WALK BIKE RIVER REGION

A Vision for Active Transportation in the Montgomery Metropolitan Area

ACKNOWLEDGMENTS

The Montgomery Metropolitan Planning Organization and project staff would like to thank the region's citizens, elected officials, and professional staff who supported this effort. In particular we are indebted to the Project Steering Committee for their commitment and expertise, as well as to the people who provided their time and vision for a walking- and bicycling-friendly region.

Prepared for:

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LAnd for living

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LETTER OF SUPPORT FROM MPO CHAIRMAN CHARLES JINRIGHT

My fellow River Region residents,

Together we're working to make the communities in our region safe, convenient, and fun places to walk and bike. Whether for social activities, recreation, or transportation, everyone deserves safe and accessible opportunities to reach destinations by foot and bike. By improving walkability and bikeability for all ages, we can also improve the environment, health, and well-being of our citizens. We're making significant progress on these goals each day by building more bikeways, sidewalks, and safe crossings.

Walk Bike River Region is our action-oriented plan that will get us to the next step in building healthy communities. The plan accomplishes this by:

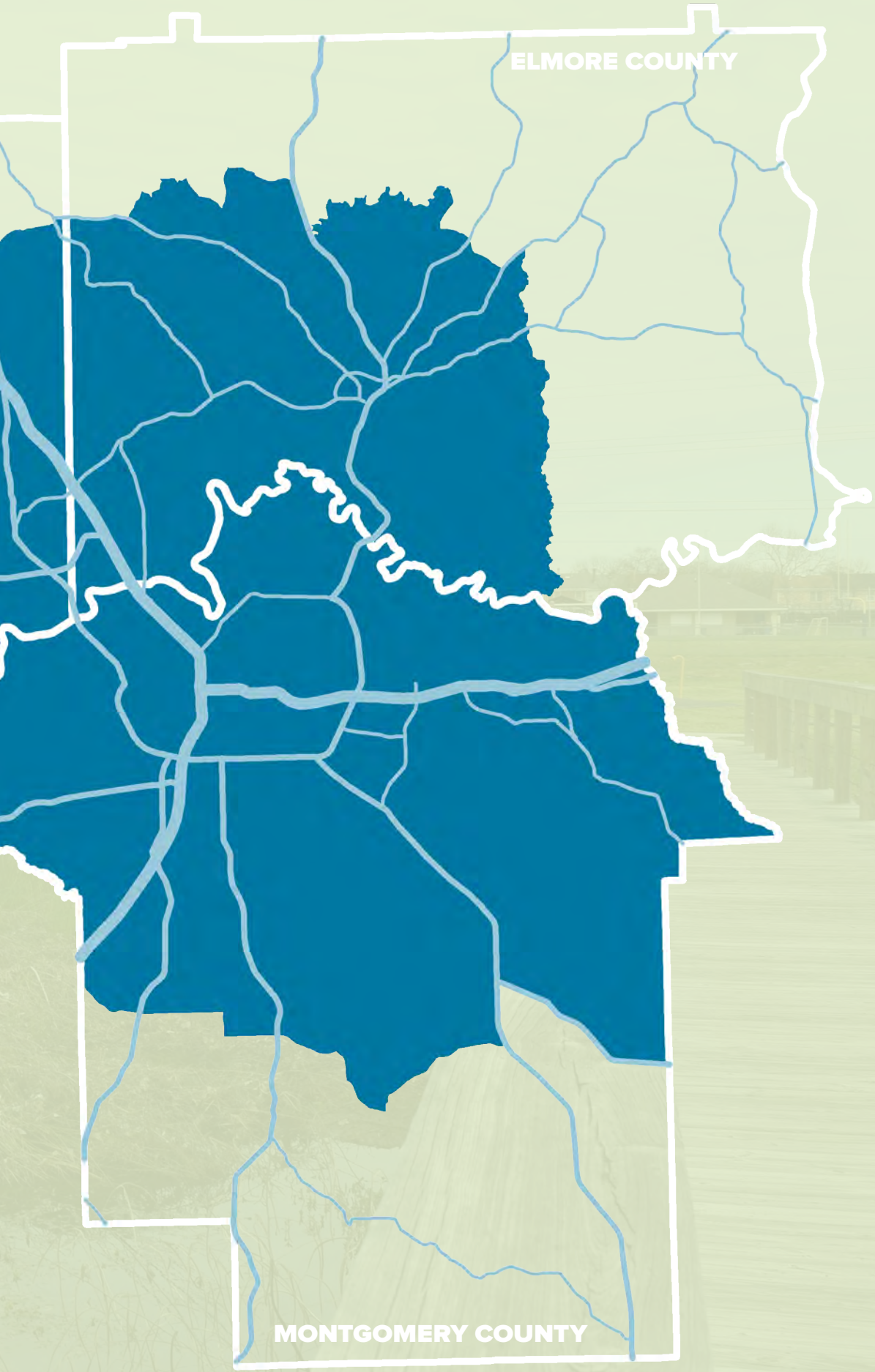
- Assessing demand for walking and biking
- Extensive public input to better understand needs and priorities
- Focusing on safety, equity, and feasibility
- Identifying key projects, programs, and policies for a comprehensive approach to creating active places

Thanks to the Montgomery Metropolitan Planning Organization for leading this effort and the many partner organizations, communities, and individuals throughout the River Region for their leadership and assistance. So tune up your bike, get out your walking shoes, and enjoy our vibrant cities, towns, and rural areas as they continue to improve!

Sincerely,

THE MONTGOMERY MPO

is the Metropolitan Planning Organization for an area that consists of three counties – Autauga, Elmore, and Montgomery including 8 municipalities. The Montgomery Metropolitan Planning Organization (MPO) assists local governments with transportation planning. A board that includes elected officials from member municipalities and counties and an Alabama Department of Transportation (ALDOT) representative provides a forum for discourse and sets the direction of transportation policies and programs. This includes the Long Range Transportation Plan (LRTP) and Transportation Improvement Program (TIP) which identify local priorities and guide the expenditure of federal transportation funding.


ELMORE COUNTY
MONTGOMERY COUNTY

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01

PREPARING THE RIVER REGION FOR A MULTIMODAL FUTURE

WALKING AND BIKING IN THE RIVER REGION IS POISED FOR RAPID GROWTH

The Montgomery Metropolitan Planning Organization (MPO) is the intergovernmental planning agency for the River Region. Collectively, the MPO sets policies and allocates federal transportation dollars to local municipalities and counties.

Walk Bike River Region is the active transportation plan for the Montgomery MPO. This plan builds on past planning efforts and forges a path for the River Region to develop a comprehensive, safe, comfortable, and fun walking and biking network. The plan will be used by the MPO and local governments to prioritize, fund, and implement high-quality infrastructure, high-impact programs, and supportive policies.

WHY NOW?

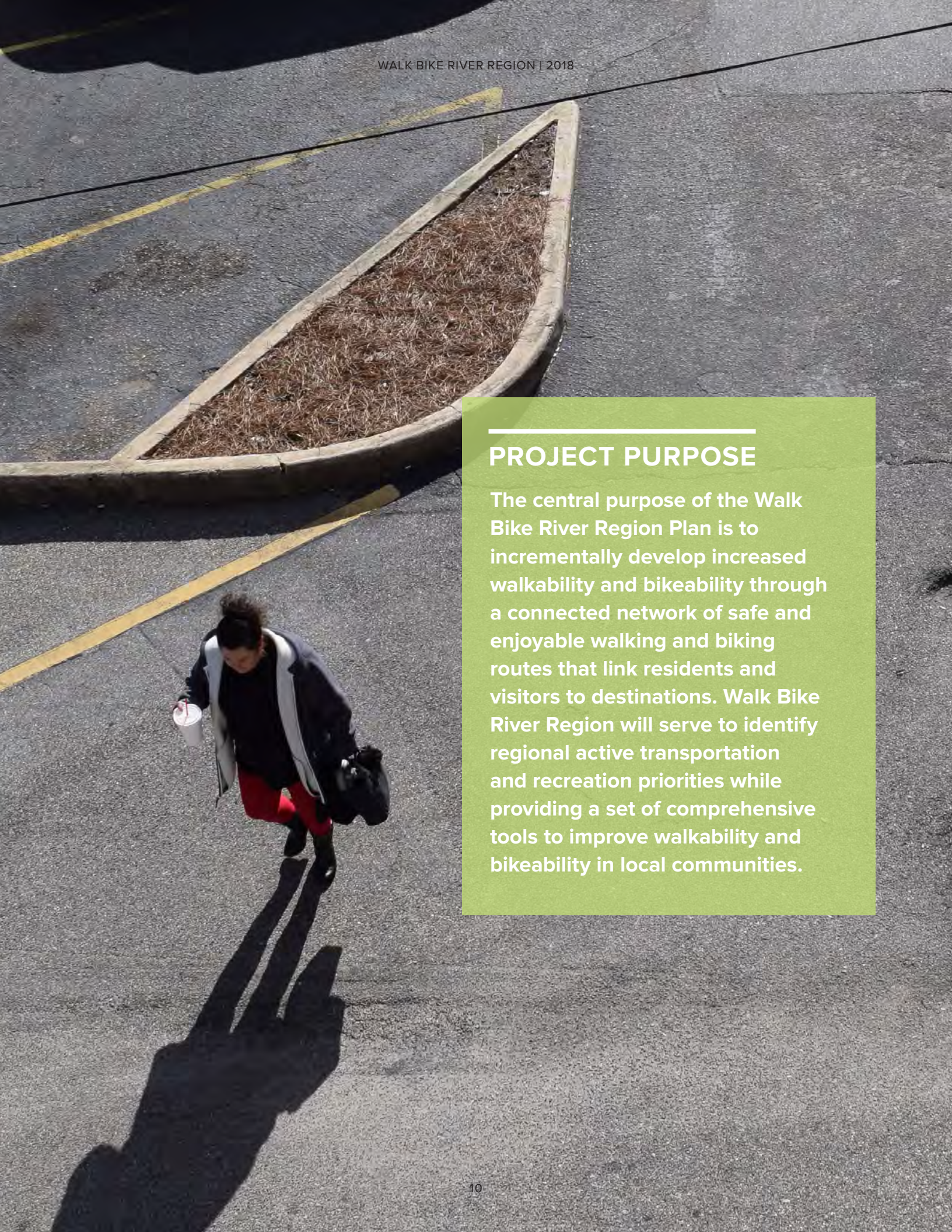
The River Region is seeing increased demand for walking and biking facilities that mirror national trends. Municipalities and counties are expanding bikeway networks with new trails, bike lanes, shared lane markings, share the road signs and wayfinding signage. The MPO has set ambitious goals for building a world-class network of connected bikeways. In 2016, the City of Montgomery was awarded honorable mention status as a Bike Friendly Community.

The City of Montgomery was also an early adopter of Smart Code zoning, which has sparked a downtown revival that has garnered national attention and has increased regional interest in walkable districts and public spaces. Advocacy groups such as the Montgomery Bicycle Club are getting more people on bikes through high-profile bike rides, education programs, and encouragement activities. Many places, such as downtown Wetumpka, are witnessing the economic impact of walkability and bikeability.

Demographic trends suggest that demand for walking and biking in the River Region will continue to rise. The Boomer generation and the millennials are the fastest growing age groups in the region, and both have shown a proclivity for destinations that can be reached by foot or bike.

Despite the positive momentum, many challenges and barriers exist to becoming walk- and bike-friendly. Dangerous roads, few dedicated facilities, land use that favors the automobile, and insufficient funding for walkways and bikeways result in a region with a low proportion of people traveling by foot or bike, and a high crash rate for pedestrians and cyclists.

This plan seeks to build on existing momentum and directly address the barriers to active transportation. By implementing the recommended projects, programs, and policies, the River Region will reap the benefits of healthier lifestyles, increased economic development and a higher quality of life.



PROJECT PURPOSE

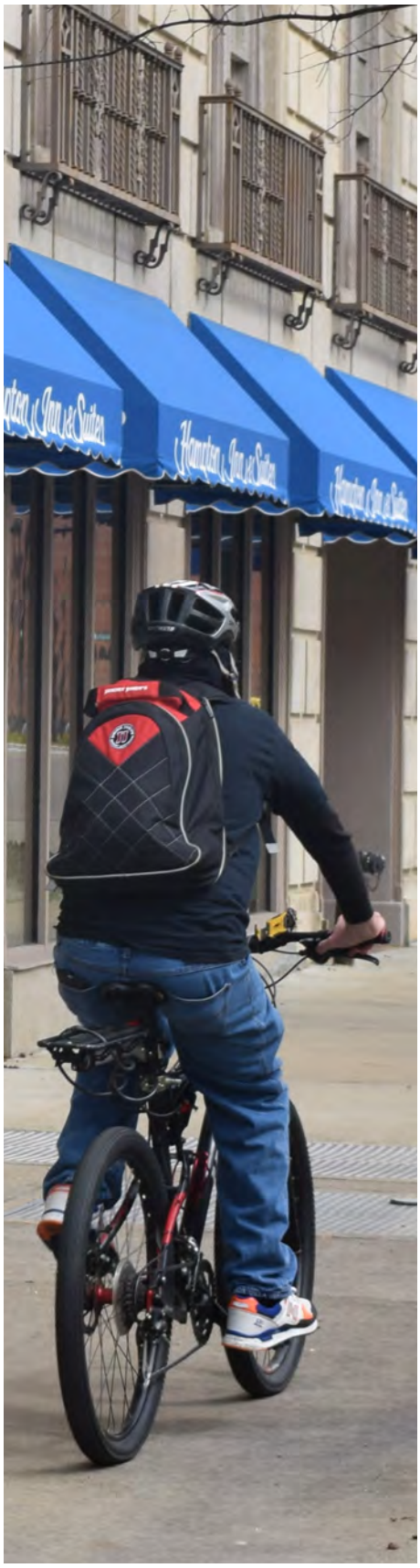
The central purpose of the Walk Bike River Region Plan is to incrementally develop increased walkability and bikeability through a connected network of safe and enjoyable walking and biking routes that link residents and visitors to destinations. Walk Bike River Region will serve to identify regional active transportation and recreation priorities while providing a set of comprehensive tools to improve walkability and bikeability in local communities.

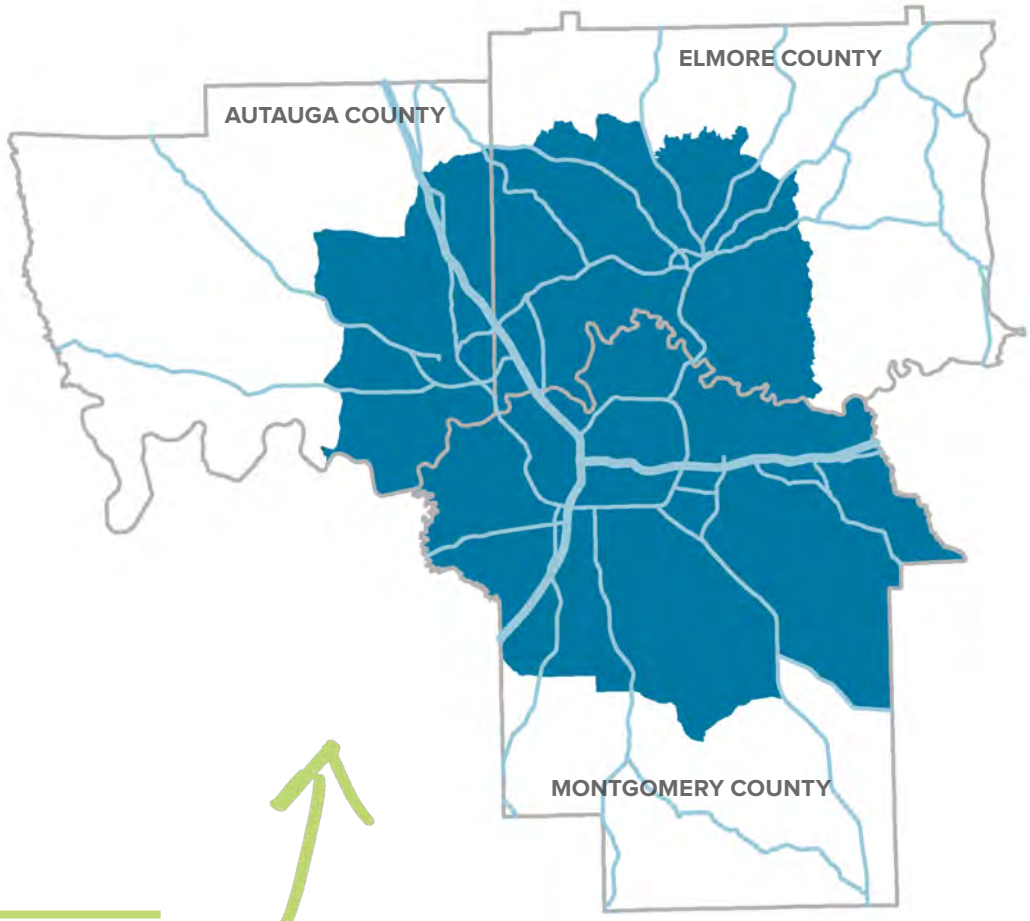
PLANNING PROCESS

The development of Walk Bike River Region took place over a one-year period starting in January 2017.

Key components of the process included:

- A project kickoff meeting to review project goals, identify data, and refine the schedule
- Steering committee meetings to gather input and provide updates
- Refinement of vision, goals, objectives, and performance measures based on best practices
- An existing conditions report summarizing a plan review, existing policies and programs
- Analysis of health and equity, as well as pedestrian and bicycle safety, level of service, and demand
- Extensive public input collected through an online interactive map, preference surveys, tabling events, and public workshops.
- Development of infrastructure, program, and policy recommendations
- A project implementation plan focused on sustainability and funding
- Draft and final report





STUDY AREA

The Walk Bike River Region study area encompasses portions of three counties–Autauga, Elmore, and Montgomery – with an estimated total population of 324,430 as of the 2015 census. The Walk Bike River Region study area is located in the south-central part of Alabama, near a confluence of rivers, agriculture, and rail lines. The River Region includes the Montgomery metropolitan area, where a large portion of the region's population lives, works, and plays. The Montgomery metro area is complemented by a ring of suburbs, small cities and towns such as Wetumpka, Prattville, and Pike Road. Further out, rural areas and small towns predominate, such as Elmore and Deatsville.

PROJECT PARTNERS

Walk Bike River Region is a collaborative plan between regional and local governments. This includes Autauga, Elmore, and Montgomery Counties as well as eight local municipalities which are instrumental in the plan's development.

A Steering Committee composed of representatives from municipalities, advocacy groups, the MPO, and the Citizens Advisory Commitee provided feedback and input throughout the planning process.

STEERING COMMITTEE MEMBERS:

Deanna Acklin, Montgomery Bicycle Club

Kindell Anderson, Montgomery MPO

Richie Beyer, Elmore County

David Bollie, ALDOT

April Delchamps, Montgomery MPO

Joel Duke, City of Prattville

Patrick Dunson, City of Montgomery

Jeff Feet, Montgomery Bicycle Club

David Robinson, City of Wetumpka

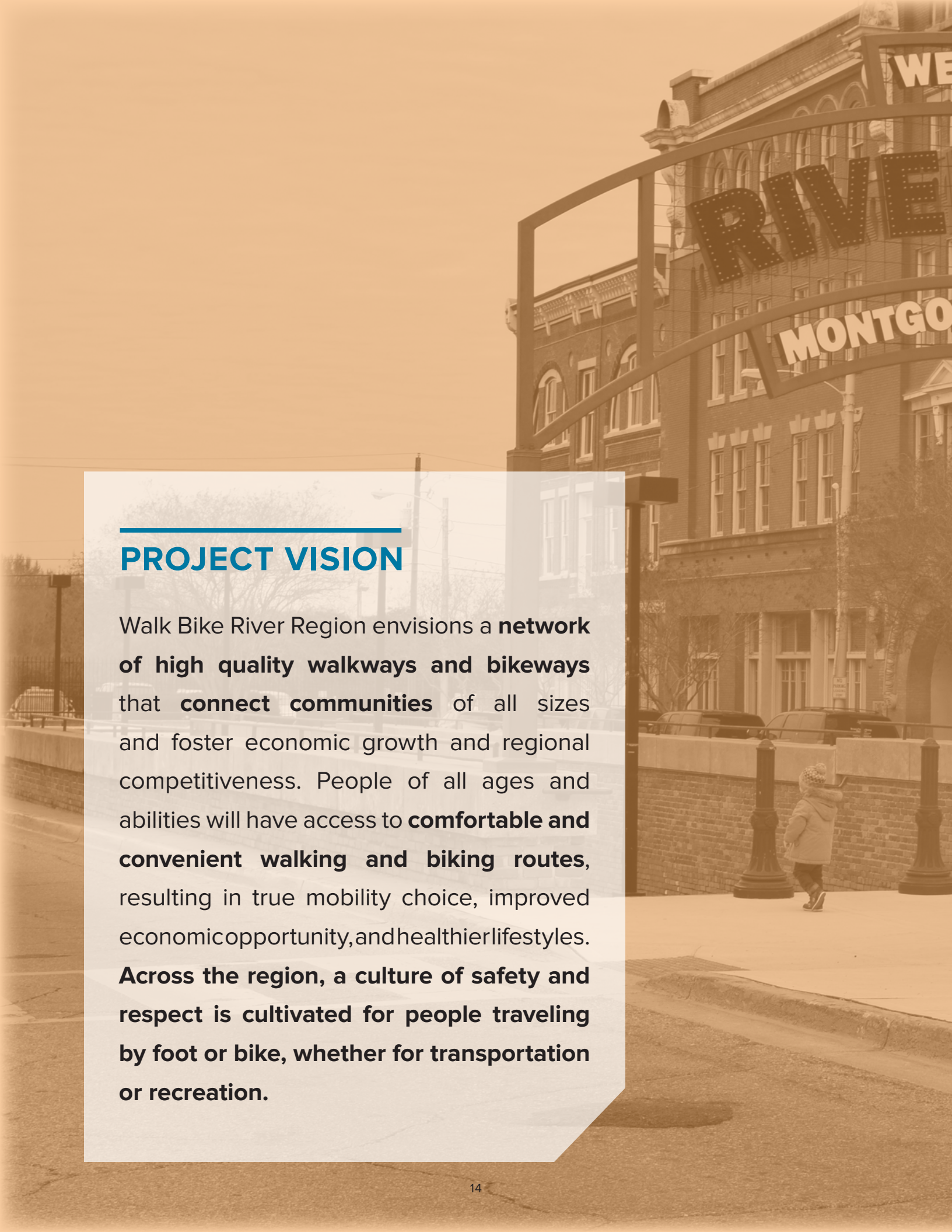
Robert Smith, Montgomery MPO

Stephen Stetson, Montgomery MPO Citizens Advisory Committee

Jonathan Smith, Town of Pike Road

Walk Bike River Region Partners and Jurisdictions

- Alabama Department of Transportation
- Autauga County
- Elmore County
- Montgomery County
- Town of Coosada
- Town of Deatsville
- Town of Elmore
- City of Millbrook
- City of Montgomery
- City of Prattville
- Town of Pike Road
- City of Wetumpka



PROJECT VISION

Walk Bike River Region envisions a **network of high quality walkways and bikeways** that **connect communities** of all sizes and foster economic growth and regional competitiveness. People of all ages and abilities will have access to **comfortable and convenient walking and biking routes**, resulting in true mobility choice, improved economic opportunity, and healthier lifestyles. **Across the region, a culture of safety and respect is cultivated for people traveling by foot or bike, whether for transportation or recreation.**


ELCOME TO
RFRONT
OMERY ALABAMA
PRIVATE PARKING LOT

ACCESSIBILITY ECONOMIC GROWTH SAFETY RESPECT

GOALS

INFRASTRUCTURE

OBJECTIVE A - Regularly inventory bicycle and pedestrian network conditions

OBJECTIVE B - Increase the quantity of bicycle and pedestrian facilities that accommodate the needs of people of all ages and abilities

SAFETY

OBJECTIVE A - Identify roadway designs that lead to systemic safety issues for bicyclists and pedestrians

OBJECTIVE B - Decrease the number of bicycle- and pedestrian-involved collisions

USAGE

OBJECTIVE A - Increase the percentage of commuters that walk or bike to work

CLEAR SPECIFIC MEASURABLE TIME-ORIENTED

EDUCATION AND ENCOURAGEMENT

OBJECTIVE A - Promote walking and bicycling through educational programming

OBJECTIVE B - Encourage grass-roots contributions to regional bicycle and pedestrian planning efforts

FUNDING

OBJECTIVE A - Decrease the burden of transportation costs on households

OBJECTIVE B - Allocate financial resources to support staff and project development on active transportation projects and programs

ENVIRONMENT AND HEALTH

OBJECTIVE A - Connect pedestrian and bicycle infrastructure with existing and planned parks, recreational facilities, and open spaces

02

THE CURRENT STATE OF WALKING AND BIKING

COMMUNITY PROFILE

AGE DISTRIBUTION AND VEHICLE ACCESS

Age groups are evenly distributed in the River Region. Approximately 25 percent of people are under age 18, 25 percent are between 18 and 34 years old, and 26 percent are between 35 and 54. Additionally, the proportion of the population categorized as older adults has risen from 22 percent of the population in 2010 to 24 percent of the population in 2015. This highlights the reality that **a large percentage of the region is too young to drive, and a growing population in the region is at an age where mobility is limited or difficult due to aging.**

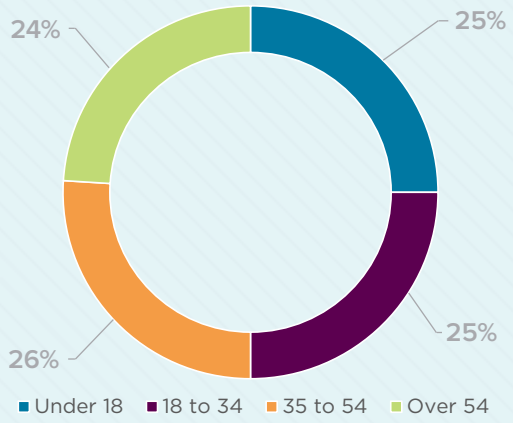
Additionally, **7 percent of households in the Montgomery MPO do not have access to a vehicle**, and another 36 percent of households have access to one vehicle. With a total of 43 percent of households owning one car or less, a significant number of River Region residents will benefit from enhanced mobility and the ability to safely walk or bike to work, school, and destinations.

RIVER REGION PROFILE

The Montgomery MPO includes the Alabama capital city of Montgomery, and largely overlaps with the Montgomery Metropolitan Statistical Area (MSA), which is the fourth biggest metropolitan region in Alabama and the 136th largest in the United States.

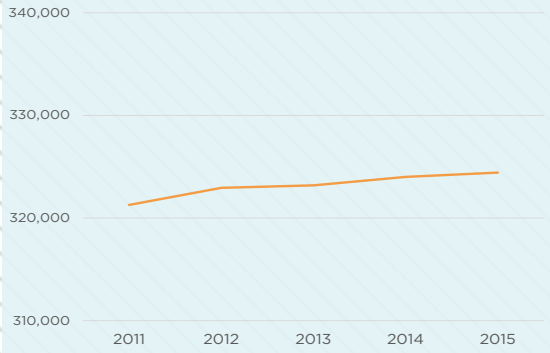
The estimated total population of the Montgomery MPO study area in 2015 is 324,430, with a density of 340 people per mile. **Almost two-thirds (63 percent) of the River Region's residents live in the City of Montgomery**, which has a 2010 population of 205,764. Since 2000, the population of the region has remained steady, with a growth rate of 0.5 percent between 2010 and 2015.

2.1 RIVER REGION AGE DISTRIBUTION



Age groups are evenly distributed in the RIver Region.

2.2 RIVER REGION POPULATION GROWTH



The population has been rising slightly over the past five years.

Source: US Census American Community Survey 5-year estimate

CULTURAL RESOURCES AND DESTINATIONS

HISTORY

The River Region is home to many historic, cultural, and recreational amenities that provide residents and visitors with unique walking and biking destinations.

A number of historic sites attest to the role the region played as the center of the Civil Rights Movement, such as the 54-mile Selma to Montgomery National Historic Trail that traces the historic march for equal voting rights. In 1861, the City of Montgomery was selected as the capital of the Confederate States of America, and a few historic sites from this era remain, including the First White House of the Confederacy.

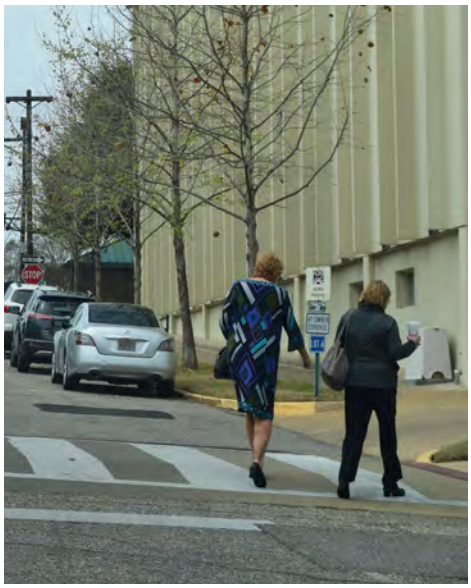
DESTINATIONS

Many of the smaller towns in the River Region, such as Wetumpka and Prattville, are historic river towns founded on the cotton boom of the mid-1800s. Both Wetumpka and Prattville have well-preserved antebellum buildings and walkable downtowns that have been featured in movies such as *The Rosa Parks Story* and *Big Fish*.

Prominent cultural sites in the region include the Montgomery Museum of Fine Arts, Fort Toulouse, the Hank Williams Museum, Old Alabama Town, the Davis Theatre for the Performing Arts, the Capri Theater in Cloverdale, the Montgomery Riverwalk, Union Station, and the Wynton M. Blount Cultural Park.

Recreational amenities are concentrated along the downtown Montgomery Riverwalk and Alabama River, and within the major parks and universities in the region. The City of Montgomery operates over 1600 park acres. Some of the larger parks in the region include Lagoon Park with its biking trail loop, and Cooter's Pond Park along the Alabama River near Prattville.

Montgomery also has a large military presence at Maxwell Air Force Base and Gunter Annex and is home to numerous colleges and universities, including Alabama State University (ASU), Auburn University at Montgomery (AUM), Troy University, Huntington College, and Faulkner University. The major employers in the region are the Maxwell Air Force Base, the state of Alabama, the Montgomery County Schools, Baptist Health, Hyundai Motor Manufacturing, Alfa Insurance, and the City of Montgomery.



REGIONAL WALKING AND BIKING TRENDS

WALKING AND BIKING MODE SHARE

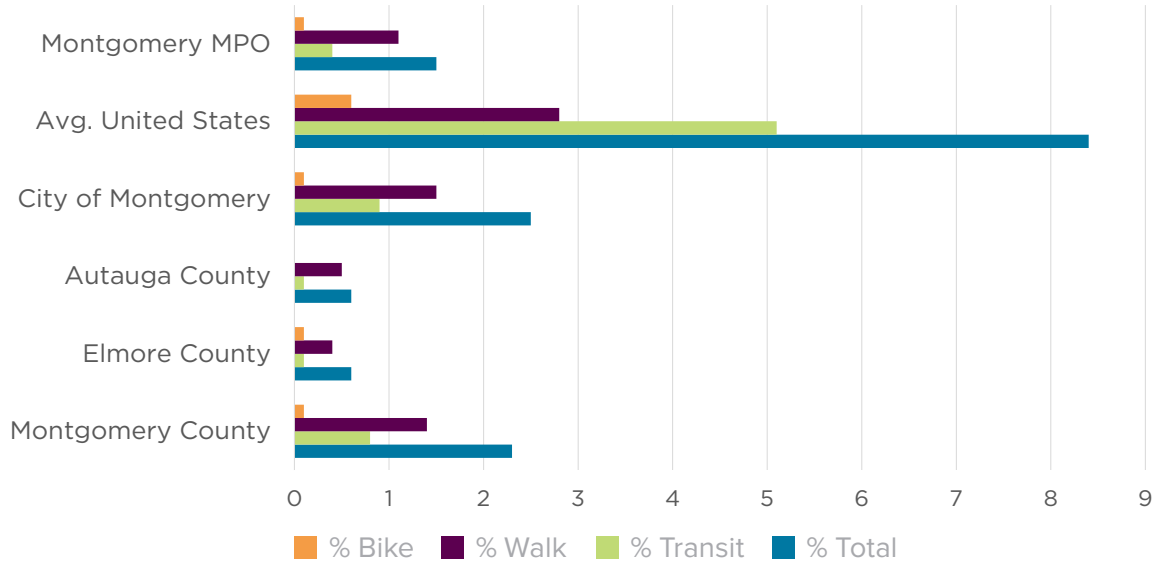
Recent U.S. Census estimates provide a snapshot of walking and biking trends in the River Region. **Within the MPO, the City of Montgomery has the highest percentage of residents that walk to work (1.5 percent).** For the region, approximately 1.1 percent of residents walk to work, 0.1 percent bike to work, and 0.4 percent take transit. These active transportation commute rates are low for a metropolitan region, and low compared to the average for the United States (see Figure 2.3 for mode share comparisons). Rates of bicycle commuting and transit use are especially low in the Montgomery MPO, with the city of Montgomery reporting the highest rates in the region at 0.1 percent and 0.9 percent respectively. Given the lack of frequent transit service across most of the region and lack of safe walking and biking facilities, the commute rates are unsurprising.

MORE RESIDENTS ARE DRIVING TO WORK ALONE

Notably, the percentage of River Region residents that drive alone has increased steadily from 81 percent in 1990 to 86 percent in 2015. This has coincided with a drop in the percentage of people taking transit and walking over the same period, while rates of biking to work have remained steady (see Figure 2.4). While these trends illuminate challenges to reversing the trends towards car-dependent travel, the data shows enormous potential to increase the rates of biking and walking in the River Region, through safer infrastructure, programs, and policies.

The concentration of jobs and average commute times for River Region residents offers a broader view of where people are commuting, and where potential exists for improving walking and biking commute rates. In 2014, 39 percent of the River Region's working population lived in the City of Montgomery, however 61 percent of the region's population worked in the City of Montgomery. **This suggests a net inflow of workers to the City of Montgomery from surrounding regions. The majority of these workers are coming from Prattville, Millbrook, Pike Road, and Wetumpka, further illustrating the need for safe and attractive transportation options (including walking, biking and transit) to the cities and towns with a larger proportion of jobs and residents.**

2.3 COMMUTE MODE SHARE FOR THE RIVER REGION

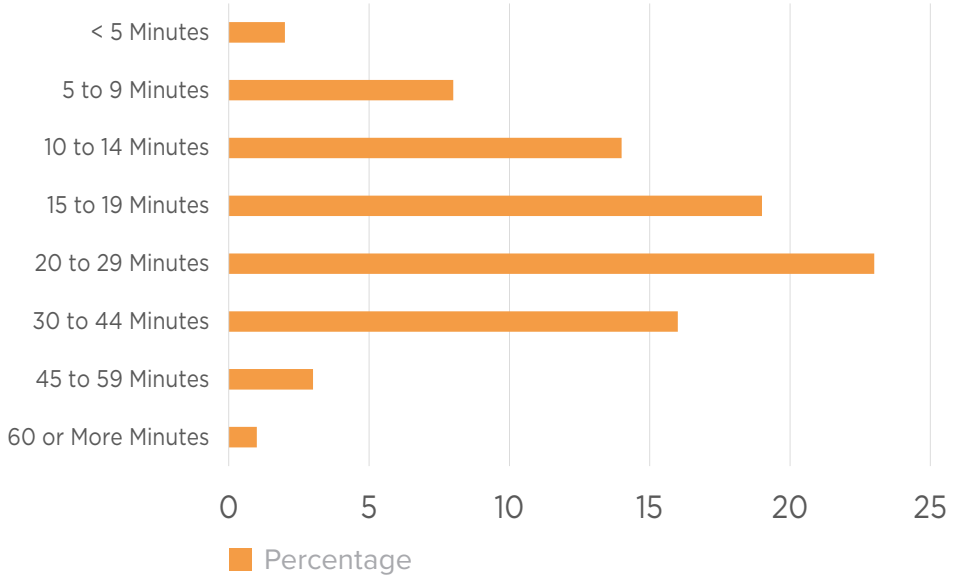


MANY RIVER REGION RESIDENTS HAVE SHORT COMMUTES

Approximately 10 percent of River Region residents have a commute time of less than 10 minutes. 14 percent of residents commute length is between 10 and 14 minutes, 19 percent of residents commute between 15 and 19 minutes. **Therefore, almost a quarter of the region has a short commute of less than 15 minutes, which presents an opportunity to reduce the number of residents driving for short trips where walking and biking are feasible options.**

Approximately 0.1 percent of commuting trips are made by bicycle in the River Region compared to an average of 0.6 percent across the US.

2.4 TRAVEL TIME TO WORK IN THE RIVER REGION



10 percent of River Region residents have a commute time of less than 10 minutes

The remaining 57 percent of residents commute 20 minutes or more to work, and approximately one in seven residents has a commute of more than half an hour.

The sprawling development patterns in the River Region, non-contiguous built up areas, and separation of land uses in the urban centers contributes to longer than average commutes for a region of this size. See Table 2.4 for a complete breakdown of travel times to work.

Sources for tables: US Census Bureau 2010-2015 American Community Survey 5-year Estimates, Table B08301

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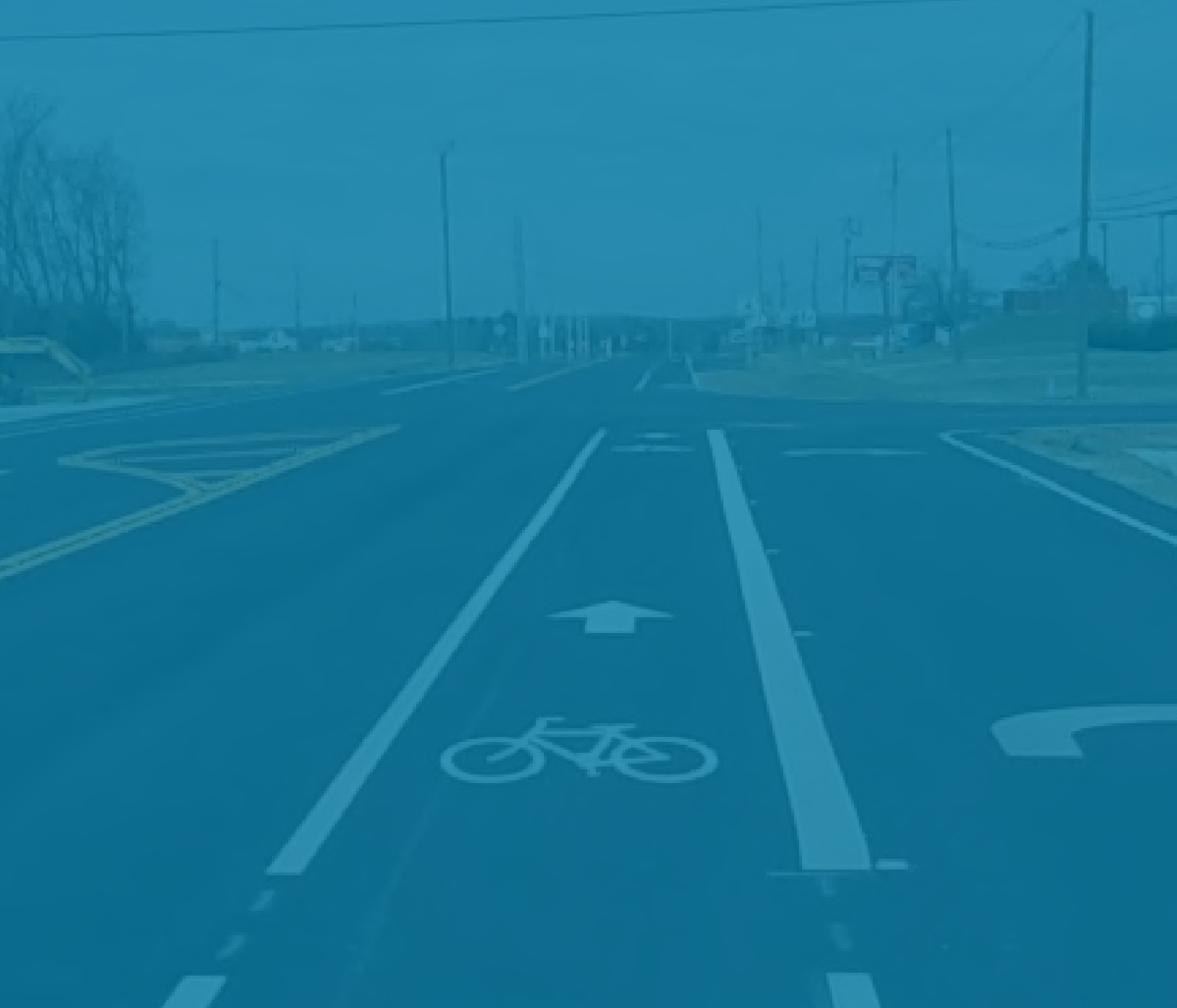


03

ANALYSIS OF EXISTING CONDITIONS

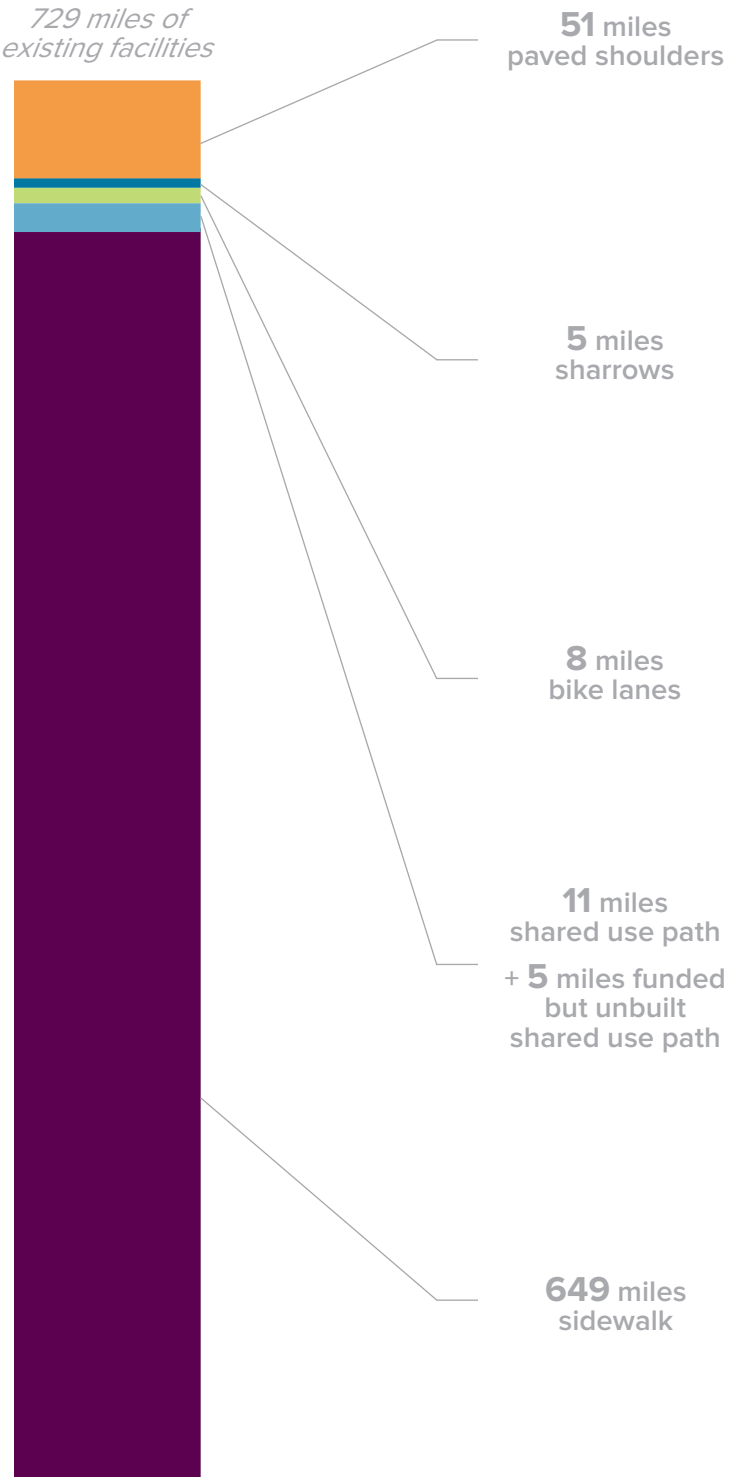
THE CHALLENGES AND OPPORTUNITIES FOR WALKING AND BIKING IN THE RIVER REGION

This chapter provides an overview of existing conditions that impact pedestrian and bicyclist safety and accessibility in the River Region. The quantitative analyses found in this section supplement the demographic and commuting data found in Chapter 2, and complement the qualitative information gathered through public input in Chapter 4. Collectively, these chapters provide a basis for understanding the current state of walking and biking in the River Region and for establishing goals and priorities.

The following sections describe the information gained and the outcomes of that process:

- **Facilities Analysis**
- **Building on Existing Plans**
- **Existing Policies and Programs**
- **Safety Analysis**
- **Equity Analysis**
- **Bicycle Level of Comfort**
- **Demand for Walking and Biking**

EXISTING WALKING + BICYCLING FACILITY TYPES AND MILEAGE



FACILITIES SUMMARY

PEDESTRIAN FACILITIES

Approximately 650 miles of sidewalks exist in the River Region. While most neighborhood streets in the City of Montgomery include sidewalks, large gaps are found in all municipalities and counties, particularly along major arterial roads with destinations for people on foot, such as Southern Boulevard and Atlanta Highway in Montgomery, and East Main Street in Prattville.

Many of these commercial corridors also lack safe crossings at reasonable distances (i.e. 1,000 feet or less) and intersections on many corridors completely lack crossing signals, striped crosswalks, or ADA accessible curb ramps, preventing safe access for pedestrians in large portions of the study area.

Notably, high-quality sidewalk and crossing treatments can be found in downtown Montgomery, particularly along Commerce Street where mid-block crossings have been added every 100 feet.

BICYCLE FACILITIES

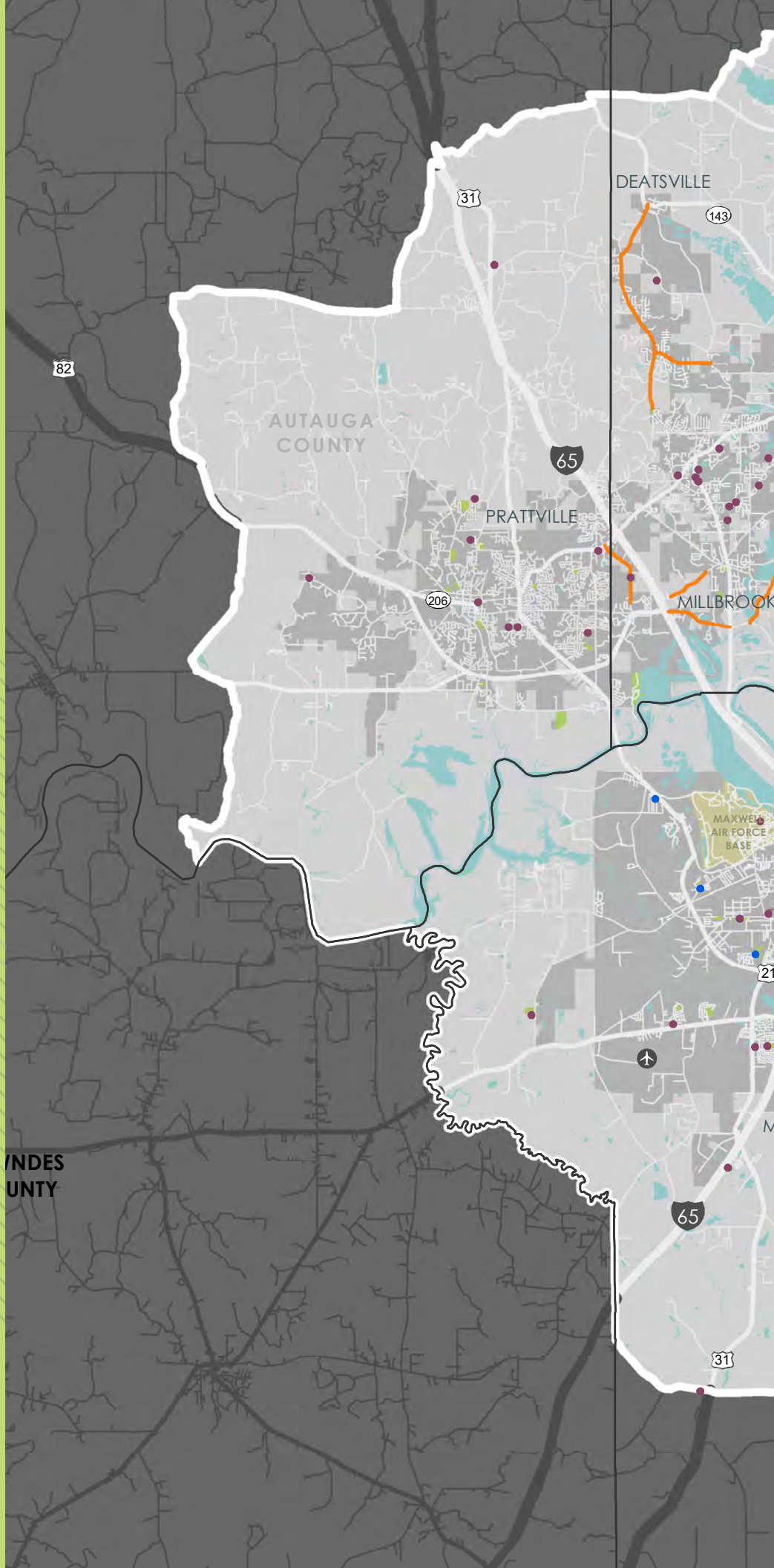
Currently, the existing on-street bicycle facilities are limited to paved shoulders, shared lane markings (sharrows), and bike lanes. Approximately 8.2 miles of bike lanes have been striped. In Montgomery County, this includes short stretches of Hall Street and Brown Springs Road in the City of Montgomery and Park Crossing in Montgomery. In Elmore County, W. Fort Toulouse Road and Old Ware Road includes bike lanes, however there currently are no bike lanes in Autauga County. Approximately 4.9 miles of sharrows are found in the River Region, including on Old Farm Lane in Prattville and Gunter Park Drive in Montgomery. The traditional bike lanes and sharrows are supplemented by Share the Road signs on popular recreational bicycling routes around the region.

Paved shoulders are defined as the space on the edge of roadways that can be enhanced or widened to serve as functional space for bicyclists and pedestrians. This space can be used for people on foot or bike in the absence of other facilities with more separation. Paved shoulders must be at least 4 feet wide, and ideally should have a buffer zone of 1.5 to 4 feet. This facility type is appropriate for many of the rural roads in the region with moderate traffic volumes and speeds. 51 miles of paved shoulders suitable for biking have been identified in the Montgomery MPO.

There are 11.2 miles of existing shared use paths and another 4.6 miles that are funded or under construction. These facilities are mainly found in Montgomery County and include shared use paths such as the Maxwell Street path that connects downtown Montgomery to Maxwell Air Force Base, as well as sidepaths along Meriwether Road and Marler Road near Waugh. Other off-street facilities include the Riverfront trails in Montgomery and Wetumpka. Bicycle facility locations can be found in the base map found in this chapter.

BASE MAP

The base map here provides an overview of existing walking and biking facilities. Destinations that may generate walking and bicycling trips, such as schools, college campuses, and parks, are also shown.

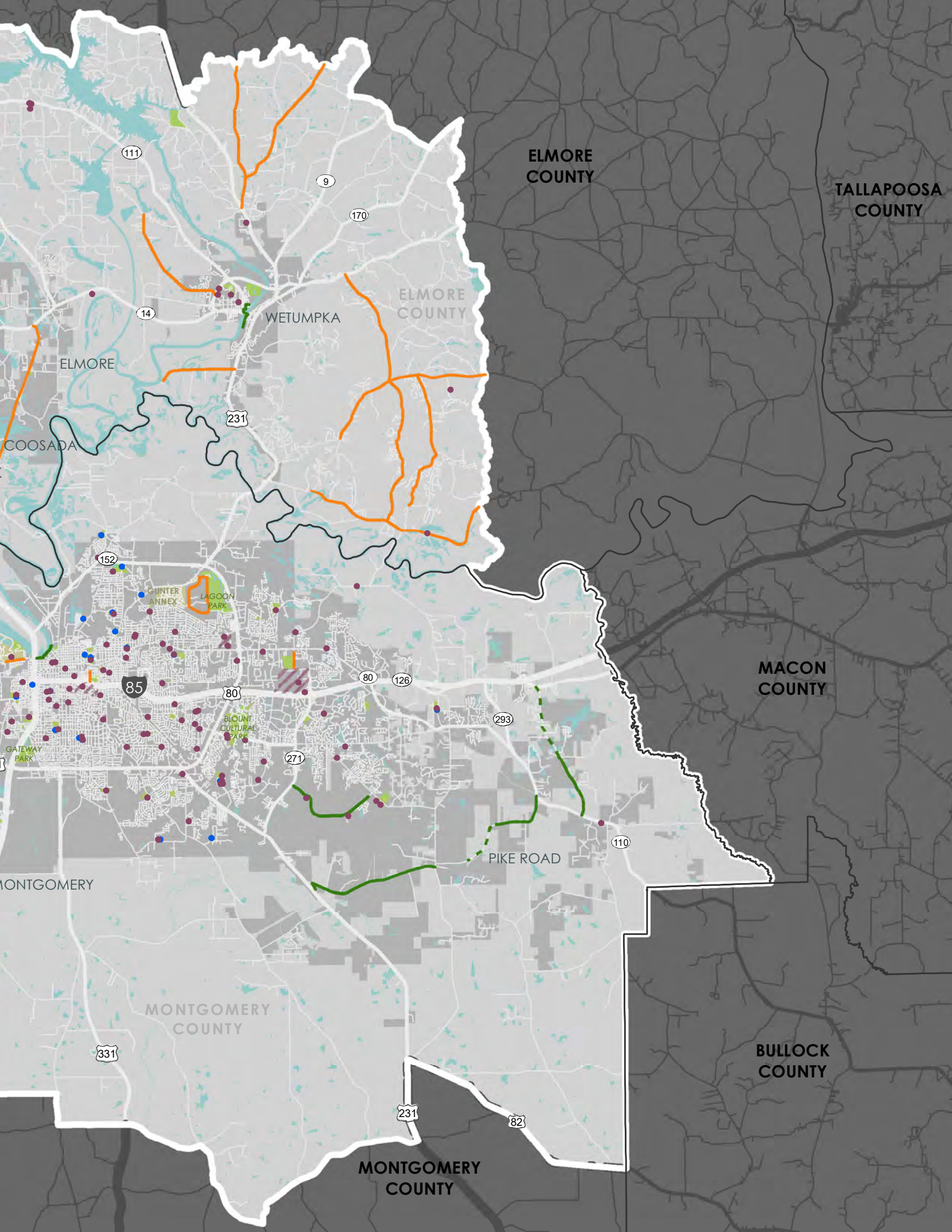


Bicycle Facilities

- Complete - Off Street
- Funded - Off Street
- Complete - On Street
- School
- Community Center
- Montgomery Regional Airport
- MPO Boundary (white)
- County Boundary
- Park
- Military Base
- College Campus
- Water Body
- Region Outside MPO

N

0 2.5 5 Miles


ELMORE COUNTY
TALLAPOOSA COUNTY
MACON COUNTY
BULLOCK COUNTY
MONTGOMERY COUNTY
ELMORE COUNTY
WETUMPKA
ELMORE
COOSADA
MONTGOMERY
PIKE ROAD
MONTGOMERY COUNTY
GUNTER ANNEX
LAGOON PARK
BLOUNT CULTURAL PARK
GATEWAY PARK
111
9
170
14
231
152
85
80
126
293
271
110
331
82

BUILDING ON EXISTING PLANS

Local and regional planning establish a community's vision for the future and the steps needed to advance towards that vision. To date, there are ten recent plans that are relevant to the goals and objectives of *Walk Bike River Region*. These are spelled out in Table 3.1 below. This plan builds upon these prior local and regional planning efforts.

A summary of plans from the following Montgomery MPO communities can be found in the appendix: Autauga, Elmore and Montgomery Counties including the municipalities of Coosada, Deatsville, Elmore, Millbrook, Montgomery, Prattville, Pike Road and Wetumpka.

SUMMARY OF FINDINGS

- The bicycle and pedestrian projects in the *Long Range Transportation Plan* (LRTP) are pulled from the 2012 *Montgomery MPO Bicycle and Pedestrian Plan* to include 32 bicycle routes and 62 connectors. The 2012 *Montgomery MPO Bicycle and Pedestrian Plan* prioritizes bicycle and pedestrian transportation improvements for the MPO study area. Recommendations for this plan will build on the recommendations in the 2012 plan.
- Among the *Prattville Parks and Recreation Plan* high priority programs are the development of walking and running programs for the growing senior population.
- The *Wetumpka Downtown Plan* highlights four streets as "key streets" that are prioritized for improvements: Main Street, Bridge Street, Court Street, and Company Street.

3.1 PREVIOUS RELEVANT PLANNING EFFORTS

PLAN	AGENCY	YEAR
*2017 ALDOT Bicycle and Pedestrian Plan**	Alabama DOT	2017
2040 Montgomery MPO Long Range Transportation Plan	Montgomery MPO	2015
Montgomery MPO FY 2016-2019 Transportation Improvement Program	Montgomery MPO	2015
Prattville Parks and Recreation Master Plan	City of Prattville	2015
Elmore County Outdoor Recreation Plan	Town of Elmore	2014
Wetumpka Downtown and Riverfront Revitalization Plan	City of Wetumpka	2014
2012 Montgomery MPO Bicycle and Pedestrian Plan	Montgomery MPO	2012
2010 ALDOT Bicycle and Pedestrian Plan	Alabama DOT	2010
Project Prattville Comprehensive Plan	City of Prattville	2010
Downtown Montgomery Plan	City of Montgomery	2007

**https://www.dot.state.al.us/tpmpweb/mp/BicyclePedestrianPlan/PDFs/Draft%20Bicycle%20and%20Pedestrian%20Plan.pdf*

EXISTING POLICIES + PROGRAMS

Prattville

Mayor Gillespie leads a bike ride every year in May in conjunction with **National Kids to Parks Day** sponsored by National Park Trust. The Mayor partners with PACE, Prattville Area Cycling Enthusiasts, to coordinate the 3.5-mile, family-friendly ride. In 2016, there were more than sixty participants. Each year the event attracts more participants (who are required to wear helmets).

In addition, Prattville has adopted a **Complete Streets resolution**.

Pike Road

Pike Road is the newest municipality in the region. Although it has not formally adopted a Complete Streets policy, **Complete Street** policies are embedded in the **Smartcode zoning regulations** which govern a portion of the community. Street design standards in the Smartcode specifically provide for designation of a **bicycle network** and provisions for **bicycle parking** in more dense districts (one bike rack per fifteen public parking spaces).

Pike Road is aggressively implementing a **trails master plan** for the community. The equestrian, pedestrian and bicycle trail links the elementary school and several large lot subdivisions. Five-and-a-half miles of shared use trails have been completed along Meriwether and Marler Roads. Two-and-a-half miles along Marler Road is currently in the design phase.

Montgomery

Montgomery has been designated a **Bicycle-friendly Community-Honorable Mention** level by the League of American Bicyclists for 2016. The community is actively working to improve the designation to the Bronze level.

Montgomery has incorporated the **bicycle-friendly policies** into the Smartcode for the zoning in the downtown area. **Bicycle-friendly street design** and readily available **bike parking** is promoted in the Smartcode urban districts.

Montgomery has also passed a **Complete Streets** resolution. The Public Works Division and the Engineering Department actively evaluate the inclusion of pedestrian and bicycle facilities in city projects.

The local bike club, Montgomery Bike Club (MBC), is the most active biking advocate in the River Region. MBC organizes **community rides** throughout the year in all three counties of the Montgomery MPO. During May, National Bike Month, MBC sponsors several events.

- **Bike to Work Week**: Event designates one week during May for participants to commute to work every day by bicycle.

The Prattville Mayor's Ride attracts bicyclists of all ages and abilities.

- **Bicycle Safety Rodeo**: MBC works with a local elementary school on bicycle riding skills and safety. In 2016, they partnered with Valiant Cross Academy, an urban, all boys school, and in 2017, they partnered with Morningview Elementary School.
- **Cycling Safety Course**: A 3-day course with 9 hours of instruction and 5 hours of skill training for those seeking to improve their confidence riding in traffic. The course is taught by a certified instructor. Topics include on-road riding, emergency procedures, hazard avoidance and tire changing techniques.
- **Cyclofemme**: Ride with your mother on Mother's Day.
- **Freedom Ride**: A tour of downtown historic sites related to Civil Rights movement.
- **Left the Car at Home Challenge**: Challenges participants to replace the car with the bicycle for twenty trips during the month of May.
- **Ride for Reading**: In 2016, collected and delivered over 3000 donated books to Chisolm Elementary School, and in 2017, collected and delivered over 3000 donated books to Southlawn Elementary School.
- **Ride of Silence**: Community ride honoring those who have been injured or killed while cycling.

The City of Montgomery participated in **National Walk at Lunch Day 2017**. The event, sponsored by Blue Cross Blue Shield, focuses on the healthy life style benefits of walking during the lunch hour.

Several River Region school districts participated in **Safe Routes to Schools programs** until 2013 when funding for the program was discontinued. The program focused on teaching children how to walk and bike safely and rules of the road.

The City of Montgomery is supporting efforts by the MBC and Downtown Business Association to improve **bicycle parking**. Approximately thirty bike racks purchased by these groups have been installed by city crews at locations across Montgomery.

PUBLIC SAFETY

The Montgomery and Prattville Police Departments and the State Capitol Police have **patrolmen on bicycle**. Although they are most often encountered in the downtown districts, they are also deployed to large parks and special events. Officers are certified through the Law Enforcement Bicycle Association.

The City of Montgomery has also passed an **ordinance requiring motorists to provide a 3-foot clearance when bicyclists are encountered on roadways**.

Several municipalities and counties have installed **'Share the Road'** signs on routes frequented by cyclists, including Montgomery County. This effort was led by the Montgomery County Commissioner and was funded with the commissioner's discretionary funds. In Elmore County, these signs have been installed along Redland and Fire Tower Roads. These roads have paved shoulders, and this route is frequented by area cyclists. Autauga County has also incorporated 'Share the Road' signs on roads used by local cyclists.

The Montgomery Bicycle Club encourages new riders with activities each year during Bike Month.

BICYCLE - AND WALK - FRIENDLY COMMUNITY ASSESSMENTS

Walk and bike friendly community assessments recognize existing successes in communities that promote walking and biking, and provide a framework for communities trying to achieve higher walking and bicycling rates.

The Walk Friendly Community (WFC) program is a national initiative led by the Pedestrian and Bicycle Information Center (PBIC) intended to encourage communities to improve their local walking environments. Similarly, the Bicycle Friendly Community (BFC) program led by the League of American Bicyclists is intended to assist communities make bicycling a viable transportation and recreational option, meeting daily needs of users regardless of their age. The City of Montgomery currently holds Bicycle Friendly Community Honorable Mention status.

Both programs incorporate assessments in their score card that help a community gauge where they are excelling and where they are falling short. WFC and BFC assessments apply the 5 E's when thinking about walking and bicycling – engineering, education, evaluation, enforcement, and encouragement. The engineering category refers to infrastructure-related elements, like bike lanes, sidewalks, and ADA accommodations. The other four E's refer to non-infrastructure efforts such as safety campaigns and programmatic efforts that promote walking and bicycling.

Comprehensive pedestrian and bicycle plans should address all five E's to effectively advance walking and biking activities in a community. Communities seeking status as WFC and BFC's must make relevant advances in each of the Five E's.

HOW TO BECOME A...

WALK FRIENDLY COMMUNITY

For communities in the River Region considering applying for WFC status, the basic steps are outlined here:

- Review best practices and existing designated WFCs at: www.walkfriendly.org
- Download the WFC assessment tool at: http://www.walkfriendly.org/WFC_Assessment_Tool_Sept2012.pdf
- Assemble a team to facilitate the submission
- Create a registration for the application
- Estimate 20-60 hours to apply
- Submit the application online by either June 15 or December 15 (applications are accepted twice per year)

HOW TO BECOME A...

BICYLE FRIENDLY COMMUNITY

The steps to apply for BFC status are outlined below for other communities in the region that are considering an application:

- Go to www.bikeleague.org/community
- Review the "Getting Started" guide
- Assemble a team to facilitate the submission
- Create a registration for the application
- Estimate 20-60 hours to apply
- Check the website www.bikeleague.org for the next submission deadline and submit the application (with city or town administration approval) online

ACHIEVING WALK FRIENDLY COMMUNITY STATUS

Many communities in the River Region have some of the qualities of a WFC already in place, and should consider applying for WFC designation. Montgomery has a strong downtown master plan and the City has adopted a complete streets resolution. Smaller towns in the region like Wetumpka offer a walkable downtown with an accessible riverfront and neighborhoods that are well connected to commercial centers and destinations.

Achieving a WFC designation can communicate a city or town's commitment to improving quality of life and the community's brand as an active and healthy community. Currently, none of the cities or small towns in the River Region have applied for WFC designation. Similarly to the BFC application, the process of applying can provide the city with feedback on key areas to improve within each of the 5Es, regardless of whether the community achieves walk-friendly community status.

ACHIEVING BICYCLE FRIENDLY COMMUNITY STATUS

At the end of 2016, LAB reviewed Montgomery's BFC application and awarded the City with honorable mention status. Along with the designation, LAB gave the City several key recommendations for moving from honorable mention to bronze status.

Among the key steps

- **Bicycle Safety Education** for all ages
- Development of a **safe bikeway network for all abilities** and confidence levels
- Creation of a **Bicycle and Pedestrian Advisory Committee**
- **Increasing staff capacity** for organizing bicycle and pedestrian programs and policies
- **Strengthening the Complete Streets Policy** to include funding and implementation oversight

Additionally, LAB provides a summary score card of current community conditions and what typical Bronze BFCs have for key criteria. With continued focus on planning and building the bikeway network, improving safety, and expanding programs to educate, encourage, and enforce biking activity, the City of Montgomery can achieve Bronze BFC designation. The scorecard is on the adjacent page.

The City of Montgomery scorecard also provides an example for other communities in the River Region to assess their current readiness to apply, and the information that would be provided by LAB for applying.

BICYCLE FRIENDLY COMMUNITY REPORT CARD

THE LEAGUE OF AMERICAN BICYCLISTS since 1880

MONTGOMERY, AL

TOTAL POPULATION
205764

POPULATION DENSITY
1273.3

TOTAL AREA
161.6

OF LOCAL BICYCLE FRIENDLY BUSINESSES 0

OF LOCAL BICYCLE FRIENDLY UNIVERSITIES 0

10 BUILDING BLOCKS OF A BICYCLE FRIENDLY COMMUNITY

	Average Bronze	Montgomery
High Speed Roads with Bike Facilities	20%	2%
Total Bicycle Network Mileage to Total Road Network Mileage	25%	1%
Bicycle Education in Schools	AVERAGE	NEEDS IMPROVEMENT
Share of Transportation Budget Spent on Bicycling	9%	UNKNOWN
Bike Month and Bike to Work Events	AVERAGE	VERY GOOD
Active Bicycle Advocacy Group	YES	YES
Active Bicycle Advisory Committee	MEETS EVERY TWO MONTHS	NO BICYCLE ADVISORY COMMITTEE
Bicycle-Friendly Laws & Ordinances	AVERAGE	AVERAGE
Bike Plan is Current and is Being Implemented	YES	NO
Bike Program Staff to Population	1 PER 145K	1 PER 103K

CATEGORY SCORES

ENGINEERING *Bicycle network and connectivity*	3/10
EDUCATION *Motorist awareness and bicycling skills*	3/10
ENCOURAGEMENT *Mainstreaming bicycling culture*	2/10
ENFORCEMENT *Promoting safety and protecting bicyclists' rights*	2/10
EVALUATION & PLANNING *Setting targets and having a plan*	1/10

KEY OUTCOMES

	Average Bronze	Montgomery
RIDERSHIP *Percentage of commuters who bike*	1.4%	0.1%
SAFETY MEASURES **CRASHES** *Crashes per 10k bicycle commuters*	1207	1627
SAFETY MEASURES **FATALITIES** *Fatalities per 10k bicycle commuters*	21	20

KEY STEPS TO BRONZE

» Bicycle-safety education should be a routine part of education, for students of all ages, and schools and the surrounding neighborhoods should be particularly safe and convenient for biking and walking. Work with local bicycle groups and interested parents to expand and improve the Safe Routes to School program to all schools.

» Ensure that high speed and/or high volume roads do not pose a barrier to bicycling in your community. It is important that your bike network is safe, comfortable, and navigable for people of all ages and abilities.

» Create an official Bicycle & Pedestrian Advisory Committee (BPAC) to create a systematic method for ongoing citizen input into the development of important policies, plans, and projects. Ensure that the members of the committee reflect the diversity and ability levels of cyclists in your community.

» Increase the amount of staff time spent on improving conditions for people who bike and walk. Increasing staff time, either by creating a position or changing the responsibilities of current staff, can have a positive impact on the ability of your community to execute bicycling and walking-related projects and programs.

» Strengthen your Complete Streets/Bicycle Accommodation policy to ensure more rigorous implementation. Your community reported a lower than average compliance rate with your current Complete Streets policy. A strong Complete Streets policy will prompt the community to consider lane and/or road diets when repaving or otherwise doing major maintenance on roadways.

SAFETY SNAPSHOT

333

PEDESTRIAN-INVOLVED COLLISIONS FROM 2012 TO 2016

38

PEOPLE WERE KILLED WHILE WALKING DURING THIS PERIOD

TOP 5 UNSAFE CORRIDORS ACROSS THE REGION FOR PEOPLE WALKING (ALL ARE LOCATED IN THE CITY OF MONTGOMERY):

- W SOUTH BOULEVARD
- MADISON AVENUE
- ANN STREET
- TROY HIGHWAY
- E SOUTH BOULEVARD

94

BICYCLE-INVOLVED COLLISIONS FROM 2012 TO 2016

3

PEOPLE WERE KILLED WHILE BICYCLING DURING THIS PERIOD

TOP 5 UNSAFE CORRIDORS ACROSS THE REGION FOR PEOPLE BICYCLING (ALL ARE LOCATED IN THE CITY OF MONTGOMERY):

- COURT STREET
- W SOUTH BOULEVARD
- MT MEIGS ROAD
- HIGHLAND AVENUE
- E SOUTH BOULEVARD

SAFETY ANALYSIS

The location and frequency of crashes involving people walking and biking in the River Region reveal patterns and corridors with safety issues. This analysis examines the what, when, and where of crashes involving people walking and biking to identify areas where infrastructure improvements, as well as other measures, can be applied to improve safety in the region.

Patterns of crashes involving pedestrians and bicyclists also indicate corridors where people on foot and bike are traveling. In the absence of data on total pedestrian and bike traffic, the conditions of high-crash corridors must be examined carefully to determine whether crashes are indicative of a safety issue or indicative of higher volumes of people walking and biking.

Analysis for this plan used data from the State of Alabama's central database for crash reports managed by the University of Alabama College of Engineering Center for Advanced Public Safety (CAPS). The database captures incident reports from local, county, and state public safety agencies. Data over a five-year period from 2012 to 2016 for all modes was analyzed.

Alabama ranks as the second most dangerous state for pedestrian safety, with 724 pedestrians killed in crashes between 2005 and 2014 (Dangerous by Design, 2016).

OVERVIEW

Based on the analysis of type, location, and number of crashes involving people walking and biking along the River Region's roadways, several key themes emerged including:

- **The majority of walking and biking crashes occur on major roadways and arterials.**
- **Crashes are concentrated at intersections where multiple major roadways converge.**
- **Crossing major corridors presents challenges to accessing destinations.**

Crashes involving people walking have increased slightly over the past five years, while bicycling crashes have decreased slightly. Most of these incidents resulted in non-incapacitating injuries; however, there were thirty-eight pedestrian fatalities and three bicyclist fatalities during the 2012 to 2016 time period.

