-2: Question 5 Responses and Count
(What type of transit/mobility services would you like to see more of in the Gainesville area?)



2.6 Question 6: Are you willing to pay additional local taxes for enhanced and/or expanded mobility services? What types of local funding sources should be used to continue or increase transit service in the future?

Nine respondents stated they were willing to pay additional taxes for enhanced or expanded mobility services. Regarding the preferred sources of funding, most agreed that private-public partnerships are desirable, as well as funding from advertisements. Contrarily, others commented they were not a fan of advertising partnerships that utilize bus wraps, as they are not aesthetically pleasing for the RTS brand.

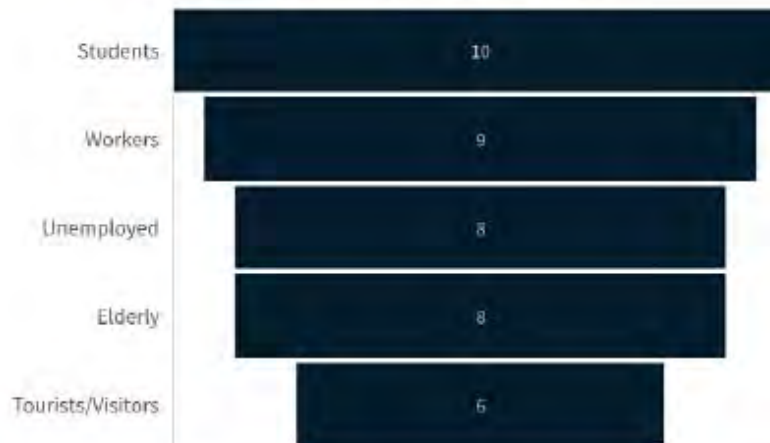
2.7 Question 7: What are reasonable passenger fares for transit service?

The majority of respondents did not feel strongly about this question and many opted to defer to whatever the industry best practices suggest. No stakeholders felt that the fares were too high, and no one suggested a quantifiable dollar value. Some suggested getting rid of the fareboxes and offering free fares to K-12 students.

2.8 Question 8: Who do you believe uses the transit system? (Workers, Students, Unemployed, Elderly, Tourists/Visitors)

Several stakeholders felt that all the listed groups use transit, with all 10 stakeholders mentioning students. After students, workers, the unemployed, elderly, and, lastly, tourists/visitors were chosen as transit users (see Figure 2-3).

Figure 2-3: Question 8 Responses and Count
(Who do you believe uses the transit system?)



2.9 Question 9: What do you believe is the purpose of most transit trips? (Medical, Shopping, Recreation, Work, School)

Some stakeholders listed multiple transit trip purposes, of which the most popular responses were school and work. The remainder of the responses are shown in Figure 2-4.

Figure 2-4: Question 9 Responses and Count
(What do you believe is the purpose of most transit trips?)



2.10 Question 10: Do you use RTS? Why? Why not?

Half of the stakeholders do not use RTS, while two stakeholders use the bus sometimes, and the remainder declining to provide a clear response. Those who do not ride RTS cited inconvenience or preferred to use their own vehicle. Others noted that they would use it more if it served their area better.

2.11 Question 11: What do you think are the most significant issues facing automobile travelers?

Almost all the stakeholders had a unique response to this question, however, a couple answers agreed that congestion, traffic, and capacity are growing issues for automobile users. Other issues mentioned include cost of ownership, safety, and competing with emerging autonomous technologies.

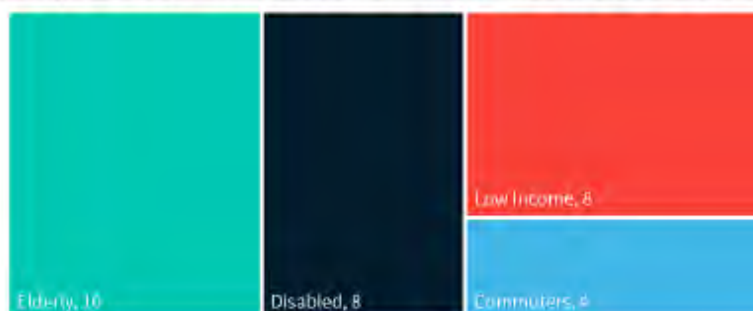
2.12 Question 12: What do you think are the most significant issues facing transit users?

