



LAKEWAY AREA

BICYCLE & PEDESTRIAN MASTER PLAN

SEPTEMBER 2019



CONTENTS



03 ACKNOWLEDGEMENTS

PART 1

04 INTRODUCTION

OVERVIEW

VISION AND GOALS

COMMUNITY PRIORITIES

PART 2

12 EXISTING CONDITIONS ANALYSIS

COMMUNITY PROFILE

PREVIOUS PLANS

TRENDS IN WALKING AND BIKING

EXISTING FACILITIES

OPPORTUNITIES AND CONSTRAINTS

SAFETY ANALYSIS

PART 3

24 RECOMMENDATIONS

OVERVIEW

CATALYST PROJECTS

NETWORK RECOMMENDATIONS

PROGRAMS AND POLICIES

PART 4

64 IMPLEMENTATION

OVERVIEW

ACTION STEPS FOR THE NEXT 5 YEARS

68 APPENDIX

FUNDING MECHANISMS

PLAN REVIEW

BICYCLE ROUTE MAPS

SURVEY RESULTS



ACKNOWLEDGEMENTS

PUBLIC PARTICIPANTS

Thank you to the residents of the Lakeway Area for their participation in this planning process and their passion for improving the place they call home.

PROJECT MANAGEMENT TEAM (PMT)

Thank you to the engaged leaders of the LAMTPO PMT for their continued participation throughout the planning process and for their commitment to furthering the efforts of this Plan.

LAKEWAY AREA METROPOLITAN TRANSPORTATION PLANNING ORGANIZATION (LAMTPO)

The Lakeway Area Pedestrian and Bicycle Master Plan is a collaborative effort between regional and local governments. This includes Hamblen and Jefferson Counties and local municipalities such as Morristown, Jefferson City, and White Pine. The support and contributions from the LAMTPO staff and local agencies are instrumental in the plan's development and success.



PART 1

PART 1

INTRODUCTION

OVERVIEW

VISION AND GOALS

COMMUNITY PRIORITIES

OVERVIEW

The Lakeway Area Metropolitan Transportation Planning Organization (LAMTPO) is the regional transportation planning agency for Hamblen and Jefferson Counties in eastern Tennessee, along with portions of the urbanized areas of Morristown, Jefferson City, and White Pine. The Lakeway Area Bicycle and Pedestrian Plan is the active transportation plan for the LAMTPO. This plan builds on recent efforts to develop a safe, fun, and comprehensive walking and biking network. The plan is organized into three primary chapters: Existing Conditions Analysis, Recommendations, and Implementation.



EXISTING CONDITIONS ANALYSIS

The existing conditions chapter summarizes the quantitative and qualitative findings from the project team. This includes an analysis of current conditions for walking and biking, opportunities and constraints based on fieldwork, separate crash analyses for pedestrians and bicyclists, and a sidewalk gap assessment.

RECOMMENDATIONS

This chapter is organized according to infrastructure and non-infrastructure recommendations. Catalyst projects are highlighted to build momentum towards creating a walk and bike-friendly region. Programs and policies are included with information organized into cut sheets to assist with rapid implementation.

IMPLEMENTATION

The projects and programs in this plan are meant as a guide for immediate action. This section includes steps for moving forward to build a high-quality, connected active transportation network.

PURPOSE

The primary purpose of the Lakeway Area Bicycle and Pedestrian Master 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. The plan 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.

PROJECT VISION

The Lakeway region will be home to a vibrant and connected network of walkways and bikeways that provide enjoyable and accessible options for recreation and transportation. People on foot will have enjoyable and direct sidewalk connections and frequent crossings to access basic needs. People travelling by bike will be able to reach major destinations, schools, job centers, and parks by either off-street trails or comfortable and well-designed on-street bikeways.



PROJECT GOALS

GOAL 1

Focus on improving sidewalk connectivity by filling in gaps near schools and major destinations

GOAL 2

Increase the percentage of trips that are made by walking and biking

GOAL 3

Create synergy by fast-tracking catalyst projects that have the backing of local governments and the community

GOAL 4

Increase the number of events that promote walking and biking as fun and rewarding activities

GOAL 5

Generate interest and support through creative, low-cost, easy-to-implement projects that can demonstrate high-impact improvements

GOAL 6

Establish downtown Morristown and Jefferson City as walking and biking hubs to generate economic development and create a focus for improvements

PROCESS

The development of this plan took place over a six-month period starting in March 2019.

