

## Huntsville MPO Bike Plan

September 2025

Final Plan







Huntsville Area

Metropolitan Planning Organization



+

This plan is dedicated to the residents of the Huntsville region. We thank you for your involvement and dedication to improve bicycling in our community.

We recognize and thank the many technical staff, advocates, and community organizations who provided guidance, leadership, and feedback throughout the planning process.

#### **Local Agency Staff**

- Huntsville Metropolitan Planning Organization (MPO)
- City of Huntsville Long Range Planning
- City of Huntsville Traffic Engineering
- City of Huntsville Public Transportation (Orbit)
- → City of Madison Planning
- City of Madison Engineering
- ★ Madison County Engineering
- → Top of Alabama Regional Council of Governments (TARCOG)

## Bicycle Advocacy Organizations and Committees

- Bicycle Advisory and Safety Committee (BASC)
- Spring City Cycling Club (SCCC)
- → Huntsville Area Mountain Bike Riders (HAMR)
- → Huntsville Urban Bike Share Coop (HUBS)
- Citizens Advisory Committee for Transportation
- → Madison Greenways and Trails
- → Singing River Trail

#### **Advisors**

- ★ Land Trust of North Alabama
- Federal Highway Administration (FHWA)
   Alabama Division
- Alabama Department of Transportation (ALDOT)
- ★ Huntsville Vision Zero Task Force
- ✦ Huntsville City Schools
- Huntsville Housing Authority
- → Huntsville Tennessee Valley AMBUCS
- Alabama Agricultural and Mechanical University (Alabama A&M)
- University of Alabama in Huntsville (UAH)
- Huntsville Hospital
- Ditto Landing
- Redstone Arsenal
- ★ Cummings Research Park



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### Welcome to the Huntsville MPO Bike Plan

The Huntsville Metropolitan Organization (MPO) is proud to present a bike plan in collaboration with the MPO's partner agencies including the City of Huntsville, City of Madison, Madison County, Town of Triana, and Town of Owen Cross Roads.

According to the 2020 Decennial census, the Huntsville MPO is home to **412,930 residents**. In the last 20 years, the MPO has seen approximately 132,000 new residents move to the region. With the area's high quality of life, growing technology and manufacturing sectors, and economic development in the region, the area is expected to continue to grow by 66% between 2020 and 2050 according to the 2050 Long Range Transportation Plan. With this time of growth comes challenges, especially on trade-offs to designing our roadways and balancing infrastructure needs in the public right-of-way.

This plan charts a path forward for the MPO to strategically plan, design, and implement a safer bicycling network for all residents of the MPO, from ages 8 to 80, to use biking as a way to travel to school, work, neighborhoods, parks, and the region's many attractions and special events.

#### Join us as we make the Huntsville region a safe and welcoming place to bike!









Introduction





Larry Mason, a local bike advocate, explains the existing bike network to a resident.



## Why Bicycling?

Bicycling is a legitimate actual, needed, and possible **form of transportation** for area residents.



Bicycling is **clean and healthy** with the potential to reduce vehicular trips, congestion, emissions, improving the health of people and infrastructure.



Bicycling cities attract and retain workforce and young professionals, making them more economically competitive.



Bicycle facilities **create new businesses and opportunities**through a qualityof-life, recreationfocused economy.



Huntsville MPO Bike Plan Introduction

# A Shared Vision for Bicycling in the Huntsville MPO

As a connected, safe, and comfortable place for bicycling for all ages and abilities, the Greater Huntsville MPO region is a premier location for bicycle transportation and recreation. A culture emerges where bicycling is accessible and fun, helping attract and retain workforce and contributing to a strong regional economy.



## Goals to Accomplish the Vision



**Provide connectivity** between destinations and existing greenways and across municipalities.





Increase equal access to bicycle **transportation** and utilitarian options for disadvantaged communities, including improved access to transit, schools, and major employers.



**Prioritize safety** in bikeway development and programs, building off Vision Zero efforts.



Build high-quality, **comfortable** bike facilities that improve experience and increase ridership.



**Build a bicycling culture** where all roadway users are more considerate, through education, encouragement, and safety programs.

**Huntsville MPO Bike Plan** Introduction



### **Huntsville Bikes!**



#### My name is Ryan.

- → I am a person just like you.
- → I love my family and my pups.
- + I am a cyclist.



The physical and mental health benefits can't be measured. I love exploring the world with my friends and community. Keeps me young at heart!



#### My name is Desmond.

- + I am a father of three.
- + I ride an e-bike.
- + I am a roadway technician.



Biking importance is near to me. Biking for fun or short trips is relaxing and takes one more car off the road, reducing the total car footprint on the map.



#### My name is Jackie.

- + Lam a mother.
- Lam a heart doctor.
- I am a cyclist.



Daily exercise keeps me feeling healthy. Biking is an easy activity on my joints. I love exploring outdoors and enjoy the peace and beauty of nature. I love the magic of the sunrise every morning at the overlook at Monte Sano.



#### My name is Chris.

- → I am a local business owner.
- ↑ I am a dad.
- + I am a cyclist.

#### Why do I ride?

Intentional movement is one of the best tools to help me be the best version of myself. Cycling is what I do for my career. Exploring new places brings me joy. It's my passion.











#### My name is Joe.

- + I am a husband.
- + I am an engineer.
- + I am a cyclist.

#### Why do I ride?

I get to work three days a week, year round, in all weather. To relax and enjoy outdoors. To explore different parts of Huntsville, North Alabama, the United States, and Europe.



#### My name is Heath.

- I am a husband and father.
- I am a program manager.
- → I am a cyclist.

#### Why do I ride?

I am a social rider. I enjoy riding and training with my friends. I enjoy racing both mountain and road bikes. My job can be stressful. Cycling is the best way to start my day. Riding helps me find joy and wonder in the world.



#### My name is David.

- 🕇 I am a husband, father, and grandfather.
- I am a rocket scientist.
- I am a road, mountain, and gravel cyclist.

#### Why do I ride?

I like to ride because I can challenge myself physically and mentally. Riding has taken me to some epic and beautiful places. And cycling keeps me healthy.



#### My name is Jamie.

#### Why do I ride?

I like to transport myself on a bike as often as possible. I have been a bike commuter for most of my life and all of my career as an engineer who loved developing hardware for space stations. I prefer riding to walking because nothing hurts when I'm on a bike. I feel happier and know that I stay healthier riding a bike.



#### My name is Karen.

- I have two children and two grandchildren.
- I am a graphic designer.
- I am a cyclist and lover of the outdoors.



#### Why do I ride?

Health and fitness are critical to my overall well-being. I love the wind in my face and sun on my skin. My most memorable travels have been cycling related. I cherish the friendships I have gained through cycling. Challenging myself physically helps me stay mentally sharp as I age.







#### **Plan Outcomes**

The Huntsville MPO Bike Plan is a feasible plan that is phased, leading to successful implementation and working toward accomplishing the stated vision and goals. The plan identifies both easy, quick-win projects that create immediate impact and long-term, visionary projects that may require additional funding, design, or coordination. As a regional effort, the plan proposes numerous projects throughout the MPO. The plan provides implementation strategies to accomplish the proposed projects.

#### **The Planning Process**

The Huntsville MPO Bicycle Plan engaged dozens of technical staff and hundreds of residents across the entire region through multiple engagement types, including a Technical Advisory Committee, Community Stakeholder Committee, open house, bike rides, public survey, interactive map, focus groups, and event attendance.

#### **The Plan Document**

The core plan gets to the heart of the matter, describing existing conditions and including updated bicycle facility typologies, recommended long-term bike network, short-term bike network, and an implementation strategy that is organized by the plan goals highlighted earlier in this chapter. More detailed information on the engagement results and project prioritization process can be found in the Appendix.

#### 2024 2025 OCT - DEC JAN - MAR **APRIL - JUNE** JULY - SEPT JAN - MAR **APRIL - SEPT Review Past Plans** Draft Network Gap Analysis Community Finalize Project Final Plan and Create GIS Development Stakeholder Prioritization One-on-one Local Basemap **Committee Meeting Demand Analysis Agency Meetings** Public Open #2 (Draft → Policy + Program **Website Setup** Recommendations) Recommendations House #1: Community Public Online Open Stakeholder **Project Overview** House **Public Survey** Draft Plan **Begin Project** + Vision and Goals Committee + Input Map + Existing Conditions **Prioritization Model** Meeting #1 Technical Advisory (Vision and Goals) Development Committee Existing Conditions Technical Advisory + Planned Network Meeting #3 Implementation Technical Advisory **Committee Meeting** (Draft Network Maps Framework + Committee Recommendations) (Existing Conditions Meeting #1 **Phasing Strategy** (Vision and Goals) + Stakeholder Feedback)

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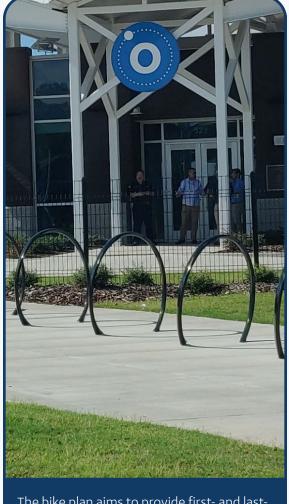
## **Bicycling Today in the Huntsville MPO**

Cities and communities in the Huntsville MPO have begun increasing funding and construction of bikeways and greenway trails across their jurisdictions in recent years. At the same time, the urbanized and suburbanized landscapes have continued growing, making bicycling trips often too long or cut off by large transportation or rail infrastructure and, in some cases, topography. Bikeways and trails are generally fragmented and mostly used for recreation and exercise by the local communities who have access or by running and biking enthusiasts who drive to trailheads.

The culture of bicycling in the region mirrors what is often seen across the Southeast. Bicycling advocacy groups and bicyclists pursue infrastructure improvements and culture change; motorists tend to not expect bicyclists or get irritated by bicyclists on roadways, leading to dangerous situations; and disadvantaged or homeless populations who depend on bicycling often ride incorrectly such as in the wrong direction, leading to confusion among roadway users.

Opportunities exist to expand solid greenway networks, particularly in Huntsville and Madison. The Singing River Trail is one example of a regional shared-use path system that will connect across jurisdictions. There are also opportunities to improve short viable trips for bicycling, such as improved transportation and recreation connections to places like Downtown Huntsville, University of Alabama at Huntsville (UAH), Town Madison, and others.

Building out a bicycle network requires understanding what is existing today in terms of infrastructure, demographics, safety, equity, and demand for bicycling. Summaries of this information can be found in this chapter. In addition, this plan's recommendations aren't developed from scratch but built upon previous planning efforts, which are also highlighted at the end of this chapter.



The bike plan aims to provide first- and lastmile connections to transit options such as the City of Huntsville's transfer center.

#### **Existing and Planned Greenway Network**

The Huntsville MPO already includes nearly 100 miles of greenways and side paths, which are mostly located along creeks, drainages, and roadways. The City of Huntsville Greenway Master Plan calls for the development of more greenway

each year with visions for long-distance greenway spines along major waterways like the Flint River. Multiple agencies are working together to see the greenway plan come to fruition. This bike plan seeks to add new low-stress and safe bicycle facilities to these greenway connections.

Stats of the Current Network

Greenways

**Miles** 

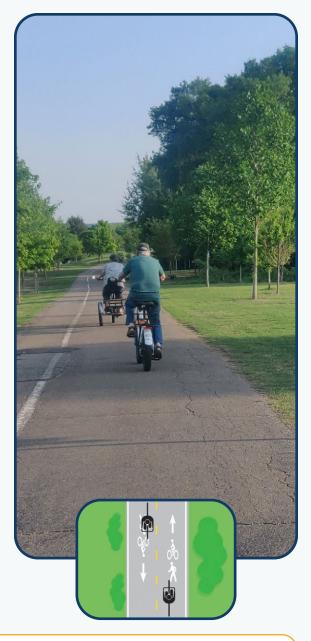
Greenlinks (side paths)

**Previously Proposed Greenway Mileage** 

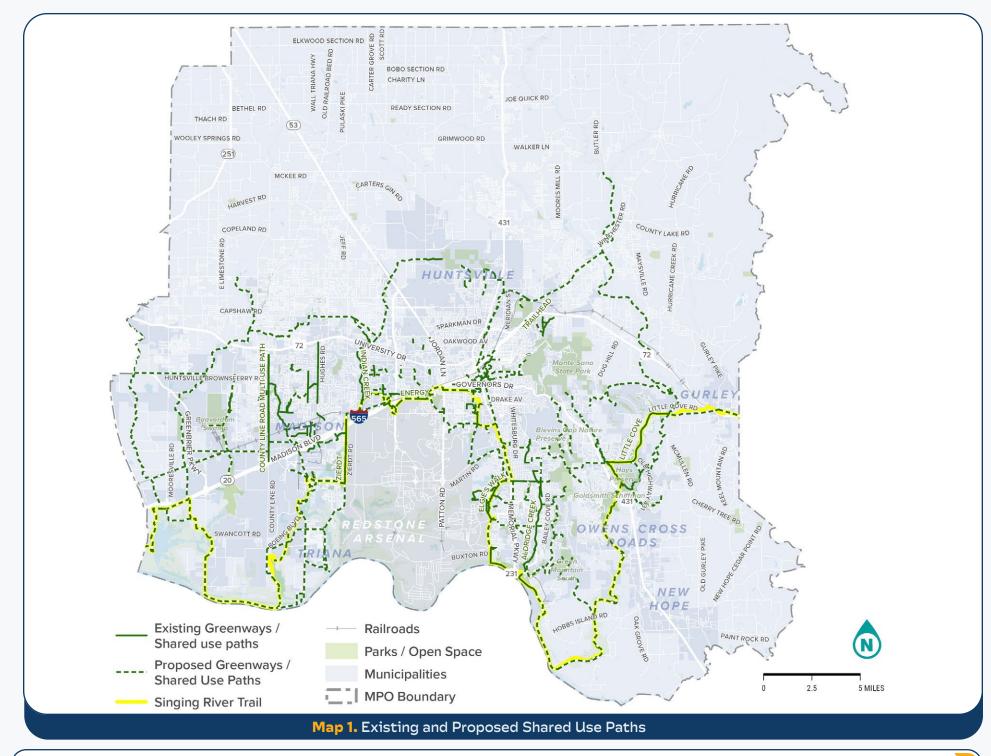
**Visionary Greenways** 

**Proposed Greenways** 





For more information, check out the City of Huntsville's Greenway Master Plan and resources



#### **Existing and Planned Bicycle Route Network**

The Huntsville region boasts an existing 182-mile signed bicycle route network that features mostly low-traffic neighborhood streets with green route markers. The previous 2020 MPO Bike Plan includes recommendations for an

additional 347 miles of bike routes throughout the county. In addition, approximately 30 miles of bike lanes have been proposed in the plan. This plan seeks to identify more separated bike facilities that will be comfortable for all ages, from 8 to 80. The future network recommendations in this plan leverage existing greenways and bike lanes to create a connected network of bicycle facilities.



**Stats of the Current Network** 

**Bike Routes** 



**Bike Lanes** 

113 miles

**Previously Proposed Mileage** 

**Bike Routes** 



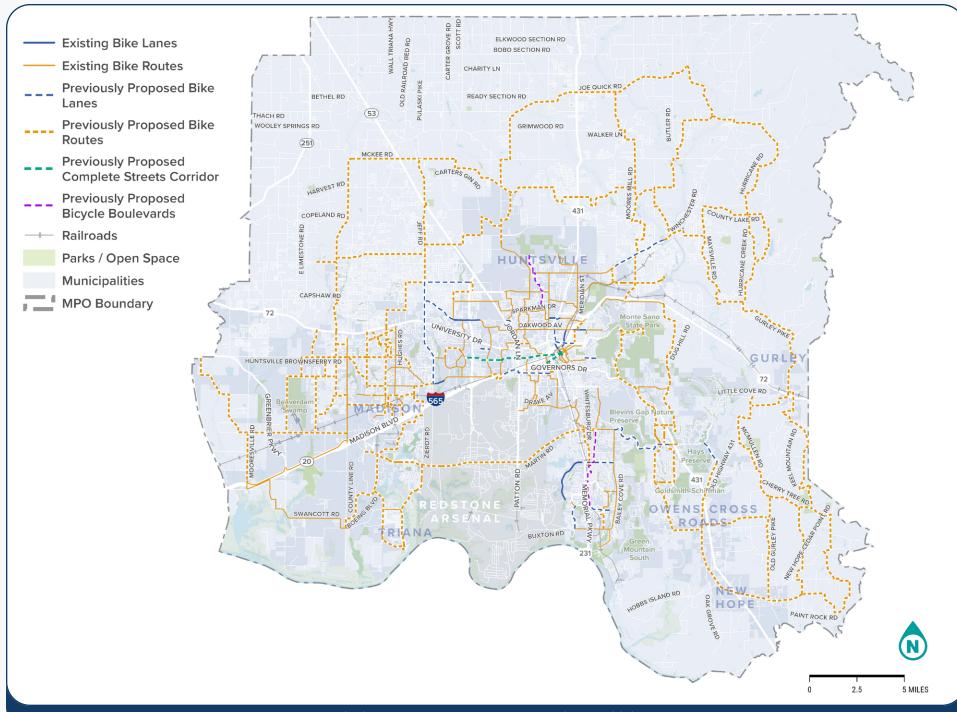
**Greenlinks** 



**Bike Lanes** 







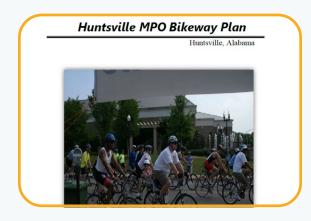
#### **Past Plans and Projects in Development**

The project team assessed past plans and visioning documents that guide active transportation and bikeway development. The documents shown here represent a portion of that plan review and highlight major projects that will connect the MPO though future bikeways, greenways, and alternative modes.

Select the title of each plan to access the full study or planning document.

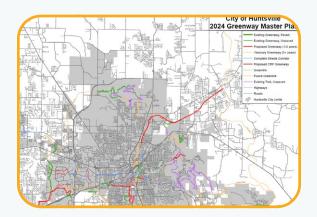
#### 2019 MPO Bike Plan

outlines the types of bike-ways and recommendations for programs to encourage



#### **2024 Greenway Plan**

includes 312 miles of connected greenways, side paths, and Complete Street corridors.



#### **Madison on Track 2045**

serves as the City of Madison's comprehensive plan and includes major greenway and side path connections.