Many respondents mentioned varying operating factors as the greatest issues facing transit users (e.g. on-time performance, frequency, bus network/access, travel time, and scheduling). Others interpreted the question more broadly and responded with affordability, mobility, safety, and convenience.

2.13 Question 13: What groups of travelers seem to experience the most limited access to transportation (the disabled, low-income, elderly, commuters, etc.)? Why?

Most stakeholders listed more than one user group in their response, with the most popular choice being the elderly. Disabled and low-income populations follow. Responses did not include much speculation for why these travelers experience limited transportation. Some mentioned that commuters are faced with a time constraint to make it to work, low-income individuals may not be able to pay the fare, and the elderly are mobility-challenged in general.

Figure 2-5: Question 13 Responses and Count
(What groups of travelers seem to experience the most limited access to transportation?)



2.14 Question 14: Do you believe there is a congestion problem in Gainesville?

90% of stakeholders believe there is an issue with congestion in Gainesville. Some noted that the congestion is worse at certain times of day and in specific corridors. These corridors may include Archer Road, 34th Street, and west of 43rd Street.

2.15 Question 15: Do you believe that public transportation or other mobility services or incentives can relieve congestion in Gainesville?

80% of stakeholders believe that public transportation and similar services can relieve congestion. Some commented that it would depend on the specific methods.

2.16 Question 16: What efforts or initiatives are you aware of that have been undertaken in the last five years to address traffic congestion in the region (locally)?

Some of the more frequent responses include light synchronization/signal timing and partnerships with universities/hospitals like Santa Fe College, University of Florida, or North Florida Regional Hospital. Other miscellaneous projects include road maintenance, road construction, park-and-rides, Ride-On-Demand, improved transit service, autonomous vehicles, and transportation network companies.

2.17 Question 17: (Of those listed above), which would you describe as successful and why?

Multiple responses praise the success of park-and-ride facilities. One stakeholder mentioned that bus passes for college students reduces congestion and alleviates some parking needs. Others mentioned that signal timing and the improved bus services have been successful.

2.18 Question 18: (Of those listed above), which would you describe as unsuccessful and why?

Most stakeholders did not have a strong response to this question and decided not to answer. The only stakeholders to respond indicated that new roads may generate more traffic and that some new road construction has not been successful because they have not yet been implemented.

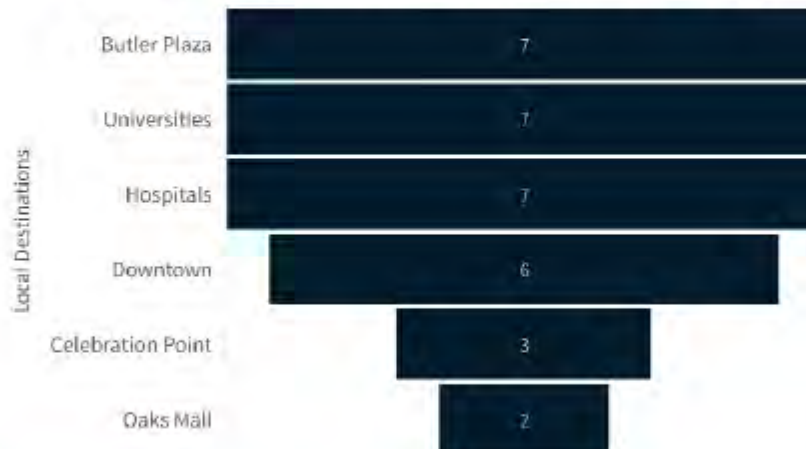
2.19 Question 19: What efforts would you like to see taken to address traffic congestion?

The majority of stakeholders referred to transit services as a tool to combat congestion. Specifically, suggestions include dedicated transit lanes, more walk/bike infrastructure, increased frequency and connectivity on fixed-route bus routes, and microtransit. Other comments include staggered work schedules and improved access to schools for children. A handful of stakeholders did not provide a response and stated they would defer to planning experts.

2.20 Question 20: What are the most frequent destinations within your immediate community?

As expected, stakeholders felt that universities (i.e., University of Florida and Santa Fe College), hospitals (i.e., Shands, VA, and UF Health), and Butler Plaza are the most popular local destinations. Other popular destinations include downtown, Celebration Point, and Oaks Mall. Less popular responses include Archer Road, various companies, and shopping/work in general. Generalized categories of the most popular responses are shown in Figure 2-6.