Key components of the process included:

- A project kickoff meeting to develop project goals, identify opportunities and constraints, and refine the schedule
- Project Management Team meetings to gather input and provide updates
- An existing conditions report summarizing a plan review, pedestrian and bicycle safety, and gaps in the sidewalk network
- Public input collected through an online survey, 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

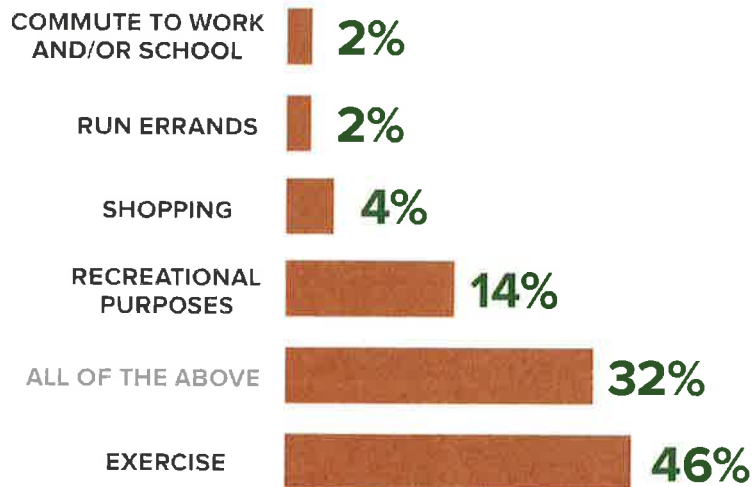
COMMUNITY PRIORITIES

The Lakeway Area Bicycle and Pedestrian Master Plan gathered feedback through the Project Management Team, an online survey, tabling at local events, and an open house.

SURVEY SUMMARY

Between February and June 2019, a pedestrian survey and a bicycle survey were posted to the main page of the LAMTPO website. Sixty residents completed the bicycle survey and 50 residents completed the pedestrian survey. Each survey included ten primary questions along with demographic information. Through the surveys, residents were asked to identify their primary purpose for walking and biking, how comfortable they felt walking and biking in the region, and opportunities to improve safety. The survey also provided an opportunity for residents to prioritize future transportation investment and suggest funding sources for non-motorized infrastructure. Highlights from both surveys are listed here, and the full survey results can be found in the appendix.

WHAT IS YOUR PRIMARY PURPOSE FOR WALKING?

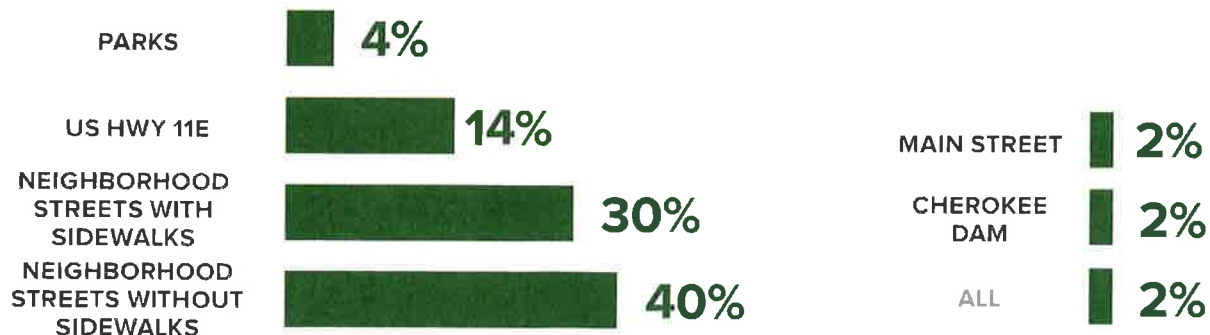


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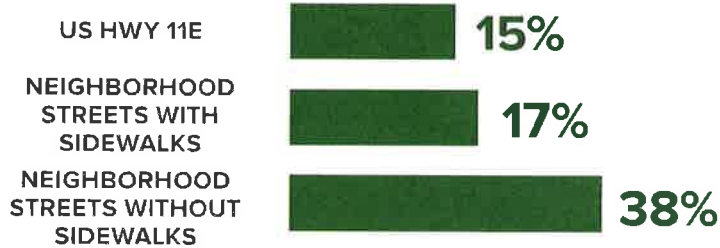
OF SURVEY RESPONDENTS BELIEVE THERE ARE NOT ENOUGH SIDEWALKS AND/OR GREENWAY PATHS WITHIN THE LAMTPO REGION



WHERE DO YOU NORMALLY WALK?