## **Downtown Active Transportation Connectivity Action Plan**

outlines strategic intersection improvements to improve walking and biking access into downtown Huntsville.



## Memorial Parkway Bicycle and Pedestrian Safety Study

details crosswalks, signals, and intersection improvements along the Parkway.



#### **Holmes Ave Complete Streets**

will bring roadway safety improvements and bike facilities along a 3.25-mile stretch from downtown to the UAH campus.



#### **Meridian Street Corridor Plan**

provides recommendations for redevelopment and improvement of a four-mile stretch of Meridian Street north of downtown.



#### **Meek Greenway**

will connect to a future Alabama A&M greenway and the North Huntsville Greenway (description below).



## Pedestrian Access and Redevelopment Corridor (PARC)

will provide the ability to walk or bike to destinations on both sides of the Parkway.



#### **Singing River Trail**

will become the major trail greenway spine across North Alabama, connecting six counties along its 220-mile stretch.



#### **North Huntsville Greenway Plan**

creates a vision for a greenway connection from PARC to the AL A&M campus, providing biking connectivity throughout this corridor.







## Identifying the Need for Bike Facilities

Where and why are bike crashes happening?

Where are the injury type crashes?

Understanding where and why bike crashes are happening uncovers which roadway corridors need safety improvements and where alternate safe routes are necessary.

**Safety** 

Are proposed bike facilities serving disadvantaged communities?

Identifying where residents don't have access to a vehicle and may rely on transit or active transportation helps locate where residents need bike facilities.

## **Equal Access**

How can new bike facilities convert vehicle trips to bike trips?

We can understand where people are traveling and the trip distance to identify strategic bike facilities that can encourage more biking trips, providing residents with more transportation options and reducing congestion during peak travel times.

**Trip Conversion** 

Where will residents use bike facilities the most?

A live-work-play analysis and short trip assessment highlights where people are traveling and where new bicycle facilities can meet the highest demand areas for bicycle commuting.

**Demand** 

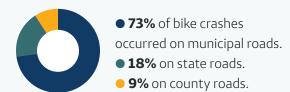
#### Safety

Between 2016 and 2023, there were 199 crashes where a bicyclist was hit by a vehicle. During this time frame, three bicyclists lost their lives in crashes, and 29 crashes resulted in suspected serious injuries. There were 83 nonincapacitating injuries (victim could walk away from scene), 40 possible injuries, and 39 property damage only. The severity of the remaining crashes was unknown. (ALDOT CARE data)

The infographics that follow explain the location of the crashes and top contributing factors.









#### **Vision Zero Findings**

This plan builds upon the efforts of the City of Huntsville Vision Zero effort. As part of the Vision Zero Plan, a bicycle High Injury Network (HIN) was identified. This data was used to identify top corridors for safety improvements or where safer alternative routes are needed.

Top corridors from the Huntsville Vision Zero HIN included the following:

- University Drive
- Pulaski Pike
- Oakwood Avenue
- Mastin Lake Road
- Holmes Avenue
- Meridian Street
- Jordan Lane
- Drake Avenue
- Clinton Avenue
- Triana Boulevard
- Governors Drive
- Sparkman Drive

#### Airport Road

**Top Contributing Circumstances** 

Unseen object

Failed to yield right-

of-way at a crosswalk

Failed to yield right-

of-way at a stop sign

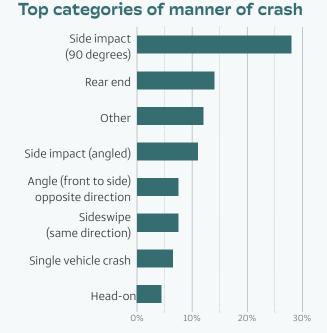
Other failed to yield

Improper crossing

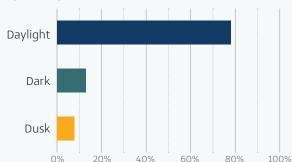
Ran traffic signal

Improper passing

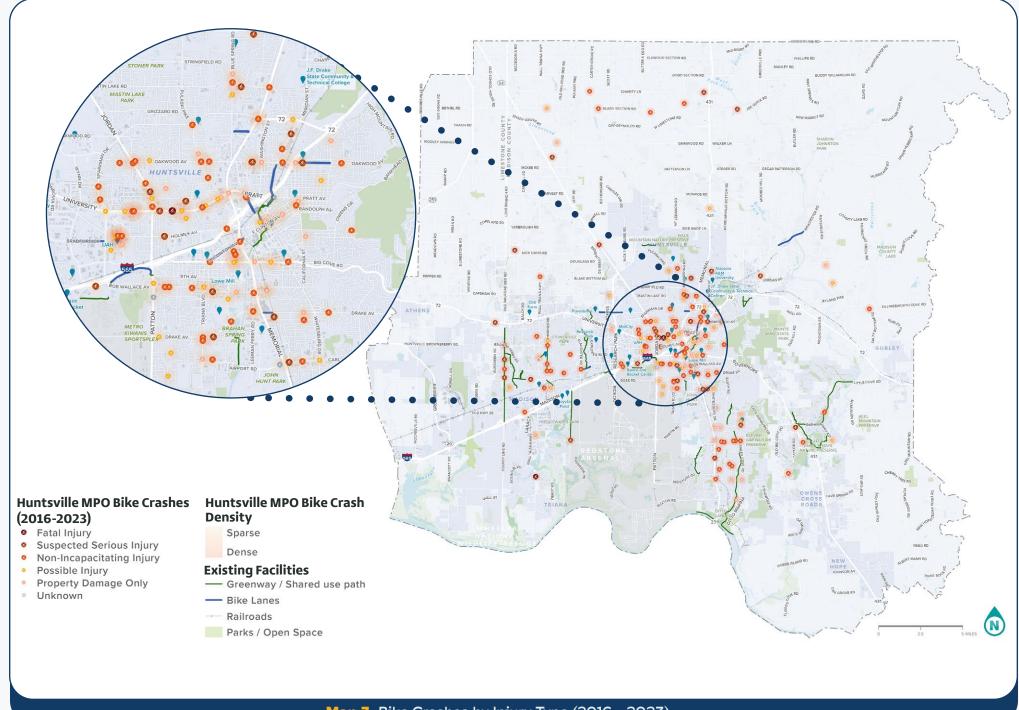
Unknown



#### **Lighting Conditions**



15%



#### **Equal Access**

As part of the project's goals, the plan aims to provide bicycle facilities to residents who may face transportation disparities and ensure equal access to bicycling as a mode of transportation. Residents may rely on transit or active modes to get around to work, school, and shopping destinations. By looking at where these residents live, the plan can focus on priority bike facility locations.

As seen in the map to right, historically disadvantaged communities are located in the north and west portions of Huntsville.

Zero vehicle households are located in similar locations with greater density along the Governor's Drive corridor just west of US 431 (The Parkway).

With Huntsville's recent increase in apartment density and influx of residents from colleges and larger metropolitan cities, Huntsville will continue to see an increase in residents choosing not to own an automobile, relying on bicycles, small electric vehicles, and transportation services.

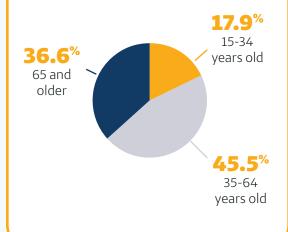
#### Zero Vehicle Households

Based on 2023 American Community Survey estimates, 3.2% of households in the MPO area are expected to be without a vehicle. That means that approximately

6,750 households or approximately 16,000 residents within the Huntsville Metro Area do not own a personal vehicle.

The ages of the residents who do not own a vehicle are shown below.

Percentage of those households without vehicles, by eldest member:

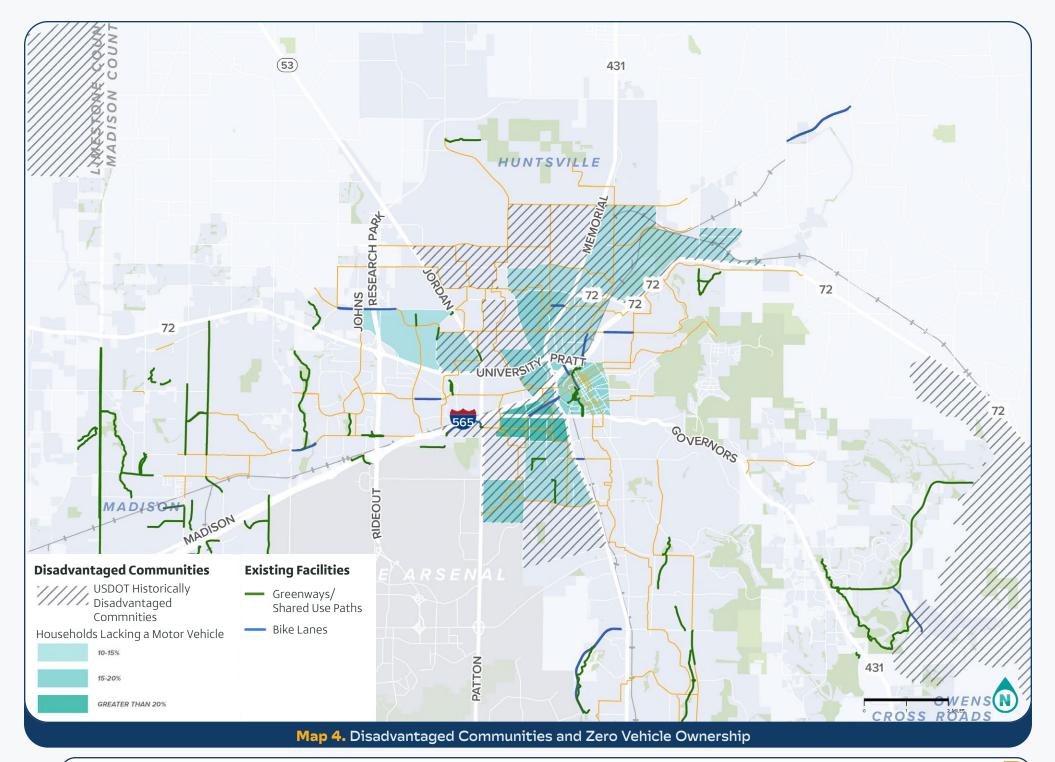




Many residents without a vehicle rely on transit service to live, work, shop, and recreate. Providing these first- and last-mile connections will be key to providing residents with options and meeting the needs of the thousands of residents without a personal vehicle or ability to drive.

#### **USDOT Definitions**

This analysis was performed in 2023 with US Department of Transportation (USDOT) data on historically disadvantaged communities. As of this plan's publication in September 2025, this data is not hosted on USDOT's website. Similar datasets, including underserved communities, are available by USDOT and referenced in recent grant programs, including the Safe Roads and Streets for All (SS4A) Program.



## **Trip Conversion: Active Trip Potential**

The project team conducted an active trip potential analysis to identify start and end locations of short trips that could be taken by a bicycle. This data helps decision makers and planners within the MPO illustrate where new investments in bike infrastructure can meet demand and provide travel alternatives. As shown by the top five locations below, there are thousands of trips that could be made via bicycle commuting, which will reduce congestion, improve air quality, and lower the wear and tear of our roadways.

Census blocks showing the five highest numbers of short trips (under three miles) were:

#### Research Park

**12,295 Trips**: Research Park has numerous bike commuters and hosts three weekly group bike rides. It is initiating a bike share program with HUBS Coop.

#### **Downtown Huntsville**

**11,564 Trips**: Downtown Huntsville is filled with events, shopping, businesses, healthcare, and government services that can be accessed by bike by residents living in Oak Park, Blossomwood, and West Huntsville. Downtown has a long established bike share to make it easier for residents and visitors to access a bike

for short trips around downtown.

#### The Medical District

**8,862 Trips:** The Medical District includes Huntsville High School and the Huntsville Madison Public Library, which has a sizable student after-school attendance. The library and Mana House are relied on by people without cars.

#### **Mid City District**

**8,808 Trips**: This district is directly between Research Park and UAH, with entertainment and events that draw residents and visitors on a daily basis. This district also contains trips to and from Calhoun Community College.

## Parkway and Crestwood Commercial District 8,600 Trips:

This commercial area includes the Parkway, Walmart Supercenter, Country Club Apartments, the Crestwood Medical Center, and the Village on Whitesburg. The area is characterized by large parking lots, suburban housing, and office parks. An existing bike route crossing Memorial Parkway via Airport Road is located at the southwest corner. A safe crossing of the Parkway here will be a key connection.

Note: The Arsenal is another hot spot for bicycle commuting but did not show up in the analysis

## Trip Conversion Potential

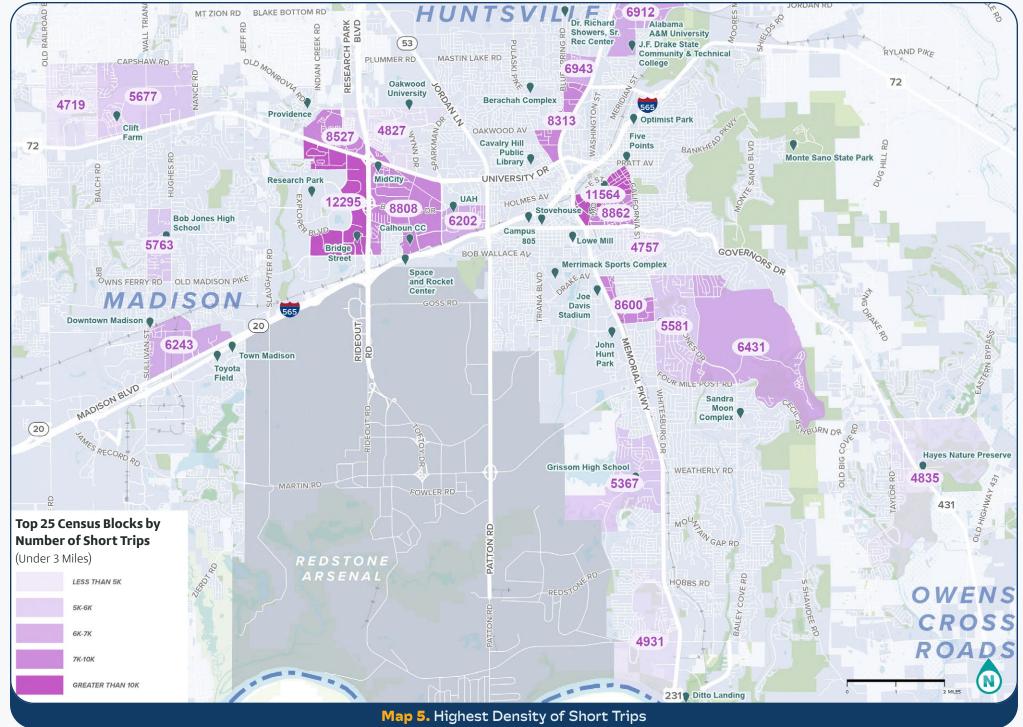
Founded within Google, **Replica** is a big data provider that uses de-identified mobile location data. The data shown here is from Replica Places, which generates activity-based travel models by using location, demographic, built environment, and economic activity data. The project team used this data to illustrate where and when vehicle trips are happening and which ones are under three miles.

As modeled by the Replica data, there are an estimated **986,190 vehicle trips happening daily** within the Huntsville
MPO. Of those trips:

305,111 trips (31% of total trips) are under three miles.

71,129 trips (7.2% of total trips) are under one mile.

These short trips could become active travel trips when safe and attractive bicycle infrastructure is implemented.



## **Short Trips: Origins and Destinations**

The most concentrated short trips are anticipated between University of Alabama at Huntsville, Providence, and Research Park. In this same area, there are also two adjacent connections to John Paul High School and Oakwood University. This highlights a need for safe bicycle connections between these major employment centers as well as a need for safe crossings of Research Park Boulevard.

Other notable trips include the following major destinations:

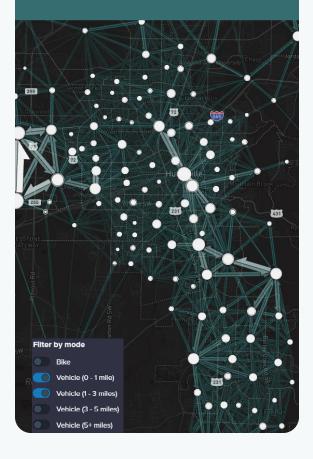
- Between Bob Jones High School and Mill Creek Greenway
- John Hunt Park
- Crossing I-565 near Intergraph Way
- Hampton Station and Big Cove Creek
   Greenway
- Lincoln Mill area and the Medical District
- East and West of Clift Farm
- Shopping along Carl T. Jones Drive in the Target shopping center

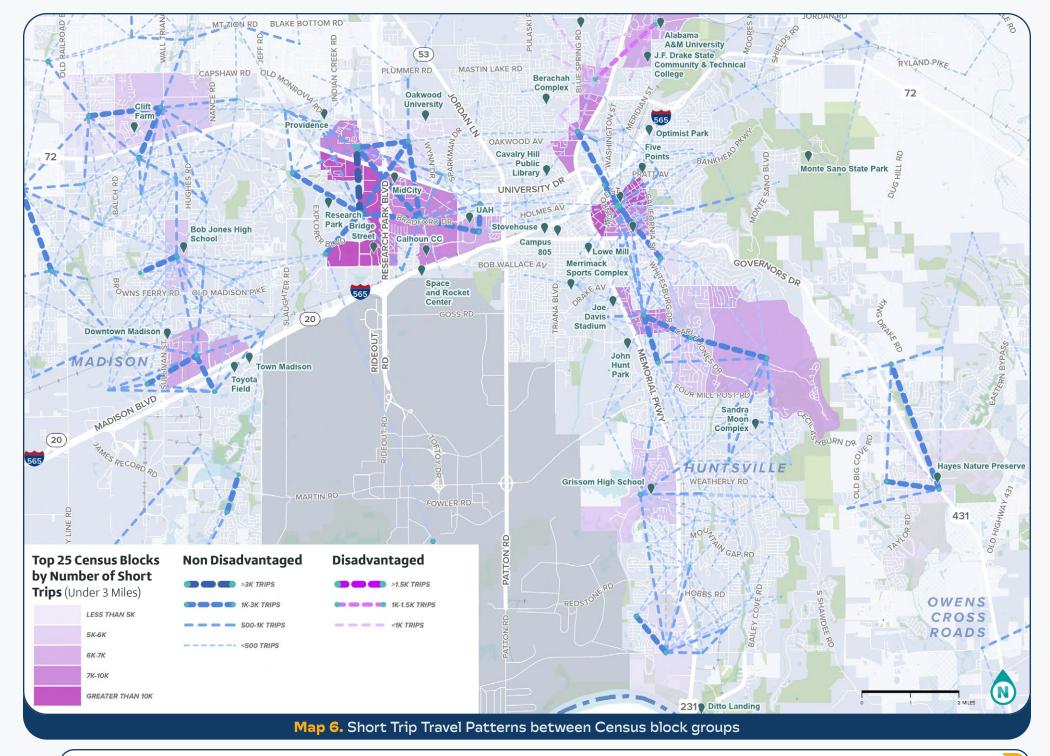
#### **Disadvantaged Communities**

The highest number of trips made by residents of disadvantaged communities occurred between the districts centered on Lakewood Elementary and Alabama A&M University. Other popular trips were centered around Montview Elementary School. Over 500 direct trips appear to be roughly between Chapman Mountain Nature Preserve and Alabama A&M. Nearly 200 trips were recorded along the Limestone Creek Trail.

