# ALACHUA COUNTYWIDE BICYCLE & PEDESTRIAN MASTER PLAN

Technical Memorandum 1: Existing Conditions Assessment

May 2025



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# INTRODUCTION

Alachua County, in partnership with the City of Gainesville and University of Florida, is developing a Countywide Bicycle and Pedestrian Master Plan (BPMP) to guide the future of walking, biking, and micromobility infrastructure across the region. This plan will provide a framework for improving safety, expanding transportation options, and enhancing connectivity between neighborhoods, business districts, schools, parks, and other key destinations.

While the plan focuses on improving facilities for people who walk, bike, and roll, its benefits extend to everyone—including those who primarily drive. A well-connected bicycle and pedestrian network helps reduce roadway congestion, improves traffic flow, and increases safety for all road users by providing dedicated spaces for non-motorized travelers. Additionally, better walking and biking options give residents more transportation choices, helping to create a more efficient and accessible system that supports economic growth and quality of life.

The Master Plan will:

- **Strengthen countywide policies and practices** to support safe and effective multimodal transportation.
- Identify gaps in the existing network of sidewalks, bikeways, and shared-use paths.
- Recommend targeted infrastructure improvements to enhance connectivity and accessibility.
- Develop an implementation strategy to prioritize investments and policy changes.

By planning for a safer and more efficient transportation network, Alachua County is taking a proactive approach to addressing the needs of all residents—whether they walk, bike, drive, or use transit. This plan reflects a commitment to a balanced and forward-thinking transportation system that enhances mobility, safety, and quality of life across the County.

# **Study Process**

The BPMP will be conducted in four phases and supported by community engagement as noted below. This interim report summarizes the existing conditions, needs, and opportunities based on data analysis and community input.



#### Alachua County Today

- Data inventory/analysis
- Understand destinations
- Assess how our system is currently performing

Community Engagement
1. Listen & Understand



#### What Is Our Active Transportation Network?

- Define context
- Create vision for countywide and local networks
- Goals, Policies, and Program Refinement

Community Engagement
2. Refine the Vision



# What Can Our Network Look Like?

- Identify gaps and needs within active transportation networks
- Evaluate projects and refine the networks



#### How Do We Make It Happen?

- Develop cost estimates and funding strategies
- Prioritize improvements
- Create phased implementation plan
   Community Engagement
  - 3. Present the Plan

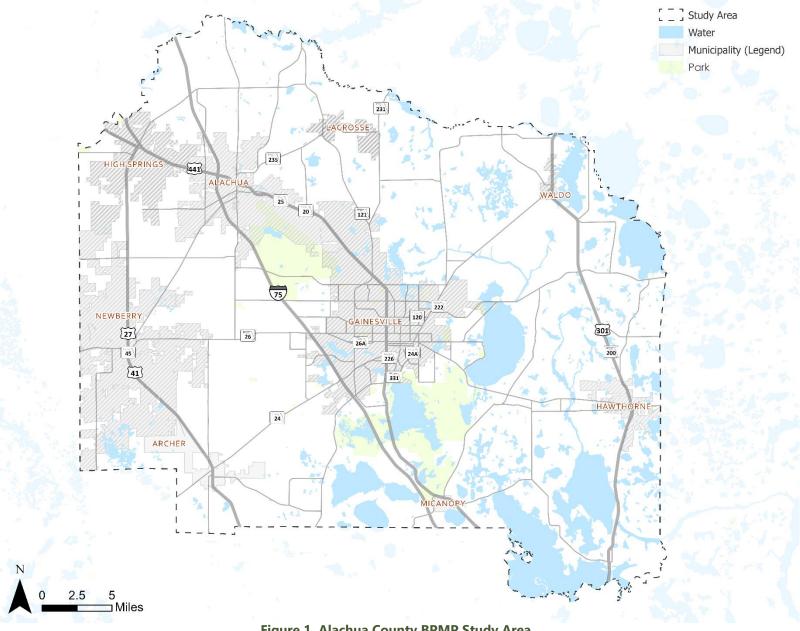
# **Study Area**

The study area for the Alachua County BPMP can be seen in **Figure 1** and includes all of Alachua County. The BPMP will focus on connecting people to everyday destinations within the unincorporated county like schools, grocery stores, and healthcare. Additionally, the BPMP will propose connections between cities and towns and to major destinations like the University of Florida, recreational and conservation areas, major hospitals, schools, and shopping districts.

Alachua County is home to nine municipalities, each with its own character, history, and role within the region. These jurisdictions, along with the unincorporated areas of the county, contribute to the diverse economic, cultural, and environmental landscape of North Central Florida.

- Gainesville The largest city and the economic and cultural hub of Alachua County, Gainesville is home to the University of Florida (UF) and Santa Fe College, making it a center for education, healthcare, and innovation. With a growing population and a strong focus on sustainability and multimodal transportation, Gainesville plays a key role in regional planning efforts.
- Alachua Known as the "Good Life Community," Alachua combines small-town charm with a growing business sector, including the Progress Corporate Park, which supports biotech and research industries. Its historic downtown and access to nature make it a unique blend of tradition and progress.
- **High Springs** A historic railroad town turned outdoor recreation destination, High Springs is famous for its proximity to springs, rivers, and state parks. The city is a gateway for eco-tourism, attracting visitors for kayaking, diving, and hiking.
- Newberry A city with strong agricultural roots, Newberry is known for its equestrian culture, farms, and sports facilities, including the Easton-Newberry Sports Complex. It has experienced steady growth while maintaining its rural charm.

- Hawthorne Positioned along U.S. 301, Hawthorne is a small town
  with strong connections to nature and outdoor recreation, including
  the Gainesville-Hawthorne State Trail, a popular route for cyclists and
  pedestrians linking to Gainesville.
- Archer A quiet, historically significant town with a past tied to the railroad and agriculture, Archer retains its rural identity while benefiting from its proximity to Gainesville.
- Micanopy Florida's oldest inland town, Micanopy is known for its historic district, antique shops, and oak-lined streets. It has a deep cultural heritage and remains a popular destination for history enthusiasts.
- Waldo Historically, a major railroad and transportation hub, Waldo is a small town with a strong community focus. It is known for its fishing lakes, rural charm, and antique markets.
- **LaCrosse** A small town with a strong agricultural heritage, LaCrosse is known for its farming community and rural landscape.



**Figure 1. Alachua County BPMP Study Area** 

# **COMMUNITY ENGAGEMENT SUMMARY**

Data-driven analyses help identify gaps and issues but do not tell the entire story. The plan is based on a strong foundation of community engagement, working with the people who frequent Alachua County's roadways every day to understand where people want to go, how they want to get there, and how they can travel most safely and comfortably. Initial community engagement efforts were conducted to understand the issues and opportunities to provide a safe and connected network for all, a summary of which is outlined below. The efforts included one in-person public workshop, two pop-up events, and an online survey & mapping exercise.

# **In-Person Engagement**

# Working Group

A project Working Group was established to solicit input from various organizations, including but not limited to representatives from different departments within Alachua County, local jurisdictions, Florida Department of Transportation (FDOT), the University of Florida, and Gainesville Regional Transit System (RTS) to name a few. The Project Team (Alachua County, City of Gainesville, University of Florida, and Kittelson & Associates, Inc.) met with the Working Group on January 15<sup>th</sup>, 2025, to gather feedback regarding the goals and strategies of the master plan and verify existing and proposed active transportation facilities in a map-based exercise.

# Public Workshop

On Wednesday, November 13<sup>th</sup>, 2024, Alachua County held an in-person public workshop in conjunction with the County's Safe Streets and Roads for All (SS4A) project (photo shown in **Figure 2**).



Figure 2: Photo of Participants Engaging in In-Person Public Workshop #1

Eighty-seven people attended the workshop located at the Harn Museum of Art (3259 Hull Rd, Gainesville, FL 32608). Participants had the opportunity to (1) engage in conversation with the Project Team, (2) provide feedback regarding their level of comfort walking and/or biking in Alachua County, and (3) provide specific geographical feedback at several interactive map stations. The data collected in-person was integrated into the online feedback discussed later in the summary.

Residents were asked to share their level of comfort **biking** in Alachua County and what would make them feel more comfortable doing so. **Figure 3** shows the findings related to the bicycle facilities people feel comfortable using while biking. Most residents shared that they felt comfortable biking on *separated*, *wider facilities* (i.e., separated bicycle lanes, a shared-use path, or a trail).

#### **Facility Types**

- •Desire for *separated bicycle facilities* (i.e., buffered bicycle lanes and other physical barriers) as opposed to painted bicycle lanes to enhance safety.
- •Desire for better bicyclist-scale lighting at night.
- •Issues with *obstructed bicycle lanes* with scooters, illegally parked vehicles, etc.

#### Vehicle Interaction

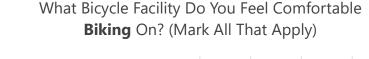
- •Support for designing roads that encourage *slower vehicle speeds*, including narrowing roads near intersections and adding speed tables.
- •Concerns about distracted driving (e.g., texting and driving).
- •Desire for more traffic enforcement of vehicle laws and better law enforcement to reduce *aggressive driving*.
- •Support for red-light enforcement near bike lanes.
- •Support for educating drivers about bicyclists' right-of-way.

#### Intersections

•Support for prioritizing bicyclist movements at major intersections.

#### Other

- •Support for more commuter bicycle trails and *better connectivity* between bicycle paths and major areas like the University of Florida (UF) and Downtown Gainesville.
- •Concerns about poor roadway surface conditions and the need for better *maintenance of bicycle lanes* (e.g., removal of debris, potholes, etc.).
- •Support for *prioritizing bicyclists over vehicles* when redesigning roadways.



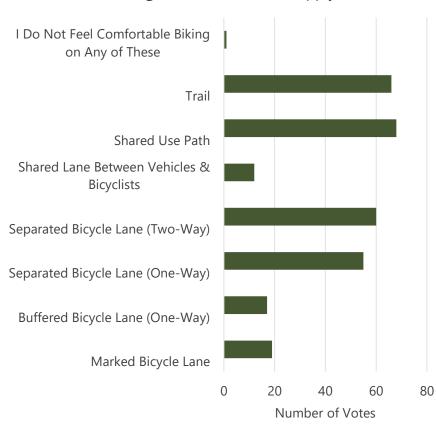


Figure 3: Reported Level of Biking Comfort by Facility Type

Residents were also asked to share their level of comfort **walking** in Alachua County and what would make them feel more comfortable doing so. **Figure 4** shows the findings related to the pedestrian facilities people feel comfortable using while walking. Most residents shared that they felt comfortable walking on *a separated, wider facility, a shared-use path, or a trail.* 

#### **Facility Types**

- •Desire for *separation of pedestrians* from cars (i.e., continuous, wide, and unobstructed sidewalks with physical buffers such as trees or planters).
- •Desire to *improve shade* for comfort and relief from heat, along walkways.
- •Desire for better pedestrian-scale lighting at night.
- •Desire to fill infrastructure gaps (i.e., sidewalk gaps) and *improve* pedestrian connectivity.

#### Vehicle Interaction

- •Desire to *ban right-turn-on-red behavior* at pedestrian-heavy intersections.
- •Desire to add safety features such as speed bumps to slow vehicle traffic.
- •Desire to enforce vehicle speed limits and traffic laws to *reduce vehicle* speeding and driver aggression.

#### Intersections

- •Support for prioritizing pedestrian movements at major intersections.
- •Desire to *increase the frequency of crosswalks*, including more signalized crossings.
- •Desire to add *pedestrian-friendly signal timing* strategies such as leading pedestrian intervals.

#### Other

- •Some concerns about the relationship between police and *marginalized* communities.
- •Support for *prioritizing pedestrians over vehicles* when redesigning roadways.
- •Concerns for motorized micromobility vehicles (i.e. e-bicycles, e-scooters, etc.) sharing sidewalks with heavy pedestrian traffic.
- •Desire for *more bus routes* and a potential train system to *improve city-wide connectivity* and *reduce reliance on vehicles*.