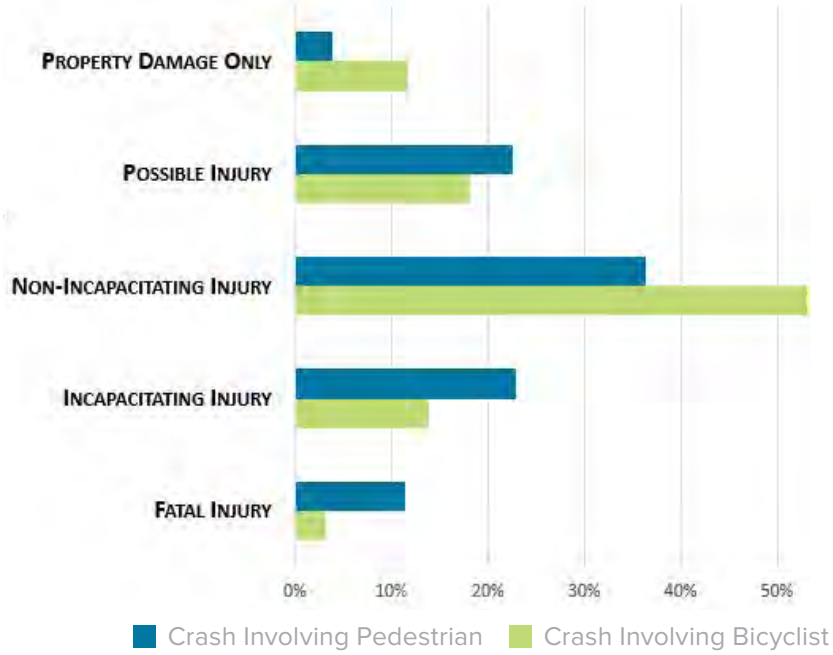
The Montgomery Ride of Silence honors those injured or killed while bicycling. Between 2012 and 2016, ninety-four bicycling crashes were reported, including three fatalities.

WHAT

Based on the data analyzed from 2012 to 2016, the Table 3.3 below identifies the corridors with the highest number of collisions with persons walking or biking and the corridors with the highest volumes of fatalities for persons walking or bicycling. Seven major corridors in the region–South Boulevard, Madison Avenue, Ann Street, Troy Highway, Mt. Meigs Road, Highland Avenue, and Court Street – account for the majority of pedestrian- and bicyclist-involved crashes.

During the five-year time period examined, 333 pedestrian-involved crashes and ninety-four bicyclist-involved crashes were reported. From these crashes, there were thirty-eight pedestrian fatalities, and three bicyclist fatalities. Most crashes resulted in non-incapacitating injuries for both pedestrians (36 percent) and bicyclists (53 percent). Another 23 percent of pedestrians suffered incapacitating injuries, and 14 percent of bicyclists suffered similar injuries.

3.2 PEDESTRIAN + BICYCLE CRASHES BY SEVERITY OF INJURY | 2012 - 2016



3.3 HIGH CRASH CORRIDORS IN THE RIVER REGION

Numbers in parentheses represent fatalities.

CORRIDOR	# BIKE CRASHES	# PED CRASHES	TOTAL # CRASHES
W. South Boulevard (Montgomery)	3	10 (4)	13 (4)
Madison Avenue (Montgomery)	1	11	12
Ann Street (Montgomery)	1	10	11
Troy Highway (Montgomery)	1	9 (2)	10 (2)
E. South Boulevard (Montgomery)	2	8 (1)	10 (1)
Mt. Meigs Road (Montgomery)	3	6	9
Highland Avenue (Montgomery)	2	6	8
Court Street (Montgomery)	4	4	8

3.4 Pedestrian + Bicycle Crash Events by Month, 2012-2016

3.5 Pedestrian + Bicycle Crash Events by Year, 2012-2016

WHEN

Crashes are occurring regularly throughout the year

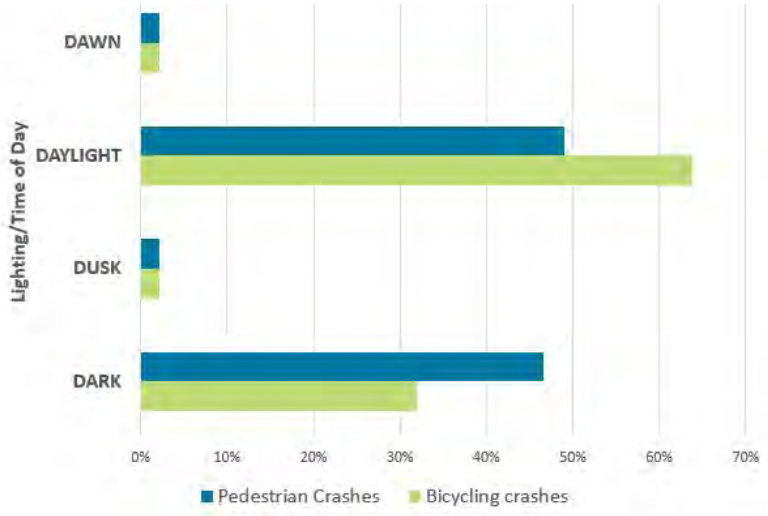
Across the River Region, crashes that involve pedestrians and bicyclists occur throughout the year, with no discernible pattern, as seen in Figure 3.4 above. The highest number of pedestrian-involved crashes occurred in December and the lowest in June. Crashes involving pedestrians are also generally higher in the months of August, September, and October. Bicycle-involved crash rates were lowest in December and highest in May.

Year-over-year crash rates are steady

Pedestrian crashes have increased slightly over the previous five years, with the seventy-four being the highest number of crashes reported in 2013, and fifty-five being the lowest number reported in 2012. However, as seen in Figure 3.5, bicycling crashes have decreased slightly in recent years. In 2012 and 2013, there were twenty-five and twenty-six bicycling crashes reported, respectively. Only eleven were reported in 2015, which is a 58 percent decrease from the two years prior.

A large portion of bicycle crashes are occurring during the day

Sixty-four percent of bicycle crashes occurred during daylight hours, and 32 percent occurred after dark, during the 2012 to 2016 period. Pedestrian crashes were more evenly distributed between daylight (49 percent) and dark (47 percent). The high incidence of crashes involving both pedestrians and bicyclists during the daytime, when they are most visible, may indicate a shortage of facilities that would provide safe active travel.



3.6 Pedestrian + Bicycle Crash Events by Time of Day and Lighting, 2012-2016

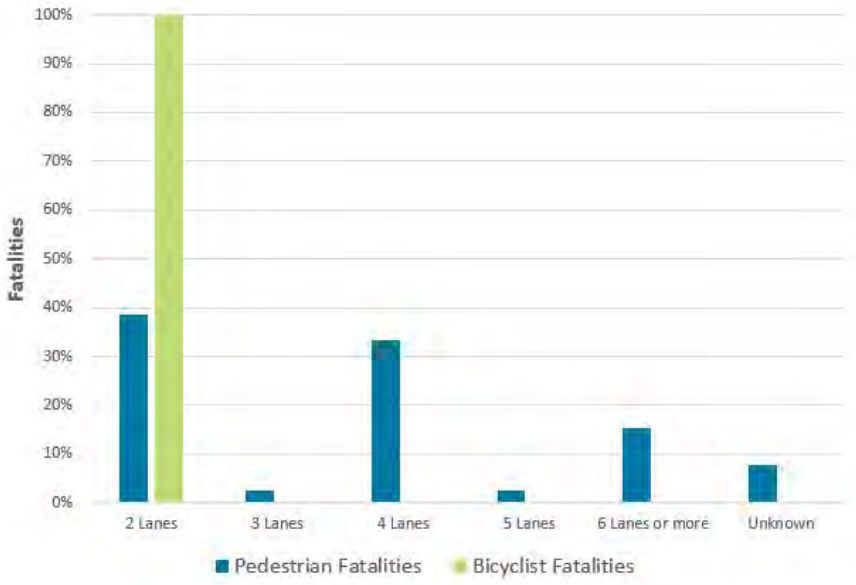
WHERE

Roadway Size

Pedestrian fatalities occurred on a number of different types of roads, ranging from small two-lane road (38 percent) to six or more lanes (15 percent).

The three bicycle fatalities occurred on two-lane roads, but other than the number of lanes, the roadways differ in context. One is a quiet residential street with low traffic volumes and speeds, another is a busier downtown street with moderate speeds, while the third is a rural road with higher speeds. None of these streets had bicycle facilities or sidewalks.

3.7 PEDESTRIAN + BICYCLE CRASHES
BY ROADWAY SIZE | 2012 - 2016



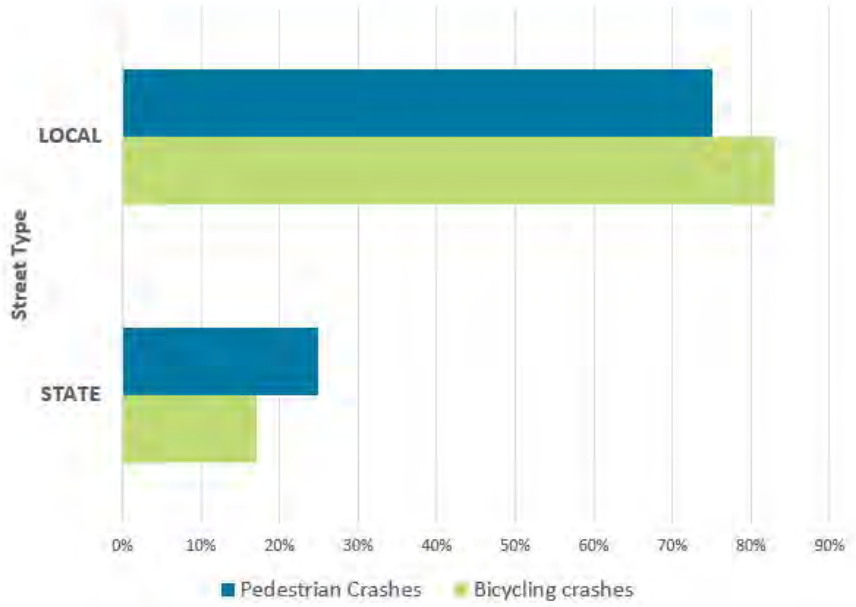
Road Ownership

Approximately 75 percent of pedestrian crashes and 82 percent of bicycle-involved crashes occurred on minor collectors or local streets, defined as those streets owned and maintained by local municipalities and counties.

The remaining 25 percent of pedestrian crashes and 18 percent of bicycle-involved crashes occurred on state roads, defined as those roads owned and maintained by ALDOT.

While fewer crashes are occurring on state roads than local roads, these streets are still important focal points for improving pedestrian and bicycle safety. State roads are typically arterials, with fast-moving traffic that present a danger to people on foot and bike.

3.8 PEDESTRIAN + BICYCLE CRASHES
BY ROAD OWNERSHIP | 2012 - 2016



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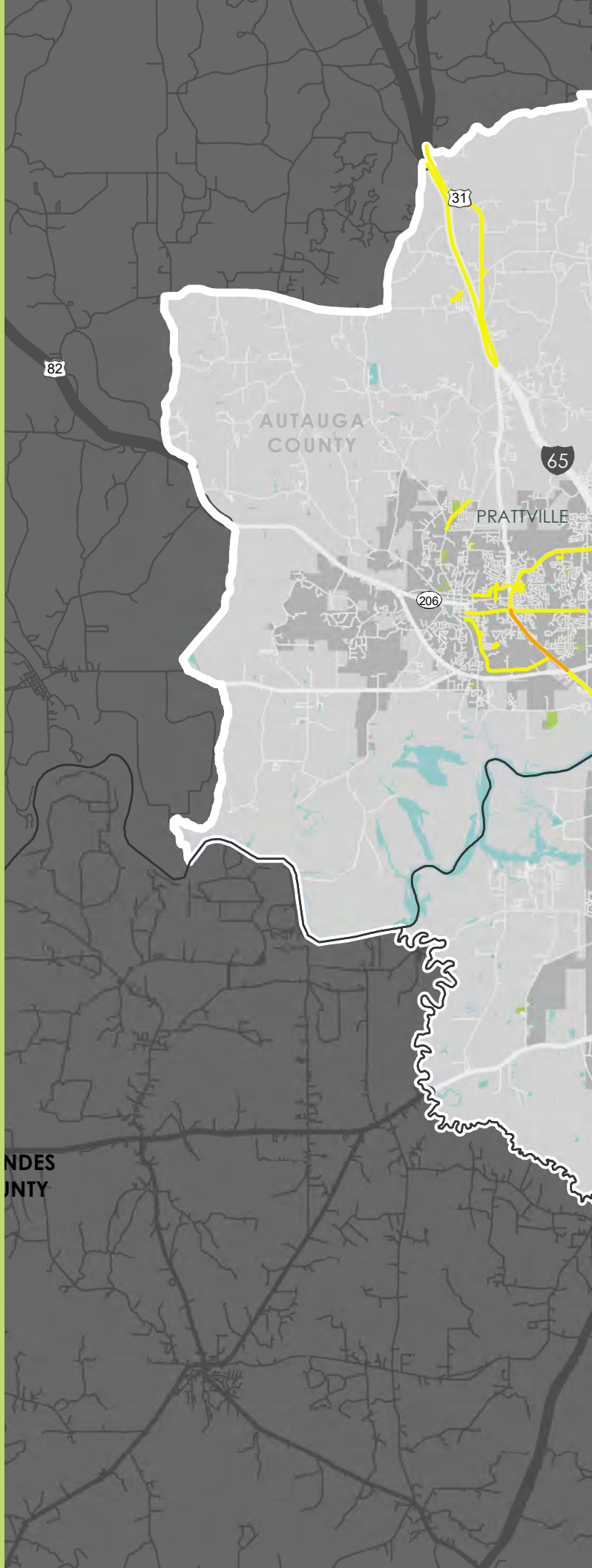
CRASHES INVOLVING PEDESTRIANS

The adjacent map shows corridors in the region with the highest number of pedestrian-involved crashes between 2012 and 2016. The darkest red lines represent high-crash corridors, defined by eight or more pedestrian-involved crashes over this 5-year period.

Notable high-crash corridors (with number of crashes noted parenthetically) are identified, such as Madison Avenue (11), W. South Boulevard (10), Ann Street (10), Troy Highway (9), and E. South Boulevard (8). These are wide, high-speed arterial roads, often four lanes or more, with multiple safety hazards for pedestrians, such as frequent driveways and long crossing distances. These roads also function as commercial corridors with multiple walking trip generators such as job centers and transit routes.

Some of the high pedestrian crash corridors converge at busy, complex intersections that present significant hazards to pedestrian accessibility. One such intersection is where Madison Avenue, Ann Street, Atlanta Highway, and Mt. Meigs Road meet. This intersection has multiple streets converging at difficult angles, and is extremely busy with schools, churches, shopping centers, and restaurants all located in close proximity. However, there are minimal pedestrian accommodations. This creates an environment with multiple vehicular turning movements and pedestrians left to navigate with little protection or predictability.

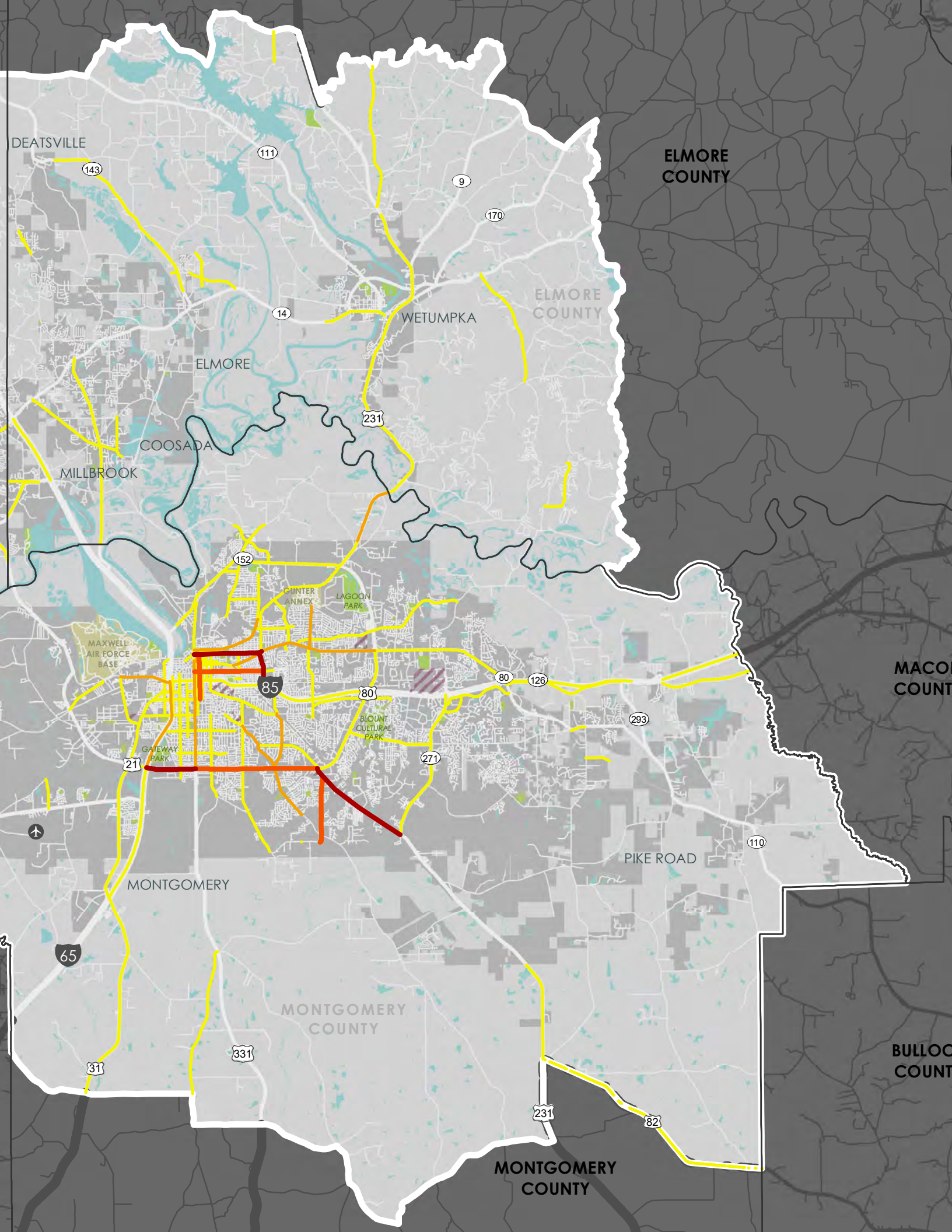


Pedestrian Crash Corridor

- High Crash Corridor
- Moderate Crash Corridor
- Montgomery Regional Airport
- MPO Boundary (white)
- County Boundary
- Park
- Military Base
- College Campus
- Water Body
- Region Outside MPO

N

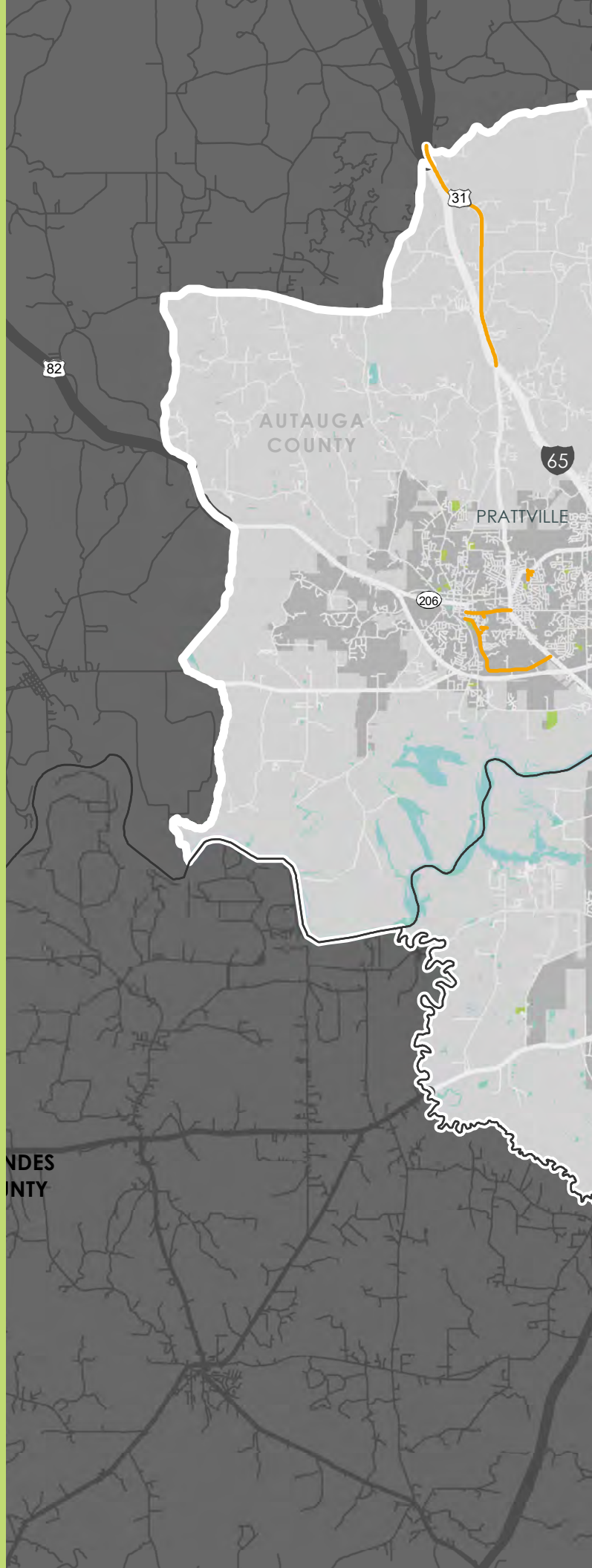
0 2.5 5 Miles


DEATSVILLE
143
111
9
170
ELMORE COUNTY
ELMORE COUNTY
14
WETUMPKA
ELMORE
231
COOSADA
MILLBROOK
152
GUNTER ANNEX
LAGOON PARK
MAXWELL AIR FORCE BASE
85
80
80
126
293
BLOUNT CULTURAL PARK
GATEWAY PARK
21
271
110
PIKE ROAD
MONTGOMERY
65
MONTGOMERY COUNTY
331
31
231
82
MONTGOMERY COUNTY

CRASHES INVOLVING BICYCLISTS

The adjacent map shows corridors in the region with the highest concentration of reported bicyclist-involved crashes between 2012 and 2016. High crash corridors (red lines) are defined here as having three or more crashes in a 5-year period. Similar to the pedestrian-involved crash trends, bicyclist-involved crashes in the River Region align with major roads and arterials. Notable high-crash corridors include Court Street (4 crashes), W. South Boulevard (3), and Mt. Meigs Road (3) – two of which are wide, high-speed arterial roads and neither of which have dedicated bicycle infrastructure.

Crashes involving bicyclists are relatively dispersed in the River Region, with corridors of moderately high concentrations of crashes (shown with orange lines) throughout the crash map. This suggests that bicycle activity occurs across the region, not just in downtown or neighborhood settings, and that bicycle safety treatments are needed to add safety, comfort, and accessibility for such a large geography.

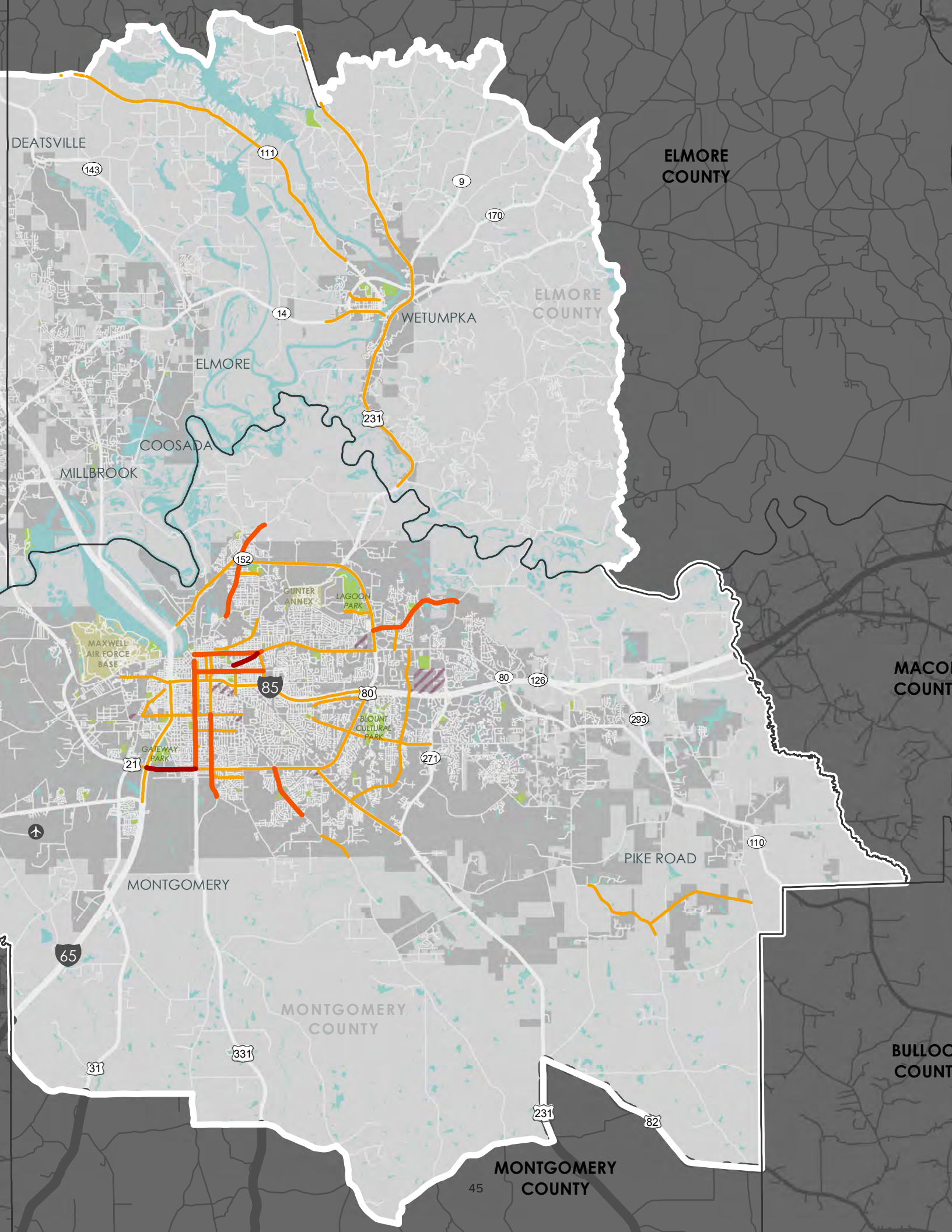


Bicycle Crash Corridor

- High Crash Corridor
- Moderate Crash Corridor
- Montgomery Regional Airport
- MPO Boundary (white)
- County Boundary
- Park
- Military Base
- College Campus
- Water Body
- Region Outside MPO

N

0 2.5 5 Miles

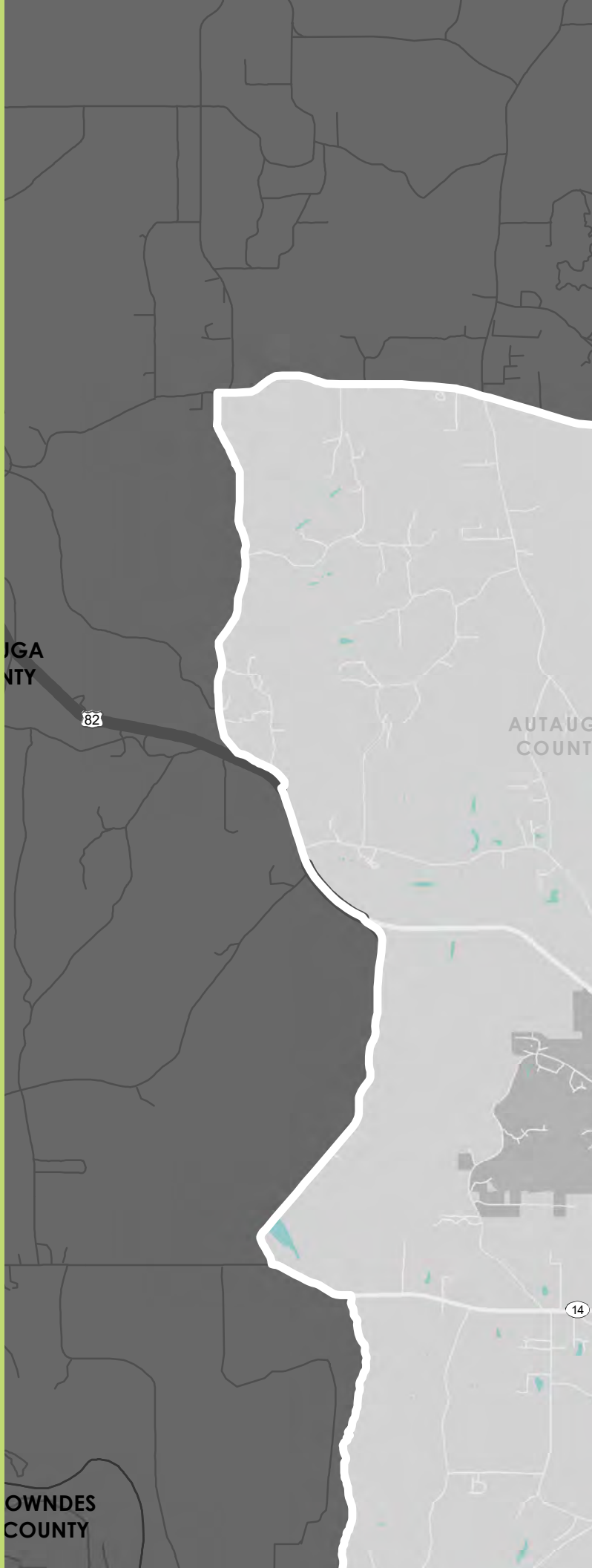

DEATSVILLE
143
111
9
170
ELMORE COUNTY
14
WETUMPKA
ELMORE COUNTY
ELMORE
231
COOSADA
MILLBROOK
152
GUNTER ANNEX
LAGOON PARK
MAXWELL AIR FORCE BASE
85
80
80
126
293
BLOUNT CULTURAL PARK
GATEWAY PARK
21
271
110
PIKE ROAD
MONTGOMERY
65
MONTGOMERY COUNTY
331
31
231
82
MONTGOMERY COUNTY

HIGH CRASH CORRIDORS

AUTAUGA COUNTY

In Autauga County, the high-crash corridors include portions of Highway 31 (near Pine Level), Highway 31 (south of Main Street in Prattville), East Main Street (between Washington St. and Memorial Drive/Hwy 31 in Prattville) and Doster Road/Dosterville Road in Prattville.

Note that the high-crash corridors in the Autauga County map are noted as high-crash relative to other corridors in Autauga County and not the region as a whole.

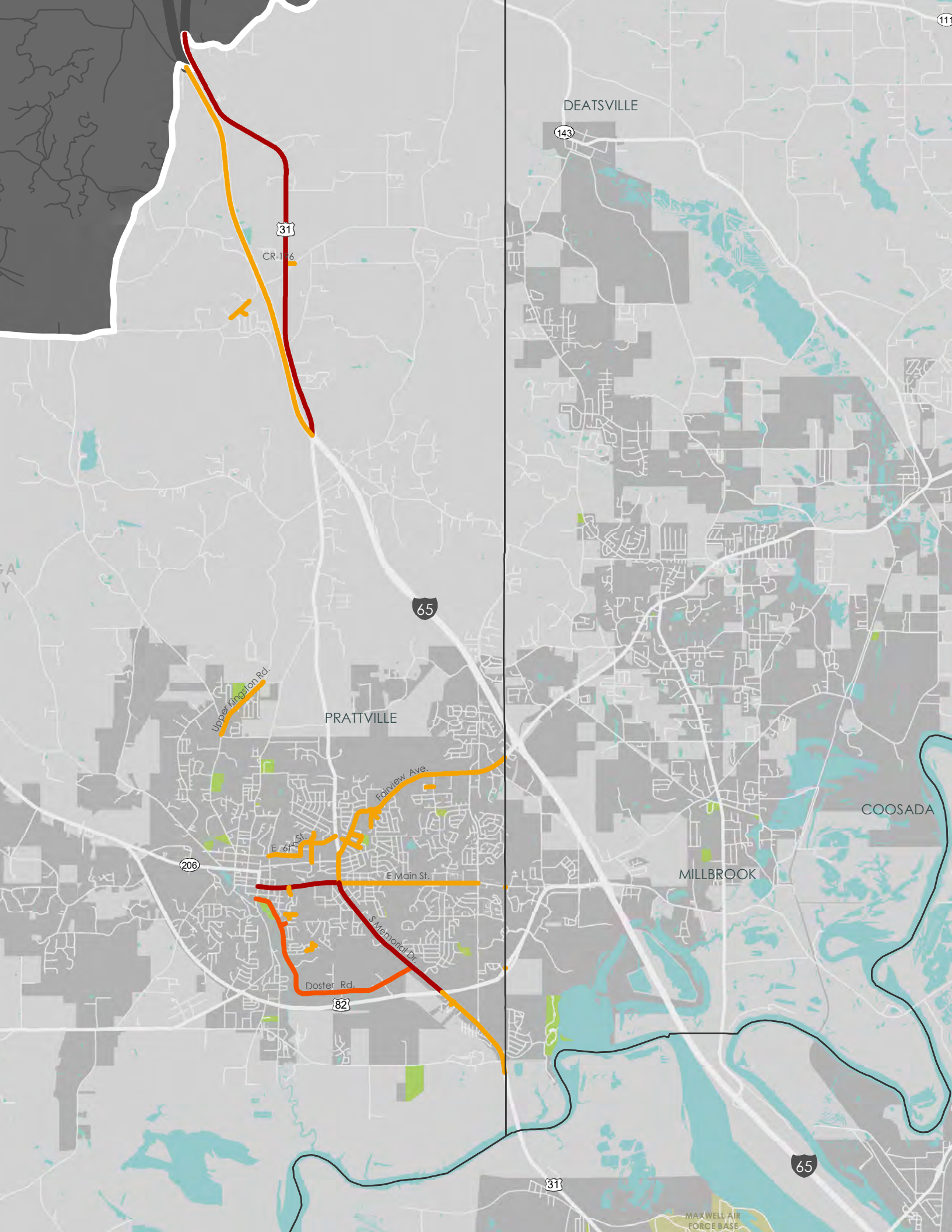


Autauga County Crash Corridors

- High Crash Corridor
- Moderate Crash Corridor
- Montgomery Regional Airport
- MPO Boundary (white)
- County Boundary
- Park
- Military Base
- College Campus
- Water Body
- Region Outside MPO

N

0 1 2 Miles

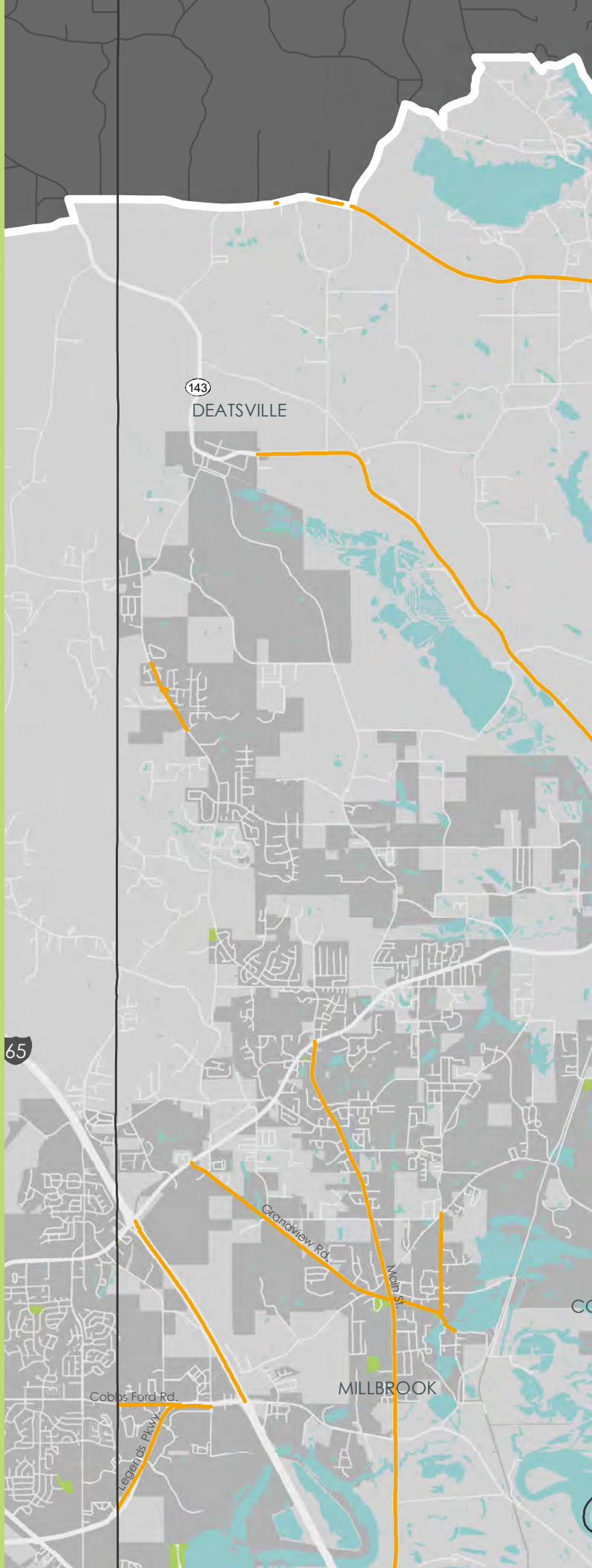

DEATSVILLE
143
31
CR-1 6
65
Upper Kingston Rd.
PRATTVILLE
Fairview Ave.
E 6th St.
206
E Main St.
S Memorial Dr.
Doster Rd.
82
COOSADA
MILLBROOK
31
65
MAXWELL AIR FORCE BASE

HIGH CRASH CORRIDORS

ELMORE COUNTY

In Elmore County, the highest crash corridors include portions of West Bridge Street in downtown Wetumpka, and Highway 231 (between Coosa River Parkway and Redland Road, in Wetumpka).

Note that the high-crash corridors in the Elmore County map are listed as high-crash relative to other corridors in Elmore County and not the region as a whole.

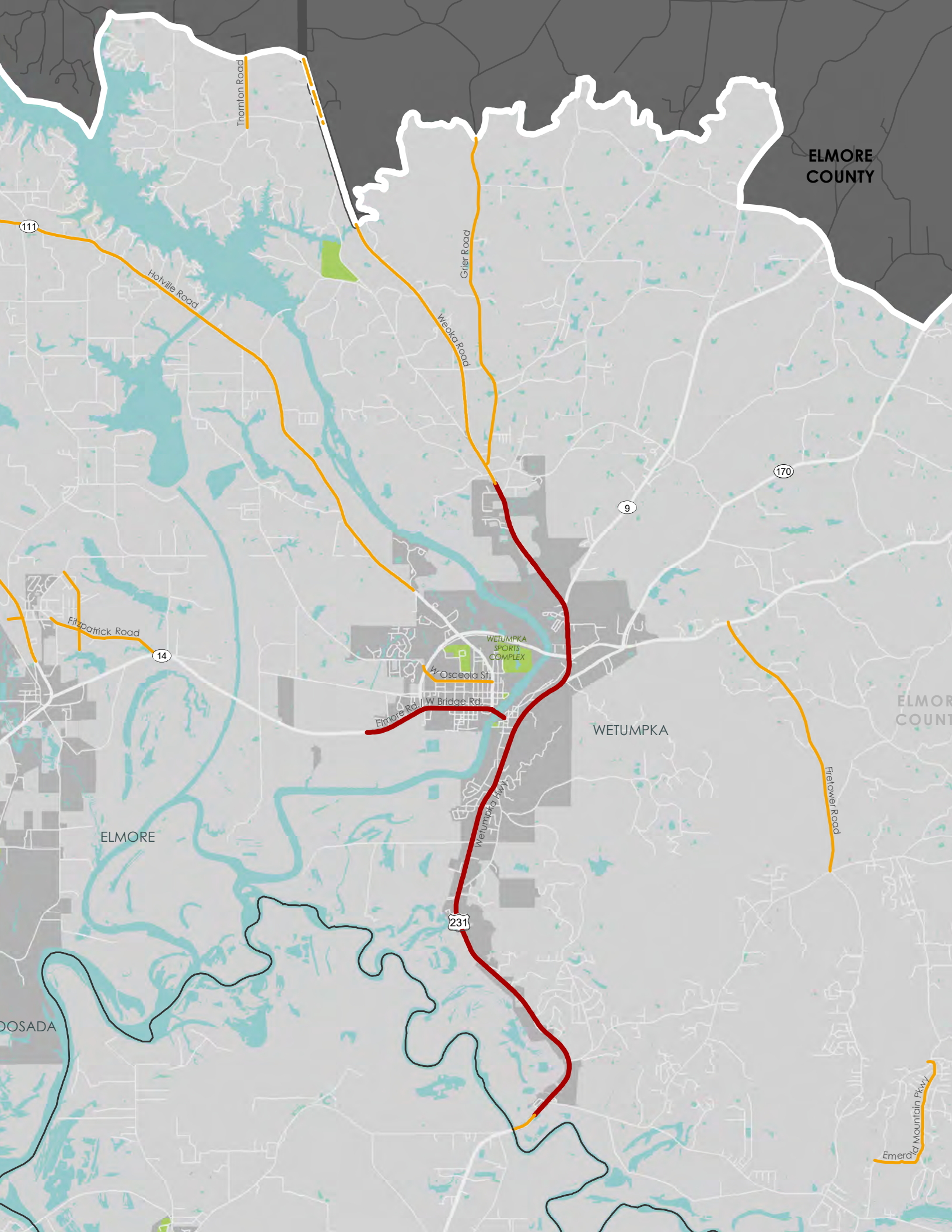


Autauga County Crash Corridors

- High Crash Corridor
- Moderate Crash Corridor
- Montgomery Regional Airport
- MPO Boundary (white)
- County Boundary
- Park
- Military Base
- College Campus
- Water Body
- Region Outside MPO

N

0 1 2 Miles

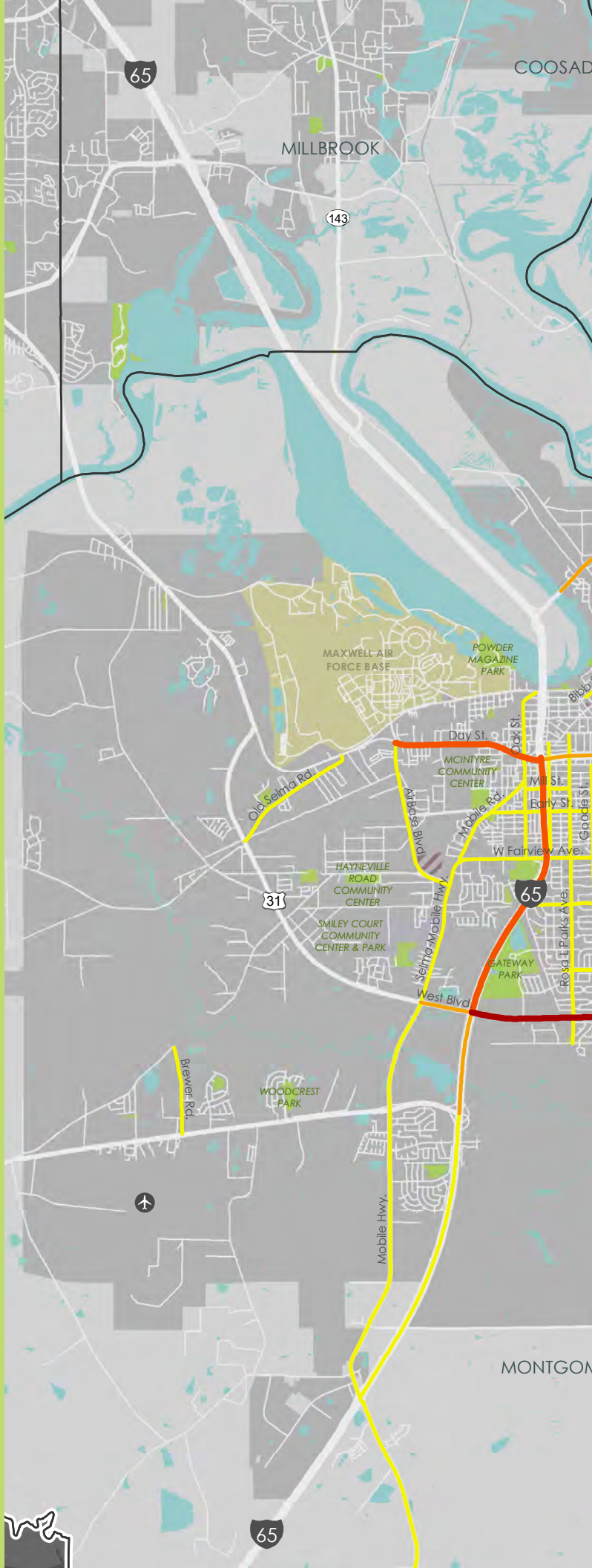

ELMORE COUNTY
Thornton Road
111
Holville Road
Grier Road
Weoka Road
170
9
Fitzpatrick Road
14
WETUMPKA SPORTS COMPLEX
W Osceola St.
Elmore Rd.
W Bridge Rd.
WETUMPKA
ELMOR COUNT
Firetower Road
Wetumpka Hwy.
ELMORE
231
OOSADA
Emerald Mountain Pkwy.

HIGH CRASH CORRIDORS

MONTGOMERY COUNTY

The majority of crashes in the River Region occur in Montgomery County. Therefore, the highest crash corridors in Montgomery County—W. South Boulevard, Madison Avenue, Ann Street, and Troy Highway - mirror the highest crash corridors for the entire region. Other corridors of note in Montgomery County with a high number of pedestrian and bicycle crashes include Day Street, Upper Wetumpka Road, Atlanta Highway, Highland Avenue, E. South Boulevard, Woodley Road, S. Court Street, and Virginia Loop Road.

Note that the high-crash corridors in the Montgomery County map are listed as high-crash relative to other corridors in Montgomery County and not the region as a whole.

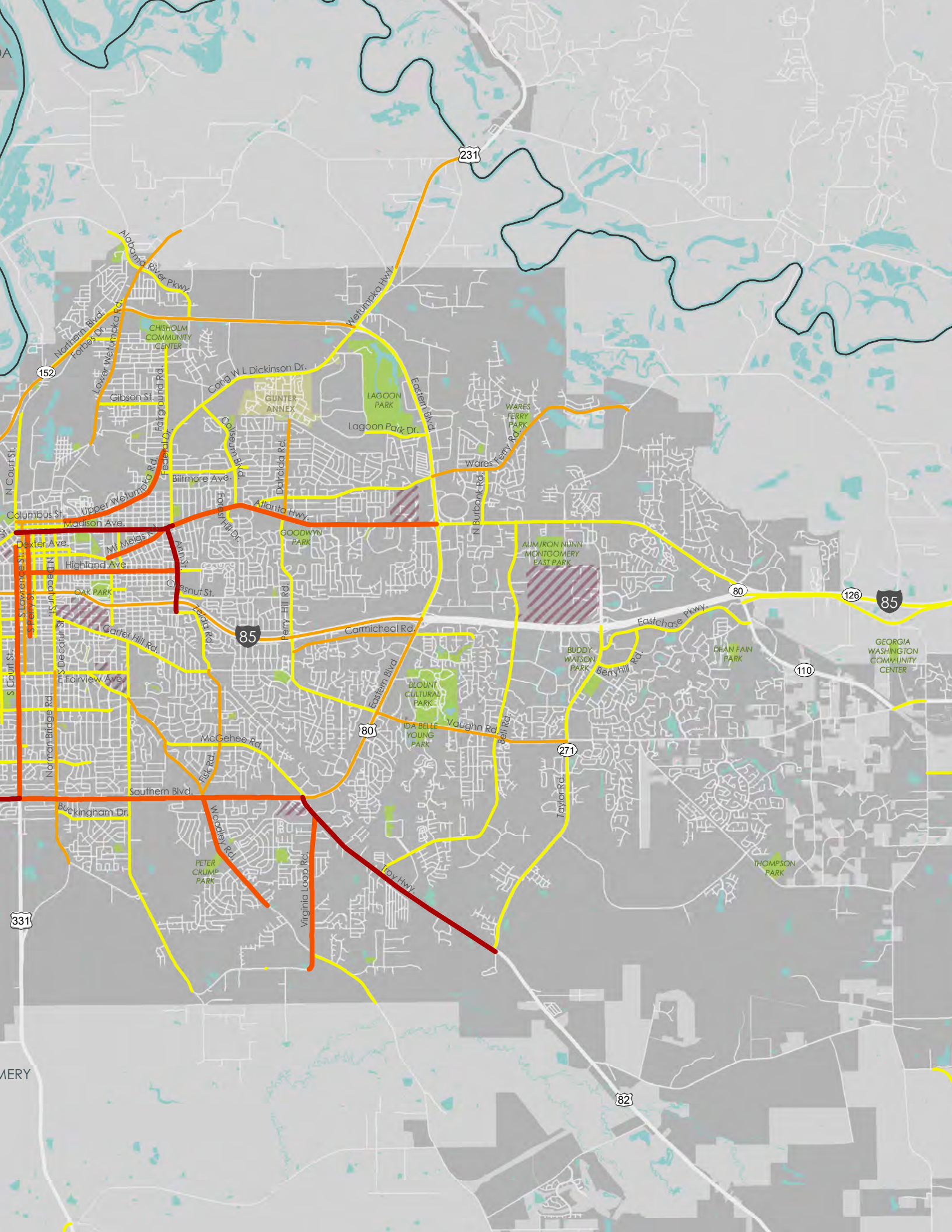


Autauga County Crash Corridors

- High Crash Corridor
- Moderate Crash Corridor
- Montgomery Regional Airport
- MPO Boundary (white)
- County Boundary
- Park
- Military Base
- College Campus
- Water Body
- Region Outside MPO

N

0 1 2 Miles


231
Alabama River Pkwy.
Wetumpka Hwy.
Northern Blvd.
Forbes Dr.
Lower Wetumpka Rd.
CHISHOLM COMMUNITY CENTER
152
Gibson St.
Fairground Rd.
Cong W L Dickinson Dr.
GUNTER ANNEX
LAGOON PARK
Eastern Blvd.
WARES FERRY PARK
Lagoon Park Dr.
Coliseum Blvd.
Federal Dr.
Darbda Rd.
Wares Ferry Rd.
N Court St.
Upper Wetumpka Rd.
Biltmore Ave.
Columbus St.
Madison Ave.
Atlanta Hwy.
Forest Hill Dr.
N Burbank Rd.
Dexter Ave.
Mt Meigs Rd.
Ann St.
GOODWYN PARK
ALIM/RON NUNN MONTGOMERY EAST PARK
Highland Ave.
Chestnut St.
OAK PARK
80
126
85
Eastchase Pkwy.
Lawrence St.
Perry Hill Rd.
Zelda Rd.
Carmicheal Rd.
Garfer Hill Rd.
BUDDY WATSON PARK
Berryhill Rd.
DEAN FAIN PARK
GEORGIA WASHINGTON COMMUNITY CENTER
110
S Court St.
S Decatur St.
E Fairview Ave.
Eastern Blvd.
BLOUNT CULTURAL PARK
IDA BELLE YOUNG PARK
Vaughn Rd.
Bell Rd.
Norman Bridge Rd.
McGehee Rd.
Fisk Rd.
271
Southern Blvd.
Buckingham Dr.
Taylor Rd.
Woodley Rd.
PETER CRUMP PARK
Virginia Loop Rd.
Troy Hwy.
THOMPSON PARK
331
82

EQUITY ANALYSIS

For many residents of the River Region, walking, biking, and taking transit is a matter of economic or mobility need rather than a lifestyle choice. An equity analysis provides insight into the areas of the River Region where these populations are concentrated, and to bring attention to neighborhoods or corridors that may be most in need of improvements. Social equity and transportation policies can ensure that harmful effects of environmental injustice and disinvestment to do not disproportionately impact low income populations, minorities, children, older adults, or disabled people.

The quantitative analysis provided here is a starting point for identifying areas that may require extra attention for access and safety enhancements. However, the plan's recommendations are based on multiple factors including the equity analysis, crash analysis, current best practices, public and stakeholder input, demand, and suitability analysis.

METHODOLOGY

This section describes the equity analysis process in more detail, and includes a summary of equity analysis methodology and results.

The equity analysis incorporated the following seven socioeconomic criteria:

- **Seniors**
- **Children**
- **Access to Vehicle**
- **Non-White Populations**
- **Linguistic Isolation**
- **Income**
- **Hispanic Population**

The measure and rationale for each criteria are described in detail in the following paragraphs.

Seniors

Metric: Senior citizens are defined as those who are 65 years old and older. This follows the 2010 Census Brief - The Older Population.

Rationale: Walkable neighborhoods help seniors to remain active, healthy, and social. Older adults socialize more when living in walkable neighborhoods, because regular social interaction is possible, convenient and more frequent.

According to Center for Disease Control and Prevention survey, 32.5 percent of Americans over the age of 65 don't have regular physical activity. Older adults who walk are less likely to suffer mental deterioration or dementia.

Walkable neighborhoods help seniors to remain active, healthy, and social.

Children

Metric: Children are defined as individuals 14 years old and younger. This threshold was determined based on the legal age for driving in Alabama.

Rationale: The U.S. has been experiencing a growing trend in youth obesity—approximately one in three children are overweight or obese. Greater access to physical activity options, connected street networks, and walkable neighborhoods are correlated to lower obesity rates and healthier lifestyles.

Vehicle Access

Metric: Vehicle access is provided by the American Community Survey that asks whether a household has access to a car, truck, or van of 1-ton capacity or less.

Rationale: Access to private vehicles can be an indicator of economic mobility and access to healthy food options and active spaces. Additionally, vehicle access shows where demand is greater for active transportation options due to a higher proportion of people relying on walking, biking, or transit to access daily goods and services.

Non-White Populations

Metric: Non-white is measured as the percentage of all races, excluding those that identified as white. This includes Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, or some other race.

Rationale: Communities with a higher proportion of racial and ethnic minorities generally lack infrastructure that supports walking, such as well-maintained sidewalks, vibrant storefronts, and safe streets.

Linguistic Isolation

Metric: Linguistic isolation is measured as percentage of households in which those over the age of 5 speak English "not well" or "not at all."

Rationale: Households that are linguistically isolated may have greater difficulty accessing services that are available to fluent English speakers, such as transportation services and social services.

Income

Metric: The income factor is measured as the percent of the population living below two times the federal poverty level. 2015 Federal Poverty Guidelines identified $48,500 as the threshold for a four-person household. American Community Survey (ACS) data groups income by increments of $4,999 so this analysis captures all household incomes at or below $49,999.

Rationale: Low-income populations are less likely to have access to a car and may depend on walking to reach work, school, public transportation, or other destinations.

Hispanic Population

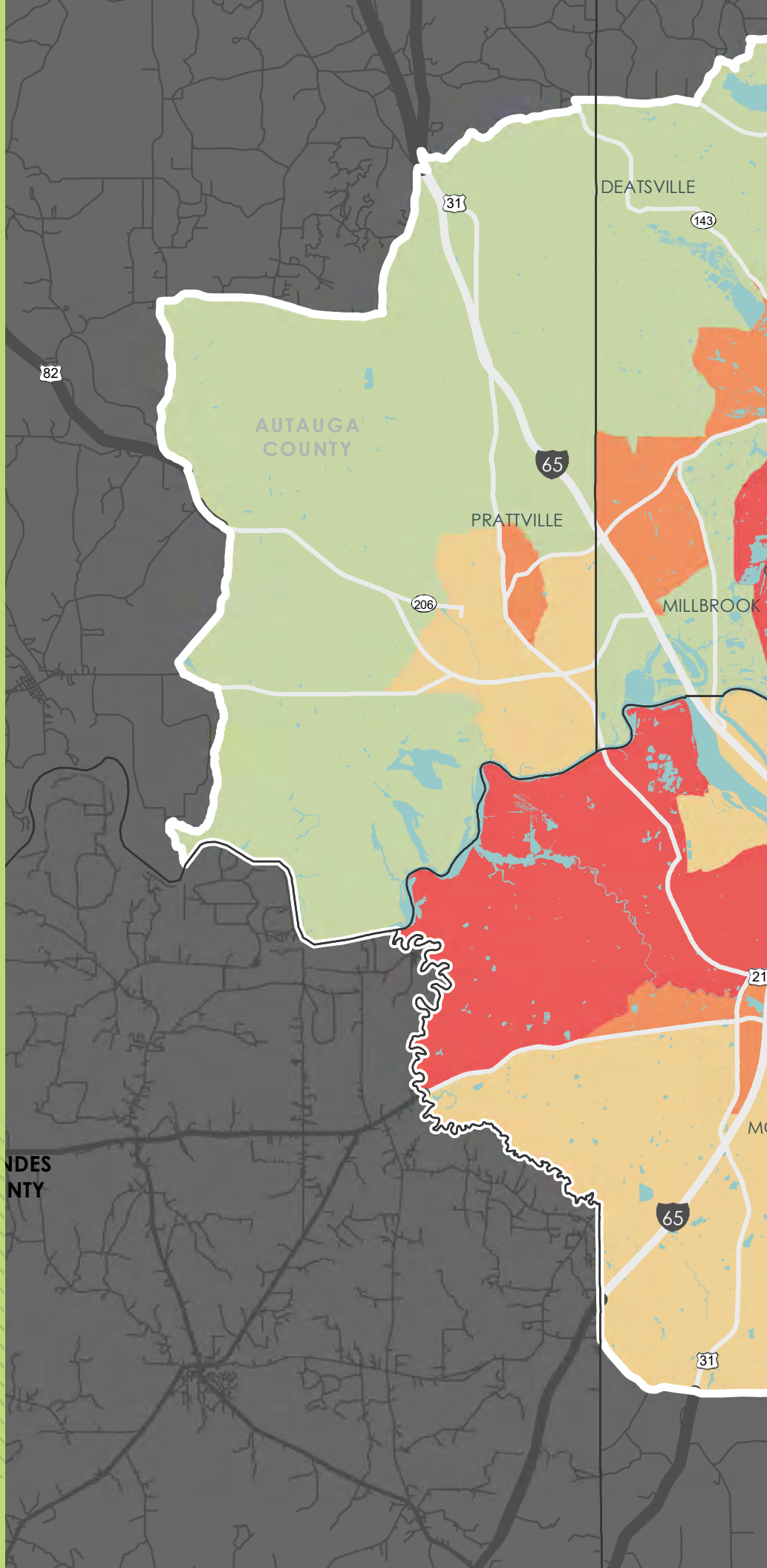
Metric: The population that identifies as Hispanic ethnicity is identified based on census data for the region, and is included as a separate metric.

Rationale: The Hispanic population in the River Region has historically been under-served and linguistically isolated and is perceived as a population with a high demand for safe walking and biking facilities. Hispanic populations are disproportionately represented in crash data and obesity statistics—metrics that can be reversed through safe and walkable street design.

WHAT THE EQUITY ANALYSIS SHOWS

The equity analysis map shows high concentrations of vulnerable populations focused near the center of the region. This includes portions of west Montgomery, north Montgomery, neighborhoods east of downtown Montgomery, southeast Montgomery along Troy Highway, and the Coosada area. Other areas listed as having moderate-high concentrations of vulnerable communities include parts of the City of Montgomery, Millbrook and Elmore.

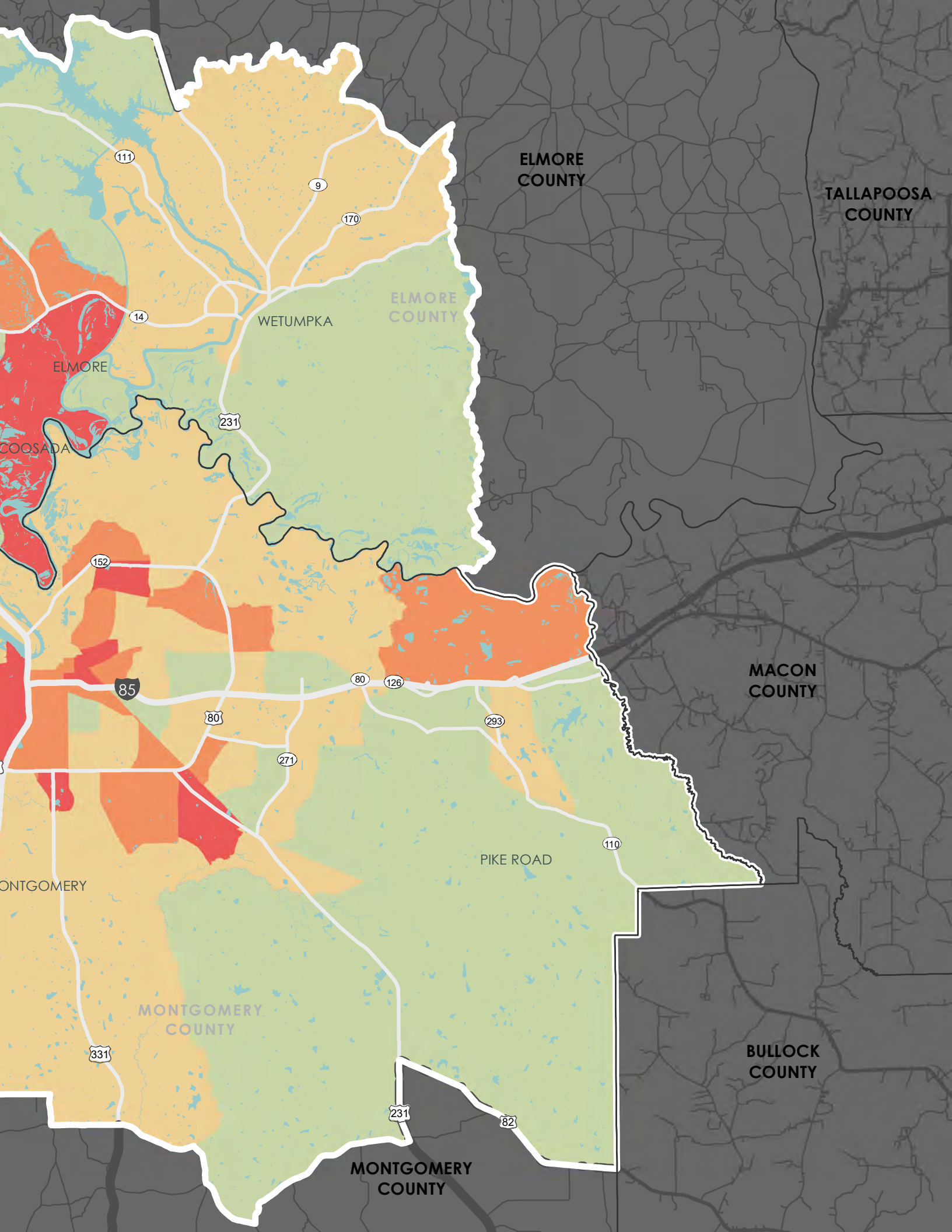
People that live in the red and orange areas of the map are less likely to be able to drive or have access to a household car, leading to a greater propensity and need to walk, bike, or take transit to get to work and other daily destinations. Targeting investment in walking and biking safety improvements within these areas can help address this discrepancy in transportation safety, and improve accessibility for those that need it the most.



Concentration of Vulnerable Populations

- High Concetration
- Low Concentration
- MPO Boundary (white)
- County Boundary
- Water Body
- Region Outside MPO

N 0 2.5 5 Miles


ELMORE COUNTY
TALLAPOOSA COUNTY
MACON COUNTY
BULLOCK COUNTY
MONTGOMERY COUNTY
ELMORE COUNTY
WETUMPKA
ELMORE
COOSADA
ONTGOMERY
PIKE ROAD
MONTGOMERY COUNTY
111
9
170
14
231
152
85
80
126
80
293
271
110
331
231
82

WALKING AND BICYCLING DEMAND ANALYSIS

INTRODUCTION

This section summarizes the methods and findings of the bicycle and pedestrian demand analysis for the River Region. The demand analysis is an objective, data-driven process that identifies areas with high demand to help inform and prioritize potential bicycle and pedestrian projects. Counting the number of people walking and biking on every street in the region is unrealistic. Instead, we can estimate the cumulative demand representative of where people live, work, play, learn, and access transit. The demand analysis measures potential demand (bicycle and pedestrian activity) by quantifying factors that generate bicycle and pedestrian movement. Results of the composite demand model are used to characterize the geographic distribution of bicycle and pedestrian demand within the River Region.

The bicycle and pedestrian demand analysis provides the following benefits:

- Quantify factors that impact pedestrian and bicycle activity and objectively identify areas of expected pedestrian and bicycle activity
- Identify network gaps that have the greatest impact on network connectivity to help identify potential improvements that have the greatest benefits for pedestrians and bicyclists
- Provide a data-driven foundation for a project list that is informed by the spatial distribution of relevant demographics and demand factors
- Guide community leaders and the public on one aspect of the project prioritization process

METHODOLOGY

The demand model relies on spatial consistency to generate logical distance and density patterns. An evenly spaced point grid was created that closely aligns with the street network. The rationale for using a point grid is that it allows for an evenly spaced sample. Data for population and employment are first analyzed individually at the census block level, which is the level at which data is available. Then, this data is tied to the point grid data. All other data used for this analysis is tied directly to the point grid data. The resulting analyses shows where people are likely to walk and bike based on a quarter-mile radius within the demand model inputs. Although locations where people live, work, play, learn, and access transit were overlaid to determine demand, the results approximate pedestrian and bicyclist activity along a street network based on the locations of the points in the grid rather than the locations of the inputs.

The Lagoon Park Trails are a popular destination for hiking and biking.

Data Inputs

Data inputs for five categories (live, work, play, learn, access to transit) were incorporated into the demand analysis. Table 3.9 displays each category, inputs for each category, its source, and notes about what is included in the data.

Scoring Method

The demand model's scoring method is a function of density and proximity. Areas that have more features and features that are closer together will have higher scores. Low feature density areas and areas where features are further apart will receive lower scores.

Composite demand is calculated by summing all five categories: Live, Work, Play, Learn, and Access to Transit. All categories are given the same weight in the composite map.

The purpose of the demand analysis is to identify areas with the greatest relative bicycle and pedestrian activity along the street network and use the demand outputs to inform project recommendations. The following figures illustrate and describe how the demand model categories support a holistic profile of high-demand areas in the River Region.

3.9 DATA INPUTS FOR BICYCLE + PEDESTRIAN DEMAND ANALYSIS

CATEGORY	MODEL INPUT	SOURCE
Live	Total Population	2010 Census*
Work	Total Employment	2014 American Community Survey (obtained through LEHD)*
Play	Community Centers + Libraries	Montgomery MPO
	Parks	Montgomery MPO
	Trails	Montgomery MPO
	Retail Employment	2014 American Community Survey (obtained through LEHD)*
Learn	Universities + Colleges	Montgomery MPO
	Elementary, Middle, Junior, High Schools	MPS, ACSS, PRS, ECPS
Transit	Montgomery Transit	Montgomery MPO

**Summarized by census block*

WHERE PEOPLE LIVE

This category is defined by population density. Data for the total population of each census block was retrieved from the 2010 U.S. Census. These locations represent potential pedestrian and bicycle trip origin locations. Population density is highest in Prattville, Elmore and Wetumpka, as well as the central and southeastern parts of Montgomery. These higher population densities indicate a greater potential for walking and biking trips to start from these areas.

WHERE PEOPLE WORK

This category represents trip endpoints (regardless of place of residence) for people working in the region. Employment data for 2014 was obtained from the Longitudinal Employer-Household Dynamics (LEHD) program, which is a part of the U.S. Census Bureau. The map shows employment density in Montgomery and the surrounding area. High employment density areas are located near the center of Montgomery, with diminishing density as you move eastward along the I-85 corridor. Pockets of density are also found in the northern suburbs of Prattville, Millbrook, Elmore, and Wetumpka. These areas of higher employment density represent potential bicycle and walking trips to and from places of work. Aside from connections within downtown Montgomery, it is also important to consider making regional connections to employment centers outside of the township limits.

WHERE PEOPLE PLAY

This category represents retail density and locations where residents may walk or bike based on the locations of trails and parks. The map shows the demand for walking and biking as well as the locations of existing parks and trails. Demand for walking and biking are highest near Gateway Golf Course in southwest Montgomery; Oak Park and the Montgomery City Planetarium in downtown Montgomery; Lagoon Park and Golf Course in northeast Montgomery; and Blount Cultural in east Montgomery where there is also a number of shopping, dining, and cultural destinations.

WHERE PEOPLE LEARN

This category represents expected pedestrian and bicyclist activity based on the locations of daycares, preschools, K-12 schools, and colleges/universities in the River Region. Areas of higher bicycle and pedestrian demand can be expected within a quarter-mile of preschools and K-12 schools in the area. The highest demand for walking and biking is the area around the Alabama State University campus in downtown Montgomery and east of the city around Faulkner University and Auburn University at Montgomery.

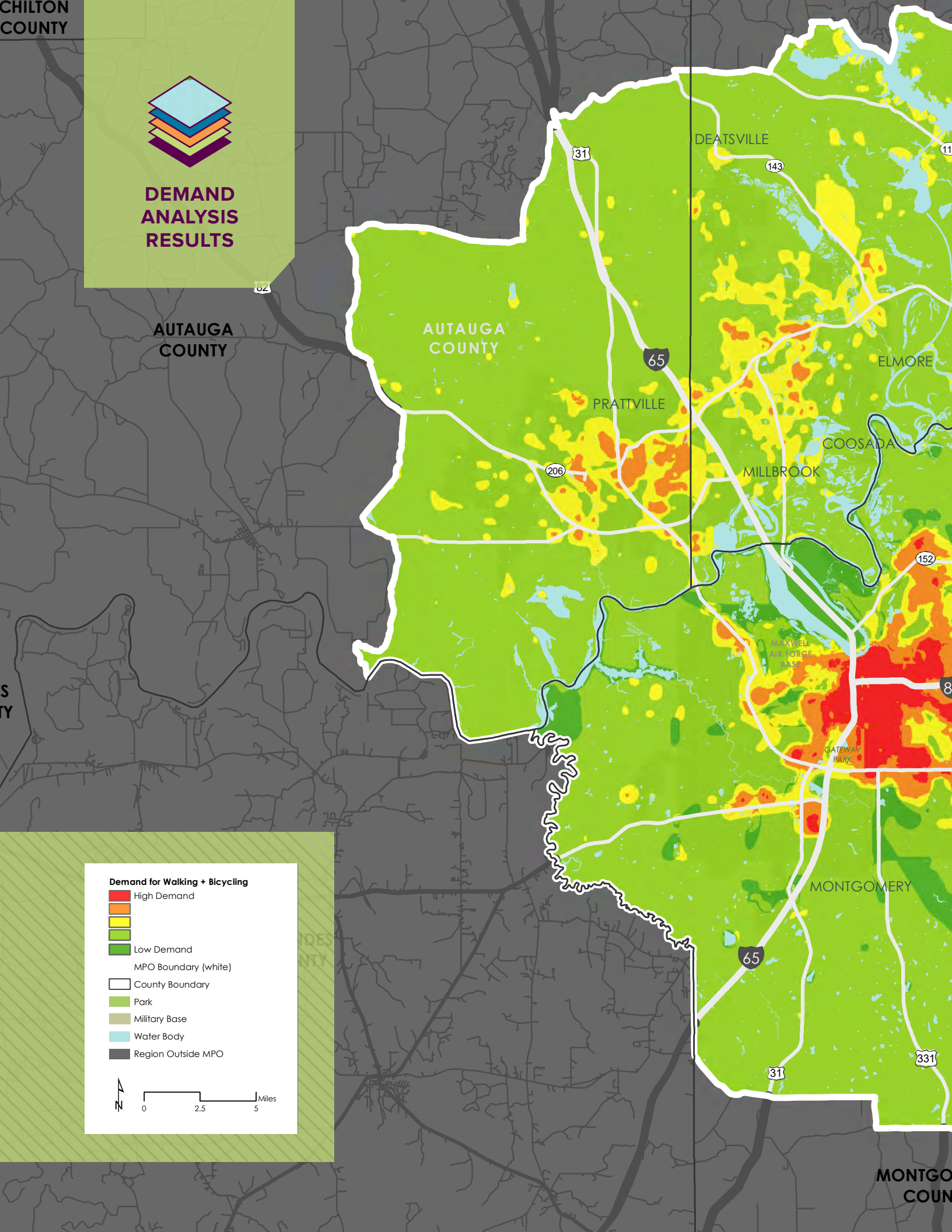
WHERE PEOPLE ACCESS TRANSIT

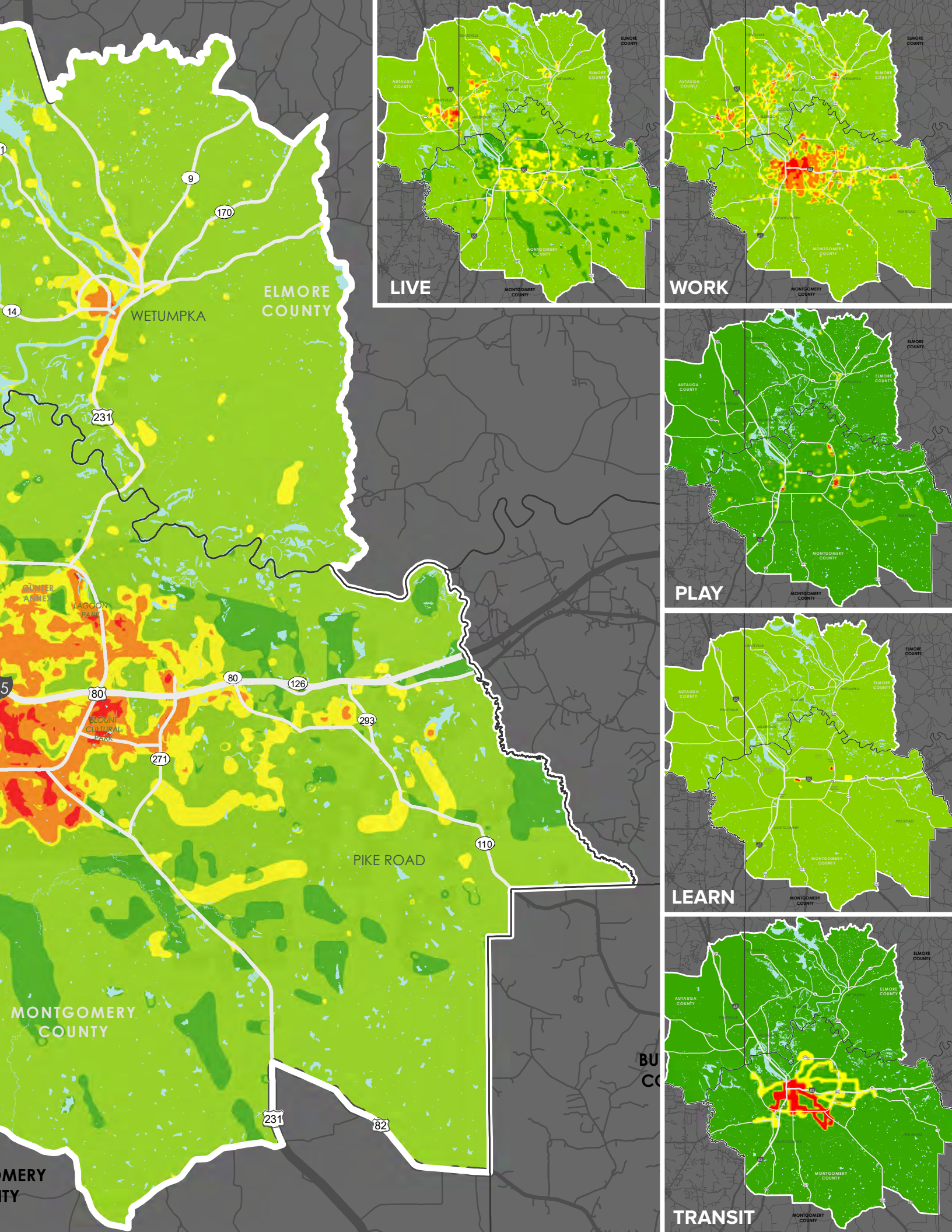
This category represents expected pedestrian and bicyclist activity based on the locations of bus stops as well as boarding and alighting frequencies at each bus stop. The total number of transit users getting on and off buses shows overall demand and is a better measure of how likely someone is to walk or bike to that bus stop. Higher pedestrian and bicycle demand can be expected within a quarter-mile of stops with the most on and off boardings. These bus stops include the following routes on the M (shown in red: Route 3, 5, 9, 10 and 12). Efforts to improve pedestrian and bicycle connectivity to these transit stops should be considered. The other bus routes generate a moderate amount of demand and are shown yellow. These include routes 1, 2, 4, 6, 7, 8, 11, 16, and 17.