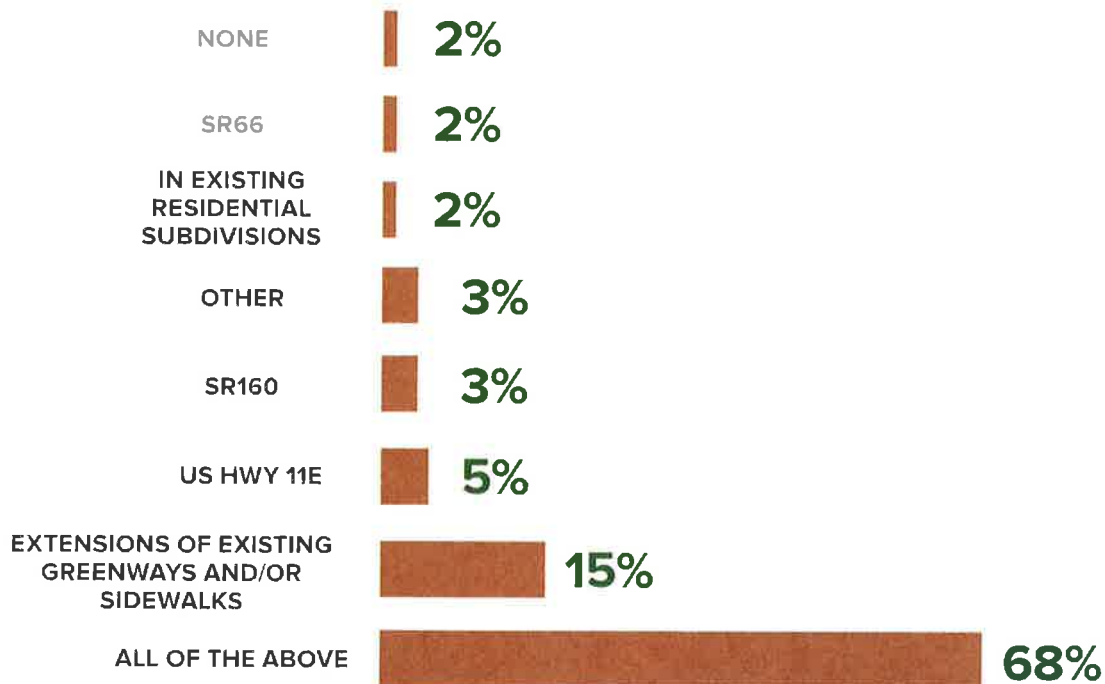
ALONG WHICH STREETS DO YOU NORMALLY BIKE?



37%

OF SURVEY RESPONDENTS TRAVEL MORE THAN 25 MILES PER WEEK BY BIKE

WHERE WOULD YOU LIKE TO SEE FUTURE BIKE LANES OR PATHS IN THE LAMTPO REGION?



PUBLIC OUTREACH

TABLING EVENTS

The project team attended two events for public outreach in June, 2019: the Morristown Kids Fun Fair (June 14), and the Morristown Downtown Concert Series (June 21). At each event, project representatives provided information on the plan process, and sought feedback on where people are currently walking/biking, and where they would like to walk and bike.



PUBLIC OUTREACH



TABLING EVENTS

Typical feedback at the tabling events included:

- Sidewalks are needed in all parts of the region
- Better connections are needed between Walter State Community College, the SuperWalmart, and Frank Lorino Park
- There are few safe bike routes in the Lakeway Region

PART 2

EXISTING CONDITIONS ANALYSIS

COMMUNITY PROFILE
PREVIOUS PLANS
TRENDS IN WALKING AND BIKING
EXISTING FACILITIES
OPPORTUNITIES AND CONSTRAINTS
SAFETY ANALYSIS

COMMUNITY PROFILE

The LAMTPO Metropolitan Planning Area (MPA) includes portions of Hamblen and Jefferson Counties, along with the urbanized areas of Morristown, Jefferson City, and White Pine. The MPA population is 89,544. Morristown is the largest city in the region with a population of 29,137. The next largest community in the region, Jefferson City, has a population of 8,047. The Lakeway region is defined by the two reservoirs that bookend the area on the north (Cherokee Lake), and south (Douglas Lake).

Cherokee Lake provides nearby recreation access to residents and visitors. The topography of the region is notably hilly as the Great Smoky Mountains are less than 25 miles to the southeast. US Highway 11E/State Route 34 connects Morristown to Jefferson City, and the majority of the region's population and destinations are found between 11E and Cherokee Lake to the north. Other primary transportation routes include Interstate 81, US Hwy 25E, Veterans Parkway, SR 92, SR 160, and SR 113. Transit services are provided by the East Tennessee Human Resources Agency (ETHRA), and Morristown is launching a municipal bus transit system.

DEMOGRAPHICS

The racial makeup of the MPA is 82.7% white, 11.1% Hispanic or Latino, 3.6% African American, and 0.5% Asian. The median income for a household is \$37,982. Approximately 21% of the population lives below the poverty line, including 28% of those under age 18. (Based on the 2013-2017 ACS data)



Downtown Morristown

PREVIOUS PLANS

Local and regional planning documents establish a community’s vision for the future and the steps needed to advance towards that vision. To date, there are seven recent plans that are relevant to the goals and objectives of the Lakeway Area Bicycle and Pedestrian Plan, which are listed in the table below. This plan builds upon these prior planning efforts. A summary of plans from the LAMTPO region can be found in the appendix.