#### **Modeled Trips**

Replica uses the activity model to capture origin and destination data. This provides insights into where residents and visitors are traveling and the trip distances. As part of the analysis, the project team developed an





#### **Demand and Short Trip Potential**

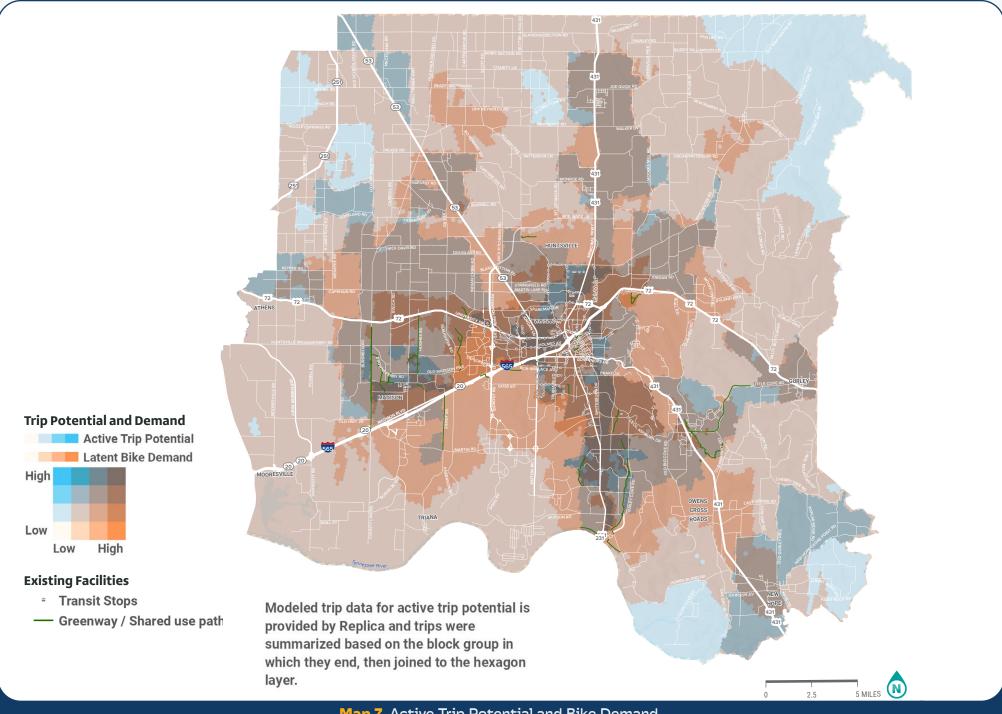
The short trips analysis highlights where vehicle trips could be converted to active trips. A demand analysis was also created to provide a comprehensive overview of where residents live, work, and play and zones for anticipated demand for bicycling. This data provides planners and decision makers within the MPO with data-driven findings to inform where future bicycle facilities will meet the highest areas of demand.

The project team developed a Live, Work, Play tool to assess both existing and suppressed demand for biking. This suppressed demand, known as latent demand, comprises trips that are not or cannot be taken because a key factor—such as safe, comfortable, and connected infrastructure—is missing. This analysis produces a heat map showing areas of high latent demand based on the consideration of trip generators, such as where people live and work, trip attractors, such as schools and retail establishments where people learn and play, and current trip-making behaviors.

The map to the right shows the areas of highest demand and short trip potential in the brown areas.

Major hubs of latent demand and short trip potential include the following:

- → Downtown Huntsville
- University of Alabama at Huntsville
- Alabama A&M University
- ♦ Oakwood University
- Providence
- ♦ Research Park
- → Bridge Street Town Centre
- → John Hunt Park area
- Lowe Mill to Stovehouse
- ★ Memorial Parkway in South Huntsville
- North of Downtown between Pratt Avenue and Sparkman Drive
- → Mill Road near the former Insanity Complex
- → The Shoppes of Madison along US 72
- Along Memorial Parkway near Green Cove Road
- → Along SR 53 at Jeff Road
- → Along Carl T Jones Drive in Jones Valley
- + Hazel Green north on US 431
- → Gurley on US 72

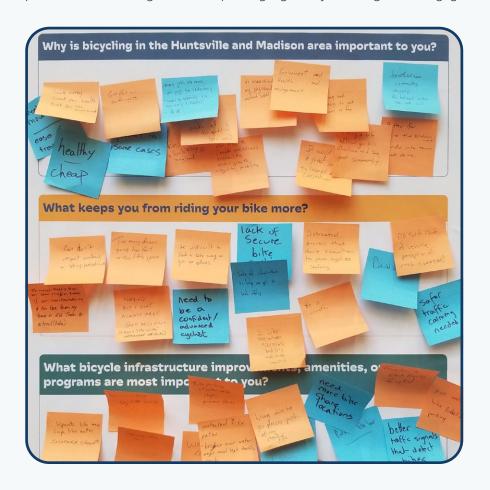






### **Engagement Overview**

The project team engaged hundreds of Huntsville MPO residents to understand where they would like to bike more, their safety concerns, and what supportive amenities, programs, and policies will help make bicycling a safer and more attractive form of transportation. The team heard from the public through a survey, interactive map, social media engagement, open houses, and meetings. Along the way, the team met with City of Huntsville, City of Madison, and Madison County engineers, traffic engineers, advisors, and decision makers to ensure the recommendations in this plan follow and build upon existing practices and processes. The findings in this chapter highlight major findings from engagement efforts.





### **Technical Stakeholder Engagement**

Community nonprofit representatives, municipal engineers, and department officials from county and city governments participated in MPO Community Advisory and Technical Stakeholder Meetings to ensure the bike plan was compatible with previous and ongoing efforts throughout the multi-agency MPO. Meetings provided opportunities to share visions, goals, priorities, barriers, opportunities, demand analysis, public input, and design standards as well as provide feedback on the recommended network.



#### Huntsville Bicycle Advisory Safety Committee Meetings

April 2024 - March 2025

Huntsville Bicycle Advisory Safety Committee (BASC) was consulted from the inception of the project, with BASC members kicking off by leading a public Huntsville downtown group ride on April 14, 2024. The ride was attended by Huntsville staff from multiple departments as well as concerned citizen commuters. Members of BASC continued to be consulted throughout the network development process, culminating in a draft bike network presentation at the BASC February 2025 meeting for citizen feedback.

#### Vision Zero Stakeholder Presentation

November 13, 2024

Alta Planning + Design was able to share crash analysis data with the Vision Zero Task Force. The HIN developed by the Vision Zero effort was used to inform prioritization of routing in the Bicycle Network.

#### **Network Workshops**

Spring 2025

City of Huntsville, City of Madison, and Madison County: Stakeholders provided feedback on the development of the bike facility network.

#### **Technical Stakeholder Meetings**





2025

One-on-one meetings with City of Huntsville, City of Madison, and Madison County

### **Public Engagement**

#### **Public Events**

Open houses and pop-up events were arranged in partnership with the Huntsville Planning Department and the Huntsville Urban Bike Share (HUBS) Coop to both inform and gather feedback from the public on the future of cycling in the Huntsville MPO. City officials and consultants were present to answer questions about existing and previously proposed bicycle facilities as well as to learn about issues citizens face when biking, or when deciding not to bike in the MPO area.

#### **Online Interactive Map**

An online interactive map was provided to draw routes and point to intersections and destinations, including:

- Favorite routes
- Favorite destinations
- Difficult intersections
- Routes needing improvement

#### **Online Survey**

An online survey was conducted reaching residents over the vast majority of the MPO. This provided an outlet for residents to share specific locations and stories about their experiences as cyclists in the Greater Huntsville Area.

#### **Pop-Up Events**







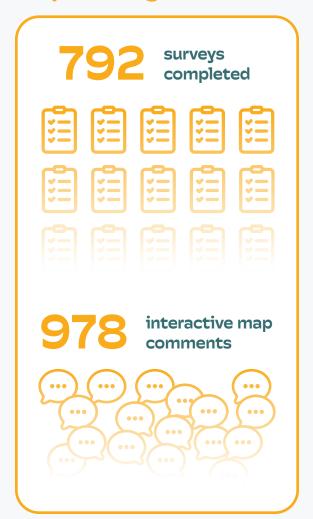
#### **Open Houses**



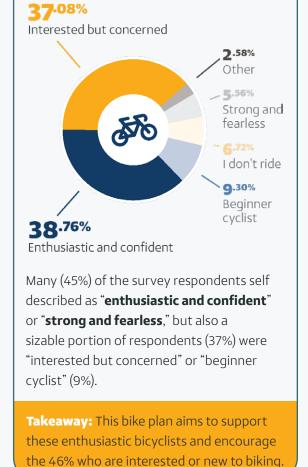


### **Engagement Findings**

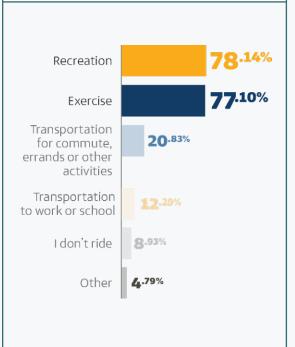
### **Survey and Interactive Map Findings**



### What type of cyclist are you/ would you describe yourself as?

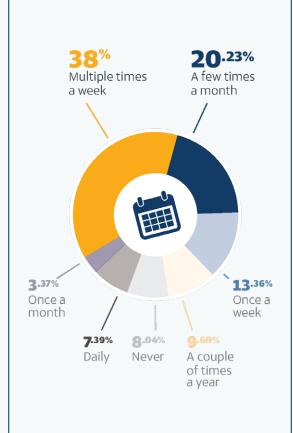


### Why do you currently ride your bike?



Takeaway: While most survey respondents are riding bikes for recreation and exercise, a significant number of respondents (33%) use bicycles as a means of transportation to work, school, errands, or other commuting.

#### How often do you ride?



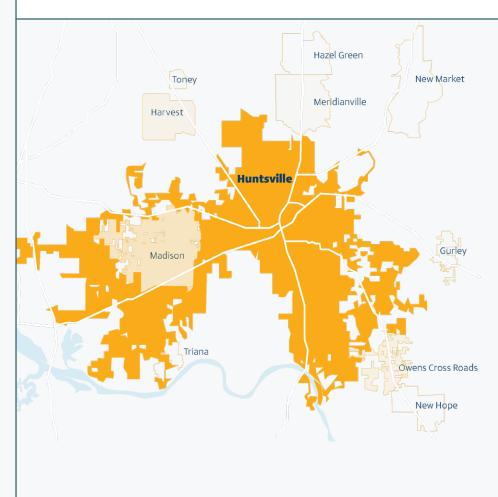
The majority of survey respondents are using their bicycle **multiple times a week** (38%), once a week (13%), or a few times a month (20%).

#### Which destinations would you like to ride your bike to?



**Parks and trails** came out on top as the most desired locations for residents to ride their bike to. **Downtown, residential neighborhoods, shopping/dining, places of work, and libraries** were the next top priorities.

#### Where do you live?



| City of Huntsville | 62.99% |
|--------------------|--------|
| City of Madison    | 15.07% |
| Other              | 6.46%  |
| Owens Cross Roads  | 5.38%  |
| Harvest            | 4.17%  |
| Gurley             | 1.35%  |
| New Market         | 1.21%  |
| Toney              | 1.21%  |
| Meridianville      | 1.08%  |
| Hazel Green        | 0.54%  |
| Triana             | 0.40%  |
| New Hope           | 0.13%  |
|                    |        |

0% 63%

### **Interactive Map Feedback**

#### **Overview**

Participants shared their favorite residential routes, struggles to cross major roads, stories of near misses, and their dreams of a future interconnected Huntsville. Facility **Connectivity** and **Safety** were by far the top issues. All public feedback was reviewed and considered when developing the plan recommendations.

978

interactive map comments



### Favorite Corridors And Destinations

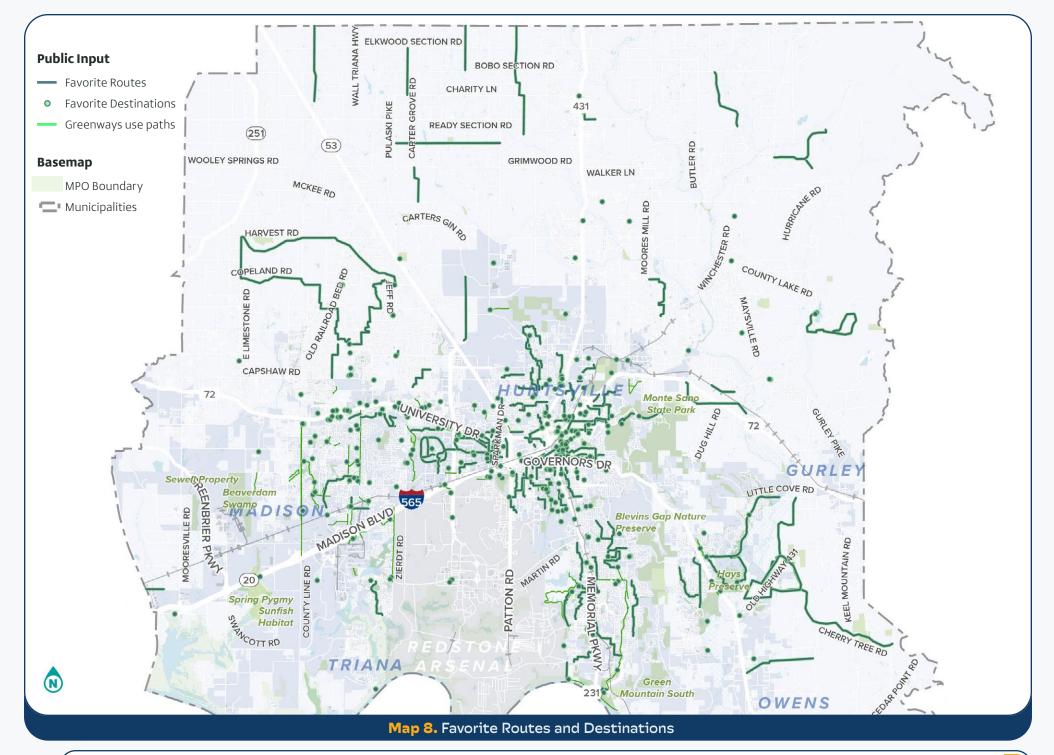
Specific favorite routes, destinations, and facilities were shared both online and at events. These valuable insights were used in combination with previous plans and data during the network design process to connect gaps and provide alternate options for difficult routes and intersections.

"I ride for recreation and exercise as well as for my daily commute

into research park. I'd like to have a better network of east west routes."

### "Clinton Ave. is the best route across town,

connecting Oak Park, Five Points, downtown, and the Campus 805 area—while managing to mostly avoid high traffic, multi-lane roads and highways. It's an ideal corridor for more robust and protected bike lane."



#### **Difficult Intersections**

The difficult intersections highlighted were the most often mentioned from the combined feedback gathered by the interactive map, survey feedback, and public event input. The larger greenway connections of **Indian Creek crossing US 72** and **Aldridge Creek crossing the golf course** were highly noted. Requests for general crossings of **Bailey Cove Road** and safer passage along **Bradford Drive from Research Park as it passes Research Park Boulevard ramps** are top concerns. By and large, intersection and crossing improvements were requested for all of **Memorial Parkway**, **US 72**, and **I-565**. The top 20 specific intersections of concern were:

- 1. Indian Creek Greenway Crossing US 72
- 2. Bradford Drive crossing SR 255/Research
  Park Boulevard
- 3. Airport Road crossing Memorial Parkway
- **4.** Sutton Road/Eastern Bypass or Little Cove Greenway crossing US 431
- 5. Old Monrovia Road crossing University Drive
- **6.** Bradford Drive/Holmes Avenue crossing Wynn Drive
- Clinton Avenue crossing under Memorial Parkway
- 8. Crossing Bailey Cove Road near Mira Vista
  Drive
- **9.** Bradford Drive crossing Sparkman Drive
- 10. Gillespie Road and Wall Triana Highway
- 11. Weatherly Road crossing Memorial Parkway

- **12.** Bike Route 22/Kohler Road crossing Memorial Parkway
- 13. Governors Drive crossing Memorial Parkway
- 14. Main Drive Bridge crossing Paint Rock River
- **15.** Logan Drive/Lily Flagg Road crossing Memorial Parkway (Signal timing)
- **16.** 9th Avenue/Governors House Drive crossing Jordan Lane (Signal timing)
- **17.** Bob Wallace Avenue crossing Memorial Parkway
- **18.** US 431 and Taylor Lane
- 19. Hughes Road Side Path crossing Mill Road
- **20.** Sparkman Drive Bike Route crossing I-565

#### Clinton Ave Crossing Memorial Parkway

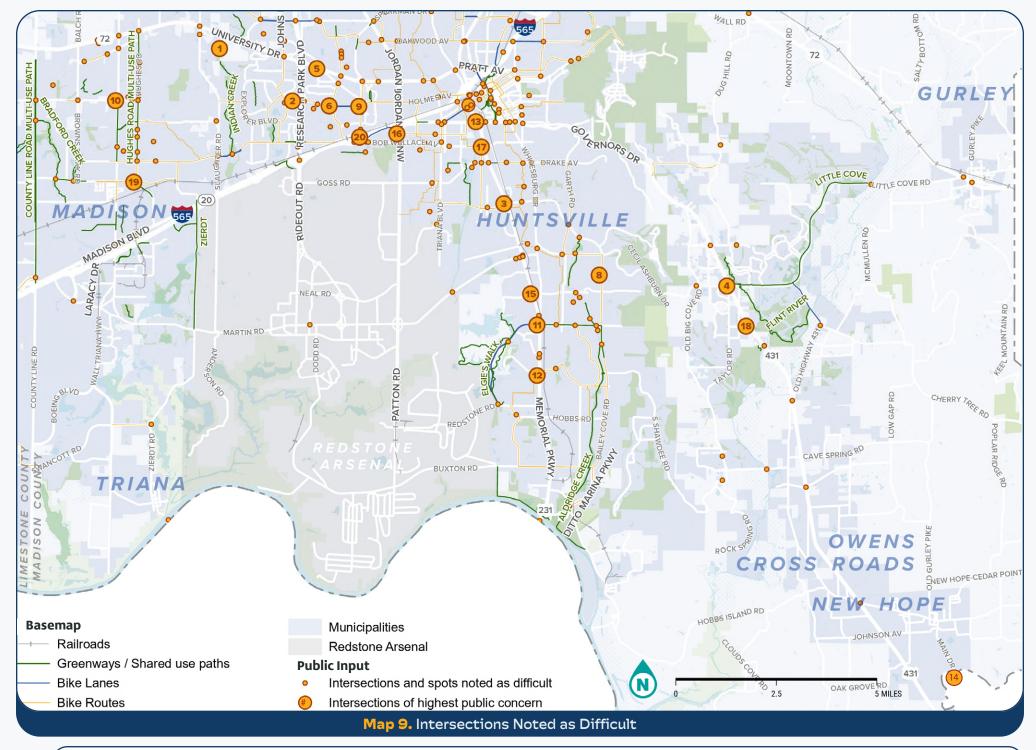
"Biking west away from downtown isn't bad, but biking back into downtown has you crossing two on ramps and two exit ramps. The bike lane coming back into downtown ends between the two sets of ramps too, so bikes heading east have to merge with traffic."