COMPOSITE DEMAND

After each individual factor (live, work, play, learn, and access to transit) was examined, all five factors were overlaid to determine cumulative pedestrian and bicycle demand in the River Region. Highest composite demand for walking and biking is near downtown Montgomery and to the south, with moderate to high demand radiating to the east of the city. Concentrations of moderate demand are also found in the northern suburbs.

DEMAND ANALYSIS RESULTS




ELMORE COUNTY
WETUMPKA
9
170
14
231
GUNTER ANNEX
LAGOON PARK
80
126
293
BLOUNT CULTURAL PARK
271
110
PIKE ROAD
MONTGOMERY COUNTY
231
82
LIVE
WORK
PLAY
LEARN
TRANSIT

04

COMMUNITY PRIORITIES

WHAT POLICIES, PROGRAMS, AND PROJECTS DO RIVER REGION RESIDENTS PREFER?

Extensive public input was a major factor for identifying the needs and priorities of river region residents. This was achieved through multiple forms and venues. Effort was made to meet people where they are through six tabling events spread throughout the region, 3 open houses (one held in each county), a website, an online interactive map, and a survey.

More than 1,000 comments were received through the input process, and provided the basis for the plan recommendations. Comments and information received are summarized here and organized according to the type of public involvement.

REGIONAL TABLING EVENTS

In order to obtain public suggestions and feedback for the Walk Bike River Region plan, the project team engaged residents at six different events across the River Region from April to May. At five of the events people were presented with two interactive posters - one that asked "What Motivates You to Walk?" and another that polled preferred bicycle and pedestrian facility types in the River Region.

By tabling at different events, the project team was able to hear a diverse set of opinions and capture a variety of feedback that ultimately reflects a wide range of social, economic, and racial populations.

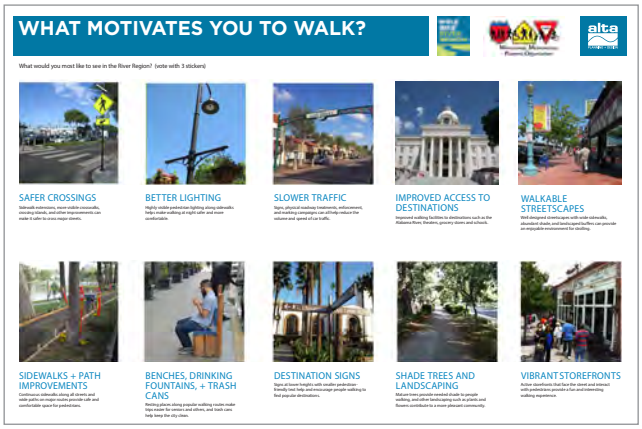
Business cards with contact information were provided at tabling events to raise awareness of the plan

RESULTS

The tabling events saw hundreds of people voting on the two different posters. Each poster received different numbers of votes. The "Preferred Bicycle and Pedestrian Facility Type" poster received 693 votes total for all the events. **No single infrastructure type received an overwhelming amount of votes.** Combining all votes from the six events, the **top three preferred facilities are: new sidewalks, intersection improvements, and protected bike lanes** (15, 13, and 12%, respectively). Shared lane markings, or **sharrows, received the least amount of votes** (5%).

The "What Motivates You to Walk?" poster received 504 votes. Similarly, there was not a clear winner. Combining all votes across the six events, t**he top three factors that would motivate people to walk are: sidewalk and path improvements, shade trees and landscaping, and better lighting** (17, 15, and 13%, respectively). Destination signs received the least amount of votes (3%).

Graphs 4.1 and 4.2 show the break down of votes for each poster.



Two posters, included the one above titled "What Motivates You to Walk" were used together with large maps to gather input on preferred facility types and locations.

Table at the Maxwell Air Force Base Air Show. This was a free event celebrating the Air Force's 70th Anniversary.

Table at the Walk of Life event promoting breast cancer awareness and providing free breast cancer screenings for underserved women and men.

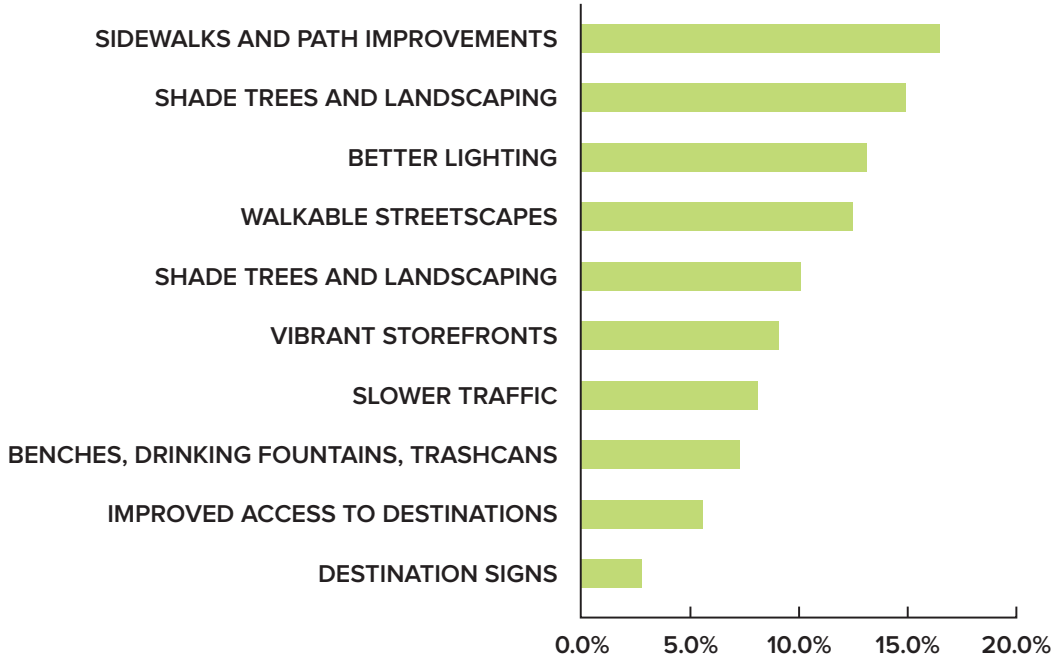
Table at the National Walk @ Lunch Day event which encouraged people to walk for exercise during their lunch break.

Table at the National Night Out Kick Off event. This annual event promotes police and community partnerships.

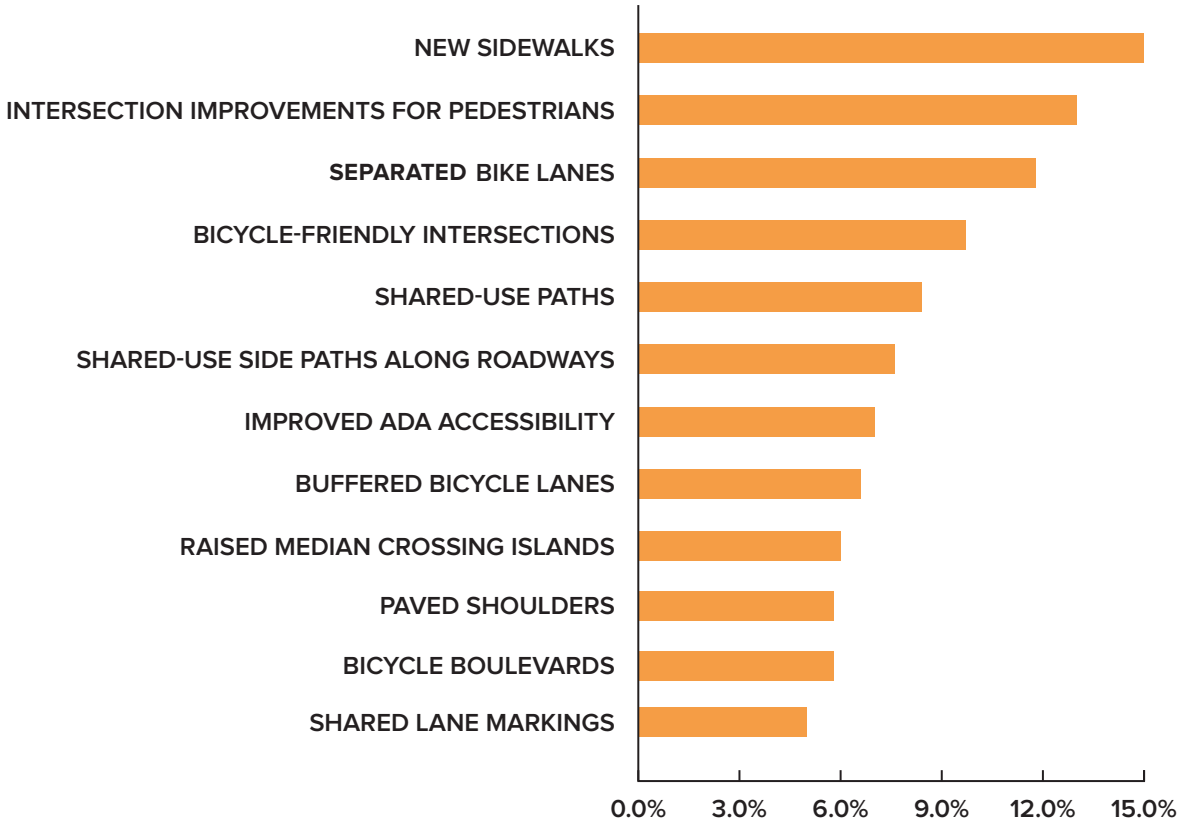
Table at the Touch a Truck event in Prattville, AL. This event was held in conjunction with the annual Mayor's Bike Ride and allows children to interact with public service vehicles.

Outreach at the Safe Cycling Skills Rodeo for elementary kids to encourage and develop safe bicycling habits and provide safety inspections.

4.1 WHAT MOTIVATES YOU TO WALK?



4.2 PREFERRED PEDESTRIAN AND BICYCLE INFRASTRUCTURE



ONLINE INTERACTIVE MAP SUMMARY

The mobile-friendly online mapping software, Leaflet, allows users to give public input on an interactive map of the River Region. Users are able to place points, draw lines, leave comments and “like” inputs. Visitors can add additional lines and points or ”like” and comment on previous inputs. The interactive map included the locations of existing streets, bike racks, bike facilities, funded bike facilities and places of interest as base layers. **Over 120 residents interacted with the map by drawing lines, placing points, commenting, and “liked” comments of previous users.**

Visitors identified 249 miles of where bicycling routes need improvements, and 25.25 miles of where walking routes need improvements. **The contrast between the existing facilities and suggested improvements shows the need for additional route connections.**

Visitors were also asked to place points on the map using four different categories including:

- Bicycling recommendation
- Walking recommendation
- Bicycling obstacle
- Walking obstacle

Users placed 9 points with bicycling and walking recommendations, and 35 points where users identified bicycling and walking obstacles. **Bicycling obstacles received the most comments** - 21 people identified specific problematic places. Major statistics summarizing the results of the online interactive map are shown in Graphic 4.3.

Snapshot of interactive map comments submitted by river region residents

4.3 INTERACTIVE MAP SUMMARY

Comments Added

82 LINES

&

44 POINTS

Miles of Existing and Added Lines Drawn

10 MILES — BIKE FACILITIES: EXISITING

10.4 MILES — BIKE FACILITIES: FUNDED

248.8 MILES — IMPROVEMENTS NEEDED: BICYCLE ROUTES

25.25 MILES — IMPROVEMENTS NEEDED: WALKING ROUTES

Number of Points Placed

8 POINTS — RECOMMENDATION: BICYCLING

1 POINTS — RECOMMENDATION: WALKING

21 POINTS — OBSTACLE: BICYCLING

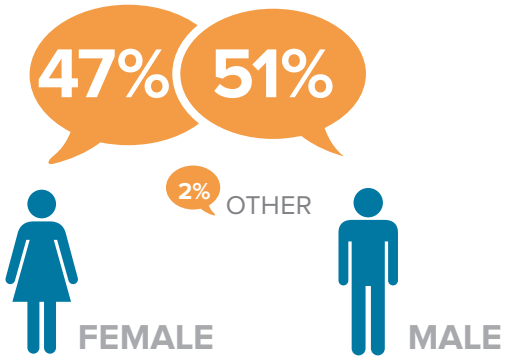
14 POINTS — OBSTACLE: WALKING

RIVER REGION SURVEY

SUMMARY

The online question and answer survey, which was deployed in September 2017, was completed by more than 115 residents. Respondents were asked fifteen questions about their transportation habits and demographic information. Through the survey, residents identified how frequently they walked and bicycled. Respondents also expressed how comfortable they thought walking and bicycling was in the region, and identified opportunities to improve the safety of walking and bicycling. The survey provided an opportunity to share priorities for future transportation investment, and how non-motorized infrastructure should be funded.

WITH WHICH GENDER DO YOU IDENTIFY?



SURVEY RESULTS

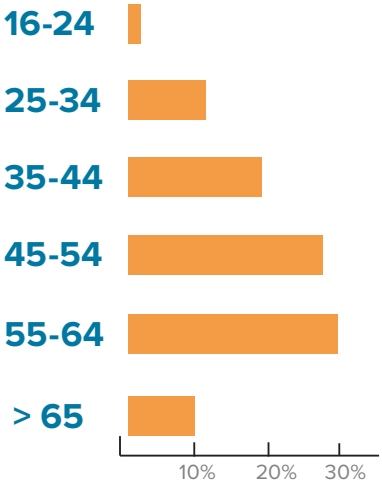
87%

OF SURVEY RESPONDENTS BELIEVE WALKING CONDITIONS ARE IMPORTANT OR VERY IMPORTANT

94%

OF SURVEY RESPONDENTS BELIEVE BICYCLING CONDITIONS ARE IMPORTANT OR VERY IMPORTANT

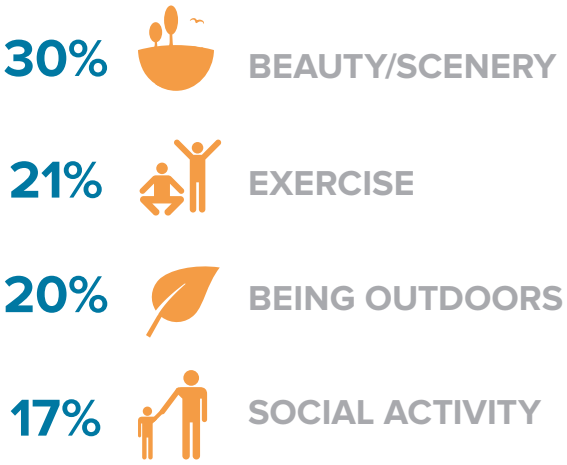
WHAT IS YOUR AGE GROUP?



WHAT RESIDENTS LIKE/DON'T LIKE ABOUT WALKING AND BICYCLING IN THEIR COMMUNITY

Overall, most people walk and bicycle for recreation, to enjoy the scenery, to be outdoors and for exercise. To make the region a more comfortable and safe place to walk and bicycle, respondents strongly called for more sidewalks, dedicated bicycle transportation facilities and greenways. Respondents also see improving the safety of pedestrians and cyclists as a high priority in the region.

WHAT DO YOU LIKE MOST ABOUT WALKING IN YOUR COMMUNITY?



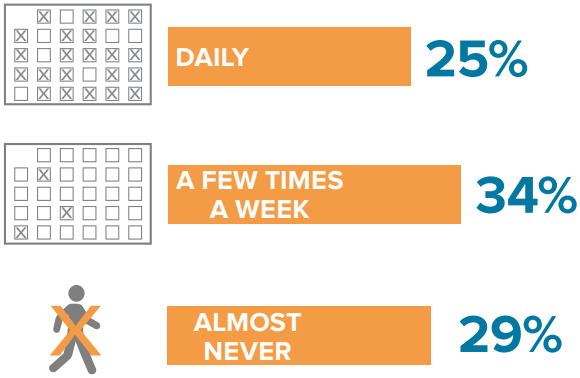
FUNDING

The two preferred funding options were federal grants and private funding through grants and partnerships. State funding and local taxes followed. Government bonds were favored by just 20% of respondents. Given the limited transportation dollars available to local government, the survey results reflect the desire to leverage as many outside funding sources (grants) as possible.

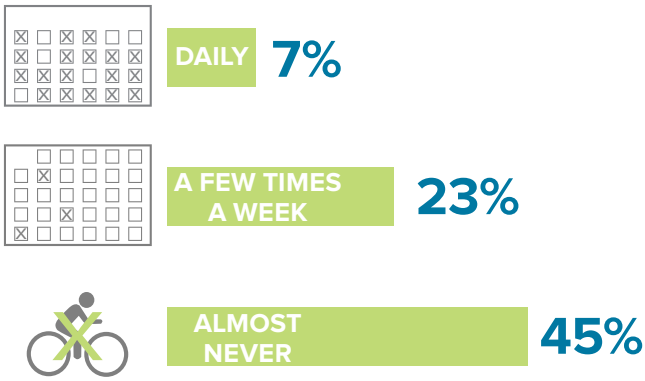
USAGE AND PERCEIVED SAFETY

Almost 60% of River Region residents walk daily or a few times per week. By comparison only 31% bicycle on a daily or weekly basis. When asked about the perceived safety of walking and biking in the River Region, over 80% of respondents feel somewhat safe walking, whereas only 39% feel somewhat safe on a bicycle.

HOW OFTEN DO YOU WALK?



HOW OFTEN DO YOU BIKE?



PRIORITIES

Survey respondents desired more bicycle and pedestrian facilities almost equally; followed by greenway trails and supporting bicycle infrastructure.

RANK THE INFRASTRUCTURE IMPROVEMENTS THAT ARE MOST IMPORTANT TO YOU.

#1 MORE ON-STREET BIKEWAYS

#2 MORE SIDEWALKS AND CROSSWALKS

#3 MORE SUPPORTING INFRASTRUCTURE

#4 MORE GREENWAY TRAILS

HOW WOULD YOU PRIORITIZE THE FOLLOWING ASPECTS OF A REGIONAL WALKWAY AND BIKEWAY PLAN?

#1 INFRASTRUCTURE

#2 SAFETY

#3 FUNDING

#4 USAGE

#5 ENVIRONMENT & HEALTH

#6 EDUCATION & ENCOURAGEMENT

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05

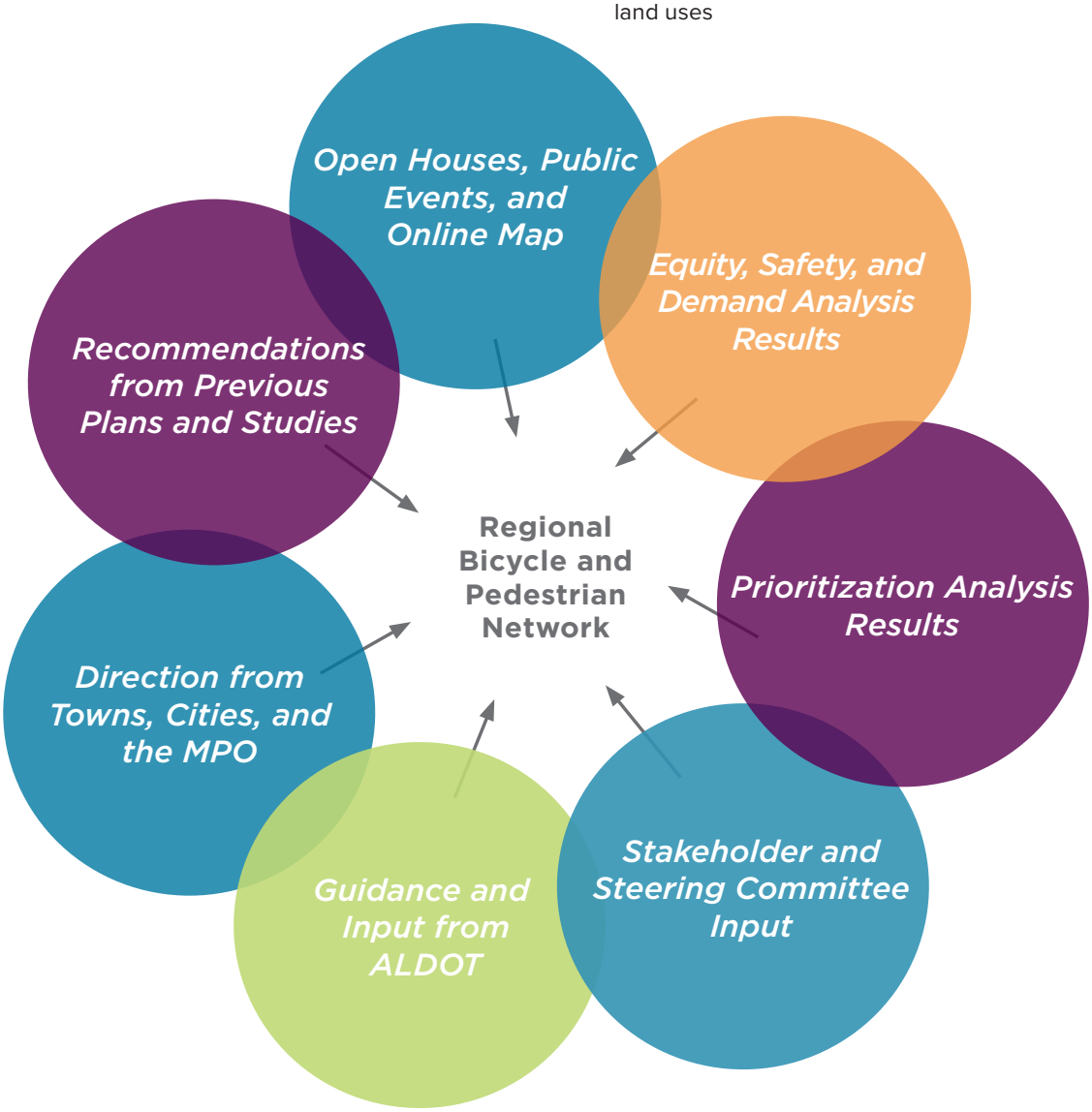
RECOMMENDATIONS

APPROACH TO DEVELOPING A REGIONAL NETWORK

Developing the bicycle and pedestrian recommendations was a multi-step process involving ongoing dialogue with the public, the Montgomery MPO, ALDOT, and other stakeholders. Network recommendations were informed both by quantitative findings and a qualitative understanding of the River Region.

The proposed network seeks to:

- Reflect the Plan vision, goals, and objectives
- Address the needs of all ages and abilities
- Balance the transportation system through consideration for all roadways users, including motor vehicles, transit, and freight
- Integrate appropriately with future development and land uses



PROCESS

The process for proposing a regional bicycle network differs from that of regional pedestrian improvements. Fundamentally, walking trips are local, generally carrying a person a half mile (about a 10 minute walk) or less. Those trips are also heavily influenced by the immediate context (the streetscape, facades, lighting, and more) and ADA accessibility. Bicycling trips cover longer distances and bicyclists offer a different set of "user" needs. Additionally, mapped data of existing bicycle and trails facilities is more complete than that of existing sidewalks, which is common for a region this size.

These considerations yielded a process that:

For bicyclists, first, targeted gaps in the existing network and areas of demonstrated need and demand, based directly on field work, community outreach, stakeholder input, and data-driven analysis. Then, identified proposed routes of regional significance, using a combination of on-street bikeways and off-street shared-use paths and trails. The regional routes prioritized access to destinations, such as jobs, commercial centers, civic uses, schools, and parks. The result is a seamless, connected bicycling network across the tri-county region offering a variety of facility types based on changing context and constraints.

For walkers, first, targeted areas with high pedestrian collision numbers, high demand for active transportation, and significant public comment to identify locations for walkway improvements of regional significance. Then, through fieldwork and aerial imagery, assessed the existing walking environment. Where no facilities existed, new facilities were recommended. These included sidewalk and shared use path recommendations. If a pedestrian facility existed, it was evaluated based on context and comfort. If the facility was comfortable, then no change was recommended, and if the facility did not create a comfortable experience, a sidewalk improvement is proposed. The result is a series of discrete, relatively small walkway projects that are of regional significance but local scale. The walkways connect locally to existing facilities and to destinations and are linked to a larger network of shared-use paths.

WHY COMFORT MATTERS

When agencies prioritize providing a bicycle or pedestrian facility, comfort may seem like a "bonus" feature, but agencies should not lose sight of the importance of comfort in a person's decision to walk or bike. Creating more welcoming environments, for example through streetscape improvements, can be one place to start. Promoting human scale development and orienting buildings toward the street, so that pedestrians and bicyclists aren't required to traverse large parking lots to reach the front door, can transform the look and feel of a corridor

Case Studies in Delivering Safe, Comfortable, and Connected Pedestrian and Bicycle Networks
Federal Highway Administration | 2015

RECOMMENDED FACILITIES

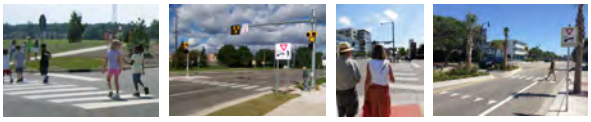
Based on public input, feedback from stakeholders on priority needs, existing infrastructure, and feasibility, the following facility types are recommended for the river region. Recommended locations for applying these facilities are mapped in this chapter and organized under bikeways and walkways. For specific guidance on each of the facility types listed below, see the design guidelines in the appendix.

Additional resources on these pedestrian and bicycle facilities can be found online at nacto.org and ruraldesignguide.com.

WALKWAYS

NEW SIDEWALKS/SIDEWALK REHABILITATION

INTERSECTION IMPROVEMENTS FOR PEDESTRIANS



YIELD ROADWAYS

SHARED-USE PATHS

SHARED-USE SIDE PATHS ALONG ROADWAYS

BIKEWAYS

SEPARATED BIKE LANES

BICYCLE LANES/BUFFERED BICYCLE LANES

SHARED LANE MARKINGS (SHARROWS)

PAVED SHOULDERS

ADVISORY BIKE LANES

PEDESTRIAN NETWORK RECOMMENDATIONS


BRAS
BODY CARE

BUILDING A RIVER REGION THAT IS ENJOYABLE FOR WALKING

Walkability is more than the ability to walk. It is a holistic approach for evaluating a streetscape or community's design, and a means to understand the factors that influence and encourage pedestrian activity. The goals of a walkable place are multi-faceted and context-specific but typically strive for the following:

- **Increase personal mobility by providing alternatives to driving private automobiles**
- **Increase personal mobility with ADA-accessible streetscapes**
- **Stimulate vibrancy in commercial and social realms of a community**
- **Increase access, proximity, and convenience to more destinations through a well-connected network of sidewalks, crosswalks, and walking trails**
- **Create an attractive place with inviting street orientations, landscaping, street furniture, and architectural design**

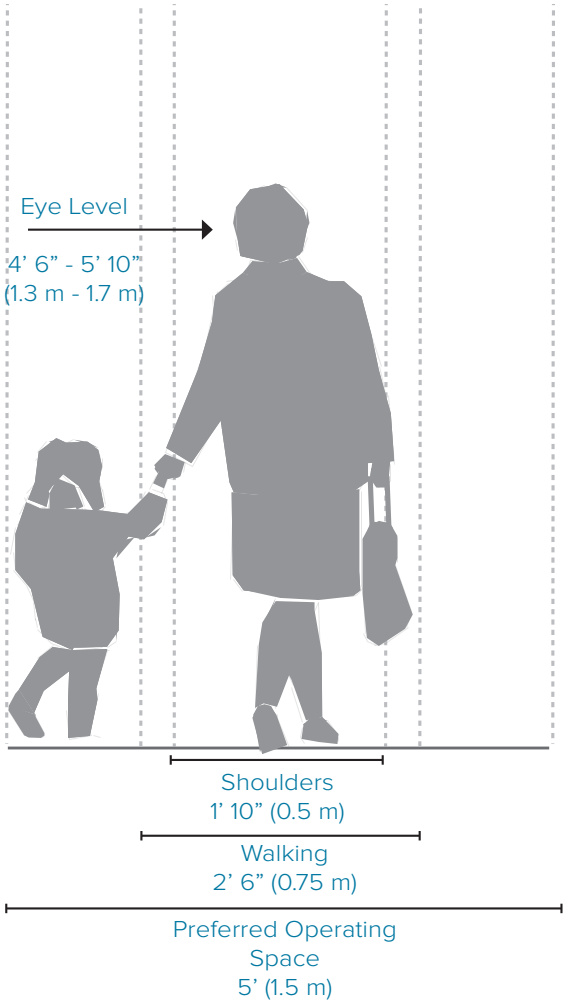
There is no single, catchall walkability definition or one specific metric for measuring walkability. However, across the various attempts at a comprehensive definition, common themes emerge. Apart from the potentially obvious features that encourage walkability, like sidewalks and frequent, visible crossings, walkable places also incorporate the following key principles:

- **Human-scaled environment**
- **Strong sense of place**
- **Physical access**
- **Connected walkways and street pattern**
- **Mix of land uses**
- **Density and location of facilities**
- **Managed parking**

DESIGNING STREETS FOR ALL AGES

TYPES OF PEDESTRIANS

Pedestrians have a variety of characteristics and the transportation network should accommodate a variety of needs, abilities, and possible impairments. Age is one major factor that affects pedestrians' physical characteristics, walking speed, and environmental perception. Children have low eye height and walk at slower speeds than adults. They also perceive the environment differently at various stages of their cognitive development. Older adults walk more slowly and may require assistive devices for walking stability, sight, and hearing. The table below summarizes common pedestrian characteristics for various age groups.



The MUTCD recommends a normal walking speed of 3.5 feet per second when calculating the pedestrian clearance interval at traffic signals. The walking speed can drop to 3 feet per second for areas with older populations and persons with mobility impairments. While the type and degree of mobility impairment varies greatly across the population, the transportation system should accommodate these users to the greatest reasonable extent.

The table below summarizes common physical and cognitive impairments, how they affect personal mobility, and recommendations for improved pedestrian-friendly design.

5.1 PEDESTRIAN CHARACTERISTICS BY AGE

AGE	CHARACTERISTICS
0-4	Learning to walk
	Requires constant adult supervision
	Developing peripheral vision and depth perception
5-8	Increasing independence, but still requires supervision
	Poor depth perception
9-13	Susceptible to "darting out" in roadways
	Insufficient judgment
	Sense of invulnerability
14-18	Improved awareness of traffic environment
	Insufficient judgment
19-40	Active, aware of traffic environment
41-65	Slowing of reflexes
65+	Difficulty crossing street
	Vision loss
	Difficulty hearing vehicles approaching from behind

Source: AASHTO. Guide for the Planning, Design, and Operation of Pedestrian Facilities, Exhibit 2-1. 2004.

SIDEWALK WIDTHS

The width and design of sidewalks in the river region will vary depending on street context, functional classification, and pedestrian demand. Below are preferred widths of each sidewalk zone according to general street type. Standardizing sidewalk guidelines for different areas of the city, dependent on the above listed factors, ensures a minimum level of quality for all sidewalks.

It is important to provide adequate width along a sidewalk corridor. Two people should be able to walk side-by-side and pass a third comfortably. In areas of high demand, sidewalks should contain adequate width to accommodate the high volumes and different walking speeds of pedestrians. The Americans with Disabilities Act requires a 4 foot clear width in the pedestrian zone plus 5 foot passing areas every 200 feet.

Street Classification	Parking Lane/ Enhancement Zone	Furnishing Zone	Pedestrian Through Zone	Frontage Zone	Total
Local Streets	Varies	2 - 5 feet	4 - 6 feet	N/A	6 - 11 feet
Commercial Areas	Varies	4 - 6 feet	6 - 12 feet	2.5 - 10 feet	11 - 28 feet
Collectors and Arterials	Varies	2 - 6 feet	4 - 8 feet	2.5 - 5 feet	8 -19 feet

Six feet enables two pedestrians (including wheelchair users) to walk side-by-side, or to pass each other comfortably

CROSSING TREATMENT SELECTION

The specific type of treatment at a crossing may range from a simple marked crosswalk to full traffic signals or grade separated crossings. Crosswalk lines should not be used indiscriminately, and appropriate selection of crossing treatments should be evaluated in an engineering study that should be performed before a marked crosswalk is installed. The engineering study should consider the number of lanes, the presence of a median, the distance from adjacent signalized intersections, the pedestrian volumes and delays, the average daily traffic (ADT), the posted or statutory speed limit or 85th-percentile speed, the geometry of the location, the possible consolidation of multiple crossing points, the availability of street lighting, and other appropriate factors.

PEDESTRIAN CROSSING CONTEXTUAL GUIDANCE At unsignalized locations	Local Streets 15-25 mph		Collector Streets 25-30 mph			Arterial Streets 30-45 mph							
FACILITY TYPE	2 lane	3 lane	2 lane	2 lane with median refuge	3 lane	2 lane	2 lane with median refuge	3 lane	4 lane	4 lane with median refuge	5 lane	6 lane	6 lane with median refuge
1 Crosswalk Only (high visibility)	✓	✓	EJ	EJ	X	EJ	EJ	X	X	X	X	X	X
2 Crosswalk with warning signage and yield lines	EJ	✓	✓	✓	✓	EJ	EJ	EJ	X	X	X	X	X
3 Active Warning Beacon (RRFB)	X	EJ	✓	✓	✓	✓	✓	✓	X	✓	X	X	X
4 Hybrid Beacon	X	X	EJ	EJ	EJ	EJ	✓	✓	✓	✓	✓	✓	✓
5 Full Traffic Signal	X	X	EJ	EJ	EJ	EJ	EJ	EJ	✓	✓	✓	✓	✓
6 Grade separation	X	X	EJ	EJ	EJ	X	EJ	EJ	EJ	EJ	EJ	✓	✓

LEGEND	
Most Desirable	✓
Engineering Judgement	EJ
Not Recommended	X


1 Marked Crosswalks


2 Crosswalk with Warning Signage


3 Active Warning Beacon (RRFB)


4 Pedestrian Hybrid Beacon


5 Full Traffic Signal

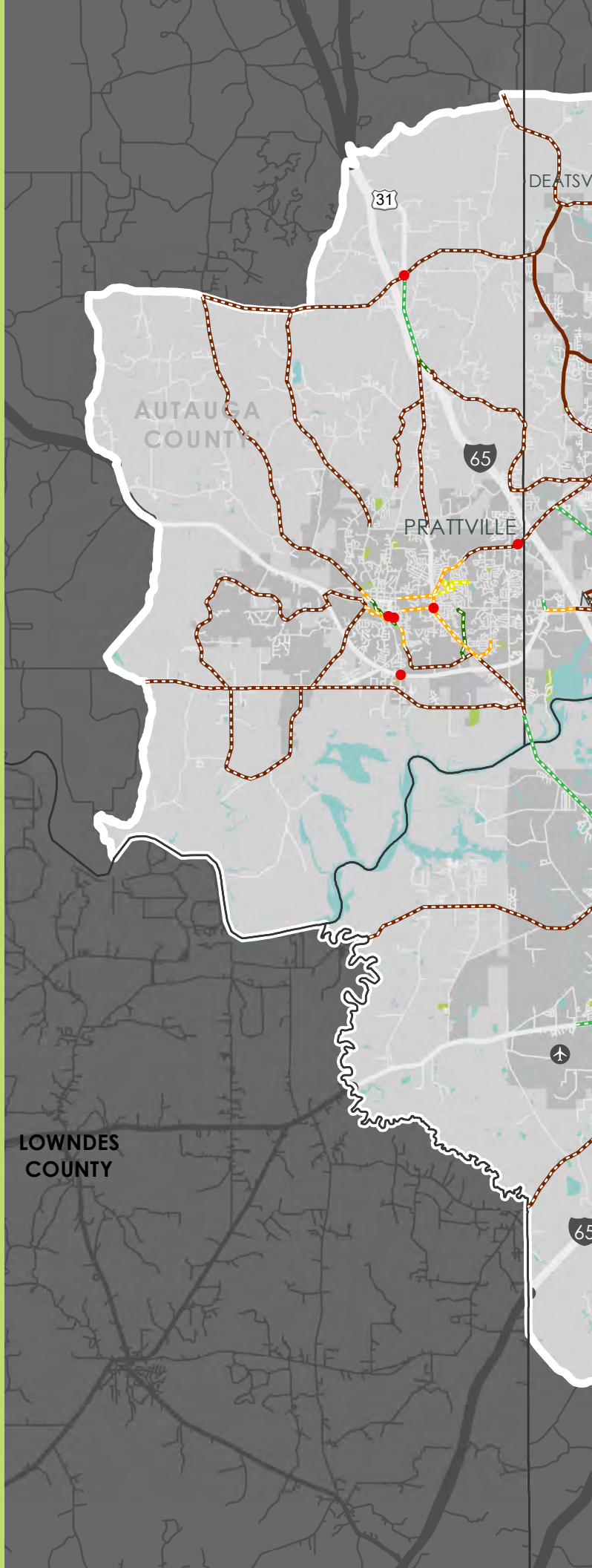
6 Grade Separation

MID-BLOCK CROSSINGS

Mid-block crossings are an important street design element for pedestrians. They can provide a legal crossing at locations where pedestrians want to travel, and can be safer than crossings at intersections because traffic is only moving in two directions. Locations where mid-block crossings should be considered include:

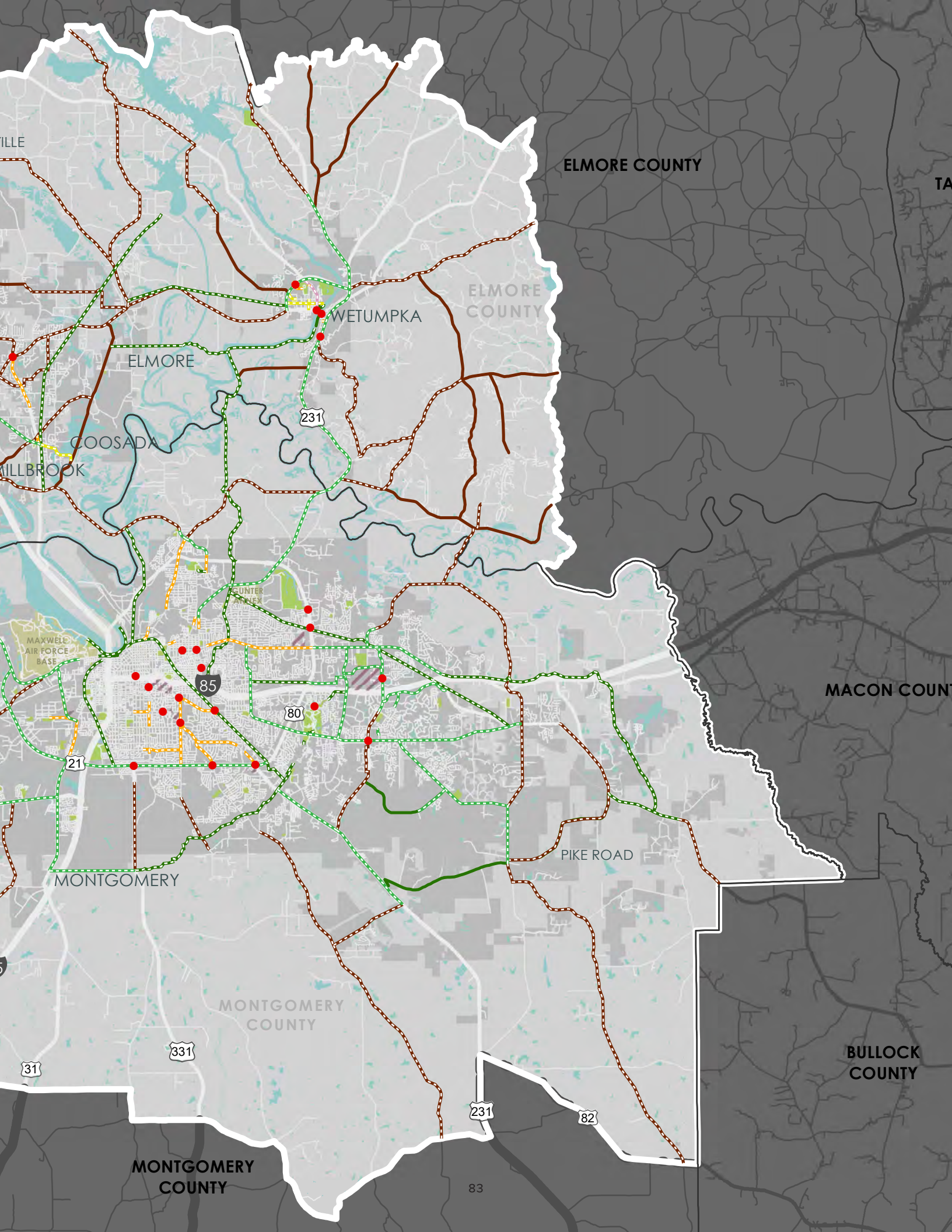
- Long blocks (longer than 600 ft) with destinations on both sides of the street.
- Locations with heavy pedestrian traffic, such as schools, shopping centers.
- Mid-block transit stops, where transit riders must cross the street on one leg of their journey.

RIVER REGION PEDESTRIAN RECOMMENDATIONS

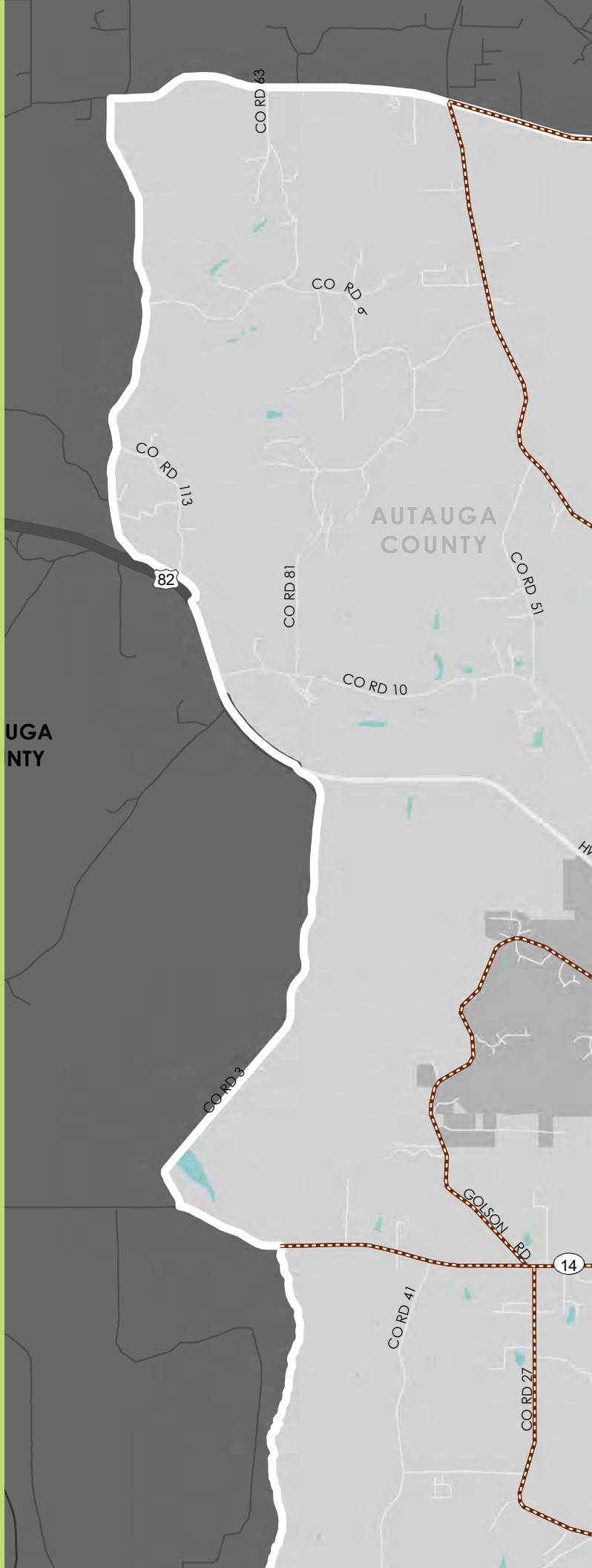


Existing
Proposed
New Sidewalk
Paved Shoulder
Advisory Bike Lanes
Yield Roadway
Sidepath
Shared Use Path
Spot Improvement
Montgomery Regional Airport
MPO Boundary (white)
County Boundary
Park
Military Base
College Campus
Water Body
Region Outside MPO

N
0 2.5 5 Miles


ELMORE COUNTY
ELMORE COUNTY
WETUMPKA
ELMORE
COOSADA
MILLBROOK
231
GUNTER ANNEX
MAXWELL AIR FORCE BASE
85
80
21
MACON COUNT
PIKE ROAD
MONTGOMERY
MONTGOMERY COUNTY
331
31
231
82
BULLOCK COUNTY
MONTGOMERY COUNTY
83

AUTAUGA COUNTY PEDESTRIAN RECOMMENDATIONS



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Park
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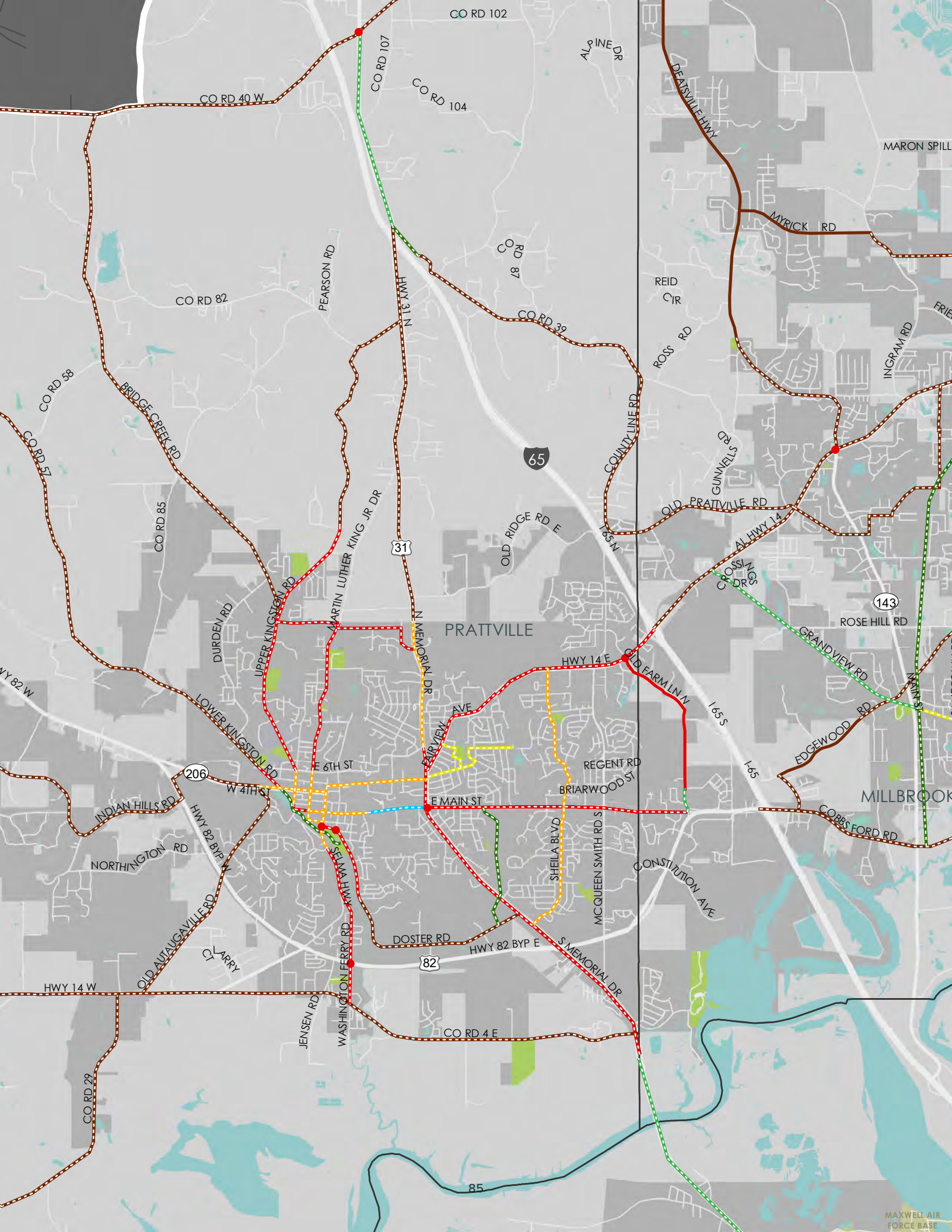
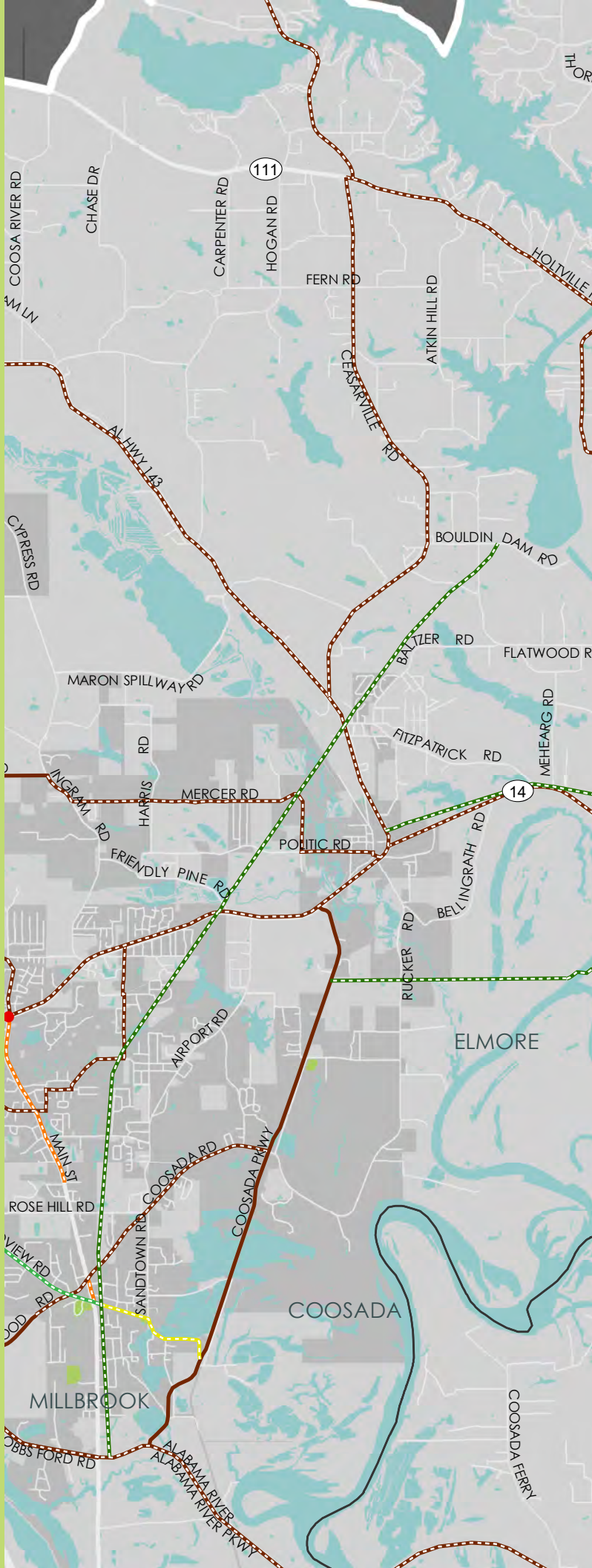
N
0 0.75 1.5 Miles


CO RD 102
CO RD 107
ALPINE DR
CO RD 104
CO RD 40 W
DEATSVILLE HWY
MARON SPILL
MYRICK RD
CO RD 87
PEARSON RD
HWY 31 N
CO RD 82
REID CIR
CO RD 39
ROSS RD
INGRAM RD
CO RD 58
BRIDGE CREEK RD
CO RD 57
65
COUNTY LINE RD
GUNNELLS RD
OLD PRATTVILLE RD
CO RD 85
MARTIN LUTHER KING JR DR
31
OLD RIDGE RD E
165 N
AL HWY 14
CROSSINGS DR
143
ROSE HILL RD
DURDEN RD
UPPER KINGSTON RD
N MEMORIAL DR
PRATTVILLE
GRANDVIEW RD
HWY 14 E
OLD FARM LN N
165 S
LOWER KINGSTON RD
FAIRVIEW AVE
EDGEWOOD RD
E 6TH ST
REGENT RD
206
W 4TH ST
BRIARWOOD ST
I-65
MILLBROOK
INDIAN HILLS RD
E MAIN ST
COBBS FORD RD
HWY 82 BYP W
NORTHINGTON RD
SELMA HWY
SHEILA BLVD
MCQUEEN SMITH RD S
CONSTITUTION AVE
OLD AUTAUGAVILLE RD
LARRY CT
DOSTER RD
HWY 82 BYP E
S MEMORIAL DR
82
HWY 14 W
WASHINGTON FERRY RD
JENSEN RD
CO RD 4 E
CO RD 29
85
MAXWELL AIR FORCE BASE

ELMORE COUNTY PEDESTRIAN RECOMMENDATIONS

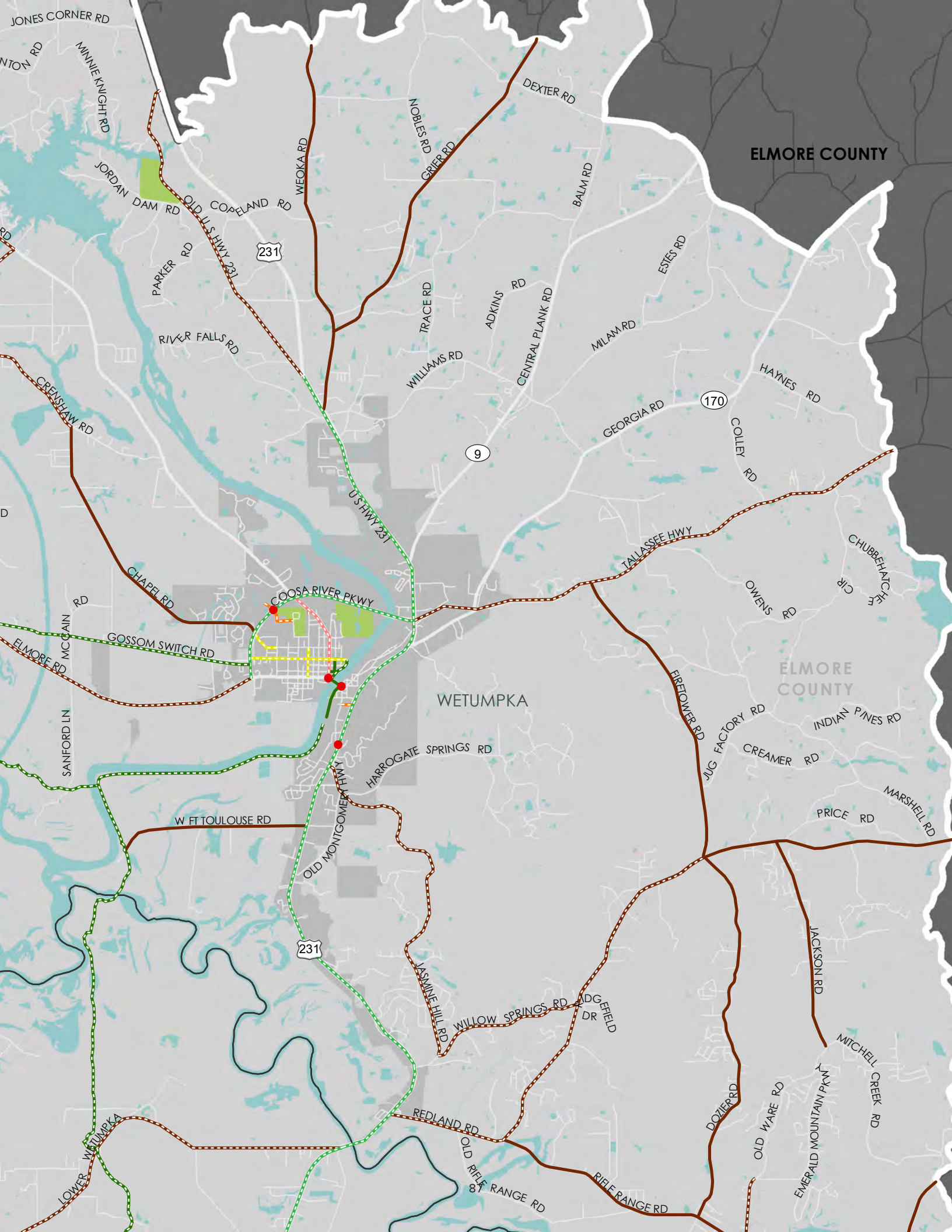


Existing	Proposed
	New Sidewalk
	Paved Shoulder
	Advisory Bike Lanes
	Yield Roadway
	Sidepath
	Shared Use Path

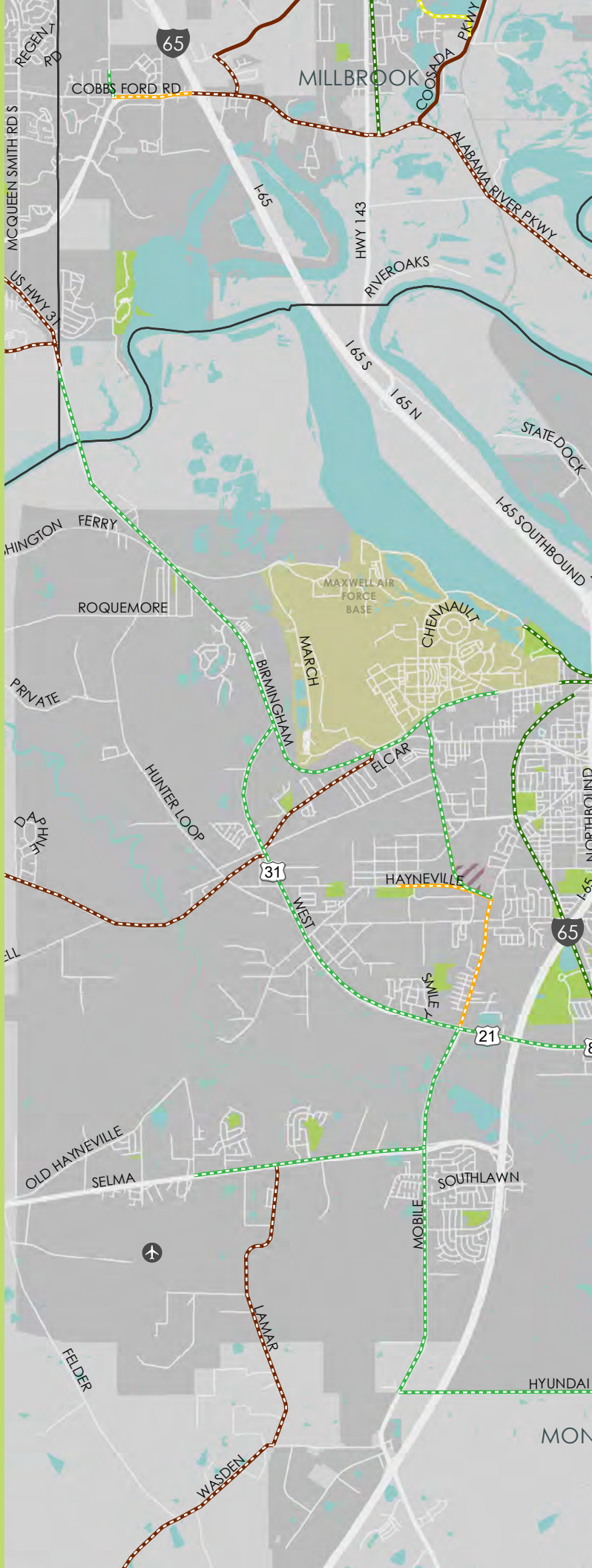
- Spot Improvement
- Montgomery Regional Airport
- MPO Boundary (white)
- County Boundary
- Park
- Military Base
- College Campus
- Water Body
- Region Outside MPO

N

0 0.75 1.5 Miles


ELMORE COUNTY
WETUMPKA
ELMORE COUNTY
JONES CORNER RD
MINNIE KNIGHT RD
JORDAN DAM RD
OLD US HWY 231
COPELAND RD
WEOKA RD
NOBLES RD
GRIER RD
DEXTER RD
BALM RD
ESTES RD
PARKER RD
231
RIVER FALLS RD
TRACE RD
ADKINS RD
CENTRAL PLANK RD
MILAM RD
WILLIAMS RD
HAYNES RD
CRENSHAW RD
GEORGIA RD
170
COLLEY RD
9
US HWY 231
TALLASSEE HWY
CHUBBEHATCHEE CR
CHAPEL RD
COOSA RIVER PKWY
OWENS RD
MCGAIN RD
GOSSOM SWITCH RD
ELMORE RD
FIREFLOWER RD
JUG FACTORY RD
INDIAN PINES RD
CREAMER RD
SANFORD LN
HARROGATE SPRINGS RD
MARSHELL RD
PRICE RD
W FT TOULOUSE RD
OLD MONTGOMERY HWY
231
JASMINE HILL RD
WILLOW SPRINGS RD
RIDGEFIELD DR
JACKSON RD
MITCHELL CREEK RD
DOZIER RD
OLD WARE RD
EMERALD MOUNTAIN PKWY
REDLAND RD
OLD RIFLE RANGE RD
RIFLE RANGE RD
87
LOWER WETUMPKA

MONTGOMERY COUNTY PEDESTRIAN RECOMMENDATIONS



Existing | Proposed

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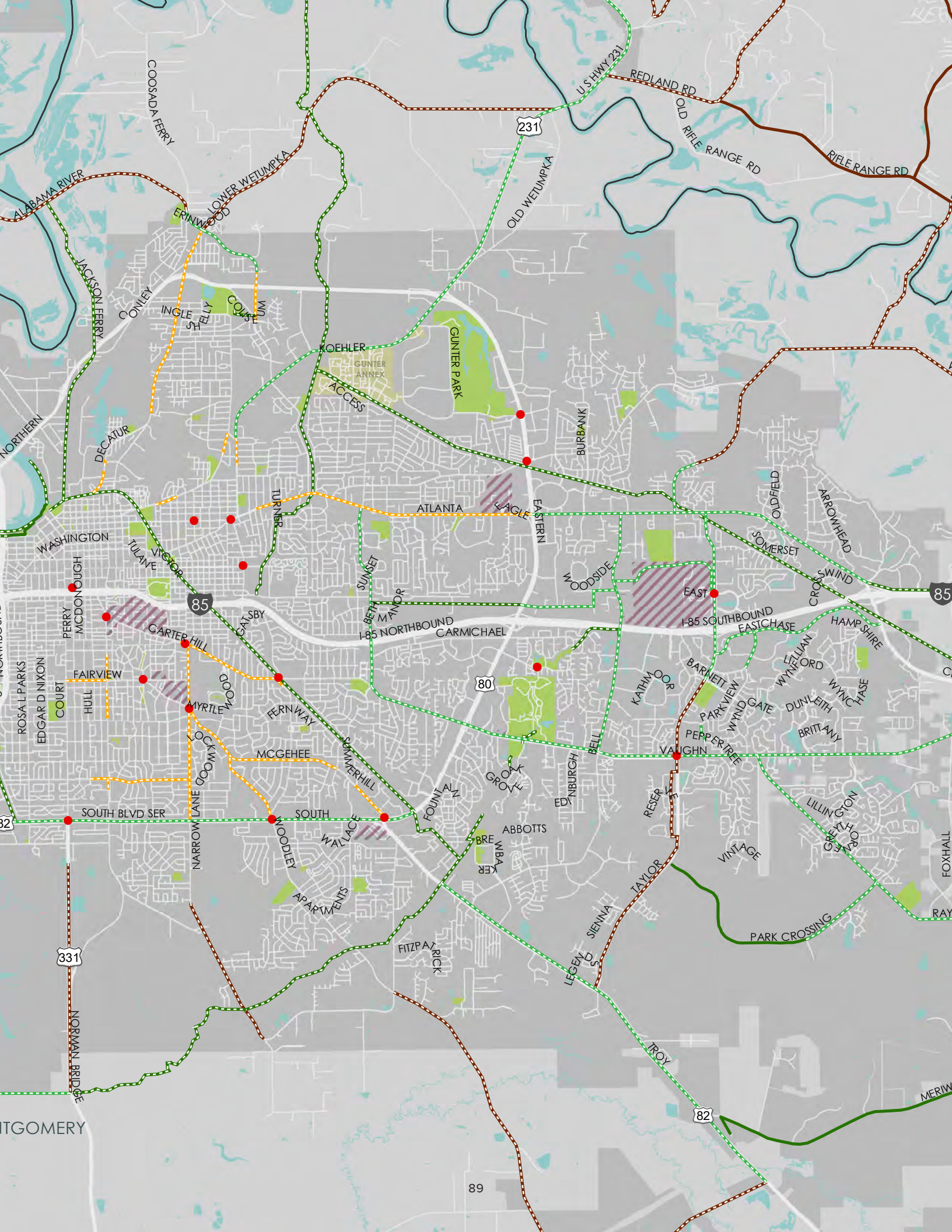
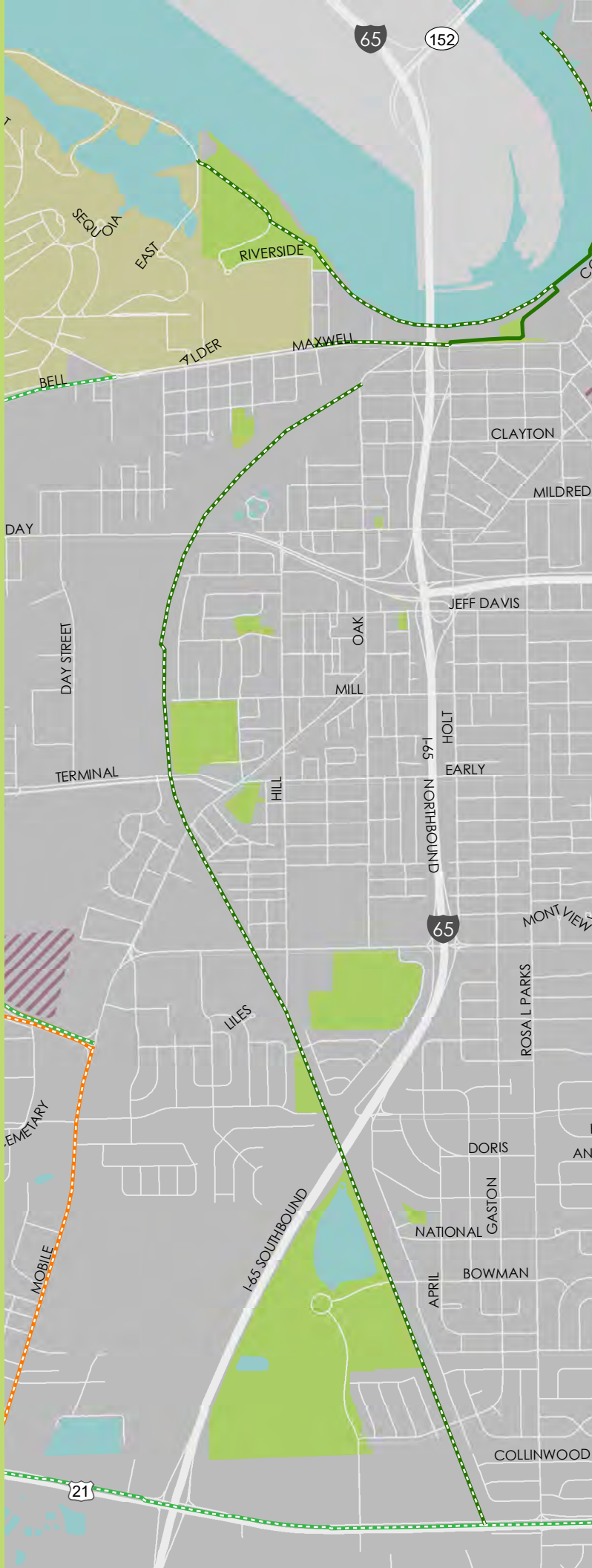
N

0 0.75 1.5 Miles


COOSADA FERRY
U S HWY 231
REDLAND RD
OLD RIFLE RANGE RD
RIFLE RANGE RD
231
ALABAMA RIVER
LOWER WETUMPKA
ERINWOOD
OLD WETUMPKA
JACKSON FERRY
CONLEY
INGLE
STELLY
COUSE
MILL
KOEHLER
GUNTER ANNEX
GUNTER PARK
ACCESS
NORTHERN
DECATUR
BURBANK
TURNER
ATLANTA
EAGLE
EASTERN
OLDFIELD
ARROWHEAD
WASHINGTON
TULANE
VICTOR
SUNSET
WOODSIDE
SOMERSET
CROSSWIND
85
EAST
BETH MANOR
I-85 NORTHBOUND
CARMICHAEL
I-85 SOUTHBOUND
EASTCHASE
HAMPSHIRE
PERRY
MCDONOUGH
GATSBY
CARTER HILL
FAIRVIEW
80
LILLIAN
WYNFORD
BARNETT
KATHMOOR
PARKVIEW
WYNDGATE
DUNLEITH
WYNCHASE
BRITTANY
ROSA L PARKS
EDGAR D NIXON
COURT
HULL
MYRTLEWOOD
FERNWAY
PEPPERTREE
VAUGHN
LOCKWOOD
MCGEHEE
SUMMERHILL
BELL
EDINBURGH
OAK GROVE
FOUNTAIN
RESERVE
LILLINGTON
GREYTHORNE
82
SOUTH BLVD SER
NARROW LANE
WOODLEY
SOUTH
WALLACE
ABBOTTS
BRE
WBAKER
VINTAGE
FOXHALL
APARTMENTS
TAYLOR
SIENNA
PARK CROSSING
331
FITZPATRICK
LEGEND
NORMAN BRIDGE
TROY
MERIW
82
ITGOMERY
89

DOWNTOWN MONTGOMERY PEDESTRIAN RECOMMENDATIONS



Existing | Proposed

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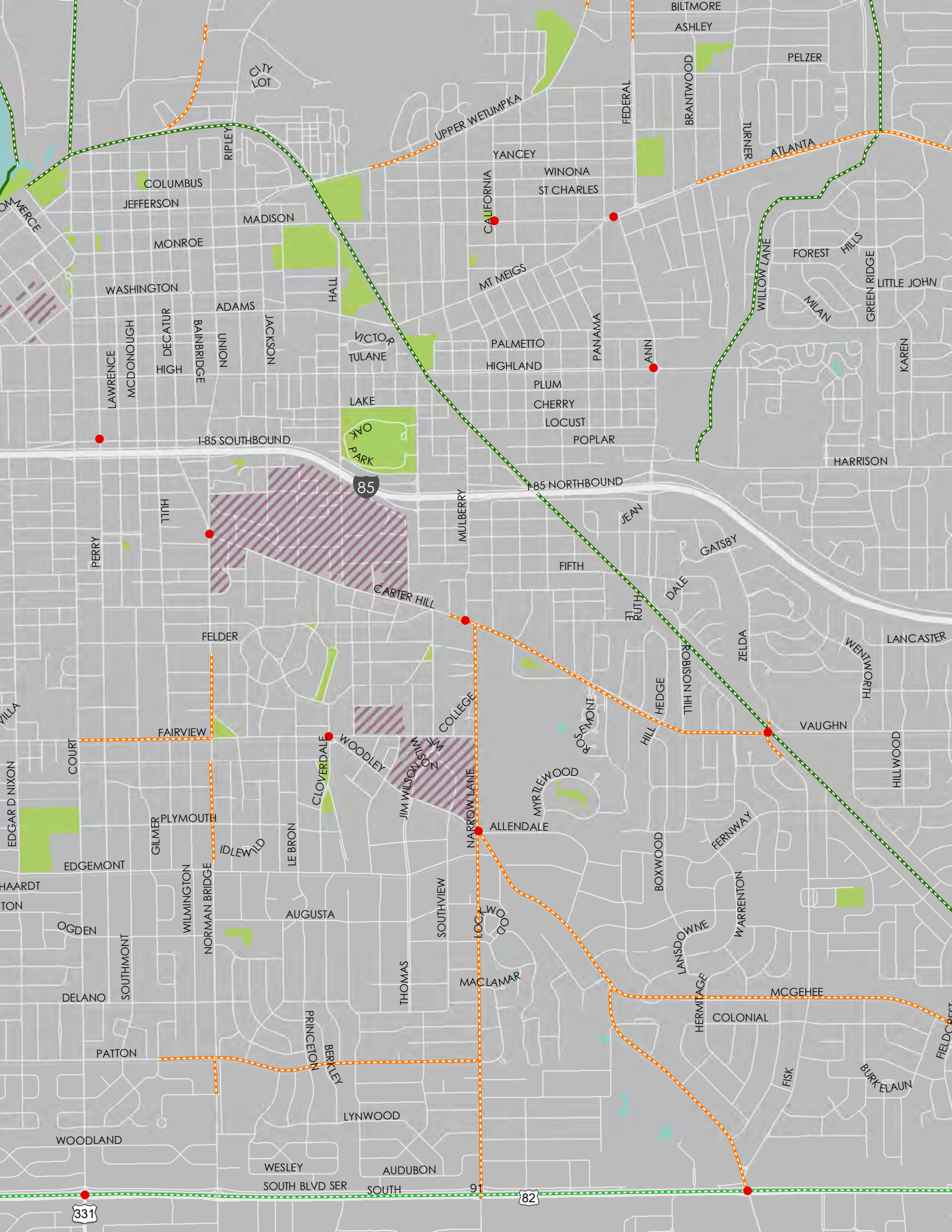
N

0 0.275 0.55 Miles


BILTMORE
ASHLEY
PELZER
CITY LOT
UPPER WETUMPKA
FEDERAL
BRANTWOOD
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JEFFERSON
MADISON
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HILLS
GREEN RIDGE
LITTLE JOHN
MILAN
KAREN
LAWRENCE
MCDONOUGH
DECATUR
BAINBRIDGE
UNION
JACKSON
HIGH
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POPLAR
PANAMA
ANN
LAKE
OAK PARK
I-85 SOUTHBOUND
I-85 NORTHBOUND
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HARRISON
HULL
PERRY
MULBERRY
JEAN
GATSBY
FIFTH
CARTER HILL
DALE
RUTH
LE
FELDER
ZELDA
LANCASTER
WENTWORTH
ROBISON HILL
HEDGE
HILL
ROSEMONT
VAUGHN
HILLWOOD
FAIRVIEW
COURT
EDGAR D NIXON
COLLEGE
WOODLEY
CLOVERDALE
JIM WILSON
MYRTLEWOOD
NARROW LANE
ALLENDALE
PLYMOUTH
GILMER
IDLEWILD
LE BRON
EDGEMONT
HAARDT
TON
WILMINGTON
NORMAN BRIDGE
AUGUSTA
SOUTHVIEW
LOCKWOOD
BOXWOOD
FERNWAY
WARRENTON
OGDEN
SOUTHMONT
THOMAS
MACLAMAR
LANSDOWNE
HERMITAGE
MCGEHEE
COLONIAL
DELANO
PRINCETON
BERKLEY
PATTON
FISK
BURKELAUN
LYNWOOD
WOODLAND
WESLEY
AUDUBON
SOUTH BLVD SER
SOUTH
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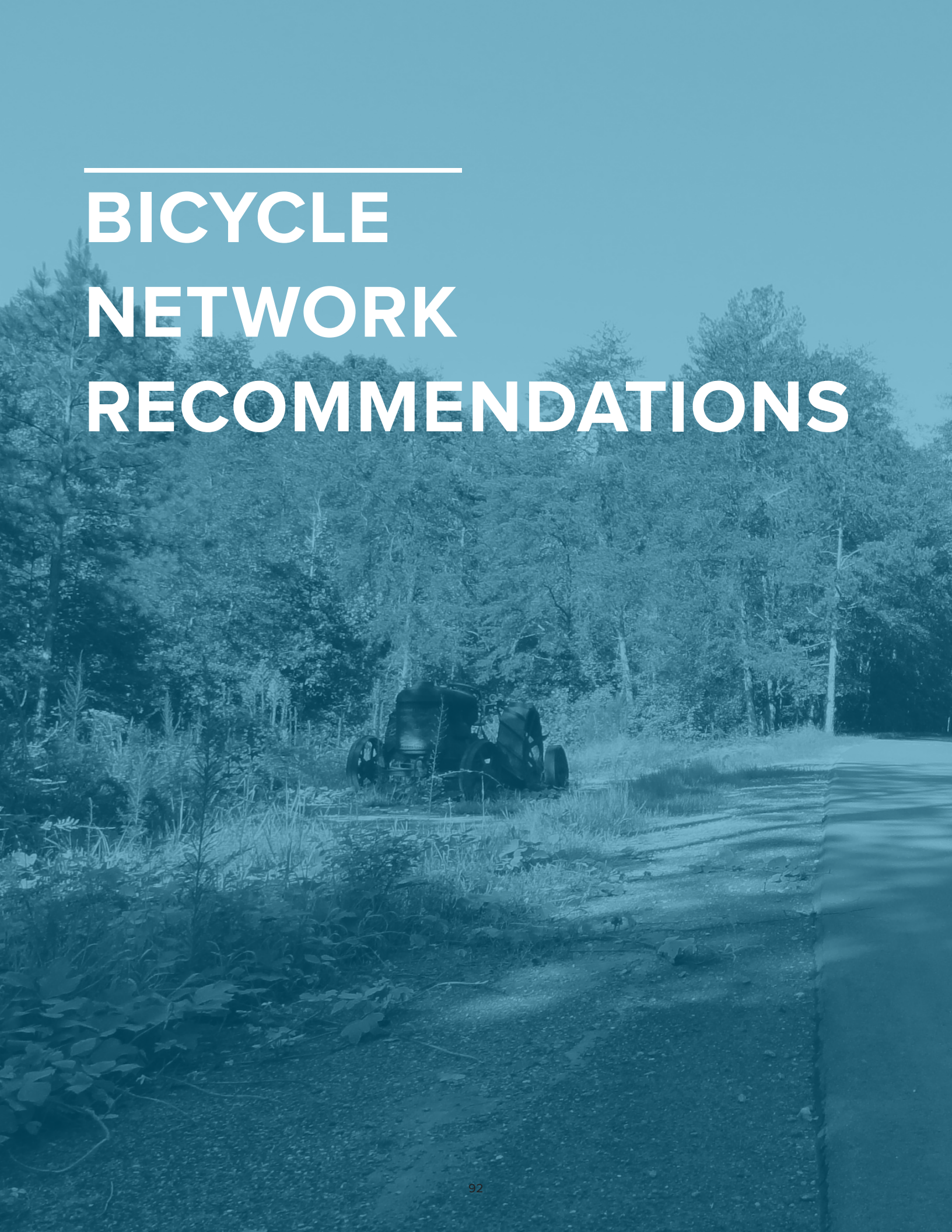
331

BICYCLE NETWORK RECOMMENDATIONS



WHO ARE WE DESIGNING FOR?