SUMMARY OF FINDINGS

- While the Morristown Greenway Plan is 17 years old, the proposed trail locations serve as a useful guide for updating recommendations and identifying key areas for priority enhancements
- The previous LAMTPO Bicycle and Pedestrian Plan (2008) lists locations for recommendations oriented around 4 basic facility types: sidewalks, greenways, bicycle routes, and bicycle lanes. However, the plan focuses on bike recommendations, with most pedestrian recommendations falling under policies and ordinances
- The TDOT Roadway Design Guidelines provide standards for municipalities and transportation authorities to follow on state roads. The LAMTPO Bicycle and Pedestrian Plan may follow the TDOT facility organization for recommendations for consistency

PLAN	JURISDICTION	YEAR
Morristown Greenway Plan	City of Morristown	2002
LAMTPO Bicycle and Pedestrian Plan	LAMTPO	2008
School Safety Audit for Hamblen and Jefferson Counties	LAMTPO	2012
White Pine, Hamblen County, and Morristown ADA Transition Plans	City of White Pine, Hamblen County, City of Morristown	2016
Lakeway Region 2040 Long Range Transportation Plans (LRTP)	LAMTPO	2017
NCS Community Livability Report	City of Morristown	2018
TDOT Roadway Design Guidelines	Tennessee Department of Transportation	2019

AREA WALKING & BIKING TRENDS

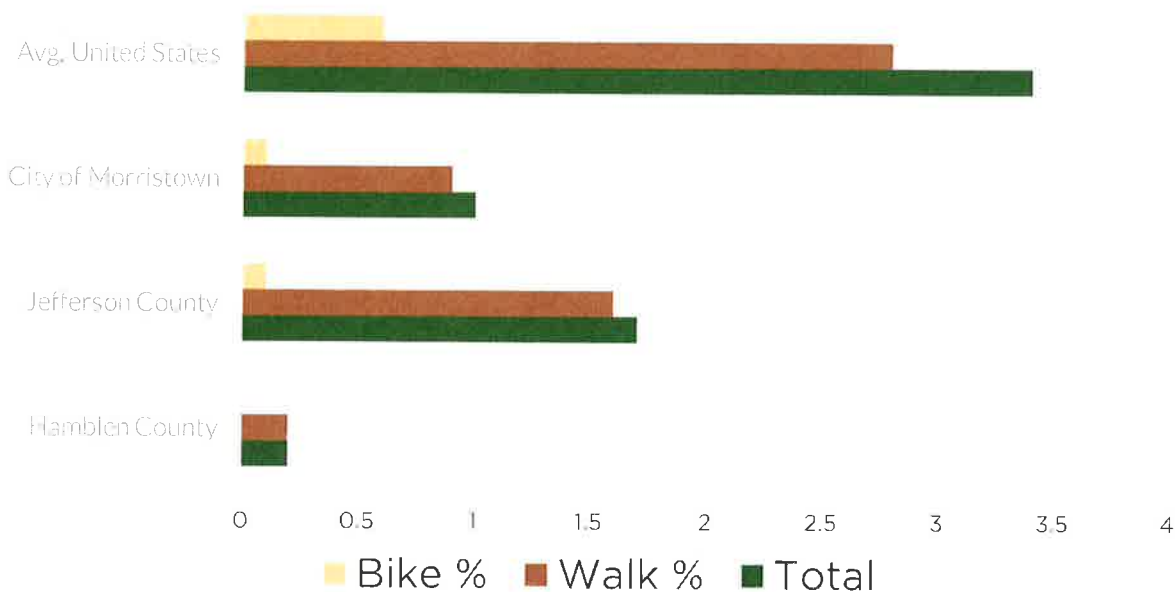
COMMUTE TO WORK MODE SHARE

Recent U.S. Census estimates provide a snapshot of walking and biking trends in the Lakeway Region. Within the LAMTPO, Jefferson County has the highest percentage of residents that walk to work (1.6 percent). In the City of Morristown, approximately 0.9% of residents walk to work, while the percentage who walk is lowest in Hamblen County (0.2%). These active transportation commute rates are low for an urbanized region, and low compared to the average for the United States (see graph below for mode share comparisons). Rates of bicycle commuting are especially low in the LAMTPO, with no jurisdiction reporting more than 0.1%. However, given the dearth of safe biking facilities and the auto-oriented land use patterns, the commute rates are unsurprising.

COMMUTE TO WORK DURATION

Approximately 13 percent of Lakeway Region residents have a commute time of less than 10 minutes, which presents an opportunity to reduce the number of residents driving for short trips where walking and biking are feasible options. Additionally, more than 1 in 3 (35%) residents have a commute length between 10 and 19 minutes. The mean travel time for the region is 23 minutes.

COMMUTE MODE SPLIT FOR LAKEWAY REGION COMMUNITIES





EXISTING WALKWAYS & BIKEWAYS

Sidewalks, shared use paths, hiking and mountain biking (MTB) trails, and state bike routes comprise the current walking and biking network, as shown on the map on page 17.

SIDEWALKS

The sidewalk network is the most dense in the cores of Morristown and Jefferson City. Between the cities and towns, there are no sidewalk connections. A recent sidewalk survey revealed that roughly 58% of existing sidewalk is less than 5-feet wide. The inventory also reported that 63% of the sidewalk network is in “excellent” or “good” condition.