Figure 2-6: Question 20 Responses and Count
(What are the most frequent destinations within your immediate community?)



2.21 Question 21: What are the most frequent destinations, outside of your community, to which people are traveling?

Stakeholders provided varied responses regarding travel destinations outside of the Gainesville area. The consensus named Jacksonville, Tampa, and Orlando as primary destinations, but several additional areas were also mentioned. These areas include Alachua County, St. Augustine, Crescent Beach, Ocala, and surrounding Florida springs.

2.22 Question 22: What additional steps should be taken to increase the use of public transit and other alternative mobility options in the Gainesville Metropolitan Area?

Replies to this question were diverse, with unique answers across the board. One stakeholder felt that the key to transit development is cooperation with economic development and utilization of tools like CRAs. Another felt that first-mile last-mile connectivity is the key to increasing use of mobility services, emphasizing that shuttle service must be reliable and consistent. Others mentioned that advertisement, funding, and community involvement may be a help.

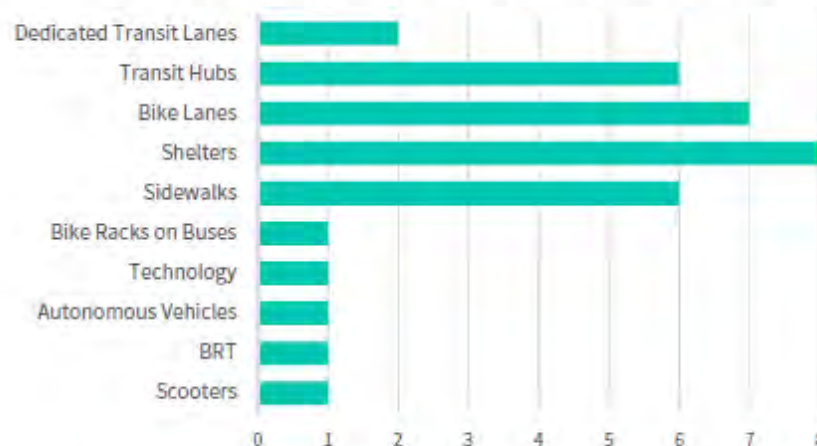
2.23 Question 23: Are more regional transportation options needed to connect Gainesville with surrounding areas (such as Alachua, Newberry, Jacksonville or Ocala)?

All stakeholders agreed that connections to these locations should be considered. Some areas were mentioned more often than others, like Alachua and Newberry. Other locations not listed in the question include High Springs, Orlando, Tampa, and Alachua.

2.24 Question 24: What infrastructure improvements are needed to enhance transit and alternative mobility options? Sidewalks, shelters, bike lanes, transit hubs, etc.

Some stakeholders responded that all of the question's enumerated infrastructure improvements are necessary to improve transit options in Gainesville. Other stakeholders added options like BRT, scooters, dedicated transit lanes, bike racks on buses, autonomous vehicles, and technology in general. The stakeholder responses are summarized in Figure 2-7.

Figure 2-7: Question 24 Responses and Count
(What infrastructure improvements are needed to enhance transit and alternative mobility options?)



2.25 Question 25: What local funding sources should be considered to improve transit service?

A handful of stakeholders did not provide a specific response to the question or opted out. The most common answer was to use taxes, varying between gas tax, ad valorem/property tax, or sales tax. Other recommendations include federal/state grants and public/private partnerships.

2.26 Question 26: Changing conditions within the community can affect the existing transit market, as well as offer new opportunities to serve potential customers. Are there any specific trends that you think will affect public transportation needs over the next 10 years? (For example, socioeconomic, transportation, land use, urban design patterns, policy, funding, technological and/or other changes.)

All of the listed options in the question were supported by stakeholder opinion, to some capacity. Stakeholders agreed that technological and transportation progress regarding transportation network companies and autonomous vehicles would provide great influence. Additionally, technology enabling telework or work-from-home options is expected to change future needs. Some

mention that population growth and densification in certain areas will yield a higher need for transit solutions, while others point out that larger shifts in the economy will also influence transit demand.

