Transit Development Plan

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Presentation to the City of Gainesville Summary Findings and Ten-Year Improvement Plan

September 2019



What's a TDP?

- It's a Transit Development Plan!
 - It sets a strategic vision for mobility
 - Produces a 5-year and 10-year service and capital plan
 - Is required by FDOT to get state and federal funding
 - Assesses mobility needs, services, and service gaps, and
 - Is used to get community input on mobility decisions



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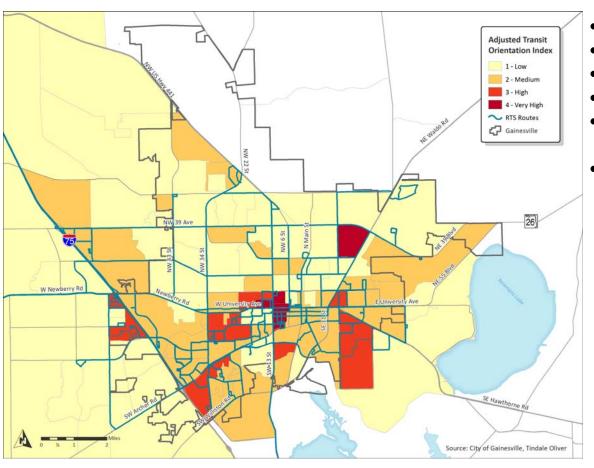
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TDP Overview

- What is the focus of this TDP?
 - mobility demand
 - transit performance metrics
 - service gaps
 - strategies for improved transit network high demand corridors
 - strategies for services to facilitate localized travel and connectivity
 - strategies for walk, bike, scooter, transportation network companies
 - consider policies, design standards, partnerships, funding
- Opportunity to shape mobility vision and priorities



Socioeconomic Trends



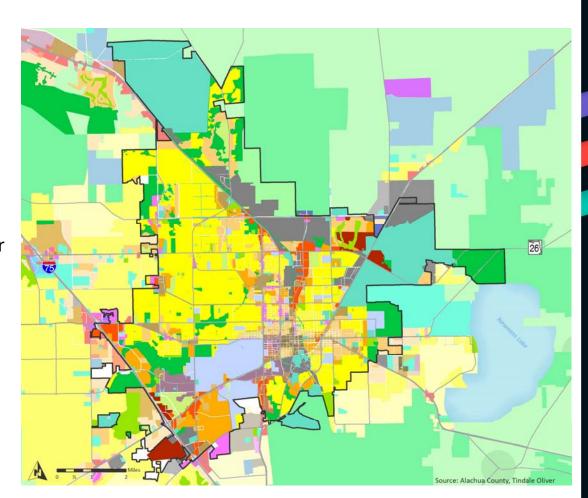
- UF Student Population
- Low Income Population
- Growing number of Seniors
- Growth in County
- Creates High Transit Demand
- Need to improve mobility for work, school, healthcare, shopping, especially in East Gainesville and along key corridors like Archer Road and Newberry Road/University and west of I-75

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Land Use

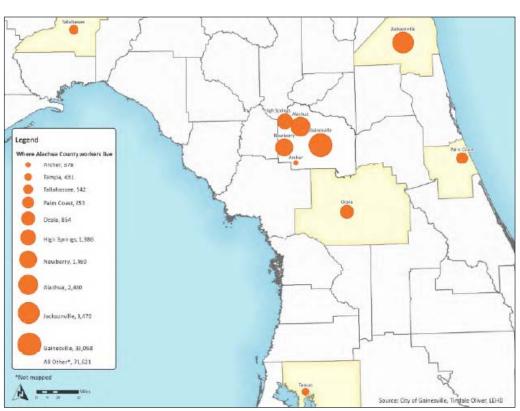
- Growth in mixed-use and higher density developments
- Creates walkable, bikeable, transit mobility options
- Low density suburban development poses obstacles for transit and walkability
- Mixed-use development is happening within the City and parts of Alachua County
- New developments and infill development should support walkable communities



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Travel Behavior and Trends

- Most travel occurs within the City and County
- Travel to/from places outside the City and County is not significant
- Congestion along major corridors will persist



Place of Residence for persons who work in Alachua County (number of persons - LEHD 2015)