SHARED USE PATH

There are 5.1 miles of shared-use paths in the LAMTPO area: 1.5 mi in Jefferson City and 3.5 miles in Morristown. The paths in Morristown are part of the Turkey Creek Greenway network, which is envisioned as a 7.5-mile path connecting downtown to Cherokee Lake. Existing paths are primarily loop trails in public parks. These provide great recreational opportunities but are less helpful for utilitarian transportation.

HIKING AND MOUNTAIN BIKING TRAILS

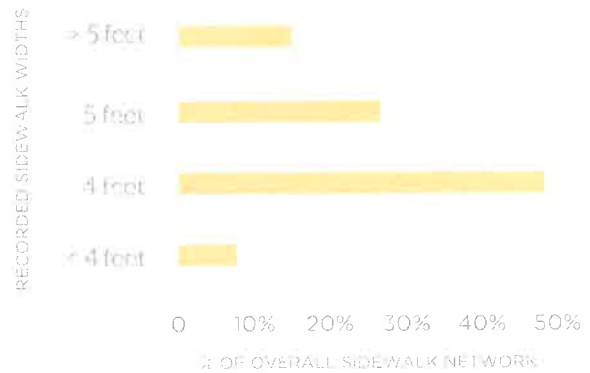
There are currently 25.8 mi of hiking and mountain biking (MTB) trails, all of which are located in Panther Creek State Park. These are a significant recreational resource for residents and a draw for visitors.

STATE BIKE ROUTES

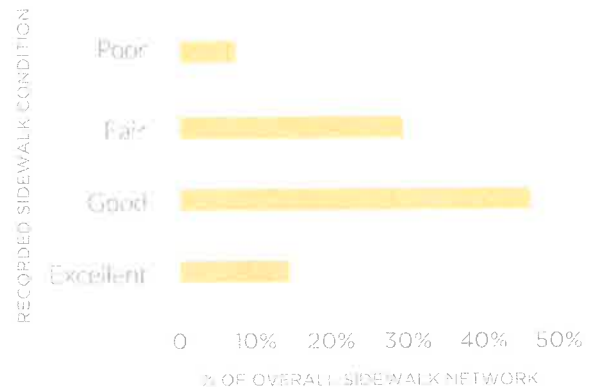
Tennessee DOT (TDOT) has designated 36.9 mi of bike route on state roads within the LAMTPO boundary. This route mainly consists of paved shoulder on high-speed arterials, particularly US Hwy 11E.

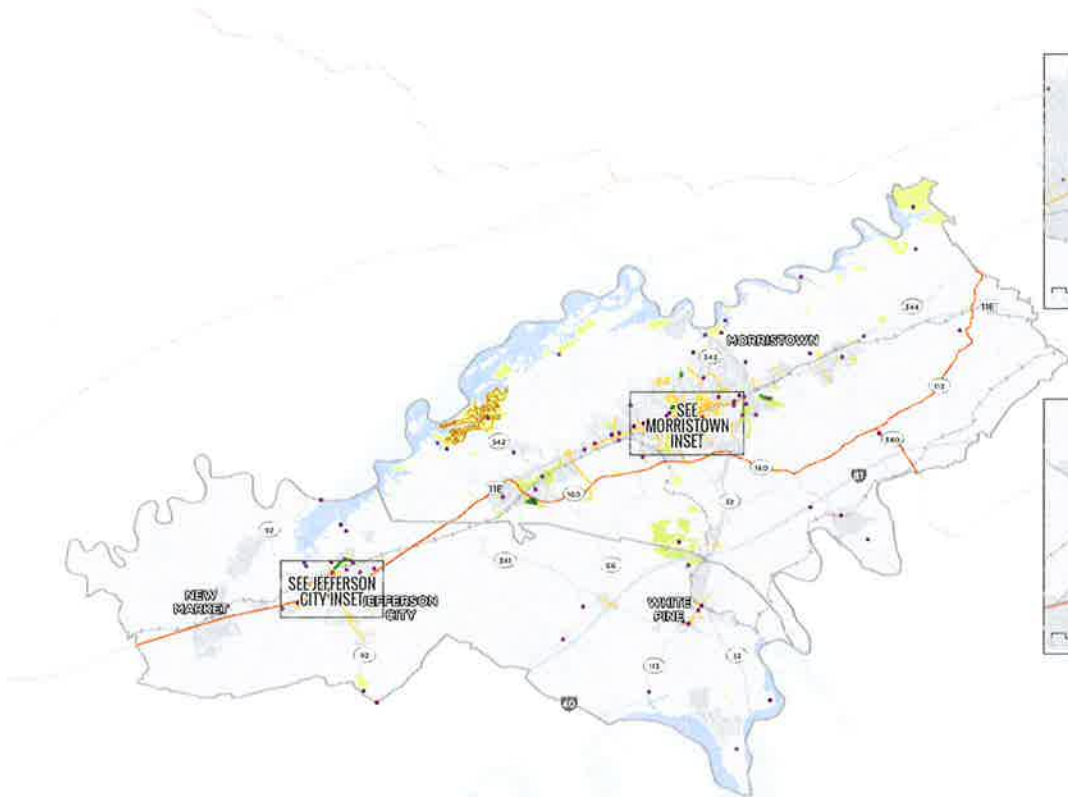
FACILITY TYPE	EXISTING MILEAGE
Sidewalk	93.5 mi
Shared Use Path	5.1 mi
Hiking and Mountain Biking Trails	25.8 mi
State Bike Route	36.9 mi