# What Pedestrian Facility Do You Feel Comfortable **Walking** On? (Mark All That Apply)

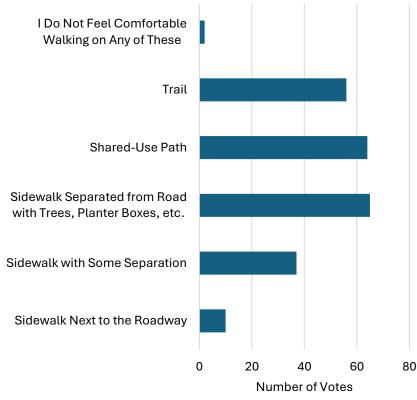


Figure 4: Reported Level of Walking Comfort by Facility Type

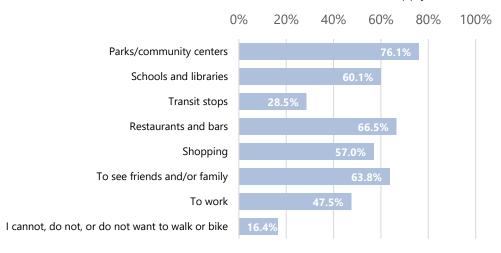
# Survey

A digital survey was made available from November 1<sup>st</sup>, 2024, to November 30<sup>th</sup>, 2024, and gathered similar input that the in-person workshop collected. The survey's primary goal was to provide the Project Team with insights into community member's transportation habits within Alachua County, including their preferred modes of transportation, their level of comfort on various bicycle and pedestrian facilities, the challenges they face, and their desired future for walking and biking in Alachua County. In total, the survey consisted of 35 questions. 2,012 people responded to the survey.

Similar to results from the in-person public workshop, the survey revealed that most Alachua County residents are most comfortable biking and/or walking along wider or separated facilities. 86% of community members felt comfortable walking on sidewalks with planter boxes or trees. More than 70% of respondents felt comfortable biking along a trail or a shared-use path. Overall, residents reported less comfort biking and/or walking along facilities adjacent to vehicles (i.e., shared lane between vehicles and bicyclists, on-street bicycle lanes, etc.)

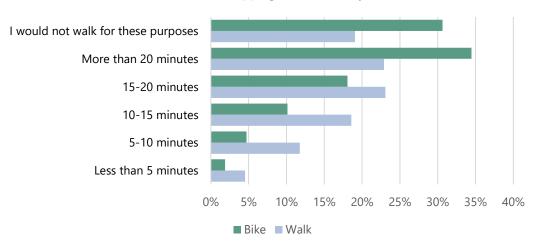
**Figure 5** shows that more than 50% of participants wanted to walk or bicycle to parks, schools, libraries, social activities, and/or shopping destinations and nearly 50% are interested in walking or biking to work. **Figure 6** shows that 35% of bicyclists and 23% of pedestrians, if it were safe and comfortable, would bicycle or walk more than 20 minutes to get to work, school, shopping, or other daily destinations.

If It Were Safe, Comfortable, And Not Too Far, Which Of The Types Of Places Would You Walk Or Bike To? (Select All That Apply)



**Figure 5: Destination Preferences** 

If It Were Safe And Comfortable, How Far Would You Walk/Bicycle To Get To Work, School, Shopping, or Other Daily Destinations?



**Figure 6: Trip Duration Preferences** 

Figure 8 shows that the community's primary obstacles to walking and biking are high vehicular speeds, dangerous intersections, and bicycle and pedestrian facility gaps.

Figure 7 shows that the community's primary vision for the future of transportation in Alachua County includes improving bicyclist and pedestrian safety, reducing traffic fatalities to zero, and improving bicyclist and pedestrian mobility along roadways.

What Specific Safety Issues Or Challenges Are You Currently Experiencing In Your Community Or Organization That You Would Like To See Addressed? (Select All That Apply)

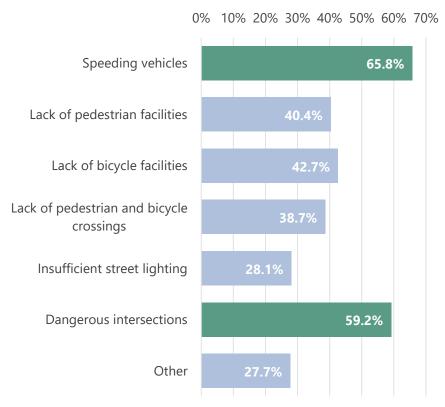
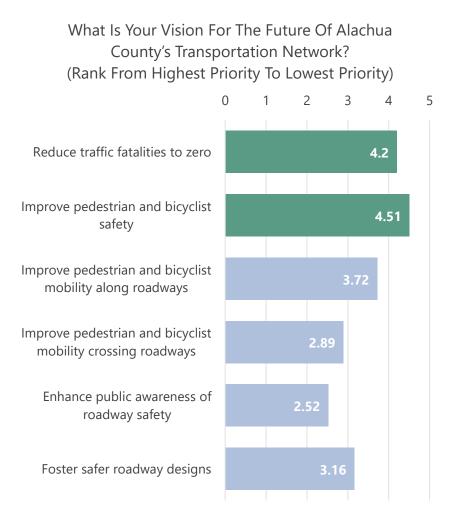


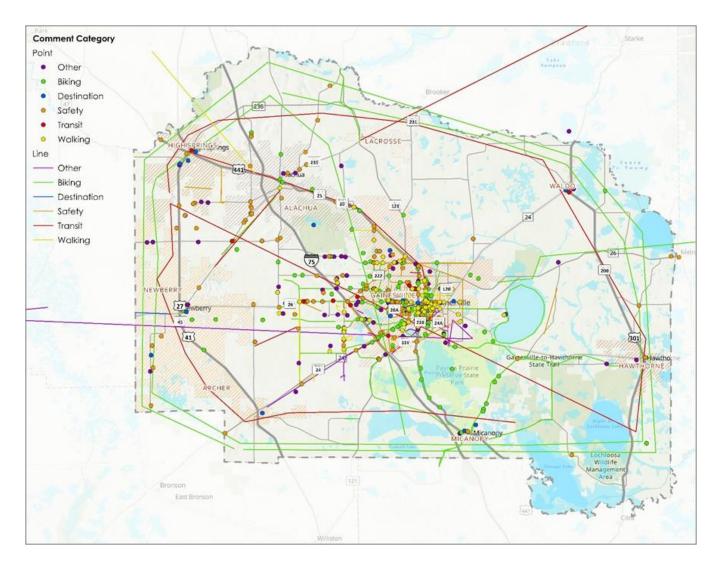
Figure 8: Survey Results for Specific Safety Issues



**Figure 7: Survey Results for Transportation Vision** 

# Online Map

An online map tool was created in tandem with the online survey and in-person public workshop. The results in the following section reflect comments submitted from November 1st, 2024, to November 30<sup>th</sup>, 2024. The map tool allowed participants to place points and/or lines to highlight geographic-specific challenges and opportunities relating to bicycling and walking (Figure 9). A total of 663 comments were made on the online map or the physical maps during the public workshop.



**Figure 9: Online Map Comments by Category** 

From the map comments, the following themes emerged for each portion of the study area:

- City of Gainesville
  - o Desire to reduce driver speed (i.e., NW 8<sup>th</sup> Avenue near Loblolly Park).
  - o Desire to increase safe crossing opportunities to schools (i.e., Littlewood Elementary School, Gainesville High School)
  - Desire to increase safe crossing opportunities at particular intersections (i.e., University Avenue & NW 13<sup>th</sup> St, NW 4<sup>th</sup> St & NW 8<sup>th</sup> Avenue along
     Rail Trail, NW 8<sup>th</sup> Avenue & NW 6<sup>th</sup> Street)
  - o Desire to fill sidewalk gaps (i.e., near Westwood Rd, 53rd Avenue)
  - Desire to reduce parking spaces downtown to provide plaza spaces and increase pedestrian and bicyclist activity.
  - o Concern about maintenance along NW 53rd Avenue multi-use trail
  - o Desire to increase accessibility for disabled people
  - o Desire to increase the continuity of the trail along Archer Rd
- Northeast Alachua County
  - o Desire for bus and/or bicycle connections between the City of Waldo and the City of Gainesville
  - Desire to slow driver speeds
- Northwest Alachua County
  - o Desire to increase roadway maintenance (i.e., debris on Millhopper Road encroaches in bicycle lane, CR 234, etc.)
  - o SR 235 needs safety improvements
  - o Desire to increase multi-use trail connections between City of High Springs and City of Gainesville
- Southeast Alachua County
  - o Desire for more trail connections between City of Micanopy and City of Gainesville/existing Hawthorne Trail
  - Desire for more paved trails in and around nearby conservation areas and trails (i.e., Paynes Prairie, Kincaid Trail to Fred Cone Park, Hawthorne Trail)
  - o Concern about maintenance and pavement quality for bicyclists along CR 234
  - o Desire for buffered bicycle lanes along US 441 and SR 20
- Southwest Alachua County
  - o Desire for more trail connections between Gainesville and City of Archer/City of Newberry
  - Desire to provide wider bike lanes and fill bicycle facility gaps
  - o Increase crossings and improve safety along SW 75th St
  - o Increase safety of intersections due to increase of traffic activity related to the Fletcher's Mill housing development

#### Other

In addition to the in-person public workshop, Alachua County engaged/will engage in several other in-person outreach events, including the Alachua County Climate Summit on November 16<sup>th</sup>, 2024; and the Alachua County Bicentennial on January 11<sup>th</sup>, 2025.

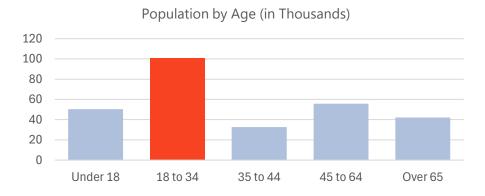
# **ALACHUA COUNTY TODAY**

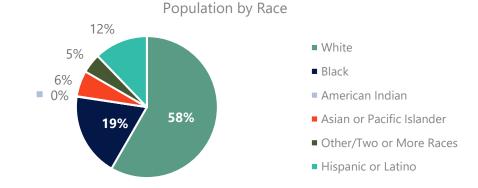
Alachua County, situated in North Central Florida, offers numerous opportunities for outdoor recreation among its several state parks, trails, and freshwater springs. It has a rich history tied to Native American culture; the land has been heavily populated by the native Timucua people for thousands of years. The county is also known for being the home of the University of Florida, located in the City of Gainesville. Much of the county's economy revolves around education, research, and healthcare associated with the University of Florida.

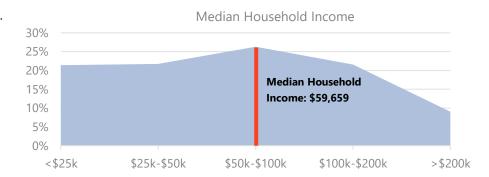
Alachua County is home to the cities and towns of Gainesville, Alachua, Archer, Hawthorne, High Springs, Micanopy, Newberry, Waldo, and LaCrosse. In addition to these incorporated municipalities, the county also includes several large unincorporated areas such as Haile Plantation, a New Urbanist neighborhood and village center located southwest of Gainesville; Tioga, a mixed-use development three miles west of Gainesville; Celebration Pointe, a mixed-use development located off of I-75 and Archer Rd; Jonesville, situated between Gainesville and Newberry; and Melrose, an unincorporated community 17 miles east of Gainesville. These cities, towns, and unincorporated areas contribute to Alachua County's unique character.

According to the ACS 2023 Community Survey 5-year Estimates:

- The median age is 32.2 years old.
- The median household income is \$59,659.
- 47.7% of residents over the age of 25 have at least a bachelor's degree.
- 41.7% of people in Alachua County are people of color (non-white).

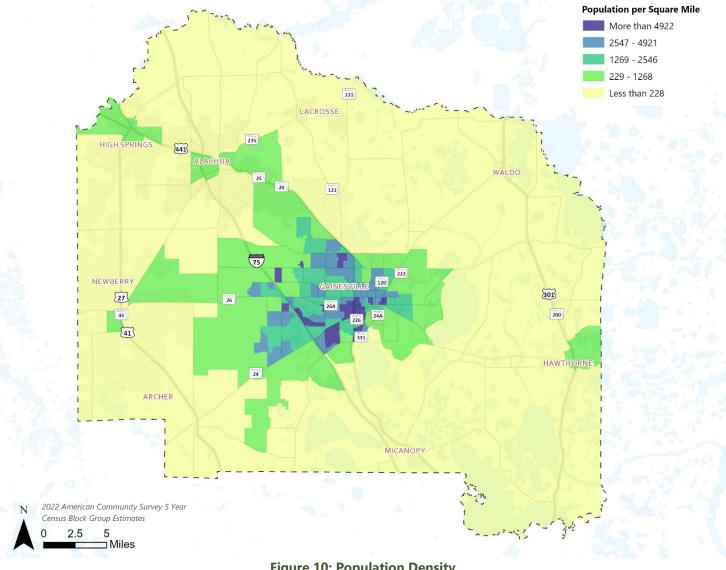






# **Demographics**

Just under 300,000 people live in Alachua County, with Gainesville as the largest city, home to approximately 143,000 residents (Figure 10). Outside Gainesville, the largest incorporated communities include Alachua (~10,000), Newberry (~7,600), and High Springs (~6,300). Understanding the needs and preferences of different groups helps identify and curate effective improvements relating to how people travel throughout Alachua County.