THE FOUR TYPES OF BICYCLISTS

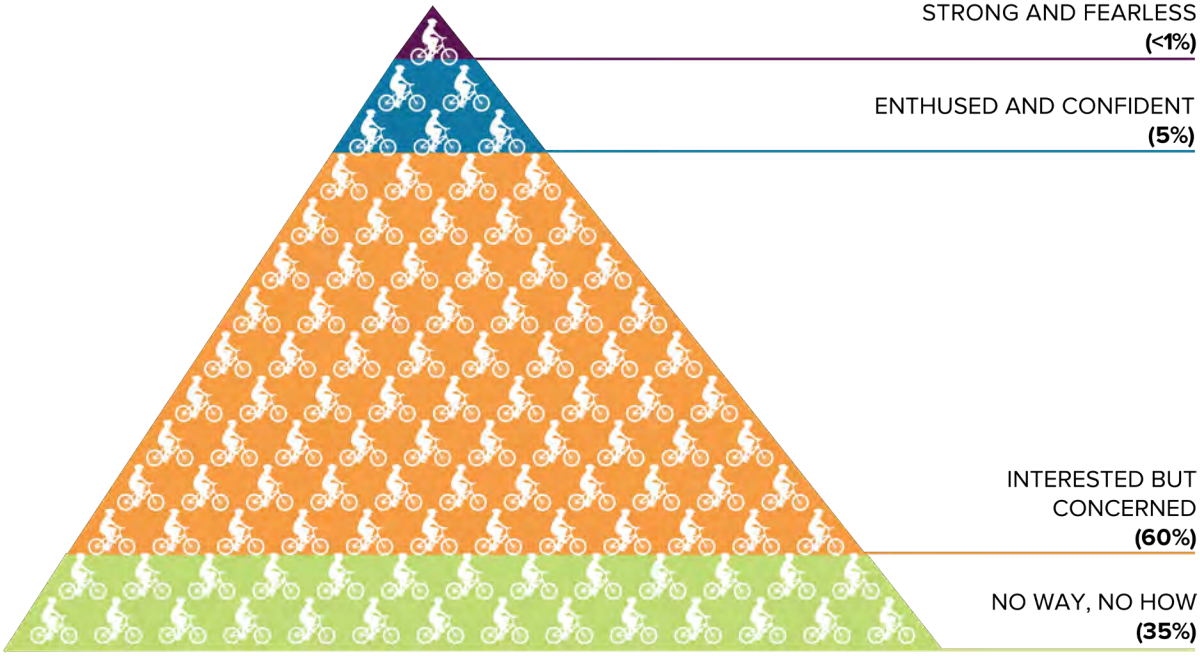
Convenience, comfort, safety, and accessibility are prerequisite features of vibrant greenway networks. A successful greenway network will efficiently connect residents and visitors to their neighborhoods, commercial centers, schools, parks, and other key destinations. Such a greenway network is complimented by an on-street network that consider a bicyclists' ability and bicycle facilities that are appropriate for the roadway context. A research-based classification system identifies four categories of bicyclists to address varying attitudes towards bicycling in the US.

Strong and Fearless (approximately 1% of population) – Characterized by bicyclists that will typically ride anywhere regardless of roadway conditions or weather. These bicyclists can ride faster than other user types, prefer direct routes and will typically choose roadway connections -- even if shared with vehicles -- over separate bicycle facilities such as shared-use path.

Enthused and Confident (approximately 5% of population) - This user group encompasses bicyclists who are fairly comfortable riding on all types of bikeways but usually choose low traffic streets or shared-use paths when available. These bicyclists may deviate from a more direct route in favor of a preferred facility type. This group includes all kinds of bicyclists such as commuters, recreational cyclists, racers and utilitarian bicyclists. They may deviate from a more direct route in favor of a preferred facility type.

Interested but Concerned (approximately 60% of population) – This user type comprises the bulk of the cycling population and represents bicyclists who typically only ride a bicycle on low traffic streets or shared-use paths under favorable weather conditions. These bicyclists perceive significant barriers to their increased use of cycling, specifically traffic and other safety issues. These people may become "Enthused & Confident" with encouragement, education and experience.

No Way, No How (approximately 35% of population) – Persons in this category are not bicyclists, and perceive severe safety issues with riding in traffic. Some people in this group may eventually become more regular cyclists with time and education. A significant portion of these people will not ride a bicycle under any circumstances.



SOURCE: www.portlandoregon.gov/transportation/article/264746

WHO ARE WE DESIGNING FOR?

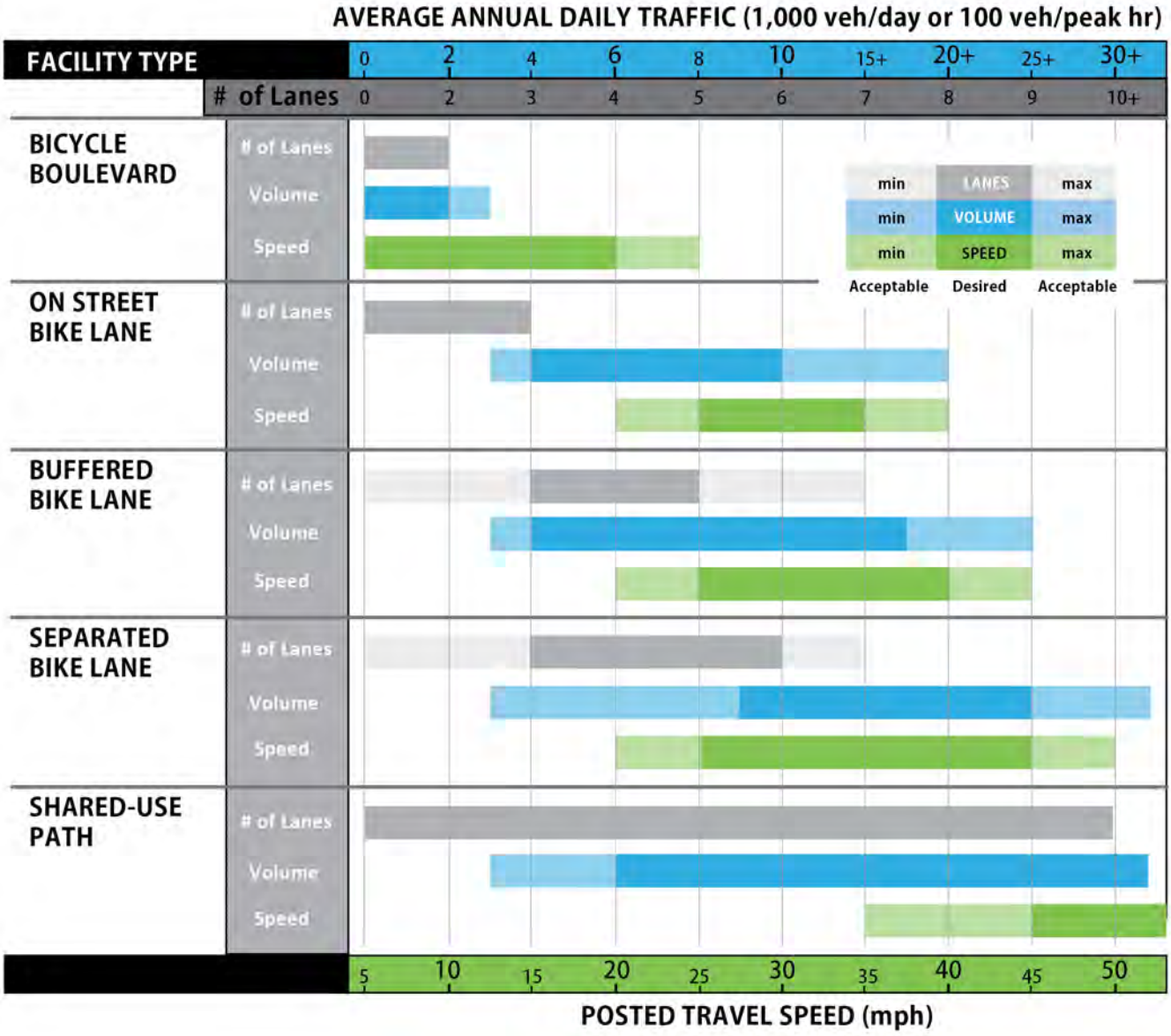
ALL AGES AND ABILITIES

While the Walk Bike River Region plan cannot convince all people to become cyclists, the goal is to design safe and accessible facilities that will appeal to the “Interested but Concerned” as well as the enthused, confident, strong, and fearless. High quality bikeways will encourage all ages and abilities. A transportation and recreation system where the safety of all modes are prioritized will result in a more vibrant, healthy, and equitable region.

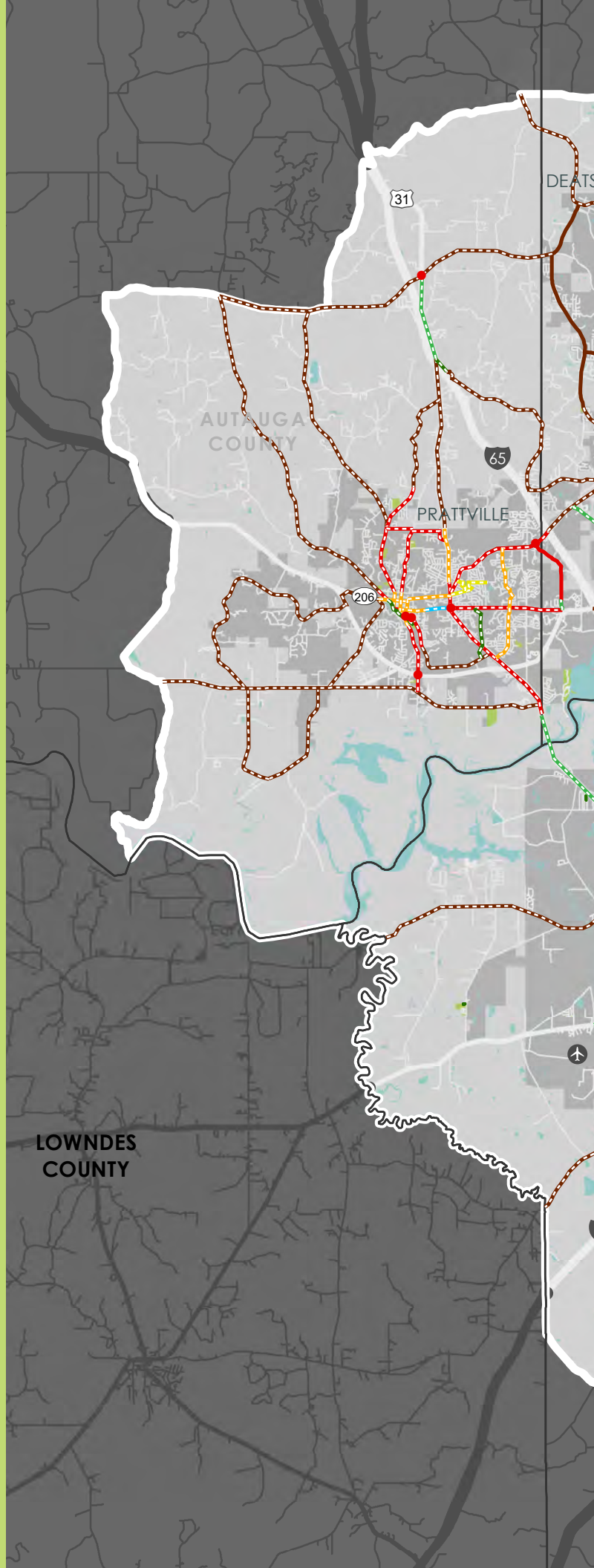
CHOOSING THE RIGHT BIKEWAY FACILITY

BIKEWAY FACILITY TYPE	STREET TYPE/ SPEED/VOLUME	DESIGN SPECIFICATIONS	IMPLEMENTATION STRATEGIES
Bicycle Boulevard 	• Local	• Identification signage and pavement markings; • 85th percentile speed <25 mph; • ADT <3000; • Crossing treatments at local streets, avenues and boulevards	• Use access management and speed reduction tools to achieve desire motor vehicle volumes and speeds.
Shared Roadway 	• Local • Commercial Main Street	• Works best on streets with speeds of 30 mph or lower. May be used on streets up to 35 mph. • Minimum placement of Shared Lane Marking (SLM) is 11 feet from curb where on-street parking is present (4 feet from edge of curb with no parking)	• Shared Lane Markings pair well with Bikes May Use Full Lane (R4-11) signs. • Modifications to signal timing help induce a bicycle-friendly travel speed for all users.
On Street Bike Lane 	• Local • Collector • Commercial Main Street	• 6'- 7' preferred bike lane width • 5' minimum bike lane width (when adjacent to parking)	• Lane narrowing • Travel lane reconfiguration • Parking lane reconfiguration
Buffered Bike Lane 	• Collector • Commercial Main Street • Arterial	• 5' minimum bicycle travel area • 18" minimum buffer area • 34' minimum for two-way travel	• Lane narrowing • Travel lane reconfiguration • Parking lane reconfiguration
One-Way Separated Bike Lane 	• Collector • Commercial Main Street • Arterial	• 7' travel area • 3' or wider buffer • 18" minimum buffer adjacent to travel lanes, • 3' minimum buffer adjacent to parking lanes	• Lane narrowing • Travel lane reconfiguration • Parking lane reconfiguration • Curb reconstruction
Two-Way Separated Bike Lane 	• Collector • Commercial Main Street • Arterial	• 12' preferred operating width • 10' minimum travel width (8' width in constrained conditions). • 3' minimum buffer adjacent to parking lanes	• Lane narrowing • Travel lane reconfiguration • Parking lane reconfiguration • Curb reconstruction

CHOOSING THE RIGHT BIKEWAY FACILITY



RIVER REGION
BICYCLE RECOMMENDATIONS



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Separated Bike Lanes
Sidepath
Shared Use Path
Montgomery Regional Airport
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County Boundary
Park
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College Campus
Water Body
Region Outside MPO
N
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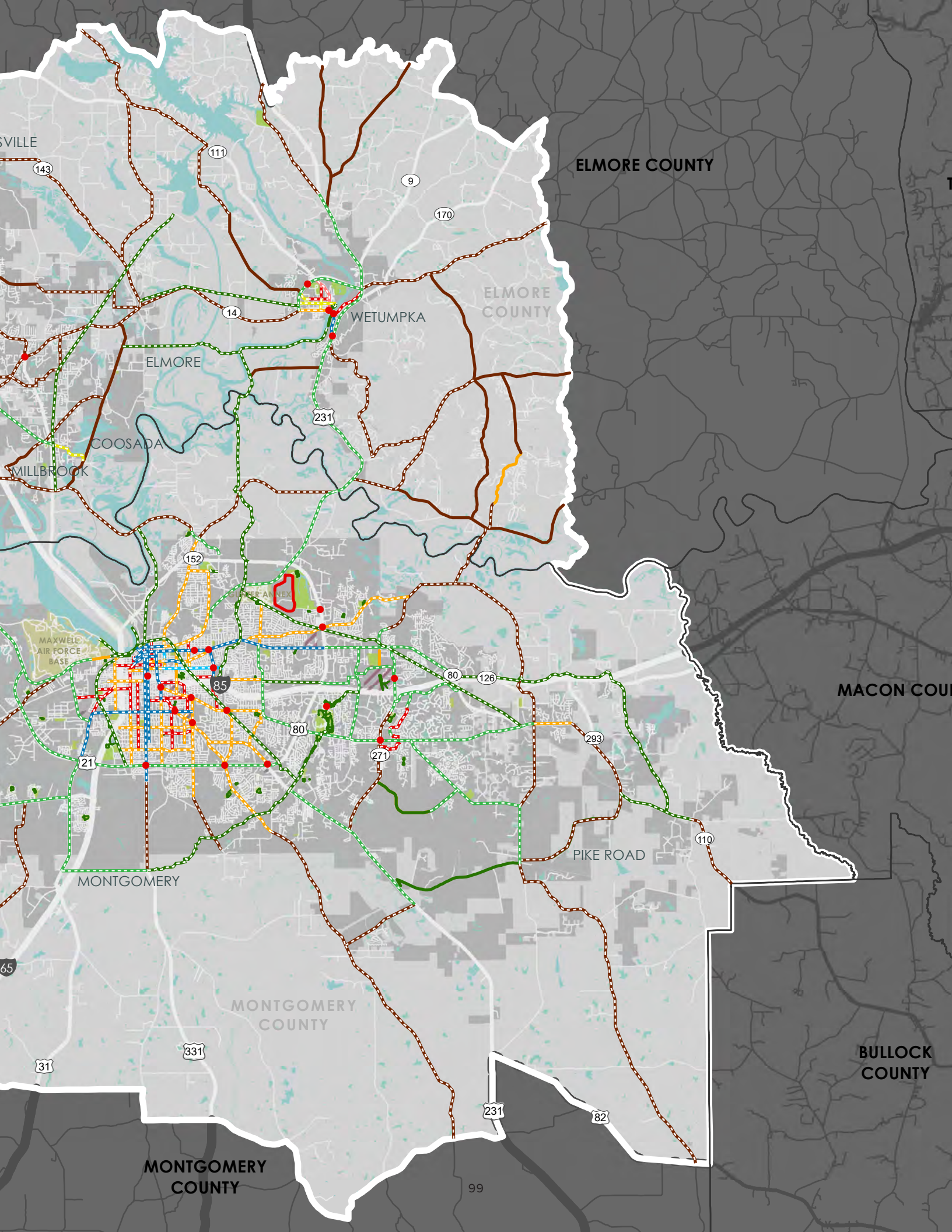
Miles


ELMORE COUNTY
ELMORE COUNTY
WETUMPKA
ELMORE
COOSADA
MILLBROOK
MAXWELL AIR FORCE BASE
MONTGOMERY
PIKE ROAD
MONTGOMERY COUNTY
MONTGOMERY COUNTY
BULLOCK COUNTY
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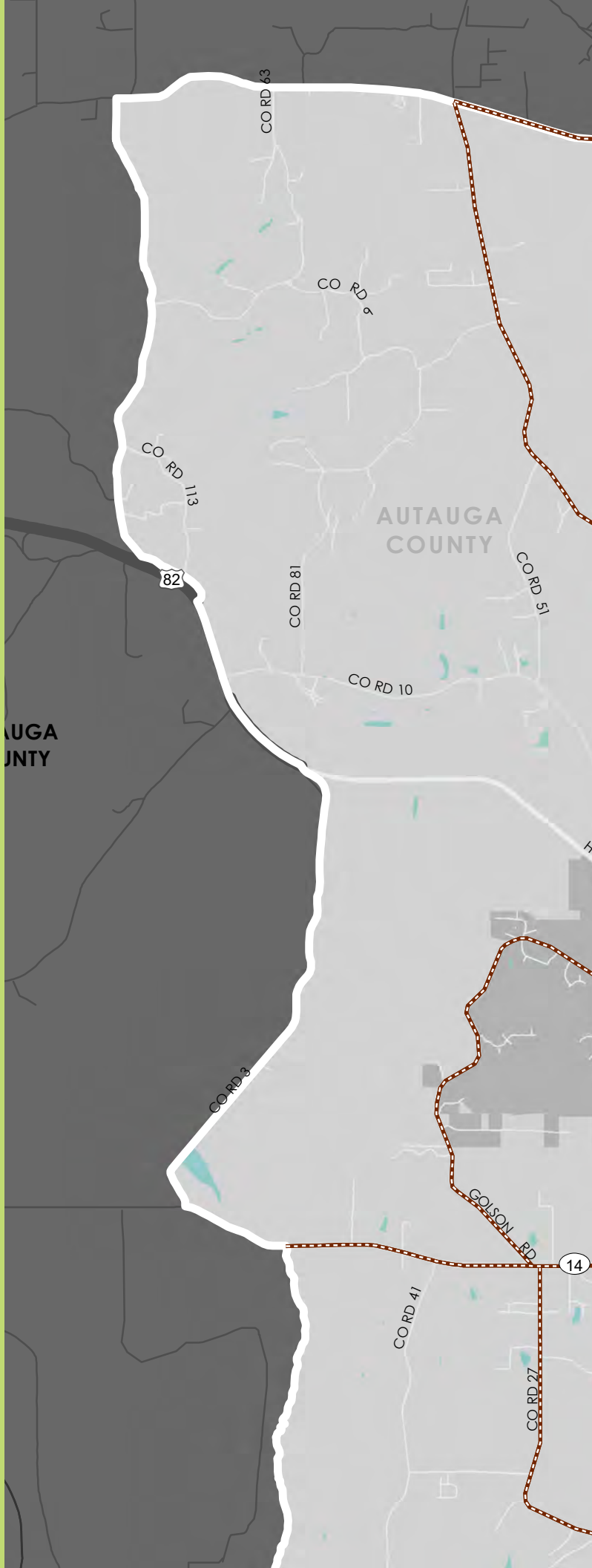
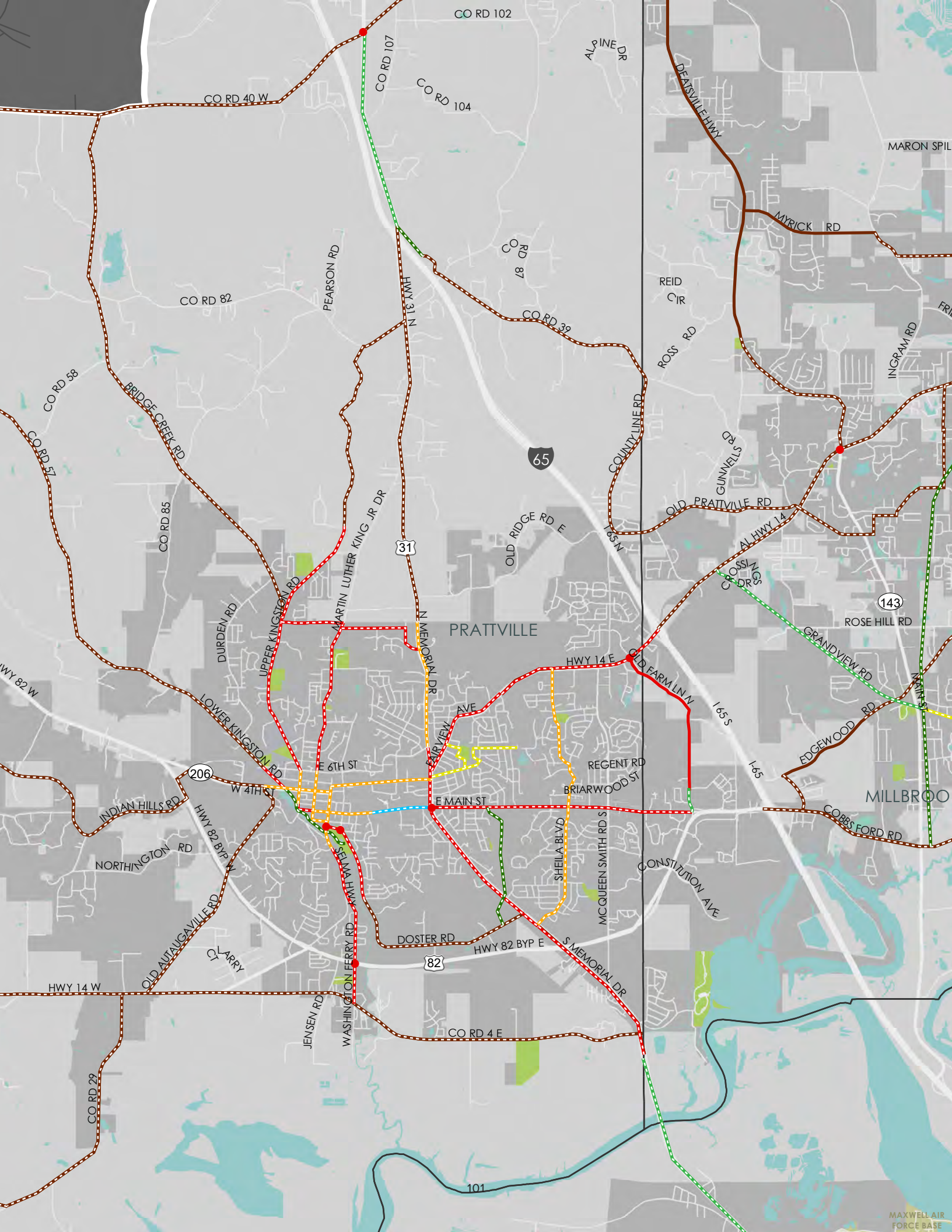
99

AUTAUGA COUNTY BICYCLE RECOMMENDATIONS

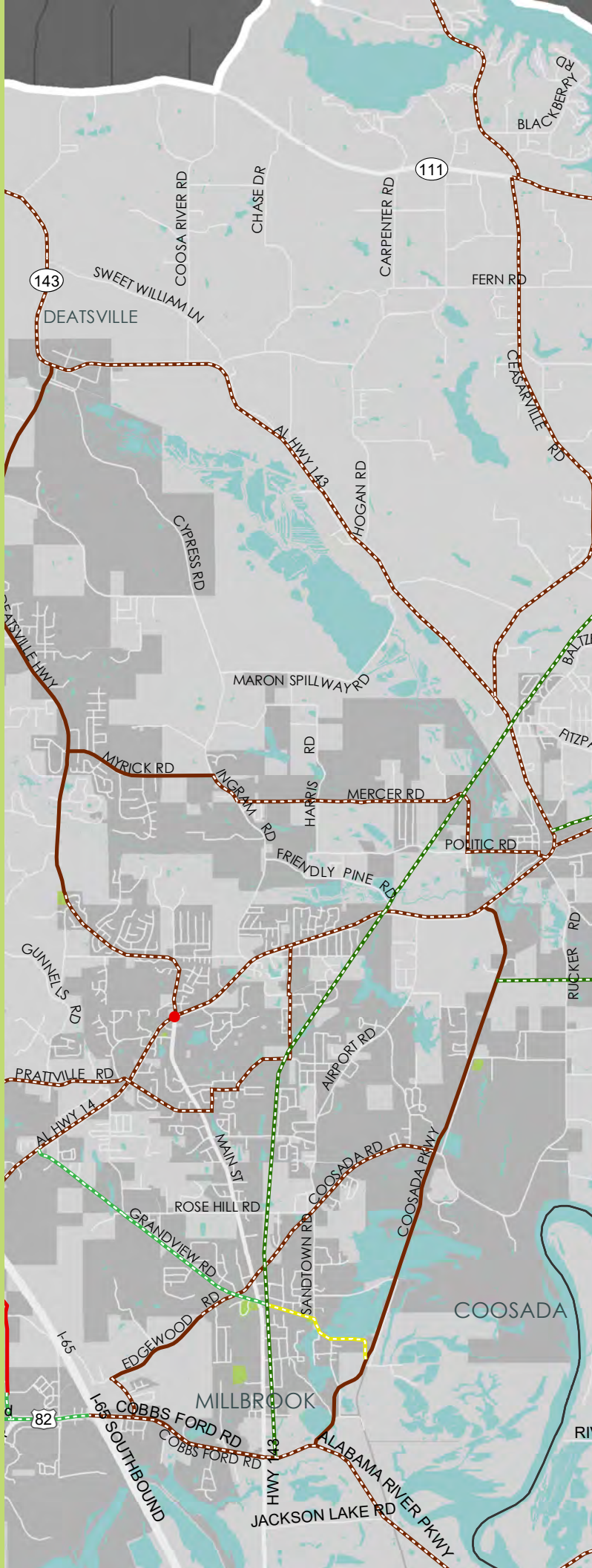


Existing
Proposed
Paved Shoulder
Advisory Bike Lanes
Shared Lane Markings
Yield Roadway
Bike Lanes
Buffered Bike Lanes
Separated Bike Lanes
Sidepath
Shared Use Path
Montgomery Regional Airport
MPO Boundary (white)
County Boundary
Park
Military Base
College Campus
Water Body
Region Outside MPO

N
0 0.75 1.5 Miles


CO RD 102
CO RD 107
ALPINE DR
CO RD 104
CO RD 40 W
DEATSVILLE HWY
MARON SPIL
MYRICK RD
CO RD 87
PEARSON RD
HWY 31 N
REID CIR
CO RD 82
CO RD 39
ROSS RD
INGRAM RD
CO RD 58
BRIDGE CREEK RD
CO RD 57
65
COUNTY LINE RD
GUNNELLS RD
OLD PRATTVILLE RD
CO RD 85
MARTIN LUTHER KING JR DR
31
OLD RIDGE RD E
I 65 N
AL HWY 14
CROSSINGS DR
143
ROSE HILL RD
DURDEN RD
UPPER KINGSTON RD
N MEMORIAL DR
PRATTVILLE
GRANDVIEW RD
HWY 14 E
OLD FARM LN N
I 65 S
MAIN ST
HWY 82 W
LOWER KINGSTON RD
AVE
FAIRVIEW
EDGEWOOD RD
E 6TH ST
REGENT RD
206
W 4TH ST
BRIARWOOD ST
I-65
MILLBROO
E MAIN ST
INDIAN HILLS RD
COBBS FORD RD
HWY 82 BYP W
NORTHINGTON RD
S MAIN
SHEILA BLVD
MCQUEEN SMITH RD S
CONSTITUTION AVE
OLD AUTAUGAVILLE RD
DOSTER RD
HWY 82 BYP E
S MEMORIAL DR
CT LARRY
82
HWY 14 W
WASHINGTON FERRY RD
JENSEN RD
CO RD 4 E
CO RD 29
101
MAXWELL AIR FORCE BASE

ELMORE COUNTY
BICYCLE RECOMMENDATIONS



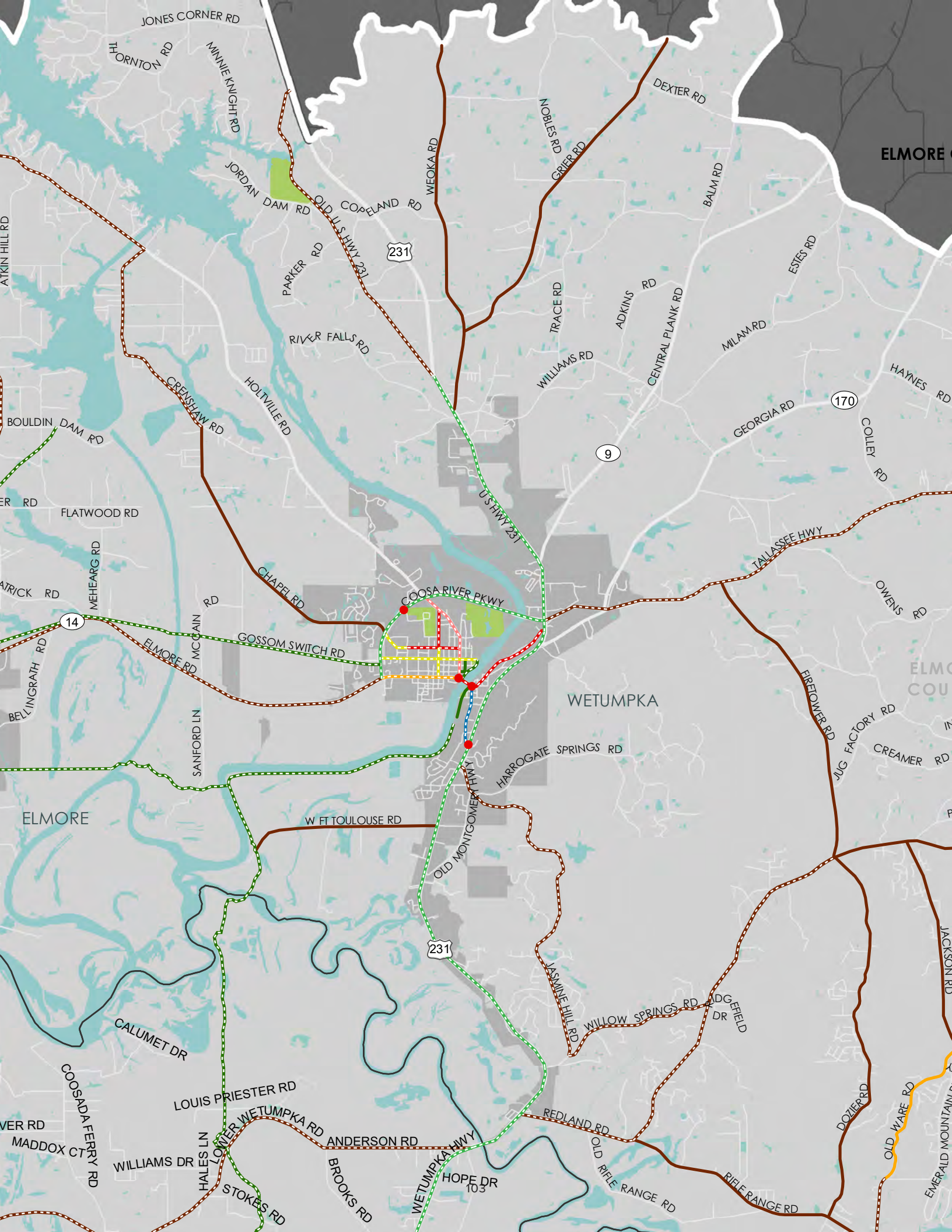
Existing | Proposed

- Paved Shoulder
- Advisory Bike Lanes
- Shared Lane Markings
- Yield Roadway
- Bike Lanes
- Buffered Bike Lanes
- Separated Bike Lanes
- Sidepath
- Shared Use Path

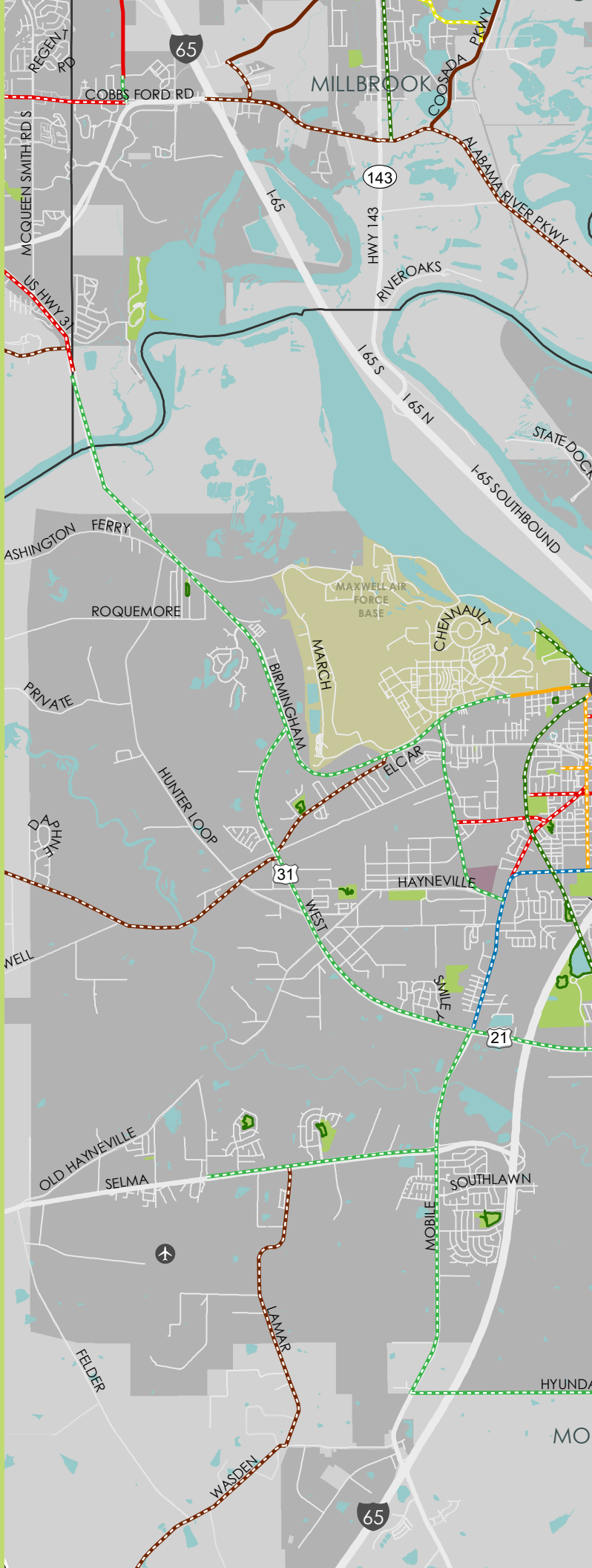
- Montgomery Regional Airport
- MPO Boundary (white)
- County Boundary
- Park
- Military Base
- College Campus
- Water Body
- Region Outside MPO

N

0 0.75 1.5 Miles


JONES CORNER RD
THORNTON RD
MINNIE KNIGHT RD
DEXTER RD
NOBLES RD
GRIER RD
WEOKA RD
JORDAN DAM RD
OLD US HWY 231
COPELAND RD
BALM RD
ELMORE
ATKIN HILL RD
PARKER RD
231
ESTES RD
TRACE RD
ADKINS RD
CENTRAL PLANK RD
RIVER FALLS RD
MILAM RD
WILLIAMS RD
HAYNES RD
CRENSHAW RD
HOLTVILLE RD
170
GEORGIA RD
BOULDIN DAM RD
COLLEY RD
9
US HWY 231
FLATWOOD RD
TALLASSEE HWY
MEHEARG RD
CHAPEL RD
COOSA RIVER PKWY
OWENS RD
14
MCCAIN RD
GOSSOM SWITCH RD
ELMORE RD
BELLINGRATH RD
WETUMPKA
FIREFLOWER RD
JUG FACTORY RD
SANFORD LN
HARROGATE SPRINGS RD
CREAMER RD
ELMORE
W FT TOULOUSE RD
OLD MONTGOMERY HWY
231
JASMINE HILL RD
WILLOW SPRINGS RD
RIDGEFIELD DR
CALUMET DR
JACKSON RD
COOSADA FERRY RD
LOUIS PRIESTER RD
LOWER WETUMPKA RD
ANDERSON RD
REDLAND RD
DOZIER RD
MADDOX CT
WILLIAMS DR
HALES LN
BROOKS RD
WETUMPKA HWY
HOPE DR
103
OLD RIFLE RANGE RD
RIFLE RANGE RD
OLD WARE RD
STOKES RD
EMERALD MOUNTAIN

MONTGOMERY COUNTY BICYCLE RECOMMENDATIONS



Existing	Proposed
	Paved Shoulder
	Advisory Bike Lanes
	Shared Lane Markings
	Yield Roadway
	Bike Lanes
	Buffered Bike Lanes
	Separated Bike Lanes
	Sidepath
	Shared Use Path

Montgomery Regional Airport

MPO Boundary (white)

County Boundary

Park

Military Base

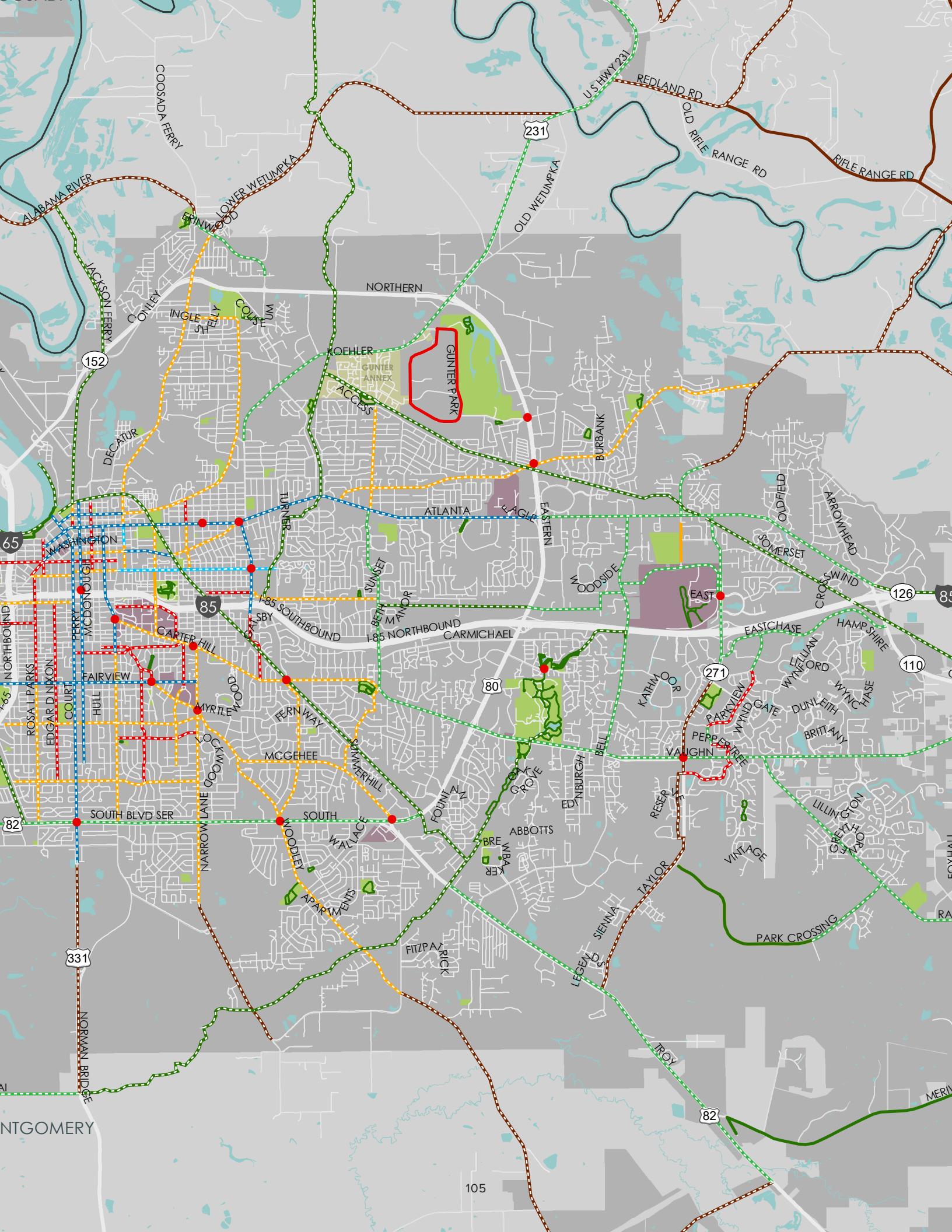
College Campus

Water Body

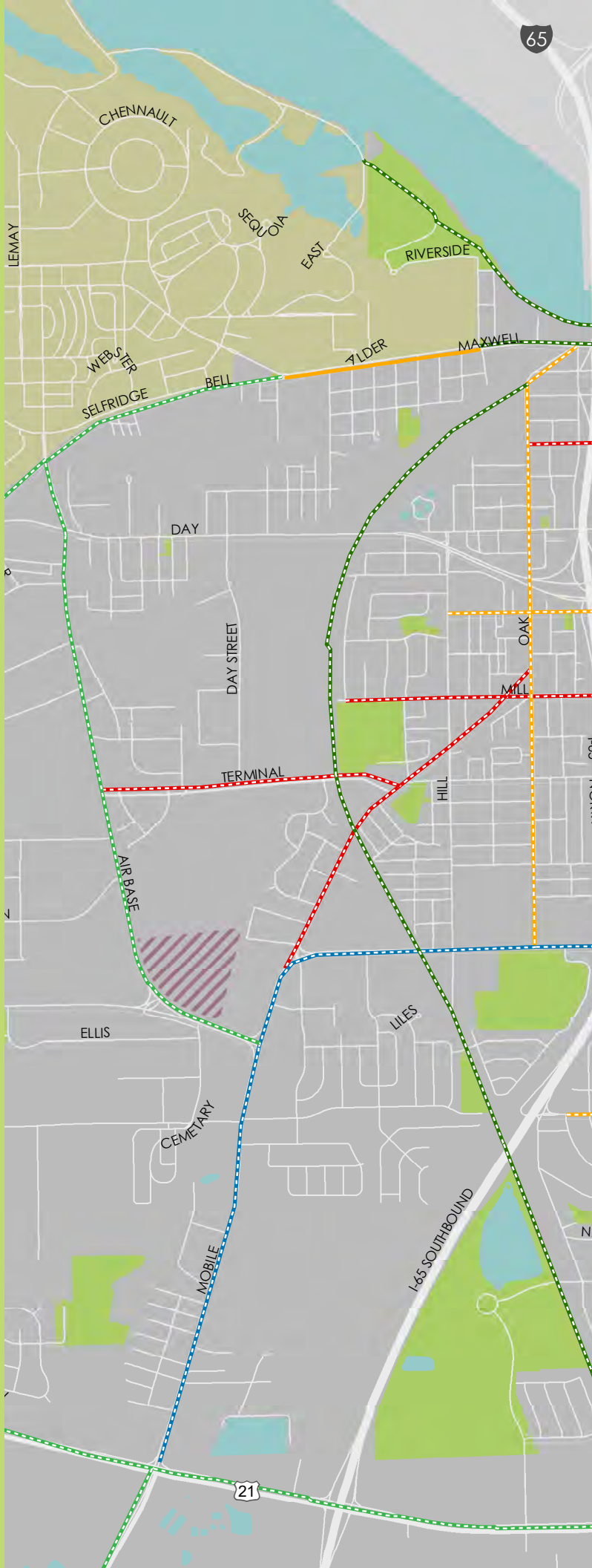
Region Outside MPO

N

0 0.75 1.5 Miles


COOSADA FERRY
U S HWY 231
REDLAND RD
OLD RIFLE RANGE RD
RIFLE RANGE RD
231
ALABAMA RIVER
LOWER WETUMPKA
OLD WETUMPKA
TRINWOOD
JACKSON FERRY
CONLEY
INGLE
SHELLY
COLISEUM
NORTHERN
152
KOEHLER
GUNTER ANNEX
GUNTER PARK
ACCESS
DECATUR
BURBANK
TURNER
ATLANTA
EAGLE
EASTERN
OLDFIELD
ARROWHEAD
SOMERSET
SWIND
CROSS
126
85
65
WASHINGTON
MCDONOUGH
PERRY
SUNSET
WOODSIDE
EAST
I-85 SOUTHBOUND
I-85 NORTHBOUND
BETH MANOR
CARMICHAEL
EASTCHASE
HAMPSHIRE
110
CARTER HILL
CALSBY
NORTHBOUND
ROSA PARKS
EDGAR DIXON
COURT
HULL
FAIRVIEW
MYRTLEWOOD
FERNWAY
80
271
KATHMOOR
ELLIAN
WYNFORD
WYNCHASE
PARKVIEW
WYNDGATE
DUNLEITH
BRITTANY
PEPPERTREE
VAUGHN
BELL
MCGEHEE
LOCKWOOD
SOMMERHILL
OAK GROVE
EDINBURGH
RESERVE
LILLINGTON
GREYTHORNE
82
SOUTH BLVD SER
SOUTH
WALLACE
FOUNTAIN
ABBOTTS
BRE
WALKER
VINTAGE
NARROW LANE
WOODLEY
APARTMENTS
TAYLOR
SIENNA
PARK CROSSING
331
FITZPATRICK
LEGEND
NORMAN BRIDGE
TROY
NTGOMERY
105

DOWNTOWN MONTGOMERY BICYCLE RECOMMENDATIONS



Existing	Proposed
	Paved Shoulder
	Advisory Bike Lanes
	Shared Lane Markings
	Yield Roadway
	Bike Lanes
	Buffered Bike Lanes
	Separated Bike Lanes
	Sidepath
	Shared Use Path

Montgomery Regional Airport

MPO Boundary (white)

County Boundary

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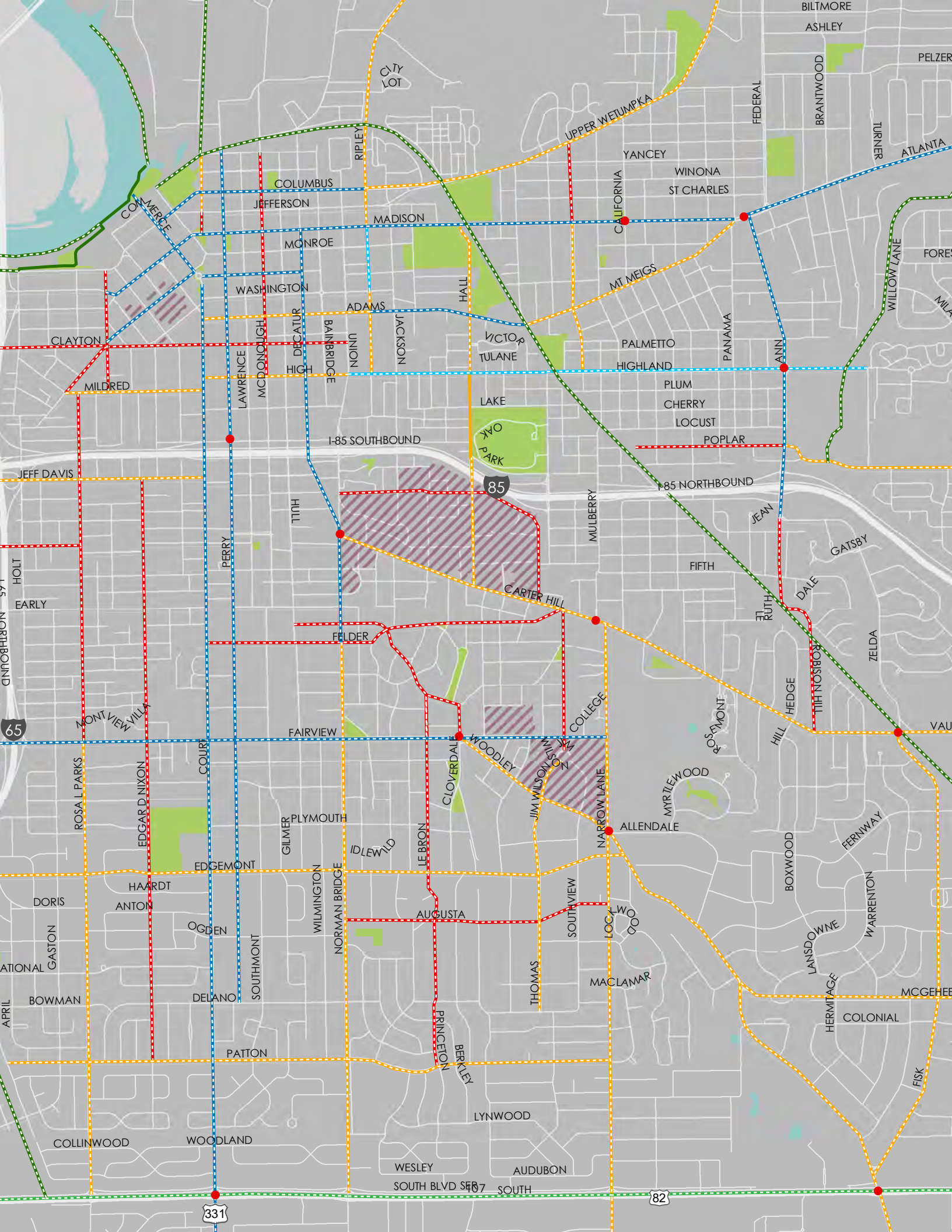
N

0 0.75 1.5 Miles


BILTMORE
ASHLEY
PELZER
CITY LOT
UPPER WETUMPKA
FEDERAL
BRANTWOOD
TURNER
ATLANTA
YANCEY
WINONA
ST CHARLES
CALIFORNIA
RIPLEY
COLUMBUS
JEFFERSON
COMMERCE
MADISON
MONROE
WILLOW LANE
MT MEIGS
WASHINGTON
ADAMS
HALL
CLAYTON
DECATUR
BAINBRIDGE
UNION
JACKSON
VICTOR
TULANE
PALMETTO
PANAMA
ANN
HIGH
HIGHLAND
MILDRED
LAWRENCE
MCDONOUGH
PLUM
CHERRY
LOCUST
LAKE
OAK PARK
POPLAR
I-85 SOUTHBOUND
I-85 NORTHBOUND
85
JEFF DAVIS
HULL
MULBERRY
JEAN
GATSBY
PERRY
FIFTH
HOLT
EARLY
CARTER HILL
DALE
RUTH
LE
ZELDA
FELDER
ROBSON HILL
HEDGE
HILL
ROSEMONT
COLLEGE
MONT VIEW VILLA
65
FAIRVIEW
WOODLEY
CLOVERDALE
JIM WILSON
WILSON
COURT
ROSA L PARKS
EDGAR D NIXON
MYRTLEWOOD
NARROW LANE
ALLENDALE
GILMER
PLYMOUTH
IDLEWILD
LE BRON
FERNWAY
EDGEMONT
HAARDT
BOXWOOD
DORIS
ANTON
WILMINGTON
NORMAN BRIDGE
AUGUSTA
SOUTHVIEW
LOCKWOOD
WARRENTON
OGDEN
GASTON
SOUTHMONT
LANSDOWNE
THOMAS
MACLAMAR
BOWMAN
DELANO
HERMITAGE
MCGEHEE
COLONIAL
APRIL
PRINCETON
BERKLEY
PATTON
FISK
LYNWOOD
COLLINWOOD
WOODLAND
WESLEY
AUDUBON
SOUTH BLVD SER
SOUTH
82
331

GUIDANCE FOR COMMON RIVER REGION ROAD TYPOLOGIES

A review of the street network in the River Region reveals common roadway typologies found in urban, suburban, and rural areas. These common roadway types have been organized under two categories - core network roads and rural connector roads.

Core network roads are found in urban and suburban parts of the region, and are suited primarily for on-street facilities. Where as core network roads are inter focused, rural connectors are intra, covering greater distances to link municipalities and rural destinations.

This section provides bicycle and pedestrian facility selection guidance organized by these roadway typologies.

For core network roadways this includes:

- Residential Shared Streets
- 2 Lane Collector Streets < 26 feet curb-to-curb
- 2 Lane Collector Streets 26 feet - 29 feet curb-to-curb
- 2 Lane Collector Streets < 30 feet curb-to-curb
- 3 Lane Collector Streets < 40 feet curb-to-curb
- 3 Lane Collector Streets > 40 feet curb-to-curb
- Bikeways along Streets with On-Street Parking
- Multi-Lane Arterials

For rural connector roadways this includes:

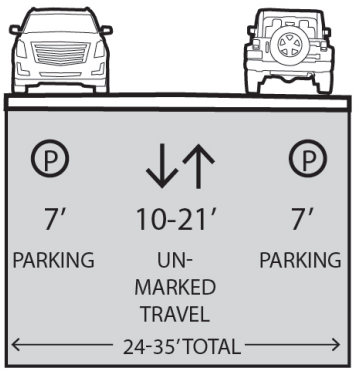
- 2 lane Country Roads
- Major Multi-Lane Arterials

A two-lane, one-way residential street in tje City of Montgomery

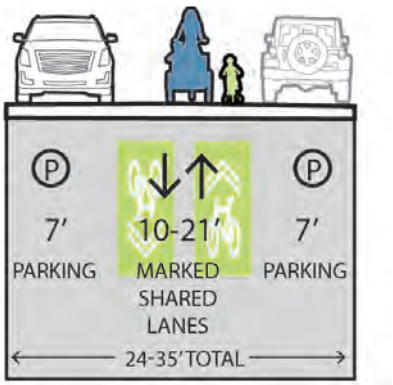
CORE NETWORK: **RESIDENTIAL SHARED STREETS**

Potential Application: Clayton Street, City of Montgomery

Existing



Alternative A: Shared Street

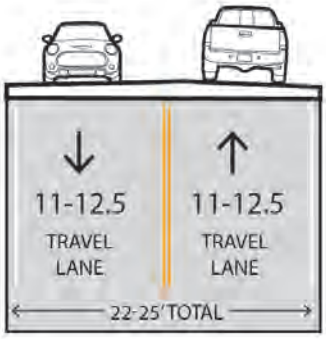


Note: Green-backed shared lane markings (shown left)require an approved Request to Experiment from FHWA. Standard shared lane markings may be used instead without approval.

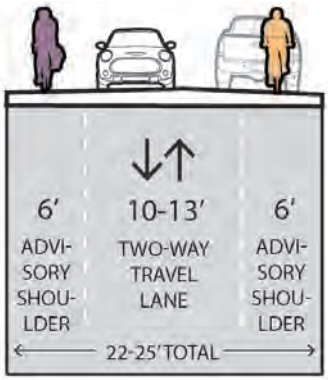
CORE NETWORK: **2-LANE COLLECTORS (< 25')**

Potential Application: Martin Luther King Drive, Prattville

Existing

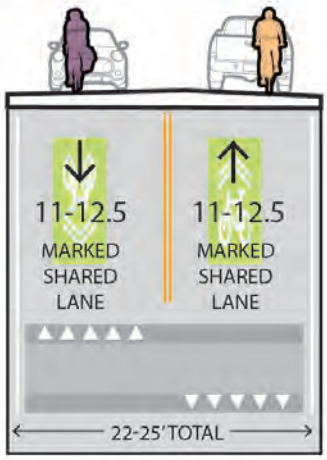


Alternative A: Advisory Bike Lanes



Note: Advisory Bike Lanes are most appropriate for streets with low to moderate volumes (up to 6,000 AADT) and moderate vehicle speeds (up to 35 mph).

Alternative B: Shared Lane Markings with Traffic Calming

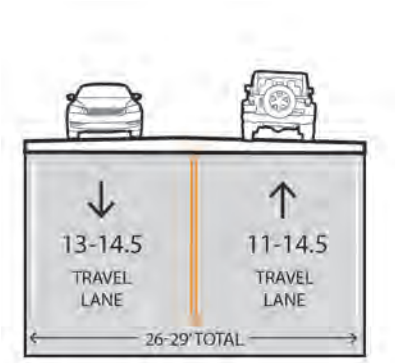


Note: Green-backed shared lane markings (shown left) require an approved Request to Experiment from FHWA.

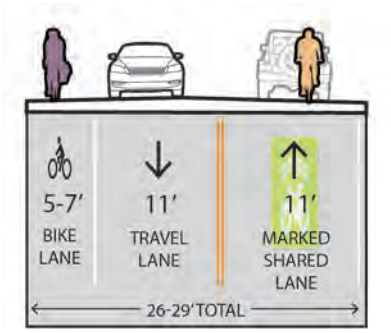
CORE NETWORK: **2-LANE COLLECTORS (26-29')**

Potential Application: Mobile Rd, Montgomery

Existing



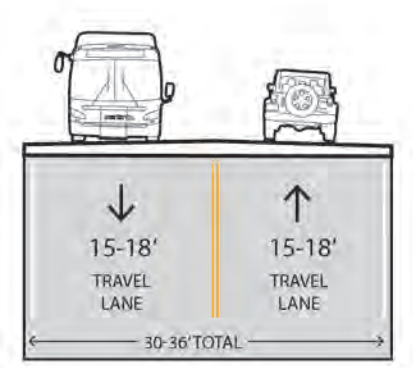
Alternative A: Uphill Bike Lanes - Downhill Shared Lane Markings



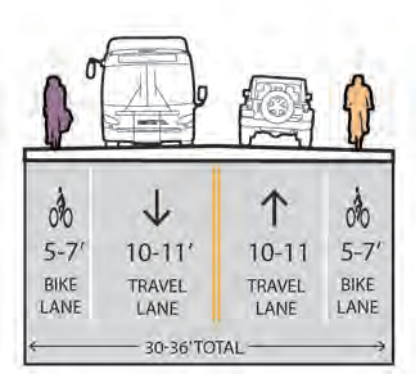
CORE NETWORK: **2-LANE COLLECTORS (>30')**

Potential Application: Hall Street/Harris Way, Montgomery

Existing



Alternative A: Bike Lanes

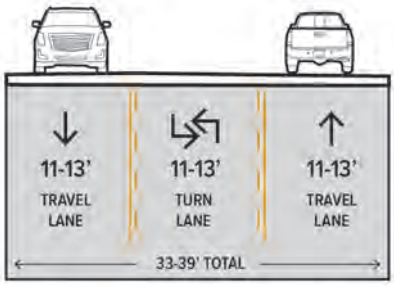


Note: For two-lane roads wider than 36', use the excess space for a painted buffer between the bike lanes and travel lanes.

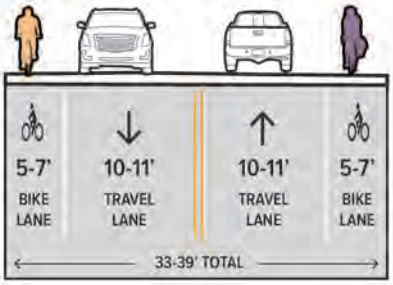
CORE NETWORK: **3-LANE COLLECTORS (<40')**

Potential Application: Main Street, Prattville

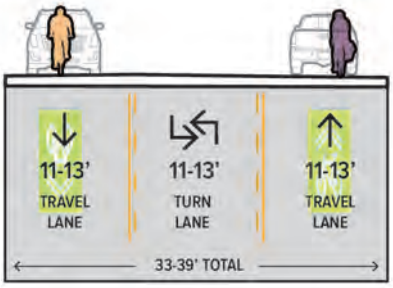
Existing



Alternative A: 3-to-2 Road Diet with Bike Lanes

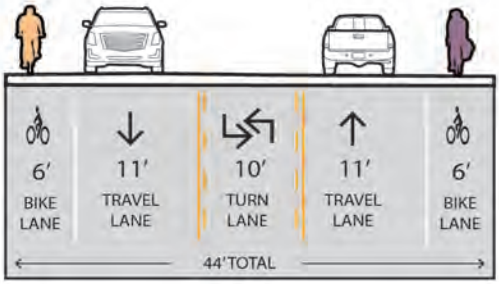


Alternative B: Shared Lane Markings



Note: Green-backed shared lane markings (shown left) require an approvedRequest to Experiment from FHWA.