SIDEWALK NETWORK BY WIDTH



SIDEWALK NETWORK BY CONDITION



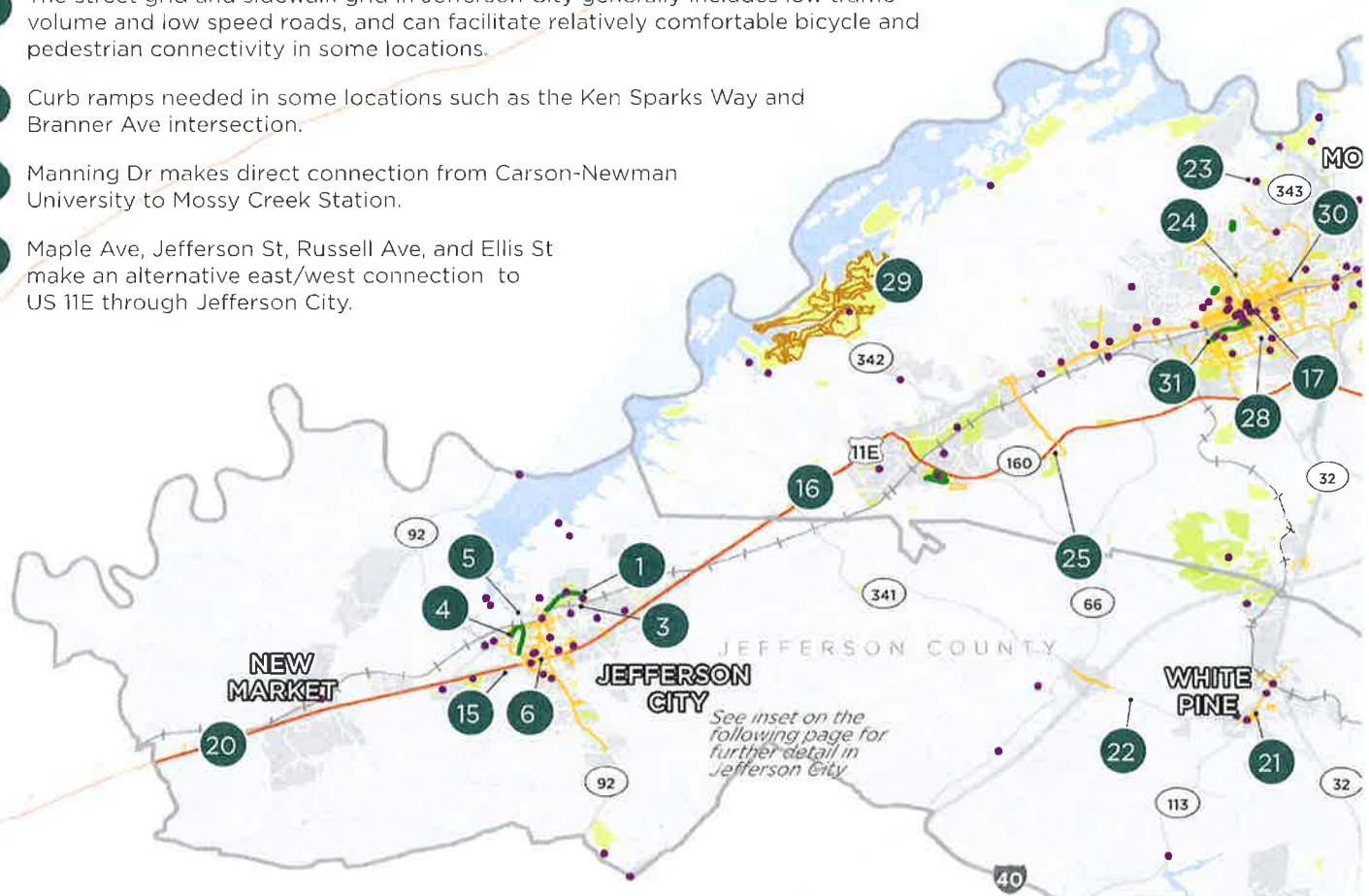


- Existing Network
- Existing Mass use Plan
- Future High Capacity
- Rapid Bus Route
- Stations
- Public Domain Land
- Municipal Boundaries
- I-AMTRTA Study Area



This map highlights opportunities and challenges for walking and bicycling in the LAMTPO region, collected from map-based comments from the Steering Committee and field/remote analysis.