**Figure 10: Population Density** 

#### POPULATIONS WITHOUT ACCESS TO A VEHICLE

Households without access to a personal vehicle are more likely to rely on other means of transportation such as walking, biking, and transit. Figure 11 shows people living with disabilities are concentrated in the southern and eastern portions of Gainesville.



6.3%

of households do not have access to a vehicle.

#### AGES LESS LIKELY TO DRIVE

People over the age of 65 and under the age of 18 may have limited access to a private vehicle, walk and bike at different speeds, need more room to travel, and have greater needs for alternatives to driving.

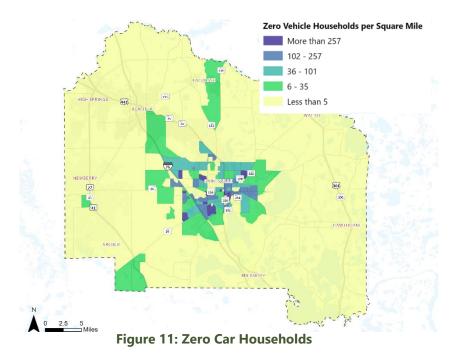


Under the age of 18

17.9% 14.9%

Are over the age of 65

Figure 12 illustrates the concentration of older and younger populations within Alachua County. High Springs and parts of Alachua have an older population, overall. Parts of Newberry and Alachua have a relatively large concentration of younger people compared to the rest of Alachua County. The BPMP may help provide transportation alternatives to people over the age of 65 and under the age of 18 who may have limited access to a private vehicle. Furthermore, a bicycle and pedestrian network that is accessible and safe for these age groups benefits people of all ages.



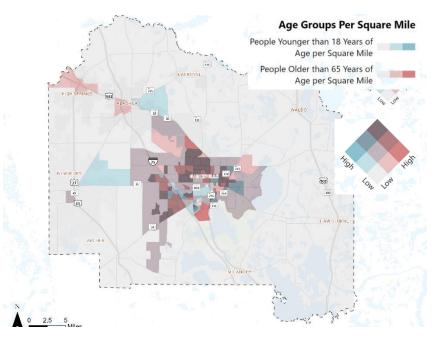


Figure 12: Population Under 18 and Over 65 per Square Mile

#### **PEOPLE WITH DISABILITIES**

People living with disabilities may need special accommodations to travel around, such as longer times to cross intersections, and they may be less likely to own a vehicle.



5.9%

of people live with a disability

**Figure 13** illustrates the number of residents with a disability per square mile. Within Gainesville, disabled populations are clustered in the southern and eastern portions. Other less dense concentrations of people with a disability are also located in rural areas of the county such as Hawthorne, Newberry, and Alachua.

#### **PEOPLE WHO LIVE IN POVERTY**

People living in poverty may not be able to afford or maintain a vehicle, and therefore are more likely to walk, bike, and ride transit instead.



19.0%

of people live in poverty

**Figure 14** illustrates the number of residents in poverty per square mile at the census tract level. The southwestern portion of Gainesville has the highest concentration of people living in poverty. Western Alachua County has a higher number of residents living in poverty compared to the eastern portion of Alachua County.

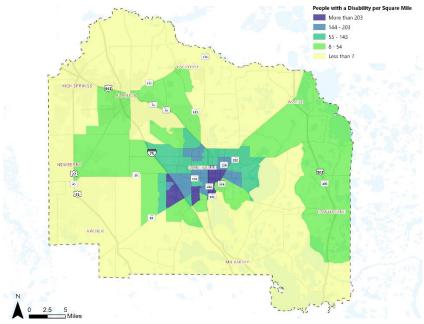


Figure 13: Population with a Disability per Square Mile

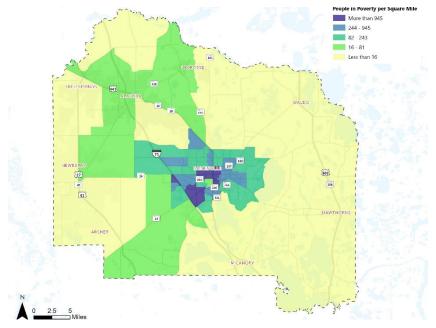


Figure 14: Population in Poverty per Square Mile

# **Opportunity Priority Areas in Alachua County**

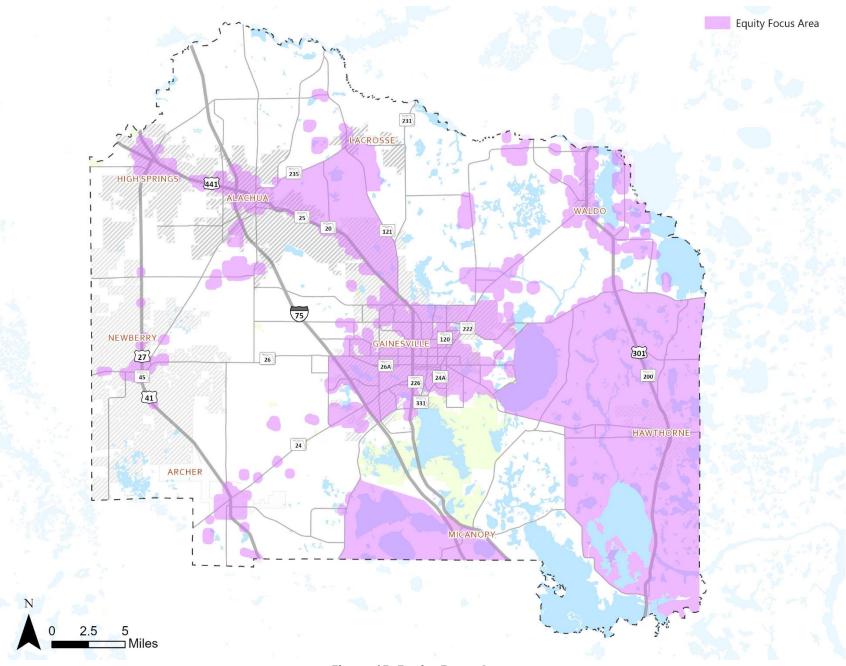
Transportation plays a critical role in ensuring that all residents have access to jobs, education, healthcare, and daily necessities. Recognizing that some communities face greater transportation challenges than others, Alachua County has identified **Priority Areas** to help guide investments in infrastructure where they are needed most. These areas highlight communities that may experience greater barriers to safe, reliable, and affordable transportation options due to economic conditions and historical underinvestment.

To define Priority Areas, the County used a data-driven approach incorporating three key indicators:

- Low Household Income (185% of Area Median Income, or AMI): This measure includes households earning up to 185% of the region's median income. Families within this range may be financially constrained when it comes to transportation options, making affordable and safe walking, biking, and transit access especially important.
- Qualified Census Tracts (QCTs): Defined by the U.S. Department
  of Housing and Urban Development (HUD), QCTs are areas where
  at least 50% of households earn less than 60% of the AMI or have a
  poverty rate of 25% or higher. These areas often experience
  infrastructure gaps that limit mobility and access to opportunity.
- Residential Improvement Value: Neighborhoods in the bottom 20% of residential improvement value, buffered by 1,320 feet, were included to capture areas where lower housing values may indicate historical disinvestment and fewer existing transportation facilities.

These considerations are further exemplified when considering the combined cost of housing and transportation (H&T). According to the Center for Neighborhood Technology, households should aim to spend no more than 45% of their income on H&T so they can have enough money left over for other living expenses. Considering these elements together as opposed to separately is important, as some people may choose to live in a more expensive but walkable area so they do not need to use a car, and others may choose to live in a more suburban area where they are able to drive to daily needs. In Alachua County, H&T costs make up about 54% of income, with people spending approximately \$16,800 on housing and \$14,000 on transportation per year.

**Figure 15** illustrates the equity focus areas defined by the County. Equity focus areas are present in all jurisdictions throughout Alachua County. These areas are especially present in parts of Gainesville, Micanopy, Hawthorne, Waldo, and along the US 441 corridor.



**Figure 15: Equity Focus Areas** 

#### **Land Use**

Understanding land use context is a key component to creating a multimodal transportation network that efficiently connects people to where they may live, work, or play throughout Alachua County. The county is a diverse region, consisting of various land uses and landscape characteristics. The following graphic provides a brief summary of the general types of places that exist in Alachua County.



Rural and agricultural areas have limited developmemnt but roads within them may serve key long distance connections. They often lack active transportation facilities and may see higher volumes of large vehicles like trucks and farm equipment.



**New Urbanist** communities such as Haile Plantation and Tioga are walkable neighborhoods with a mix of uses.



**Conservation** areas typically have a few intersecting roadways, if any roadways at all. These areas are often destinations for people using all modes of transportation, but roads may be high speed and lack active transportation facilities.



**Urban** areas like the City of Gainesville consist of mixeduses including commercial, residential, and government spaces. Streets often follow a grid pattern and have many intersections.



Rural small towns consist primarily of low-density residential single-family homes, surrounded by agricultural land and conservation areas. These areas often have a small, walkable downtown area with retail that can attract people from around the county.



The University of Florida has slow speeds and numerous traffic calming devices to support the many people who walk and bike there.



Residential areas consist primarily of single-family homes and low-density developments. These areas typically funnel transportation onto wide, high-speed arterials with limited crossing opportunities that provide access to commercial areas and freeways.



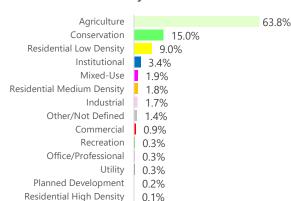
Newer mixed-use developments such as Celebration Pointe promote walkability and include a mix of different land uses but may only be accessible via high speed arterials.

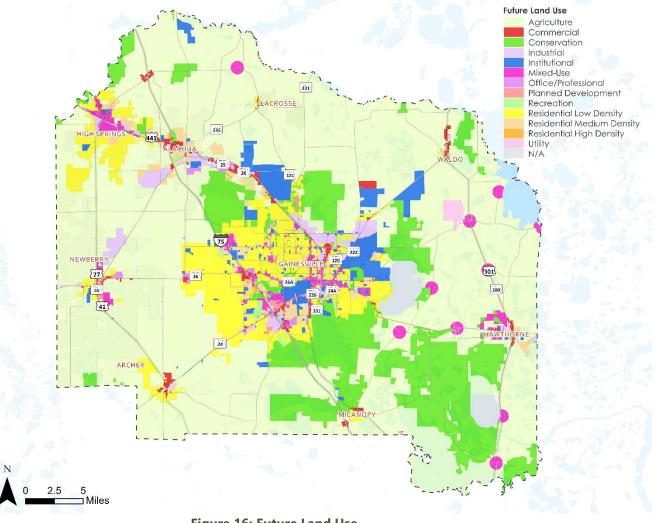
#### Future Land Use

Evaluating the future land use is a helpful way to evaluate how the County intends to grow and where major attractors are or will be. **Figure 16** shows most of the county is designated as agriculture<sup>1</sup> or conservation. Several clusters in unincorporated areas have a future land use designated as mixed use, particularly in the western portion of the county. Generally, the higher the intensity and diversity of uses, the more likely people are to live near various destinations that they can access via walking or biking.

- Nearly 80% of all land in Alachua County is planned for agriculture or conservation purposes. As noted previously, these areas may be destinations or support long distances active transportation routes.
- Approximately 10% of land is designated for residential uses, most of which is low density. These areas may require additional attention to create all ages and abilities facilities.
- Several areas are zoned for mixed use, mainly near town centers, urban downtowns, or new mixed-use developments. These areas will require high quality walking and biking facilities to support local needs.