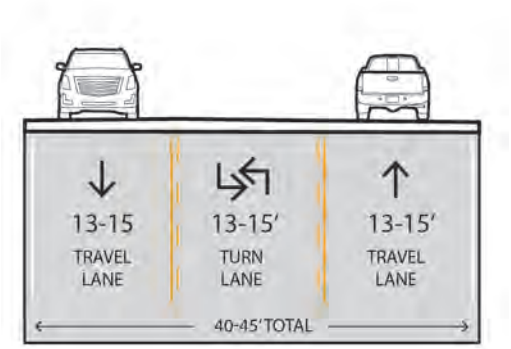
Proposed C: Roadway Expansion with Bike Lanes



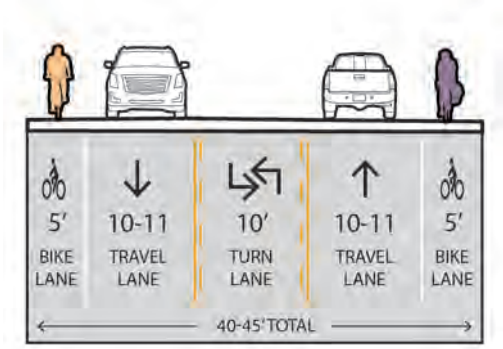
CORE NETWORK: **3-LANE COLLECTORS (>40')**

Potential Application: Woodley Road, Montgomery

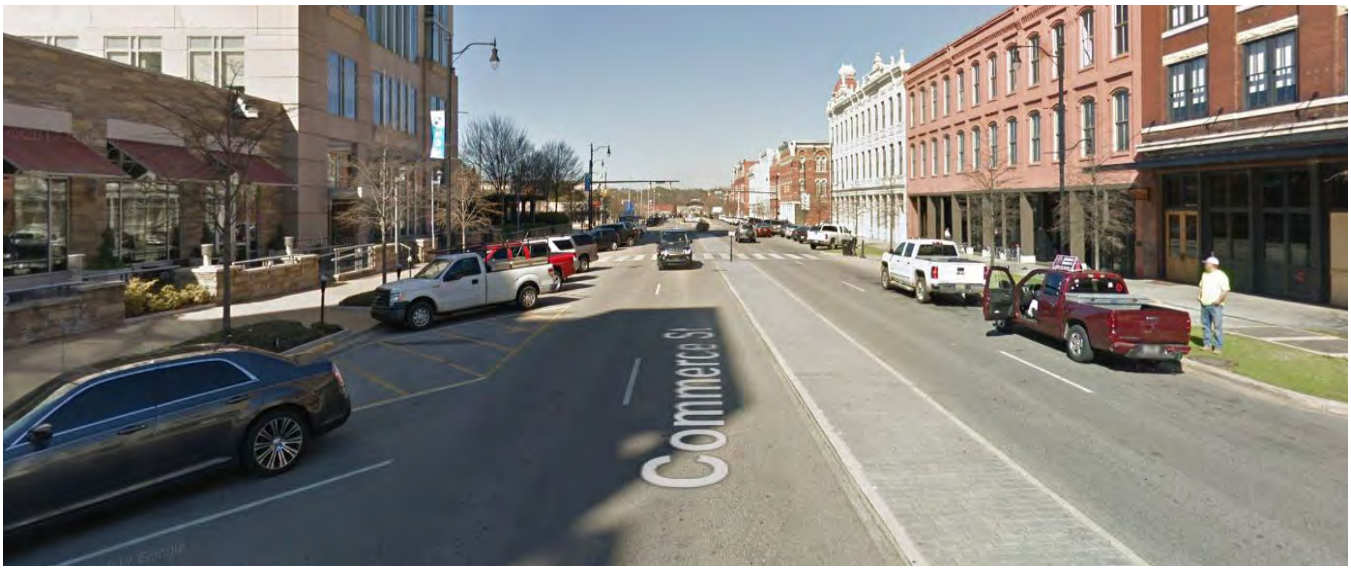
Existing



Alternative A: Bike Lanes

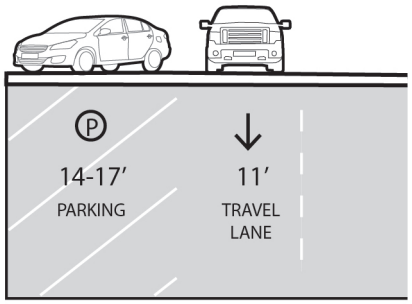


CORE NETWORK: **BIKEWAYS ALONG ON-STREET PARKING**

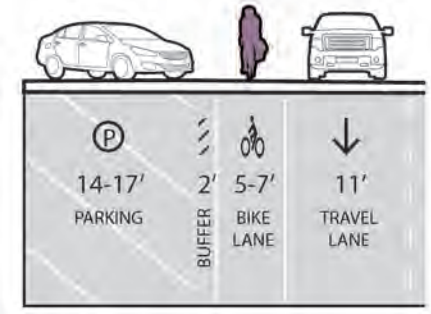


Potential Application: Commerce Street, Montgomery

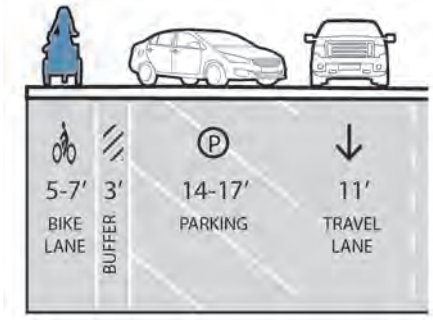
Existing



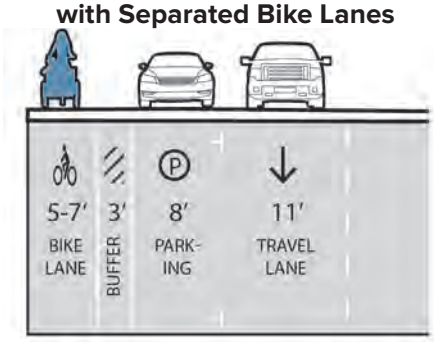
Proposed A: Back-in Angle Parking with Bike Lanes



Proposed B: Back-in angle parking with Separated Bike Lanes



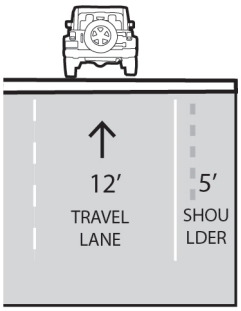
Alternative C: Parallel Parking with Separated Bike Lanes



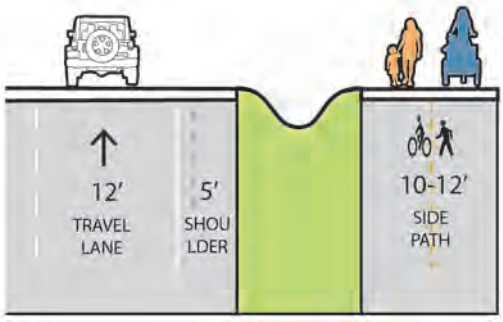
CORE NETWORK: **MULTI-LANE ARTERIALS**

Potential Application: Atlanta Highway, Montgomery

Existing



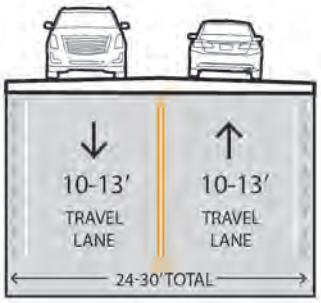
Alternative A: Sidepath



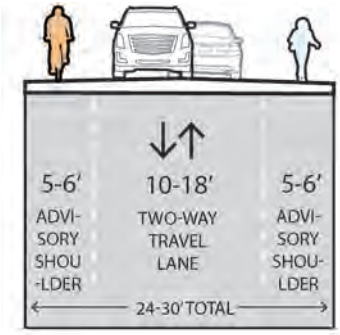
RURAL CONNECTORS: **2-LANE COUNTRY ROADS**

Potential Application: Elmore Road, Wetumpka

Existing

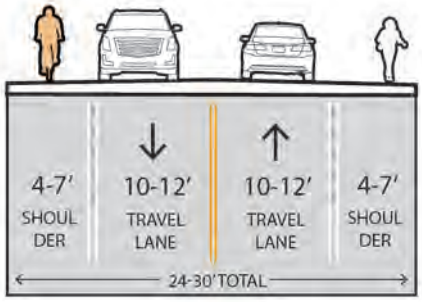


Alternative A: Advisory Bike Lanes

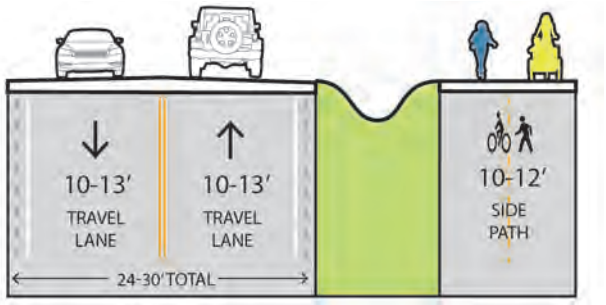


Note: Not suitable where speed limit exceeds 35 MPH and/or AADT exceeds 6k. Requires an approved Request to Experiment from FHWA

Alternative B: Roadway Expansion with Paved Shoulders



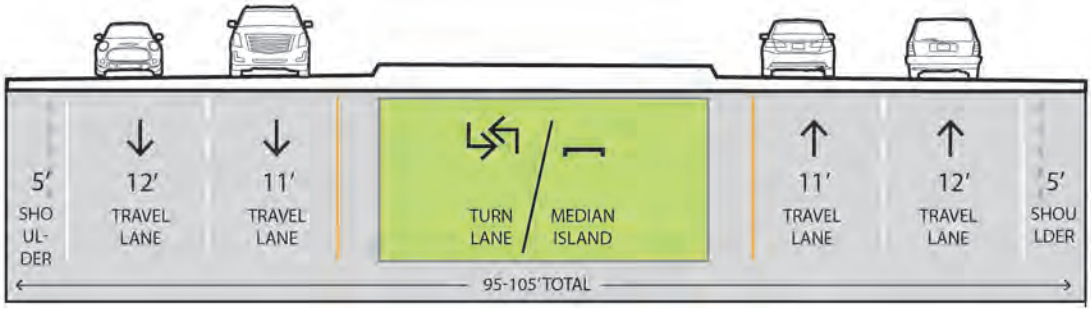
Alternative C: Roadway Expansion with Sidepath



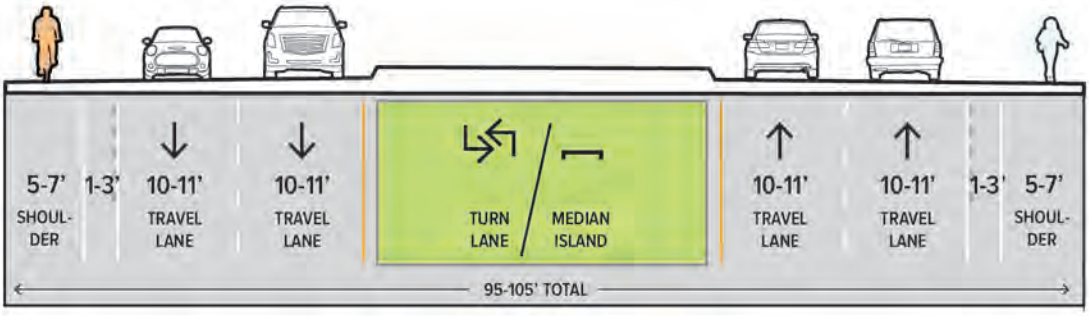
RURAL CONNECTORS: **MULTI-LANE ARTERIALS**

Potential Application: US-31

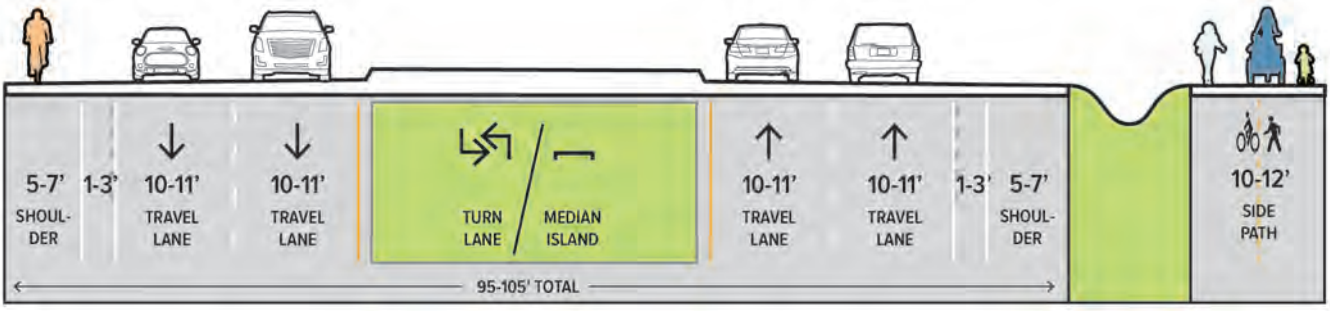
Existing



Alternative A: Paved Shoulder



Alternative B: Sidepath with Bike-Friendly Shoulders



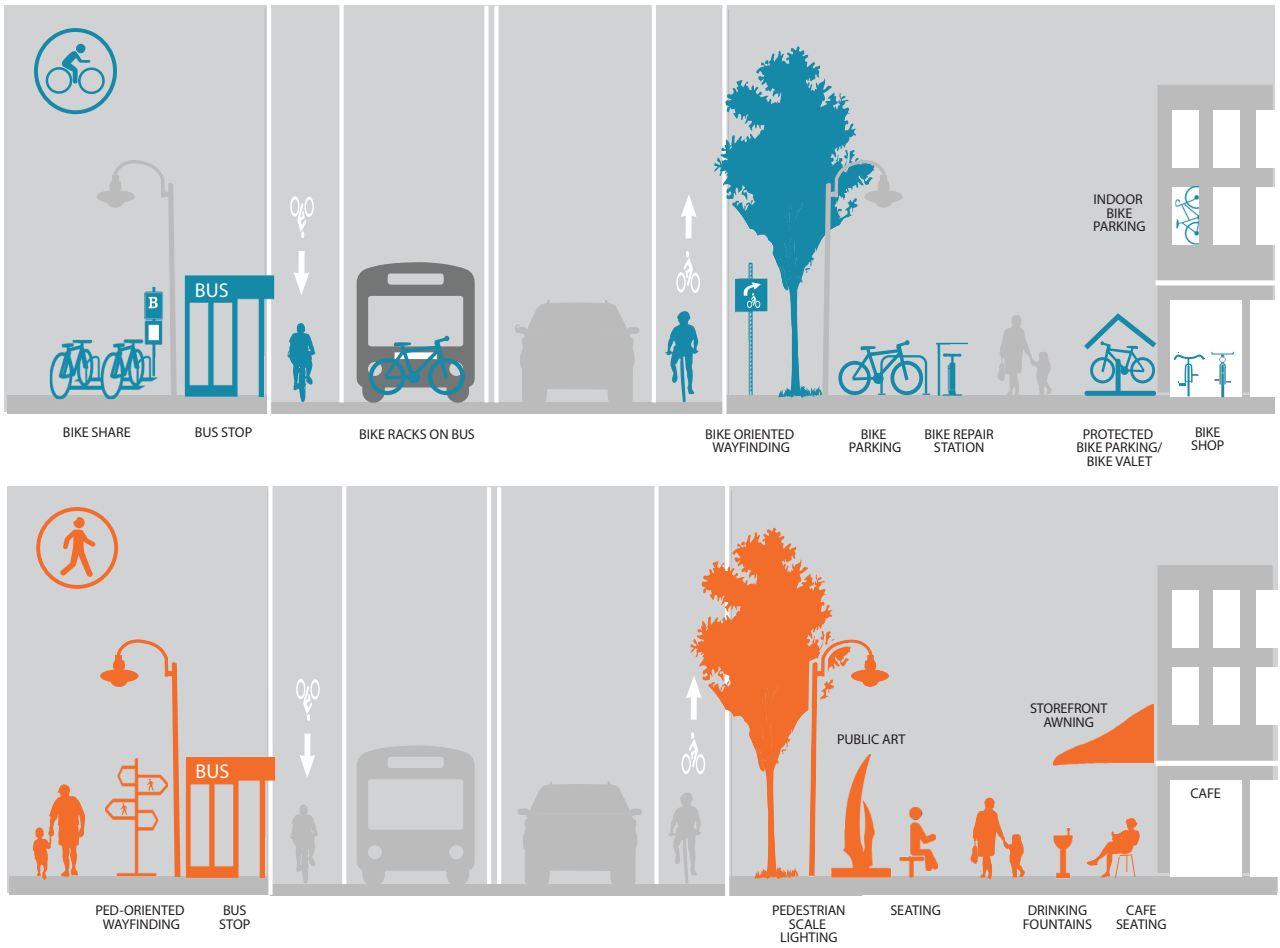
PEDESTRIAN AND BICYCLE SUPPORT FACILITIES

Support facilities are practical and necessary elements of a complete walking and biking network. They are needed to create a network that is convenient and comfortable to use, not just during a trip but at the beginning and end of a trip too.

Some support facilities for walking and biking can be shared, such as bus stops, while many are separate. The graphic below summarizes the different support facilities for walking and biking that should be considered when developing public and private projects that connect people between destinations and provide access to destinations at the end of trips.

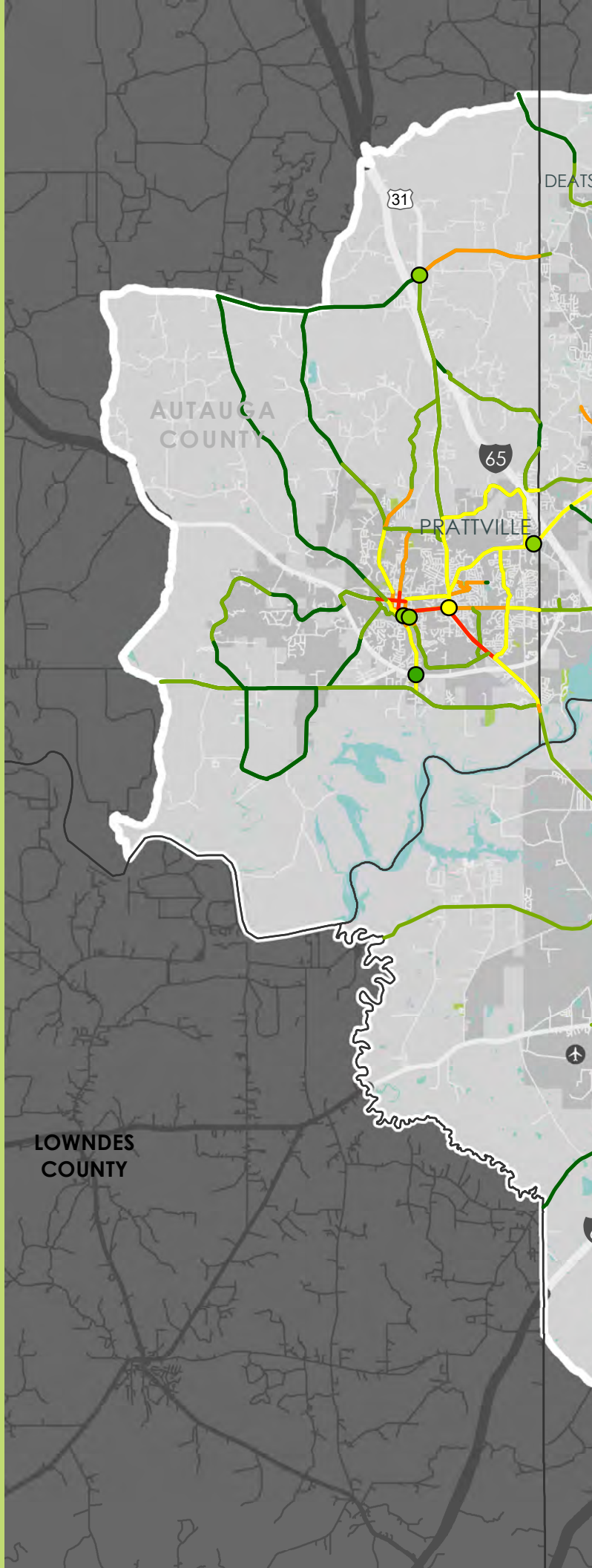
To ensure these elements are regularly incorporated into public and private projects, the following key action steps are recommended for local municipalities:

- Review and update land use and development regulations to require adequate infrastructure for people walking and biking.
- Update design standards and policies for public infrastructure projects to include walking and biking support infrastructure, such as bike parking standards.



PRIORITY PROJECTS

RIVER REGION PRIORITY PROJECTS



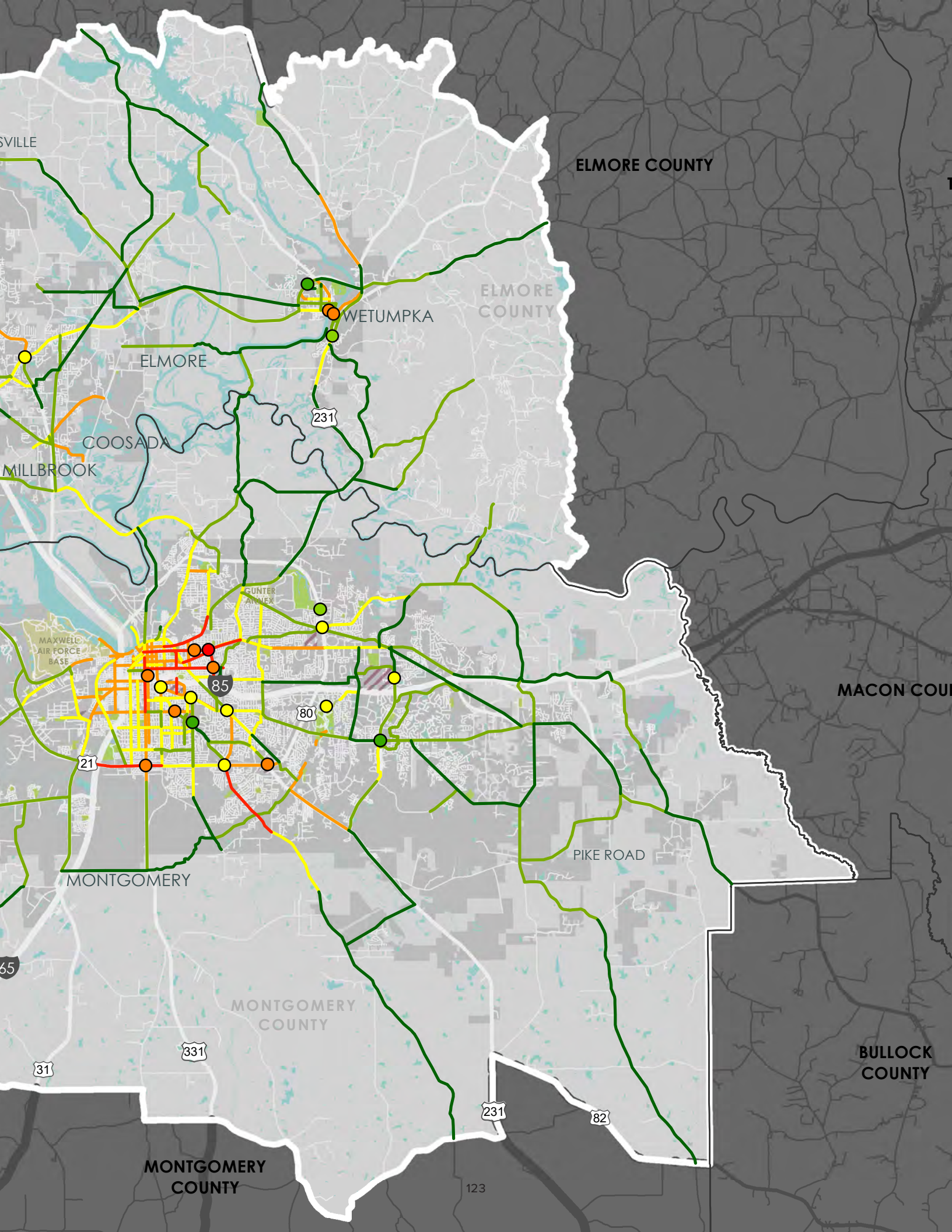
Corridors
- Highest Priority
-
-
-
- Lower Priority

Spot Improvements
- Highest Priority
-
-
-
- Lower Priority

- Montgomery Regional Airport
- MPO Boundary (white)
- County Boundary
- Park
- Military Base
- College Campus
- Water Body
- Region Outside MPO

N

0 2.5 5 Miles


ELMORE COUNTY
ELMORE COUNTY
WETUMPKA
ELMORE
COOSADA
MILLBROOK
231
GUNTER ANNEX
MAXWELL AIR FORCE BASE
85
80
21
MACON COU
PIKE ROAD
MONTGOMERY
65
MONTGOMERY COUNTY
331
31
231
82
BULLOCK COUNTY
MONTGOMERY COUNTY
123

TOP 25 PRIORITY CORRIDOR PROJECTS FOR THE RIVER REGION

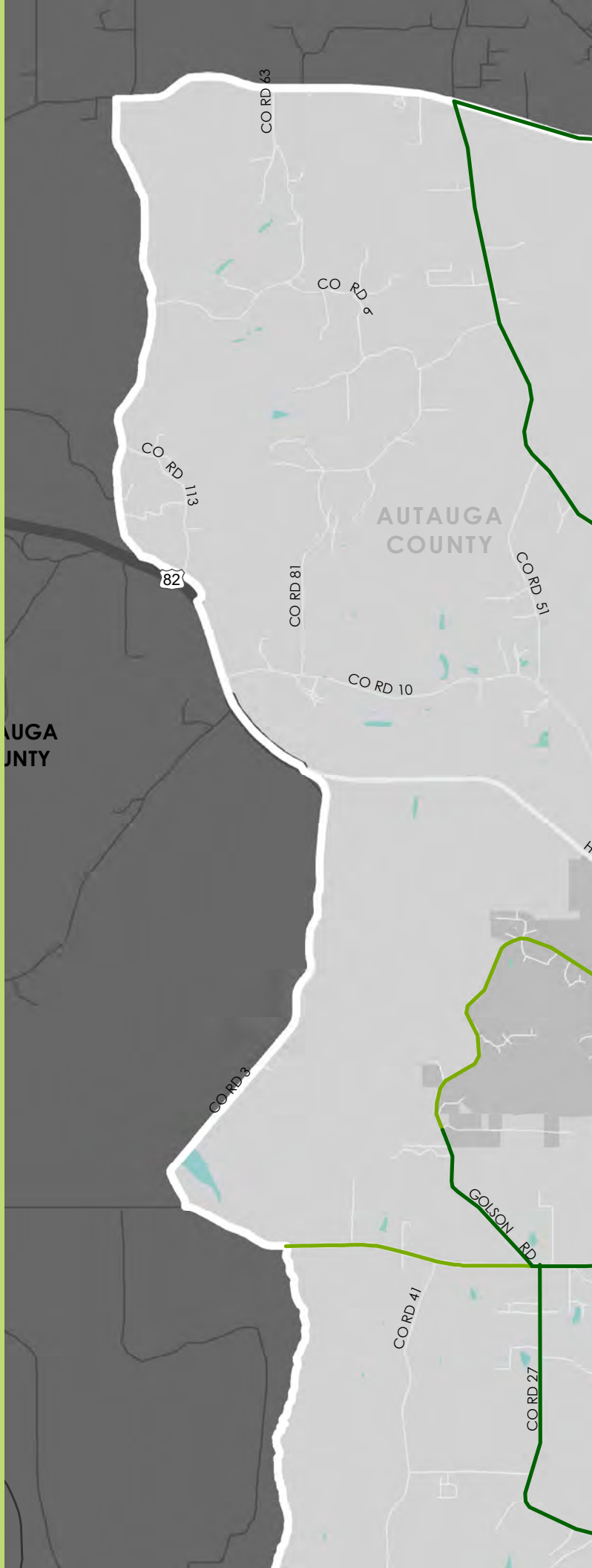
CORRIDOR NAME	FROM	TO	FACILITY TYPE	PROJECT LENGTH
Madison Ave	Coosa St	Railroad near Hall St	Separated Bike Lanes	1.04
Ann St	Atlanta Highway	Zelda Rd	Separated Bike Lanes	1.17
Madison Ave	Railroad near Hall St	Atlanta Hwy	Separated Bike Lanes	1.02
S. Court St	Dexter Ave	W Jeff Davis Ave	Separated Bike Lanes	0.74
S. Court St	Fairview Ave	Patton Ave	Separated Bike Lanes	1.20
Highland Ave	Lincoln Rd	Forest Ave	Buffered Bike Lanes	1.20
Highland Ave	Forest Ave	Union St	Buffered Bike Lanes	0.75
Harris Way	Glenn Palmer Ave	Carter Hill Rd	Bike Lanes	0.48
Hall St	Madison Ave	Highland Ave	Bike Lanes	0.58
Mt. Meigs	Railroad	Madison Ave/Atlanta Hwy	Bike Lanes	0.89
Woodley Rd	Virginia Loop Rd	Baldwin Brook Dr	Bike Lanes	1.60
S. Court St	W Jeff Davis Ave	Fairview Ave	Separated Bike Lanes	1.00
Upper Wetumpka Rd/ Fairground Rd	Ripley St	Capitol Pkwy	Bike Lanes	0.80
Upper Wetumpka Rd/ Fairground Rd	Capitol Pkwy	Crestview St	Bike Lanes	1.10
South Boulevard	Railroad	Norman Bridge Rd	Sidepath	0.20
W. Bridge St	N Bridge St	S Main St	Shared Lane Markings	0.19
Highland Ave	Court St	Union St	Bike Lanes	0.55

CORRIDOR NAME	FROM	TO	FACILITY TYPE	PROJECT LENGTH
Upper Wetumpka Rd/ Fairground Rd	Vonora Ave	Capitol Pkwy	New Sidewalk	0.28
Atlanta Hwy	Mt Meigs Rd	Coliseum Blvd	Separated Bike Lanes	1.10
Woodley Rd	South Boulevard	Baldwin Brook Dr	Bike Lanes	1.10
South Boulevard	Mobile Hwy	Railroad	Sidepath	1.50
Maxwell	Holt St	Coffee St/Eugene St	Shared Use Path	0.41
Riverwalk Extension	End of Current Facility	Base Access Road	Shared Use Path	1.30
Hwy 231	Troy Hwy	Existing Path	Shared Use Path	1.11
Ida Bell Young Park to Blount Cultural Park	Existing Path at Ida Bell	Existing Path at Blount	Shared Use Path	0.29

TOP 5 PRIORITY SPOT IMPROVEMENT PROJECTS FOR THE RIVER REGION

INTERSECTION
Madison and Ann and Atlanta Hwy
Highland Ave and Ann St
Madison Ave and California St
E Bridge St and S Main St
South Blvd and S Court St

AUTAUGA COUNTY PRIORITY PROJECTS



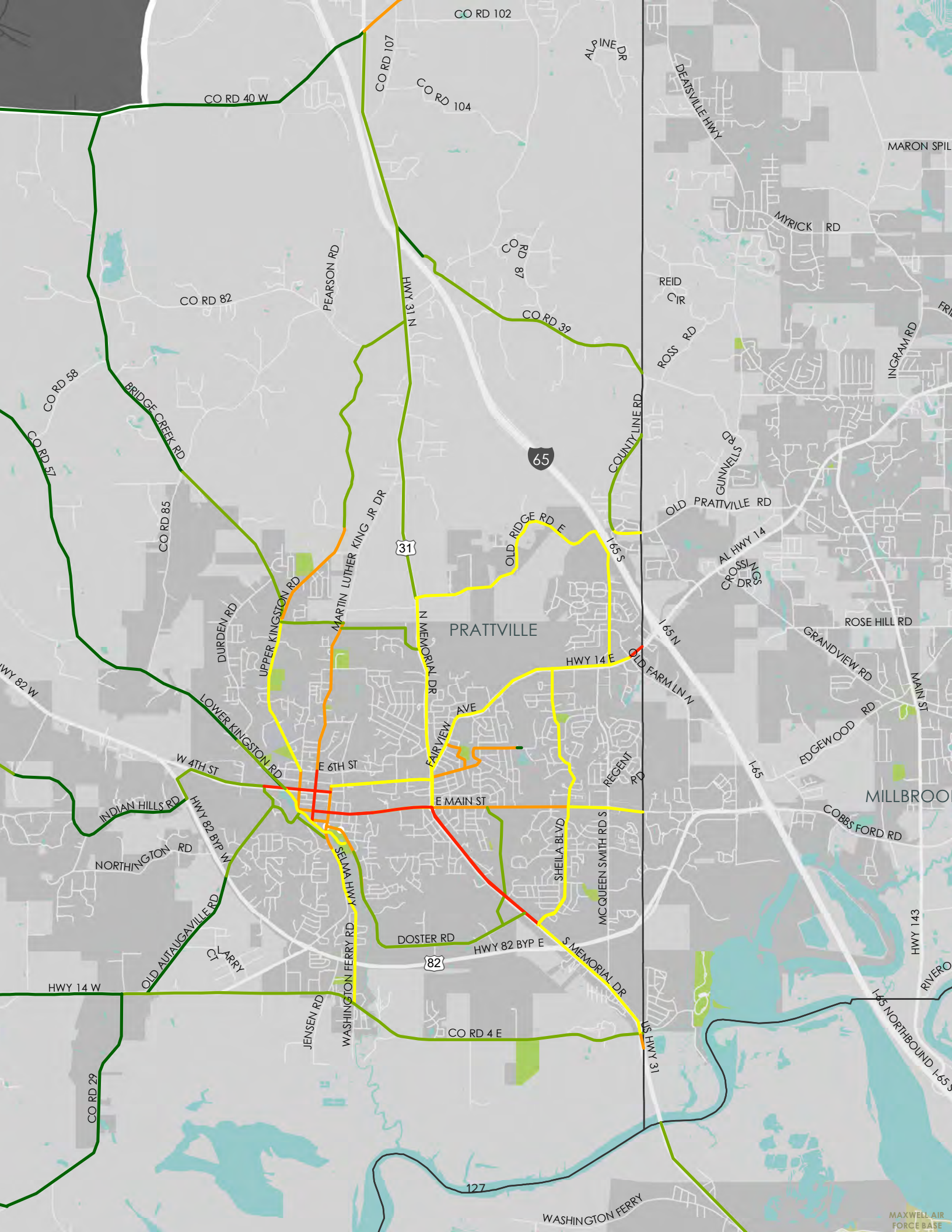
Existing | Proposed

- Paved Shoulder
- Advisory Bike Lanes
- Shared Lane Markings
- Yield Roadway
- Bike Lanes
- Buffered Bike Lanes
- Separated Bike Lanes
- Sidepath
- Shared Use Path

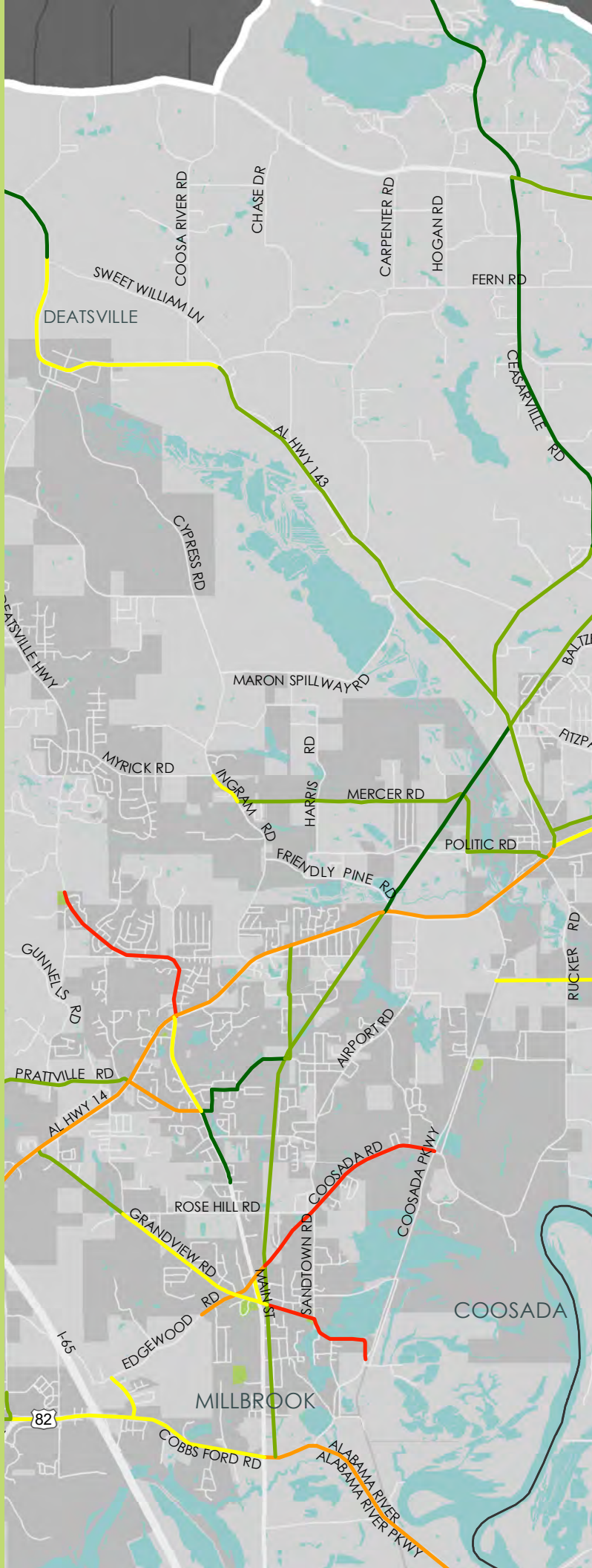
- Montgomery Regional Airport
- MPO Boundary (white)
- County Boundary
- Park
- Military Base
- College Campus
- Water Body
- Region Outside MPO

N

0 0.75 1.5 Miles


CO RD 102
CO RD 107
ALPINE DR
CO RD 104
CO RD 40 W
DEATSVILLE HWY
MARON SPIL
MYRICK RD
CO RD 87
PEARSON RD
HWY 31 N
CO RD 82
CO RD 39
REID CIR
ROSS RD
INGRAM RD
CO RD 58
BRIDGE CREEK RD
CO RD 57
COUNTY LINE RD
65
GUNNELLS RD
OLD PRATTVILLE RD
CO RD 85
OLD RIDGE RD E
165 S
AL HWY 14
CROSSINGS DR
31
MARTIN LUTHER KING JR DR
UPPER KINGSTON RD
DURDEN RD
N MEMORIAL DR
PRATTVILLE
165 N
ROSE HILL RD
GRANDVIEW RD
HWY 14 E
OLD FARM LN N
MAIN ST
HWY 82 W
LOWER KINGSTON RD
AVE
FAIRVIEW
EDGEWOOD RD
W 4TH ST
E 6TH ST
REGENT RD
I-65
MILLBROO
INDIAN HILLS RD
HWY 82 BYP W
E MAIN ST
COBBS FORD RD
NORTHINGTON RD
SELMA HWY
SHEILA BLVD
MCQUEEN SMITH RD S
OLD AUTAUGAVILLE RD
DOSTER RD
HWY 82 BYP E
S MEMORIAL DR
HWY 143
CT LARRY
82
WASHINGTON FERRY RD
HWY 14 W
JENSEN RD
CO RD 4 E
US HWY 31
I-65 NORTHBOUND
CO RD 29
127
WASHINGTON FERRY
MAXWELL AIR FORCE BASE

ELMORE COUNTY PRIORITY PROJECTS

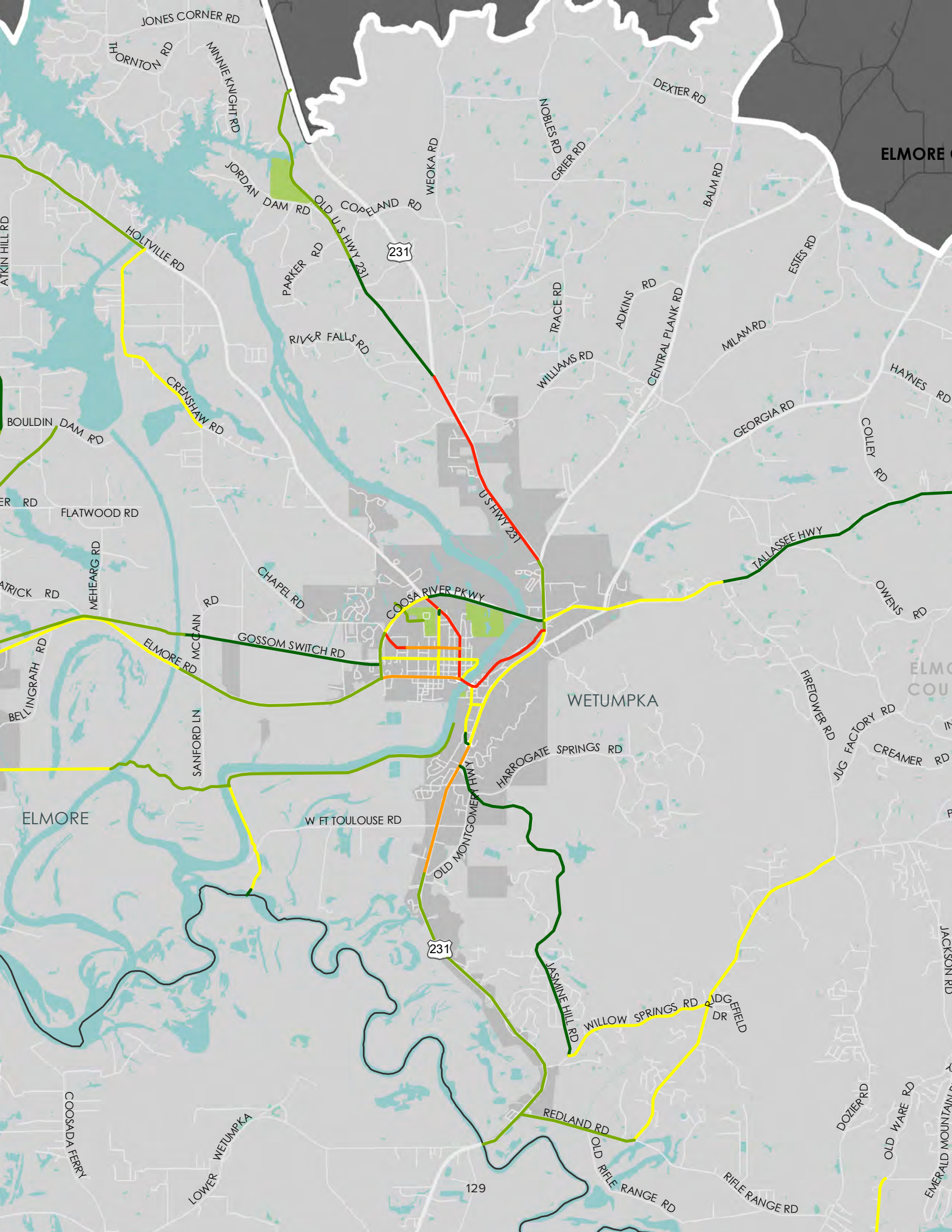


Existing	Proposed
	Paved Shoulder
	Advisory Bike Lanes
	Shared Lane Markings
	Yield Roadway
	Bike Lanes
	Buffered Bike Lanes
	Separated Bike Lanes
	Sidepath
	Shared Use Path

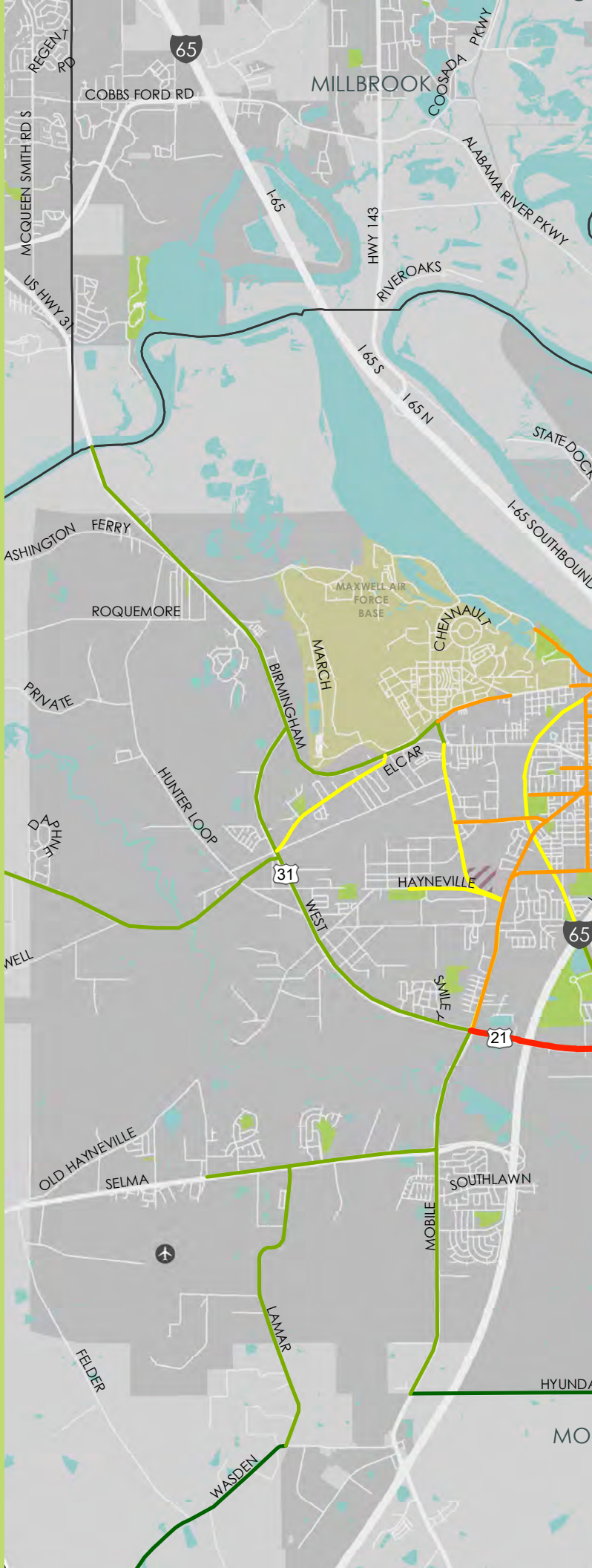
- Montgomery Regional Airport
- MPO Boundary (white)
- County Boundary
- Park
- Military Base
- College Campus
- Water Body
- Region Outside MPO

N

0 0.75 1.5 Miles


JONES CORNER RD
THORNTON RD
MINNIE KNIGHT RD
DEXTER RD
NOBLES RD
GRIER RD
WEOKA RD
BALM RD
ELMORE
JORDAN DAM RD
OLD COPELAND RD
OLD U S HWY 231
231
HOLTVILLE RD
ATKIN HILL RD
PARKER RD
ESTES RD
TRACE RD
ADKINS RD
CENTRAL PLANK RD
MILAM RD
RIVER FALLS RD
WILLIAMS RD
HAYNES RD
CRENSHAW RD
BOULDIN DAM RD
GEORGIA RD
COLLEY RD
U S HWY 231
FLATWOOD RD
TALLASSEE HWY
MEHEARG RD
CHAPEL RD
COOSA RIVER PKWY
OWENS RD
MCGAIN RD
GOSSOM SWITCH RD
ELMORE RD
BELLINGRATH RD
WETUMPKA
FIRETOWER RD
JUG FACTORY RD
CREAMER RD
SANFORD LN
HARROGATE SPRINGS RD
ELMORE
W FT TOULOUSE RD
OLD MONTGOMERY HWY
231
JASMINE HILL RD
WILLOW SPRINGS RD
RIDGEFIELD DR
JACKSON RD
REDLAND RD
COOSADA FERRY
LOWER WETUMPKA
129
OLD RIFLE RANGE RD
RIFLE RANGE RD
DOZIER RD
OLD WARE RD
EMERALD MOUNTAIN

MONTGOMERY COUNTY PRIORITY PROJECTS



Existing	Proposed
	Paved Shoulder
	Advisory Bike Lanes
	Shared Lane Markings
	Yield Roadway
	Bike Lanes
	Buffered Bike Lanes
	Separated Bike Lanes
	Sidepath
	Shared Use Path

Montgomery Regional Airport

MPO Boundary (white)

County Boundary

Park

Military Base

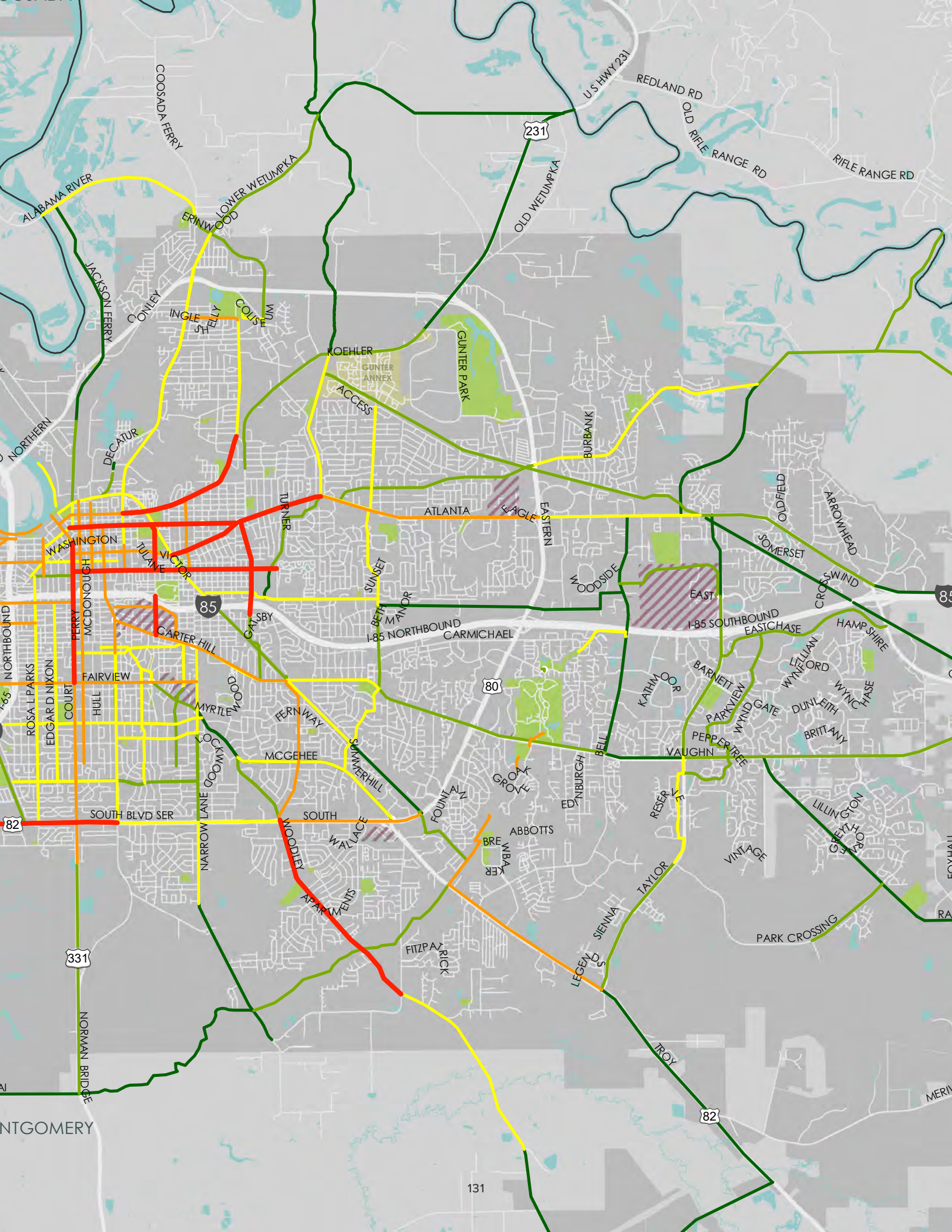
College Campus

Water Body

Region Outside MPO

N

0 0.75 1.5 Miles


COOSADA FERRY
U S HWY 231
REDLAND RD
OLD RIFLE RANGE RD
RIFLE RANGE RD
231
OLD WETUMPKA
LOWER WETUMPKA
ALABAMA RIVER
ERINWOOD
JACKSON FERRY
CONLEY
INGLE
SHELLY
COLISEUM
KOEHLER
GUNTER ANNEX
GUNTER PARK
ACCESS
BURBANK
NORTHERN
DECATUR
TURNER
ATLANTA
EAGLE
EASTERN
OLDFIELD
ARROWHEAD
WASHINGTON
TULANE
VICTOR
SUNSET
WOODSIDE
SOMERSET
CROSSWIND
85
EAST
BETH MANOR
I-85 NORTHBOUND
CARMICHAEL
I-85 SOUTHBOUND
EASTCHASE
HAMPSHIRE
PERRY
MCDONOUGH
CARTER HILL
GATSBY
NORTHBOUND
ROSA L PARKS
EDGAR D NIXON
COURT
FAIRVIEW
HULL
80
KATHMOOR
BARNETT
ELLIAN
WYNFORD
WYNCHASE
PARKVIEW
WYNDGATE
DUNLEITH
BRITTANY
MYRTLEWOOD
FERNWAY
PEPPERTREE
VAUGHN
BELL
LOCKWOOD
MCGEHEE
SUMMERHILL
EDINBURGH
OAK GROVE
FOUNTAIN
RESERVE
LILLINGTON
GREYTHORN
82
SOUTH BLVD SER
NARROW LANE
SOUTH
WALLACE
WOODLEY
ABBOTTS
BRE
WALKER
VINTAGE
APARTMENTS
TAYLOR
SIENNA
PARK CROSSING
FITZPATRICK
LEGEND
331
NORMAN BRIDGE
TROY
82
NTGOMERY

TOP 5 PRIORITY PROJECTS FOR AUTAUGA COUNTY

CORRIDOR NAME	FROM	TO	FACILITY TYPE	PROJECT LENGTH
Main St	Chestnut St	New Moon Dr	Bike Lanes	0.65
S Memorial Dr	E Main St	Sheila Blvd	Buffered Bike Lanes	1.73
S Memorial Dr	E Main St	Sheila Blvd	New Sidewalk	1.73
Chestnut St	1st St	Railroad St	Bike Lanes	0.53
4th St	Gin Shop Hill Rd	Washington St	Bike Lanes	0.72

TOP 5 PRIORITY PROJECTS FOR ELMORE COUNTY

CORRIDOR NAME	FROM	TO	FACILITY TYPE	PROJECT LENGTH
W. Bridge St	N Bridge St	S Main St	Shared Lane Markings	0.19
N. Bridge St	W Bridge St	Coosa River Pkwy	Advisory Bike Lanes	1.18
Deatsville Hwy	Highway 14	Legacy Park	Paved Shoulder	1.9
Company St	S Main St	Hwy 231	Shared Lane Markings	1.2
Pratville Junction Rd/ Grandview Rd	Coosada Pkwy	ROW near Main St	Yield Roadway	1.3

TOP 5 PRIORITY PROJECTS FOR MONTGOMERY COUNTY

CORRIDOR NAME	FROM	TO	FACILITY TYPE	PROJECT LENGTH
Madison Ave	Coosa St	Railroad near Hall St	Separated Bike Lanes	1.04
Ann St	Atlanta Highway	Zelda Rd	Separated Bike Lanes	1.17
Madison Ave	Railroad near Hall St	Atlanta Hwy	Separated Bike Lanes	1.02
S. Court St	Dexter Ave	W Jeff Davis Ave	Separated Bike Lanes	0.74
S. Court St	Fairview Ave	Patton Ave	Separated Bike Lanes	1.20

OPPORTUNISTIC IMPLEMENTATION

The improvements listed herein represent planning-level recommendations of the most appropriate and optimal bicycle and pedestrian facility type for the conditions observed. In many cases, more detailed design studies will be required to examine specific site conditions and develop detailed design guidance that reflects local conditions and constraints. While the River Region and its implementing partners should strive to implement the network as presented, other unforeseen constraints may prevent this from happening in all cases. In those instances, the implementing agency should strive to implement the next best facility type in terms of user separation and safety. For instance, if separated bike lanes are not feasible on a section of roadway, buffered bike lanes should be installed as the alternative treatment. Lastly, the River Region and its implementing partners should look for opportunities to coordinate bikeway and walkway construction with regularly programmed maintenance activities even where this results in lower priority projects being implemented before higher priority projects. Coordinating with Town, City, County, and ALDOT maintenance will greatly reduce the costs of implementing recommended facilities in most cases.

06

SETTING THE BAR

HOW DOES WALKING AND BIKING IN THE RIVER REGION COMPARE TO ITS PEERS?

Chapter six sets the bar for improving walking and biking in the River Region. Peer and Aspirational regions are compared with the Montgomery MPO across multiple statistics, and the best practices review highlights successful policies, programs, and design trends across the southeast.

Suitable performance measures for the River Region were collected through the peer regions review and combined with the public input and data collected in previous chapters to create specific, measurable, and achievable targets for the next 5 to 10 years. The result is a clear picture of where active transportation compares now and how it will transform the region in the future.

PEER AND ASPIRATIONAL REGIONS

The peer and aspirational regional review collects and summarizes data gathered from the River Region as well as three peer regions and three aspirational regions.

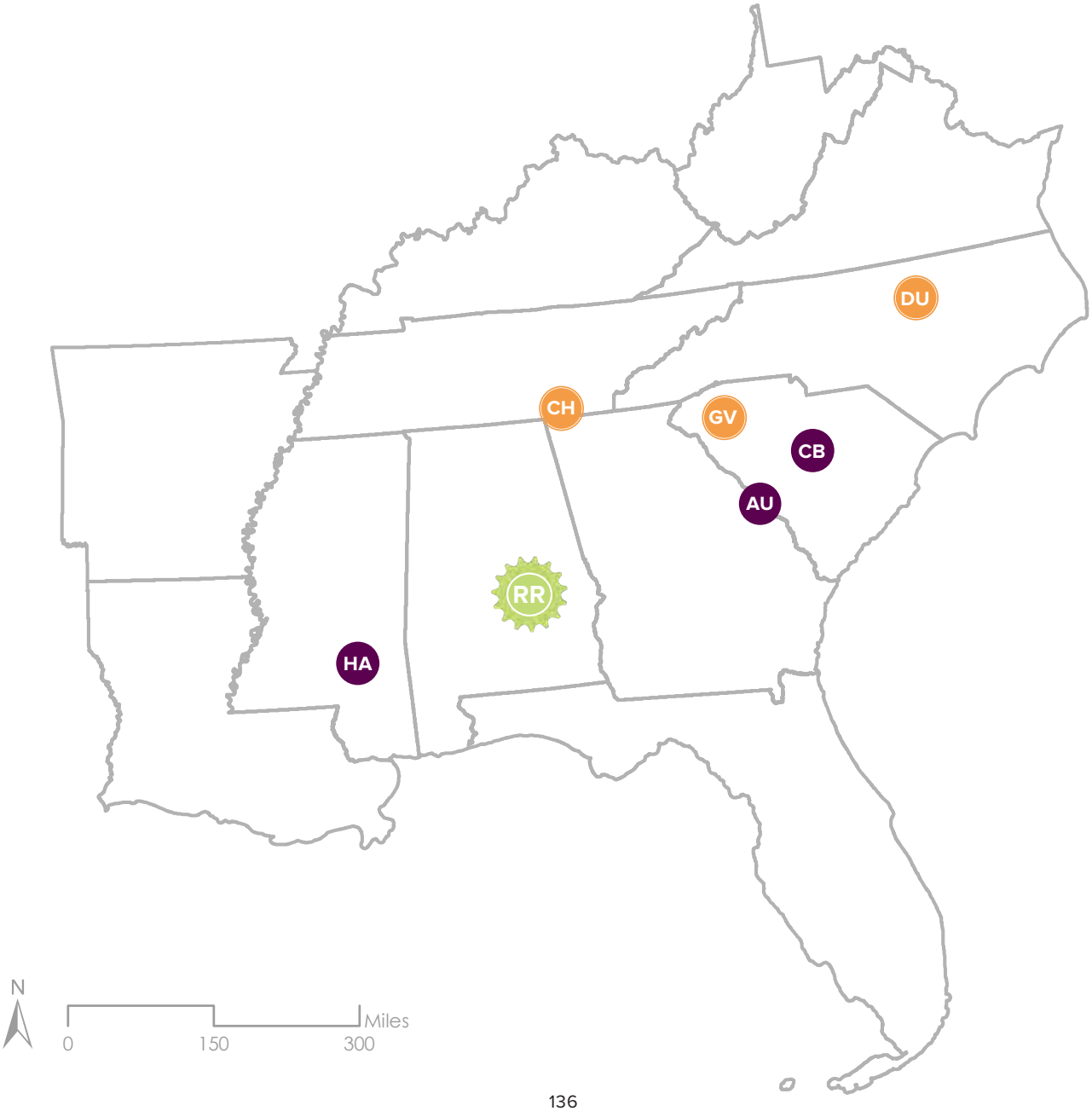
RR River Region = RR

Peer Regions:

- AU Augusta, GA = AU
- CB Columbia, SC = CB
- HA Hattiesburg, MS = HA

Aspirational Regions:

- CH Chattanooga, TN = CH
- DU Durham, NC = DU
- GV Greenville, SC = GV



SUMMARY

The Peer and Aspirational Regions Review identifies **three peer regions and three aspirational regions** to make comparisons between similar regions in the southeast according to the six goals outlined for the River Region:

- Infrastructure
- Safety
- Usage
- Education and Encouragement
- Funding
- Environment and Health

The goals for the review are as follows:

- To understand how peer regions compare across various metrics for biking and walking
- To evaluate how peer and aspirational regions have created targets and metrics for improvements
- To highlight program and policy trends that have proven successful
- To set specific goals and targets for improvement in the River Region
- To incorporate findings as a factor for identifying plan recommendations

SELECTION CRITERIA

The six peer and aspirational regions featured here were selected through a scoring process that identified regions that share similar culture, geography, and political structure. The southeast region was the focal point for selecting cities based on the following specific criteria:

- Population demographics
- Population size
- Population growth
- Population density
- Land area
- Government structure
- Geography and climate

In addition to the data used to narrow the list of regions, the plan Steering Committee assisted with qualitative data to assist the selection process. Peer regions were selected based on real and perceived notions of similar environments for biking and walking, while aspirational regions were selected based on real and perceived notions of environments that the region region can hold as a model for advancing active transportation and real mobility choice.

AUGUSTA: BICYCLE PARKING POLICY

AU

The Augusta Regional Transportation Study (ARTS) adopted bicycle parking regulations in 2015. The regulations require that at least two short-term and two long-term bicycle parking spaces are provided for any non-exempt new building over 1,200 square feet. After this minimum is provided, at least one bicycle parking space must be provided for every ten vehicle spaces.

Augusta's bicycle parking requirements establish allowable bicycle rack type and size, and give instructions for proper installation. Signage and lighting are also required elements of bicycle parking so as to increase the safety and visibility of bicyclists and their bikes. Because Augusta currently has minimum vehicle parking requirements, bicycle parking may be used to reduce the number of vehicle spaces required by 5%- 7%.

BEST PRACTICES

REGIONAL PROGRAMS AND POLICIES

- Safe Crossings to Elementary and Middle Schools
- James Brown Boulevard Streetscape Improvements
- Augusta Canal River Levee Trail

NOTABLE LOCAL PROGRAMS AND POLICIES

- Safe crossings to Elementary + Middle Schools
  Grovetown, GA
- Sidewalks required on both sides with all new residential streets
  North Augusta, SC
- All collector and arterial streets have bike plans specified
  North Augusta, SC
- Subdivisions that adjoin the North Augusta Greeneway are required to provide sidewalks that connect all internal lots to the greenway
  North Augusta, SC

COLUMBIA: OPEN STREETS EVENT

CB

On April 2, 2017, the inaugural Columbia Open Streets transformed a three block section of Devine Street into a car-free space bustling with people walking, bicycling, and participating in community activities like chalk art, cornhole, story telling, "design a new Columbia flag", exercise classes, yoga, magnetic darts, chess, massages, children's games, and an electric assist bicycle demonstration.

The City of Columbia organized the event together with the Bicycle and Pedestrian Advisory Committee (BPAC). They scheduled the event from 12:30pm to 5:00pm on a Sunday to limit the potential impact on traffic. The event was entirely funded by sponsorships and in-kind donations from the city. More information can be found at openstreetscolumbia.com

BEST PRACTICES

REGIONAL PROGRAMS AND POLICIES

- A regional riverfront greenway network that connects Cayce, West Columbia, Springdale and Columbia. The greenway is focused on accessibility for ages eight to eighty. There are also conceptual alignments for more riverfront greenway as part of the Palmetto Trail.

LOCAL PROGRAMS AND POLICIES

- Richland County has a 1% sales tax for transportation, one-third of which goes to funding greenways and trails.
- Partnership between the City and the South Carolina Department of Health and Environmental Control (DHEC) to fund pedestrian safety and access improvements for public health.
- Bicycle and pedestrian master plans have been adopted for three contiguous jurisdictions.
- City Council-appointed Bicycle and Pedestrian Advisory Committee (BPAC) to oversee the implementation of Walk Bike Columbia - the City's bicycle and pedestrian master plan.

HATTIESBURG: SAFE ROUTES TO SCHOOL SIDEWALK PROJECTS

AU

Following the adoption of the MPO Bicycle and Pedestrian Plan, the City of Hattiesburg has focused more than $700,000 on sidewalk improvements focused around schools.

The Hawkins Safe Routes to School Sidewalk Project is a centerpiece of the effort, which will include a new 8 foot sidewalk along Gordon's Creek and 5 foot sidewalks along Green and West Streets adjacent to the school.

The interest in improving sidewalks has spread beyond the Safe Routes to School program and now also includes walking routes near destinations and popular commercial corridors.

BEST PRACTICES

NOTABLE LOCAL PROGRAMS AND POLICIES

- **"Hattie Hundred":** a popular bicycle race that serves as a fundraiser for "DREAM" of Hattiesburg, Inc - an effort to assist in educating and developing skills that enable children and youth to resist alcohol and drugs. The event is organized and run by volunteers.
- Bike to Work Day annual ride organized by the Hattiesburg-Petal-Forrest-Lamar Metropolitan Planning Organization.
- Longleaf Trace Trail: The longest rail-to-trail in Mississippi at 40.5 miles. The trail connects the University of Southern Mississippi to downtown Hattiesburg.
- Monthly bike rides organized by the City of Hattiesburg on the Longleaf Trace Trail.

CHATTANOOGA: GREENTRIPS PROGRAM

CH

The Chattanooga Hamilton-County Regional Planning Agency coordinates the GreenTrips program, which provides education resources and incentives for walking, biking, using transit, carpooling, and telecommuting.

The GreenTrips program has numerous resources to make active transportation social and fun. Commuters can go to iGreenTrip.org to find other members to join on walking, biking, transit, or carpooling trips, for either single trips or for repeat commutes.

GreenTrips also includes an Employer Partner Program. The program assists employers with training employees on using local transportation resources, and can help employers develop better accommodations for pedestrians and cyclists.

BEST PRACTICES

REGIONAL PROGRAMS AND POLICIES

- MPO Complete Streets Policy
- Applied for and won a Complete Streets Consortium technical assistance award from Smart Growth America. The award is tailored to local contexts and will address specific barriers to Complete Streets implementation.
- Performance measures that weigh safety as a criteria, as well as the benefits of biking and walking

LOCAL PROGRAMS AND POLICIES

- Pedestrian Action Plan focused on sidewalk improvement prioritization
- First bike share program in southeast, with 33 stations and 300 bikes
- Complete Streets Ordinance
- Separate Transportation, Engineering, and Design Departments
- Adoption of NACTO Design Guides and ITE “Walkable Urban Thoroughfares” as design standards
- Interactive map of bicycle parking locations and capacity

DURHAM: BICYCLE BOULEVARDS

DU

Durham Bicycle Boulevards began as a kickstarter campaign in January to raise money for affordable and effective safety improvements on residential streets.

Bicycle Boulevards is now an organization focused on establishing 15 miles of priority bicycle routes within one year using low-speed streets that connect to major destinations.

The organization is promoting the project through a partnership with a local bike shop, Bullseye Bicycle, which is offering free tuneups and bicycle discounts to people who pledge at least $75 to support the boulevards.

BEST PRACTICES

REGIONAL PROGRAMS AND POLICIES

- Inter-jurisdictional coordination on planning and development of the Tobacco Trail

LOCAL PROGRAMS AND POLICIES

- Separate pedestrian and bicycle plans for all municipalities in the region
- Bicycle Boulevards Pilot Program (Durham)
- Several jurisdictions participate in "Watch for MeNC" pedestrian and bicycle safety program
- Installation of at least 300 bike racks (Durham)
- Track miles of sidewalks along arterial roads for focused improvements
- Efforts have resulted in 3 Bicycle Friendly Community designations

GREENVILLE: SWAMP RABBIT TRAIL

GV

The Swamp Rabbit Trail builds on the success of downtown Greenville's revitalization by linking the downtown core with destinations such as Cleveland Park, Furman University, Falls Park, and the Town of Travelers Rest. The trail is approximately 20 miles and follows abandoned rail corridors and greenways.

In 2014 the Greenville-Pickens Area Transportation Plan (GPATS) released a 3 year study of the Swamp Rabbit Trail usage as well as health and environmental impacts. The study observed over 500,000 trail users in year three, which highlighted the success of the trail as a major recreation and transportation corridor.

The high number of trail users opened the doors for funding trail expansion as well as safety improvements at major trail intersections.

BEST PRACTICES

REGIONAL PROGRAMS AND POLICIES

- The Unified Planning Work Program (UPWP) offers grants to communities for active transportation plans
- Inter-jurisdictional coordination on the Swamp Rabbit Trail
- Regional Safe Routes to Work Program

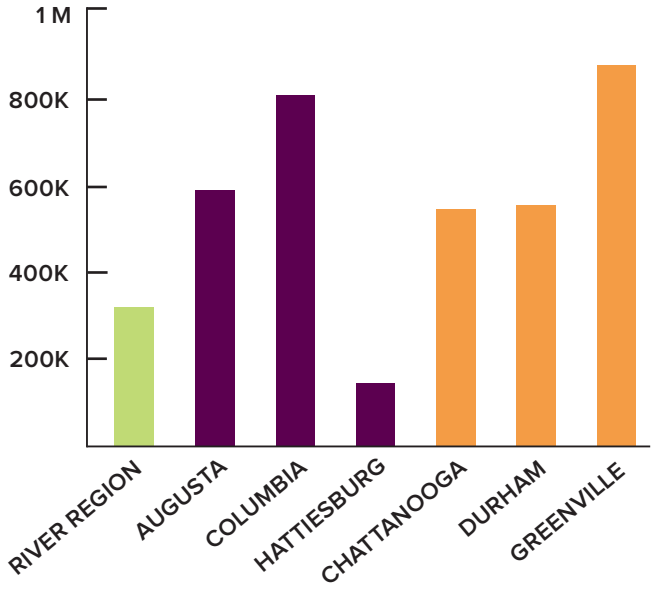
LOCAL PROGRAMS AND POLICIES

- Greenville Complete Streets Policy
- 3 year impact study of the Swamp Rabbit Trail
- Bike share system with eight stations and thirty five bikes
- All city buses have capacity for two bikes
- Temporary parking-protected bike lane on Broad Street has now led to the permanent installation of a the facility

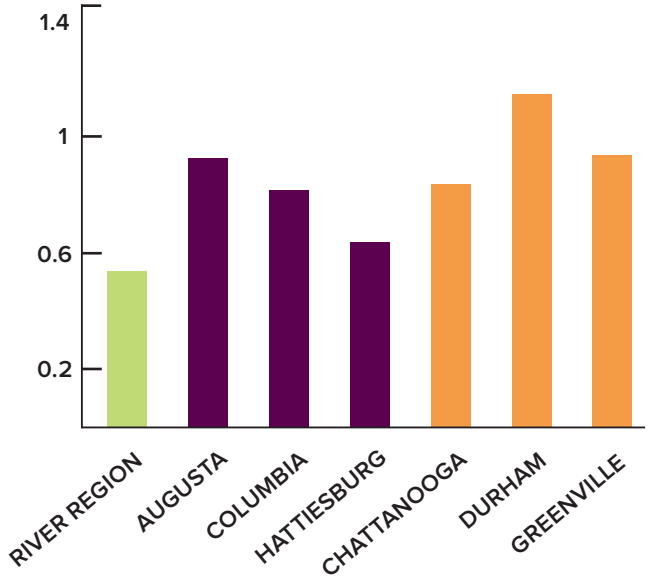
POPULATION COMPARISONS

RIVER REGION
PEER REGION
ASPIRATIONAL REGION

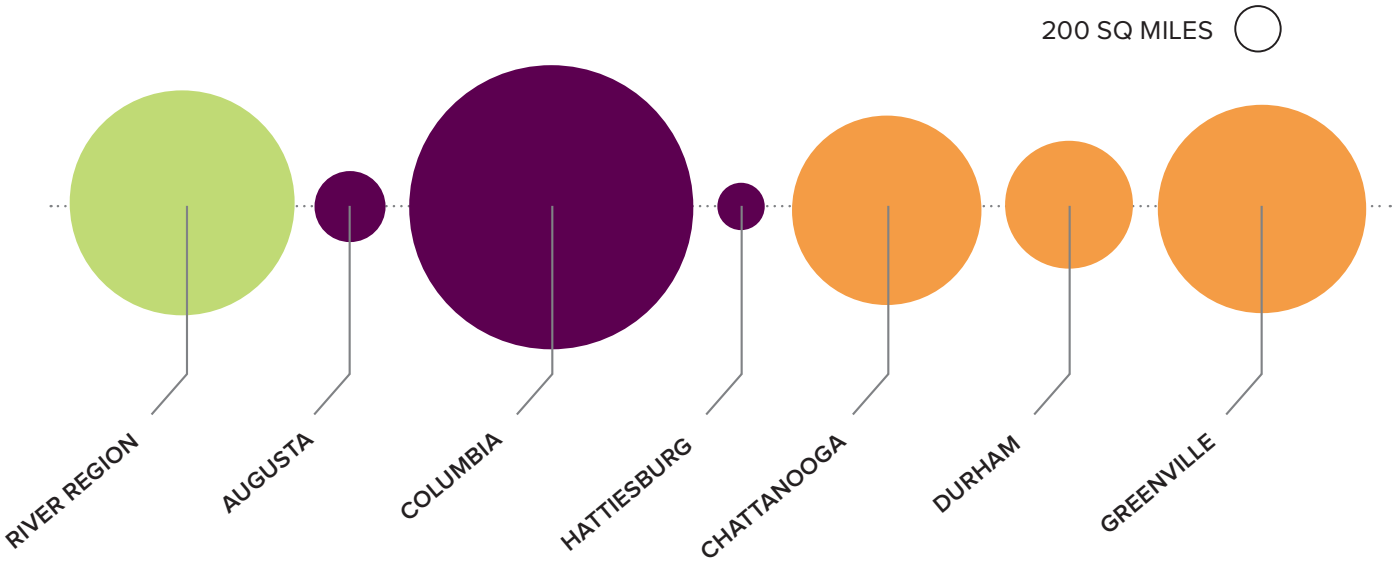
POPULATION BY REGION (2015)



POPULATION DENSITY (people per sq mile)



AREA BY REGION (sq miles)

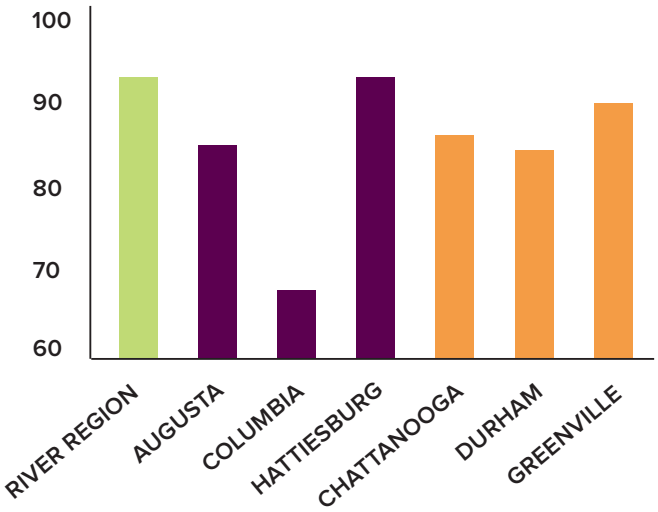


METRICS OF SUCCESS

BICYCLE FRIENDLY COMMUNITY DESIGNATION

RIVER REGION	*None**
AUGUSTA	*None*
COLUMBIA	*Bronze	City of Columbia*
HATTIESBURG	*Bronze	City of Hattiesburg*
CHATTANOOGA	*Silver	City of Chattanooga*
DURHAM	*Bronze + Silver	City of Durham, City of Chapel Hill, + City of Carrboro*
GREENVILLE	*Bronze	City of Greenville*

PERCENT OF COMMUTES LESS THAN 10 MINUTES BY AUTOMOBILE



* The City of Montgomery received an Honorable Mention in 2016.