### Crossing the Parkway at Weatherly

"There is a crosswalk there now, but there are obstacles (the overpass) that obstruct drivers' vision for cyclists. Plus, they are not looking for cyclists. If a more sophisticated crosswalk/bridge/tunnel is not feasible, it would be great to at least have a flashing light to let drivers know that a cyclist is crossing."

# "Feels like we are an island on the Goldsmith side of 431.

It's hard to comfortably get kids and or myself or a dog across to access facilities, middle school, Hays, grocery store, etc."



#### **Top Corridors**

Routes recommended by residents for improvement were gathered by the interactive map feedback, specific survey feedback, and public engagement comments or drawings. Requests for corridors most often cited **Memorial Parkway, US 72,** and **Whitesburg Drive** but were at times accompanied with requests for a parallel, less stressful route. The top 20 specific routes of concern were:

- 1. Old Madison Pike/Browns Ferry Road
- 2. Whitesburg Drive (or alternate)
- **3.** US 72/University Drive (or parallel)
- 4. Indian Creek Greenway northern gap
- 5. Holmes Avenue/Bradford Drive
- 6. Aldridge Creek Greenway gap
- Slaughter Road
- 8. Bob Wallace Avenue
- Bankhead Parkway
- 10. Madison Boulevard
- 11. Bailey Cove Road

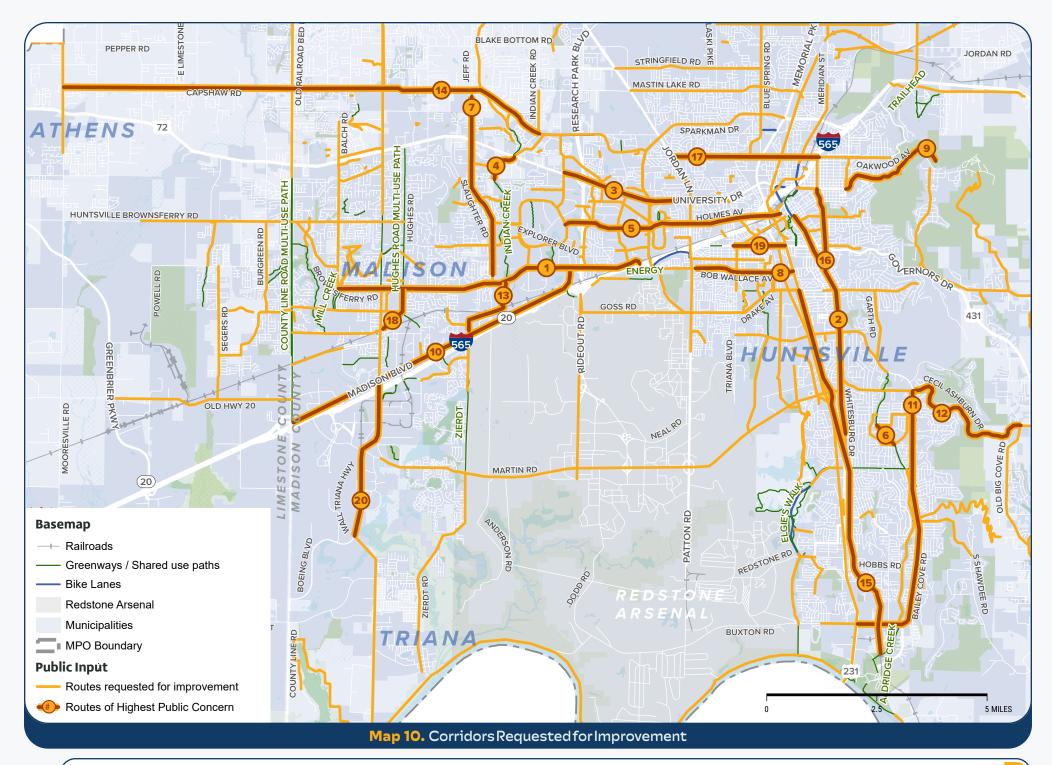
- 12. Cecil Ashburn Drive
- 13. Indian Creek Greenway to Zierdt Side Path
- 14. Capshaw Road/Old Monrovia Road
- **15.** L&N Greenway
- **16.** California Street
- 17. Oakwood Avenue
- 18. Hughes Road
- 19. Governors Drive
- 20. Wall Triana Highway

#### "Longer greenways, more separated bike lanes

near greenways to encourage biking to and from them especially south Huntsville greenways."

### "We need to get ahead of the game

to make the most use of the new Sky Bridge. Also connecting the existing greenways will go a long way. Separated bike paths and lanes are the best use. It's safer and encourages more people to ride."





Erin and Andrew, Huntsville Area Mountain Bike Riders (HAMR) club leaders, want to be able to ride to their jobs in Research Park, the Arsenal, to the grocery store, John Hunt Park, and dinner.



Julia rides her bike to commute, have fun, exercise, and spend time with her daughter. Her daughter, Jessie, rides a bike so she can exercise, and it's fun!



Jacob rides his bike for commuting, but also for social time with friends. He shared that bikes are a great device for transporting yourself, staying in shape, and having fun with friends.

### We thank you!



Thank you to the hundreds of Huntsville MPO residents who shared their stories, time, energy, and feedback during the planning process.

### **Engagement Top Takeaways**

Table 1. Concerns and Action Items

| Concern  | Action Items for the Bike Plan  |  |
|--|---|--|
| Clear separation of bicycle facilities from other modes of travel  | Upgrade existing facilities. Install shared-use side paths where possible.  |  |
| Greenway connectivity  | Fill in the gaps with more greenways or alternative road facilities as links between them.  |  |
| Protected bicycle facilities   | Upgrade bike lanes with buffers or separators. Install cycle tracks with vertical separation from cars where possible.  |  |
| Need to Update Rocket City: stemming from a sense that<br>Huntsville is behind and needs to catch up with other cities | Show the demand to those in decision-making positions. Continue to provide more supportive infrastructure, programs, and policies to support bicycling.   |  |
| Driver and biker conflicts   | Public education campaigns are key. New programs will spread awareness, and visible facilities will help raise the awareness of bicyclists on the road.   |  |
| Law enforcement  | Provide visible mechanisms for reporting incidents and create clearly designated rules and consequences.  |  |
| Difficult-to-cross intersections   | Implement protected intersections, more bike detection, new signals, and additional striping.   |  |
| Education is needed primarily for drivers but also for bikers  | Spread awareness of bike and driver safety through new programs and launch an awareness campaign.   |  |
| School and youth accessibility   | Locate bike boulevards and greenway connections near schools to allow for safe routes to school and provide neighborhood bicycle boulevards for children as they learn to be more confident riders. |  |
| Land use and policy changes  | Update policies and land development codes to provide connected bike facilities, encourage density where appropriate, and create interconnected neighborhoods with new developments.                |  |
| Commercial connectivity to neighborhoods   | Provide safe crossings of major roads and implement shared-use side paths along shopping areas to create safe zones that can encourage more biking for daily activities.                            |  |
| Workplace connectivity to neighborhoods  | Work with major employers and their staff to identify key commuting routes.   |  |



### **Facility Recommendation Typologies**

The proposed bicycle facility types in this plan include bicycle boulevards, bike lanes, buffered bike lanes, separated bike lanes/cycle tracks, and shared use paths. Spot improvement toolboxes include traffic calming, signals, bike boxes, protected intersections, and mid-block crossings.

The project team used industry standards to identify facility recommendations for the core network to determine the best-fit facilities for both the core and long-term networks.

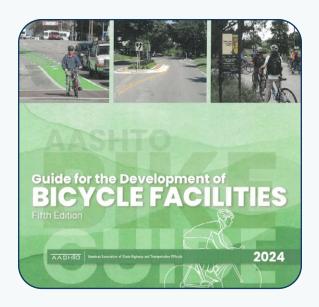
According to federal guidance, different bikeways suit different roads based on speed and traffic volume (see graphic on pages 56 and 57). Higher road speeds and traffic volumes require more separated facilities. Streets with lower road speeds and traffic volume may not require separation.

The facility types with speed limit and Annual Average Daily Trips (AADT) are meant to serve as overall guidance and not specific recommendations. Every location will have context sensitive elements such as on-street parking, presence of driveways, and other factors that will influence bike facility selection.

#### **Latest Guidance**

The project team referenced the following national guidance regarding bike facility selection:

- AASHTO Guide for the Development of Bicycle Facilities
- ♦ AASHTO Guide for Bike Crossings
- ★ FHWA Bikeway Selection Guide
- → FHWA Separated Bike Lane Guide
- → FHWA Separated Bike Lanes on High Speed Roads
- FHWA Road Diets
- FHWA Field Guide to Selecting Pedestrian
   Countermeasures at Uncontrolled Crossings
- FHWA Small Town and Rural Multimodal Networks
- ♦ NACTO Don't Give up at the Intersection
- ♦ NACTO Designing for All Ages and Abilities
- → NACTO Urban Bikeway Design Guide
- → USDOT Rail with Trails
- USDOT Guidebook for Developing Pedestrian and Bicycle Performance Measures
- MUTCD



## URBAN BIKEWAY DESIGN GUIDE



#### **Bicycle Boulevard Design Guidance**

#### **Bicycle Typologies**

The types of bicycle facilities recommended in this plan are illustrated on the next page.

The recommended vehicle speed ranges and volumes were guided by the 2025 National Association of City Transportation Officials (NACTO) **Urban Bikeway Design Guide**.

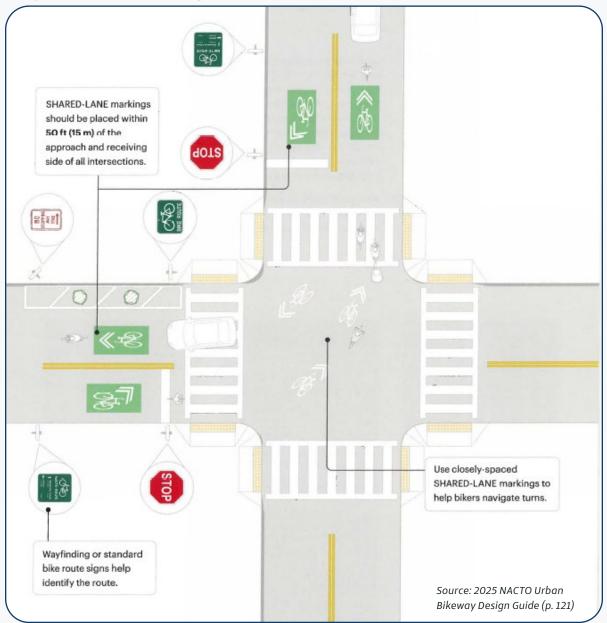
This guide provides recommendations for bicycle facilities for all ages and abilities.

The full guide provides guidelines and best practices for designing and implementing bike infrastructure. By following NACTO resources, the recommended facilities meet high standards.

#### **Design Flexibility**

The traffic volume and speeds listed on the next page are meant as preliminary guidance when locating a bicycle facility on a roadway. Vehicle volumes and speeds are not fixed. These can change over time through policy and design. In some cases, a proposed bicycle facility might fall short of the All Ages and Abilities traffic volume and speed requirements, but can still substantially reduce traffic stress for people on bikes.

Jurisdictions should not use the inability to meet the criteria to avoid implementing a bikeway.



Huntsville MPO Bike Plan Proposed Bike Network

### All Ages and Abilities Bike Facility Types

#### **Bicycle Boulevards**

Bicycle boulevards refer to a shared street between bikes and vehicles. Slow vehicle speeds, neighborhood type streets, and traffic calming combine to create bicycle boulevards. The sharrow markings communicate the presence of cyclists on the roadways.



Travel Lane

Appropriate Vehicle Speeds:

≤ 20 mph

Appropriate Daily Vehicle Volume:

< 2,000 AADT



#### **Bike Lane**

Bike lanes are a marked space on and along a length of roadway designated for use by bicyclists. As shown on the image below and other bike lane types, a painted bike symbol with direction of travel arrow is included.



Travel Lane

Appropriate
Vehicle Speeds:
≤ 20 mph

Appropriate Daily Vehicle Volume:

< 3,000 AADT



#### **Buffered Bike Lane**

A buffered bike lane provides a bike lane with additional space between the bike lane and the auto lane or parked cars. They are appropriate on moderate volume and moderate speed roads or roadways with high parking turnover.



Appropriate Vehicle Speeds:

≤ 25 mph

Appropriate Daily Vehicle Volume:

< 6,000 AADT



Least separated (lower traffic volume/speed scenarios)

Source: 2025 Urban Bikeway Design Guide



#### Cycle Tracks/ Separated Bike Lanes

Cycle tracks are a portion of a right-of-way that has been vertically and horizontally separated from traffic by cross-hatched paint with curbs, parking, or planting strips for the exclusive use of bicyclists (usually one-way protected lanes or two-way cycle tracks).



Appropriate Vehicle Speeds:

> 25 mph

Appropriate Daily Vehicle Volume:

> 6,000 AADT



#### Shared-Use Path: Side Path

Side paths provide bikeways that are physically separated from motorized vehicular traffic by an open space or barrier and are typically within the roadway right-of-way.



High Vehicle Speeds, With Limited Conflicts



### Shared-Use Path: Greenway

Shared use paths accommodate pedestrians and bicyclists, dog walkers, joggers, and so on through open space and/or parks. Path width is determined based upon expected volume of pedestrians and cyclists and diversity of users.



Appropriate
Vehicle Speeds:



Appropriate Daily Vehicle Volume:

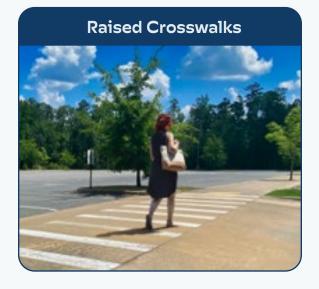




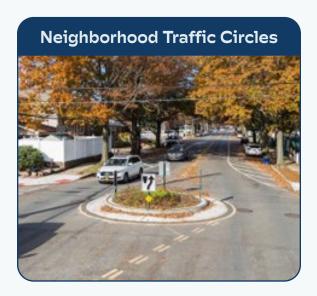
Most separated (higher traffic volume/speed scenarios)

Huntsville MPO Bike Plan Proposed Bike Network

### **Traffic Calming Toolbox**







#### **Traffic Calming Options**

This page includes a sample of traffic calming options and configurations. The traffic calming measures are meant to encourage slower vehicle speeds and create a more comfortable environment for bicycling. These treatments are recommended mostly for bicycle boulevards. The raised crosswalks and curb extensions are recommended crossing improvements.





### **Intersection Treatment Toolbox**







### Intersection Treatments of Bicycle Facilities

One very important part of bicycle facility implementation is the intersection crossing treatment to ensure continuity of the facility and increase visibility of bicyclists to motorists. The improvements shown here illustrate options for safer bicycle crossings at intersections to increase visibility, awareness, separation, and communication of bicycles on the road.





Huntsville MPO Bike Plan

Proposed Bike Network

### **Protected Intersections**

Protected intersections allow for safer bicycle and pedestrian movement and provide dedicated space for bicycle travel across the intersection. Striping and the geometric design of these intersections increase visibility of cyclists. Narrow curb radii encourage slower speeds. Mountable curbs can be installed to allow for emergency vehicle movement through the intersection. The following guidance provides conceptual recommendations for a protected intersection layout.

**Bikeway Setback:** 10' minimum in the shadow of the parking/loading lane, 14-20' preferred.' If < 12', include longer clear distances, and additional signal phasing or speed reduction strategies. Setbacks > 20' increase turn speeds.

Corner Island: Radii should be small enough that passenger cars are discouraged from turning > 10 mph. May have a mountable override area to accommodate large vehicles. Corner islands may also be channelization markings that are reinforced by mountable vertical elements such as modular speed bumps.