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Transit Ridership Trends

Figure 1-2: RTS Peer and Trend Comparison for Passenger Trips

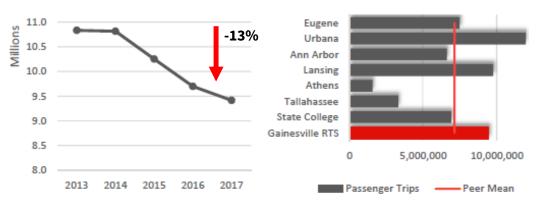
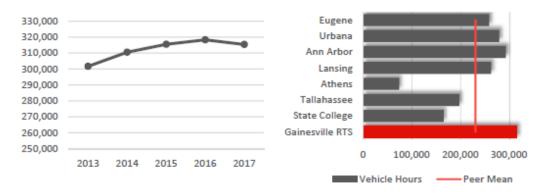


Figure 1-6: RTS Peer and Trend Comparison for Vehicle Hours



- National decline in transit ridership since 2012 due to improved economy, cheap gas, artificially priced TNCs
- Need to improve travel time with premium transit and customer focused services to be competitive



Demand Response Ridership Trends

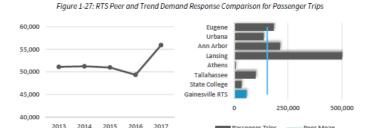


Figure 1-29: RTS Peer and Trend Demand Response Comparison for Total Operating Expense

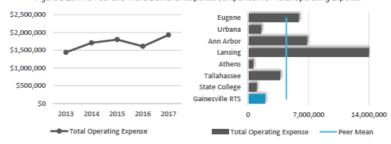
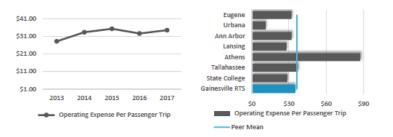


Figure 1-34: RTS Peer and Trend Demand Response Comparison for Operating Expense Per Passenger Trip

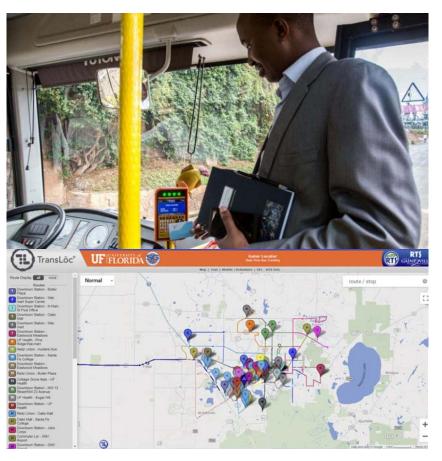


- Need for ADA on-demand service is growing!
- Consistent with national trend the aging boomers
- Cost of service increasing
- Need long-term solution to better serve growing demand





Technology Trends



- Mobile / Electronic Pay
- Real-Time Information
- Transit Signal Priority
- Automated, Connected, and Shared Vehicles
- Mobility on Demand
- Transportation Network Companies
- Shared bikes / scooters



Transit Demand

• Baseline Ridership Estimates – No Changes to Service

Service Period	2019 Baseline	2029 Estimate	Change
Weekday	12.67 million	15.95 million	25.9%
Saturday	347,830	521,666	50.0%
Sunday	135,245	180,541	33.5%



Rider Survey Findings

On-board rider survey

- Most riders travel between home, work, school
- Most riders walk to/from bus stop (90%)
- Most riders ride 5 or more days a week (74%)
- Most riders would walk or catch a ride if not for bus (67%)
- Most riders are long time users, 2 plus years (51%)
- Most riders want more frequent service (32%), weekend service (22%), benches and shelters (17%)
- Most riders want a premium BRT service (60%)
- Most riders have 1 vehicle available (42%), have 2 plus (24%)