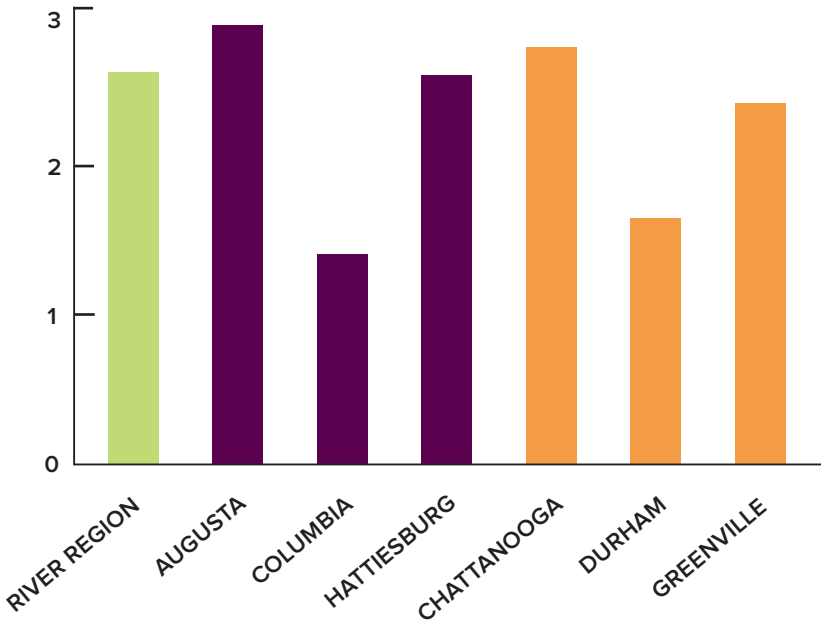
SAFETY

The 2014 Dangerous by Design report provides pedestrian safety data for all metropolitan areas and counties in the U.S. This includes pedestrian fatalities per 100,000 people, as well as percentage of pedestrian fatalities by posted speed limit.

At the metropolitan level, the River Region is comparable to its peer regions, with a pedestrian fatality rate of 1.76. However, the Chattanooga metro area (0.95), and the Durham metro area (1.46) had lower pedestrian fatality rates during the same five-year period (2008 - 2012).

More recent data from the National Highway Traffic Safety Administation (NHTSA) in 2015 compares county-level safety data. According to this data set, Montgomery County has a pedestrian fatality rate of 2.65 per 100,000 people. This suggests that the higher rates of pedestrian fatalities occur in the core of the county. The safety analysis in Chapter 3 confirms this notion too.

PEDESTRIAN FATALITIES PER 100,000 PEOPLE



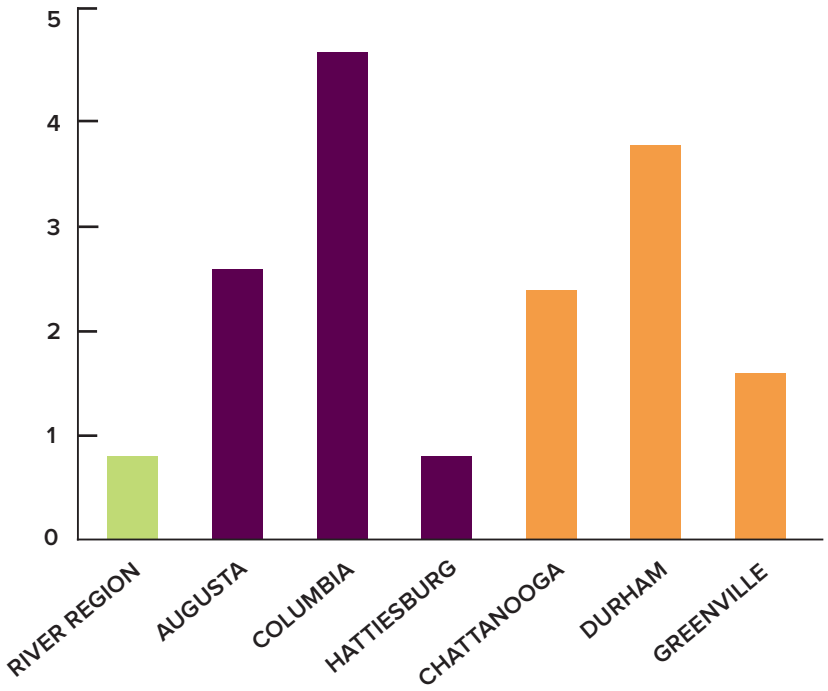
USAGE

Data from the American Community Survey suggests the River Region lags behind both its peer and aspirational cities in terms of percent of residents who walk or bike. This is especially true for rates of bicycling in the River Region, which only account for 0.1% of all trips. Chattanooga and Autauga regions have the highest bicycling rate at 0.5%.

The Columbia region leads walking rates at 4.5% with Durham not too far behind at 2.8%. A place's design features, things like greater intersection density and block density, can support a more walkable environment. In Columbia, the University of South Carolina likely also contributes to this significant figure as campus design can encourage walking between classes and around town.

The same is not true for the River Region, which has a walking rate of only 0.7% despite being home to multiple colleges and universities such as Alabama State University, Auburn University at Montgomery, and Huntington College.

PERCENT OF BICYCLE + PEDESTRIAN TRIPS

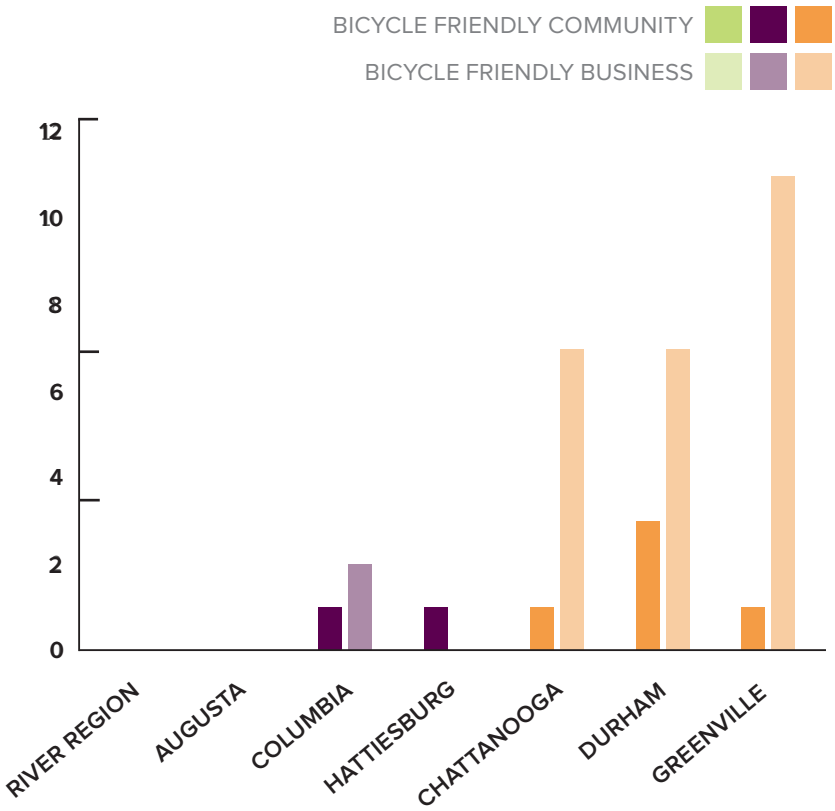


EDUCATION AND ENCOURAGEMENT

The League of American Bicyclists awards communities with Bicycle Friendly Community status for progress and success across the "Five E's": enforcement, education, engineering, evaluation, and encouragement. Businesses can also apply for bike friendly status based on their efforts to encourage and attract staff and customers to arrive by bike.

The aspirational regions are leading the way for the number of bicycle friendly communities and businesses. The Greenville region has the most Bicycle Friendly Businesses (11), while Durham has the most Bicycle Friendly Communities (3). Only one region has a community with Walk Friendly Community status (Columbia).

BICYCLE FRIENDLY COMMUNITIES + BUSINESSES

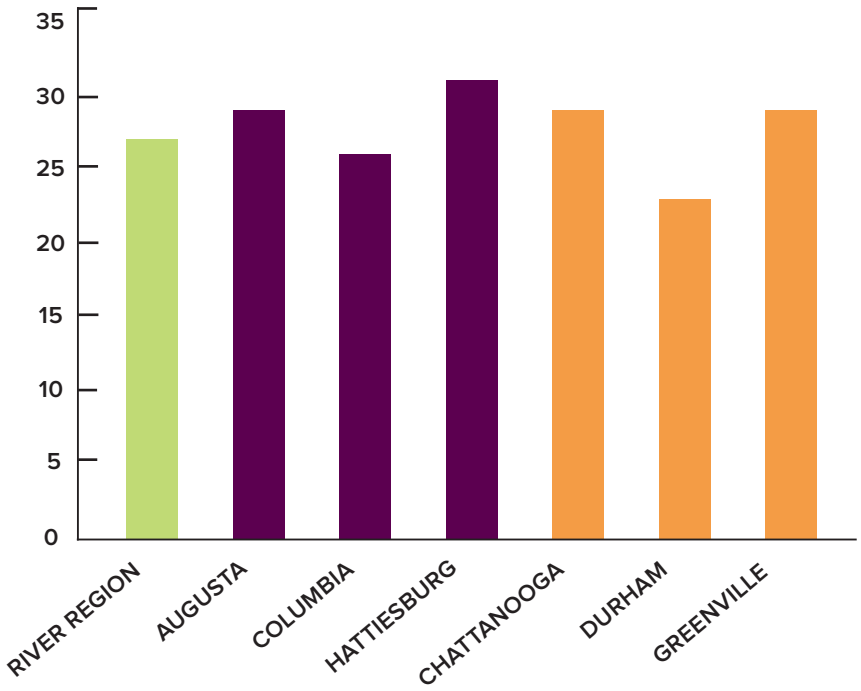


FUNDING

When transportation costs are added to housing costs, a clear picture emerges of how much the typical household in a region spends on daily necessities. Data from the Center for Neighborhood Technology shows that the river region compares favorably to its peers in this category, with the typical household spending $12,807 per year on transportation costs.

However, the Durham region spends the least on transportation costs, which may be attributed to the higher percentages of people walking and biking. Over the course of 10 years, the resident of the Durham region saves an additional $10,000, on transportation costs versus the typical household in the Hattiesburg region, which spent the most of the six peer regions.

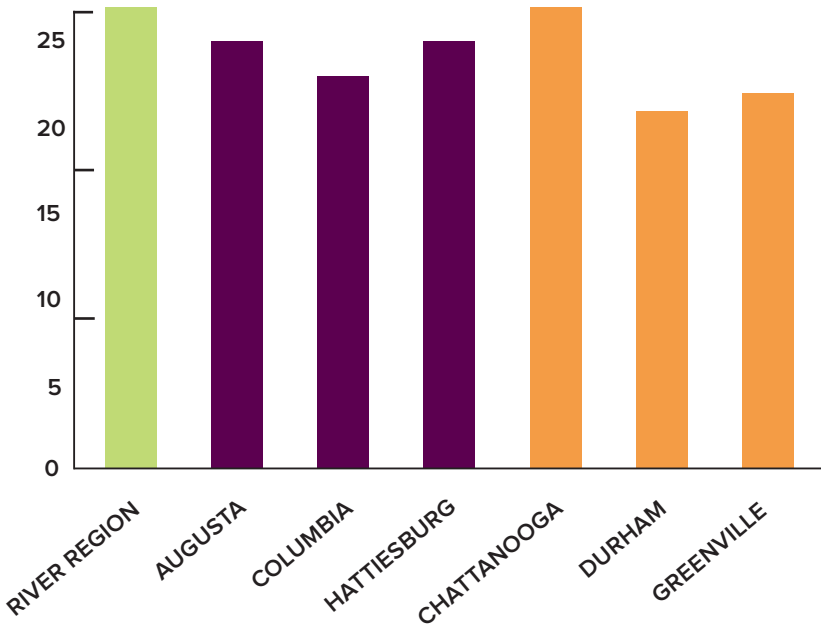
TRANSPORTATION COSTS FOR THE TYPICAL HOUSEHOLD



ENVIRONMENT AND HEALTH

Physical inactivity is defined as the percentage of people in the principal county of each region that do not meet the CDC's minimum amount of recommended physical activity (150 minutes per week). In Montgomery County, approximately 27% of residents do not meet this guideline, on par with the Hattiesburg region and the Chattanooga region for highest rate of physical inactivity. This correlates with higher rates of obesity (35% in Montgomery County compared with 28% in Greenville County), and is a barometer of the overall health and wellbeing of the region.

PERCENTOFPHYSICALLYINACTIVEADULTSBYPRINCIPLE COUNTY IN THE REGION



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07

IMPLEMENTATION

PROGRAMS TO SUPPORT ACTIVE TRANSPORTATION & ACTIVE LIVING

Programs are an important component of a bicycle and pedestrian master plan, as they provide the framework for the 4 E's of Education, Encouragement, Enforcement, and Evaluation/Planning to help enhance the culture of walking and biking and support the safety of the facilities recommended in the plan.

Programs can also be designed to support the enforcement of policies and the evaluation of the impact on safety and traffic in the River Region. These programs, along with the supporting policies described in the next section, will help to institutionalize the principles of bicycling and walking friendliness in the region.

The program initiatives and policies included in this chapter were identified through:

- Research of existing programs and policies in peer communities
- The equity, safety, and demand analysis conducted for Walk Bike River Region
- Review of existing facilities in the River Region
- Input from three steering committee meetings
- Public input reviewed from the interactive online map
- Conversations with stakeholders between January and May, 2017

AGENCY & STAFF TRAINING

Staff training provides core knowledge for MPO staff, technical committees, elected officials, and transportation professionals on design and implementation of Complete Streets and safe street design. Trainings can be oriented towards people of various backgrounds and technical abilities.

KEY DETAILS

Professional development courses provide training to transportation and other professionals who may not have received extensive experience or training in pedestrian and bicycle facilities. Webinars and courses are available through the Association of Bicycle and Pedestrian Professionals (APBP), the Pedestrian and Bicycle Information Center (PBIC), and others. Sample topics include bicycle and pedestrian design standards, complete streets concepts, how to coordinate with other departments on bicycle and pedestrian projects, and funding opportunities.

BENEFITS

Public agency staff have many opportunities to contribute to making the River Region a great place to walk and bike. Internal trainings will make sure that they all are fully trained on policies and practices that the agency wants to institutionalize. Educating professional staff about bicycle and pedestrian issues helps staff understand why and how to include bicycle and pedestrian accommodations in roadway projects and developments.

COST: $$$

RESOURCES

- Association of Bicycle and Pedestrian Professionals (APBP) Webinars: http://www.apbp.org/?page=Webinars
- Pedestrian and Bicycle Information Center (PBIC) Webinars: http://www.pedbikeinfo.org/training/webinars.cfm
- Initiative for Bicycle and Pedestrian Innovation: https://www.pdx.edu/ibpi/

Portland State University's Initiative for Bicycle and Pedestrian Innovation offers professional development through workshops, knowledge sharing, and research initiatives.

BRING IT TO THE RIVER REGION!

STRATEGY

Bi-annual training opportunities for the Montgomery MPO board and staff, technical committees, city and county engineers, planners, police, and other staff may include:

- Developing a Complete Streets Policy/ Context Sensitive Design
- NACTO Design Guidance for pedestrian and bicycle facilities
- Creating a Pedestrian Safety Action Plan
- Implementing a Vision Zero Policy
- Pedestrian Friendly Streetscape Design
- Parking Policies and Land Use for Walkability

BICYCLE & PEDESTRIAN COUNTS

Bicycle and pedestrian counts provide data on bike and pedestrian behavior that can enable analysis of biking and walking trends, such as increase/decrease in facility usage, peak travel periods, and high activity locations.

KEY DETAILS

Counts can be conducted manually or with automatic sensors. Manual counts are low-cost, easy to implement, and can provide additional data such as gender and percentage of people who bike that wear helmets or have bike lights. However, manual counts require significant volunteer time and do not provide a continual, 24 hour picture of usage.

Automatic pedestrian and bike counting technology has advanced rapidly in recent years. In-pavement sensors, computer vision, infrared beams, radar, and tube counters can all detect people who walk and bike. However, devices vary considerably in terms of cost, accuracy, data collection, and ease of deployment. It is important to choose counting devices that are best suited for the type of data needed (short term or long term) and the site characteristics where counts will take place.

BENEFITS

Better data on pedestrian and cyclist travel will

- Help to determine where investments are most needed;
- Help quantify the benefits of walking and biking, and;
- Make active transportation projects more competitive for funding opportunities.

COST: $$$

Bike counters can help evaluate and impact the success of infrastructure projects.

RESOURCES

- NCHRP Report 797: "Guidebook on Pedestrian and Bicycle Volume Data Collection." Available at: escholarship.org/uc/item/11q5p33w.pdf
- National Bicycle and Pedestrian Documentation Project: http://bikepeddocumentation.org/
- Pedestrian and Bicycle Information Center: http://www.pedbikeinfo.org/training/webinars_PBIC_LC_022117.cfm

BRING IT TO THE RIVER REGION!

STRATEGY

Seek funding for a bicycle and pedestrian count pilot program that focuses on before and after counts of one or two priority projects (balance a recreational project with a transportation project), and assign staff to manage counts program. Determine key locations for manual and/or automatic pedestrian and bicycle counts and identify the appropriate count technology. Regularly review counts data to evaluate trends.

KEY IMPLEMENTERS + STAKEHOLDERS

- Montgomery MPO
- Local Planning Departments, Public Works
- Nonprofit organizations and advocacy groups

WALK FRIENDLY & BIKE FRIENDLY COMMUNITY PROGRAMS

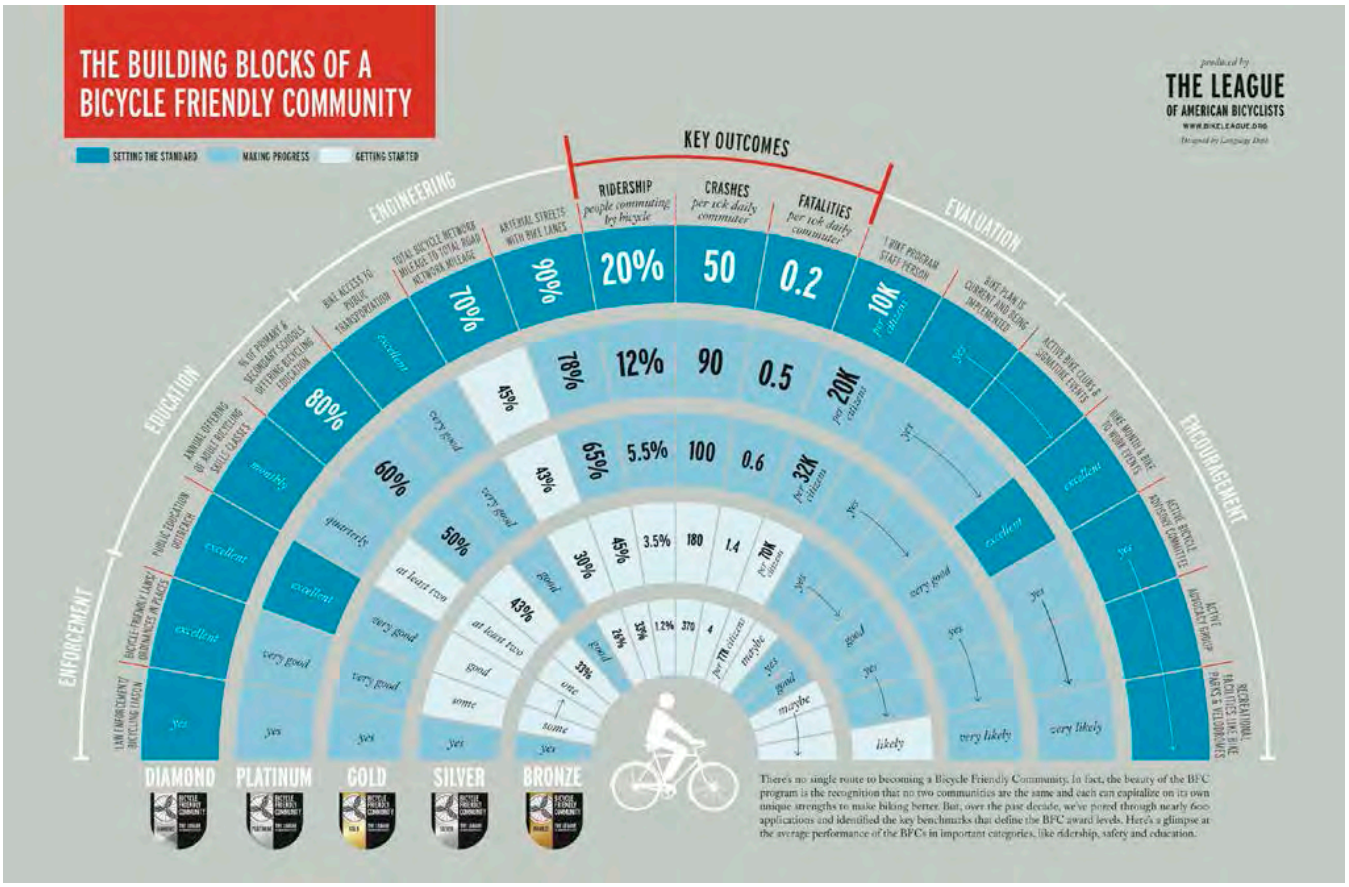
While transportation infrastructure – roads, sidewalks, crossings, bikeways – are critical for improving walking and bicycling, other pieces – local policies, ordinances, and programs – must also be used to make communities that are truly walking- and bicycling-friendly. This plan's framework incorporates the many pieces that must be used to make walking and bicycling safe, comfortable, and normal forms of transportation.

The Walk Friendly Community (WFC) program, led by the Pedestrian and Bicycle Information Center (PBIC), and Bicycle Friendly Community (BFC), led by the League of American Bicyclists, are national initiatives intended to encourage communities to improve their local active transportation systems. The process for becoming a WFC and BFC are detailed below along with how to use local planning efforts to participate in national programs for recognizing outstanding local places.

KEY DETAILS

Both programs incorporate assessments that are useful for discovering where a community stands with respect to pedestrian and bicycling facilities and activities. The WFC and BFC assessments recognize existing success in communities that already promote walking and biking as well as provide a framework for those areas trying to achieve higher walking and bicycling rates.

The applications for BFC and WFC begin with questions about the community itself, followed by sections for each of the 5 Es, which ask about the existence and characteristics of infrastructure, plans, and programs related to walking and biking.



The application for becoming a Bicycle Friendly Community is available on the League of American Bicyclists' website: www.bikeleague.org/community

Both programs publish previews of their applications, which can be used to help the community prepare before it submits the final application online.

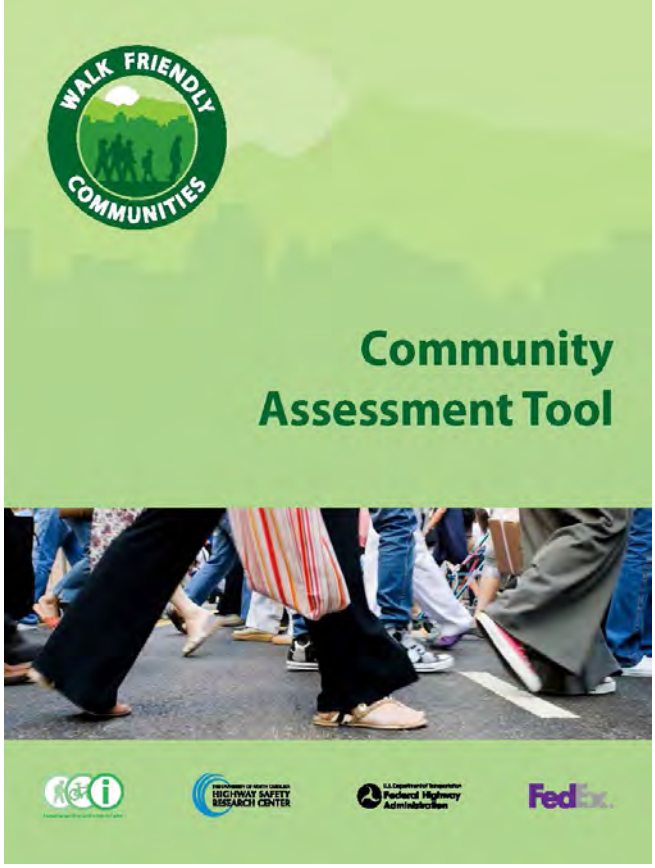
BENEFITS

Walk Friendly and Bike Friendly Community designation signals to current residents, potential residents, and visitors that the region's communities are safe and welcoming places for individuals and families to live and recreate.

COST: $$$

RESOURCES

- BFC application preview: www.bikeleague.org/community
- Walk Friendly Assessment Tool: http://walkfriendly.org/wp-content/uploads/2017/03/WFC_Assessment_Tool.pdf



The Walk Friendly Communities' Community Assessment Tool provides a framework for communities to identify how to improve their walkability.

BRING IT TO THE RIVER REGION!

STRATEGY

Cities and Counties in the region should use the Walk Friendly and Bike Friendly Community framework for:

- Self-evaluation and comparison with other regional communities
- Developing master plans and implementation/capital plans
- Marketing to businesses, visitors, and potential residents
- Increasing programming in the weak areas noted in the WFC/BFC survey
- Grant applications.

KEY IMPLEMENTERS + STAKEHOLDERS

- Montgomery MPO
- Local cities and counties
- Local Planning Agencies
- Nonprofit organizations & Advocacy groups

RAILS-TO-TRAILS FEASIBILITY STUDY

A Rails-to-Trails feasibility and impact study can evaluate where potential rail trails exist, the potential for developing multi-use trails out of abandoned railroads, and the potential economic impact, health, and environmental benefits of transforming unused rail corridors to valuable active spaces for the community.

KEY DETAILS

Rails-to-Trails feasibility studies entail identifying the availability of abandoned rail corridors and assessing their suitability for conversion to recreation trails based on the existing physical conditions of the corridor and probable costs for upgrading to multi-use trail standards. Elements that are assessed include: the condition of the rail-bed ballast; requirements for screening and access control; connection opportunities to adjacent neighborhoods, schools, parks, and other destinations; trail access points; existing bridges and other structures; and roadway intersection crossings. The associated costs for upgrading the corridor are measured against the potential economic, health, and environmental benefits of the trail as well as the costs of alternative trail alignments.

BENEFITS

Rails-to-Trails projects present opportunities to re-purpose abandoned railroad corridors as valuable recreation space and utilitarian active transport corridors where people can travel, exercise, recreate, and enjoy nature. In addition to the increased quality of life and health benefits associated with increased physical activity, these types of trails projects have been shown to bring positive economic impacts to surrounding communities in the form of increased tourism, property values, and tax revenue.

Additional benefits of Rails-to-Trails projects include their function as conservation corridors for plants and animals, and as a strategy for preserving railroad easement rights-of-way for future train service.

COST: $$$

RESOURCES

- Rails-to-Trails Conservancy: https://www.railstotrails.org/
- Doodle Rail Trail Feasibility Study: http://www.cityofeasley.com/single-post/2014/10/27/Doodle-Rail-Trail-Feasibility-Study
- Acquiring Rail Corridors: A How To Manual: https://www.railstotrails.org/resource-library/resources/acquiring-rail-corridors-a-how-to-manual/
- Secrets of Successful Rail-Trails: An Acquisition and Organizing Manual for Converting Rails into Trails: https://www.railstotrails.org/resource-library/resources/secrets-of-successful-rail-trails-an-acquisition-and-organizing-manual-for-converting-rails-into-trails/

The Doodle Trail is a popular and successful Rails-to-Trails project between Easley and Pickens, South Carolina.

BRING IT TO THE RIVER REGION!

STRATEGY

Solicit a study to identify where potential rail trails exist in the region, which would be most feasible, where trails would have the most impact, and estimated project costs. Create a broad-based coalition of elected officials, advocates and stakeholders to raise money and identify a timeline and plan for implementation.

KEY IMPLEMENTERS + STAKEHOLDERS

- Local & State Transportation & Planning Departments
- Railroad Companies
- Property owners along rail corridor
- Nonprofit organizations & Advocacy groups

TRANSPORTATION DEMAND MANAGEMENT PROGRAMS

Transportation Demand Management (TDM) initiatives can build on "Commute Smart Montgomery" to develop information and incentives aimed at relieving travel demand by encouraging and facilitating the use of bicycle, pedestrian, transit, and ridesharing options.

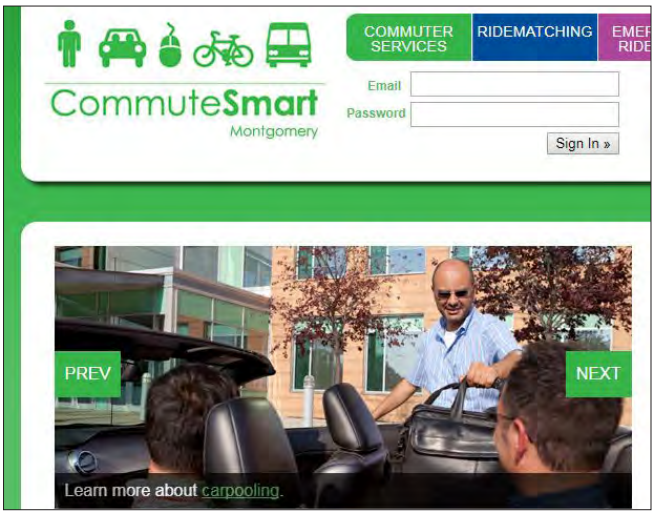
KEY DETAILS

Workers and residents in the River Region may not be aware of all the transportation options that are available to them, such as biking, carpooling, and transit options. Furthermore, workers and residents may need more incentives to use all forms of transportation and to rely less on automobiles.

Service offerings should include ride matching services, carpool incentive programs that offer reserved spaces and reduced parking rates for pooled vehicles, residential outreach, transit benefit assistance to employers, telework programs, marketing, guaranteed ride home (GRH) program, bikesharing, carsharing, and commuter stores to assist commuters to purchase transit passes.

BENEFITS

The main goal of TDM programs is to reduce single occupancy vehicle trips by promoting and encouraging more efficient travel modes. In doing so, the program can reduce the total number of vehicle miles traveled, reduce congestion, and ultimately contribute to a higher quality of life for the River Region's residents.



CommuteSmart- Montgomery offers ridematching services through carpooling and a guaranteed ride home program. Visit commutesmart.org/montgomery for more information.

COST: $$$

RESOURCES

- CommuteSmart Montgomery: commutesmart.org/montgomery/
- Montgomery MPO Congestion Management Process: montgomerympo.org/congestion-management-process/

BRING IT TO THE RIVER REGION!

STRATEGY

Establish a transportation demand management (TDM) program to manage congestion, encourage and incentivize residents and visitors to use all forms of transportation, and shift single occupancy vehicle trips to non-motorized modes.

KEY IMPLEMENTERS + STAKEHOLDERS

- Montgomery MPO
- City of Montgomery Planning & Development
- Local Municipalities

SAFE ROUTES TO SCHOOL

Safe Routes to School (SRTS) is a national effort to encourage students and families to walk and bicycle to school, improving transportation safety through targeted infrastructure improvements and enforcement, walking and biking safety education, and encouragement programs.

While SRTS efforts focus on transportation and behaviors at individual schools, a regional approach for SRTS can help practitioners coordinate their efforts better, establishing best practices and reducing administration and program development costs.

Safe Routes to School is a federally funded program that is implemented locally to increase the number of children who walk or bike to and from school.

KEY DETAILS

Regional support for SRTS by the Montgomery MPO could take the form of:

- Coordinating efforts between jurisdictions and districts, helping practitioners build on lessons learned from work being done in similar communities
- Developing a central repository of information about SRTS, from mapping, planning efforts, and funding to participation in activities.
- Providing guidance for consistent SRTS data collection and reporting throughout the region, enabling local programs to quickly and efficiently collect data and report back to the public
- Supporting local efforts by promoting SRTS, whether via a regular progress report, outreach/informational materials, or campaign materials
- Providing technical assistance to the schools or districts with the most disadvantages, to ensure that all students have access to resources and can take advantage of them
- Building local capacity for implementation by creating template materials and guidebooks and/or providing trainings to help local programs understand the toolkit of SRTS activities.

BENEFITS

Safe Routes to School (SRTS) initiatives directly benefit schoolchildren, parents and teachers by creating a safer travel environment near schools, increasing opportunities for physical activity, improving quality of life, and reducing motor vehicle congestion at school drop-off and pick-up zones.

COST: $$$

RESOURCES

- National Center for Safe Routes to School: http://www.saferoutesinfo.org/
- Safe Routes to School National Partnership: http://saferoutespartnership.org/
- Bay Area Safe Routes to School (MTC): http://www.sparetheairyouth.org/

BRING IT TO THE RIVER REGION!

STRATEGY

Establish a regional Safe Routes to School Task Force to coordinate efforts with and across local school districts.

KEY IMPLEMENTERS + STAKEHOLDERS

- Montgomery MPO
- Montgomery Public Schools, Autauga County Schools, Elmore County Public Schools, Pike Road Public Schools

OPEN STREETS

Car-free, open street events have many names - Sunday Parkways, Ciclovias, Summer Streets, and Sunday Streets - and involve periodic street "openings" that create a temporary park that is open to the public for walking, bicycling, dancing, and other physical activity. The purpose of the event is to encourage physical activity by providing a fun, welcoming environment for activity. Car-free street events have been very successful internationally and are rapidly becoming popular in the U.S.

Open streets events allow people to connect with the people and places in their community in new ways.

KEY DETAILS

Open Street initiatives temporarily close the streets to automobiles so people may use them for various activities like walking, jogging, bicycling, skating, dancing and other social activities. Local businesses open doors and set up tables along sidewalks to support the event and generate foot and bike traffic for their businesses. The events can be centered in a downtown or across neighborhoods. They should be located on roadways that feature key destinations but also reach into a variety of neighborhoods, including under-served communities, outside of downtown districts.

BENEFITS

Open Street events are great at bringing the community together and promoting transportation options, placemaking, and public health. These events are also excellent at building community. They bring together neighborhoods, businesses and visitors alike.

COST: $$$

RESOURCES

- Open Streets Project: http://openstreetsproject.org/
- Atlanta Streets Alive: http://www.atlantastreetsalive.com/
- GablesBikeDay:http://openstreetsproject.org/coralgables/

BRING IT TO THE RIVER REGION!

STRATEGY

The Montgomery MPO should work with partner jurisdictions and organizations to build off of national open street best practices and implement a car-free event in the River Region.

There are many potential models. Cities could host a summer series of once-a-month open streets events (similar to Portland Sunday Parkways). Other stakeholders may also sponsor and organize the events with support from the City. The police department would play a significant role in closing off streets to bicycle and pedestrian travel only.

KEY IMPLEMENTERS + STAKEHOLDERS

- Montgomery MPO, Individual Cities
- Private entities and Advocacy groups

PEDESTRIAN SAFETY/ DRIVER SAFETY PROGRAM

Pedestrian safety and driver safety education campaigns target motorists and those walking, biking, and taking transit to create a shared sense of responsibility among all roadway users, rather than singling out one user group. In the River Region, safety campaigns can be coordinated with state agencies

Pedestrian safety trainings can teach drivers and people on foot to understand traffic laws and pedestrian right-of-way laws.

KEY DETAILS

Each municipality should collaborate on a comprehensive safety campaign that addresses the safety needs of residents of all ages and abilities by promoting a sense of responsibility towards protecting the safety of more vulnerable users, i.e., walkers and bicyclists.

COST: $$$

RESOURCES

- Pedestrian & Bike Info Center–Programs & Campaigns: http://www.pedbikeinfo.org/programs/index.cfm

BRING IT TO THE RIVER REGION!

STRATEGY

Implement a comprehensive safety campaign that includes education, encouragement, and enforcement components. Implement safety campaign in conjunction with Vision Zero efforts and include Safe Routes to School programming.

KEY IMPLEMENTERS + STAKEHOLDERS

- Montgomery MPO, Planning Department, Public Works, Mayor's Office
- State of Alabama Government Agencies
- Health Department, Public Schools, Police & Fire,
- Nonprofit organizations, Advocacy groups

LOCAL POLICIES AND INITIATIVES

In addition to the programs and policies that are to be implemented on a regional scale, there are initiatives that can be started on a smaller scale within each municipality in the River Region. The following programs and policies could be implemented by local governments at the local level.

WAYFINDING SYSTEM

Pedestrian- and bike-oriented wayfinding elements, such as signage and mile markers, can enhance resident and visitor orientation, and will give users a unique experience while improving safety by alerting both users and motorists of the presence of pedestrian and bicycle routes.

A sign in Downtown Nashville (Source: Informing Design, Inc.)

KEY DETAILS

Wayfinding systems integrate pedestrian, bicycle route, and trail maps and signage with local street and interstate traffic guidance signs to create a comprehensive navigation system.

Pedestrian-and bike-oriented wayfinding elements will:

- Help to draw visitors to the region,
- Help users to identify the best routes, and enhance their ability to connect to major destinations,
- Contribute to economic development by pointing visitors to key destinations within a community

COST: $$$

RESOURCES

- Case Study- Bicycle Wayfinding Signage, City of Berkeley, CA: https://nacto.org/case-study/bicycle-way-finding-signage-berkeley-ca/
- Case Study- Pedestrian Wayfinding Program: http://www.aiga.org/case-study-walknyc-pedestrian-wayfinding; https://segd.org/walknyc-pedestrian-wayfinding

BRING IT TO THE RIVER REGION!

STRATEGY

Begin by implementing a basic wayfinding system to help users navigate existing bikeways, neighborhood greenways, and trails.

Develop signage that conveys distance and direction to major destinations

KEY IMPLEMENTERS + STAKEHOLDERS

- Local cities and counties
- Montgomery MPO
- Planning Department

SIDEWALK INFILL PRIORITIZATION & MAINTENANCE

A regular maintenance schedule for all facilities helps protect investments and ensure a high-quality user experience. Existing facilities such as sidewalks, crosswalks, bike lanes, and trails should be evaluated to determine whether the existing maintenance plan is working, and to make improvements.

Regular maintenance of existing infrastructure can ensure proper use and visibility of walkways and bikeways.

KEY DETAILS

Sidewalk infill and maintenance policies can identify sidewalk gaps, and develop strategies, project prioritization criteria and funding for completing these gaps. Potential project prioritization criteria include filling gaps along key pedestrian routes, near major pedestrian trip generators like schools, transit routes, and along streets with high vehicle volumes. Regular maintenance of existing infrastructure can ensure proper use and visibility of walkways and bikeways

BENEFITS

Aligning pedestrian, bike, and transit upgrades and safety improvements with maintenance projects ensures that the upgrades are implemented frequently and efficiently.

COST: $$

RESOURCES

- The Municipal Research and Services Center (MRSC) offers guidance and example statutes for sidewalk maintenance and repair: http://mrsc.org/Home/Explore-Topics/Public-Works/Streets,-Road-and-Sidewalks/Sidewalk-Construction-Maintenance-and-Repair-(1).aspx
- Charlotte DOT's existing program: http://charlottenc.gov/Transportation/CDOTServices/Pages/StreetSidewalkMaintenance.aspx

BRING IT TO THE RIVER REGION!

STRATEGY

To develop a sidewalk maintenance program:

1. Gather data on sidewalk conditions (a prioritization system may be necessary in larger areas)
2. Identify funding needs
3. Develop a funding plan
4. Prioritize corridors for improvements based on condition and need
5. Create a transparent and accessible schedule of upcoming repairs

KEY IMPLEMENTERS + STAKEHOLDERS

- Local Planning Departments

INTER-AGENCY COORDINATION

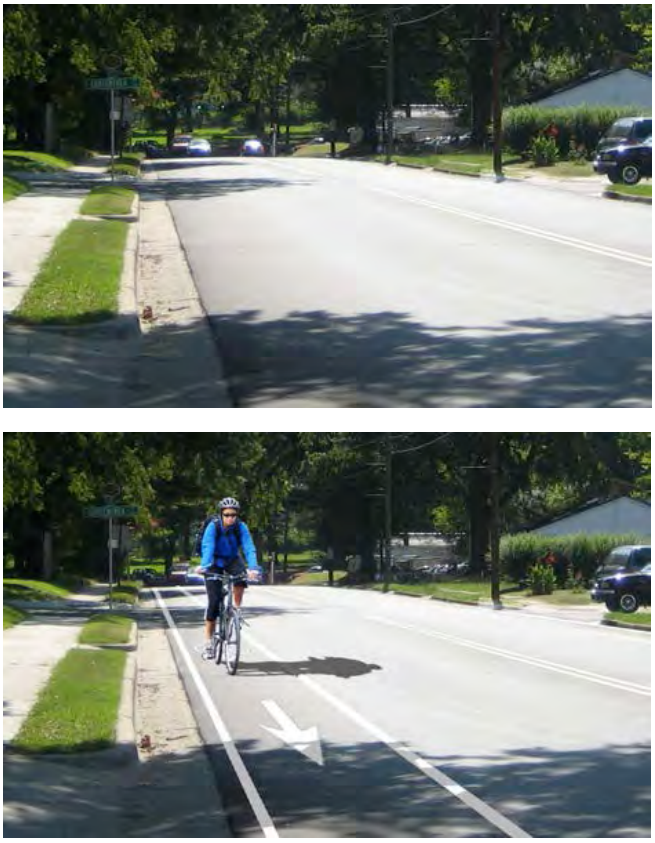
River Region municipalities can regularly review and coordinate proposed projects with city and state roadway repaving schedules. Doing so will help the river region municipalities implement proposed on-street bikeways that only require pavement markings and improve efficiency.

KEY DETAILS

Repaving projects provide a clean slate for revising pavement markings. It is much more cost-effective to provide a bicycle facility when these road projects are implemented than to initiate the improvement as a "retrofit."

When a road is repaved, the roadway can be restriped to create narrower lanes and provide space for bike lanes and shoulders, where feasible. In addition, if the spaces on the sides of non-curb and gutter streets have relatively level grades and few obstructions, the total pavement width can be widened to include paved shoulders.

COST: $$$



A photo rendering of the addition of bicycle lanes through restriping. This is an example of a project that could be coordinated with a repaving project.

RESOURCES

- Webinar on Incorporating Bicycle Networks into ResurfacingProjects:http://www.pedbikeinfo.org/training/webinars_PBIC_LC_051017.cfm

BRING IT TO THE RIVER REGION!

STRATEGY

In order to take advantage of upcoming opportunities to incorporate bicycle and pedestrian facilities into routine transportation projects, the Montgomery MPO member municipalities and counties as well as ALDOT should track repaving schedules, and other lists of projects. Additionally, ALDOT should be encouraged to use this Plan as a ready reference when maintenance projects are being programmed. A semiannual meeting with project partners will ensure this critical communication. As the long-range transportation plan is updated in future years, bicycle and pedestrian improvements should be included in appropriately programmed projects.

KEY IMPLEMENTERS + STAKEHOLDERS

- Local Planning and Public Works Departments
- State- and County-level Transportation and Planning Departments
- Montgomery MPO

BICYCLE PARKING DESIGN STANDARDS

Bicyclists expect a safe, convenient place to secure their bicycle when they reach their destination. This may be short-term parking of two hours or less or long-term parking for employees, students, residents, and commuters. Bicycle parking design standards and requirements explicitly require bicycle parking facilities with the development of commercial, multi-family, and civic projects, in order to provide bicyclists with safe, convenient places to secure their bicycle appropriate to the land-use.

KEY DETAILS

Bicycle parking is an essential element of a bicycle friendly community and must be provided in adequate supply in order to make bicycling a safe, accessible, and convenient choice. Parking requirements are context dependent and design standards should be developed to accommodate parking needs across various land-use intensities and parking demand. Examples of different types of bike parking that should be considered for development standards are described below:

Bike Racks

Short-term bicycle parking is meant to accommodate visitors, customers, and others expected to depart within two hours. It should have an approved standard rack, appropriate location and placement, and weather protection. The Association for Pedestrian and Bicycle Professionals (APBP) recommends selecting a bicycle rack that:

- Supports the bicycle in at least two places, preventing it from falling over
- Allows locking of the frame and one or both wheels with a U-lock
- Is securely anchored to ground and
- Resists cutting, rusting, and bending or deformation

Bike Corrals

Bike corrals (also known as on-street bicycle parking) consist of bicycle racks grouped together in a common area within the street or in a parking lot traditionally used for automobile parking. Bike corrals are reserved exclusively for bicycle parking and provide a relatively inexpensive solution to providing high-volume bicycle parking. Bike corrals can be implemented by converting one or two motor vehicle parking spaces into on-street bicycle parking. Each motor vehicle parking space can be replaced with approximately 6-10 bicycle parking spaces.

Secure Bike Parking

A Secure Parking Area for bicycles, also known as a Bike SPA or Bike & Ride (when located at transit stations), is a semi-enclosed space that offers a higher level of security than ordinary bike racks. Accessible via key-card, combination locks, or keys, Bike SPAs provide high-capacity parking for 10 to 100 or more bicycles. Increased security measures create an additional transportation option for those whose biggest concern is theft and vulnerability. Bike SPAs can be standalone structures or occupy space within a building.

COST: $$$

RESOURCES

- APBP's Essentials of Bike Parking: Selecting and Installing Bike Parking that Works (2015): http://www.apbp.org/?page=publications
- Pittsburgh Bike Parking program: http://pittsburghpa.gov/dcp/bicycleparking
- Minneapolis Bike Parking program: http://www.minneapolismn.gov/www/groups/public/@publicworks/documents/webcontent/wcmsp-172354.pdf
- Seattle Bike Parking program: http://www.seattle.gov/transportation/bikeparking.htm

Basic bike parking example

BRING IT TO THE RIVER REGION!

STRATEGY

The municipalities in the River Regions Beach should update their development regulations with bicycle parking design standards. Bike parking requirements should be explicitly required with commercial, multi-family, and civic developments. The Association of Pedestrian and Bicycle Professionals Bicycle Parking Guidelines should be used as a resource for best practices related to site design, construction, and number of bike parking spaces to require.

KEY IMPLEMENTERS + STAKEHOLDERS

- Montgomery MPO
- Local municipalities' Planning Departments, Public Works

Bicycle parking comes in many forms depending on the context and demand. Pictured above are standard bike racks (top), a bike corral (middle), and a Bike SPA (secure parking area) (bottom).

BICYCLE FACILITY MAINTENANCE PROGRAM

Bicycle facility maintenance policies create funding and schedules for regular maintenance of bicycle facilities in order to keep them free of debris and structural deterioration. A good maintenance program is necessary to protect the public investment in bikeways and keep them safe for their users.

KEY DETAILS

Bikeways are especially vulnerable to the accumulation of leaves and gravel as they are blown off the travel lane by automobile traffic. Such accumulation, as well as potholes, cracks, and joints, create serious obstacles and hazards to cyclists.

COST: $$$

RESOURCES

- Advocacy Advance. "How Communities are Paying to Maintain Trails, Bike Lanes, and Sidewalks." 2014: http://www.advocacyadvance.org/docs/Maintenance.pdf
- American Association of State Highway and Transportation Officials. (2012). Guide for the Development of Bicycle Facilities: 2012 Fourth Edition. https://bookstore.transportation.org/item_details.aspx?id=1943
- Case Study-Seattle's Bicycle Facility Maintenance Activities & Strategies, available in "Seattle Bicycle Master Plan": http://www.seattle.gov/transportation/bikemaster.htm

The City of Los Angeles purchases small street sweepers specifically for cycle track maintenance to ensure the facilities are clear of debris.

BRING IT TO THE RIVER REGION!

STRATEGY

Develop a strategy for bicycle facility maintenance and policies to support it based on best practices as available through the American Association of State Highway and Transportation Officials (AASHTO). Streets with bike lanes, buffered bike lanes, and separated bike lanes should have regular maintenance schedules.

KEY IMPLEMENTERS + STAKEHOLDERS

- Montgomery MPO
- Local jurisdictions

PERFORMANCE MEASURES

Performance measures for the River Region are critical for assessing and understanding whether the goals of the plan are being achieved over time. While these measures focus on evaluating progress over the long-term (10 years), data should be collected on a regular basis to track interim progress (5 years). Frequent tracking will provide the Montgomery MPO with feedback on whether policy adjustments are needed to progress beyond the current baseline.

The performance measures outlined in this section are generally outcome based and focus on achieving policy objectives. The intent of outcome-based performance measures is to prioritize investments that best progress the objectives of the plan.

The River Region's performance measures were crafted to track achievements using data that can easily be attained on a regular basis. Each measure is categorized based on the goal area that it targets, including infrastructure, safety, usage, health and environment, education and encouragement, and funding.

In some cases the baseline for each objective of a goal is known, in other cases the baseline must be calculated by the MPO to develop the 5-year and 10-year targets.

> In a **constrained funding environment**, it is critical to be able to identify the projects and investments that will provide the **highest level of benefit**. Transportation agencies use performance measures to **assess the effectiveness** of a wide range of activities, and all are fundamentally oriented toward **understanding how a transportation system works and impacts users**. No single measure can fully describe the nuances of transportation experience across all travel modes, so many agencies **consider multiple measures** throughout the transportation planning process.
>
> *Guidebook for Developing Pedestrian + Bicycle Performance Measures*
> Federal Highway Administration

INFRASTRUCTURE

Improve the quality of the region's bicycle and pedestrian network

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OBJECTIVE A - Regularly inventory bicycle and pedestrian network conditions

Performance Measure: Administer an annual bicycle and pedestrian user satisfaction survey that includes questions about overall satisfaction with the bicycle and pedestrian network

- Baseline: to be calculated by MPO
- 5-year target:
- 10-year target:

OBJECTIVE B - Increase the quantity of bicycle and pedestrian facilities that accommodate the needs of people of all ages and abilities

Performance Measure: Percent of roadways within commercial corridors with adjacent walkways

- Baseline: to be calculated by MPO
- 5-year taget: 10% increase
- 10-year target: 15% increase

Performance Measure: Total lane miles of on-street bikeways

- Baseline: to be calculated by MPO
- 5-year taget: 10% increase
- 10-year target: 15% increase

SAFETY

Proactively address regional bicycle and pedestrian safety issues

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OBJECTIVE A - Decrease the number of bicycle- and pedestrian-involved collisions

Performance Measure: Reported number of combined bicycle- and pedestrian-involved fatalities AND collisions based on the most recent 5-year dataset

- Baseline: 427 total collisions, 41 total fatalities | ALDOT Data | 2012 - 2016
- 5-year taget: 20% decrease

10-year target: 40% decrease

OBJECTIVE B - Identify roadway designs that lead to systemic safety issues for bicyclists and pedestrians

Performance Measure: Administer an annual bicycle and pedestrian user survey that includes questions about perceptions of safety while bicycling and walking

- Baseline: to be calculated by MPO
- 5-year taget: 10% increase in number of respondents that strongly agree that they feel safe bicycling and walking in the region
- 10-year target: 20% increase in number of respondents that strongly agree that they feel safe bicycling and walking in the region

USAGE

Increase the convenience of bicycle and pedestrian trips

OBJECTIVE A - Increase the percent of commuters in the Montgomery MSA that walk or bike to work

Performance Measure: American Community Survey walk commute mode split (3 County average)

- Baseline: 0.7% | ACS | 2011 - 2015
- 5-year taget: 1.0%
- 10-year target: 1.3%

Performance Measure: American Community Survey bike commute mode split (3 County average)

- Baseline: 0.1% | ACS | 2011 - 2015
- 5-year taget: 0.4%
- 10-year target: 0.7%

ENVIRONMENT + HEALTH

Provide opportunities to increase levels of physical activity and decrease air pollution through the transportation network

OBJECTIVE A - Connect pedestrian and bicycle infrastructure with existing and planned parks, recreational facilities, and open spaces

Performance Measure: Decrease rates of physical inactivity

- Baseline: 27% (Aggregate average for 3 counties) | County Health Ranking | 2017
- 5-year taget: 25% (Aggregate average for 3 counties)
- 10-year target: 23% (Aggregate average for 3 counties)

Performance Measure: Increase access to adequate exercise opportunities

- Baseline: 76% (Aggregate average for 3 counties) | County Health Ranking | 2017
- 5-year taget: 81% (Aggregate average for 3 counties)
- 10-year target: 86% (Aggregate average for 3 counties)

EDUCATION + ENCOURAGEMENT

Normalize walking and bicycling through programming

OBJECTIVE A - Promote walking and bicycling through educational programming

Performance Measure: Percent of public school students (K-8) that are eligible for free or reduced lunches engaged in a Safe Routes to School initiative or program

- Baseline: to be calculated by MPO
- 5-year taget: 10% increase
- 10-year target: 40% increase

OBJECTIVE B - Encourage grass-roots contributions to regional bicycle and pedestrian planning efforts

Performance Measure: Number of communities with Bike-Friendly or Walk-Friendly Community designation

- Baseline: 1
- 5-year taget: 3
- 10-year target: 5

FUNDING

Dedicate regional resources to pedestrian and bicycle projects and programs

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OBJECTIVE A - Decrease the burden of transportation costs on households

Performance Measure: Decrease percent of household spending dedicated to transportation

- Baseline: 27% | Center for Neighborhood Technology (CNT) | 2017
- 5-year taget: 25%
- 10-year target: 23%

OBJECTIVE B - Allocate financial resources to support staff and project development on active transportation projects and programs

Performance Measure: Increase the number of roadway resurfacing, repaving, and restriping projects that include bike facilities

- Baseline: to be calculated by MPO
- 5-year taget:
- 10-year target:

FUNDING

Sufficient funds for transportation infrastructure and related transportation programs are critical to achieving the Montgomery MPO goals of creating a safe transportation network that meets local needs. Communities that are successful in expanding their walking and bicycling network leverage funds from a variety of sources and consistently make investments in capital and maintenance projects. The network cannot logically and effectively grow with piecemeal, sporadic investments. This chapter outlines various funding strategies that the River Region can utilize to realize the bicycle and pedestrian network recommendations.

The following key themes emerged as the project team discussed the funding process, funding sources, and the fundings needs of the Montgomery MPO and the region's local governments:

- There is a need for diversified funding strategies
- There is a need to deliver projects faster
- There is a need to focus project funding where walking and bicycling needs and demand are highest
- There is a need to reduce bureaucracy to deliver smaller-scale projects, such as walking and biking projects
- With fewer staff and technical resources, smaller jurisdictions such as Pike Road and Coosada often struggle to deliver projects through the federally funded project process
- There is a desire for more public-private partnerships
- There is a need for big regional projects that connect communities such as Montgomery and Prattville
- Scoping assistance can help identify project delivery issues early in the federally funded project delivery process

FUNDING SOURCES

FEDERAL SOURCES

Local municipalities will likely implement the majority of projects identified in this plan, but 80%-90% of the cost can be covered by federal assistance programs. Most major federal transportation funding programs are available for pedestrian and bicycle projects. Additionally, the Department of Housing and Urban Development (HUD) and the Environmental Protection Agency (EPA) provide funding for healthy and sustainable community programs. This includes the Community Development Block Grant (CDBG) program and the EPA's Smart Growth Program.

Federal funding sources eligible for pedestrian and bicycle projects through the DOT include; the Surface Transportation Block Grant (STBG) Program, the Transportation Alternatives (TA), the Highway Safety Improvement Program (HSIP), and NHTSA 402/405 funds. The FHWA provides detailed information on eligible projects and requirements for each program. Federal Transit Administration grants are available to designated FTA Grantees for projects that improve pedestrian and bike access around stations, such as TOD planning and bike parking. The US Department of Transportation provides competitive TIGER Discretionary Grants for significant local projects that improve transportation and economic development. The Fixing America's Surface Transportation Act, or "FAST Act" provides long-term funding for states and local governments to implement surface transportation projects. The FAST Act allows for increased design flexibility and allows Transit Oriented Development to be eligible for Highway and Rail funding programs.

The river region receives Transportation Alternatives (TA) funds from the FAST Act (and its predecessor MAP-21) administered by the Montgomery MPO and are applied exclusively towards pedestrian and bicycle projects, in particular multi-use paths (however other project types are eligible). Projects that qualify for TA funds include streetscape improvements, pedestrian and bicycle facilities, and multi-use paths that:

- Provide economic development or tourism benefits
- Enhance connectivity of regional or statewide active transportation networks
- Have a significant transportation connection
- Meet the needs of targeted user types
- Are listed as priority projects for ALDOT, county, regional, or municipal transportation plans
- Improve safety for people on foot or bike
- Are included as part of a larger non-TA funded active transportation project

The TA program in the State of Alabama is divided into two separate funding systems. A portion of the TA funds each year are set aside for each of the Metropolitan Planning Areas. 50% of the States yearly TA allocation is distributed to the MPOs, while the State retains the other 50% for use at their discretion for any eligible project from any eligible application. The State's allocation for each fiscal year is approximately $15.3 million. The Montgomery MPO receives approximately $422,000 per year. The limitations on this funding are that:

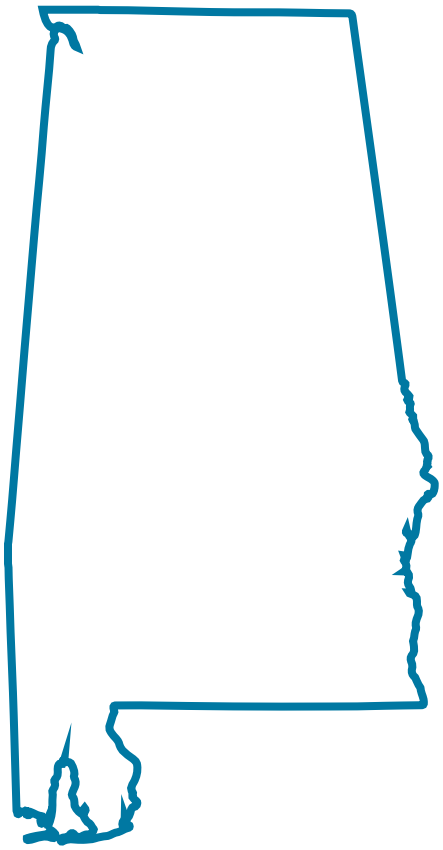
- Cities, towns, and counties may apply for TA funding
- Cities, towns, and counties within an MPO may apply for funding of TA projects from the MPO and from the State; It is not unusual for the same project to be submitted at both levels
- There is a $400,000 cap on federal funds for all projects funded by the TA program
- The funding ratio for the TA program is 80% federal and 20% local
- Preliminary engineering is the responsibility of the applicant

A significant source of federal transportation funds for the State of Alabama comes by way of the Surface Transportation Block Grant (STBG) Program. Each year, ALDOT receives approximately $196 million in STBG funds. Of this, approximately $5.55 million per year is suballocated to the Montgomery MPO. STBG funds may be used to fund pedestrian and bicycle improvements, including recreational trails. The Montgomery area MPO can choose to use its own STBG funds to fund pedestrian and bicycle improvements, and the State of Alabama can also fund pedestrian and bicycle improvements from the Statewide STBG funds.

STATE SOURCES

While much of the federal funding used for bicycle and pedestrian projects in the river region come from funds allocated directly to the Montgomery MPO, there are many other federal funding programs that can be used for walking and biking projects that are administered by the Alabama Department of Transportation (ALDOT) to local jurisdictions and MPOs. ALDOT uses state or federal funds to provide sidewalks, bike lanes, or pedestrian crossing improvements on maintenance, widening or reconstruction projects on state roads. ALDOT also identifies federal funding needs through the Statewide Transportation Improvement Program (STIP). Within each metropolitan area with over 50,000 people, the MPO establishes a long-range transportation plan and develops a Transportation Improvement Program (TIP) that includes programs like Transportation Alternatives (TA).

Each year, the State of Alabama receives approximately $65 million in Safety funds. These funds would be eligible for pedestrian and bicycle-related improvements where crash history indicates the need for safety improvements. The Alabama Office of Safety Operations (OSO) receives approximately $6 million each year in State and Community Highway Safety Program (Section 402) funding from the USDOT for safety improvements. Under this program, State agencies, political subdivisions (city/county governments), private, non-profit organizations listed as 501(c)3, and State, local and federally-recognized Indian tribal governments are eligible to apply for grants. The OSO administers the Strategic Highway Safety Program (SHSP) through which they set goals for eliminating traffic fatalities and identify safety projects at high crash locations, including bicycle and pedestrian crash locations. ALDOT has adopted the USDOT's goal of "Toward Zero Deaths" as a priority target for all safety programs to eliminate preventable traffic fatalities.



LOCAL SOURCES

Local taxes and infrastructure bonds are the primary local public funding sources for pedestrian and bicycle projects. Local taxes create dedicated funds for transportation operating expenses and capital improvement projects. Revenue from these taxes is stable and reliable from year to year, unlike specific appropriated sources. The sales tax is the most common form of local revenue, but other sources include utility taxes, property taxes, impact fees, transportation sales taxes, hotel/motel taxes, Tax Allocation Districts (aka Tax Increment Financing -- value capture of the increment tax increase collected and used for improvements within the district), Community Improvement Districts (self-taxing districts for non-residential properties) and capital improvement budget funds.

PRIVATE SOURCES

Many private funding sources are available for pedestrian and bicycle projects, from small grants for marketing activities to multi-year foundation grants. Small scale projects and improvements that require land acquisition are often funded primarily from private sources. Specific funding sources for creating active communities in the river region include local health and wellness charities, community foundations such as the Central Alabama Community Foundation, corporate and cultural organizations, local hospitals and health departments, as well as national foundations such as Grantmakers in Aging, the Robert Wood Johnson Foundation, and People for Bikes.

PUBLIC–PRIVATE PARTNERSHIP

Public-private partnerships are contractual agreements that can leverage funds from both sectors for infrastructure projects and facilities. Where municipal budgets fall short, private revenue can fill the gaps.

INNOVATIVE SOURCES

Increasingly, non-profits organizations, municipalities, and individual advocates are using crowdsourcing to fund innovative pedestrian and bicycle projects. Crowdsourcing uses a large audience for fundraising, typically with the help of internet donation websites such as Ioby.org and kickstarter.com. Transportation agencies such as MARTA in Atlanta, GA have used ioby.org to raise $4,500 for self-service bicycle maintenance kiosks at select transit stations. The kiosks will be useful for basic repairs such as fixing flat tires or broken chains and will complement Atlanta's bike share program.

LOCAL SET-ASIDES

Transportation is only successful if users can safely access it by walking or biking. Local governments can set aside portions of general transportation revenue, public school bonds, county health department funding, parking fees, and traffic violation revenue for upgrades to walking and biking facilities.

LOW COST PROJECTS

Local governments can implement a variety of low-cost projects which have the benefit of being easier to implement and show immediate progress toward implementation of the bicycle and pedestrian plan goals and objectives. Using non-federal funding options for these types of projects will help increase the ease of implementation in a shorter time frame as well as keep costs lower. Examples include restriping projects, wayfinding, and support infrastructure such as bike lockers, bike racks, bike repair stations, benches, and transit shelters.

DEMONSTRATION PROJECTS

Temporary popup or "demonstration projects" can demonstrate the success of walking and biking infrastructure without a long-term commitment and a big budget. Popup projects include temporary protected bike lanes, painted sidewalks, parklets, pedestrian plazas in formerly vacant spaces, and traffic calming techniques.

A "Space Activation" program can identify the best candidates for popup projects in local communities within the river region. Popup projects should reflect community needs and should be easy to implement. Ideas for transforming spaces and projects may emerge from community conversations or neighborhood association meetings. Typically, the most effective demonstration projects are grassroots efforts by passionate citizens that know what problems exist but don't have the resources for permanent solutions. While demonstration projects may be led by citizens, they should be supported by the Montgomery MPO and local municipalities. This enables increased communication and allows for neighborhoods and the city or MPO to test the effectiveness of a proposed project. While Demonstration projects rely primarily on volunteer time, for larger efforts innovative funding sources and private donations are often used to purchase materials.

SOURCES BY BUDGET SIZE AND PROJECT TIMELINE

Small Budget - Short Term	Small Budget - Long Term	Large Budget - Short Term	Large Budget - Long Term
• Neighborhood Associations • Community Improvement Districts • Crowdsourcing • Non-Profit Grants • Impact Fees • Infrastructure bonds • Alabama Office of Safety Operations (OSO) • Alabama MainStreet Program • Local taxes • Local health departments • Foundation grants • Individual donors	• Federal Transportation Funds (FAST Act programs) • HUD and EPA funds • Capital Improvement budget funds • State Programs: • Alabama Department of Transportation • Recreational Trails Program (Dept. of Natural Resources) • Community Development Block Grant (CDBG)	• Foundation grants • Individual donors • Community Improvement Districts • Public-Private Partnerships • Infrastructure bonds • Local taxes	• Federal Transportation Funds

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NOW THAT PRIORITY PROJECTS AND PROGRAMS HAVE BEEN IDENTIFIED, WHAT ARE THE NEXT STEPS?

The implementation of the walkway and bikeway network will require a comprehensive approach that utilizes continued coordination and evaluation of the objectives and performance measures by MPO staff, municipal leaders, and project stakeholders. It will also require dedication to the vision established by the Steering Committe and relentless communication with agencies and individuals that will implement the project list, programs, and policies.

The recommendations outlined in this plan should be updated at least every five years to reflect rapidly-evolving best practices and the river region's long-term vision for a connected, safe, and accessible walkway and bikeway network. Evaluation of progress on implementing recommendations should be completed annually.

The vision that is defined within this plan requires a stable and recurring source of funding. Communities across the country that have successfully implemented bicycle and pedestrian projects have relied on multiple funding sources to achieve their goals. No single source of funding will meet the recommendations identified in this plan. Stakeholders will need to work cooperatively across a range of private sector, municipality, state, and federal partners to generate funds sufficient to implement this network. A descriptive list of local, state, and national potential funding sources can be found in this chapter. Programs and deadlines for applying for funds are constantly shifting. These funding sources should be immediately researched and cross-referenced with the project list, programs, and policies to determine which funding sources are applicable to which projects and how/when they will be pursued.

The resources found in this plan - the safety analysis, the peer and aspirational region review, the project list, the recommended programs, and the design guidelines - can provide daily reference for the MPO staff and municipal partners.

Of course, the implementation of a quality walkway and bikeway system will also require persistent desire for improvements by community members - neighborhood leaders, local businesses, advocates, schools, and others. The most walk-friendly and bike-friendly places have a strong culture of community-backed active transportation projects and a responsive political structure.

Additionally, the Montgomery MPO and river region communities should strive to find opportunities to coordinate pedestrian and bicycle improvements with regularly-programmed roadway maintenance projects and new developments.

STEPS TO ENSURE THIS PLAN SERVES AS A VALUABLE RESOURCE FOR THE RIVER REGION

1 ESTABLISH A PERMANENT STEERING COMMITTEE

A team effort is required to move the plan forward. The steering committee should include citizens and community leaders that can partner to make programs and projects a reality and follow up on evaluation of the performance measures. Capitalize on this momentum, and formalize the committee as a River Region Bicycle-Pedestrian Committee that meets quarterly, at a minimum.

2 PRIORITIZE FUNDING FOR INFRASTRUCTURE PROJECTS

To kickstart the funding conversation, partner with lcoal communities to identify eligible TA projects and matching funds. Continue the Plan's momentum by sharing project priorities directly with the local and state funding partners. This includes ALDOT, City and County Councils, Alabama State University, Auburn University at Montgomery, and private sector partners. The funding analysis included in this chapter provides a resource for matching grants with programs and projects.

3 DEVELOP AND IMPLEMENT ONE PROGRAM AT A TIME

Programs have a big impact on walkability and are easy to accomplish without a major investment. A variety of community partners can assist by funding efforts or volunteering their time. Convene "Program Champions" as part of the steering committee to develop a list of communications strategies to promote and implement each program. Make a goal to implement at least two programs per year.

4 FOLLOW UP ON THE INTEGRATION PLAN

The integration plan includes strategies to incorporate the Walk Bike River Region recommendations into other local and regional transportation, land use, and comprehensive plans. This will ensure that local and regional agencies will have access to pedestrian and bicycle priority projects when developing and implementing relevant plans.

5 HOST A WEBSITE TO COMMUNICATE THE PLAN RECOMMENDATIONS

Create an online site to communicate the projects list and plan with residents and affiliated groups and organizations. The website can continue the momentum and provide updates on plan implementation, progress, and evaluation.

6 UTILIZE FUN EVENTS TO BUILD ON THE DIVERSE COMMUNITY OF ADVOCATES

Work with local communities and existing organizations such as the Montgomery Bicycle Club to host fun events such as open streets and creative pop-up projects to build support and add people of all ages to the advocate community. The MPO and local governments have forged a strong working relationship through this project and other cross-jurisdictional efforts. Continue this collaboration and build on municipal support with representation from major employers, universities, and local schools.