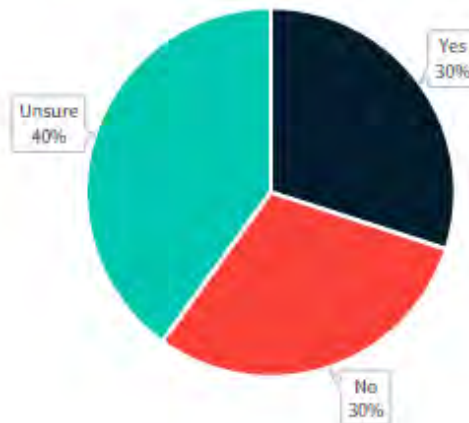
2.27 Question 27: Where do you see RTS in ten years? Role, function, size, mission?

Stakeholders seem to agree that the general vision for RTS is to be bigger, better, and serve as a leader in its field. Some specific responses mention autonomous buses, serving more people, providing more/better service, and being a good partner (for example, to the city, university, or private companies like TNCs).

2.28 Question 28: Do you believe RTS has been effective marketing transit service options?

Feedback regarding effective marketing is mixed. Most respondents do not feel comfortable providing direct feedback to the question and opted not to provide a “yes” or “no” response. Comments suggested there is always room for improvement and that RTS should take inspiration from other transit agencies as well as capitalize on new projects, like the autonomous shuttle, to garner more attention. Others think that marketing is ineffective and RTS could improve on marketing its services and brand better.

Figure 2-8: Question 28 Responses
(Do you believe RTS has been effective marketing transit service options?)





Gainesville Regional Transit System
Public Meeting Notice

You're invited to attend a public workshop about the Gainesville Regional Transit System's (RTS) Transit Development Plan. This meeting is an opportunity for the community to engage, learn, discuss, and express concerns and desires about transportation and transit in the City, County, and region. The meeting will take place on and at:

Thursday, July 25, 2019 from 4:00pm – 7:00pm

Santa Fe College's Gainesville Technology Entrepreneurship Center (GTEC)

Conference Room GT-107

2153 SE Hawthorne Rd., Gainesville FL 32641

Access via RTS Routes: 2, 3, 7

A Transit Development Plan is a strategic process designed to create a 10-year service and capital plan for the transit system. The process looks at mobility needs, identifies service gaps, and proposes service improvements. The process is designed to engage the community to provide public input about transportation needs and priorities. This public meeting is a chance to shape the vision and priorities for mobility services in Gainesville for the next 10 years. Please consider attending the meeting if you are able. If you are not able to attend, please provide comments.

Comments will be accepted starting one week before and for one week after the public meeting date (July 25). For more information and to provide comments, questions, or concerns, please contact:

Krys Ochia, RTS Planning Manager, Gainesville Department of Mobility, OchiaK1@CityofGainesville.org (352) 393-7820

Appendix D – Peer Performance Indicators

Table D-1: Peer Agency Fixed Route General Performance Indicators (2017 NTD)

General Indicators	Gainesville RTS	State College	Tallahassee	Athens	Lansing	Ann Arbor	Urbana	Eugene	Peer Mean	% from Mean
Service Area Population	163,990	104,360	162,310	119,980	289,629	228,574	136,828	302,200	188,484	-13.0%
Service Area Size (sq mi.)	76	89	102	44	136	110	40	482	135	-43.7%
Passenger Trips	9,415,077	6,892,140	3,302,667	1,553,282	9,740,032	6,596,905	11,939,808	7,465,237	7,113,144	32.4%
Passenger Miles	24,815,978	17,230,350	8,055,605	5,598,040	29,753,135	23,183,887	21,969,247	29,777,780	20,048,003	23.8%
Vehicle Miles	3,838,362	1,973,456	2,130,772	889,851	3,535,643	3,753,773	3,251,934	3,405,544	2,847,417	34.8%
Revenue Miles	3,657,573	1,792,806	2,056,339	826,286	3,276,260	3,460,748	3,115,545	3,154,525	2,667,510	37.1%
Vehicle Hours	315,385	165,493	198,052	74,312	262,952	293,175	279,665	259,196	231,029	36.5%
Route Miles	237	140	236	168	395	302	205	676	295	-19.6%
Total Operating Expense	23,701,024	14,994,202	14,068,274	5,563,824	30,213,694	29,850,581	30,769,454	38,006,597	23,395,956	1.3%
Total Employee FTEs	272	157	157	65	228	270	264	265	210	29.9%
Vehicles Operated in Maximum Service	111	60	68	22	79	84	96	76	75	49.0%
Total Gallons Consumed	1,028,412	647,763	562,420	262,570	731,947	830,858	777,544	756,544	699,757	47.0%