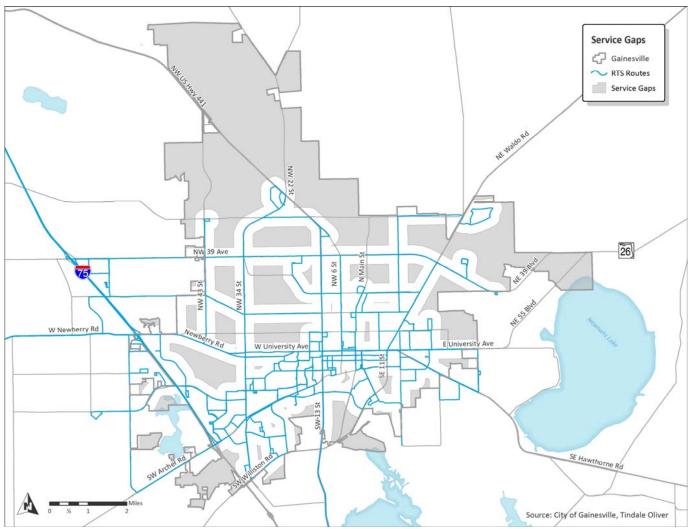
Online Survey Findings

Online general public survey

- Lack of transportation has negative impacts on income (94%) and access to opportunities (87%) for the person
- Lack of transportation hurts the community (89%) and economy (93%)
- We need better mobility services (85%)
- We to be better in letting folks know about services (85%)
- Need to increase service frequency (75%)
- Improve facilities for riders, bicyclist, pedestrians (54-63%)
- Invest more on transit and mobility (94%)
- Improvements in mobility should benefit all (70%)