#### **Future Land Use by Total Land Area**





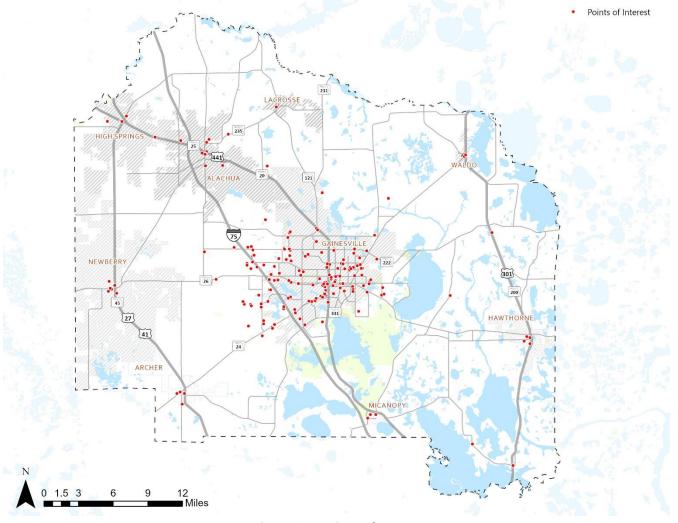
**Figure 16: Future Land Use** 

<sup>&</sup>lt;sup>1</sup> A residential density of one dwelling unit per acre is allowed for land designated for agriculture use.

#### **Destinations**

Understanding where people want to go is one key element in developing a safe, convenient, and accessible transportation network. By providing comfortable routes to places like schools, jobs, healthy food, and social opportunities, the Alachua County Bicycle and Pedestrian Master Plan can help encourage people to walk and bike while also expanding access for people without vehicles.

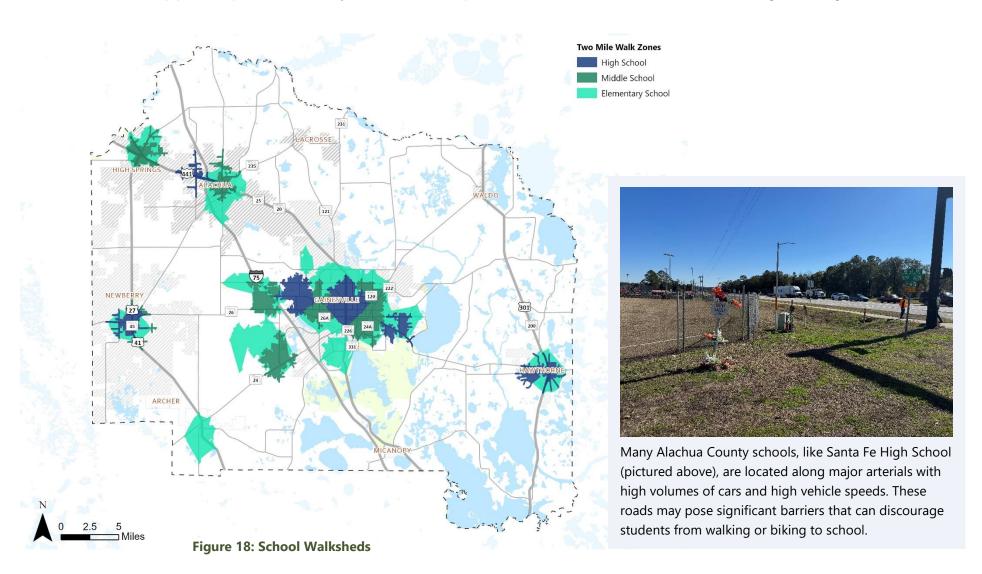
Figure 17 illustrates the local destinations people might want to get to every day. These "points of interest" were gathered from Open Street Map and reflect destinations such as schools, major shopping centers and grocery stores, parks, universities, and healthcare facilities. Most of these are concentrated in and around Gainesville, with smaller concentrations in town centers across the county.



**Figure 17: Points of Interest** 

#### School Walksheds

Schools are an important destination for comfortable walking and biking facilities, as many students do not drive and are more likely to walk or bike. In Alachua County, bus service is not provided within two-miles of schools, and so students in these areas are either required to walk, bike, be driven to school, or take public transportation. **Figure 18** illustrates two-mile school walk zones for elementary, middle, and high schools in Alachua County. Understanding the extent of these walk zones can help prioritize pedestrian and bicycle infrastructure improvements to create routes that are safe for walking and biking to school.



### **Travel Patterns**

Understanding how and where people choose to travel, whether walking, biking, driving, or using transit, is vital for defining the current and future needs and opportunities within the transportation system. This analysis leverages data from Replica, a platform that integrates anonymized information from sources like the US Census Bureau, mobile location data, land use, and economic activity to simulate travel patterns within an area. By examining both average weekday and weekend travel patterns of all trips (**Figure 19**) we gain a comprehensive view of how people move throughout Alachua County, helping us design a network that is safe, efficient, and comfortable for everyone.

#### Where People Are Going

People travel for many reasons including to go to the doctor, for exercise, or spending time with friends or families. This analysis identified the following trips people in Alachua take:

- Regardless of the day of the week, more than 50% of all daily trips are for shopping, eating, or social purposes.
- Just over 1 out of 5 daily trips are commuting for work on the weekday, and with 1 out of 10 trips for work on the weekend.
- Approximately 1 of 10 trips on the weekday are to or from school.

# Number of Trips by Trip Purpose

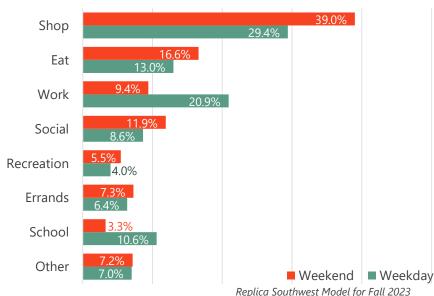


Figure 19: All Trips with Destinations in Alachua County

#### Where People Take Short Trips

When people travel shorter distances, travel patterns can vary, from the routes people take to the types of destinations people want to reach (**Figure 20**). Shorter trips (those 2 miles or less) are also most likely to be converted to bicycle or pedestrian trips in the future.

- Shopping and eating trips make up a majority of short trips.
- Work trips and school trips are less likely to be short trips.

# Number of Trips by Trip Purpose

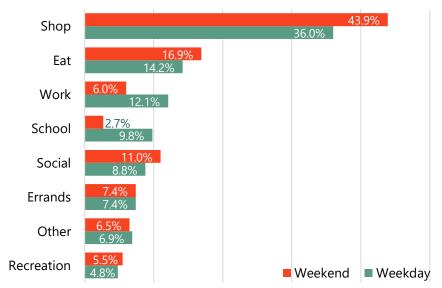


Figure 20: Trips Less than Two Miles with Destinations in Alachua County

Replica Southwest Model for Fall 2023

# How People are Getting There

How we choose to travel may depend on the type of trip, the day of the week, and how far away the destination is (**Table 1** and **Table 2**). Replica data shows that while Alachua County mostly drives to destinations, walking is the second most common way they choose to travel regardless of trip type. This analysis identified several trips that we might take:

#### Getting to School

All trips to school, colleges, or universities.

- Trips to school are the shortest type of trip measured by both by average distance and average travel time.
- Getting to school is mostly done by driving, followed by walking.
- People use a bike to get to school more than they bike for any other type of trip.

#### Getting Outside

Trips include all trips to recreational areas such as parks and trailheads (these trips exclude trips without a destination, such as jogging).

- Compared to other trip purposes, people drive the least to recreational destinations on both weekdays and weekends.
- Getting outside is the second most popular type of trip to take by bike
  or by walking on both weekdays and weekends. It is also the second
  most common trip taken by transit but only on weekdays.

Traveling for Daily Needs

Trips include all trips to destinations where people run errands, shop, socialize, or dine.

- People walk most on weekends and weekdays for trips that meet their daily needs.
- People bike more for their daily needs on the weekends than on the weekdays.

#### Getting to Work

Trips include all trips that end at the workplace. Transit is most used for getting to work.

- Regardless of the day of the week, the majority of trips taken by car are work trips.
- Work trips are least likely to be taken by bike.
- Getting to work is the most common trip taken on transit on both weekdays and weekends.

**Table 1: How Alachua County Travels on Weekdays** 

	Drive	Transit	Bike	Walk	Other		Average Travel Distance [miles]
Getting to Work	87.8%	4.6%	1.9%	5.1%	0.7%	29.5	13
Getting to School	86.3%	2.4%	4.3%	6.9%	0.2%	21.4	6.9
Travel for Daily Needs	77.9%	2.2%	2.4%	16.0%	1.5%	23.1	9.2
<b>Getting Outside</b>	77.3%	3.5%	2.8%	15.4%	0.9%	22.3	8.7

**Table 2: How Alachua County Travels on Weekends** 

	Drive	Transit	Bike	Walk	Other		Average Travel Distance [miles]
Getting to Work	85.5%	3.5%	2.9%	7.5%	0.6%	25.4	9.7
Getting to School	82.2%	1.0%	5.6%	11.0%	0.1%	20.1	5.0
Travel for Daily Needs	74.8%	0.4%	3.4%	19.2%	2.1%	23.5	9.7
<b>Getting Outside</b>	77.2%	0.6%	3.7%	16.9%	1.5%	24.6	11.0

Replica Southwest Model for Fall 2023

Replica Southwest Model for Fall 2023

# **NETWORK CONDITIONS**

# **Roadway Characteristics**

Roadway design, including posted speed, number of lanes, and the presence of pedestrian and bicycle related infrastructure is crucial for the creation of a well-connected multimodal transportation network. Understanding Alachua County's existing roadway characteristics is key in order to inform future improvements to the county's overall network connectivity. The following section summarizes existing roadway conditions throughout Alachua County.



# Functional Classification

Functional classification is a hierarchy of roadway classes based on their role in providing access to adjacent properties and facilitating vehicle speeds and volumes (**Figure 21**). Typically, arterials are the highest speed and volume roads but have limited property access, while local roads are lower speed and volume with a higher degree of access. Functional classification can impact the number of lanes and posted speeds when designing a road.



#### **INTERSTATES**

are controlled access roadway that provide regional connections. Walking and biking access may be allowed in some rural areas but is generally prohibited. High vehicle speeds and volumes make freeways unfavorable for usage by people on foot or bike. Therefore, they are excluded from this plan.



#### **COLLECTORS**

are controlled access roadway that provide regional connections. Walking and biking access may be allowed in some rural areas but is generally prohibited.



#### **A**RTERIALS

are major roadways with multiple lanes and higher speeds. They typically connect residential streets with highways or freeways, facilitating the flow of vehicles between local and regional destinations. High vehicle speeds and volumes may make them uncomfortable for people walking and biking, but they may often provide the only route to access destinations.



#### **LOCAL STREETS**

are streets with low speeds and traffic volumes that typically provide circulation around neighborhoods and urban areas. They often have 2 to 3 lanes, on street parking, and may include treatments to lower speeds and volumes of vehicles. This can make them comfortable for people to walk and bike on, but local street networks are typically bound by collectors and/or arterials.

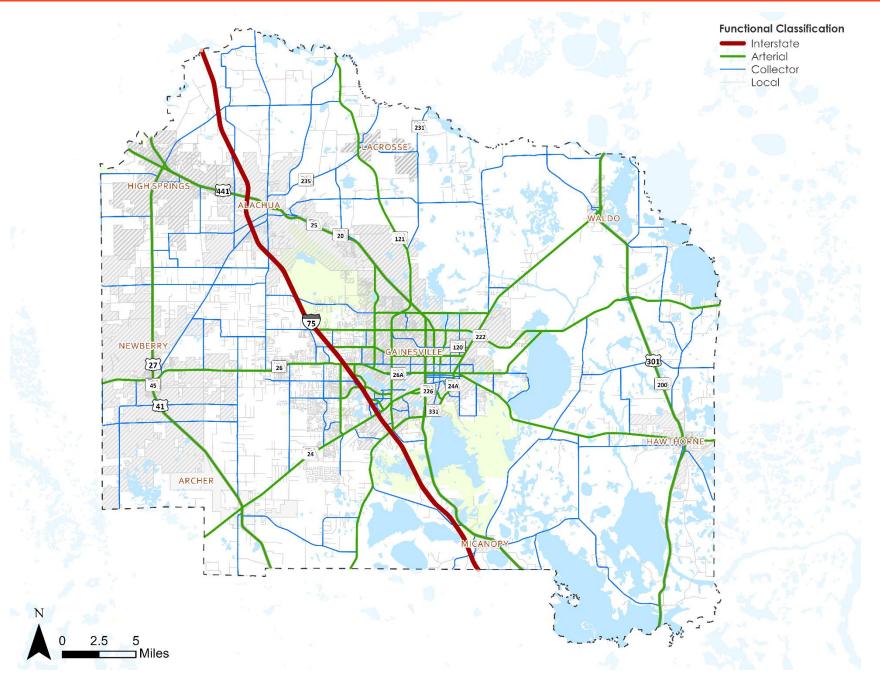


Figure 21: Functional Classification of Roadways in Alachua County (Source: FDOT, 2024)

#### *Intersection Control*

Traffic control devices help manage the flow of all road users efficiently. Traffic control devices in Alachua County generally include:



TRAFFIC CONTROL SIGNALS control vehicles traffic at intersections and are

generally located along arterials and collectors.