Table D-2: Peer Agency Fixed Route Effectiveness Measures (2017 NTD)

Effectiveness Measures	Gainesville RTS	State College	Tallahassee	Athens	Lansing	Ann Arbor	Urbana	Eugene	Peer Mean	% from Mean
Vehicle Miles Per Capita	23.4	18.9	13.1	7.4	12.2	16.4	23.8	11.3	15.8	48.0%
Passenger Trips Per Capita	57.4	66.0	20.3	12.9	33.6	28.9	87.3	24.7	41.4	38.7%
Passenger Trips Per Revenue Mile	2.6	3.8	1.6	1.9	3.0	1.9	3.8	2.4	2.6	-1.9%
Passenger Trips Per Revenue Hour	31.2	44.3	17.1	21.5	38.9	23.5	44.3	30.5	31.4	-0.6%
Revenue Miles Between Failures	8,074.1	4,596.9	9,792.1	3,577.0	7,480.0	15,046.7	23,965.7	5,214.1	9,718.3	-16.9%

Table D-3: Peer Agency Fixed Route Efficiency Measures (2017 NTD)

Efficiency Measures	Gainesville RTS	State College	Tallahassee	Athens	Lansing	Ann Arbor	Urbana	Eugene	Peer Mean	% from Mean
Operating Expense Per Capita	144.5	143.7	86.7	46.4	104.3	130.6	224.9	125.8	125.9	14.8%
Operating Expense Per Passenger Trip	2.5	2.2	4.3	3.6	3.1	4.5	2.6	5.1	3.5	-27.6%
Operating Expense Per Passenger Mile	1.0	0.9	1.7	1.0	1.0	1.3	1.4	1.3	1.2	-20.0%
Operating Expense Per Revenue Mile	6.5	8.4	6.8	6.7	9.2	8.6	9.9	12.0	8.5	-24.0%
Operating Expense Per Revenue Hour	78.6	96.3	72.8	76.9	120.8	106.3	114.1	155.1	102.6	-23.4%
Farebox Recovery (%)	0.6	0.5	0.3	0.3	0.2	0.2	0.2	0.1	0.3	99.8%
Revenue Miles Per Vehicle Mile	1.0	0.9	1.0	0.9	0.9	0.9	1.0	0.9	0.9	1.8%
Revenue Miles Per Total Vehicles	27,920.4	25,250.8	26,705.7	26,654.4	36,002.9	34,607.5	28,583.0	36,258.9	30,247.9	-7.7%
Vehicle Miles Per Gallon	3.7	3.0	3.8	3.4	4.8	4.5	4.2	4.5	4.0	-6.7%
Average Fare	1.5	1.0	1.4	1.1	0.6	0.7	0.6	0.7	1.0	59.6%

Table D-4: Peer Agency Demand Response General Performance Indicators (2017 NTD)

General Indicators	Gainesville RTS	State College	Tallahassee	Athens	Lansing	Ann Arbor	Urbana	Eugene	Peer Mean	% from Mean
Passenger Trips	55,916	34,508	99,740	6,818	501,308	212,637	136,451	183,871	153,906	-63.7%
Passenger Miles	511,492	237,576	592,602	35,672	3,503,239	1,427,530	622,422	1,493,213	1,052,968	-51.4%
Revenue Miles	580,650	272,702	596,303	56,384	2,965,342	1,625,110	343,595	1,233,197	959,160	-39.5%
Revenue Hours	39,238	18,197	47,214	5,489	189,402	133,817	40,434	111,601	73,174	-46.4%
Total Operating Expense	1,931,854	987,120	3,701,557	595,341	13,982,511	6,816,993	1,523,892	5,879,943	4,427,401	-56.4%

Table D-5: Peer Agency Demand Response Effectiveness Measures (2017 NTD)