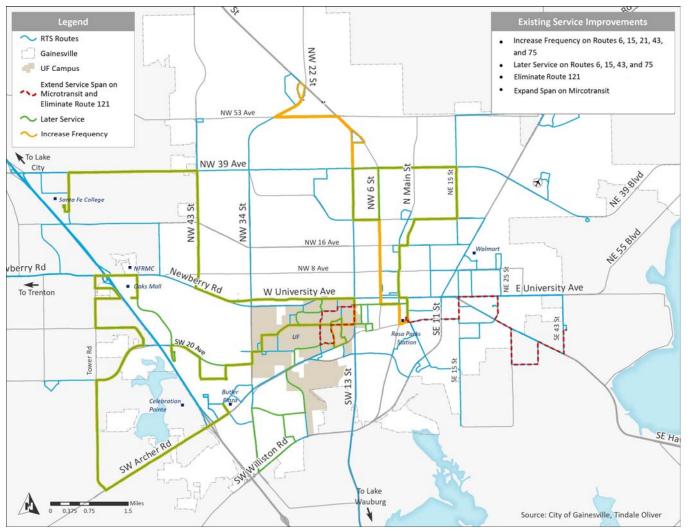


Existing Service and Service Gaps



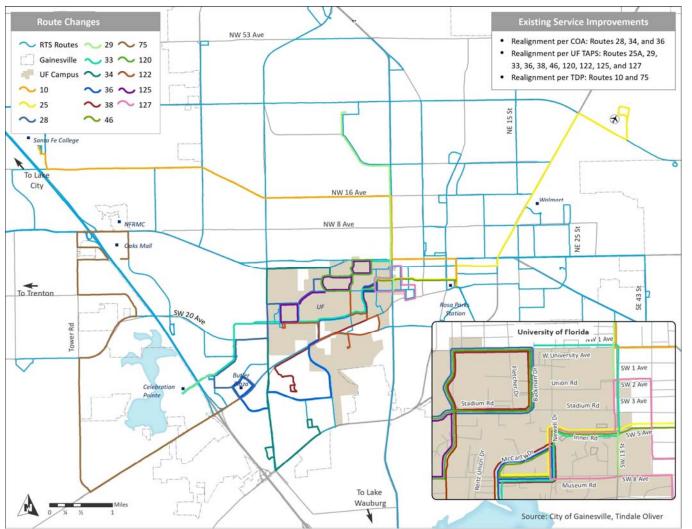


Service Alternatives – Span & Frequency



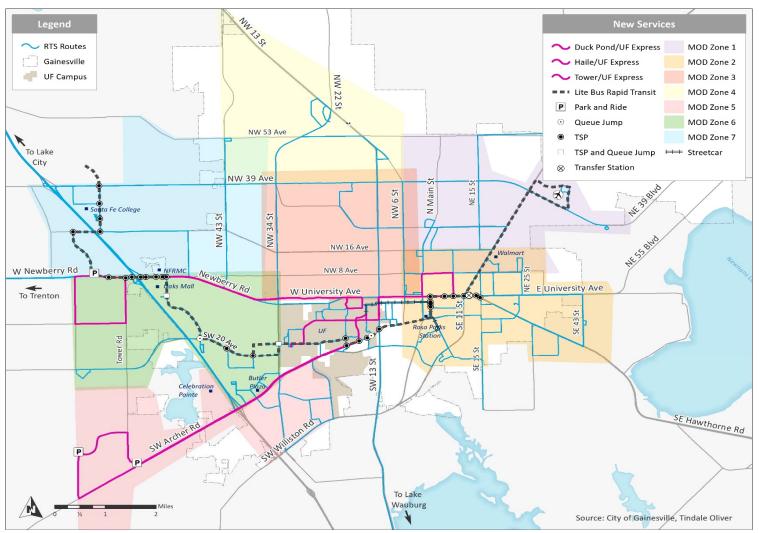


Service Alternatives – Realignments





Service Alternatives - New Services





Transit Demand with Improvements

Weekday Ridership Estimates – based on improvement type

Service Period	2019	2029 Estimate	Change
Weekday – No service changes	12.67 million	15.95 million	25.9%
Impacts of service improvements			
Weekday – Span and Frequency	15,951,919	16,765,947	814,028
Weekday – Alignment Changes	15,951,919	16,557,069	605,150
Weekday – New Services	15,951,919	16,284,457	332,538

- Biggest benefit from improved frequency and span
- Combined impacts are not additive but will be higher than span and frequency alone
- Recommend combined changes



Key Takeaways

- Create regional partnerships to provide high-quality transit and multimodal solutions in the City and Alachua County
- Proposed route improvements will add coverage, improve service frequencies, and reduce travel times
- Premium transit services will provide reliable travel times and improve on-time service along congested corridors
- MOD services will improve access to local travel, connections to fixed route, and support growing paratransit demand
- Extended service span on Microtransit to match Route 7 will improve service and access downtown and East Gainesville



Proposed Service Improvements

Description	Implementation Year	Annual Operating Cost (2019\$)	Vehicles Required
Increase Service Frequencies: 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	2020	\$233,753 \$102,523 \$832,489 \$266,560 \$334,226	None
Increase Service Span: 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 Replace Route 121 with other service Improvements	2020	\$246,056 \$ 92,271 \$ 88,170 \$174,289 \$230,472 (\$393,689)	None
Realign Routes per COA, TDP, UF TAPS Recommendations: Realign routes 25A, 29, 38, 46, 120, 122, 125, 127 Realign routes 10, 28, 33, 34, 75 Paratransit to cover new service and demand Realign Route 36 per COA recommendation (2023)	2020	\$0 \$0 \$31,023 \$328,074	None
New Mobility-on-Demand (MOD) Service: Add MOD zones (seven proposed) to overlay fixed route network to provide on-demand local mobility and first/last- mile connections to fixed route network; serves the general public; augments growing paratransit demand	2024	\$1,009,732	8



Phase 2 - Proposed New Services

Description	Implementation Year	Annual Operating Cost (2019\$)	Vehicles Required
Bus Rapid Transit (BRT) Service: Introduce BRT-Lite service along Newberry, Archer, West University with TSP and Queue Jump treatments at key intersections to facilitate improved transit service reliability and reduced travel times along key travel corridors	2025	\$2,419,548	11
New Express Services: Duck Pond / UF Express Haile / UF Express Tower / UF Express	2025	\$1,476,334	8
Additional Paratransit Services: Expanded ADA Paratransit service to cover new service areas and increased paratransit demand; May be mitigated by new MOD services	2025	\$1,992,480	24