08

APPENDIX

DESIGN GUIDELINES

ON-STREET BIKEWAYS

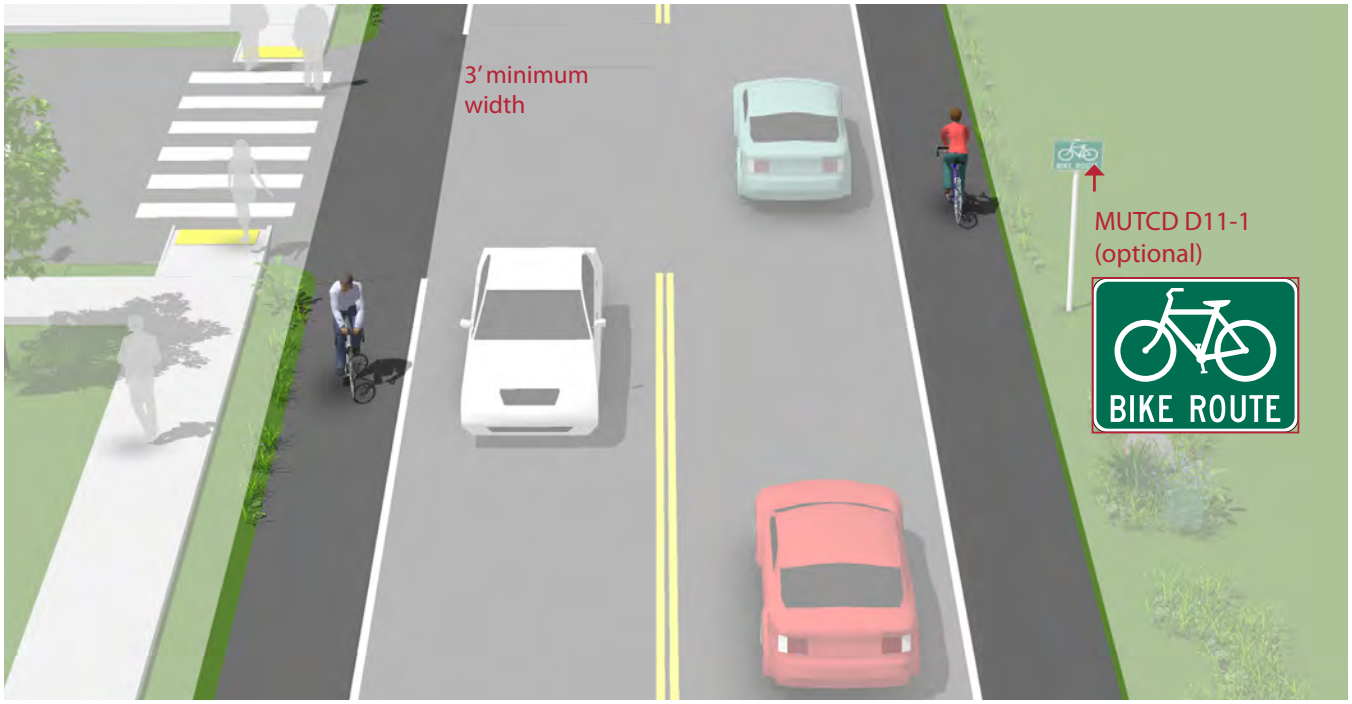
Paved Shoulders

Description

Typically found in less-dense areas, paved shoulders, or shoulder bikeways, are paved roadways with striped shoulders (4'+) wide enough for bicycle travel. Shoulder bikeways often, but not always, include signage alerting motorists to expect bicycle travel along the roadway. Shoulder bikeways should be considered a temporary treatment, with full bike lanes planned for construction when the roadway is widened or completed with curb and gutter. This type of treatment is not typical in urban areas and should only be used where constraints exist.

Guidance

- If 4 feet or more is available for bicycle travel, the full bike lane treatment of signs, legends, and an 8" bike lane line would be provided.
- If it is not possible to meet minimum bicycle lane dimensions, a reduced width paved shoulder can still improve conditions for bicyclists on constrained roadways. In these situations, a minimum of 3 feet of operating space should be provided.
- Rumble strips are not recommended on shoulders used by bicyclists unless there is a minimum 4 foot clear path. 12 foot gaps every 40-60 feet should be provided to allow access as needed.



Discussion

A wide outside lane may be sufficient accommodation for bicyclists on streets with insufficient width for bike lanes but which do have space available to provide a wider (14'-16') outside travel lane. Consider configuring as a marked shared roadway in these locations.

Additional References and Guidelines

FHWA. *Rural and Small Town Design Guidelines.* 2017.
AASHTO. *Guide for the Development of Bicycle Facilities.* 2012.
FHWA. *Manual on Uniform Traffic Control Devices.* 2009.

Materials and Maintenance

Paint can wear more quickly in high traffic areas or in winter climates. Shoulder bikeways should be cleared of snow through routine snow removal operations.

Advisory Bike Lanes

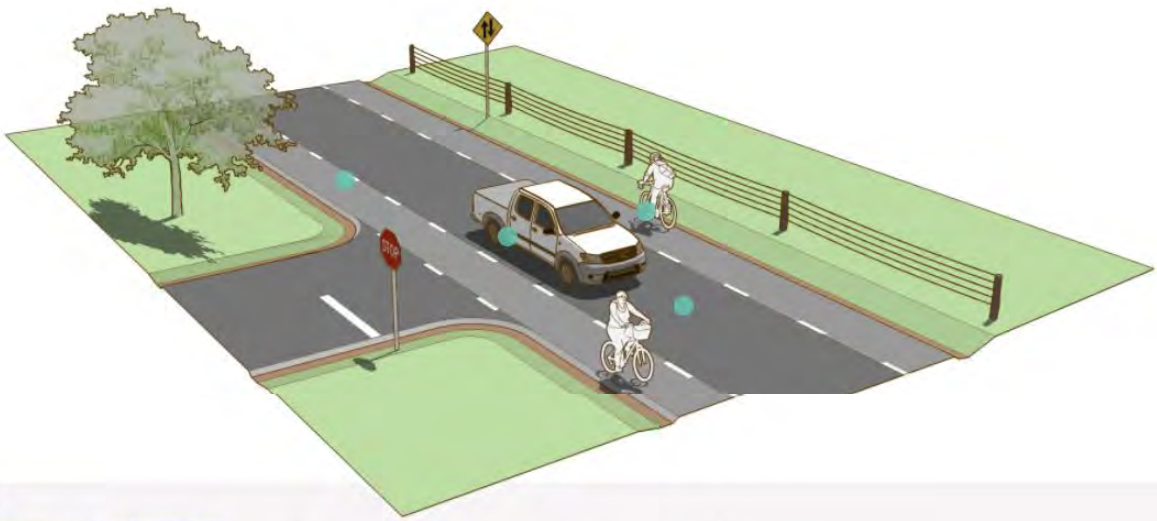
See FHWA's *Small Town and Rural Multimodal Networks*

MIXED TRAFFIC

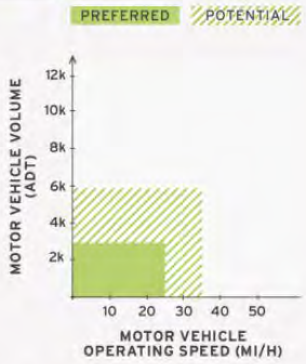
Advisory Shoulder

Advisory shoulders create usable shoulders for bicyclists on a roadway that is otherwise too narrow to accommodate one. The shoulder is delineated by pavement marking and optional pavement color. Motorists may only enter the shoulder when no bicyclists are present and must overtake these users with caution due to potential oncoming traffic.

*Note: Advisory shoulders are a new treatment type in the United States and no performance data has yet been collected to compare to a substantial body of international experience. In order to install advisory shoulders, **an approved Request to Experiment** is required as detailed in **Section 1A.10** of the **MUTCD**. FHWA is also accepting requests for experimentation with a similar treatment called "dashed bicycle lanes."*



APPLICATION



Speed and Volume
Most appropriate on streets with low to moderate volumes and moderate speed motor vehicles.

Network
Applies to constrained connections between built up areas.

Land Use
For use outside, between, and within built up areas with bicycle and pedestrian demand and limited available paved roadway surfaces.

Shared Lane Markings

Description

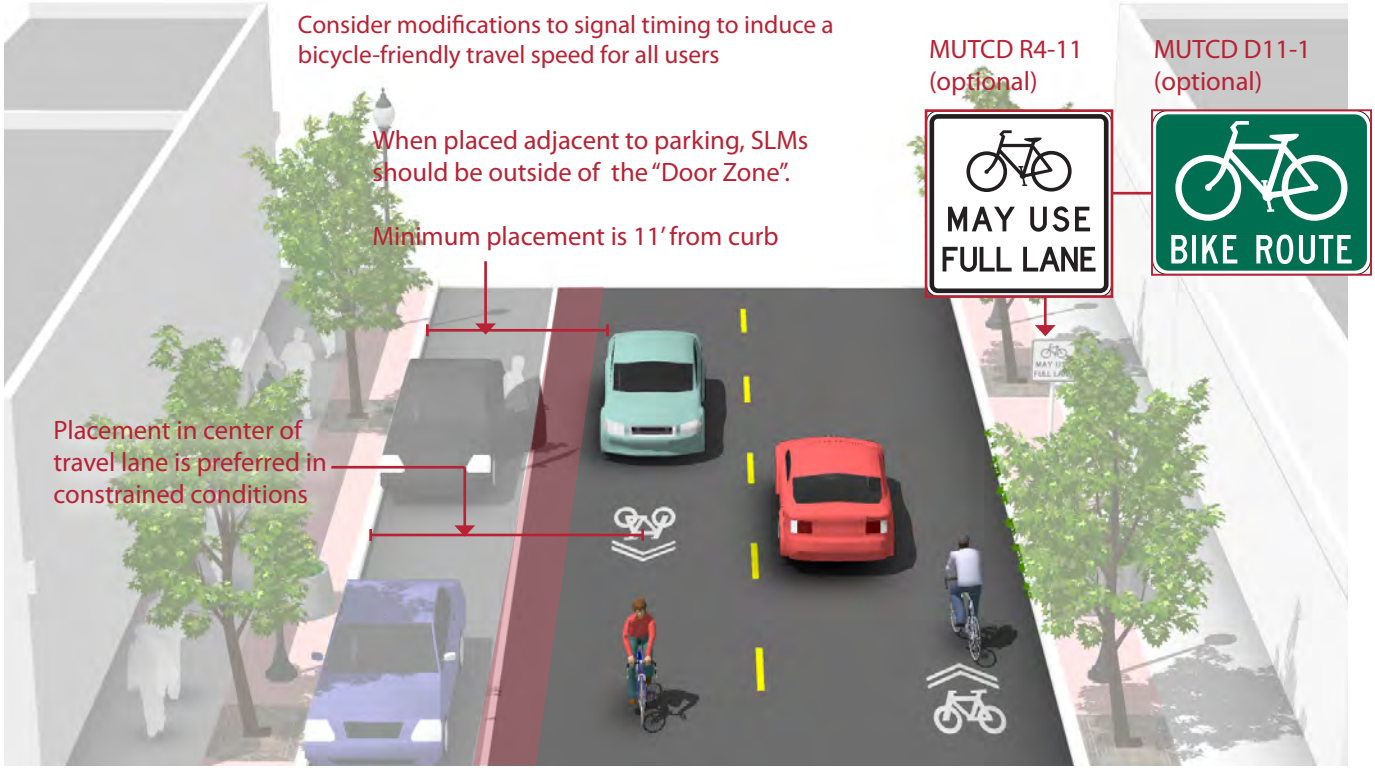
Shared Lane Markings (SLMs), also referred to as shared roadways, are used on a general purpose travel to encourage bicycle travel and proper positioning within the lane.

In constrained conditions, the SLMs are placed in the middle of the lane. On a wide outside lane, the SLMs can be used to promote bicycle travel to the right of motor vehicles.

In all conditions, SLMs should be placed outside of the door zone of parked cars.

Guidance

- May be used on streets with a speed limit of 35 mph or under. Lower than 30 mph speed limit preferred.
- In constrained conditions, preferred placement is in the center of the travel lane to minimize wear and promote single file travel.
- Minimum placement of SLM centerline is 11 feet from the edge of curb where on-street parking is present, or 4 feet from edge of curb with no parking. If parking lane is wider than 7.5 feet, the SLM should be moved further out accordingly.



Discussion

If collector or arterial, this should not be a substitute for dedicated bicycle facilities if space is available.

Bike Lanes should be considered on roadways with outside travel lanes wider than 15 feet, or where other lane narrowing or removal strategies may provide adequate road space. SLMs shall not be used on shoulders, in designated bike lanes, or to designate bicycle detection at signalized intersections. (MUTCD 9C.07)

Additional References and Guidelines

AASHTO. *Guide for the Development of Bicycle Facilities.* 2012.
FHWA. *Manual on Uniform Traffic Control Devices.* 2009.
NACTO. *Urban Bikeway Design Guide.* 2012.

Materials and Maintenance

Placing SLMs between vehicle tire tracks will increase the life of the markings and minimize the long-term cost of the treatment.

Shared Lane Markings Adjacent to Diagonal Parking

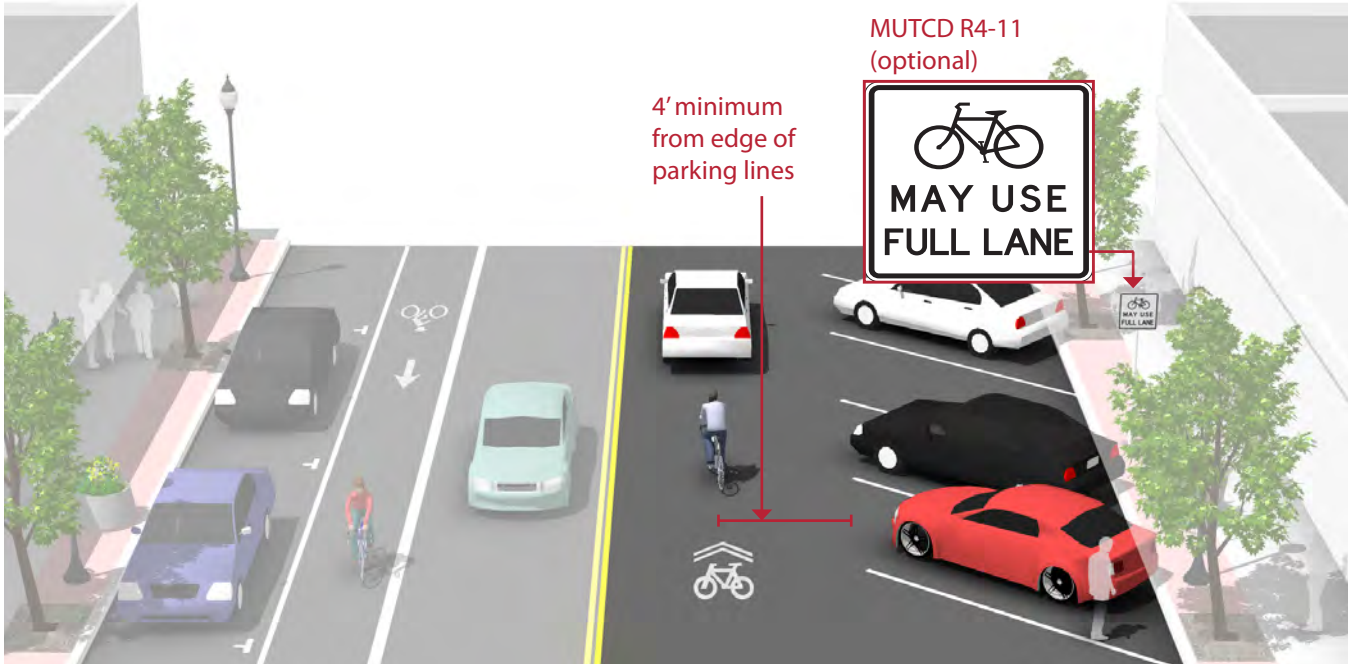
Description

In certain areas with high parking demand such as urban commercial areas, diagonal parking can be used to increase parking supply.

Back-in diagonal parking improves sight distance between drivers and bicyclists when compared to conventional head-in diagonal parking. Back-in diagonal parking provides additional benefits to vehicles including loading and unloading of the trunk at the curb rather than in the street, passengers (including children) are directed by open doors towards the curb; there is also no door conflict with bicyclists.

Guidance

- In constrained conditions, preferred placement is in the center of the travel lane to minimize wear and promote single file travel.
- Minimum placement of SLM centerline is 4 feet from the edge of parking lines.



Discussion

Conventional front-in diagonal parking is not compatible or recommended in conjunction with high levels of bicycle traffic as drivers backing out of conventional diagonal parking have poor visibility of approaching bicyclists.

While there may be a learning curve for some drivers, using back-in diagonal parking is typically an easier maneuver than conventional parallel parking.

Additional References and Guidelines

There is no currently adopted Federal or State guidance for this treatment.

Materials and Maintenance

Paint can wear more quickly in high traffic areas or in winter climates.

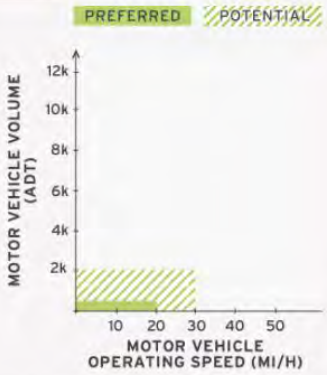
Yield Roadway

See FHWA's *Small Town and Rural Multimodal Networks*

MIXED TRAFFIC
Yield Roadway

A **yield roadway** is designed to serve pedestrians, bicyclists, and motor vehicle traffic in the same slow-speed travel area. Yield roadways serve bidirectional motor vehicle traffic without lane markings in the roadway travel area.

APPLICATION



Speed and Volume
Most appropriate on streets with low volumes (+) and low speed.

Network
Local residential roadways. Not for through motor vehicle travel.

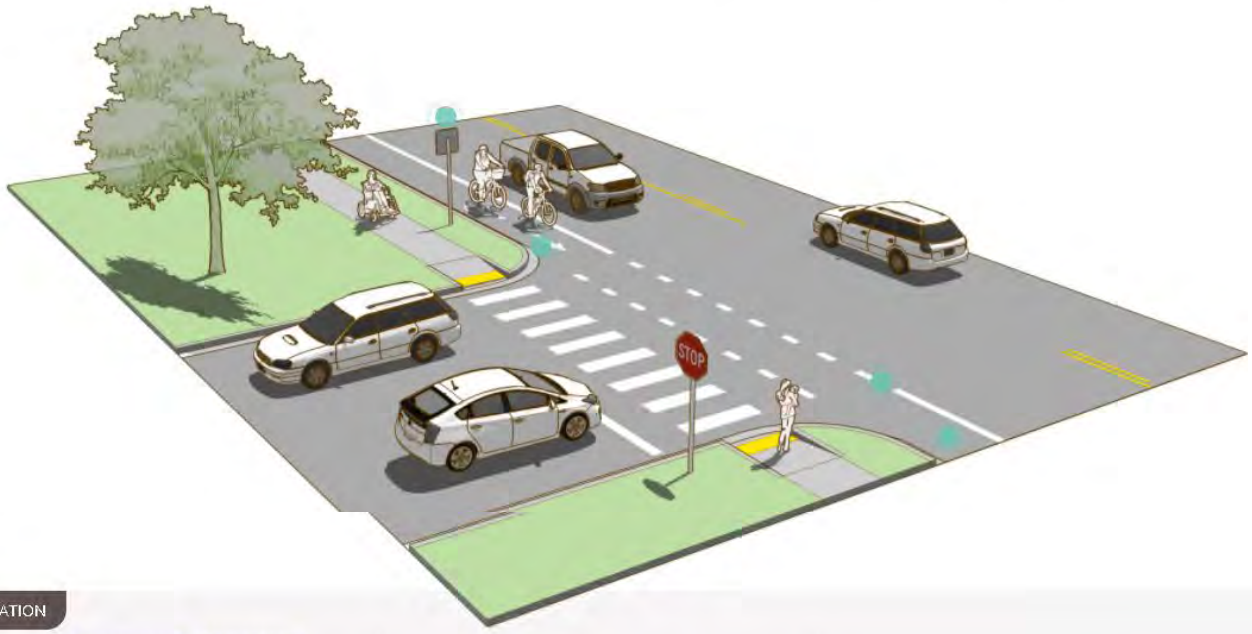
Land Use
Within built up areas, particularly near residential land uses where most traffic is familiar with prevailing road conditions.

Bike Lanes

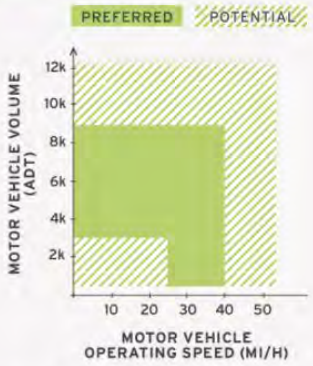
See FHWA's *Small Town and Rural Multimodal Networks*

VISUALLY SEPARATED
Bike Lane

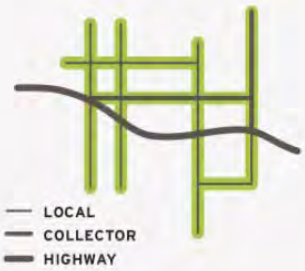
Bike lanes designate an exclusive space for bicyclists through th use of pavement markings and optional signs. A bike lane is located directly adjacent to motor vehicle travel lanes and follow the same direction as motor vehicle traffic.



APPLICATION



Speed and Volume
Appropriate on streets with moderate volumes and moderate speed. May function on multi-lane streets with heavy traffic, but fails to provide a low-stress experience in this condition, which would appeal to larger numbers of bicyclists.



Network
Serves moderate distance trips connecting local bikeway routes to regional corridors.

Land Use
For use inside, or between, built up areas where increased pedestrian and/or bicycle activity is present or expected.

Bike Lane Adjacent to On-Street Parallel Parking

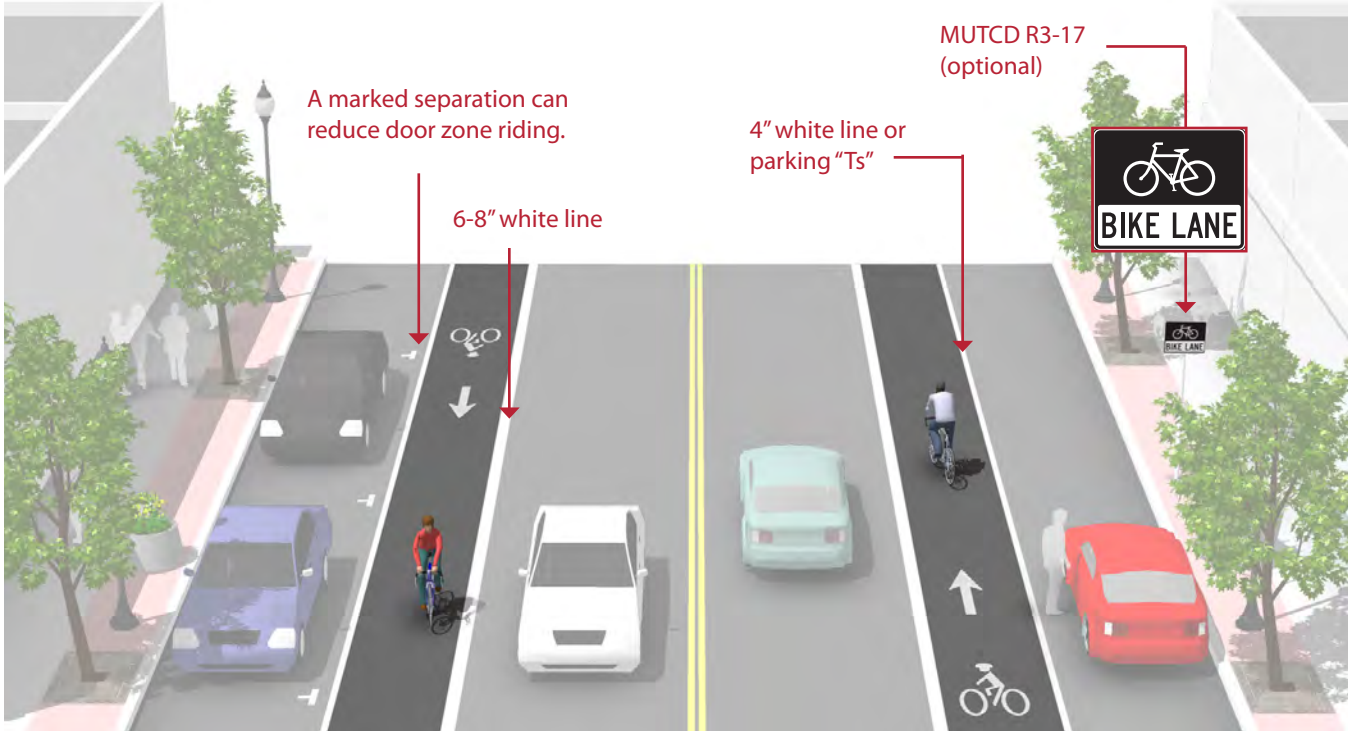
Description

Bike lanes designate an exclusive space for bicyclists through the use of pavement markings and signage. The bike lane is located adjacent to motor vehicle travel lanes and is used in the same direction as motor vehicle traffic. Bike lanes are typically on the right side of the street, between the adjacent travel lane and curb, road edge or parking lane.

Many bicyclists, particularly less experienced riders, are more comfortable riding on a busy street if it has a striped and signed bikeway than if they are expected to share a lane with vehicles.

Guidance

- 12 foot minimum from curb face to edge of bike lane.
- 14.5 foot preferred from curb face to edge of bike lane.
- 7 foot maximum for marked width of bike lane. Greater widths may encourage vehicle loading in bike lane. Configure as buffered bicycle lanes when a wider facility is desired.



Discussion

Bike lanes adjacent to on-street parallel parking require special treatment in order to avoid crashes caused by an open vehicle door. The bike lane should have sufficient width to allow bicyclists to stay out of the door zone while not encroaching into the adjacent vehicular lane. Parking stall markings, such as parking "Ts" and double white lines create a parking side buffer that encourages bicyclists to ride farther away from the door zone.

Additional References and Guidelines

AASHTO. *Guide for the Development of Bicycle Facilities.* 2012.
FHWA. *Manual on Uniform Traffic Control Devices.* 2009.
NACTO. *Urban Bikeway Design Guide.* 2012.

Materials and Maintenance

Paint can wear more quickly in high traffic areas or in winter climates. Bicycle lanes should be cleared of snow through routine snow removal operations.

Bike Lanes and Diagonal Parking

Description

In certain areas with high parking demand such as urban commercial areas, diagonal parking can be used to increase parking supply.

Back-in diagonal parking improves sight distances between drivers and bicyclists when compared to conventional head-in diagonal parking. Back-in parking is best paired with a dedicated bicycle lane.

Conventional front-in diagonal parking is not compatible or recommended with the provision of bike lanes, as drivers backing out of conventional diagonal parking have limited visibility of approaching bicyclists. Under these conditions, shared lane markings should be used to guide bicyclists away from reversing automobiles.

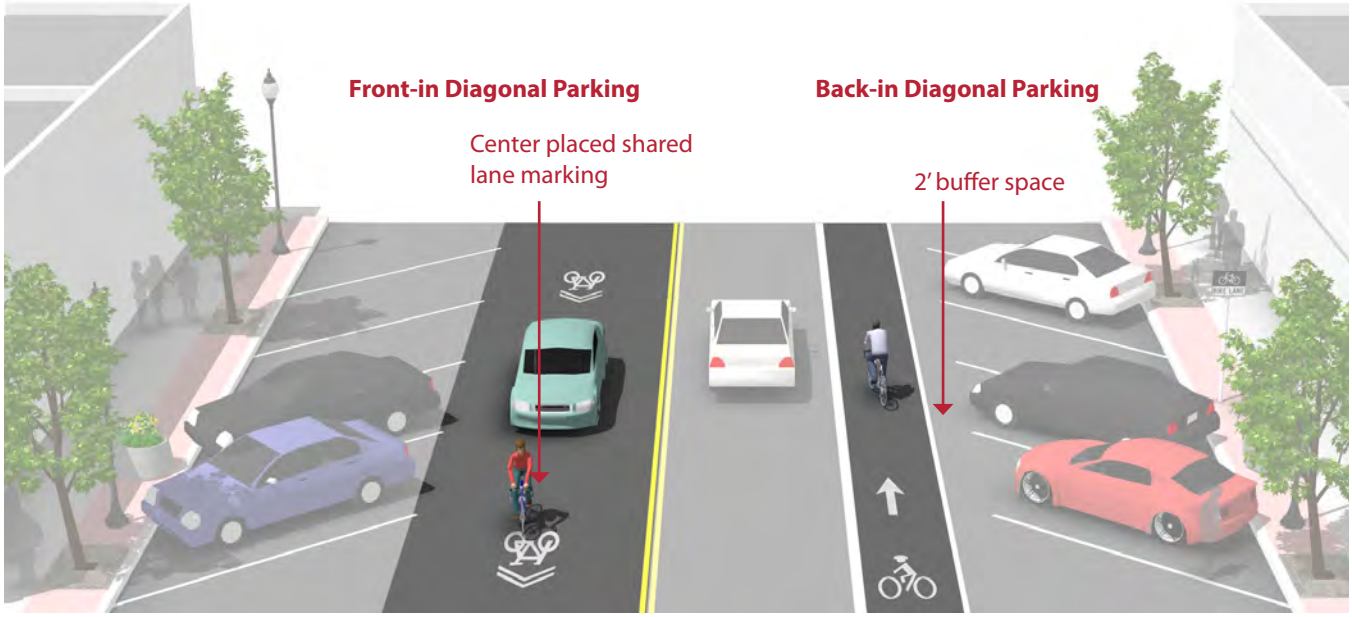
Guidance

Front-in Diagonal Parking

- Shared lane markings are the preferred facility with front-in diagonal parking

Back-in Diagonal Parking

- 5 foot minimum marked width of bike lane
- Parking bays are sufficiently long to accommodate most vehicles (so vehicles do not block bike lane)



Additional References and Guidelines

AASHTO. *Guide for the Development of Bicycle Facilities.* 2012.

Materials and Maintenance

Paint can wear more quickly in high traffic areas or in winter climates. Bicycle lanes should be cleared of snow through routine snow removal operations.

Buffered Bike Lanes

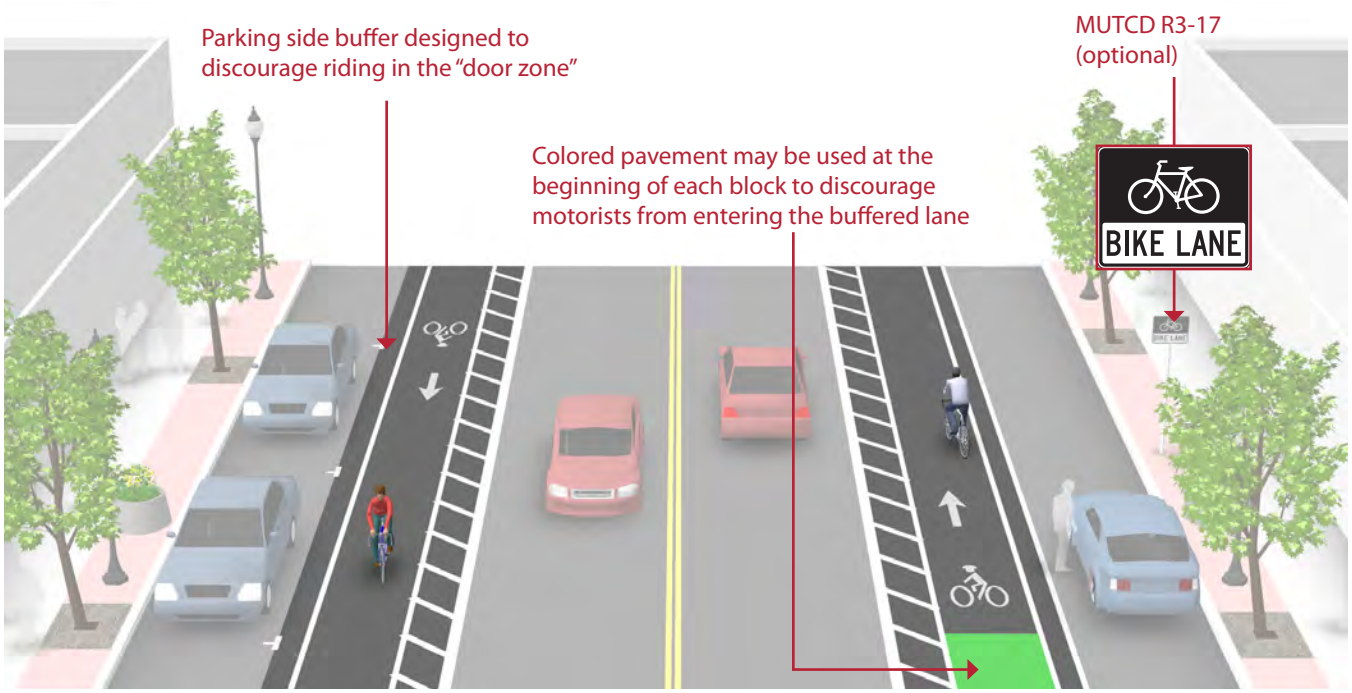
Description

Buffered bike lanes are conventional bicycle lanes paired with a designated buffer space, separating the bicycle lane from the adjacent motor vehicle travel lane and/or parking lane. Buffered bike lanes follow general guidance for buffered preferential vehicle lanes as per MUTCD guidelines (section 3D-01).

Buffered bike lanes are designed to increase the space between the bike lane and the travel lane and/or parked cars. This treatment is appropriate for bike lanes on roadways with high motor vehicle traffic volumes and speed, adjacent to parking lanes, or a high volume of truck or oversized vehicle traffic.

Guidance

- The minimum bicycle travel area (not including buffer) is 5 feet wide.
- Buffers should be at least 2 feet wide. If 3 feet or wider, mark with diagonal or chevron hatching. For clarity at driveways or minor street crossings, consider a dotted line for the inside buffer boundary where cars are expected to cross.
- Buffered bike lanes can buffer the travel lane only, or parking lane only depending on available space and the objectives of the design.



Discussion

Frequency of right turns by motor vehicles at major intersections should determine whether continuous or truncated buffer striping should be used approaching the intersection. Commonly configured as a buffer between the bicycle lane and motor vehicle travel lane, a parking side buffer may also be provided to help bicyclists avoid the 'door zone' of parked cars.

Additional References and Guidelines

AASHTO. *Guide for the Development of Bicycle Facilities.* 2012.
FHWA. *Manual on Uniform Traffic Control Devices. (3D-01).* 2009.
NACTO. *Urban Bikeway Design Guide.* 2012.

Materials and Maintenance

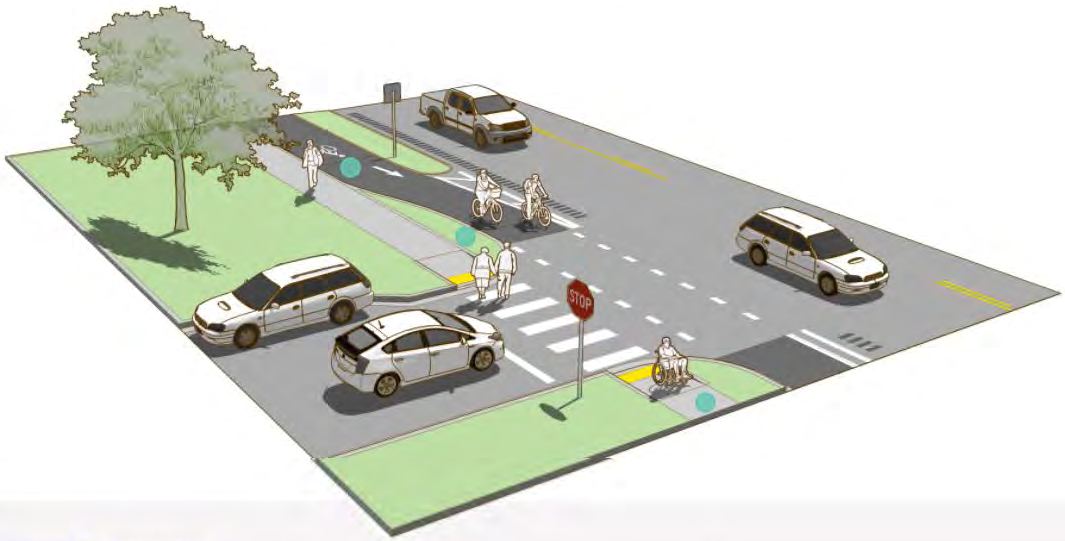
Paint can wear more quickly in high traffic areas or in winter climates. Bicycle lanes should be cleared of snow through routine snow removal operations.

Separated Bike Lanes

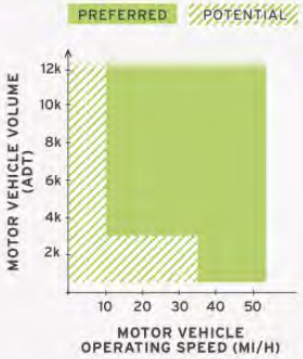
See FHWA's *Small Town and Rural Multimodal Networks*

PHYSICALLY SEPARATED
Separated Bike Lane

A **separated bike lane** is a facility for exclusive use by bicyclists that is located within or directly adjacent to the roadway and is physically separated from motor vehicle traffic with a vertical element.



APPLICATION



Speed and Volume
For use on roads with high motor vehicle volumes, and moderate to high speed motor vehicle traffic.

Network
Serves primary connections on major roads through and across communities.

Land Use
For use inside built-up areas where a moderate to high volume of bicyclists and pedestrians is expected.

DESIGN GUIDELINES

OFF-STREET BIKEWAYS AND SHARED-USE PATHS

Sidepaths

Description

Shared Use Paths along roadways, also called Sidepaths, are a type of path that run adjacent to a street.

Because of operational concerns it is generally preferable to place paths within independent rights-of-way away from roadways. However, there are situations where existing roads provide the only corridors available.

Along roadways, these facilities create a situation where a portion of the bicycle traffic rides against the normal flow of motor vehicle traffic and can result in wrong-way riding where bicyclists enter or leave the path.

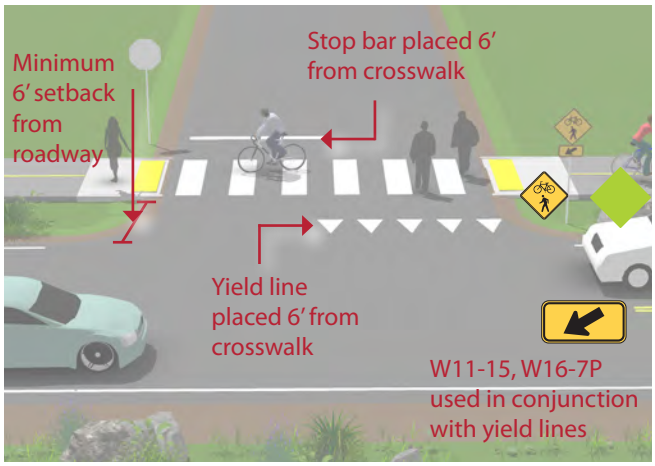
The AASHTO Guide for the Development of Bicycle Facilities cautions practitioners of the use of two-way sidepaths on urban or suburban streets with many driveways and street crossings.

In general, there are two approaches to crossings: adjacent crossings and setback crossings, illustrated below.

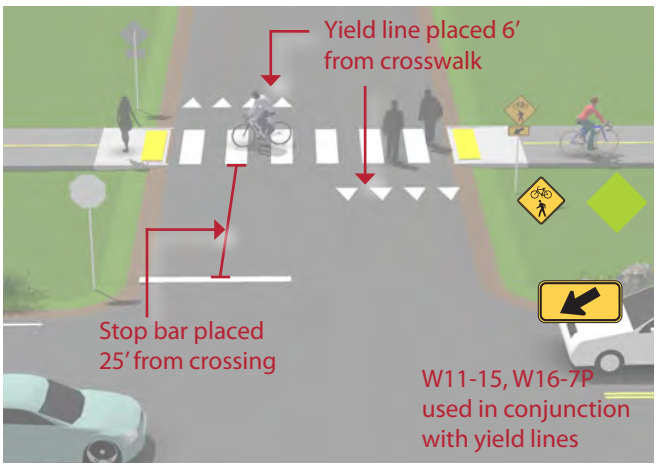
Guidance

- Guidance for sidepaths should follow that for general design practises of shared use paths.
- A high number of driveway crossings and intersections create potential conflicts with turning traffic. Consider alternatives to sidepaths on streets with a high frequency of intersections or heavily used driveways.
- Where a sidepath terminates special consideration should be given to transitions so as not to encourage unsafe wrong-way riding by bicyclists.
- Crossing design should emphasize visibility of users and clarity of expected yielding behavior. Crossings may be STOP or YIELD controlled depending on sight lines and bicycle motor vehicle volumes and speeds.

Adjacent Crossing - A separation of 6 feet emphasizes the conspicuity of riders at the approach to the crossing.



Setback Crossing - A set back of 25 feet separates the path crossing from merging/turning movements that may be competing for a driver's attention.



Additional References and Guidelines

AASHTO. *Guide for the Development of Bicycle Facilities.* 2012.
FHWA. *Rural and Small Town Design Guidelines*. 2017.
NACTO. *Urban Bikeway Design Guide.* See entry on Raised Cycle Tracks. 2012.

Materials and Maintenance

Asphalt is the most common surface for bicycle paths. The use of concrete for paths has proven to be more durable over the long term. Saw cut concrete joints rather than troweled improve the experience of path users.

Shared Use Paths in Abandoned Rail Corridors

Description

Commonly referred to as Rails-to-Trails or Rail-Trails, these projects convert vacated rail corridors into off-street paths. Rail corridors offer several advantages, including relatively direct routes between major destinations and generally flat terrain.

In some cases, rail owners may rail-bank their corridors as an alternative to a complete abandonment of the line, thus preserving the rail corridor for possible future use.

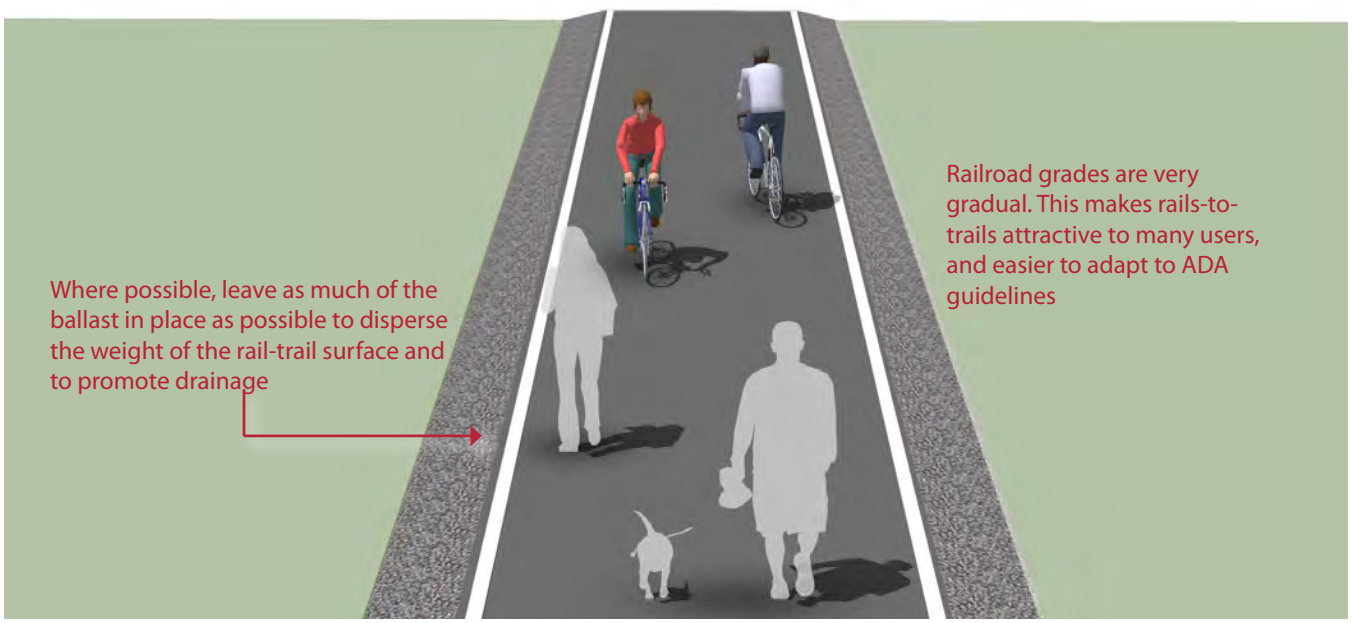
The railroad may form an agreement with any person, public or private, who would like to use the banked rail line as a trail or linear park until it is again needed for rail use. Municipalities should acquire abandoned rail rights-of-way whenever possible to preserve the opportunity for trail development.

Guidance

Shared use paths in abandoned rail corridors should meet or exceed general design practices. If additional width allows, wider paths, and landscaping are desirable.

In full conversions of abandoned rail corridors, the sub-base, superstructure, drainage, bridges, and crossings are already established. Design becomes a matter of working with the existing infrastructure to meet the needs of a rail-trail.

If converting a rail bed adjacent to an active rail line, see Shared Use Paths in Active Rail Corridors.



Discussion

It is often impractical and costly to add material to existing railroad bed fill slopes. This results in trails that meet minimum path widths, but often lack preferred shoulder and lateral clearance widths.

Rail-to-trails can involve many challenges including the acquisition of the right of way, cleanup and removal of toxic substances, and rehabilitation of tunnels, trestles and culverts. A structural engineer should evaluate existing railroad bridges for structural integrity to ensure they are capable of carrying the appropriate design loads.

Additional References and Guidelines

AASHTO. *Guide for the Development of Bicycle Facilities.* 2012.
FHWA. *Manual on Uniform Traffic Control Devices.* 2009.
Flink, C. *Greenways: A Guide To Planning Design And Development.* 1993.

Materials and Maintenance

Asphalt is the most common surface for bicycle paths. The use of concrete for paths has proven to be more durable over the long term. Saw cut concrete joints rather than troweled improve the experience of path users.

Shared Use Paths in Active Rail Corridors

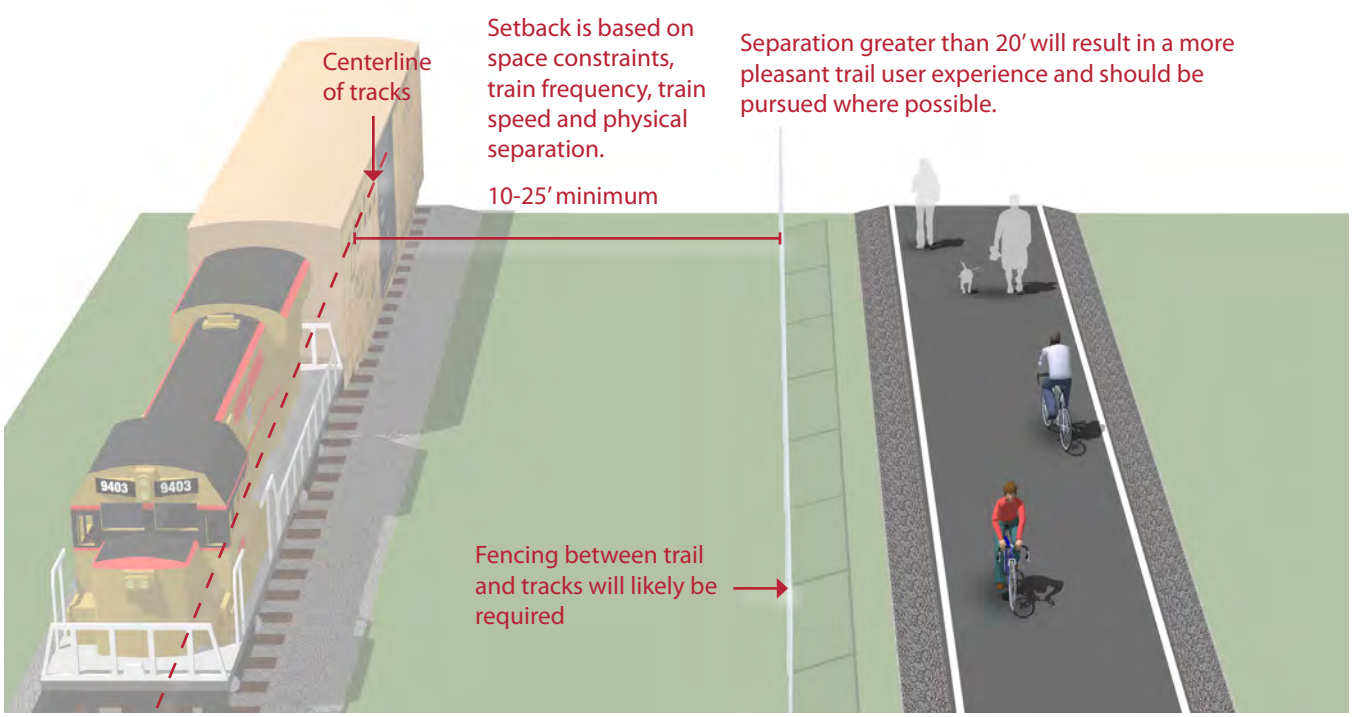
Description

Rails-with-Trails projects typically consist of paths adjacent to active railroads. It should be noted that some constraints could impact the feasibility of rail-with-trail projects. In some cases, space needs to be preserved for future planned freight, transit or commuter rail service. In other cases, limited right-of-way width, inadequate setbacks, concerns about safety/trespassing, and numerous crossings may affect a project's feasibility.

Guidance

Shared use paths in utility corridors should meet or exceed general design standards. If additional width allows, wider paths, and landscaping are desirable.

If required, fencing should be a minimum of 5 feet in height with higher fencing than usual next to sensitive areas such as switching yards. Setbacks from the active rail line will vary depending on the speed and frequency of trains, and available right-of-way.



Discussion

Railroads may require fencing with rail-with-trail projects. Concerns with trespassing and security can vary with the volume and speed of train traffic on the adjacent rail line and the setting of the shared use path, i.e. whether the section of track is in an urban or rural setting.

Additional References and Guidelines

AASHTO. *Guide for the Development of Bicycle Facilities*. 2012.
FHWA. *Manual on Uniform Traffic Control Devices*. 2009.
FHWA. *Rails-with-Trails: Lessons Learned*. 2002.

Materials and Maintenance

Asphalt is the most common surface for bicycle paths. The use of concrete for paths has proven to be more durable over the long term. Saw cut concrete joints rather than troweled improve the experience of path users.

Shared Use Paths in River and Utility Corridors

Description

Utility and waterway corridors often offer excellent shared use path development and bikeway gap closure opportunities. Utility corridors typically include powerline and sewer corridors, while waterway corridors include canals, drainage ditches, rivers, and beaches. These corridors offer excellent transportation and recreation opportunities for bicyclists of all ages and skills.

Guidance

Shared use paths in utility corridors should meet or exceed general design practices. If additional width allows, wider paths, and landscaping are desirable.

Access Points

Any access point to the path should be well-defined with appropriate signage designating the pathway as a bicycle facility and prohibiting motor vehicles.

Path Closure

Public access to the shared use path may be prohibited during the following events:

- Canal/flood control channel or other utility maintenance activities
- Inclement weather or the prediction of storm conditions

Discussion

Similar to railroads, public access to flood control channels or canals may be undesirable. Hazardous materials, deep water or swift current, steep, slippery slopes, and debris all may constitute risks for public access. Appropriate fencing may be desired to keep path users within the designated travel way. Creative design of fencing is encouraged to make the path facility feel welcoming to the user.

Additional References and Guidelines

AASHTO. *Guide for the Development of Bicycle Facilities.* 2012.
FHWA. *Manual on Uniform Traffic Control Devices.* 2009.
Flink, C. *Greenways: A Guide To Planning Design And Development.* 1993.

Materials and Maintenance

Asphalt is the most common surface for bicycle paths. The use of concrete for paths has proven to be more durable over the long term. Saw cut concrete joints rather than troweled improve the experience of path users.

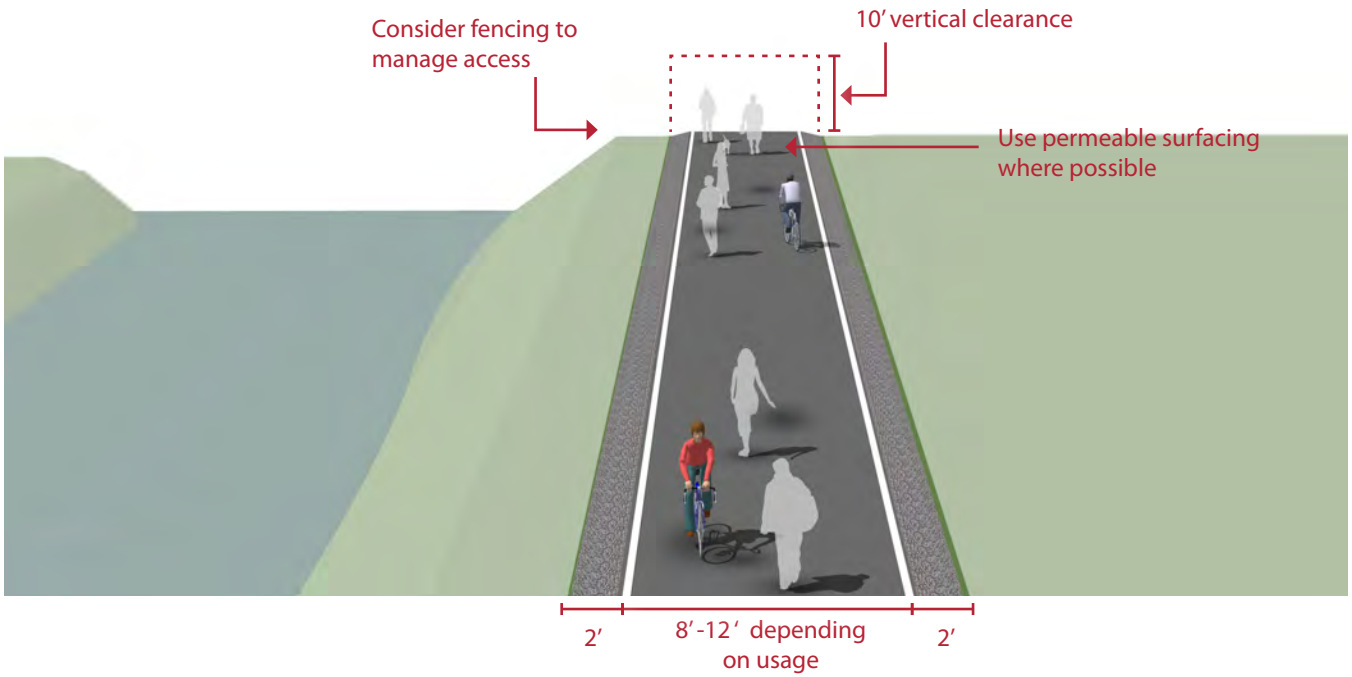
Shared Use Paths on Canals

Description

Canal corridors often offer excellent opportunities for shared use path development and bikeway gap closure.

They are typically long and linear in nature and can generally offer a continuous bikeway with few conflicts with other transportation modes. Waterway corridors often have the benefit of a serene atmosphere and are suitable for users of all ages and skill levels.

The relatively clear, level surface of the top of a canal provides an ideal location for a shared use path. Access to a trail on top of a canal may sometimes require ramps to provide Americans with Disabilities Act (ADA) compliance. Barriers such as water crossings, existing bridges and flood control infrastructure may require modifications or additional structures to provide continuous access for the shared use path.



Discussion

Similar to railroads, public access to flood control channels or canals often necessitate additional features to make a shared use path compatible with flood control or canal operations. Shared use path related improvements can often improve maintenance operations for canal and ditch companies. A favorable maintenance and liability agreement between the local jurisdiction and the canal/ditch companies can ensure that the improvements associated with the shared use pathway are beneficial for all. Access control may be required in select areas to address safety or liability concerns.

Additional References and Guidelines

AASHTO, *Guide for the Development of Bicycle Facilities.* 2012
FHWA, *Manual on Uniform Traffic Control Devices.* 2009
Flink, Chuck, *Greenways: A Guide To Planning Design And Development.* 1993

Materials and Maintenance

Asphalt is the most common surface for shared use paths. The use of concrete for paths has proven to be more durable over the long term. Saw cut concrete joints rather than troweled joints improve the experience of wheeled shared use path users.

BIKEWAY MAINTENANCE

Sweeping

Description

Bicyclists often avoid shoulders and bike lanes filled with gravel, broken glass and other debris; they will ride in the roadway to avoid these hazards, potentially causing conflicts with motorists. Debris from the roadway should not be swept onto sidewalks (pedestrians need a clean walking surface), nor should debris be swept from the sidewalk onto the roadway. A regularly scheduled inspection and maintenance program helps ensure that roadway debris is regularly picked up or swept.

Guidance

- Establish a seasonal sweeping schedule that prioritizes roadways with major bicycle routes.
- Sweep walkways and bikeways whenever there is an accumulation of debris on the facility.
- In curbed sections, sweepers should pick up debris; on open shoulders, debris can be swept onto gravel shoulders.
- Pave gravel driveway approaches to minimize loose gravel on paved roadway shoulders.
- Perform additional sweeping in the Fall in areas where leaves accumulate .

Signage

Description

Bike lanes, shared shoulders, Bicycle Boulevards and paths all have different signage types for wayfinding and regulations. Such signage is vulnerable to vandalism or wear, and requires periodic maintenance and replacement as needed.

Guidance

- Check regulatory and wayfinding signage along bikeways for signs of vandalism, graffiti, or normal wear.
- Replace signage along the bikeway network as-needed.
- Perform a regularly-scheduled check on the status of signage with follow-up as necessary.
- Create a Maintenance Management Plan.

Roadway Surface

Description

Bicycles are much more sensitive to subtle changes in roadway surface than are motor vehicles. Various materials are used to pave roadways, and some are smoother than others. Compaction is also an important issue after trenches and other construction holes are filled. Uneven settlement after trenching can affect the roadway surface nearest the curb where bicycles travel. Sometimes compaction is not achieved to a satisfactory level, and an uneven pavement surface can result due to settling over the course of days or weeks. When resurfacing streets, use the smallest chip size and ensure that the surface is as smooth as possible to improve safety and comfort for bicyclists.

Guidance

- Maintain a smooth pothole-free surface.
- Ensure that on new roadway construction, the finished surface on bikeways does not vary more than ¼".
- Maintain pavement so ridge buildup does not occur at the gutter-to-pavement transition or adjacent to railway crossings.
- Inspect the pavement 2 to 4 months after trenching construction activities are completed to ensure that excessive settlement has not occurred.
- If chip sealing is to be performed, use the smallest possible chip on bike lanes and shoulders. Sweep loose chips regularly following application.
- During chip seal maintenance projects, if the pavement condition of the bike lane is satisfactory, it may be appropriate to chip seal the travel lanes only. However, use caution when doing this so as not to create an unacceptable ridge between the bike lane and travel lane.

Pavement Overlays

Description

Pavement overlays represent good opportunities to improve conditions for bicyclists if done carefully. A ridge should not be left in the area where bicyclists ride (this occurs where an overlay extends part-way into a shoulder bikeway or bike lane). Overlay projects also offer opportunities to widen a roadway, or to re-stripe a roadway with bike lanes.

Guidance

- Extend the overlay over the entire roadway surface to avoid leaving an abrupt edge.
- If the shoulder or bike lane pavement is of good quality, it may be appropriate to end the overlay at the shoulder or bike lane stripe provided no abrupt ridge remains.
- Ensure that inlet grates, manhole and valve covers are within ¼ inch of the finished pavement surface and are made or treated with slip resistant materials.
- Pave gravel driveways to property lines to prevent gravel from being tracked onto shoulders or bike lanes.

Maintenance Management Plan

Description

Bikeway users need accommodation during construction and maintenance activities when bikeways may be closed or unavailable. Users must be warned of bikeway closures and given adequate detour information to bypass the closed section. Users should be warned through the use of standard signing approaching each affected section (e.g., "Bike Lane Closed," "Trail Closed"), including information on alternate routes and dates of closure. Alternate routes should provide reasonable directness, equivalent traffic characteristics, and be signed.

Guidance

- Provide fire and police departments with map of system, along with access points to gates/bollards
- Enforce speed limits and other rules of the road
- Enforce all trespassing laws for people attempting to enter adjacent private properties

SUMMARY OF PLANNING EFFORTS

ALABAMA STATE-WIDE BICYCLE AND PEDESTRIAN PLAN

Year: 2017

Description: The 2017 Alabama Statewide Bicycle and Pedestrian Plan builds on previous ALDOT planning efforts to guide improvements that have a big impact with a small budget. For ALDOT, the Alabama Statewide Transportation Plan and the Strategic Highway Safety Plan form the basis for safe, multimodal facilities at the policy level. At a regional level, the separate MPO bicycle and pedestrian plans are used to implement specific projects and plans, while the Alabama Statewide Bicycle and Pedestrian Plan provides guidance for facility design on ALDOT roads.

The ALDOT plan includes existing facility conditions as well as current federal and state bicycle and pedestrian laws, programs, standards, and policies.

There are four primary goals for the plan:

- Improve safety for for people on foot and bike of all ages
- Develop well connected, complete bicycle and pedestrian networks
- Support local, regional, and state economic growth
- Expand travel options for all modes and users

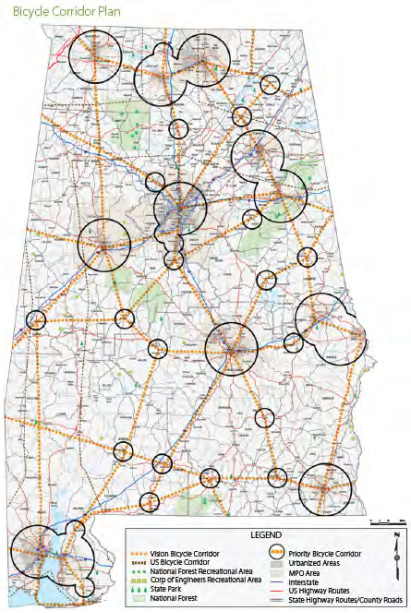
Recommendations: The statewide plan includes three priority strategies for implementation:

1. Increase access to walking and biking facilities for underserved populations
2. Improve connections to local greenways, paths, and scenic areas from facilities on state highways
3. Prioritize safety programs for pedestrians and cyclists

Performance measures are included for safety, access, and mobility. Recommendations also include specific design guidance for paved shoulders and on-street facilities for walkways and bikeways. Additionally, all state routes were assessed for bicycle suitability.

The "Corridor Bicycle Plan" includes state roads that link major cities and towns throughout the state. However, specific roads are not identified for bicycle improvements, but "Priority Bicycle Corridors" are mapped as vague suggestions or direct links for identifying roads that are best suited to connect municipalities.

Figure 4-2. Bicycle Corridor Plan



The Priority Bicycle Corridors in the 2017 ALDOT plan

2040 MONTGOMERY MPO LONG RANGE TRANSPORTATION PLAN

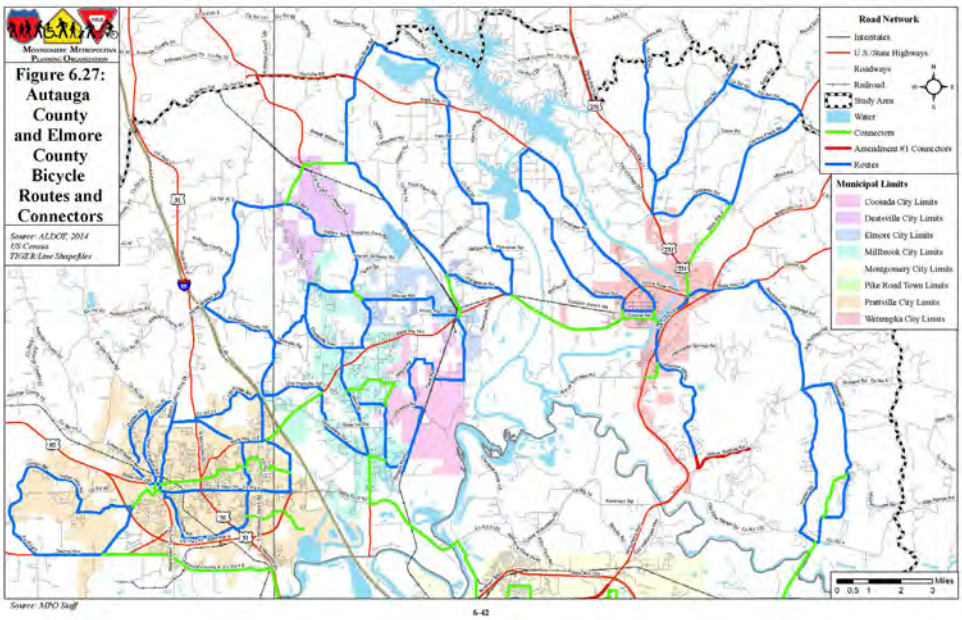
Year: 2015

Description: The 2040 Montgomery MPO Long Range Transportation Plan (LRTP) addresses federal planning requirements to implement the transportation planning process. The LRTP identifies the scope of transportation planning for the next 20 years, includes long and short-term multimodal strategies, integrates local transportation and land use plans, and provides cost estimates for the list of projects. The study area overlaps with the 950 square mile Montgomery MPO boundaries to include portions of Autauga, Elmore, and Montgomery counties. Within the LRTP are stated goals to "provide viable travel choices to improve accessibility and mobility, sustain environmental quality, and preserve community values", and "develop, maintain, and preserve a balanced multimodal transportation system that provides for safe, integrated, and convenient movement of people and goods."

Recommendations: The LRTP identifies needs and creates an implementation work program for roadways, transit, and freight as well as bicycle and pedestrian projects. The bicycle and pedestrian projects in the LRTP are pulled from the 2012 Montgomery MPO Bicycle and Pedestrian Plan to include 32 bicycle routes and 62 connectors. Existing and planned bicycle facilities are mapped by corridor, and a sidewalk inventory displays areas where sidewalk gaps occur. A list of existing and planned bicycle facilities includes bicycle lanes, shared lane markings, shared use paths, nature trails, and Share the Road signage, though the LRTP does not clarify which projects exist and which are planned. Guidance for improving pedestrian facilities involves a focus on the downtown core. However, specific sidewalk improvement projects are not identified.

Additionally, projects funded through the Transportation Alternatives (TA) are identified in the LRTP. The Montgomery MPO is projected to receive $415,413 annually, which is dispensed to municipalities by the MPO based on a selective application process. Seven already-funded TA projects are listed in the LRTP for a total cost of $616,096:

1. Cooters Pond Park (New Walkway), City of Prattville
2. Wallahatchie Road section 1 (nature trail), Town of Pike Road
3. Wallahatchie Road section 2 (nature trail), Town of Pike Road
4. Maple Street Sidewalk Improvements, City of Prattville
5. Marler Road North section 1 (nature trail), Town of Pike Road
6. Marler Road North section 2 (nature trail), Town of Pike Road
7. Downtown Streetscape Improvements Phase 1, City of Wetumpka



An example map of bicycle routes and connectors in the LRTP

MONTGOMERY MPO FY 2016-2019 TRANSPORTATION IMPROVEMENT PROGRAM

Year: 2015

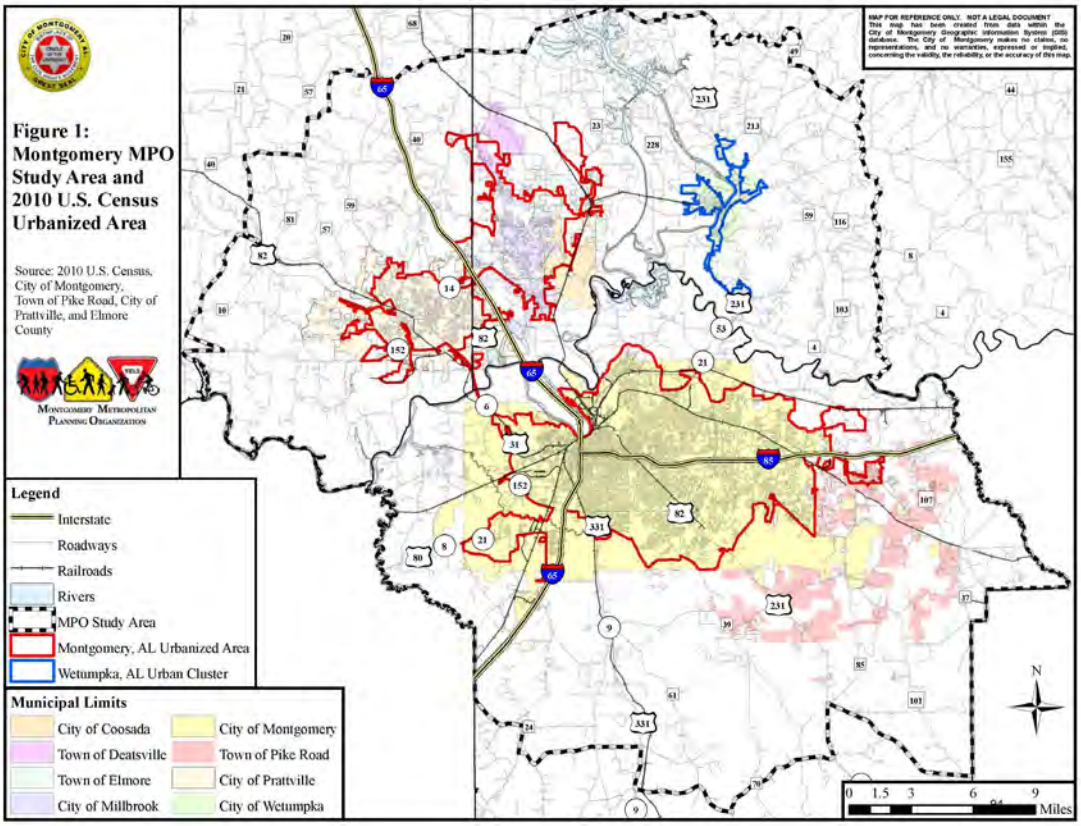
Description: The Transportation Improvement Program (TIP) identifies the priority list of funded projects the fiscal years 2016-2019 for the Montgomery MPO, which are coordinated with the list of projects for the LRTP. All planning tasks must meet goals for livability as adopted by ALDOT. Each goal includes specific livability performance measures, some of which pertain to bicycling and walking improvements such as:

- Percent of jobs and housing located within one-half (1/2) mile of transit service
- Percent of household income spent on housing and transportation
- Percent of transportation investment dedicated to enhancing accessibility of existing transportation systems
- Percent of housing located in walkable neighborhoods with mixed use destinations located nearby

Along with the LRTP, a specific policy statement requires that bicycling and walking facilities are included in all transportation projects, unless there are exceptional circumstances. Therefore, many of the roadway resurfacing project in the TIP mention the inclusion of bike lanes and sidewalk improvements.

Recommendations: The stand-alone bicycle and pedestrian projects in the TIP reflect the seven projects listed in the 2040 Montgomery MPO Long Range Transportation Plan:

1. Cooters Pond Park (New Walkway), City of Prattville
2. Wallahatchie Road section 1 (nature trail), Town of Pike Road
3. Wallahatchie Road section 2 (nature trail), Town of Pike Road
4. Maple Street Sidewalk Improvements, City of Prattville
5. Marler Road North section 1 (nature trail), Town of Pike Road
6. Marler Road North section 2 (nature trail), Town of Pike Road
7. Downtown Streetscape Improvements Phase 1, City of Wetumpka



An example map of the study area in the transportation improvement plan

PRATTVILLE PARKS AND RECREATION MASTER PLAN

Year: 2015

Description: Prattville, a community of about 35,000 people northwest of Montgomery, is home to 320 acres of park space within 18 city parks. The Prattville Parks and Recreation Master Plan will guide the expansion of existing greenspace and the development of new greenspace and recreation improvements through 2025. The projects were identified through public input and an assessment of current facilities and area demographic trends. A budget analysis and funding options are listed for recommended projects.

While most of the public input centered on the need and opportunities for open space, many stakeholders expressed the need for more paved trails and better pedestrian connections between schools, parks, and neighborhoods. The public input section notes specific requests for bicycle connectivity, expansion of trails in Upper Kingston Park, walking trails, and creek trail enhancements. Of the top five park programs for improvement, hiking/biking was listed as number 2.

Recommendations: The development of new park programs make up a large bulk of the recommendations. Among the high priority programs are the development of walking and running programs for the growing senior population. The Action Plan is divided into Tier One priorities (0-24 months), Tier Two priorities (25-60 months), and Tier Three priorities (61-120 months).