- 1 Existing shared use path from Johnson Ballpark to Rhoten St.
- 2 Steep hill to Nelson Merry Park (high point, beautiful view) at the northern end of Jefferson City.
- 3 The E. Old Andrew Johnson Hwy bridge over the railroad tracks in Jefferson City is currently closed and needs repair - key opportunity to incorporate bike/ped facilities with future repair.
- 4 Existing shared use path in Centennial Park connects into the neighborhood to the south and Sizer Ave.
- 5 Mossy Creek flows through the middle of Jefferson City and into Cherokee Reservoir - potential space for greenway trail development. Mossy Creek Station between Main St and Tallent St could be a trailhead opportunity.
- 6 The street grid and sidewalk grid in Jefferson City generally includes low traffic volume and low speed roads, and can facilitate relatively comfortable bicycle and pedestrian connectivity in some locations.
- 7 Curb ramps needed in some locations such as the Ken Sparks Way and Branner Ave intersection.
- 8 Manning Dr makes direct connection from Carson-Newman University to Mossy Creek Station.
- 9 Maple Ave, Jefferson St, Russell Ave, and Ellis St make an alternative east/west connection to US 11E through Jefferson City.



- 10 Branner Ave is very wide from Ken Sparks Way to Old Andrew Johnson Highway - potential space for on-street bike facility.
- 11 Mountcastle Street is a low traffic volume/speed corridor that connects commercial areas along US 11E toward Carson Newman University.
- 12 W. Jefferson St between Russell Ave and Maple Ave (to the Senior Citizen Center), adjacent to Roy Harmon Park, is very wide. Potential opportunity to improve streetscape between parking and existing sidewalk.
- 13 ADA upgrades needed along southeast corner and to the east of the Russell Ave/US 11E intersection.
- 14 Gap in sidewalk along Maple Ave between US 11E and Elmwood St (pieces of sidewalk in disrepair currently).

OPPORTUNITIES AND CHALLENGES IN THE LAKEWAY AREA MTP



- 15. Right of way on south side of US 11E could be utilized for shared use path connection from hospital/school properly toward the center of Jefferson City
- 16. Wide, paved shoulders are found along much of US 11E (outside of most of the curbed sections, major intersections and railroad bridge)
- 17. Skywalk (elevated sidewalk) is found along Main St through the downtown core of Morristown
- 18. Traffic speeds are very low along Main Street through the heart of Morristown. Outside of downtown Main Street is very wide - could be opportunity to incorporate on-street bike facility
- 19. ADA improvements upcoming as part of a TDOT multimodal grant along Andrew Johnson Highway here.

- 20. State Bike Routes - The Tennessee state bike route system connects through the region along a combination of US 11E, TN 160, TN 340, and TN 113. Wide paved shoulders currently exist on much of US 11E and TN 160.
- 21. Sidewalk/ADA improvements needed along TN 113 in White Pine.
- 22. Wide paved shoulder exists along TN 341 from Valley Home Rd to Old Airport Rd.
- 23. The proposed Turkey Creek Greenway system (partially complete) could serve as a key north/south spine from downtown Morristown to Cherokee Lake.
- 24. A sidepath is currently in development from 3rd St to Cherokee Dr to serve as part of the Turkey Creek Greenway connection from downtown toward Cherokee Lake.
- 25. TN 66 is currently being widened/extended, and may have space for future bicycle facility.
- 26. Connect Walters State CC to Frank Loring Park, potentially working with Walmart to develop connection.
- 27. Sidewalk improvements along the south side of US 11E are in development.
- 28. Potential trail connection along former rail line south of downtown Morristown from Fred Miller Park to Lincoln Heights Middle School.
- 29. Existing hiking/mountain biking trails in Panther Creek State Park.
- 30. The street grid and sidewalk grid in Morristown generally includes low traffic volume and low speed roads and can facilitate relatively comfortable bicycle and pedestrian connectivity in and around the downtown core.
- 31. Existing greenway segments in downtown Morristown.