Existing Services and Phase 1 Costs

Service and Capital Improvements		Operating Cost		Estimated Farebox Recovery*		Total Capital Cost		equired New Funding	Existing or New Operating Revenues
		2019\$ + CPI		2019\$ + CPI		2019\$ + CPI		2019\$ + CPI	
Maintain Existing Services (2020-2029)									
Maintain Existing Fixed-Route	\$	266,390,435	\$	169,504,234	\$	60,108,807	\$	156,995,008	FTA, FDOT, Local
Maintain Existing Service - Paratransit	\$	21,713,299	\$	13,816,172	\$	4,493,369	\$	12,390,496	FTA, FDOT, Local
Phase 1 (2020 - 2024)									
Improvements to Existing Routes	\$	12,265,312	\$	7,804,418	\$	-	\$	4,460,894	FTA, FDOT, Local
New Services - MOD	\$	1,090,826	\$	694,093	\$	9,256,023	\$	9,652,757	FTA, FDOT, Local
Complementary ADA Paratransit for New Fixed-Route Services	\$	475,118	\$	302,317	\$	1,472,334	\$	1,645,134	FDOT, Local
Preventative Maintenance	\$	-	\$	-	\$	8,081,605	\$	8,081,605	FTA, FDOT, Local
TSP/Queue Jump Treatments (intersections)	\$	-	\$	-	\$	-	\$	-	FTA, FDOT, Local
East Side Transfer Station (Design, RE, Const)	\$	4,006,925	\$	-	\$	4,006,925	\$	8,013,850	FTA, FDOT, Local
Bus Stop Infrastructure - Annual Allocation	\$	2,930,500	\$	-	\$	2,930,500	\$	5,861,000	FTA, FDOT, Local
ADA Improvements - Annual Allocation	\$	2,500,000	\$	-	\$	2,500,000	\$	5,000,000	FTA, FDOT, Local
Technology Projects	\$	6,771,000	\$	-	\$	6,771,000	\$	13,542,000	FTA, FDOT, Local
Recurring Facilities Upgrades	\$	750,000	\$	-	\$	750,000	\$	1,500,000	FTA, FDOT, Local
Technology Projects - Recurring	\$	1,482,000	\$	-	\$	1,482,000	\$	2,964,000	FTA, FDOT, Local
Microtransit Sevice Development	\$	551,706	\$	351,051	\$	551,706	\$	752,361	FTA, FDOT, Local
Total 5-Year Investment	\$	320,927,122	\$	192,472,285	\$	102,404,268	\$	230,859,105	

^{*} Assumes continued local cost sharing partnerships.

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Existing Services and Phase 2 Costs

Service and Capital Improvements		Operating Cost		Estimated Farebox Recovery*		Total Capital Cost		equired New Funding	Existing or New Operating Revenues
		2019\$ + CPI		2019\$ + CPI		2019\$ + CPI		2019\$ + CPI	
Phase 2 (2025 - 2029)									
New Services - MOD, BRT-Lite, UF Express	\$	51,232,114	\$	32,598,994	\$	3,154,366	\$	21,787,486	FTA, FDOT, Local
Complementary ADA Paratransit for New Fixed-Route Services	\$	2,846,295	\$	1,811,097	\$	606,353	\$	1,641,550	FTA, FDOT, Local
Preventative Maintenance	\$	24,629,254	\$	15,671,594	\$	9,143,594	\$	18,101,254	FTA, FDOT, Local
TSP/Queue Jump Treatments (intersections)	\$		\$	-	\$	8,000,000	\$	8,000,000	FDOT, Local
East Side Transfer Station (Design, RE, Const)	\$	ı	\$	-	\$		\$	-	FTA, FDOT, Local
Bus Stop Infrastructure - Annual Allocation	\$		\$	-	\$	2,930,500	\$	2,930,500	FTA, FDOT, Local
ADA Improvements - Annual Allocation	\$	-	\$	-	\$	2,500,000	\$	2,500,000	FTA, FDOT, Local
Recurring Facilities Upgrades	\$	T.	\$	-	\$	817,614	\$	817,614	FTA, FDOT, Local
Technology Projects - Recurring	\$	=	\$	-	\$	2,470,000	\$	2,470,000	FTA, FDOT, Local
Microtransit Sevice Development	\$	551,706	\$	-	\$	-	\$	551,706	FTA, FDOT, Local
Total 5-Year Investment	\$	86,030,369	\$	50,081,686	\$	29,622,428	\$	65,571,111	

^{*} Assumes continued local cost sharing partnerships.

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Priorities

- Existing services span, frequency, vehicles, microtransit
- Service realignments per UF TAPS and previous COA/TDP
- Mobility-on-Demand services improves local mobility, access to fixed route, augments growing paratransit demand
- Transit priority treatments on key corridors
- BRT-Lite and UF Express
- Priorities for Improvements
 - Near term (0 to 5 years) improve existing network; vehicle replacement; East Gainesville Transit Center
 - Longer term (5 to 10 years) TSP and Queue Jump improvements to benefit service on key corridors and support BRT-Lite

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Next Steps

- Submit TDP for FDOT Review by September 1, 2019
- Process FDOT Comments
- Prepare Final TDP
- Present Final TDP to City of Gainesville