Effectiveness Measures	Gainesville RTS	State College	Tallahassee	Athens	Lansing	Ann Arbor	Urbana	Eugene	Peer Mean	% from Mean
Passenger Trips Per Capita	0.3	0.3	0.6	0.1	1.7	0.9	1.0	0.6	0.7	-51.4%
Passenger Trips Per Revenue Hour	1.4	1.9	2.1	1.2	2.6	1.6	3.4	1.6	2.0	-28.5%
Revenue Miles Between Failures	21,506	272,702	11,251	7,048	31,546	147,737	22,906	68,511	72,901	-70.5%

Table D-6: Peer Agency Demand Response Efficiency Measures (2017 NTD)

Efficiency Measures	Gainesville RTS	State College	Tallahassee	Athens	Lansing	Ann Arbor	Urban a	Eugene	Peer Mean	% from Mean
Operating Expense Per Passenger Trip	\$34.55	\$28.61	\$37.11	\$87.32	\$27.89	\$32.06	\$11.17	\$31.98	\$36.34	-4.9%
Operating Expense Per Revenue Mile	\$3.33	\$3.62	\$6.21	\$10.56	\$4.72	\$4.19	\$4.44	\$4.77	\$5.23	-36.4%
Operating Expense Per Revenue Hour	\$49.23	\$54.25	\$78.40	\$108.46	\$73.82	\$50.94	\$37.69	\$52.69	\$63.19	-22.1%
Average Fare	\$2.96	\$2.78	\$2.12	\$3.30	\$2.21	\$2.93	\$2.03	\$1.48	\$2.47	19.6%

Appendix E – Performance Monitoring Program

Performance Measures and Indicators

Once the proposed transit services are implemented, the following performance indicators and measures should be monitored by RTS on a quarterly basis for its fixed-route, Microtransit, and mobility-on-demand services as part of the recommended performance monitoring program.

- **Passenger Trips** – annual number of passenger boardings on the transit vehicles.
- **Revenue Miles** – number of annual miles of vehicle operation while in active service.
- **Revenue Hours** – number of annual hours of vehicle operation while in active service.
- **Passenger Trips per Revenue Hour** – ratio of passenger trips to revenue hours of operation.

New fixed-route type services typically take three years to become established and productive, the performance data up to that point should be reviewed and interpreted cautiously as a result. Further, Microtransit and mobility-on-demand services will be a relatively new service type in the City of Gainesville and therefore have fewer benchmarks with which to compare initially. Although adjustments and modifications are encouraged as demand and needs change, outright discontinuation based on performance monitoring data alone are discouraged during the initial three years.

Evaluation Methodology and Process

This process is based on two measures, trips per mile and trips per hour, which are weighted equally to derive an overall route score. An individual route's score for a particular measure is based on a comparison of the measure as a percentage of the system average for that particular measure. These individual measure scores are added together and divided by two to get a final aggregate score. This final composite performance score is an indication of a route's performance for the two measures when compared to the system average for those measures. A higher score represents better overall performance when compared to other routes.

The noted comparative performance evaluation can be beneficial, but caution should be exercised when using the final scores and rankings, because these figures are comparing routes to one another and may not reflect the specific goals established for a particular route (i.e., geographic coverage vs. ridership performance). The process is particularly useful, however, in highlighting those routes that may have comparative performance-related issues. These routes can then be singled out for closer observation in future quarters or years to determine specific changes that may help mitigate any performance issues.

Once a route score is determined, routes can be ranked to show the highest performing and lowest performing routes. The rankings are a useful proxy for determining the comparative performance of any route, as well as highlighting changes in performance over time. To track the performance variation over time, three performance levels have been developed:

- 
- **Level I – Good ($\geq 75\%$)** – Transit routes in this category are performing efficiently compared with the average level of all the agency’s routes.
 - **Level II – Monitor (30–74%)** – Routes in this category exhibit varying levels of performance problems and require more detailed analysis (e.g., ride checks, on-board surveys, increased marketing efforts, etc.) to aid in identifying specific changes that can be made to help improve the route’s performance.
 - **Level III – Requires Attention ($\leq 29\%$)** – Routes in this category exhibit poor performance and low efficiency. Recommendations for these routes may include truncation of the route, reduction in the route’s number of revenue hours, or discontinuation of the route