**ROUNDABOUTS AND TRAFFIC CIRCLES** are intersections in which traffic flows in one direction around a circular area in the middle.



**TRAFFIC SIGNS** 

are signs such as Stop signs or Yield signs that alert drivers to come to a complete stop or yield at intersections.



**RECTANGULAR RAPID FLASHING BEACONS (RRFB)** are devices where pedestrians and bicyclists can

are devices where pedestrians and bicyclists ca manually activate flashing lights to increase visibility while crossing midblock or at unsignalized intersections with speed limits typically less than 40 mph.



#### PEDESTRIAN HYBRID BEACONS (PHB)

are overhead traffic devices mounted on mast arms above the roadway. Pedestrians and bicyclists can manually activate lights that flash yellow to alert drivers to incoming pedestrians. These devices are typically located at midblock crosswalks with speed limits greater than 40 mph.

# Traffic Calming

Traffic calming devices help encourage drivers to slow down and help to achieve a roadways design speed:



**SPEED HUMPS AND SPEED TABLES** 

are asphalt or rubber mounds designed to reduce vehicular speed.



RAISED CROSSWALKS AND INTERSECTIONS

are vertical speed control devices to reduce vehicular speed and encourage motorists to yield to pedestrians and bicyclists within crosswalks.



CHICANES

are curves in a roadway designed to reduce vehicular speeds for safety.



RADAR FEEDBACK SIGNS

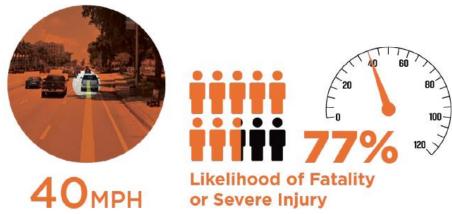
display the speed of an approaching vehicle to encourage a slower vehicular speed.

# Roadway Speed Limits

A variety of factors impact safety and comfort for people walking and biking, but interaction with vehicles is one of the most critical. As driving speed increases, a driver's line of sight of the roadway and its surroundings is also impacted. Research shows that when driving at a higher speed, the driver naturally focuses on objects further away. The driver's peripheral vision is reduced, meaning that people driving at faster speeds are less likely to notice a person biking or waiting to cross the street while people driving at slower speeds are more likely to have better awareness of people around them. Posted speeds in Alachua County are often 25 - 30 miles per hour (MPH) or less on local streets and range from 30 to 65 on collectors and arterials.







Source: Impact Speed and a Pedestrian's Risk of Severe Injury or Death. Brian Tefft, AAA Foundation for Traffic Safety, 2011

# **Walking in Alachua County**

A cohesive, connected pedestrian network that is safe and comfortable for all ages and abilities is a key factor in making walking a viable transportation option throughout Alachua County. **Figure 22** shows Alachua County's existing pedestrian network, highlighting crossing opportunities, sidewalks, and shared use paths.

Most walking infrastructure including crossing opportunities are located within incorporated parts of Alachua County. Uniquely, Alachua County also provides a regional system of Shared Use Paths that connect multiple communities including Gainesville, Hawthorne, and Archer. While Gainesville has a sidewalk present on most streets, smaller communities such as Waldo, Lacrosse, Alachua, High Springs, Micanopy, and unincorporated communities have few sidewalks available to them, especially on local roadways.

# Varying Sidewalk Conditions

Where sidewalks are present, the condition of the sidewalk may not provide a comfortable walking experience, especially for those using mobility assistive devices or strollers:

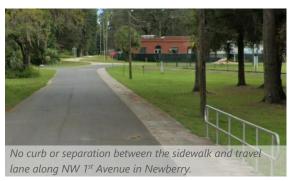
- Throughout sidewalks in Alachua County are narrow—typically meeting the minimum width requirements—but are often further narrowed due to utility poles, overgrown landscaping, refuse bins, or other *obstructions*
- Sidewalks can terminate without warning or signage
- Sidewalks without vertical separation may not be comfortable for people walking
- Lack of street lighting on most roadways outside of incorporated communities





Existing sidewalk narrowed by utility pole and landscape overgrowth along NW 12<sup>th</sup> Street in Gainesville.







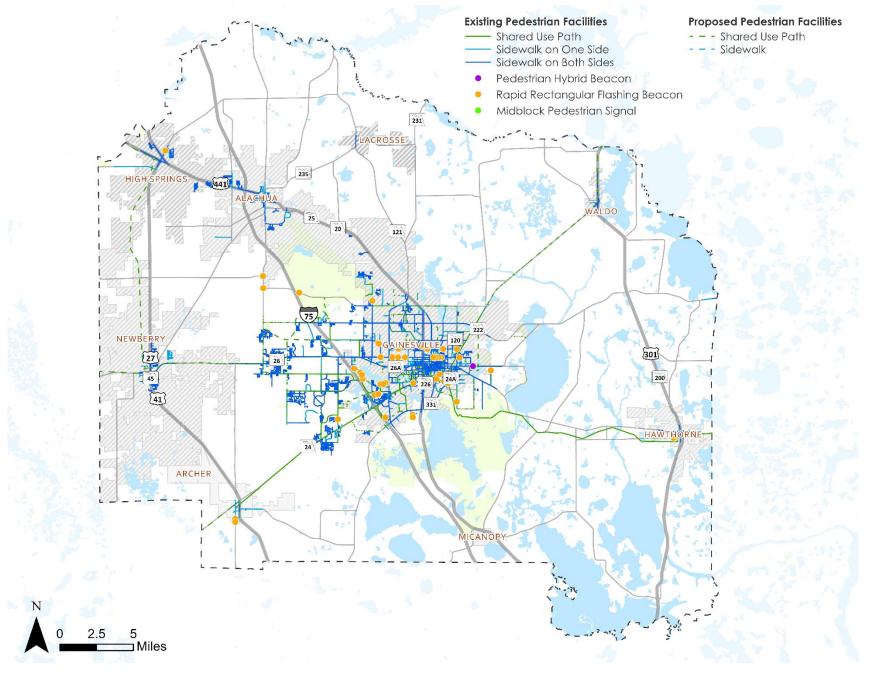


Figure 22: Existing Walking Network in Alachua County

# Crossing the Street in Alachua County

One of the most significant elements to making walking comfortable is the frequency, type, and quality of street crossings. Signalized intersections and midblock crossings provide a dedicated time and space for people walking, and can be the most comfortable place for people walking to cross a busy street.

- THE MAJORITY OF TRAFFIC CONTROLLED MIDBLOCK CROSSINGS ARE IN GAINESVILLE. Most of the 48 RRFBs and four Pedestrian Hybrid Beacons in Alachua County are in Gainesville.
- LIMITED PLACES TO CROSS MAIN ROADS IN SMALL TOWNS. In small communities in Alachua County, very few marked crossings are provided to cross main streets. Figure 23 shows the City of Alachua with only four east-west crossings across NW County Road 235 which bifurcates the City into east and west sides. Like other main roads, NW County Road 235 is lined with destinations that people walking may want to reach; however, the distances between marked crosswalks (up to a 16-minute walk) may be too far for most people and many may instead choose to use an unmarked crossing. Similar conditions are apparent in other smaller communities, including La Crosse where there are no marked crossings across N SR 121 at all.
- CHALLENGING SUBURBAN ROADWAYS. Collectors and arterials in urban and suburban areas create
  similar conditions where there are long walking distances between traffic-controlled crosswalks.
  Most destinations, including schools, businesses, and bus stops are located along these streets.
  People walking may choose to cross outside of signals to avoid walking long distances despite
  having to navigate high speed, high-volume traffic and negotiate conflicts with motor vehicles.
- **LIMITED WALKING AND BIKING CONNECTIONS TO SCHOOLS.** School bus services are not provided to students who live within 2 miles of a school, creating a natural need for quality walking and biking connections to schools in these areas. However, less than 4.3% of students walk to school in Alachua compared to 6.78% statewide. Providing comfortable connections could encourage more students to walk or bike to school.





Figure 23: Marked Crosswalks across NW Country Road 235th in Alachua



 East-west marked crosswalks across NW Country Road 235th in the City of Alachua

#### **Destinations along NW Country Road 235th**

- Schools, Libraries, or Community Centers
- Churches
- Commercial Center



# Pedestrian Comfort

Several factors influence the comfort of someone walking along a roadway, including traffic speed, the presence of sidewalks, and the type of sepration—such as landscaping—from moving traffic. To measure how these conditions affect different walkers, the 'Level of Traffic Stress' (LTS) scoring system was developed, with LTS 1 representing the most comfortable conditions and LTS 4 indicating conditions that may only be comfortable for only a few and shown in **Figure 24**. The Florida Department of Transportation (FDOT) outlines a state adopted methodology to calculate bicycle and pedestrian LTS in the **2023 Multimodal Quality / Level of Service (MMQLOS) Handbook.** For consistency, the Alachua County BPMP utilized the FDOT methodology to assess walking and biking comfort on all public streets excluding I-75. However, FDOT's LTS methodology was primarily designed for state roadways and lacks some nuanced context for local roads. To address this, the following modifications were made to the LTS methodology, further described in **APPENDIX A**.

LOCAL ROADWAY DISTINCTION. Local streets with a speed limit of 30
MPH or less were assigned an LTS score of 1 if sidewalks were present
on both sides of the road, or an LTS score of 2 if only one or no sides
had sidewalks.

The resulting scores are indicated in **Figure 25**. Key findings include:

- Most residential neighborhoods offer comfortable streets to walk and bike on, but they are often cut off from surrounding destinations by higher stress arterials and collectors. Limited crossing opportunities and stressful existing crossings can exacerbate these barriers.
- While most arterials and collectors are uncomfortable, some provide separation, such as landscaped buffers, that increase the comfort of people walking.

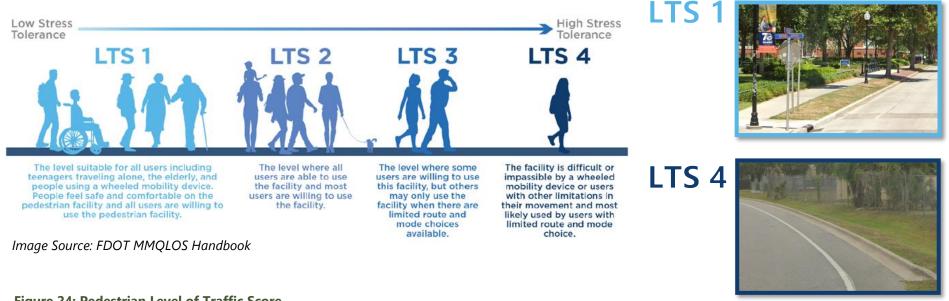
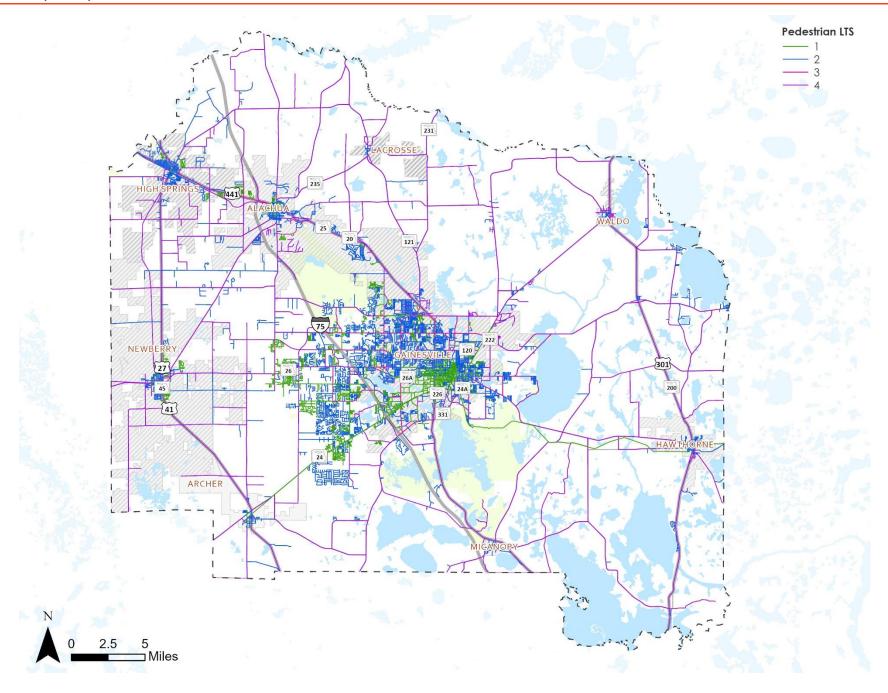


Figure 24: Pedestrian Level of Traffic Score



**Figure 25: Pedestrian Level of Traffic Stress (LTS)** 

# **Biking in Alachua County**

A complete, connected bike network that is comfortable and safe for people of all ages and abilities is critical to make biking a viable transportation option for travel in Alachua County. Expanding and enhancing the bicycle network throughout the region can help reduce congestion as people can choose to bike rather than drive. The following are examples of bike facilities currently provided in Alachua County Today.