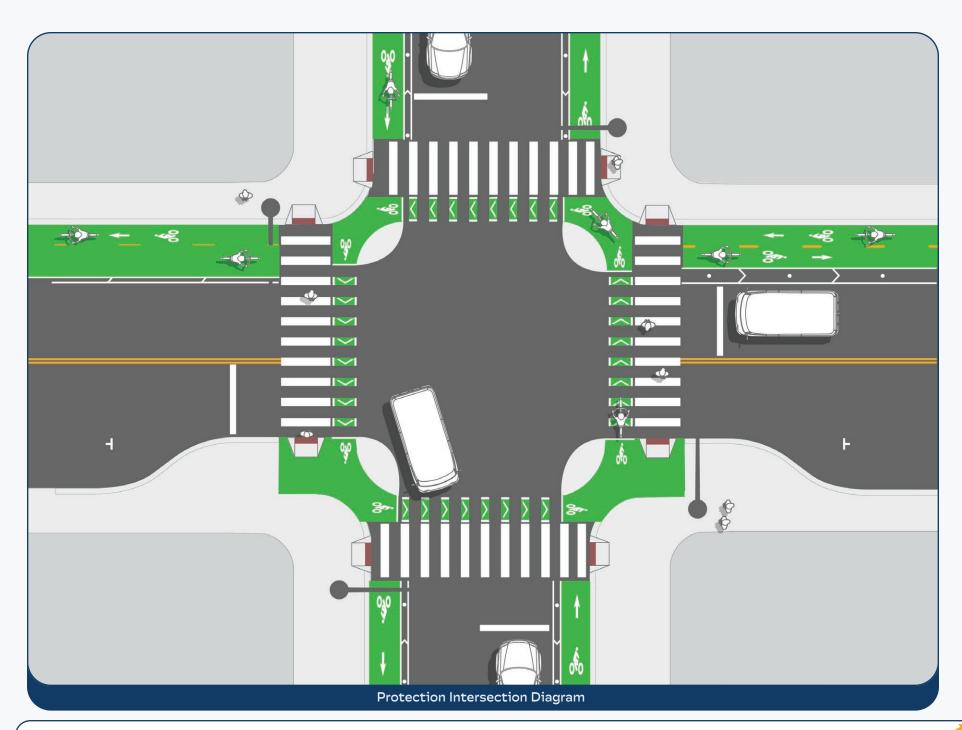


**Pedestrian Islands:** Wider islands support high volumes of people walking and biking, raising the person-capacity of the intersection. To serve as an accessible waiting area, the minimum width of a pedestrian island is 6'. The desired minimum width is 8'. If 6' or wider, detectable warning surfaces must be placed at both sides of the island to distinguish the bikeway from the sidewalk, and the island from the bikeway.

No Stopping/No Standing Zones: Long enough to allow approaching drivers and bike riders to see and recognize one another ahead of the intersection. 20-30' of curb before an intersection as a no-standing zone to increase visibility. Features that permit visibility, such as plants, seating, bike parking, and shared micromobility stations, can be placed here.

Accessible Signals, Bike Yield Line and Bike
Lane Crosswalk, and other Signs: "Yield Here to
Pedestrian" sign if yield teeth are used. See MUTCD
Chapter 4E, PROWAG, other national guidance, and
local standards for signal timing and location
guidance. Bike traffic should be expected to move
forward to the stop bar on any signal phase, and
pedestrian traffic should also be expected to cross
to the island on any phase. This operation may
be formalized with optional yield teeth on the
bikeway before the crosswalk. "Turning Vehicles
Yield to Bikes and Pedestrians" sign (R10-15) is
recommended where a signalized intersection
allows right turns concurrent with bicycle and
pedestrian movements (NACTO '24) (MUTCD 2000).

60



### The Proposed Bike Network

Maps on the following pages illustrate the envisioned bicycle network throughout the MPO. The types of bicycle facilities are shown on pages 56 and 57. Where possible, the network leverages slow speed and low traffic neighborhood streets as future bicycle boulevards. Bike lanes are proposed where speeds and volumes are appropriate for a designated striped facility. Separated cycle tracks are proposed in urban areas where there is potential space within the pavement for a safe bike facility.

Roadways with high traffic volumes and speeds include side paths where there is a need for full separation.

Shared use paths, buffered bike lanes, and bicycle boulevards are the main recommended facilities within the urban areas of the MPO. Visionary bikeways are located in more rural areas where a future shoulder, bike lane, or shared use path is recommended. The typology will depend on the land use context, future development, vehicle travel speeds, and volume.

Table 2. Bicycle Network Recommendation Mileage by Type

| Facility                                       | <b>Existing Miles</b> | Recommended Miles |
|--|-----------------------|-------------------|
| Greenways                                      | 61.6                  | 224.9             |
| Side Paths                                     | 36.8                  | 289.8             |
| Standard Bike Lanes                            | 9.7                   | 14.1              |
| Buffered Bike Lanes                            | 0.8                   | 68.5              |
| Bike Boulevards                                | 0                     | 133.4             |
| Protected or Separated Bike Lanes/Cycle Tracks | 1.3                   | 30.4              |
| Unclassified: Pending design study             | N/A                   | 31.5              |
| Visionary Bikeways                             | N/A                   | 265.1             |

#### How did we get there?

To develop the bike network, the project team evaluated every road across the MPO in terms of demand, safety, and feasibility for bicycle facilities. The types of facilities were chosen based upon the following factors:

#### **Roadway Context**

- Traffic volumes
- Speed limits
- Crash data and HIN

#### plus

#### **Anticipated Demand**

- → Strava heat map data
- ★ Short trip potential analysis findings
- ★ Live-Work-Play analysis findings

#### plus

#### Infrastructure or Past Planning

- Existing and previously proposed bike infrastructure and greenways
- Past plans and upcoming projects

#### plus

Public and Technical Stakeholder Feedback

#### Recommended Bicycle Network Facilities

#### Huntsville MPO Bike Plan

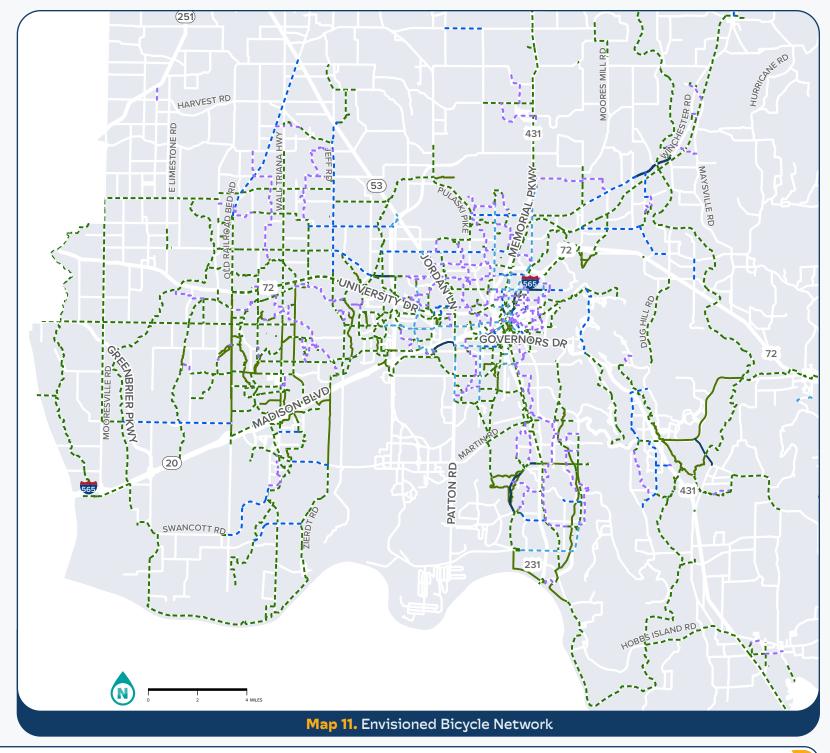
#### Recommendation

- Shared Use Paths
- Bike Lanes
- Cycle Tracks/Separated Bike Lanes
- Bike Boulevards

#### **Existing Facilities**

- Greenways/ Shared Use Paths
- Bike Lanes

#### **Basemap**



### **Recreational Connections**

The MPO recommendations are interconnected facilities that provide comfortable connections for bicycle commuters and recreational cyclists of all ages and abilities. While the MPO proposed bike network does not include all of the recreational routes from the 2020 Greenway Master Plan, it does provide access points to the existing and previously proposed shared use facilities as well as mountain biking trails that are geared toward the advanced recreational biker.

Some connections are direct links between greenways or shared use paths while some are accessed by shared road bike routes, which may include signage and appropriate shoulder widths.

Lines on Map 12 include existing bike facilities, such as bike trails, as well as previously proposed shared use paths. Many of the previously proposed greenways were ridge-top and river routes with some off-road proposals. Recreational long-distance routes also include difficult crossings of highways. The dots represent points of access and improvement to such recreational facilities. Input for these came from recreational long-distance cyclists in the Huntsville area.

#### **Notable Connections**

#### **Existing Greenway Connections**

- ♦ Indian Creek
- Bradford Creek
- → Aldridge Creek
- ✦ Heritage Plantation
- → Flint River
- Tennessee River
- ★ Redstone Gateway

#### **Proposed Trail Connections**

- Warpath Ridge
- Red Lizard Trail
- Arrowhead Trail
- → Spacewalk
- ✦ Fanning and Scout Trail
- → Bill and Marion Certain and Blevins Gap
- → Weatherly Mountain
- Sugar Tree Trail
- ♦ Wallace Mountain
- → Hawks Ridge
- ♦ NICA Trail
- → Wade Mountain
- → Devil's Race Track

- → Poison Ivy Trail and Chapman Mountain
- Driskell Trail
- → Terry Trail
- ✦ Hadley Hill Trail
- Lost Sink Trail
- → Tall Tupelo Trail
- Bankhead Parkway Trail
- ♦ Tollgate Trail
- Fagan's Spring Trail
- ✦ Elona/Chase Rail Trail
- Chaney Thompson Trailhead

#### **Bike Route Crossings**

- Singing River Trail Route
- Hobbs Island Road
- ♦ New Hope's Main Drive bridge
- → Jeff Road and Jordan Road Roundabout
- Meridianville Bottom Road crossing US
   431

**Bike the Rocket City** 

- → Old Hwy 431 crossing US 431
- → Sutton Road crossing US 431
- → Little Cove Road crossing US 72
- ♦ Research Park Boulevard



Proposed Bike Network

# Recreation Connections Access Points

#### Huntsville MPO Bike Plan

#### **Recommended Access**

- Access Points
- 6 Long-Distance Cyclist Input

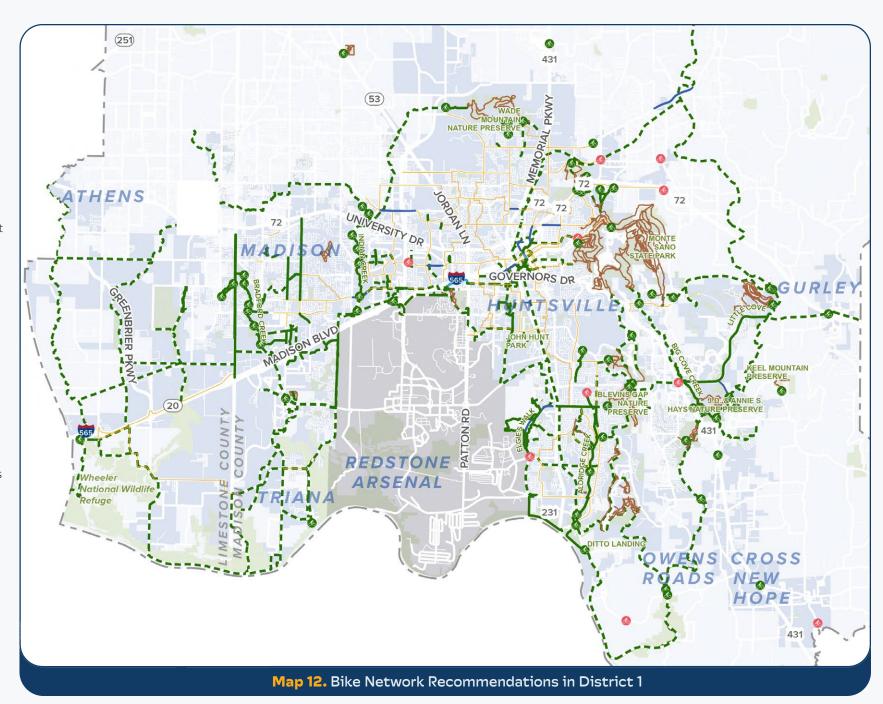
#### **Previous Proposals**

--- Previously Proposed Shared Use Paths

#### **Existing Facilities**

- Greenways/ Shared Use Paths
- Bike Lanes
- Cycle Tracks
- Bike Routes
- Natural Surface Trails

- MPO Boundary
- Rural MPO
- Parks/Open Space
- Municipalities
- Popular Destinations
- School
- College



### **Network by Bike Facility Type**

The implementation of the bicycle network will take on various forms depending on the recommended bike facility type. The maps on the following pages illustrate the layers of the network by bicycle boulevards, bike lanes, and shared use paths.

### Quick Wins: Bicycle Boulevards

Installing bicycle boulevards, in many cases on already-signed bike routes along low-traffic roads, is a quick win that may only necessitate new traffic calming measures and painted symbols. Bicycle boulevards include the following:

- Max Luther Drive to Oakwood Road
- North Rainbow
- Lockhardt Road to Trailing Creek Road
- Bike Route 30
- Bike Route 40
- Bike Route 49
- ♦ Bike Route 51
- ♦ Bike Route 55
- ♦ Bike Route 59
- ♦ Bike route 64
- ♦ Bike Route 70
- ♦ Bike Route 74
- ★ Lincoya Drive to Lewisburg Drive

#### **Bike Lanes**

At the same time, bicycle lanes can be implemented at the time when roads are resurfaced or when a road configuration is possible. Other significant bike lane projects to implement include:

- Mastin Lake Road
- → Blue Spring Road
- Triana Boulevard NW

#### **Shared Use Paths**

**Side paths**: Madison on Track includes an extensive shared use path network plan along major roadways. Huntsville side paths include east-west connections across Pinhook Creek and Memorial Parkway.

**River Greenways**: Huntsville MPO has numerous planned river greenways that can create recreational as well as commuting options for users of all skill levels.

**Rail Trails**: Aside from the Chase-Elora Rail Project, the L&N rail-with-trail is a visionary project with the potential to bridge the Northern Huntsville Greenway to the Tennessee River.

#### **Major Spines**

The proposed bicycle facilities in this plan connect into major walking and bicycling spines that cross the MPO. Major spines under development or envisioned include:

**Singing River Trail**: Creates an east-west regional trail that follows the Tennessee River with a detour through Downtown Huntsville. The trail is proposed to connect six counties in North Alabama.

**Madison on Track**: Proposes east-west connections to Athens along Huntsville Browns Ferry Road and Huntsville along Old Madison Pike.

**Holmes Avenue:** Serves as a major east-west corridor with cycle tracks and Complete Streets improvements that connect UAH with Downtown.

**PARC Project**: Connects Big Spring
Park and Downtown with Lowe Mill across
Memorial Parkway and Pinhook Creek.

**Chase-Elora Railway**: Follows an old rail corridor to create a greenway through northeastern Madison County. The corridor connects to Huntsville via the Meek, Alabama A&M, and North Huntsville future greenways.