Tier One priorities related to biking and walking:

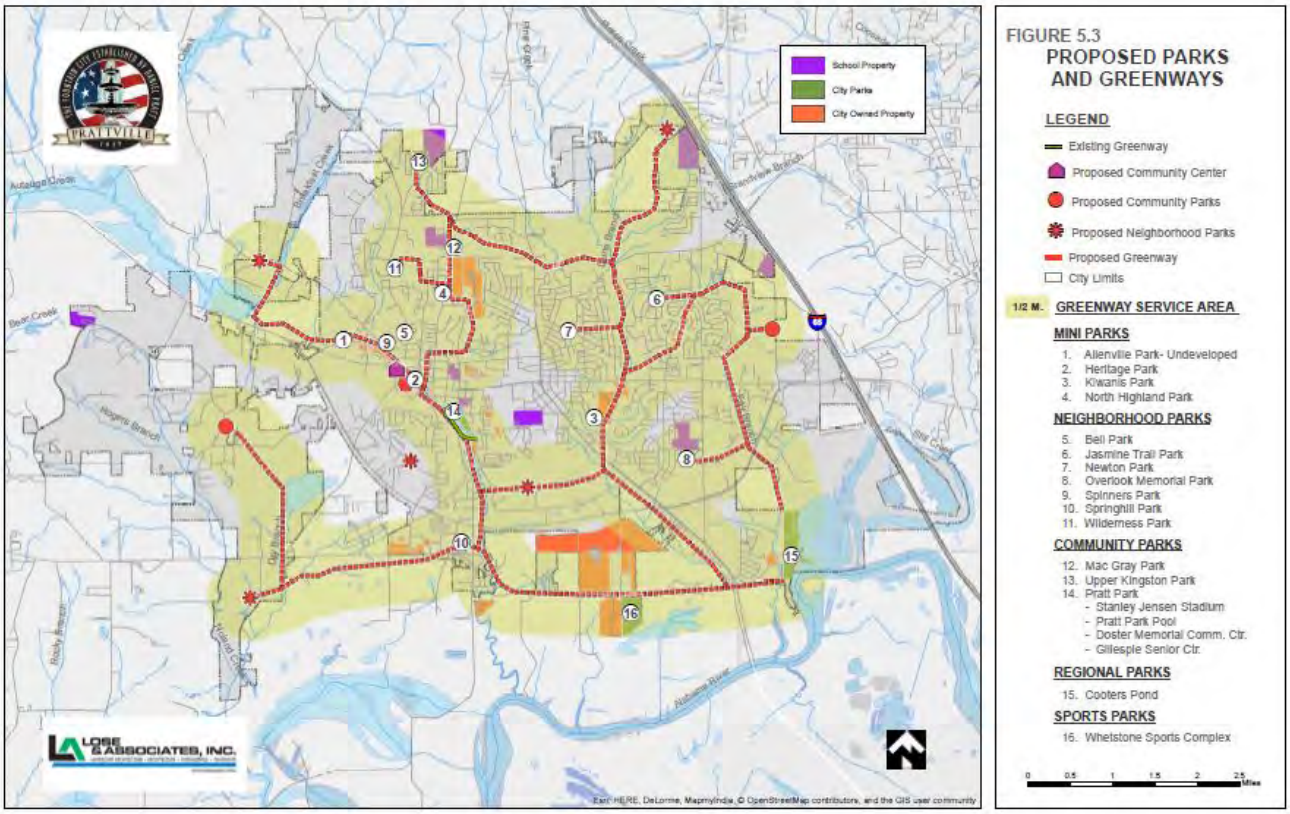
- Build a greenway around the cotton gin mill property near Pratt Park
- Brand the Prattville walking trail to attract interstate travelers
- Improve ADA accessibility in all parks

Tier Two priorities related to biking and walking:

- Add greenway segments throughout Prattville

Tier Three priorities related to biking and walking:

- Continue the greenway development outlined in the capital plan



Proposed Parks and Greenways in the Prattville Parks and Recreation Master Plan

WETUMPKA DOWNTOWN AND RIVERFRONT REVITALIZATION PLAN

Year: 2014

Description: Wetumpka was designated an Alabama Main Street Community in 2016, and the Wetumpka Downtown and Riverfront Revitalization plan uses the program's four-point approach to address promotion, economic development, organization, and design. A market analysis from 2012 provides data for the plan on the viability of potential businesses and land uses. The plan focuses on the riverfront and the core of downtown, roughly bordered by Green Street on the north, Ready Street on the south, Fish Street on the east, and the Coosa River on the west. Existing conditions are extensively covered, and the physical plan revolves around designs that aim to improve walkability and bikeability, such as intersection improvements, key street improvements, public spaces, and streetscapes.

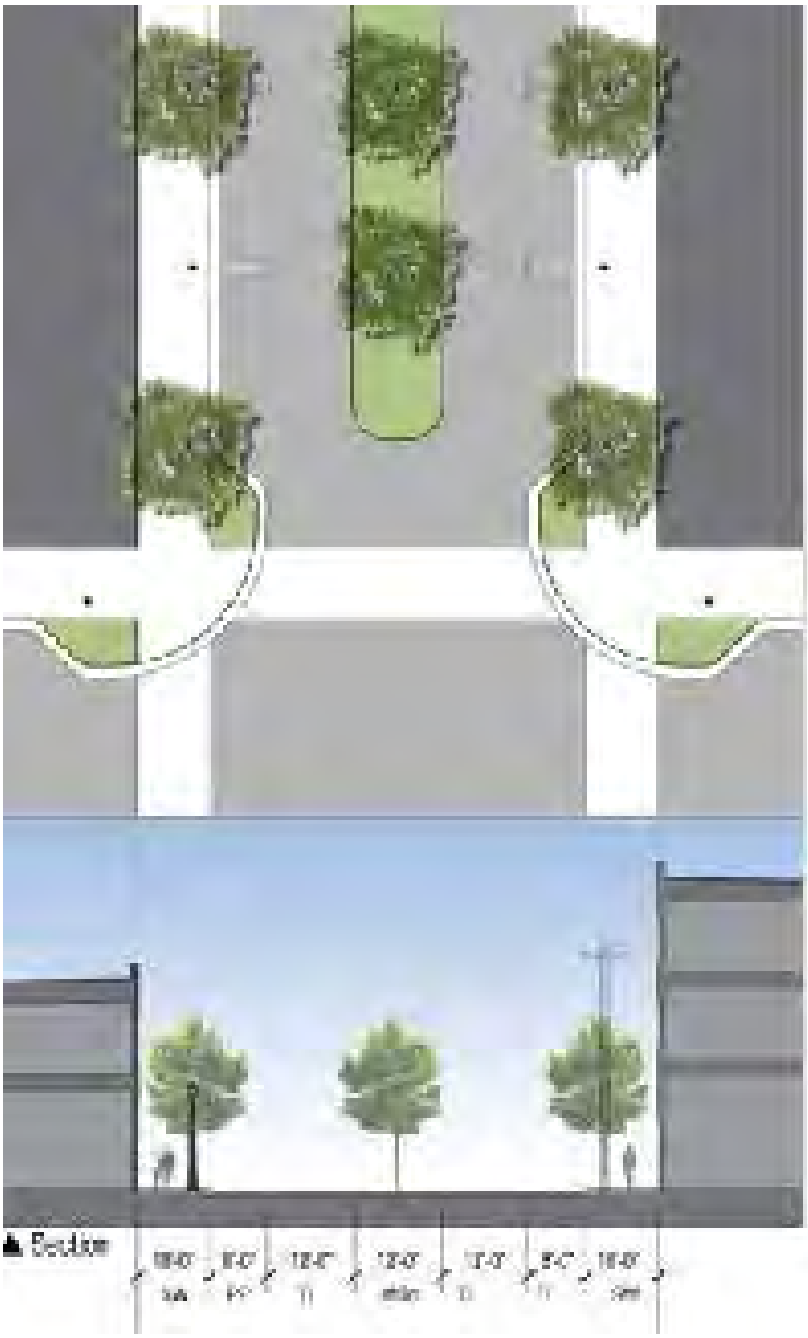
Recommendations: Improvements to the pedestrian realm are outlined in the sections that cover intersections, streets, streetscapes, and public spaces. Four streets are highlighted as "key streets" and are prioritized for improvements: Main Street, Bridge Street, Court Street, and Company Street. Specific examples include:

Streets and Streetscapes:

- Create raised crosswalks a key locations on Commerce and Main Streets
- Include tree planters in streetscape redesign projects
- Improve primary intersections downtown with curb bulbouts at crosswalks
-
-

Public Spaces:

- Make design enhancements at Gold Star Park, with a trail extension to Fort Toulouse
- Develop a plaza fronting Main Street next the Chamber
- Make Court Street more pedestrian friendly



Pedestrian Improvement Concepts for Court Street, Wetumpka

2012 MONTGOMERY MPO BICYCLE AND PEDESTRIAN PLAN

Year: 2012

Description: The previous Montgomery MPO Bicycle and Pedestrian Plan was adopted in 2012. The plan prioritizes bicycle and pedestrian transportation improvements for the MPO study area, which includes portions of Autauga, Elmore, and Montgomery Counties and the municipalities of Coosada, Deatsville, Elmore, Millbrook, Montgomery, Prattville, Pike Road and Wetumpka. The process for developing the final recommendations was organized into three phases: research and information gathering, public input on preliminary proposed bicycle and pedestrian facilities, and public input on the final draft of the 2012 Bicycle and Pedestrian Plan.

Recommendations: Approximately 70 citizens provided input on bicycle facility and sidewalk location preferences through the public comment process. A sidewalk inventory that was completed in 2010 provided a background for filling in sidewalks to create a complete network.

For the bikeway network, existing facilities (bike lanes, share the road signs, and shared lane markings) were mapped, and bicycle route and bicycle "connector" route maps were created. Individual maps were developed of planned bicycle routes and connectors for the following:

- City of Montgomery Central Business District
- Eastern City of Montgomery
- Western City of Montgomery
- City of Millbrook
- City of Prattville
- City of Wetumpka

For the sidewalk network, individual maps were created of sidewalk projects, which includes sidewalk rehabilitation and new sidewalks on one or both sides of the street. The individual sidewalk project maps were developed for the following communities:

- City of Montgomery Central Business District
- Eastern City of Montgomery
- Midtown City of Montgomery
- Southern City of Montgomery
- Western City of Montgomery
- City of Millbrook
- City of Prattville
- City of Wetumpka

Sidewalk Projects Map for the Montgomery Central Business District

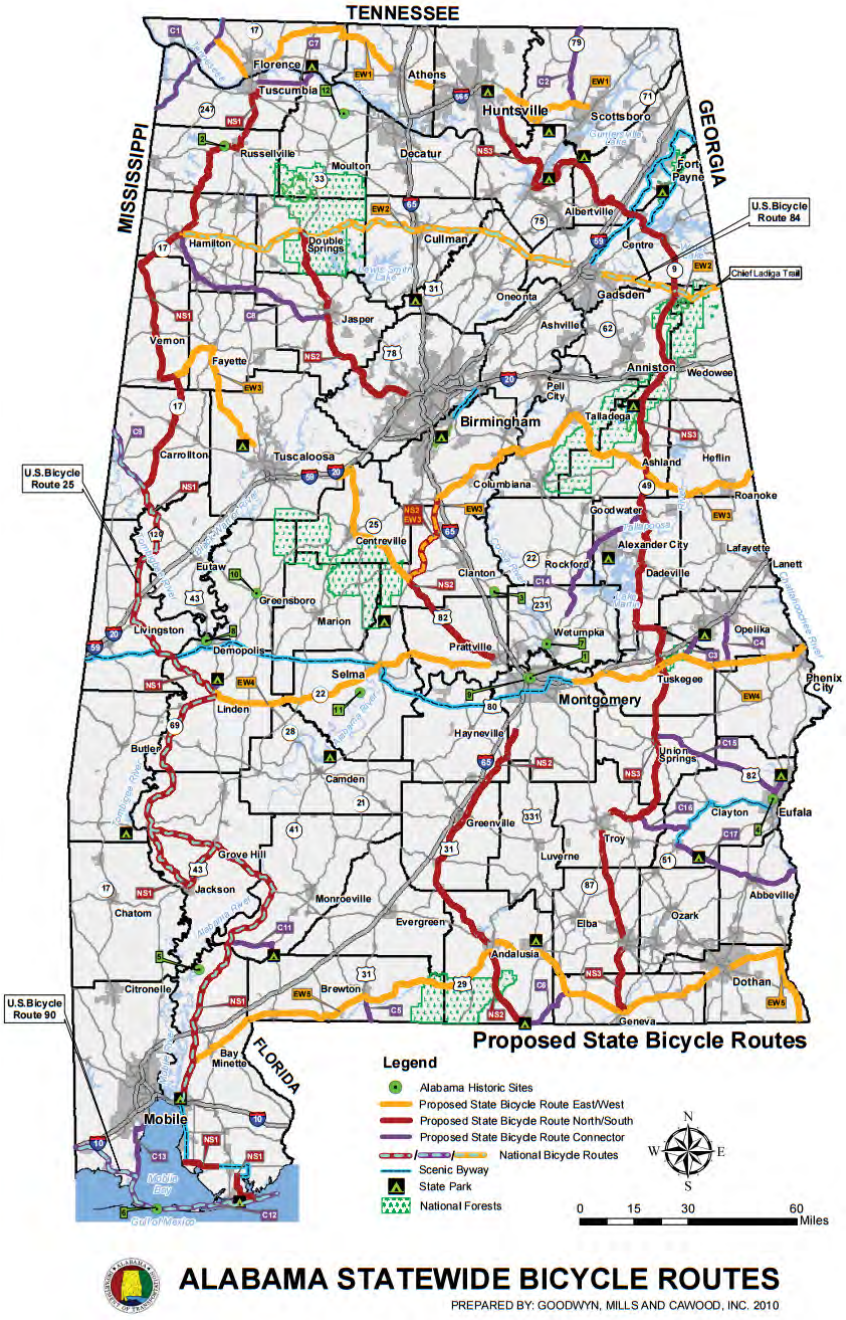
2010 ALDOT BICYCLE AND PEDESTRIAN PLAN

Year: 2010

Description: The Alabama Department of Transportation (ALDOT) developed the 2010 Bicycle and Pedestrian Plan to reduce barriers to local and regional bicycle and pedestrian planning and improve the design and safety for people on foot and bike on all ALDOT roadways. More specifically, the plan aims to implement a statewide bicycle network, create bicycling links between municipalities in Alabama, and build bicycle and pedestrian facilities that reflect the goals of local and regional plans. The plan elements describe four bicycle facility types – shared lane, wide outside lane, bike lane, and paved shoulder. Pedestrian facility design details are provided for sidewalks, curb ramps,detectablewarnings,channelized islands, push-buttons, audible signals, and crosswalks. Federal and local funding sources are summarized according to projects and programs. As of January 2017, ALDOT is in the process of updating the Bicycle and Pedestrian Plan.

Recommendations: Five east-west Statewide Bicycle Routes and three north-southStatewideBicycleRoutesare identified and mapped. Scenic Byways are also listed as potential state bicycle routes. Two of the Statewide Bicycle Routes pass through the Montgomery MPO:

- East/West Route 4, which follows Highway 14/22 through Prattville and Montgomery
- North/South Route 2, which follows Highway 82 into Prattville and Highway 31 south from Montgomery



Map of All Alabama State Bicycle Routes

ELMORE COUNTY OUTDOOR RECREATION PLAN

Year: 2014

Description: The 2014 Elmore County Outdoor Recreation Plan is a framework for increasing tourism and economic development opportunities through public access to quality recreation facilities. The Elmore County Commission led the planning process for the Outdoor Recreation Plan, supported by the Central Alabama Regional Planning and Development Commission (CARPDC). Public input on recommendations were gathered at meetings in Wetumpka, Millbrook/Coosada, Holtville, and Tallassee. A working group comprised of representatives from eight municipalities in the county, the county commission, and the school board also reviewed recommendations. Four overarching goals are outlined: 1) Provide county-wide access to outdoor recreation, 2) Connect recreation facilities to build synergy, 3) Support community development and economic growth, and 4) Enhance tourism infrastructure.

Recommendations: Based on public input, recommendations were divided into recreation opportunities and tourism opportunities. Several trail projects were mentioned in the listening sessions, and potential trail projects listed in the recommendations are outlined below:

Tallassee:

- Expand trails from downtown north along Yates Lake to the nature preserve
- Expand trails south from the APCO Thurlow Dam along the river to the AES boat ramp

Wetumpka:

- Expand a walking trail on the Coosa River from Bibb Graves Bridge to the Hwy 14 sports complex
- Build a trail from downtown to the Jordan dam
- Build a trail from downtown south to Ft. Toulouse

Wetumpka to Elmore:

- Develop a rail-to-trail from Wetumpka to the Town of Elmore

Abundant tourism opportunities are outlined for development into cultural, historic, and recreation resources. Many have the potential to improve walkability and bikeability in Elmore County, particularly the Swayback Bridge Trails network. A Wayfinding system is also listed as a key strategy for increasing tourism and building awareness of existing recreation facilities.

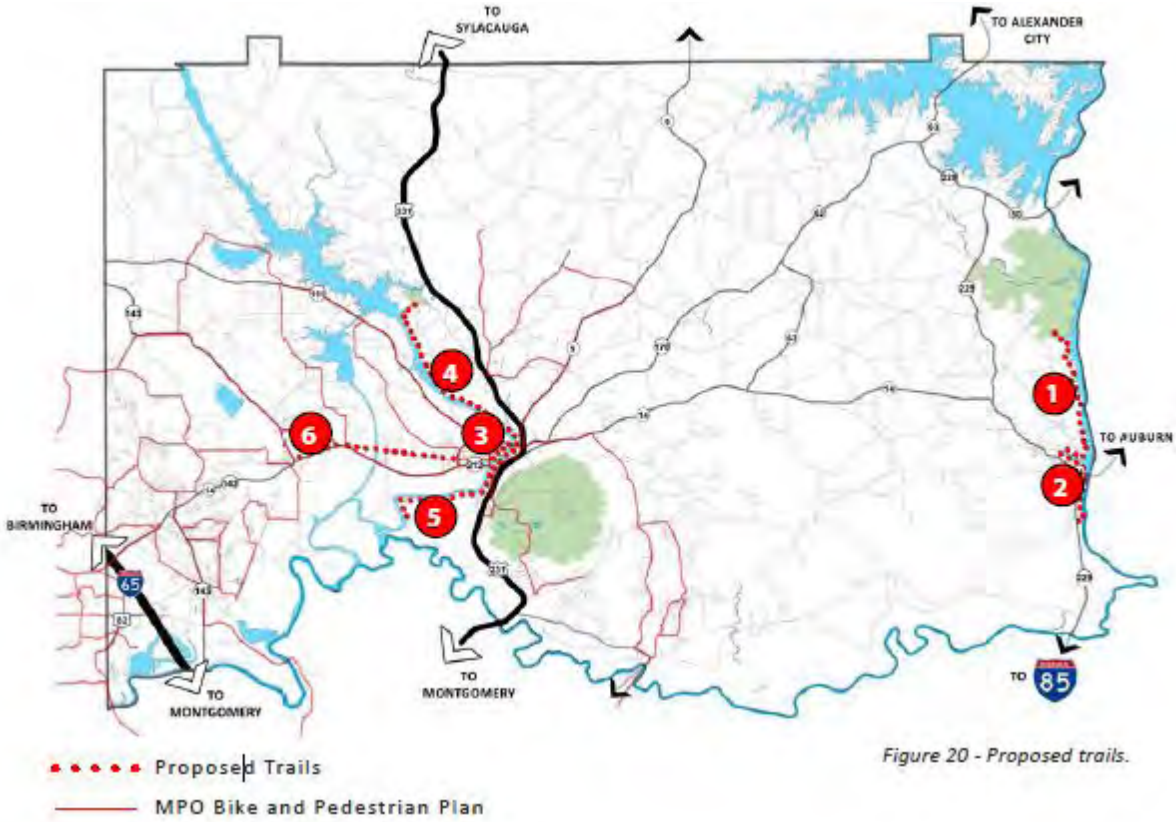


Figure 20 - Proposed trails.

Map showing proposed trails in Elmore County

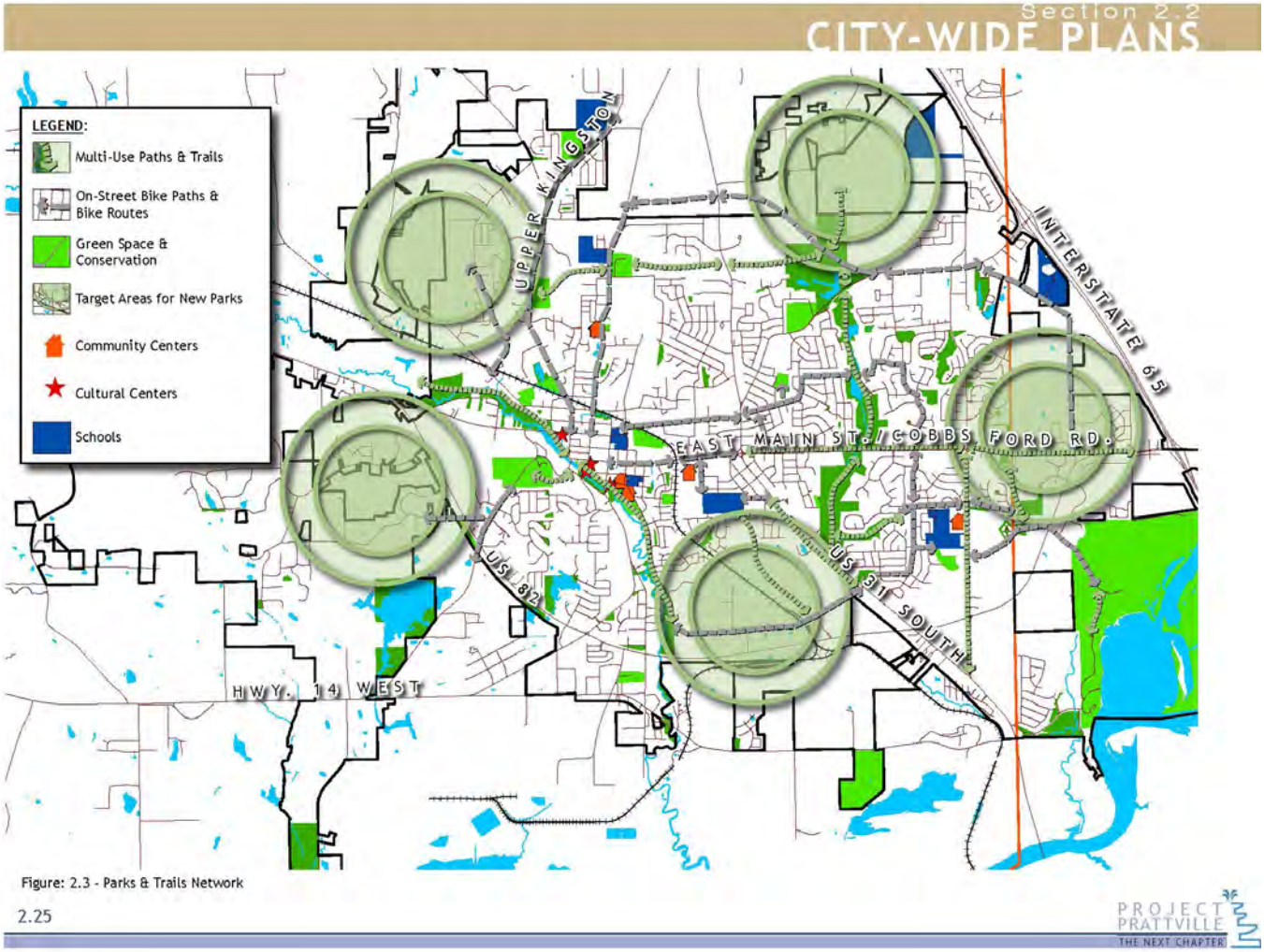
PRATTVILLE COMPREHENSIVE PLAN

Year: 2010

Description: The Prattville Comprehensive Plan, also known as Project Prattville, is a strategic guide to achieving a collective vision and community objectives. Through a public outreach process, community objectives were grouped according to Land Use, Economic Development, Housing, Transportation & Circulation, and Community Facilities. Goals under Transportation & Circulation include growing a multimodal transportation system and creating a connected network of parks through on and off-street paths.

Recommendations: Recommended projects for implementation are grouped according to type: Capital, Economic Development, Organizational, Planning, and Regulatory. Planning projects are summarized in the Comprehensive Plan with information on funding, workflow, and responsibilities along with a priority ranking from 1 to 4. Projects with the potential to improve biking and walking facilities include:

- City-wide Trails Plan (Priority 1)
- Expand the Creekwalk (Priority 1)
- Conduct a Downtown Greenspace Study (Priority 2)
- Bicycle Route Signage (Priority 2)
- Trail Segment Feasibility Studies (Priority 3)
- Walkable Schools Initiative (Priority 3)



Map of the parks and trail recommendaitons from the 2010 Prattville Comprehensive Plan

DOWNTOWN MONTGOMERY PLAN

Year: 2007

Description: Historic downtown Montgomery has seen a resurgence in growth and activity in recent years, mirroring national trends. Radiating outwards from the Alabama Riverfront, the Capital city's downtown has a bright future as residents converge for employment, recreation, and entertainment. The Downtown Montgomery Plan, adopted in 2007, charted a path for renewal that is still relevant ten years later. The plan includes a history of the study area, an architectural overview, and an analysis of the street network. Public input included design charrettes and downtown tours to get a sense of community needs and priorities.

Recommendations: The Downtown Montgomery Plan is largely centered on land use recommendations such as the development of a Smartcode to guide zoning and urban design. However, a key objective outlined in the plan is to "promote a better balance of transportation options and design" which includes a "pedestrians first" philosophy. A separate transportation analysis chapter identifies key mobility and streetscape improvements.

Among the transportation goals and other recommendations for pedestrian improvements:

- Creating walkable thoroughfares through land use development patterns
- Returning one-way streets to a two-way configuration
- Improving walkability on Dexter Avenue through streetscape enhancements
- Restoration of the Court Square Plaza
- Balancing parking supply and demand
- Formalize the Selma to Montgomery National Voting Rights Trail

The Illustrative Master Plan was created during the charrette. The plan synthesizes community ideas and depicts the idealized build-out for Downtown. This map is for illustrative purposes and is not a regulating document. The Illustrative Master Plan identifies key opportunity parcels for infill development and preservation of open space.

Illustration of the Downtown Montgomery Master Plan

BICYCLE LEVEL OF TRAFFIC STRESS

Given the limitations of the robust data typically required as inputs for a level of traffic stress analysis, the project team recreated and adopted the results of a bicycle suitability analyses conducted for the Montgomery MPO 2012 Bicycle and Pedestrian Plan. This analysis, while conducted in 2005, were groundtruthed and vetted to represent current true conditions. The results allowed the project team to glean a high-level perspective about which major streets in the region are comfortable and which pose high stress for bicyclists.

METHODOLOGY

The methods for a level of traffic stress analysis are adapted from the 2012 Mineta Transportation Institute (MTI) *Report 11-19: Low-Stress Bicycling and Network Connectivity.* The approach outlined in the MTI report uses roadway network data, including posted speed limit, the number of travel lanes, and presence and character of bicycle lanes. These factors serve as a proxy for bicyclists' level of comfort along roadway segments. Road segments are classified into one of four levels of traffic stress based on these criteria. The lowest level of traffic stress, LTS 1, is assigned to roads that would be tolerable for most children to ride and also to shared use paths that are separated from traffic.

LTS 1	Presenting little traffic stress and demanding little attention from cyclists, and attractive enough for a relaxing bike ride. Suitable for almost all cyclists, including children trained to safely cross intersections. On links, cyclists are either physically separated from traffic, or are in an exclusive bicycling zone next to a slow traffic stream with no more than one lane per direction, or are on a shared road where they interact with only occasional motor vehicles (as opposed to a stream of traffic) with a low speed differential. Where cyclists ride alongside a parking lane, they have ample operating space outside the zone into which car doors are opened. Intersection are easy to approach and cross.
LTS 2	Presenting little traffic stress and therefore suitable to most adult cyclists but demanding more attention than might be expected from children. On links, cyclists are either physically separated from traffic, or are in an exclusive bicycling zone next to a well-confined traffic stream with adequate clearance from a parking lane, or are on a shared road where they interact with only occasional motor vehicles (as opposed to a stream of traffic) with a low speed differential. Where a bike lane lies between a through lane and a right turn lane, it is configured to give cyclists unambiguous priority where cars cross the bike lane and to keep car speed in right-turn lane comparable to bicycling speeds. Crossings are not difficult for most adults.
LTS 3	More traffic stress than LTS 2, yet markedly less than the stress of integrating with multilane traffic, and therefore welcome to many people currently riding bikes in American cities. Offering cyclists either an exclusive riding zone (lane) next to moderate-speed traffic or shared lanes on streets that are not multilane and have moderately low speed. Crossings may be longer or across higher-speed roads than allowed by LTS 2, but are still considered acceptably safe to most adult pedestrians.
LTS 4	A level of stress beyond LTS 3

Based on the data, the project team deduced that the original 2005 analysis used speed, volume, and functional classification of roads to determine level of traffic stress. The analysis did not account for the prevalence of bicycle facilities such as paved shoulders, bike lanes, or shared use paths, which contribute to an increased level of comfort. In addition, not all roads in the region were analyzed. Local roads, typically low-volume, low-speed residential streets, were excluded. The rest of the roadway network was assigned a LTS score according to the criteria in the table.

At the core of the LTS methodology and scoring is the belief that bicyclists experience decreased comfort as the number of lanes and speed limit increases.

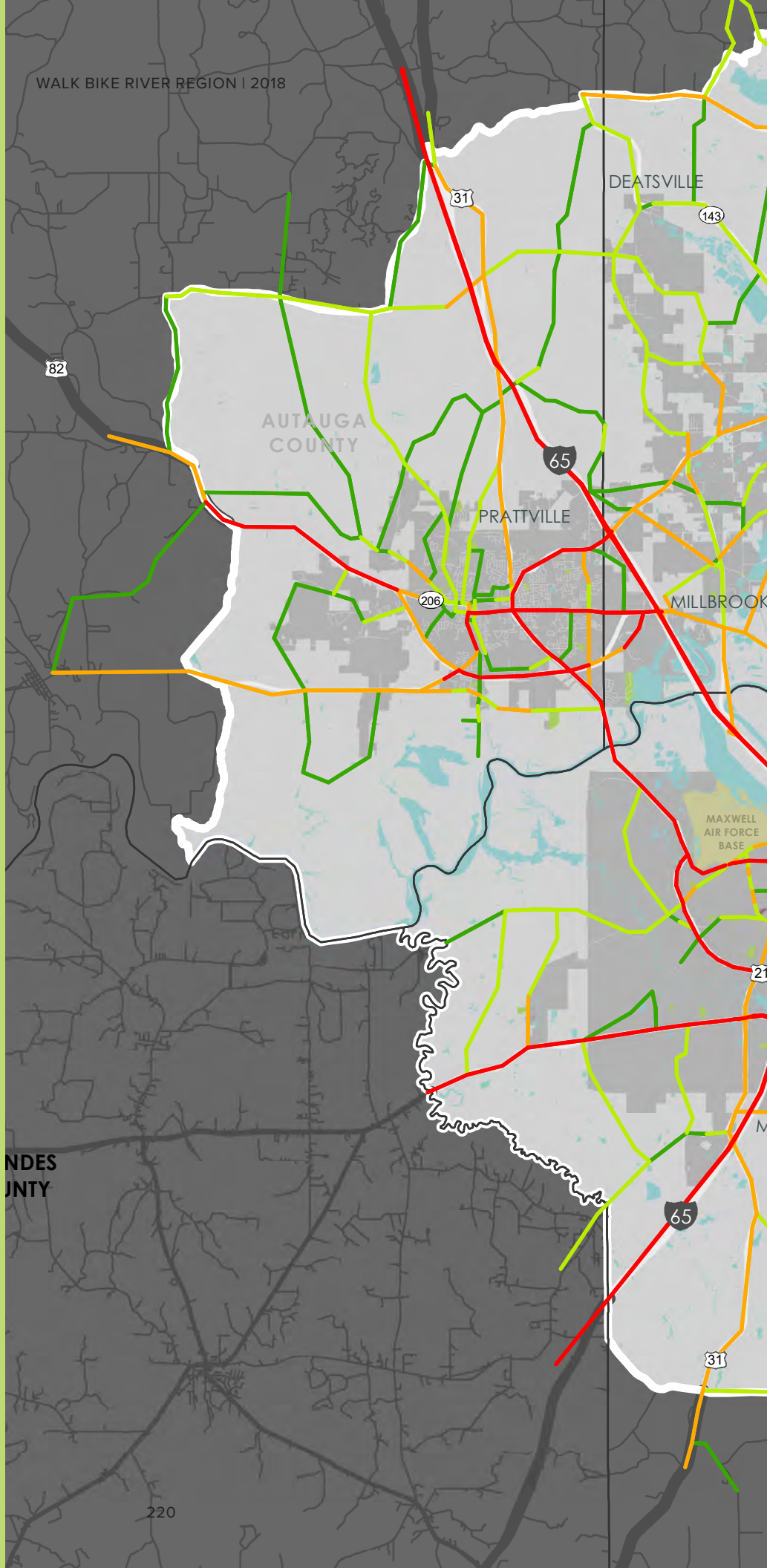
RESULTS

The results of the segment-based Level of Traffic Stress (BLTS) analysis are shown in the map on the following page. Much of the network consists of clusters of low- to moderate-stress facilities divided by high-stress state highways, US highways, and the Interstate. The low-to moderate-stress roads in Autauga and Elmore County are largely rural roads, while the opposite is true for Montgomery County whereby lower stress roads are centered around downtown Montgomery.

It may be difficult for bicyclists to ride from low-stress streets to other low-stress streets if they have to cross a high-stress segment. The map on the following page shows that there are clusters of low stress facilities but it is hard to get from one low stress facility to another without crossing a high stress facility. The greatest barriers to bicycle travel are arterials and collectors, such as Madison Avenue/Atlanta Highway, Maxwell Boulevard, Fairview Avenue, Cobbs Ford Road, and Highway 231.

The BLTS results provide useful depictions of the quality of infrastructure serving bicyclists in the River Region. The pockets of contiguous low-stress roads across the three counties offer higher levels of comfort. However, these areas are isolated and cut-off by high-stress facilities that make biking continuously along low-stress roads difficult. Shared use paths that are adjacent to roadways offer alternatives for bicyclists to travel off-road, and the results underscore the need for more facilities of these kinds in order to address bicyclist comfort, especially along major arterials and collectors.

2005 BICYCLE LEVEL OF TRAFFIC STRESS RESULTS

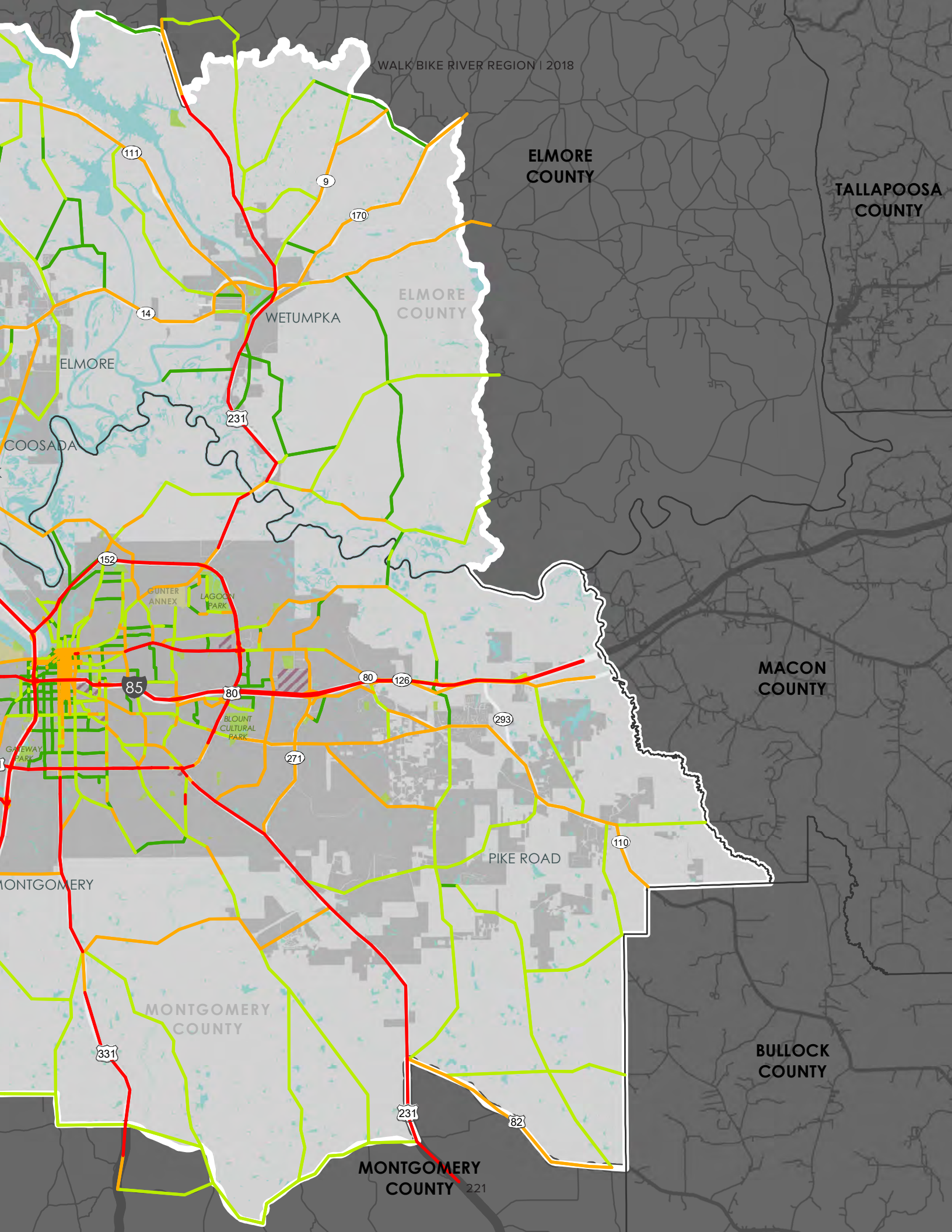


2005 Bicycle Level of Traffic Stress

- High-Stress
- Low-Stress
- MPO Boundary (white)
- County Boundary
- Park
- Military Base
- College Campus
- Water Body
- Region Outside MPO

N

0 2.5 5 Miles


ELMORE COUNTY
TALLAPOOSA COUNTY
ELMORE COUNTY
WETUMPKA
ELMORE
COOSADA
GUNTER ANNEX
LAGOON PARK
BLOUNT CULTURAL PARK
GATEWAY PARK
MONTGOMERY
PIKE ROAD
MACON COUNTY
MONTGOMERY COUNTY
BULLOCK COUNTY
MONTGOMERY COUNTY
111
9
170
14
231
152
85
80
126
293
271
110
331
82
221

PRIORITIZATION FRAMEWORK

Project prioritization is a useful tool for ensuring that implementation provides the highest value of investments and best meets the goals and objectives of the Plan. Prioritization also ensures that projects of greatest need and benefit are implemented first, that implementation capitalizes on programmed investments and leverages new infrastructure, and that improvements are distributed equitably.

The framework for the prioritization is anchored by the following key parameters:

- prioritizing based on regional goals
- prioritizing pedestrian and bicycle projects together, rather than separately
- using the same prioritization methodology for linear improvements as for spot improvements
- using prioritization criteria that are data-driven, measurable, and reproducible using GIS

All proposed linear improvements are segmented at logical start and end points. These project segments, as well as each spot improvement are individually scored based on a set of project criteria with associated weights.

Prioritization factors and weights are based upon the input that the project team received from the Walk Bike River Region Steering Committee and the public. These criteria and weights can be seen in the following table.

Steering committee members vote on the weights of each criteria. The more almonds a crieria received, the greater the associated weight.

PRIORITIZATION CRITERIA + WEIGHTS

Criteria	Description	Input Source	Measurements	Max Possible Points
Safety	Measures the need for addressing safety issues for people on foot or bike.	Safety Analysis	• Regional and local high crash corridors • Regional and local medium crash corridors	25
Network Connectivity	Measures whether a proposes project would fill a gap in the network or connect to existing facility.	Montgomery MPO map of existing facilities	• Connects to existing facility	15
Demand	Measures demand for walking and biking based on population density, job density, amenities, and other factors.	Demand Analysis	• Highest demand area • Medium demand area	15
Feasibility of Implementation	Measures potential feasibiilty based on difficulty of implementation and funding availability.	Funded project list through 2021, need for additional ROW	• Project is funded • Project facility does not require ROW acquisition	15
Local Access	Measures access to schools, parks, and community centers.	Montgomery MPO maps of schools, parks, and community centers	• Connects within 1/4 mile to school, park, or community center (up to 2)	10
Regional Access	Measures access to major regional destinations such as historic sites, downtowns, and shopping centers.	Regional destinations map	• Connects within 1/4 mile to regional destination (up to 2)	10
Equity	Measures concentration of disadvantaged communities.	Equity Analysis	• Highest concentration of vulnerable population • Medium concentration of vulnerable population	10

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- AASHTO. Guide for the Development of Bicycle Facilities, 2012.
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- FHWA. Road Diet Informational Guide, 2014.
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- FHWA. Incorporating On-road Bicycle Networks in to Resurfacing Projects, 2015.
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- FHWA. Pedestrian Hybrid Beacon Guide, Recommendations and Case Study, 2014.
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- King, Michael, Andy Clarke, and Charles Zegeer. Bicycle Facility Selection: A Comparison of Approaches. 2002.
- NACTO. Urban Bikeway Design Guide, 2012.
- NACTO. Urban Street Design Guide, 2013.
- NCHRP. Report 766: Recommended Bicycle Lane Widths for Various Roadway Characteristics, 2014.

BIKEWAY FACILITY GUIDANCE

- AASHTO Guide for the Development of Bicycle Facilities (2012) provides guidance on appropriate context for bicycle facilities, including shared roadway conditions.
- AASHTO A Policy on Geometric Design of Highways and Streets (2011) defines geometric design requirements and differences between high-speed, low-speed, and very-low volume streets.
- Bicycle Facility Selection: A Comparison of Approaches (2002) by Michael King, Andy Clarke, and Charles Zegeer, evaluates bicycle facility selection guidelines from a variety of published national, state, and local design manuals, in order to determine whether global consensus exists that could lead toward establishing minimum standards.

  FHWA Manual on Uniform Traffic Control Devices (2009) regulates the use of signing and marking on streets, including volume and speed guidance related to centerlines markings and shared lane markings, both elements necessary for implementation of bicycle boulevards and shared roadways.
- NACTO Urban Bikeway Design Guide (2012) provides detailed guidance on bicycle boulevards, bike lanes, and separated bike lanes (cycle tracks).
- NCHRP Report 766: Recommended Bicycle Lane Widths for Various Roadway Characteristics (2014) describes characteristics which impact bicycle positioning, and where buffers may be beneficial for influencing safety.

PROJECT TABLES

CORRIDOR NAME	FROM	TO	COUNTY	FACILITY TYPE
N. Bridge St	Coosa River Pkwy	Elmore Rd	Elmore	Advisory Bike Lanes
N. Memorial Dr	850' S of Powell Rd	E 6th St	Autauga	Bike Lanes
Mt. Meigs	Adam Ave	Madison Ave	Montgomery	Bike Lanes
Harrison Rd	Ann St	Perry Hill Dr	Montgomery	Bike Lanes
Wares Ferry Rd	Atlanta Hwy	Eastern Blvd	Montgomery	Bike Lanes
Harris Way	Carter Hill Rd	325' N of Interstate 85	Montgomery	Bike Lanes
Narrow Lane Rd	Carter Hill Rd	1700' N of Seibles Rd	Montgomery	Bike Lanes
Main St	Chestnut St to	New Moon Dr	Autauga	Bike Lanes
Thomas Ave	College Ave	1100' N of Adrian Lane	Montgomery	Bike Lanes
Bridge St	Coosa River Pkwy	N Bridge St	Elmore	Bike Lanes
N Ct St	CSX Rail Trail 1	Jefferson St	Montgomery	Bike Lanes
S. Ripley St	Dexter Ave	Highland Ave	Montgomery	Bike Lanes
Chestnut St	E 6th St	1st St	Autauga	Bike Lanes
Woodley Rd	E Fairview Ave	Southern Blvd	Montgomery	Bike Lanes
Wares Ferry Rd	Eastern Blvd	Wares Ferry Rd/ McLemore Dr	Montgomery	Bike Lanes
Sheila Blvd/Jasmine Trail	Fairview Ave	S Memorial Dr	Autauga	Bike Lanes
Norman Bridge Rd	Fielder Ave	Southern Blvd	Montgomery	Bike Lanes
Patton/Adrian Ln	Proposed Shared Use Path	Narrow Lane Dr	Montgomery	Bike Lanes

PROJECT TABLES

CORRIDOR NAME	FROM	TO	COUNTY	FACILITY TYPE
4th St	Gin Shop Hill Rd	Washington St	Autauga	Bike Lanes
Hall St	Hall St	Madison Ave	Montgomery	Bike Lanes
Jefferson Davis	Hill St	S Ct St	Montgomery	Bike Lanes
Edgemont Ave	Interstate 65	Norman Bridge Rd	Montgomery	Bike Lanes
Dalraida Rd	Kershaw Rail Trail	Atlanta Hwy	Montgomery	Bike Lanes
Vandiver Blvd	Lower Wetumpka Blvd	Fairground Rd	Montgomery	Bike Lanes
Capitol Pkwy	Madison Ave	Highland Ave	Montgomery	Bike Lanes
Mildred St	Mobile St	S Ct St	Montgomery	Bike Lanes
Glen Gratton Dr	Norman Bridge Rd	Woodley Rd	Montgomery	Bike Lanes
W Main St	N Chestnut St	E Fourth St	Autauga	Bike Lanes
Lower Wetumpka Rd	N Decatur St	Alabama River Pkwy	Montgomery	Bike Lanes
N. Ripley St	N Ripley St	Madison Ave	Montgomery	Bike Lanes
Upper Wetumpka Rd/ Fairground Rd	N Ripley St	E Vandiver Blvd	Montgomery	Bike Lanes
Vaughn Rd	Old Pike Rd	.25 Miles E of CR 247	Montgomery	Bike Lanes
Highland Ave	S Ct St	S Union St	Montgomery	Bike Lanes
Adam Ave	S Ct St	S Ripley St	Montgomery	Bike Lanes
Carter Hill Rd	S Union St	Vaughn Rd	Montgomery	Bike Lanes
N. Bridge St	Southern Blvd	Virginia Loop Rd	Montgomery	Bike Lanes

PROJECT TABLES

CORRIDOR NAME	FROM	TO	COUNTY	FACILITY TYPE
Fieldcrest Dr	Vaughn Rd	McGehee Rd	Montgomery	Bike Lanes
Ct St	W 6th St	Tichnor Ave	Autauga	Bike Lanes
Oak St	W Fairview Ave	CSX Rail Trail	Montgomery	Bike Lanes
Rosa Parks Ave	W Fairview Ave	Southern Blvd	Montgomery	Bike Lanes
S. Washington St	Wetumpka St	Deer Trace	Autauga	Bike Lanes
Wetumpka St	S Washington St	N Memorial Dr	Autauga	Bike Lanes
Fisk Rd/Carter Hill Rd	Woodley Rd	Vaughn/Carter Hill Rd	Montgomery	Bike Lanes
McGehee Rd	Woodley Rd	Eastern Blvd	Montgomery	Bike Lanes
Vaughn Rd	Zelda Rd	Perry Hill Rd	Montgomery	Bike Lanes
Poplar St	End of Poplar St	E Poplar St	Autauga	Bike Ped Connection
Highland Ave	Foster Ave	Lincoln Rd	Montgomery	Buffered Bike Lanes
N. Ripley St	Madison Ave	Dexter Ave	Montgomery	Buffered Bike Lanes
E. Main St	Memorial Dr	New Moon Dr	Autauga	Buffered Bike Lanes
Highland Ave	S Union St	Forest Ave	Montgomery	Buffered Bike Lanes
Bellingrath Rd	CR 23	Robinson Spring Rd (Hwy 14)	Elmore	From Trail of Legends
Coliseum Blvd/Alabama River Pkwy	1000' N of North Blvd	850' N of Chisolm St	Montgomery	New Sidewalk
E Patton Ave/Adrian Lane	1200' W of Norman Bridge Rd	Narrow Lane Rd	Montgomery	New Sidewalk
Atlanta Hwy	1350' E of Federal Dr	Eastern Blvd	Montgomery	New Sidewalk

PROJECT TABLES

CORRIDOR NAME	FROM	TO	COUNTY	FACILITY TYPE
Upper Wetumpka Rd	1500' W of N Capitol Pkwy	N Capitol Pkwy	Montgomery	New Sidewalk
McGehee Rd	3000' NW of Southern Blvd	Southern Blvd	Montgomery	New Sidewalk
Zelda Rd/Carter Hill Rd	350' N of Vaughn Rd	550' S of Vaughn Rd	Montgomery	New Sidewalk
Carter Hill Rd	350' W of Mulberry St	Zelda Ave	Montgomery	New Sidewalk
Hayneville Rd	3650' E of Ashley Rd	Selma-Mobile Hwy	Montgomery	New Sidewalk
N Decatur St	700' N of Clisby Park	450' N of Clisby Park	Montgomery	New Sidewalk
Sidewalk across the Coosa River Pkwy	Across the Coosa River Pkwy	<Null>	Elmore	New Sidewalk
Lower Wetumpka Rd	Alabama River Pkwy	1000' N of N Decatur St	Montgomery	New Sidewalk
Maple St	Bridge St	E Fourth St	Autauga	New Sidewalk
McGehee Rd	Carter Hill Rd	South Blvd	Montgomery	New Sidewalk
Narrow Lane Rd	Carter Hill Rd	Southern Blvd	Montgomery	New Sidewalk
Upper Wetumpka Rd	Crestview St	Biltmore Ave	Montgomery	New Sidewalk
Federal Dr	Crestview St	500' S of Biltmore Ave	Montgomery	New Sidewalk
N Decatur St	CSX Rail Trail 1	450' N of Clisby Park	Montgomery	New Sidewalk
S Memorial Dr	E Main St	Sheila Blvd	Autauga	New Sidewalk
Norman Bridge Rd	E Patton Ave	750' S of E Patton Ave	Montgomery	New Sidewalk
Main St	Edgewood Rd	Grandview Rd	Elmore	New Sidewalk
S Decatur St	Felder Ave	E Fairview Ave	Montgomery	New Sidewalk

PROJECT TABLES

CORRIDOR NAME	FROM	TO	COUNTY	FACILITY TYPE
N Memorial Dr	Fairview Ave	E Main St	Autauga	New Sidewalk
McGehee Rd/Woodley Rd	Fisk Rd	Southern Blvd	Montgomery	New Sidewalk
Bridge St	Gin Shop Hill Rd	W Main St	Autauga	New Sidewalk
NW Main St	Holtville Rd	300' S of Holtville Rd	Elmore	New Sidewalk
E S Boundary St	Main St	Wetumpka Hwy	Elmore	New Sidewalk
Woodley Rd	Narrow Lane Rd	McGehee Rd	Montgomery	New Sidewalk
Fairview Ave	N Memorial Dr	Diane Dr	Autauga	New Sidewalk
E Main St	Old Farm Lane	400' W of Interstate 65	Elmore	New Sidewalk
E. Main St	Old Farm Lane	450' W of Interstate 95	Elmore	New Sidewalk
Norman Bridge Rd	Ponce De Leon Ave	E Edgemont Ave	Montgomery	New Sidewalk
E Main St	Pratt St	S Memorial Dr	Autauga	New Sidewalk
Doster Rd	Pratt St	Summer Hill Rd	Autauga	New Sidewalk
Main St	Robinson Spring Rd	Robert E Lee Dr	Elmore	New Sidewalk
W/E Fairview Ave	S Ct St	Norman Brudge Rd	Montgomery	New Sidewalk
Sheila Blvd	S Memorial Dr	Jay St	Autauga	New Sidewalk
Wetumpka St	S Nington St	N Memorial Dr	Autauga	New Sidewalk
Airbase Blvd	Terminal Rd	Selma-Mobile Hwy	Montgomery	New Sidewalk
Lower Kingston Rd	W 6th St	E 4th St	Autauga	New Sidewalk

PROJECT TABLES

CORRIDOR NAME	FROM	TO	COUNTY	FACILITY TYPE
Selma-Mobile Hwy	Western Blvd	Airbase Blvd	Montgomery	New Sidewalk
County Line Rd/Old Prattville Rd	1100' W of CR 85	Robinson Spring Rd	Autauga/Elmore	Paved Shoulder
Narrow Lane Rd	1800' N of Seibles Rd	McInnis Rd	Montgomery	Paved Shoulder
Edgewood Rd/Coosada Rd	2000' W of Grandview Rd	Coosada Pkwy	Elmore	Paved Shoulder
Fogarty Rd	3000' W of Village Creek Rd	County Line	Autauga	Paved Shoulder
Deatsville Hwy	550' N of CR 124	Robinson Spring Rd	Elmore	Paved Shoulder
CR 232	CR 233	CR 4	Autauga/Montgomery	Paved Shoulder
CR 23	CR 474	SR 111	Elmore	Paved Shoulder
Edgewood Rd	CR 68	Cobbs Ford Rd	Elmore	Paved Shoulder
Fairview Ave	Diane Dr	County Line	Autauga	Paved Shoulder
Lower Kingston Rd	Durden Rd	W 6th St	Autauga	Paved Shoulder
Wasden Rd	End of Roadway	Lamar Rd	Montgomery	Paved Shoulder
SR 111	Hwy 143	CR 366	Elmore	Paved Shoulder
CR 172	Ingram Rd	CR 162	Elmore	Paved Shoulder
CR 101	Meriwether Rd	AL 6	Montgomery	Paved Shoulder
Browns Rd/CR 119	Robinson Spring Rd	Robinson Spring Rd	Elmore	Paved Shoulder
Lamar Rd	Selma Hwy	Wasden Rd	Montgomery	Paved Shoulder
Memorial Dr/ Birmingham Hwy	Sheila Blvd	1250' S of Moore Dr	Autauga	Paved Shoulder

PROJECT TABLES

CORRIDOR NAME	FROM	TO	COUNTY	FACILITY TYPE
Coosa River Pkwy	SR 111	CR 23	Elmore	Paved Shoulder
CR 366	SR 111	CR 20	Elmore	Paved Shoulder
Doster Rd	Summer Hill Dr	S Memorial Dr	Autauga	Paved Shoulder
Old Pike Rd	Pike Rd	CR 82	Montgomery	Paved Shoulder
Ingram Rd	Thornfield Dr	CR 172	Elmore	Paved Shoulder
N. Memorial Dr/Hwy 31	Timber Trail	850' S of Powell Dr	Autauga	Paved Shoulder
Woodley Rd	Trotman Rd	CR 70	Montgomery	Paved Shoulder
W. 4th St	US 82	Old Autaugaville Rd	Autauga	Paved Shoulder
Old Selma Rd	Western Blvd	Birmingham Hwy	Montgomery	Paved Shoulder
Vaughn Rd	1320' E of CR 247	Wallahatchie Rd	Montgomery	Paved Shoulder Bikeway
McLemore/Hwy 64	3150' NE of Atlanta Hwy	Dozier Rd	Montgomery	Paved Shoulder Bikeway
Hwy 14	900' W of Autauga County Line	1450' E of County Line	Montgomery	Paved Shoulder Bikeway
Anderson Rd	Alabama River Pkwy	Wetumpka Rd	Montgomery	Paved Shoulder Bikeway
Vaughn Rd	CR 37	County Line	Montgomery	Paved Shoulder Bikeway
Autauga County Rd 40	CR 57 / Lower Kingston Rd	Elmore CR 7	Autauga/Elmore	Paved Shoulder Bikeway
Wares Ferry Rd	Dozier Rd	Techna Center Blvd	Montgomery	Paved Shoulder Bikeway

PROJECT TABLES

CORRIDOR NAME	FROM	TO	COUNTY	FACILITY TYPE
Hwy 14	Fairview Rd	W Bridge Rd/W Coosa Pkwy	Elmore	Paved Shoulder Bikeway
Willow Springs Rd	Jasmine Hill Rd	Redland Rd	Elmore	Paved Shoulder Bikeway
Woodley Rd	McInnis Rd	Trotman Rd	Montgomery	Paved Shoulder Bikeway
Redland Rd	Oak Hollow Lane	CR 222	Elmore	Paved Shoulder Bikeway
Wallahatchie Rd	Old Carterhill Rd	Vaughn Rd	Montgomery	Paved Shoulder Bikeway
Coosa	SR 111	Hwy 14	Autauga/Elmore	Paved Shoulder Bikeway
Old U.S. Hwy 231	SR 21	SR 21	Elmore	Paved Shoulder Bikeway
Pike Rd	Vaughn Rd	Ray Thorington Rd	Montgomery	Paved Shoulder Bikeway
Dozier Rd - Elmore Co	Wares Ferry Rd	CR 4	Montgomery	Paved Shoulder Bikeway
Jasmine Hill Rd	Wetumpka Hwy	Willow Springs Rd	Elmore	Paved Shoulder Bikeway
Oak Hollow Lane	Wetumpka Hwy	CR 4	Elmore	Paved Shoulder Bikeway
Tallassee Hwy	Wetumpka Hwy	900' W of CR 260	Elmore	Paved Shoulder Bikeway
Trotman Rd	Woodley Rd	Troy Hwy	Montgomery	Paved Shoulder Bikeway
Hwy 2/Cobbs Ford Rd	400' W of Interstate 65	Main St	Elmore	Paved Shoulder Bikeways

PROJECT TABLES

CORRIDOR NAME	FROM	TO	COUNTY	FACILITY TYPE
Autauga County Rd 29	CR 3062	Fogarty Rd	Autauga	Paved Shoulder Bikeways
Autauga County Rd 57/ Lower Kingston Rd	CR 40	Durden Rd	Autauga	Paved Shoulder Bikeways
Bridge Creek Rd	CR 40	Upper Kingston Rd	Autauga	Paved Shoulder Bikeways
Autauga County Rd 50	Fogarty Rd	CR 3062	Autauga	Paved Shoulder Bikeways
Old Autaugaville Rd	Fogarty Rd	E 4th St	Autauga	Paved Shoulder Bikeways
Indian Hills Rd/Golson Rd	Fogarty Rd	SR 6	Autauga	Paved Shoulder Bikeways
Alabama River Pkwy	Main St	Faro Dr	Montgomery/Elmore	Paved Shoulder Bikeways
Old Selma Rd	Montgomery County Line	Western Blvd	Montgomery	Paved Shoulder Bikeways
Upper Kingston Rd	N Memorial Dr	Crows Pass	Autauga	Paved Shoulder Bikeways
Taylor Rd	750' SW of Berryhill Rd	Vaughn Rd	Montgomery	Paved Shoulders
S. Ct St	Hyundai Blvd	1000' S of Fleming Rd	Montgomery	Paved Shoulders
Taylor Rd	Vaughn Rd	Troy Hwy	Montgomery	Paved Shoulders
N. Ct St/Jackson Ferry Rd	Alabama River Pkwy	CSX Rail Trail 1	Montgomery	Paved Shoulders
Atlanta Hwy Feeder Rd	Atlanta Hwy	Marlar Rd	Montgomery	Paved Shoulders
Marler Rd	US 80	Vaughn Rd	Montgomery	Paved Shoulders

PROJECT TABLES

CORRIDOR NAME	FROM	TO	COUNTY	FACILITY TYPE
Vaughn Rd	Wallahatchie Rd	CR 37	Montgomery	Paved Shoulders
Commerce St	750' NW of Tallapoosa St	Montgomery St	Montgomery	Separated Bike Lanes
Atlanta Hwy	Ann St	Eastern Blvd	Montgomery	Separated Bike Lanes
Tallapoosa St/ Columbus St	Commerce St	N Ripley St	Montgomery	Separated Bike Lanes
Perry St	CSX Rail Trail 1	E Delano Ave	Montgomery	Separated Bike Lanes
S. Ct St	Dexter Ave	1000' S of Fleming Rd	Montgomery	Separated Bike Lanes
S. Main St	Elmore Rd/W Bridge Rd	Wetumpka Hwy	Elmore	Separated Bike Lanes
Montgomery St	Goldthwaite St	Commerce St	Montgomery	Separated Bike Lanes
Bibb St	Goldthwaite St	Coosa St	Montgomery	Separated Bike Lanes
S. Decatur St	Madison Ave	Felder Ave	Montgomery	Separated Bike Lanes
Ann St	Madison Ave	Zelda Rd	Montgomery	Separated Bike Lanes
Madison Ave	N Ct St	Mount Meigs Rd	Montgomery	Separated Bike Lanes
Fairview Ave	Oak St	Narrow Lane Rd	Montgomery	Separated Bike Lanes
Dexter Ave	S Ct St	N Decatur St	Montgomery	Separated Bike Lanes
Adam Ave	S Ripley St	CSX Rail Trail 2	Montgomery	Separated Bike Lanes
Mobile Hwy/W. Fairview Ave	Western Blvd	Oak St	Montgomery	Separated Bike Lanes
W Osceola St	1850' E of Coosa River Pkwy	N Bridge St	Elmore	Shared Lane Markings
Hwy 14	900' W of Autauga County Line	1450' E of County Line	Autauga/Montgomery	Shared Lane Markings

PROJECT TABLES

CORRIDOR NAME	FROM	TO	COUNTY	FACILITY TYPE
Terminal Rd	Airbase Blvd	Mobile Rd	Montgomery	Shared Lane Markings
Goldthwaite St	Bell St	Mildred St	Montgomery	Shared Lane Markings
Upper Kingston Rd	Bridge Creek Rd	Crows Pass	Autauga	Shared Lane Markings
Gardner Rd	Bridge Creek Rd	Martin Luther King Dr	Autauga	Shared Lane Markings
College St	Carter Hill Rd	E Fairview Ave	Montgomery	Shared Lane Markings
Princeton/Lebron	Cloverdale Rd	E Patton Ave/Adrian Lane	Montgomery	Shared Lane Markings
McDonough St	CSX Rail Trail 1	Highland Ave	Montgomery	Shared Lane Markings
Selma Hwy	Deer Trace	Moore Dr	Autauga	Shared Lane Markings
Fairview Ave	Diane Dr	1450' E of County Line	Autauga	Shared Lane Markings
Doster Rd	E 4th St	Summer Hill Dr	Autauga	Shared Lane Markings
N. Memorial Dr	E 6th St	E Main St	Autauga	Shared Lane Markings
S Memorial Dr	E Main St	Sheila Blvd	Autauga	Shared Lane Markings
MLK Dr	Gardner Rd	E 6th St	Autauga	Shared Lane Markings
Upper Kingston Rd	Gardner Rd	W 6th St	Autauga	Shared Lane Markings
Parkview Dr S	Halcyon Park Dr	Berryhill Rd	Montgomery	Shared Lane Markings
NW Main St	Holtville Rd	W Osceola St	Elmore	Shared Lane Markings
N. Ct St	Jefferson St	Madison Ave	Montgomery	Shared Lane Markings
Company St	Main St	Wetumpka Hwy	Elmore	Shared Lane Markings

PROJECT TABLES

CORRIDOR NAME	FROM	TO	COUNTY	FACILITY TYPE
Greencrest Lane/ Ridgewood Dr	Martin Luther King Dr	N Memorial Dr	Autauga	Shared Lane Markings
Rosa Parks Ave	Mildred St	W Fairview Ave	Montgomery	Shared Lane Markings
Mobile St	Mildred St	N Goldwaithe St	Montgomery	Shared Lane Markings
W. Bridge St	N Bridge St	S Main St	Elmore	Shared Lane Markings
Clayton St	N Goldwaithe St	S Ct St	Montgomery	Shared Lane Markings
E. Main St	N Memorial Dr	Old Farm Lane	Autauga/Elmore	Shared Lane Markings
Fairview Ave	N Memorial Dr	Diane Dr	Autauga	Shared Lane Markings
E. Main St	N Memorial Dr	Old Farm Lane	Autauga/Elmore	Shared Lane Markings
Augusta Ave	Norman Bridge Rd	Narrow Lane Rd	Montgomery	Shared Lane Markings
Clayton St	Oak St	N Goldwaithe St	Montgomery	Shared Lane Markings
Poplar St	Proposed CSX Rail Trail 2	Ann St	Montgomery	Shared Lane Markings
Mill St	Proposed Shared Use Path	Rosa L Parks Ave	Montgomery	Shared Lane Markings
Felder Ave	S Ct St	Carter Hill Rd	Montgomery	Shared Lane Markings
Clayton St	S Ct St	S Union St	Montgomery	Shared Lane Markings
Cloverdale Rd	S Hull St	E Fairview Ave	Montgomery	Shared Lane Markings
Memorial Dr/ Birmingham Hwy	S Memorial Dr	County Line	Autauga	Shared Lane Markings
University Dr/Tuttle/ Pineleaf St	S Union St	Carter Hill Rd	Montgomery	Shared Lane Markings
Plantation Crossing/ Peppertree Lane	Taylor Rd	Halcyon Park Dr	Montgomery	Shared Lane Markings

PROJECT TABLES

CORRIDOR NAME	FROM	TO	COUNTY	FACILITY TYPE
S Ct St	Tichnor Ave	Chestnut St	Autauga	Shared Lane Markings
Capitol Pkwy	Upper Wetumpka Rd	Madison Ave	Montgomery	Shared Lane Markings
Lower Kingston Rd	W 6th St	E 4th St	Autauga	Shared Lane Markings
Mobile Rd	W Fairview Ave	Oak St	Montgomery	Shared Lane Markings
Edgar Nixon Ave	W Jeff Davis Ave	W Patton Ave	Montgomery	Shared Lane Markings
Ann St/Robison Hill Rd	Zelda Rd	Carter Hill Rd	Montgomery	Shared Lane Markings
CSX Rail Trail 1	1000' W of N Ct St	Upper Wetumpka Rd	Montgomery	Shared Use Path
Riverwalk Extension	4600' NW of Interstate 65	750' NW of Tallapoosa St	Montgomery	Shared Use Path
Proposed Shared Use Path	8600' E of Rucker Rd	Coosa River Trail	Elmore	Shared Use Path
CSX Rail Trail 3	900' S of Poplar St	Vaughn Rd	Montgomery	Shared Use Path
Proposed Shared Use Path	Alabama River Pkwy	Robinson Spring Rd	Elmore	Shared Use Path
Coosa River Trail	Anderson Rd	N Main St	Montgomery/Elmore	Shared Use Path
Trail Connection	Anderson Rd	Cong. WL Dickinson Dr	Montgomery	Shared Use Path
Kershaw Rail Trail 3	Atlanta Hwy	Interstate 85	Montgomery	Shared Use Path
Proposed Shared Use Path	Atlanta Hwy	Harrison Rd	Montgomery	Shared Use Path
Proposed Shared Use Path	Chisholm Park	Coliseum Pkwy	Montgomery	Shared Use Path
Proposed Shared Use Path	Cong. WL Dickinson Dr	Atlanta Hwy	Montgomery	Shared Use Path
Proposed Shared Use Path	Coosada Pkwy	8600' E of Rucker Rd	Elmore	Shared Use Path

PROJECT TABLES

CORRIDOR NAME	FROM	TO	COUNTY	FACILITY TYPE
Kershaw Rail Trail 1	Dalraida Rd	Eastern Blvd	Montgomery	Shared Use Path
Proposed Shared Use Path	Doster Rd	E. Main St (Prattville)	Autauga	Shared Use Path
Prattville Creekside Trail	E Fourth St	Doster Rd	Autauga	Shared Use Path
Kershaw Rail Trail 2	Eastern Blvd	Atlanta Hwy	Montgomery	Shared Use Path
Wetumpka Riverfront	Elmore Rd	County Rd	Elmore	Shared Use Path
Maxwell Sidepath	Eugene St	N. Holt St	Montgomery	Shared Use Path
Riverwalk Extension	Francis St	Riverwalk Stadium	Montgomery	Shared Use Path
Untitled Path	Proposed Shared Use Path	Dalraida Rd	Montgomery	Shared Use Path
Proposed Shared Use Path	Grove Park	Ida Bell Young Park	Montgomery	Shared Use Path
Rail to Trail	Hwy 143	Coosa River Pkwy	Elmore	Shared Use Path
Proposed Shared Use Path	Hwy 231	Grove Park	Montgomery	Shared Use Path
Conceptual Trail	Hyundai Blvd	Narrow Lane Rd	Montgomery	Shared Use Path
Proposed Shared Use Path	Ida Bell Young Park	Blount Cultural Park	Montgomery	Shared Use Path
Kershaw Rail Trail 4	Interstate 85	Vaughn Rd	Montgomery	Shared Use Path
Proposed Shared Use Path	Narrow Lane Rd	Troy Hwy	Montgomery	Shared Use Path
Monticello Dr	Perry Hill Rd	Eastern Blvd	Montgomery	Shared Use Path
Untitled Path	Robinson Spring Rd	CR0320	Elmore	Shared Use Path
Proposed Shared Use Path	Southern Blvd	Oak St	Montgomery	Shared Use Path

PROJECT TABLES

CORRIDOR NAME	FROM	TO	COUNTY	FACILITY TYPE
Trail Connection	Southern Blvd	Unmarked Location	Montgomery	Shared Use Path
Proposed Shared Use Path	Timber Trail	US 31	Autauga	Shared Use Path
Trail Gap Connection	Unpaved Rd	50' S of Woodmere Blvd	Montgomery	Shared Use Path
CSX Rail Trail 2	Upper Wetumpka Rd	900' S of Poplar St	Montgomery	Shared Use Path
CSX Rail Trail 4	Vaughn Rd	Eastern Blvd	Montgomery	Shared Use Path
Untitled Path	Woodmere Blvd	Bell Rd	Montgomery	Shared Use Path
Old Farm Lane	1450' N of Cobbs Ford Rd/Legends Pkwy	Cobbs Ford Rd/ Legends Pkwy	Elmore	Sidepath
Park Crossing Dr	5900' W of Ray Thorington Rd	Ray Thorington Rd	Montgomery	Sidepath
Maxwell Blvd/Bell St	Airbase Blvd	4050' E of Airbase Blvd	Montgomery	Sidepath
Bell Rd	Atlanta Hwy	Vaughn Rd	Montgomery	Sidepath
McLemore/Hwy 64	Atlanta Hwy	3150' NE of Atlanta Hwy	Montgomery	Sidepath
Taylor Rd	Atlanta Hwy	750' SW of Berryhill Rd	Montgomery	Sidepath
Perry Hill Rd	Atlanta Hwy	Vaughn Rd	Montgomery	Sidepath
Memorial Dr/ Birmingham Hwy	Autauga County Line	Airbase Blvd (Montgomery County)	Autauga/Elmore/ Montgomery	Sidepath
Vaughn Rd	Bell Rd	Old Pine Rd	Montgomery	Sidepath
Oliver Dr/AUM Dr	Bell Rd	Taylor Rd	Montgomery	Sidepath
Airbase Blvd	Bell St	Hwy 143	Montgomery	Sidepath
Airbase Blvd	Bell St	Day St	Montgomery	Sidepath

PROJECT TABLES

CORRIDOR NAME	FROM	TO	COUNTY	FACILITY TYPE
W Blvd	Birmingham Hwy	Selma-Mobile Hwy	Montgomery	Sidepath
Selma Hwy	Brewer Rd	Mobile Hwy	Montgomery	Sidepath
N. Memorial Dr/Hwy 31	CR 196	Proposed Shared Use Path Connection to Timber TR	Autauga	Sidepath
Alabama River Pkwy	Faro Dr	Coliseum Blvd	Montgomery	Sidepath
Wetumpka Hwy	CR 382	Montgomery County Line	Elmore	Sidepath
Federal Dr	Crestview St	Proposed Trail Connection	Montgomery	Sidepath
Berryhill Rd	Echase Pkwy	Berryhill Rd	Montgomery	Sidepath
Atlanta Hwy	Eastern Blvd	Techna Center Blvd	Montgomery	Sidepath
Monticello Dr	Eastern Blvd	Bell Rd	Montgomery	Sidepath
Coosa River Pkwy	Elmore Rd/W Bridge Rd	Wetumpka Hwy	Elmore	Sidepath
Vaughn Rd	Fieldcrest Dr	Bell Rd	Montgomery	Sidepath
Coliseum Blvd/Alabama River Pkwy	Lower Wetumpka Rd	1000' N of Nern Blvd	Montgomery	Sidepath
Hyundai Blvd	Mobile Hwy	Norman Bridge Rd	Montgomery	Sidepath
Ray Thorington Rd	Park Crossing Dr	Old Pike Rd	Montgomery	Sidepath
Halcyon Park Dr	Parkview Dr S	Peppertree Lane	Montgomery	Sidepath
Wetumpka Hwy	Proposed Shared Use Path	County Line	Montgomery	Sidepath
Troy Hwy	Proposed Shared Use Path	Taylor Rd	Montgomery	Sidepath
Pike Rd	Ray Thorington Rd	Meriwether Rd	Montgomery	Sidepath

PROJECT TABLES

CORRIDOR NAME	FROM	TO	COUNTY	FACILITY TYPE
Grandview Rd	Robinson Spring Rd	Main St	Elmore	Sidepath
Southern Blvd	Selma-Mobile Hwy	CSX Rail Trail 4	Montgomery	Sidepath
Troy Hwy	Taylor Rd	Trotman Rd	Montgomery	Sidepath
Echase Pkwy	Taylor Rd	Chantilly Pkwy	Montgomery	Sidepath
Ray Thorington Rd	Vaughn Rd	Park Crossing Dr	Montgomery	Sidepath
Mobile Hwy	Western Blvd	Hyundai Blvd	Montgomery	Sidepath
Tallassee St	Coosa River Pkwy	Wetumpka Riverfront	Elmore	Yield Roadway
W Osceola St	Coosa River Pkwy	1850' E of Coosa River Pkwy	Elmore	Yield Roadway
Walker St/Park St/Till St	Fairview Ave	Wright St	Autauga	Yield Roadway
NW Main St	Holtville Rd	Elmore Rd/W Bridge Rd	Elmore	Yield Roadway
Poplar St/Wright St	N Memorial Dr	End of Poplar St	Autauga	Yield Roadway
CR 10	Proposed Shared Use Path	Coosada Pkwy	Elmore	Yield Roadway

WALK
BIKE
RIVER
REGION