**Figure 26** shows Alachua County's existing bicycle network, highlighting bicycle lanes, shared use paths, and other types of bicycle related infrastructure. Gainesville is home to several regional rails-to-trails shared use paths, which people use for both active transportation and recreation. However, throughout the county there are bike facilities located on high-speed, high-volume roadways, which can be uncomfortable for bicyclists (i.e., sharrows on 4-lane facilities or 5' painted bike lanes on 45+ mph facilities).



# Types of Biking and Related Facilities in Alachua County



Shared Use Paths (SUPs) are facilities designed to accommodate both pedestrians and bicyclists. They typically measure 10 feet or more in width and are separated from vehicular traffic. With over 300 miles of shared use paths in Alachua County shared use paths make up nearly 50% of all bike facilities.



Separated Bike Lanes are facilities designed exclusively for bicyclists that are physically separated from motor vehicle traffic with vertical separation including lane delinators such as flex posts, raised bike lanes, or curb separated bike lanes. Separated bike lanes may also be two-way, allowing bikes to travel in both directions on one-side of the road.



Bike Lanes are delineated spaces for bicyclists to ride in the roadway. With approximately 574 miles of roadways with bike lanes in Alachua County bike lanes make up nearly 50% of all bike facilities.

Buffered bike lanes provide additional delinated space between the bike lane and travel lane with additional

painted markings.



**Sharrows** are pavement markings that indicate a shared lane between vehicles and bicyclists.



Wide Sidewalks may be used as a shared walking and biking facility but do not meet the minimum requirements to be defined as a SUP. While bikes may use them, conflicts may arise between people walking and biking and they may not be comfortable for either user.

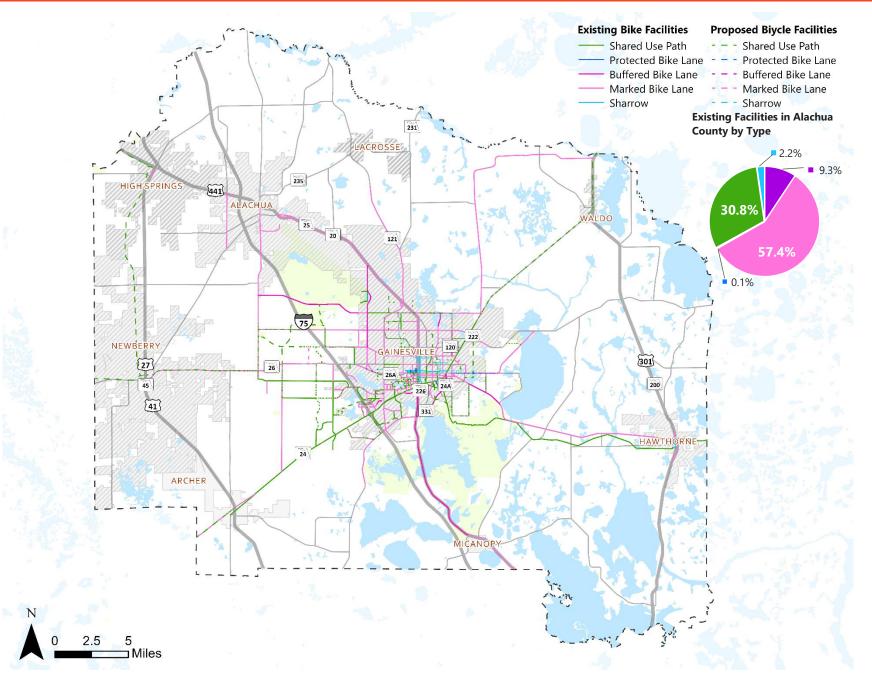


Figure 26: Existing Bicycle Network in Alachua County

#### Bike Conditions in Alachua

Many bike facilities across Alachua provide a comfortable place to ride for many people; however, facilities are not consistantly maintained nor implemented providing a varied experience across the County. Similar to walking infrustructure, a major component of a riders comfort is the ability to comfortably cross roads or navigate intersections. For most riders, signalized intersections are most comfortable for crossing high-speed, high-volume roadways such as arterials and collectors. However, without biking amenities, signalized intersections may also cause discomfort due to low driver compliance.

- LACK OF SIGNALIZED CROSSINGS AT SHARED USE PATHS. Shared use paths are among the most
  comfortable biking facilities in Alachua County, yet some of their intersections with high-speed
  and multi-lane roads do not provide signalized traffic control and may be a barrier to some users.
- LACK OF DEDICATED BIKE INFRASTRUCTURE AT MAJOR INTERSECTIONS. While biking facilities might exist along a roadway segment, some biking facilities terminate before or at an intersection, as shown in Figure 27, requiring riders to either navigate traffic or dismount and utilize pedestrian facilities. Some intersections do continue bike facilities to the intersection but do not provide accommodation for all turn movements, particularly left turns. Further, many bike facilities break at slip lanes when approaching or leaving the intersection, creating conflicts between people biking and potentially fast-moving traffic.
- **INCONSISTENT OR FACILITIES LACK MAINTENANCE.** Biking facilities vary significantly in width across the County, including some not meeting the 4-foot minimum. Further, many bike lanes have overgrown vegetation that narrow the lanes and may require riders to navigate around.

No bike infrastructure to facilitate left-turn movements despite presence of bike lanes

Intersection in Gainesville that requires bikes to either navigate traffic or take two phases to make a left turn.



Figure 27: Biking Facilities Terminating Before and At an Intersection in Gainesville



### **Biking Comfort**

While some people are comfortable biking in any environment, many riders—such as families with children—may evaluate comfort differently. Similar to walking, several factors influence biking comfort, including traffic speed and volume, the type of bicycle facility, and road design and FDOT has developed an LTS scoring system, with LTS 1 representing the most comfortable conditions and LTS 4 indicating conditions suitable for only a few and shown in **Figure 28**. As with walking, the FDOT methodology was used to evaluate biking comfort on all roads excluding I-75 with the following modifications to account for local context and data availability, further described in **APPENDIX**. These modifications are consistent with the FHWA Bikeway Selection Guide and the North American City Transportation Officials (NACTO's) Designing for All Ages and Abilities.

 TRAFFIC VOLUMES. FDOT's LTS requires consideration of AADT to determine LTS in some cases. Volumes are not consistently available for all roads, so the following assumptions were made:

tolerated by most adults.

 Streets with no bike lanes and speeds of 35 MPH or greater were assigned LTS 4. Streets with bike lanes and speeds under 40 MPH were assumed have AADT over 7 000 within

- the incorporated jurisdictions and County's Urban Cluster. Otherwise they were assumed to have volumes of 7,000 or less.
- **BIKE LANE WIDTH.** FDOT's LTS considers bike lane width when the posted speed is less than 35 MPH and volumes are over 7,000 AADT. Lane widths were not consistently available, and so streets in this category were assigned LTS 3.

The resulting scores are indicated in **Figure 29**. Key findings include:

- Most arterials and collectors are too high stress for most people biking unless a shared use path is present.
- Local roadways are a major part of the comfortable biking network but are often cut-off from final destinations by higher stress arterials or collectors.
- Shared use paths and trails create regional low stress connections, but there are very few low stress connections from residential neighborhoods or destinations from these regional trails.



Image Source: FDOT MMQLOS Handbook

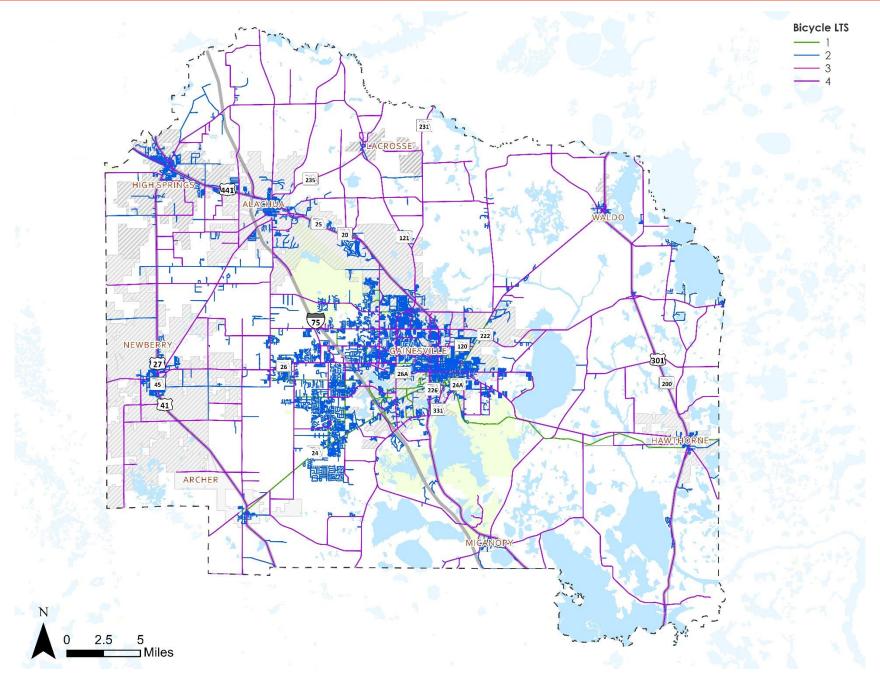
The level tolerated by confident cyclists who still prefer having their own dedicated space for riding.

The level tolerated only by those with limited route or mode choice or cycling enthusiasts that choose to ride under stressful conditions.





can use confidently.



**Figure 29: Bicycle Level of Traffic Stress (LTS)** 

### **Field Review**

A field review was conducted on Wednesday, January 15th, 2025, from 10:00 AM to 3:00 PM to evaluate existing conditions and review bicycle and pedestrian infrastructure gaps. The weather was partly cloudy with an average temperature of 50° F. The study team split into two groups, one surveyed the City of Gainesville and southeast Alachua County and the other surveyed western and northeastern Alachua County. Below is a summary of their key findings:

- During the public workshop in November 2024, members of the public shared the need for increased connections between the City of Gainesville and the City of Micanopy. They shared a desire to provide bicyclist and pedestrian facilities along CR 234 from the City of Micanopy to the Hawthorne trail connection in Rochelle.
  - There are currently no bicycle or pedestrian facilities along CR 234. There is a potential opportunity to provide a shared use path on one side of the roadway along CR 234.
  - There is an opportunity to explore the conversion of an abandoned rail line/utility corridor just east of CR 234 to connect the City of Micanopy to the Hawthorne Trail.
  - Members of the public also shared safety concerns with the buffered bicycle lane on US 441 from the City of Micanopy to the City of Gainesville. There is an opportunity to provide pedestrian infrastructure and provide more separation for the current bicycle infrastructure on US 441.