#### Regional Initiatives & Recommended Bicycle Boulevards

#### Huntsville MPO Bike Plan

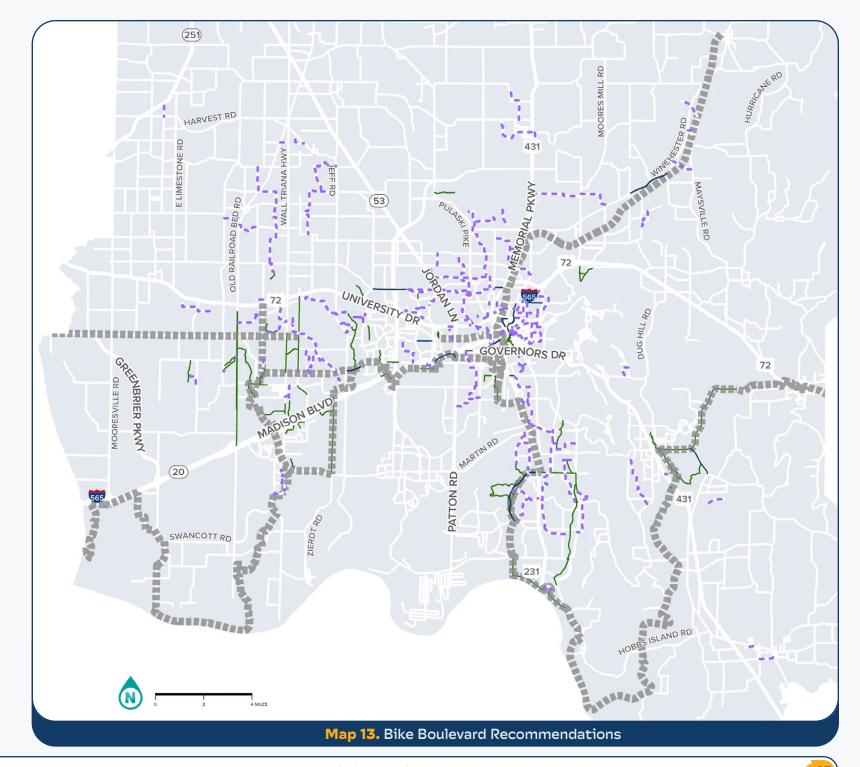
#### Recommendation

- Bike Boulevards
- ■■■ Regional Spines

#### **Existing Facilities**

- Greenways/ Shared Use Paths
- Bike Lanes

#### **Basemap**



#### Regional Initiatives & Recommended Bicycle Lanes

#### Huntsville MPO Bike Plan

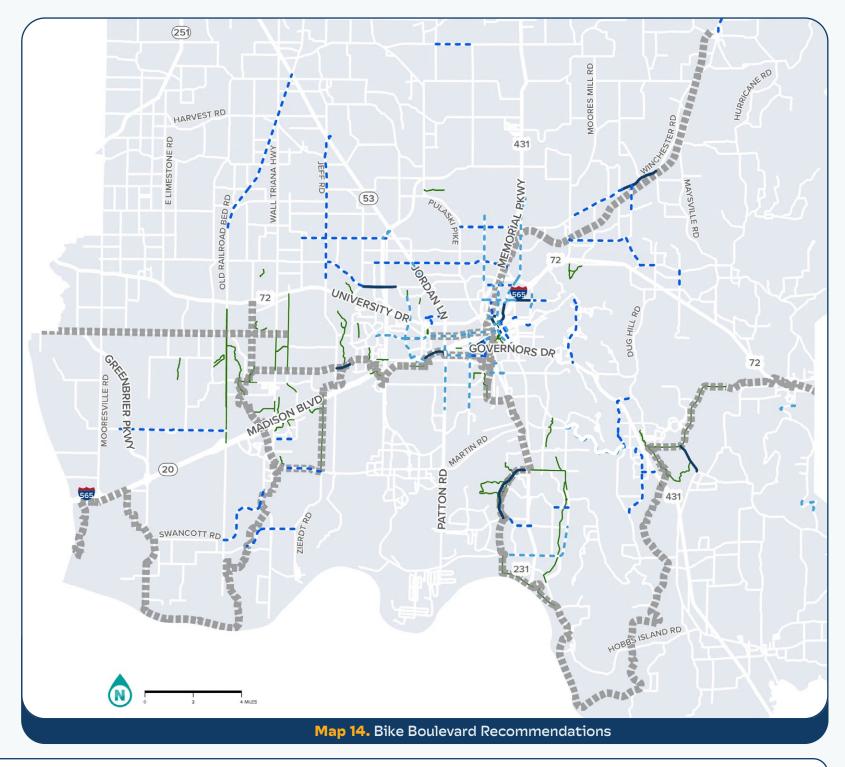
#### Recommendation

- Bike Lanes
- Cycle Tracks / Separated Bike Lanes
- Regional Projects

#### **Existing Facilities**

- Greenways/ Shared Use Paths
- Bike Lanes

#### Basemap



#### Regional Initiatives & Recommended Shared Use Paths

#### Huntsville MPO Bike Plan

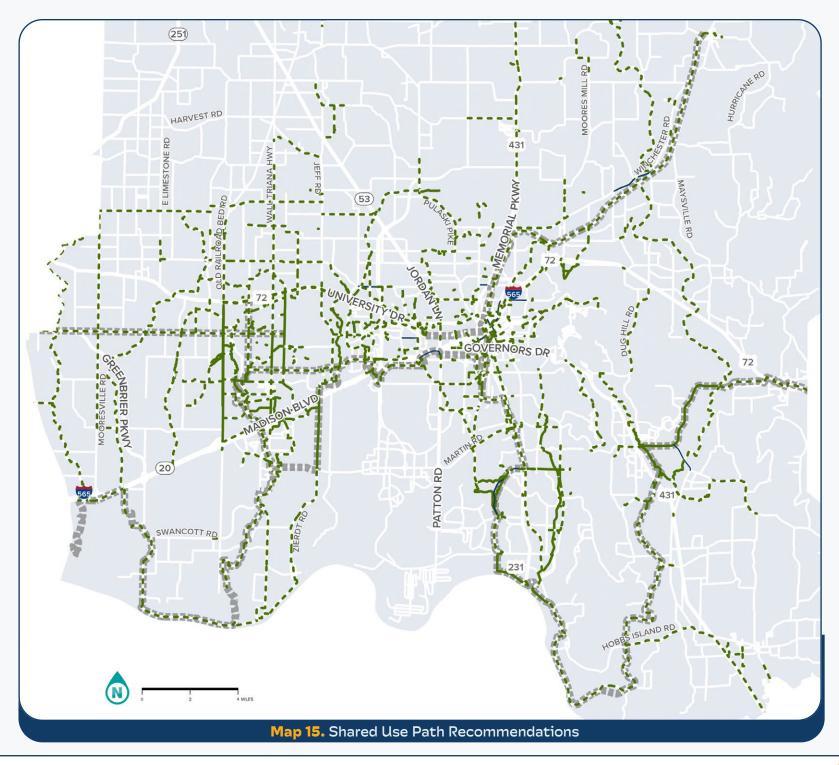
#### Recommendation

- - Shared Use Paths
- Regional Spines

#### **Existing Facilities**

- Greenways/
  Shared Use Paths
- Bike Lanes

#### **Basemap**



# Bicycle Network HSV City Council District 1

#### Huntsville MPO Bike Plan

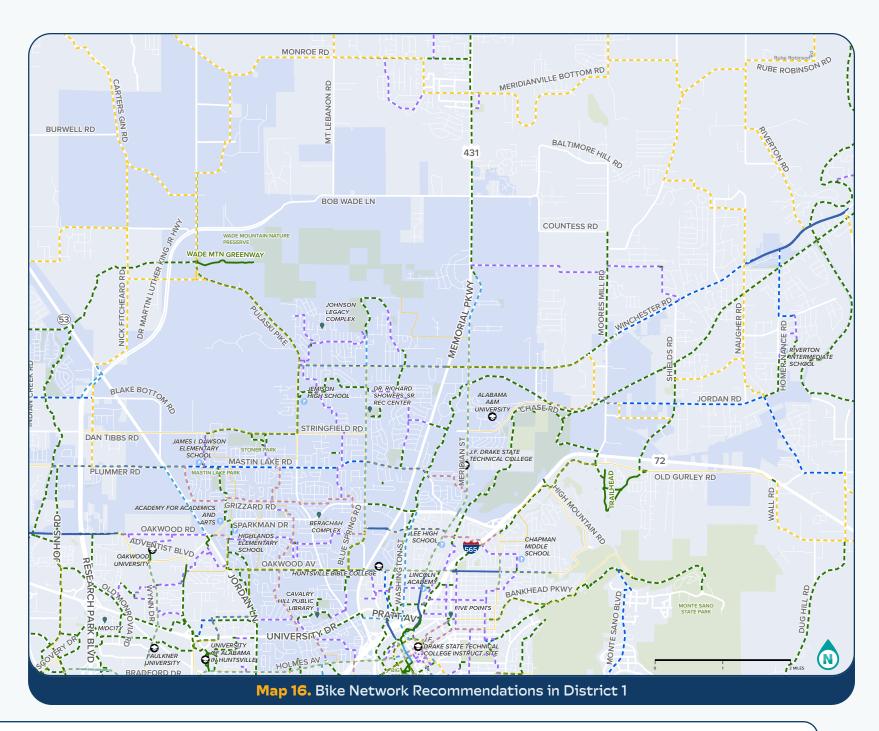
#### Recommendation

- --- Shared Use Paths
- --- Bike Lanes
- --- Cycle Tracks (Protected Bike Lanes)
- --- Bike Boulevards
- --- Visionary Bike Route
- --- Unassigned Bike Facility TBD

#### **Existing Facilities**

- Greenways/ Shared Use Paths
- Bike Lanes
- Cycle Tracks
- Bike Routes

- MPO Boundary
- City Council District
- Parks/Open Space
  - Municipalities
- Popular Destinations
- School
- College



# Bicycle Network HSV City Council District 2

#### Huntsville MPO Bike Plan

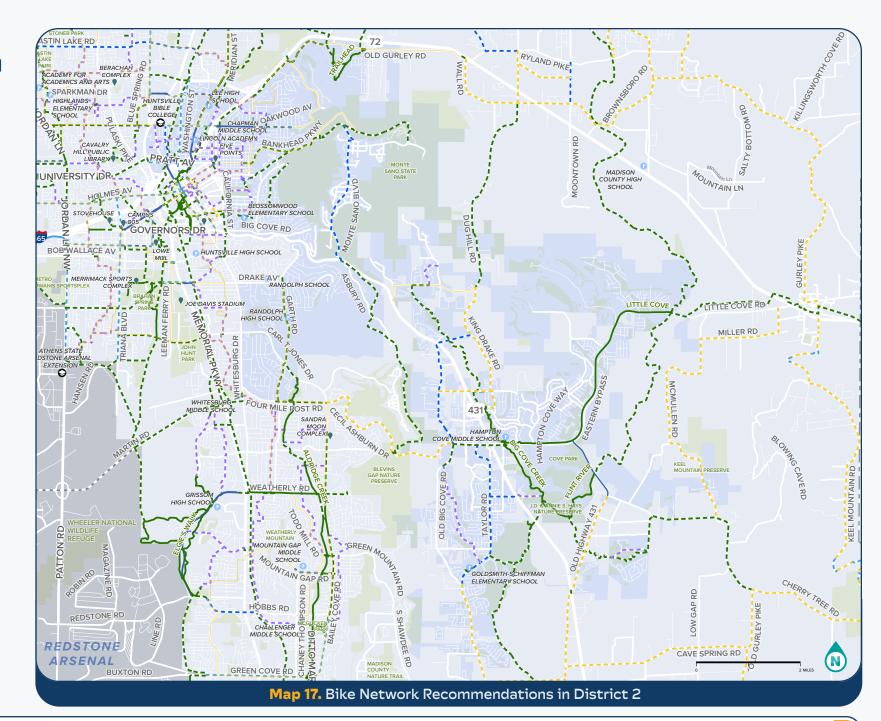
#### Recommendation

- --- Shared Use Paths
- --- Bike Lanes
- Cycle Tracks (Protected Bike Lanes)
- --- Bike Boulevards
- --- Visionary Bike Route
- --- Unassigned Bike Facility TBD

#### **Existing Facilities**

- Greenways/ Shared Use Paths
- Bike Lanes
- Cycle Tracks
- Bike Routes

- MPO Boundary
- City Council District
- Parks/Open Space
  - Municipalities
- Popular Destinations
- School
- College



# Bicycle Network HSV City Council District 3

#### Huntsville MPO Bike Plan

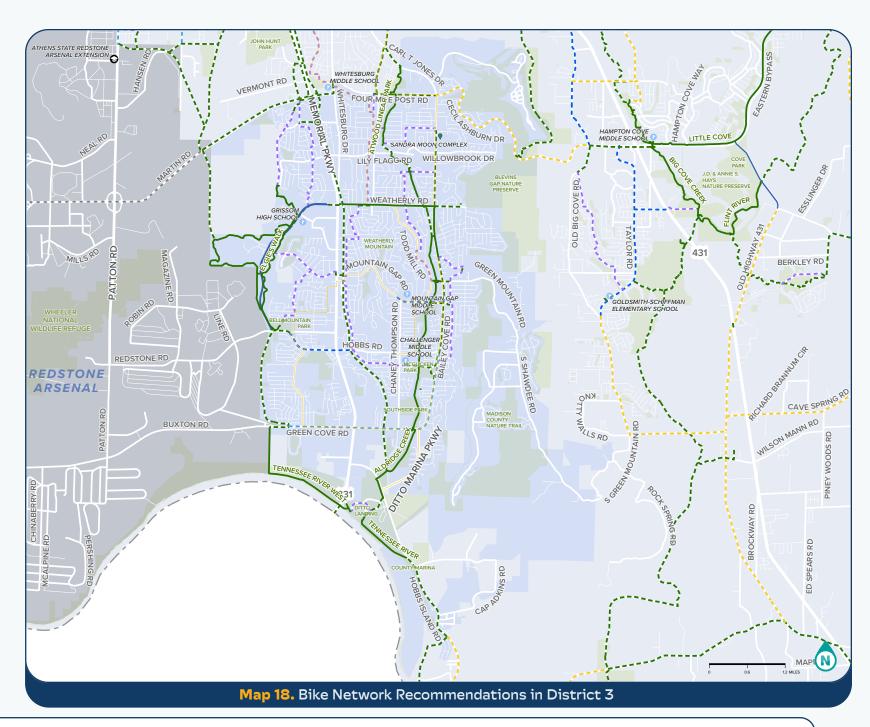
#### Recommendation

- --- Shared Use Paths
- --- Bike Lanes
- --- Cycle Tracks (Protected Bike Lanes)
- --- Bike Boulevards
- --- Visionary Bike Route
- --- Unassigned Bike Facility TBD

#### **Existing Facilities**

- Greenways/ Shared Use Paths
- Bike Lanes
- Cycle Tracks
- Bike Routes

- MPO Boundary
- City Council District
- Parks/Open Space
  - Municipalities
- Popular Destinations
- School
- College



# Bicycle Network HSV City Council District 4

### Huntsville MPO Bike Plan

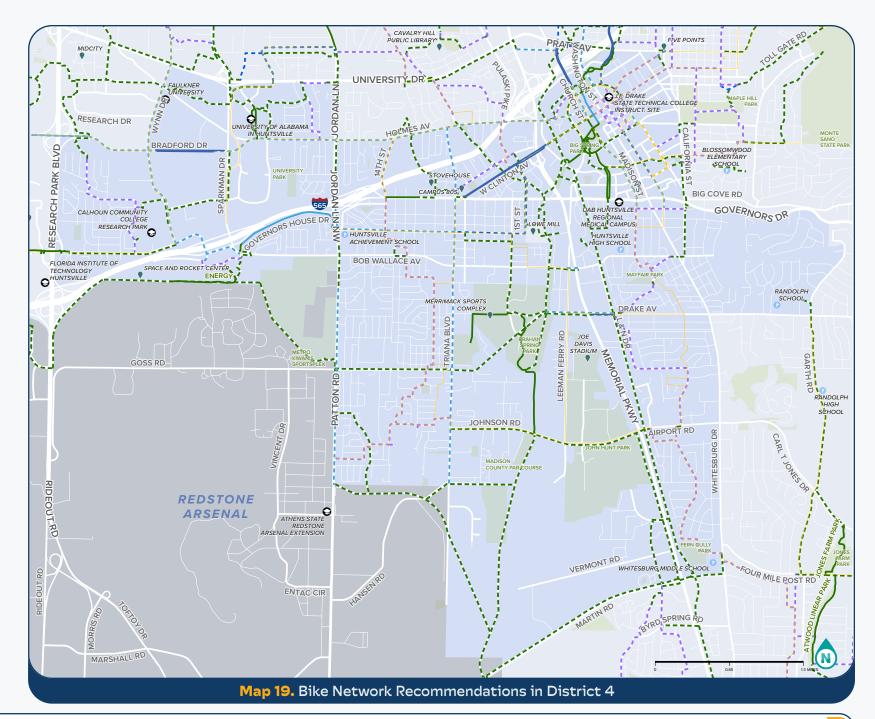
### Recommendation

- --- Shared Use Paths
- --- Bike Lanes
- Cycle Tracks (Protected Bike Lanes)
- --- Bike Boulevards
- --- Visionary Bike Route
- --- Unassigned Bike Facility TBD

### **Existing Facilities**

- Greenways/ Shared Use Paths
- Bike Lanes
- Cycle Tracks
- Bike Routes

- []] MPO Boundary
- City Council District
- Parks/Open Space
  - Municipalities
- Popular Destinations
- School
- College



# Bicycle Network HSV City Council District 5

### Huntsville MPO Bike Plan

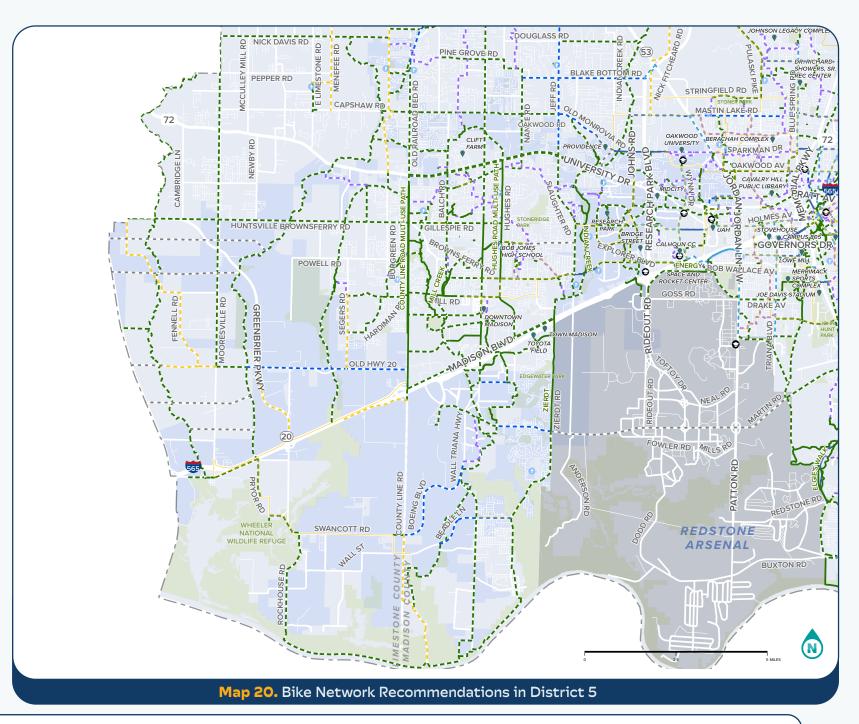
### Recommendation

- Shared Use Paths
- Bike Lanes
- Cycle Tracks
- (Protected Bike Lanes)
  - Bike Boulevards
  - Visionary Bike Route
- Unassigned Bike
- --- Facility TBD

### **Existing Facilities**

- Greenways/ Shared Use Paths
- Bike Lanes
- Cycle Tracks
- Bike Routes

- [\_\_] MPO Boundary
- City Council District
- Parks/Open Space
- Municipalities
- Popular Destinations
- School
- College





# Bicycle Network City of Madison

### Huntsville MPO Bike Plan

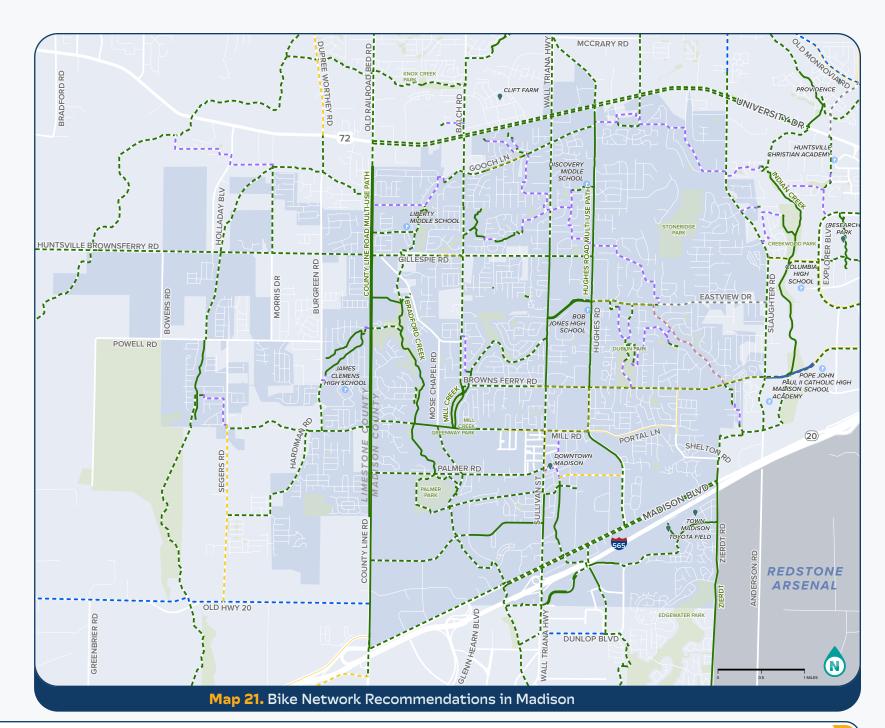
### Recommendation

- --- Shared Use Paths
- --- Bike Lanes
- --- Cycle Tracks (Protected Bike Lanes)
- --- Bike Boulevards
- --- Visionary Bike Route
- --- Unassigned Bike Facility TBD