Rail Line / Utility Corridor Connection



Bike Lane on US 441

- Many of the roadways within central Alachua County have bicycle and pedestrian infrastructure but there are gaps in the network that limit connectivity.
  - The City of Gainesville recently conducted a project along S Main Street from SW 16<sup>th</sup> Avenue to SW Depot Avenue to provide buffered bicycle lanes, wide sidewalks, on-street parking, and traffic calming elements. S Main Street south of SW 16<sup>th</sup> Street has a sidewalk but no bicycle facilities or traffic calming elements

- Glen Springs Road/23<sup>rd</sup> Boulevard, from NW 34<sup>th</sup> Street to SR 24 has an intermittent sidewalk and no bicycle facility along the corridor which serves residential and civic uses (Glen Springs Elementary School and Alfred A. Ring Park). There is an opportunity to fill sidewalk gaps and widen the sidewalk into a shared-use path to provide a separated bicycle facility. There is also an opportunity to provide a sidewalk connection from NW 23<sup>rd</sup> Boulevard to Alfred A. Ring Park.
- NW 22<sup>nd</sup> Street from University Avenue (SR 26) to NW 16<sup>th</sup> Avenue has an intermittent sidewalk and no bicycle facility along the corridor which provides a north/west connection for residential neighborhoods to the University of Florida campus. There is an opportunity to fill sidewalk gaps to provide pedestrian infrastructure. There is also an opportunity to provide a bicycle facility by widening the sidewalk into a shared-use path and/or providing traffic calming to provide a sharrow.
- SW 23<sup>rd</sup> Terrace and SW 35<sup>th</sup> Place both provide connections from residential uses to the University of Florida campus. SW 23<sup>rd</sup> Terrace has a shared-use path on the eastern side of the roadway but has limited crossing opportunities to the west side where most of the residential uses are located. SW 35<sup>th</sup> Place has intermittent sidewalks and an on-street bicycle facility. There are opportunities to fill sidewalk gaps, provide more separation for bicyclists, and provide traffic calming.
- Most of the University of Florida Campus has bicycle and pedestrian facilities on it. Natural Area Drive from Archer Road (SR 24) to Hull Road has an intermittent sidewalk and a sharrow along the corridor which provides a north/west connection for residential neighborhoods to the University of Florida campus. There are opportunities to fill sidewalk gaps and provide traffic calming and/or a shared-use path for bicyclists.



Glen Springs Road/23rd Boulevard



NW 22nd Street



S Main Street South of SW 16th Avenue

- In Eastern Alachua County, the context is more rural, and speeds are much higher.
- The intersection of US 301 & Hawthorne Road is a grade-separated interchange that is dangerous and uncomfortable for bicyclists and pedestrians to cross. US 301 has a high volume of through-truck traffic. Community members shared red-light-running issues at this location and a desire for safe bicycle and pedestrian crossings and traffic calming to slow traffic down and provide more bicycle and pedestrian connectivity from eastern Hawthorne to western Hawthorne and the Hawthorne Trail.
- There is a community desire to improve connectivity throughout the City of Waldo and provide connections to the City of Gainesville. There is an FDOT project which will provide a t-intersection connection at US 301 & 5<sup>th</sup> Boulevard.

- There are new developments coming in on NE 39<sup>th</sup> Avenue which currently has intermittent sidewalks and bicycle lanes. The roadway serves the Gainesville Regional Airport, civic uses (Juvenile Detention Center, North Florida Evaluation and Treatment Center, etc.), and low-income neighborhoods. There is a need to provide better bicycle and pedestrian facilities and fill gaps.







US 301 & 5th Boulevard



NE 39th Street Avenue of Gainesville Regional Airport

- In Northwest Alachua County, the context is also rural with high-speed arterials connecting small towns to Gainesville.
  - CR 235A (NW 173<sup>rd</sup> Street) is a north-south roadway that connects residents to Santa Fe High School at US 441 & CR 235A (NW 173rd Street). The roadway has intermittent sidewalks and bicycle facilities along it. Community members shared that students at Santa Fe High School cross at the intersection of US 441 & CR 235A (NW 173rd Street) and there was a student fatality at this intersection. Overall, there is a need to provide more connectivity and better connections to Santa Fe High School.



US 441 & CR 235A (NW 173rd Street



City of Alachua Main Street



NW 43rd Street Just South of US 441

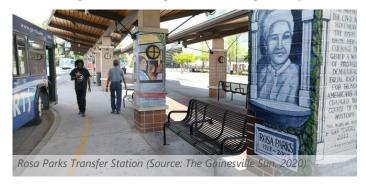
- US 441 in the northwest part of Alachua County has minimal sidewalk infrastructure and on-street bicycle facilities. There is a need to provide more comfortable bicycle infrastructure and fill sidewalk gaps.
- The City of Alachua's Main Street was noted as a good example of a main street with traffic calming, pedestrian crossings, on-street parking, and sidewalks.
- New development is anticipated along NW 43rd Street just south of US 441, which is outside of the urban cluster. NW 43rd Street just south of US 441 has a bicycle lane with no sidewalks. There is a need to fill sidewalk gaps to support upcoming development.
- There are bicycle and pedestrian facility gaps along Progress Boulevard in the City of Alachua where new development and an extensive network of mountain bike trails are located (San Felasco Hammock Preserve State Park).
- NW 143rd Street provides a connection from the City of Alachua to the City of Newberry and civic uses along the corridor. There are intermittent sidewalks and an on-street bicycle facility along the roadway with the potential for a shared-use path.
- In Southwest Alachua County, the context is more suburban with a mix of walkable developments and single-family homes.
  - SW 75th Street (Tower Road) has a shared-use path along most of the roadway. There is a gap north of SW 8th Avenue to be filled. There is a pedestrian crossing with an RRFB at Kanapaha Middle School and Kimball Wiles Elementary School at the intersection of SW 75th Street (Tower Road) & SW 46th Boulevard. The addition of an PHB or pedestrian signal should be considered to provide a safer crossing for students.



Pedestrian Crossing at SW 75<sup>th</sup> Street (Tower Road) & SW 46<sup>th</sup> Boulevard

### **Transit in Alachua County**

Transit routes provide important access and connectivity to key destinations and regional access to employment, education, shopping, and services for people without vehicles. Thus, transit stops are daily destinations for some people in Alachua County. Regional Transit System (RTS) services 1,035 stops along 38 routes (**Figure 30**). Since most people walk or bike to reach transit stops, understanding where stops are located is an important element in the development of the BPMP. 800 stops, or more than three out of every four stops, are more than 250 ft away from signalized or marked crosswalks. This means people may have to walk long distances to get to a crossing or may be encouraged to cross the street outside of a marked crossing.







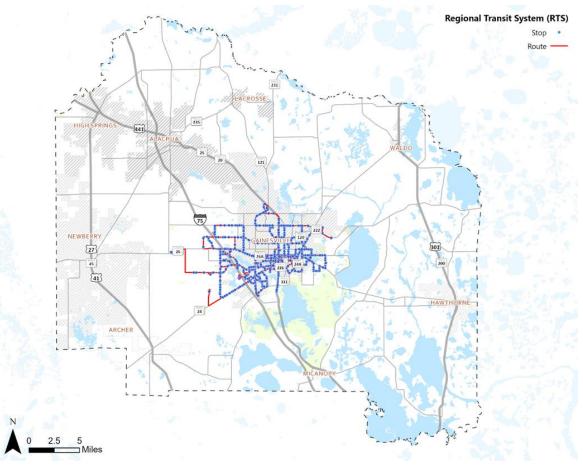
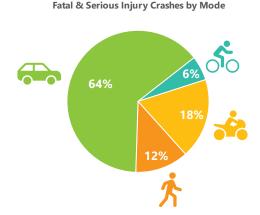


Figure 30: RTS Routes and Stops (2023)

## **SAFETY**

Alachua County envisions a transportation network that is safe for everyone to use, whether they are walking, biking, riding transit, or driving. To support this, Alachua County has undertaken a concurrent effort to develop a Safe Streets and Roads for All Action Plan which will identify systemic safety issues and solutions to address them. While this separate effort will provide most of the safety analysis related to the BPMP, a brief summary of initial findings is presented in this section. The analysis considers crash data from January 1, 2019 to June 30, 2024 obtained from SignalFour Analytics. The analysis excludes I-75.



### **Safety Trends**

Between 2019 and June 2024, a **total of 36,478 crashes** occurred in Alachua County, including **953 serious injury crashes** and **281 fatal crashes**. As shown in **Figure 32**, the number of crashes occurring per year has decreased between 2019 and 2024, except between 2020 and 2021. During the height of the Covid-19 Pandemic, fewer people were on the road, therefore, many places saw a decrease in the number of overall crashes.

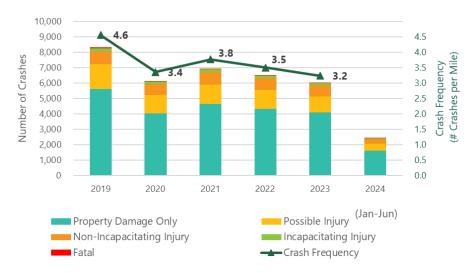


Figure 32: Crashes by Year and Severity

The state of Florida has identified 11 emphasis areas for fatal and severe injury (FSI) crashes to focus safety initiatives on. **Figure 31** compares crashes in Alachua County to the emphasis areas. Lane Departure and Intersection Crashes make up a large portion of the crashes.

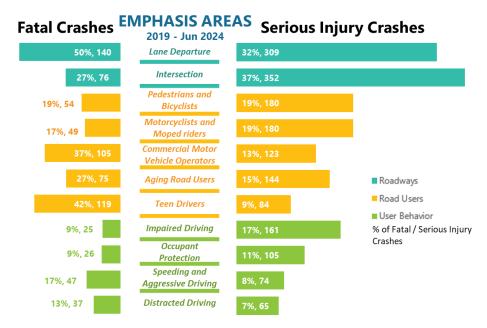


Figure 31: FSI Crashes by Emphasis Area

Between 2019 and 2024, there were 619 crashes involving someone walking and 638 crashes involving someone biking. In that same time period, there were a total of **72 crashes which resulted in the death of someone** walking or biking. 86% of these crashes occurred in urban areas.

The top crash types for crashes involving someone biking are angle crashes (41%, 261 crashes) and Other (36%, 227 crashes), including left-turns, right-turns, rear-ends, etc. The top crash types for crashes involving someone walking are Other (65%, 402 crashes), and Angle (15%, 93 crashes).

**Pedestrian Crashes All Severity** 150 120 ■ Fatal 90 Incapacitating Injury Non-Incapacitating Injury 60 Possible Injury 30 Property Damage Only 2019 2020 2021 2022 2023 2024 (Jan-Jun) **Bicycle Crashes All Severity** 150 120 Fatal Incapacitating Injury Non-Incapacitating Injury 60 Possible Injury Property Damage Only 2019 2020 2021 2022 2023 2024 (Jan-Jun)

**Table 3** shows the number of crashes by mode and **Table 4** shows the number FSI crashes by mode. Unfortunately, while crashes overall have been trending down and crashes in general are getting less severe, crashes involving someone biking are increasingly more likely to result in someone being killed or seriously injured.

When comparing 2019 and 2023 crash data, crashes involving someone biking decreased by about 20% - the likelihood of being killed or seriously injured when involved in a crash while biking rose by 61%. Additionally, people walking and biking are eight and four times as likely to be killed or seriously injured in a crash than people driving, respectively.

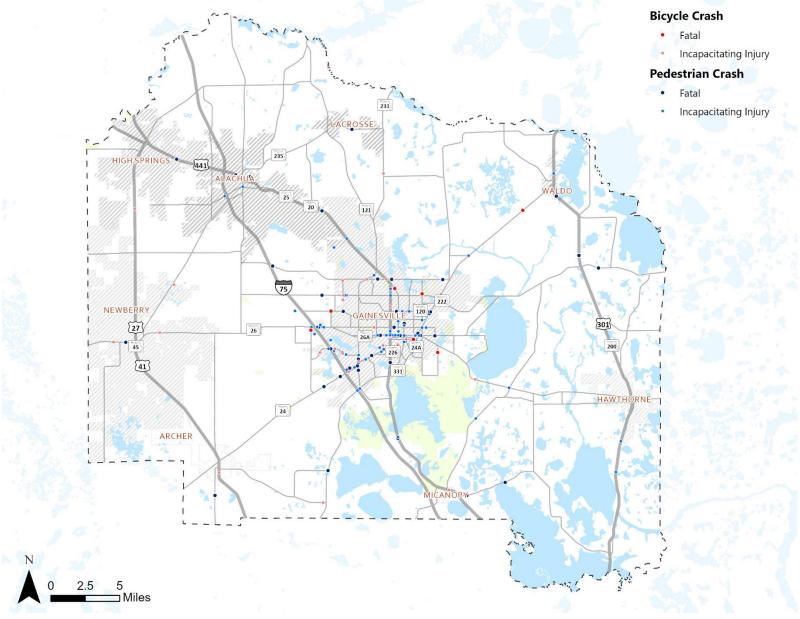
**Table 3: Crashes by Mode** 

	2019	2020	2021	2022	2023	2024 (Jan-June)
Vehicle	8,071	5,964	6,748	6,285	5,812	2,341
Biking	144	97	104	119	118	56
Walking	122	90	105	123	123	56
Total	8,337	6,151	6,957	6,527	6,053	2,453

**Table 4: FSI Crashes by Mode** 

	2019	2020	2021	2022	2023	2024 (Jan-June)
Vehicle	244	189	179	156	176	73
Biking	11	11	12	14	18	5
Walking	32	19	33	29	23	10
Total	287	219	224	199	217	88

**Figure 33** illustrates fatal and serious injury (FSI) bicycle and pedestrian crashes in Alachua County from 2019 to 2024. As can be seen, most of the FSI crashes occurred in Gainesville. Furthermore, most of them occurred on major arterials such as Archer Road, University Avenue, Waldo Road, and Williston Road.



**Figure 33: FSI Bicycle and Pedestrian Crashes** 

## **GAPS AND OPPORTUNITIES**

Gaps and opportunities for walking and biking were evaluated in two key ways: by looking at places where people might choose to walk and bike more given the right infrastructure and by looking at places where existing conditions are making walking and biking less attractive.

- OPPORTUNITIES TO IMPROVE MAIN STREETS IN SMALL TOWNS. Alachua County is home to many small towns, each with a main street and its own character. Cities like Alachua and High Springs have created comfortable main streets with landscaping, traffic calming, and crossings. However, most smaller cities also have major arterials with wide lanes and high speeds running through their town center, creating a conflict between a land use character that lends itself to walking and biking but streets which are focused on fast traffic and high volumes.
- INFREQUENT CROSSINGS & HIGH STRESS INTERSECTIONS. High-stress
  roadways often have few comfortable crossing points due to long gaps
  between signalized intersections, which are often wide and increase
  exposure for people on foot or bike. Additionally, shared use paths
  crossing these roads often lack signalized crossings, limiting their ability
  to connect neighborhoods or offer safe access to destinations.
- EXISTING BIKING FACILITIES MISMATCHED TO NEED. Alachua County
  offers hundreds of miles of bike facilities, but many aren't comfortable
  for all ages and abilities due to current road conditions, such as speeds
  and lane numbers. Upgrading these facilities can make walking and
  biking more comfortable.
- OPPORTUNITIES FOR NEW BIKING FACILITIES. Some roadways are considered high stress because they lack biking or walking facilities. Adding appropriate infrastructure can improve comfort, expand the network, and increase access to destinations.

- SCHOOL WALKING ZONES. School buses are provided to students
  throughout Alachua County for those who live more than 2 miles away
  from school. However, less than 4.3% of students walk to school in
  Alachua compared to 6.78% statewide, implying that there may be a
  need to provide more comfortable facilities to encourage students to
  walk or bike to school.
- SEVERE INJURY AND FATALITIES. The perception of safety is crucial in determining whether people feel comfortable walking or biking. Areas where serious injury or fatal crashes have occurred involving people walking or biking represent significant network gaps, highlighting the need for additional safety measures to improve accessibility and reduce risk in those locations.
- MINIMUM SIDEWALKS REGARDLESS OF CONTEXT. Where sidewalks are available, they are often only 5 feet wide. While this meets minimum standards, it does not provide enough space for people to comfortably pass each other. This issue is more acute where there are higher volumes of people walking or where people choose to bike on the sidewalk because on-street facilities are not comfortable. This issue is also seen on shared use paths, which may be 8- or 10-feet wide although current best practices encourage wider designs to better accommodate all users.

## **SUMMARY AND KEY FINDINGS**

The existing conditions analysis findings can be summarized into the following themes. These themes create a baseline for the development of biking and walking network recommendations.

### **Finding**

# LAND USE PATTERNS. Existing land use patterns contribute to accessibility differences in Alachua County and suggest the need for different types of bike facilities. For example, there are higher concentrations of mixed uses and destinations types in Gainesville and small town centers than in suburban or rural areas. Therefore, residents adjacent to these areas have better walking and biking access to destinations, while others may have to walk or bike long distances to get to destinations if they choose to at all. Additionally, there are many conservation areas where people may choose to walk or bike but lack comfortable facilities connecting to them.

### **Considerations for Next Steps**

- Consider longer distance connections in suburban and rural areas to provide access to Town Centers, conservation areas, and other walkable and bikeable destinations.
- Evaluate opportunities for trails and other connections in suburban areas to allow for recreational use, even if destinations are far away.
- Identify opportunities for small interventions to increase access for people walking in already walkable and bikeable areas.

**DESTINATION LOCATION & ACCESS.** There are marked differences in development patterns which impact access. In Gainesville, some neighborhood commercial destinations, schools, and other daily needs are designed to front local streets where people can easily walk or bike to access them. On the other hand, in areas like Alachua, schools and commercial destinations are often located on major roads making them easier or more comfortable to access via driving.

- Identify place types or use Context Classification to help determine appropriate treatments.
- Identify improvements to low stress streets and potential new connections to provide access to destinations without using higher stress / less comfortable roads where possible.
- For high stress roads that provide the only access to destinations, evaluate the potential to install high quality infrastructure like shared use paths. Consider opportunities for easements or other off-street facilities to provide access to destinations on major roads.

**SUBURBAN ROADWAY PATTERNS.** Many parts of Alachua County follow a development pattern that creates disconnected local roadway networks, funneling people walking and biking onto higher-stress roadways, such as collectors and arterials, to reach their destinations. Additionally, major roads tend to have limited opportunities for people to cross on foot or bike, forcing people to travel significantly longer distances, which discourages biking and walking altogether. As a result, they may choose not to cross them or may instead choose to drive.

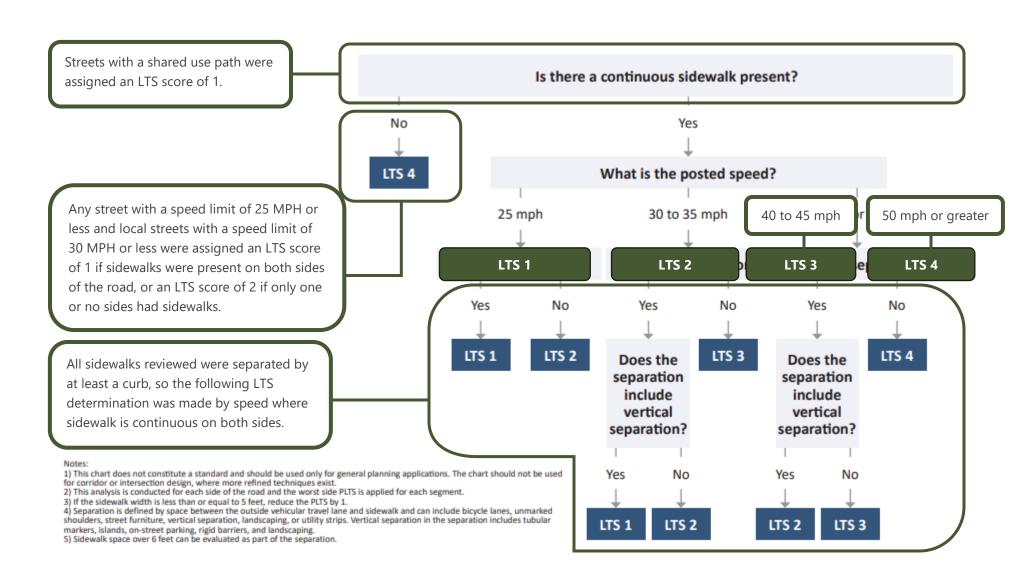
- Identify infrastructure which could be installed to improve the crossings of high stress barriers like protected intersections.
- Identify locations where low stress facilities cross high stress ones and/or where crossing improvements would help connect people to destinations and transit stops.
- Identify biking and walking infrastructure that would be comfortable for all ages and abilities along higher stress roadways.
- Identify crossing spacing standards to ensure people do not have to walk long distances to reach a controlled crossing.

# **APPENDIX A**

**FDOT Level of Traffic Stress Methodology & Modifications** 

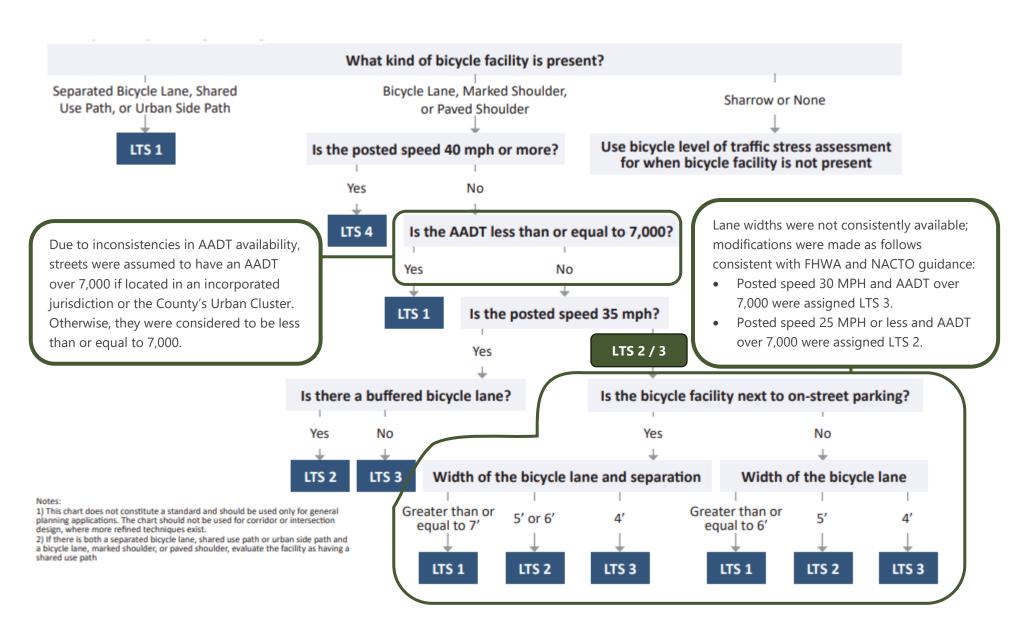
### **Pedestrian LTS Flow Chart**

The following flow chart was used for pedestrian LTS, with modifications as noted:



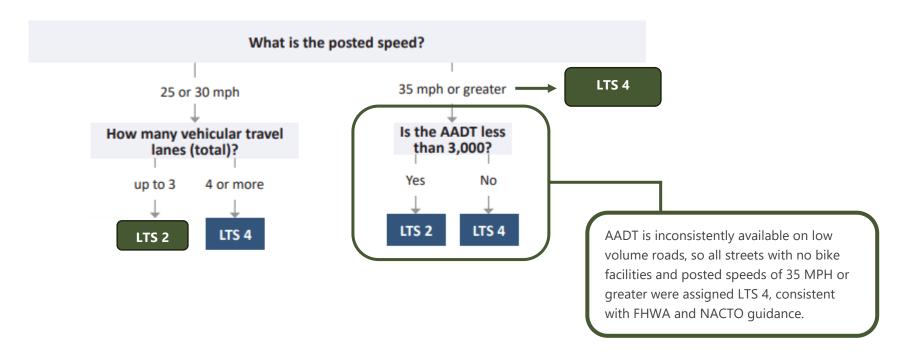
# **Bicycle LTS Flow Chart – Bike Facilities Present**

The following flow chart was used for bike LTS on streets with bike facilities, with modifications as noted:



# **Bicycle LTS Flow Chart – No Bike Facilities Present**

The following flow chart was used for bike LTS on streets with no bike facilities, with modifications as noted:



#### Notes

<sup>1)</sup> This chart does not constitute a standard and should be used only for general planning applications. The chart should not be used for corridor or intersection design, where more refined techniques exist.