### **Existing Facilities**

- Greenways/ Shared Use Paths
- Bike Lanes
- Cycle Tracks
- Bike Routes

- MPO Boundary
- City Limits
  - Parks/Open Space
  - Municipalities
- Popular Destinations
- School
- College



# Bicycle Network Rural MPO

### Huntsville MPO Bike Plan

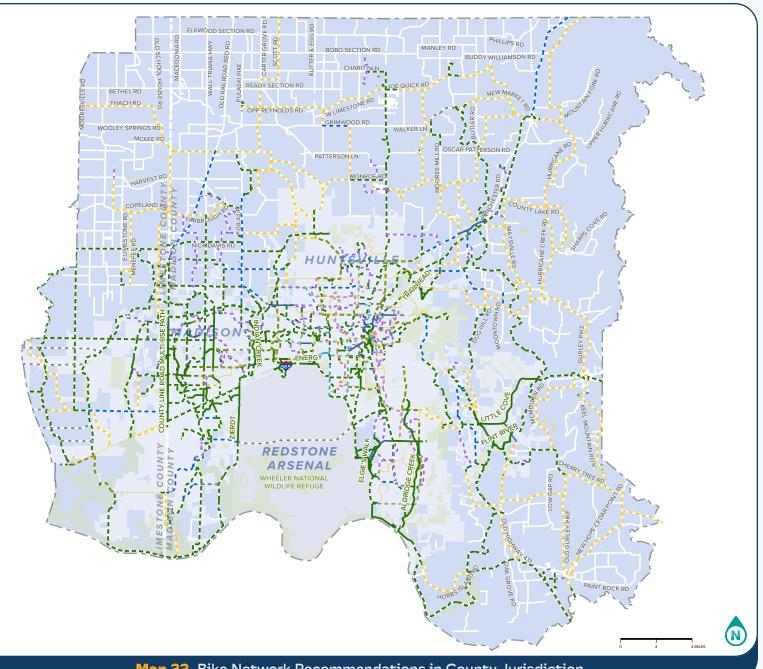
### Recommendation

- --- Shared Use Paths
- --- Bike Lanes
- --- Cycle Tracks (Protected Bike Lanes)
- --- Bike Boulevards
- --- Visionary Bike Route
- --- Unassigned Bike Facility TBD

### **Existing Facilities**

- Greenways/ Shared Use Paths
- Bike Lanes
- Cycle Tracks
- Bike Routes

- MPO Boundary
- Rural MPO
- Parks/Open Space
  - Municipalities
- Popular Destinations
- School
- College







# **Design and Infrastructure**

Establishing a safe, comfortable, and connected bicycling network will require bike lanes, cycle tracks, side paths, and intersection improvement to encourage bicycling trips by residents and visitors and support bicycling to everyday destinations. Providing support elements, including bike parking and storage at popular destinations and bike racks on buses, signals that bicycling is an option to get around town and makes it a convenient transportation option.



### **Strategy 1:**

### Use the latest design guidance to support safe and comfortable bike facilities

- ◆ Use innovative designs for bike lanes, cycle tracks, and bicycle boulevards and implement safety improvements using guidance from organizations such as the National Association of City Transportation Officials (NACTO) and the Institute of Transportation Engineers (ITE), as well as applicable state and federal design guidelines, including the Safe Systems Approach.
- Continue to add bike detection at intersections and explore new technologies.
- Incorporate bike boxes, striping, and painting at intersections to signal bike crossings.
- Design for appropriate and context-sensitive safe crossings and visibility of bicyclists at high-volume intersections.
- Install traffic calming along bike routes to create bicycle boulevards.
- Continue to develop priority segments of the Greenway Master Plan and coordinate top priority bike segments with the yearly plan update.



Broglan Branch could serve as a greenway connection between the Clinton bike lanes and the future Holmes Complete Streets improvements. Developing future greenway connections throughout the MPO will continue to build out a safe bicycling network.



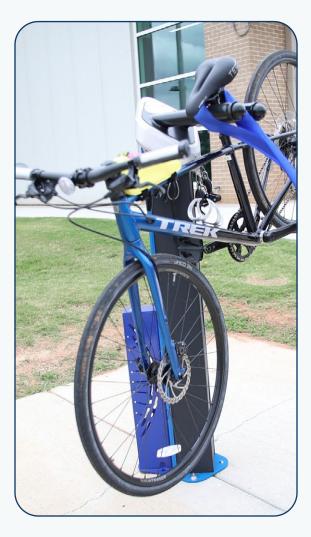
The existing Bike Route #59 crosses Airport Road. Improving the crossing with bike detection, striping, and pavement would increase awareness among drivers of this important crossing.

### **Strategy 2:**

### Provide bike parking and support elements

- Explore funding or subsidy opportunities to support a bike parking retrofit program, enabling existing private developments to install or upgrade bicycle parking facilities. A bike parking request program could also be established to identify high-demand areas and fund the installation of public bike racks or lockers. Funding sources may require that these facilities be located in publicly accessible spaces to ensure broad community benefit.
- Collaborate with school boards to establish school bike parking and fund bike parking through new school developments.
- Add bike parking and fix-it station improvement request forms on MPO agency websites where residents can request bike parking to be placed at destinations of their choice.





City of Madison staff celebrate the installation of two new bike repair stations located in Town Madison at the Wellness Center and near Toyota Field. These are located along the Singing River Trail and support cyclists when they need to fix a flat, adjust brakes, or tighten bolts. (Photo source: City of Madison)

# Jarid shared his thoughts on the bike connectivity to transit. He thought the bus routes

were well located, but suggested more frequent service and more bike racks on buses.

### **Strategy 3:**

# Integrate the bike network with transit

- Locate and prioritize bikeways that safely facilitate first- and last-mile connections to transit.
- Install secure long-term bicycle parking at transit stations.
- Work with Orbit and transit providers throughout the MPO to increase the amount of buses with racks that accommodate three bicycles.

### Strategy 4:

### Provide wayfinding and signage

- Develop and implement a comprehensive wayfinding signage system to improve navigation for cyclists, building on the signage elements already in place. Signage could include distance markers and vicinity maps highlighting major destinations and multimodal routes (up to three miles for biking).
- Expand the bike network system with increased route signing.

# Safety

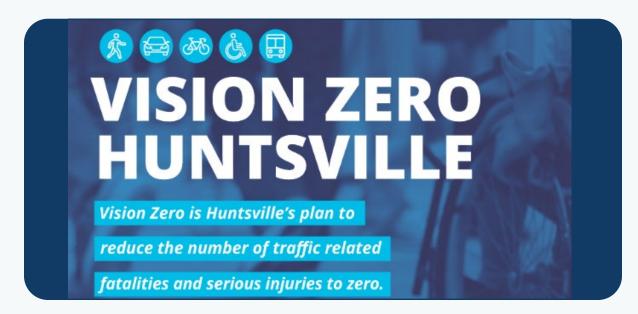
The bike plan envisions a safe system of bike facilities that offers options to bike to everyday destinations. Bicyclists are some of the most vulnerable road users and require safe roadway corridors and intersection crossings. There are efforts underway in the region to address safety. To continue to grow the bike network and address safety concerns, collaborating with safety initiatives and building a Safe Systems approach for all roadway users will help implement a safe bike network. Establishing an MPO-wide Safe Routes to School (SRTS) program will connect students to schools through safe routes and education.

### Strategy 1:

# Collaborate with the Vision Zero effort and establish a regional Safe Systems approach

- Integrate network development priorities with targeted safety enhancements, ensuring alignment with Vision Zero Huntsville initiatives, public outreach, and regional efforts. Regular coordination with Vision Zero Huntsville will support a unified, data-driven approach to community engagement and safety education.
- Establish an MPO-wide safety initiative to comprehensively address safety for all modes of travel. As the Huntsville region continues to grow, there is an opportunity

- to adopt a Safe Systems Approach for all roadway users on new roadways and developments.
- Fund safety education programs for people driving, walking, and biking that encourage safe behaviors.
- Create a template resolution authorizing school zone speed limits as low as 15 mph for MPO agencies to adopt.
- Monitor crash factors and provide targeted multimodal education on transportation safety best practices.



### **Strategy 2:**

# Integrate a Safe Systems approach to roadway design

- Collaborate with traffic engineering staff and local agency departments to develop a bike safety warrants approach to identify when and why bike safety improvements are necessary and proactively implement safety countermeasures along corridors with bike facilities and intersections with bike crossings.
- Track and evaluate bike crashes and create a database for residents to record near misses.

### **Strategy 3:**

### Establish a Safe Routes to Schools (SRTS) program

- Apply for Safe Streets and Roads for All (SS4A) funding to conduct SRTS planning.
   Focus SRTS planning efforts along and near HIN corridors around schools.
- Collaborate with school representatives to identify key student travel routes and pursue funding opportunities to expand the Huntsville region's bikeway network in proximity to schools. Coordinate safety outreach initiatives to enhance messaging and effectively engage students and families through school-based channels.
- Identify and prioritize pedestrian and bicycle safety improvements in the Capital Improvement Program (CIP), focusing on areas pear schools.
- Support school districts by providing bicycle racks to public schools or expanding bicycle parking where additional capacity is needed.
- Implement traffic calming and speed reduction measures to promote safer driving behavior in school zones.

# Promotion, Education, and Programs

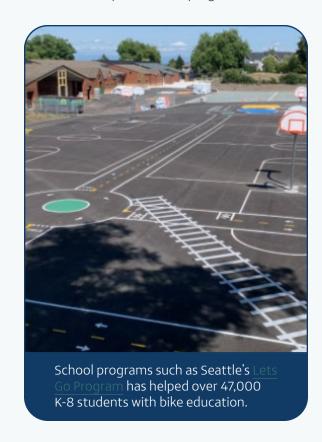
Building the bike network infrastructure will be key to creating a bikefriendly region. At the same time, increased awareness of bicycling as a form of transportation and educational programs encourage and support bicycling as an attractive, fun, and convenient way to get around. Education for motorists and bicyclists and supportive programs create a culture that outlines safe behavior and bridges gaps between various road users

### Strategy 1:

# Promote biking through encouragement and programs

- Establish a Bicycle Friendly Business Program and supporting events like Bike to Work
   Day to encourage active transportation.
   The MPO and its partner agencies can lead by example by promoting alternative commuting options for its own employees.
- Collaborate with the Bicycle Advisory Safety Committee, Spring City Cycling Club, and other bike organizations to promote National Bike to Work Day, International Bike to School Day, and others. Support their efforts through promotion on agency communication outlets, press releases, and other media.
- Offer financial incentives for individuals who choose to walk or bike instead of driving during a designated period. Additionally, non-monetary rewards—such as entry into a prize drawing—can be effective in encouraging participation.
- Collaborate with Mid City, the Orion, the Von Braun Center, Toyota Field, and other major event locations to promote biking to major

- events and create incentives. Partner with local bike shops to provide designated routes and rental bicycles.
- Encourage bike commuters to record their trips on Strava and create an incentive to record the highest number of trips or mileage traveled. Create social media content to promote the program.





The City of Huntsville's See and Be Seen program provides important guidance regarding safe biking and links to the current state and local ordinance.



### Strategy 2:

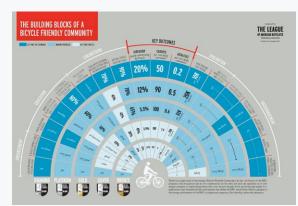
# Develop an educational program for bicyclists and drivers

- Sponsor or host a range of adult, family, and youth bicycling skills classes. Partner with the YMCA, school districts, Spring City Cycling Club, and other partners to create a bike-focused curriculum.
- Develop a driver education program and safety campaign to educate drivers when, where, and how to look for bicyclists.
- Continue promotion of the City of Huntsville's "See and Be Seen" program and expand the program's reach across the MPO. Consider promotion of the website and resources through social media engagement.

### Strategy 3:

# Promote the Huntsville MPO as a bicycle friendly community

- The Huntsville MPO partner agencies can pursue a Bicycle Friendly Community designation through the League of American Bicyclists, which recognizes cities that actively promote bicycling and safety. The application process and feedback serve as valuable tools for evaluating progress and enhancing bike-related education and encouragement efforts.
- Collaborate with the City of Huntsville, City of Madison, and Madison County to create a bike-focused page on their websites and create promotional materials such as bike maps.



# **Equal Access for All**

The Huntsville MPO region seeks to expand the bike network to provide essential transportation and access to recreation to all residents. Hearing from residents in underserved communities and building trust will be essential to understanding community members' needs. By identifying gaps in the bike network and actively engaging the community, the MPO can strategically provide bike facilities in communities that may rely on bicycling to access jobs, healthcare, services, recreation, and education.



At the yearly Bikes or Bust event, local radio talk show host Mojo Jones is lifted into a platform in the air off Memorial Parkway to collect bikes for kids in foster care at Christmas. Volunteers, including the Army National Guard, support by assembling bicycles. In 2023, the event collected 850 bicycles.

### Strategy 1:

### Provide safe and highquality bike infrastructure in underserved communities

- Create a community ambassador program that provides information for local leaders to gather information from residents about where bicycling infrastructure is needed. Provide compensation to local ambassadors to host meetings and share feedback from their communities.
- Track where bike facilities are being implemented and ensure that projects are distributed throughout the MPO.

### **Strategy 2:**

# Provide resources to the underserved population

- Create a program to provide bikes to students in underserved communities.
- Establish a bike donation program to provide families in underserved communities with bicycles, helmets, locks, and lights.
- Subsidize or provide free bicycle equipment to residents who qualify for federal or local assistance programs. Create a rebate program for the purchase of e-bikes for lowincome residents.
- Provide transit passes to residents in underserved communities and provide resources to show how to connect to essential destinations through biking and transit.

# **Policy Recommendations**

# Commitment to Plan Implementation

As a first step, a way to demonstrate commitment will be plan adoption by MPO partner agencies and the addition of this plan to major comprehensive planning documents including Madison on Track and the City of Huntsville's Big Picture Plan. Adoption by the City of Huntsville, City of Madison, Town of Triana, and Town of New Hope City Councils and the Madison County Commission supports plan implementation and future resources.

### **Supportive Policy**

- Support all MPO jurisdictions and groups with creating and adopting Complete
   Streets and Vision Zero policies and targets.
  - \* Work with local agency departments to create a Complete Streets checklist for projects at various stages (new construction, reconstruction, resurfacing, and rehabilitation.
- Support the development of a policy to include shared-use paths, bike boulevards, sidewalks, and other bikeways as part of existing and future development agreements.

- Require bike parking and storage at schools, libraries, and other public services.
- Create bicycle and pedestrian connectivity ordinances/cul-de-sac greenway
   easements to facilitate neighborhood connections between dead end streets and cul-de-sacs. Assess and update subdivision regulations as needed.
- Collaborate with Madison County to identify context-sensitive road shoulder requirements with roads that have anticipated demand for bicycle travel.
- Require large-scale new developments to include **pedestrian and bicycle counts** as part of their transportation assessments.

  Broaden traffic data collection efforts by:
  - \* Conducting pre- and post-project counts of pedestrian, bicycle, and vehicle activity on all roadway improvement projects.
  - \* Exploring the use of **automated counting technologies** to monitor key pedestrian and bicycle corridors. These technologies—such as in-pavement loop detectors for bicycles and infrared sensors for shared-use paths—can provide accurate, continuous data to support planning and evaluation efforts.

### **Electric Bikes**

Electric bikes (e-bikes) are continually growing in popularity and offer residents and visitors who face health challenges and other disabilities the ability to ride a bike and travel farther distances. Some cities, including Atlanta, offered rebates in 2024 between \$1.500 to \$2.000 to assist low-income residents purchase an e-bike. At the same time, bikes with fast speeds do create the potential for user conflicts, especially on popular shared use paths. This can be proactively addressed by signage, bike path user education, and policy. Develop an electric bike (e-bike) policy that outlines speed limits, off limit riding zones, helmet requirements, and any limitations on the type of e-bike (Class 1, 2, and 3) on streets and paths.



Photo source: People for Bikes

## **Maintenance**

Ensure regular maintenance of sidewalks, bikeways, and trails through maintenance agreements to enhance user experience, safety, and comfort.

- Collaborate with MPO partners to create a maintenance schedule and checklist for bike lanes and facility maintenance.
- Create an online public reporting system (similar to or integrated with SeeClickFix program) to provide the public with a way to report bike facilities in need of maintenance.

### Signage maintenance

- Create an inventory of existing signage and record condition and year installed. Establish a system to update the inventory list biannually and inspect signage.
- **\*** Establish a checklist for inspecting signage.



### Road sweeping

- Check maintenance agreements with ALDOT and partner agency maintenance policies to ensure roadway sweeping includes bike lanes.
- On roads with wide shoulders and those designated as bike routes, such as Cecil Ashburn Drive, check that roadway maintenance includes shoulder sweeping and regular landscape maintenance to keep the shoulder clear of grass and vegetation.

The green bike lane paint at Clinton Ave and the Memorial Parkway Southbound ramp is worn and shows signs of repeated stopping and breaking. Bike lane striping will need maintenance on an as-needed basis, especially near intersections.

### Repaving

- Ensure the bike detection is functional after repaving and re-paint the bike detection symbols.
- Repave and restripe bike lanes and intersection striping. Assess the condition of bike lane striping at least annually.



Recent repaying at the intersection of Governors Drive and Gallatin Street. As part of repaving efforts, check if bike detection symbols need to be repainted and that the bike detection is working properly.



for riders in the bike lane.

# **Evaluation Programs and Performance Tracking**

# **Project Effectiveness** and Communication:

- Conduct before and after studies of new bicycle and pedestrian facilities to measure effectiveness.
- Measure bike counts. Utilize a variety of data collection methods, such as automated and mobile counters. This approach will generate long-term data on bicycle activity at specific locations and help evaluate the impact of changes to the community's roadway and bikeway networks.
- Gather testimonials from bicyclists. Share success stories through media outlets and with bike advocacy organizations.

### **Safety Concerns**

- Annually assess where, when, and why bike crashes are happening.
- Identify if bike crash trends are decreasing and update project priorities to reflect safety needs.
- Update the bike HIN with yearly data from data from the ALDOT CARE database.



# Data Gathering and Yearly Assessment

- Develop an annual or semi-annual Pedestrian and Bicycle Report Card to monitor progress toward the goals, policies, and action items outlined in this Plan. This report should incorporate data from community and workforce surveys, pedestrian and bicycle counts, and summaries of collision and hospital records to provide a comprehensive overview of active transportation trends and safety.
- → Gather Strava Metro data to assess where bike commuting trips are happening.

# **Project Tracking and Strategic Planning**

- Create an online map with the bike network and bi-annually update the map with completed projects or adjusted segments.
- Share bike facility existing and planned facilities GIS data between the City of Huntsville, City of Madison, Madison County, and towns.



# We're in this together!

+

To establish a safe. comfortable, and connected bicycling network, it will require bike lanes, cycle tracks, side paths, and intersection improvements to encourage bicycling trips by residents and visitors and support bicycling to everyday destinations. Providing support elements, including bike parking and storage at popular destinations and bike racks on buses, signals that bicycling is an option to get around town and makes it a convenient. transportation option.

### **Huntsville MPO Agencies**

City of Huntsville
City of Madison
Madison County
Town of Triana

Town of New Hope

### **Regional, State, and Federal Agencies**

Alabama Department of Transportation (ALDOT)

Redstone Arsenal

Wheeler National Wildlife Refuge (WNWR)



### **Local Agency Departments**

Engineering

Traffic Engineering

**Public Works** 

Capital Projects

**Public Transportation** 

Utilities

Communications

### **Advisory Boards**

Bicycle Advisory and Safety Committee (BASC)

MPO Community Advisory Committee

Madison City Disability Advisory Board

Active Living Advisory Committee

Millennial Advisory Committee





### **Local Nonprofits and Advocacy Groups**

Spring City Cycling Club (SCCC)

Huntsville Urban Bike Share Co-op (HUBS)

Singing River Trail

Land Trust of North Alabama

Huntsville Area Mountain Bike Riders (HAMR)

Madison Greenways and Trails

Huntsville Tennessee Valley AMBUCS



### **Economic Development and Tourism**

Huntsville Area Assoc. of Realtors and Valley MLS

Ditto Landing

Launch2035

Downtown Huntsville

Downtown Madison

### **Schools and Community Organizations**

Huntsville City Schools

Boys & Girls Club of North AL

First Stop Organization

Family Services Center

Higher Education

University of Alabama at Huntsville (UAH)

Alabama Agricultural and Mechanical University (AAMU)

Cummings Research Park (CRP) / Chamber/Cyber School

Oakwood University

### **Foundations**

Community Foundation of Greater Huntsville

The Huntsville Hospital Foundation

United Way of Madison County Incorporated

### **Wellness and Healthcare**

Huntsville Hospital
Crestwood Medical Center

Huntsville MPO Bike Plan Implementation Strategy

# Internal and Cross-Agency Collaboration

# Capacity Building and Collaboration

- Continue to build capacity through local partnerships.
- Continue the quarterly meetings with BASC and establish an internal bike committee to communicate next steps to the broader MPO and partner agencies. The committee will support the non-infrastructure components of this Plan. This committee would focus on fostering partnerships and advancing recommendations that rely on community engagement, outreach, and coordination.
- Continue the quarterly Complete Streets
   Coalition meetings and create a similar program for MPO partner agencies to meet and collaborate on bike projects.
- Continue to support local advocates and bike events such as the Bike or Bust event through volunteer support and media promotion.



Huntsville Utilities Volunteer Council supports the annual WZYP's Bikes or Bust campaign. In 2024, they delivered 38 brand new bikes to the Kids to Love Foundation.

# Identify Opportunities to Collaborate with ALDOT

- Create a partnership with the Alabama Department of Transportation (ALDOT) to identify acceptable proven bicycle safety countermeasures along state routes through a Memorandum of Understanding.
- Meet quarterly with ALDOT to identify projects under development or those that will be added to the Statewide Transportation Improvement Program and other ALDOT projects.

# **Create New Internal Tools and Processes**

- Identify staff roles for sections of the plan implementation including promotion, bike route updates, and crash data review.
- Develop a Complete Streets implementation toolkit and/or checklist to provide staff with guidance when to implement bike facilities for various project types including new construction or reconstruction, resurfacing, restoration, and/or pavement rehabilitation.
- Establish quarterly meetings with engineering, capital projects, and public works to review upcoming projects and road resurfacing schedules.
- Review the capital budget process for opportunities to support demonstration projects and standalone bicycle projects.
- Collaborate across city departments to routinely identify and integrate new or improved bike facility improvements into all standard maintenance.



# **Funding Strategies**

### **Yearly Capital Budgets**

- Collaborate across local agency departments to identify projects to incorporate into yearly budgets.
- Work with Traffic Engineering to locate proven safety countermeasures for bicycle safety when making improvements to roadways.

### **Grants**

- Meet quarterly to identify grant opportunities and collaborate on applications. Annual state programs that support bicycling infrastructure include the Transportation Alternatives Program.
- Create an internal program to track federal, state, and local grant opportunities.

# **Development Fees and New TIF Districts**

- Develop a program for a land development fee and utilize funds to implement and maintain the bicycling network.
- → As part of the permitting process for new developments, MPO local agencies can require developers to incorporate bicycle and pedestrian improvements that align with the scope of their construction projects.
- Tax Increment Financing (TIF) is a value capture funding mechanism that leverages anticipated increases in property tax revenues to finance infrastructure improvements, such as upgraded bikeways. This approach involves designating a specific TIF district, typically in an area targeted for economic revitalization.

# Foundations and Public-Private Partnerships

- Identify new partnerships with public health stakeholders and collaborate on projects.
- Continue to partner with Singing River Trail, the Land Trust of North Alabama, and other regional trail and bicycle advocacy organizations to raise money for bicycle improvements.
- Coordinate with Launch2035 and local economic development partners to identify projects that support local businesses and fundraise for bicycle projects.

Huntsville MPO Bike Plan Implementation Strategy

# Implementation Strategies

Because there is a universe of potential projects in the bicycle facility recommendations, a strategic, phased approach is needed. Projects can be implemented in four phases based on cost and speed of delivery.

Engineering is the core component to Huntsville MPO's implementation strategy as design impacts behaviors and safety. Engineering is also the most labor-intensive and costly, requiring significant financial and staff resources.

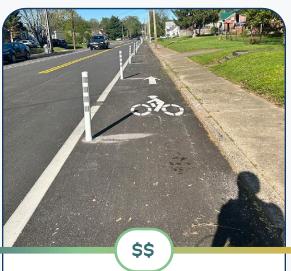
Large, transformative projects will require multiple steps, including audit/analysis, concept design, full design, and construction. In other cases, quickbuild projects can more quickly and easily make small but important impacts across Huntsville.



### **Quick-Build Projects**

**Summary**: Projects that use lower-cost materials such as paint, bollards or flex posts, and concrete bike barriers.

**Notes**: Can be easily modified or removed and typically take days or weeks to construct, progressing from conception to reality within months. Unlike temporary demonstration projects, quick-builds can provide lasting benefits and adapt based on public feedback. Both quick-build and demonstration projects provide efficient improvements that can be used to gather community feedback and provide a solution while working towards funding goals for full build





implementation.

**Summary**: Provide an opportunity to implement bikeway projects because the street is a blank canvas after the resurfacing work is complete.

**Notes**: Additional community engagement surrounding the addition



### **Stand-Alone Projects**

of a bikeway is needed, particularly if there are parking or travel lane tradeoffs. **Summary**: Can be considered a small capital project and may include some reconstruction depending on the desired bikeway type.

**Notes**: Could be funded via the Capital



### **Reconstruction Projects**

Improvement Plan and supported via grants.

**Summary**: Often completed because the quality of the pavement has deteriorated to a point where it needs to be fully reconstructed and typically includes the full right-of-way.

**Notes**: When reconstruction projects overlap with routes identified in the

Huntsville MPO Bike Plan Implementation Strategy

# **Five-Year Implementation Plan**

| Theme                                 | Yearly programs and tracking   | 2026  |
|---------------------------------------|--|---|
| Infrastructure and<br>Design Guidance | <ul> <li>Measure and track the performance of the new bike facility projects (corridor and intersection)</li> <li>Coordinate biannually with ALDOT to provide safe bicycle facilities as part of TIP projects. Share recommendations from this plan with them</li> <li>Identify yearly mileage targets for installing new greenways</li> <li>Continue to track grant opportunities</li> <li>Continue the neighborhood traffic calming program</li> </ul> | <ul> <li>Update design guidance for bike lanes and intersection treatments and adopt bicycle facility selection criteria based upon motor vehicle speed and volume</li> <li>Identify top greenway segments and connecting bike facilities</li> <li>Implement five miles of bicycle boulevards with signage, traffic calming, and intersection improvements</li> <li>Implement the Max Luther Drive, Blue Spring Road, and Wall Triana buffered bike lanes (see concept designs in the Appendix) and the Holmes Ave Complete Streets corridor</li> <li>Design the first protected intersection</li> <li>Identify locations for intersection bike boxes and continue adding bike detection</li> <li>Develop a bicycle boulevard best practices and traffic calming toolkit</li> </ul> |
| Safety                                | <ul> <li>Vision Zero working group quarterly meetings</li> <li>Identify MPO staff to coordinate with ALDOT on crash data and report on findings</li> <li>Yearly reports on the progress towards Vision Zero</li> <li>Updates to the Vision Zero action plan every 5 years</li> </ul>   | <ul> <li>Develop the SS4A Safe Routes to School (SRTS) program and safety campaign (pending award)</li> <li>Create a near-miss crash reporting system and identify hot spot locations</li> <li>Install near-miss cameras and research new technology and big data</li> <li>Conduct the Governor's Drive and Medical District safety planning study</li> <li>Update the Vision Zero Action Plan</li> <li>Conduct a safety planning study of crossing Research Park Blvd and/or developing a pedestrian bridge</li> </ul>   |
| Access for All                        | <ul> <li>Host transportation open houses in disadvantaged communities</li> <li>Create a yearly report on engagement best practices and lessons learned</li> <li>Track where projects are implemented and funding allocated for bicycle infrastructure throughout the MPO</li> </ul>  | <ul> <li>Create an engagement strategy to hear from and build trust within disadvantaged communities during transportation planning and implementation projects</li> <li>Host bi-annual meetings or open houses with District representatives to understand concerns from disadvantaged communities</li> <li>Create an internal strategy and best practices approach to engage disadvantaged communities and populations who are often hard to reach through traditional engagement (open houses, online surveys, etc.)</li> </ul>  |

| 2027  | 2028   | 2029   | 2030  |
|---|--|--|---|
| <ul> <li>Implement another five miles of the bicycle boulevard network and traffic calming elements. Install devices to monitor speed</li> <li>Identify over-capacity roads with potential for lane reconfiguration and bike lanes</li> <li>Implement another five miles of greenway projects</li> <li>Implement a protected intersection and bike boxes</li> </ul> | <ul> <li>Implement another five miles of the bicycle boulevard network</li> <li>Identify over-capacity roads with potential for lane reconfiguration and bike lanes</li> <li>Implement another five miles of greenway projects</li> <li>Measure success and feedback on the protected intersection</li> <li>Measure success of the traffic calming elements</li> </ul> | Finalize construction documents and bid construction for major greenway segments including the Chase Greenway, Indian Creek Greenway, North Huntsville Greenway, and Cummings Research Park Greenway | <ul> <li>Update bike plan</li> <li>Begin implementation of<br/>major greenway segments</li> </ul>   |
| <ul> <li>Finalize the SRTS plans and start implementing projects and the safety campaign</li> <li>Finish the Governor's Drive and Medical District safety planning study</li> <li>Hire a SRTS coordinator</li> </ul>  | <ul> <li>Implement five (5) SRTS projects</li> <li>Develop a program to track success, report crash reductions, and collect narratives from parents and students</li> </ul>  | <ul> <li>Implement another five (5) SRTS projects</li> <li>Publish internal findings on crash reductions and progress</li> </ul>   | <ul> <li>Update the Vision Zero Safet<br/>Action Plan</li> <li>Create new performance<br/>measures and strategies for<br/>bicycle safety</li> </ul> |
| <ul> <li>Develop a community ambassador program and conduct bike audits</li> <li>Create a rebate program for the purchase of e-bikes</li> <li>Assess the success of public engagement efforts in disadvantaged communities</li> </ul>   | <ul> <li>Create a program for free bicycles, helmets, and lights for students who complete a bike safety program and volunteer hours</li> <li>Engage students and Parent Teacher Associations at the schools where SRTS plans are implemented</li> </ul>   | <ul> <li>Continue SRTS and education programming</li> <li>Assess success and lessons learned from the ambassador program</li> </ul>  | <ul> <li>Evaluate program success</li> <li>Update and develop a new</li> <li>5-year strategic plan</li> </ul>                                       |

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# **Five-Year Implementation Plan**

| Theme                             | Yearly programs and tracking   | 2026   |
|-----------------------------------|--|--|
| Education                         | <ul> <li>Continual maintenance and promotion of the<br/>See and Be Seen resource page</li> </ul> | <ul> <li>Collaborate with BASC, Spring City Cycling, and other advocates to create a bike<br/>education program at schools to support SRTS initiatives</li> </ul>  |
|                                   | → Bi-annual coordination with regional and state   | <ul><li>Develop an approach for a bike + vulnerable road user (VRU) safety campaign</li></ul>  |
|                                   | partners on bike safety initiatives  | <ul> <li>Collaborate with county and city communications departments to create an<br/>approach and schedule for social media posts and other media promotion for bike<br/>events and programs (see below)</li> </ul> |
| Promotion and Supportive Elements | <ul> <li>Continued promotion of May Bike Month and<br/>new events each year</li> </ul>           | <ul> <li>Apply for the League of American Bicyclists Bicycle Friendly Community (BFC)<br/>program</li> </ul>   |
|                                   | → Identify new partners to support events,<br>encouragement programs, and incentives             | ★ Encourage bike commuters to record rides on Strava   |
|                                   |  | <ul> <li>Create a web-based map with greenways, bike routes, bike lanes, and planned<br/>infrastructure</li> </ul>   |
|                                   |  | <ul> <li>Install trail counters at greenways, bicycle facilities, and intersections with bicycle<br/>facilities</li> </ul>   |
|                                   |  | <ul> <li>Collaborate with Orbit to increase the number of racks on buses and develop a first-<br/>and last-mile strategic connections plan</li> </ul>  |
|                                   |  | ↑ Identify locations for fix-it stations   |

| i | 2027  | 2028   | 2029   | 2030   |
|---|---|--|--|--|
|   | <ul> <li>Collaborate with ADECA and AlaBike on<br/>driver education requirements regarding<br/>bike safety</li> </ul>   | <ul> <li>Measure progress from the safety<br/>campaign and create an internal and<br/>public-facing report</li> </ul>  | <ul> <li>Evaluate program effectiveness<br/>of the bike education program</li> </ul> | <ul> <li>Develop an updated 5-year<br/>strategic plan</li> </ul> |
|   | <ul> <li>Implement the bike and VRU safety<br/>campaign and create an approach to<br/>track progress</li> </ul>   | → Implement the bike-focused curriculum<br>for K-8 students at schools across the MPO  |  |  |
|   | <ul> <li>Identify strategies recommended by the<br/>BFC program application and feedback</li> <li>Create an incentive program to<br/>encourage existing businesses to install<br/>bike parking</li> </ul> | <ul> <li>Install new bike share locations and encourage bike share as part of new developments</li> <li>Implement recommendations from the BFC application feedback</li> </ul> | <ul> <li>Expand the bike share program<br/>to new locations</li> </ul>               | ◆ Reapply for BFC designation                                    |
|   | <ul> <li>Assess existing land development policies to incorporate more bicycle facilities and supporting elements (bike parking)</li> <li>Install fix-it stations</li> </ul>                              |  |  |  |

Huntsville MPO Bike Plan Implementation Strategy

# Recommended Planning, Design, and Programs

This plan outlines the strategy for bike facility implementation for the MPO. Next steps include feasibility studies, program development, supportive policies, implementation toolkits, updated design guidance, and new tools and data. The following planning efforts will provide the MPO with strategic next steps for implementation.

### **Feasibility and Design**

### Chase rail-trail feasibility study

Madison County has funded portions of the Chase rail-trail that are going out to construction soon. There is a need for a feasibility study to connect the AL A&M Greenway to designed sections of the Chase Greenway.

### **Construction Documents**

The concepts illustrated on pages 80 through 101 will require construction documents. High priority greenway segments, like the North Huntsville Greenway, necessitate design to communicate the intended vision and meet engineering standards.

### **Research Park Feasibility Study**

Develop a study to assess the feasibility of a pedestrian bridge over Research Park Boulevard to provide western connections to Mid City, UAH, and downtown Huntsville.

### **Tools and Resources**

### **Policy assessment**

Successful implementation of the bike plan requires supportive policy. An assessment of the existing Complete Streets policy and expanding supportive policy across the MPO will support cross-agency collaboration and implementation.

### **Design standards**

Adopted design standards for bicycle facilities and deciding when and how to implement bicycle facilities will help MPO partners collectively identify bike facilities when deciding on roadway allocation.

# Neighborhood Quick-win and bicycle boulevard toolkit

A key component of this plan is the development of a low-stress and low traffic volume neighborhood roadway network. A set of adopted traffic calming and bicycle boulevard toolkit will provide neighborhood advocates, engineers, planners, and decision makers will a menu of tools.

### **Bike Network Online Map**

An online interactive map allows planners and decision makers visualize data and factors in one place. Adding the findings from the analysis items (demand, short trip analysis, and HIN) along with the bicycle network recommendations provides a one-stop-shop with data and the envisioned bicycle network to information decision making. A public-facing version is also recommended to communicate upcoming projects and the build community momentum for projects.

### **Safety Campaign and SRTS**

A safety education campaign focused around safe driving and bicycling will address strategies from the Vision Zero effort and support education and awareness needs identified in this plan. Continue to pursue SS4A and other safety funding to build a safety education campaign and Safe Route to School projects.