OPPORTUNITIES AND CHALLENGES IN MORRISTOWN AND JEFFERSON CITY

MORRISTOWN



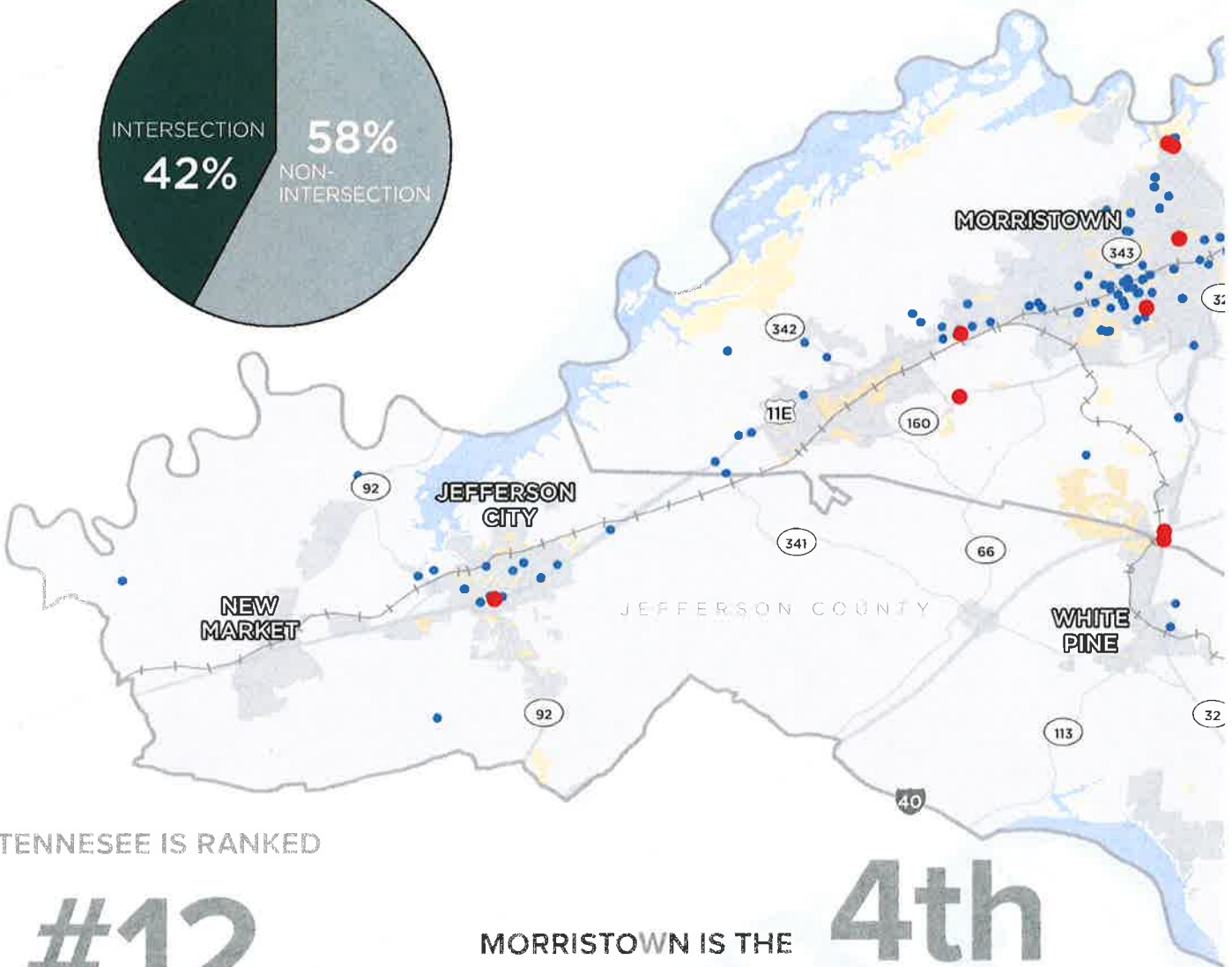
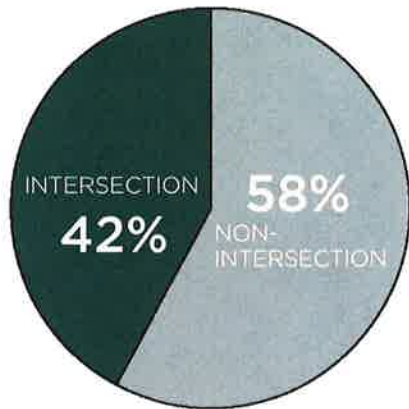
JEFFERSON CITY





PEDESTRIAN CRASH ANALYSIS

PEDESTRIAN CRASH LOCATIONS



TENNESSEE IS RANKED

#12

MOST DANGEROUS STATE FOR PEDESTRIANS (2019 Dangerous by Design Report)

4th

MORRISTOWN IS THE MOST DANGEROUS METRO AREA FOR PEOPLE ON FOOT IN TENNESSEE (2019 Dangerous by Design Report)

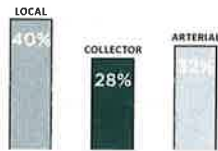
PEDESTRIAN CRASH ANALYSIS

PEDESTRIAN CRASH ANALYSIS

This map shows pedestrian-motor vehicle crash locations in the LAMTPO Region, from 2002 to 2019, which included 140 crashes, 10 of which were fatal.

Most of the pedestrian crashes were near built-up areas, with Morristown recording the majority of them (93 crashes within the municipal limits).

CRASHES BY ROADWAY TYPE



- Pedestrian Fatality (10)
- Pedestrian Crashes (140)

- Municipality Boundaries
- Municipal Boundaries
- LAMTPO Study Area



HIGHEST CRASH CORRIDORS (2002 TO 2019):

1. I1E Morristown (23 crashes)
2. Cumberland Ave/TN 343 in Morristown (11 crashes)
3. I1E Jefferson City (7 crashes)
4. Lincoln Ave in Morristown (5 crashes)
5. Main St in Morristown (5 crashes)
6. Jackson St in Morristown (4 crashes)

PEDESTRIAN CRASHES NEAR DOWNTOWN MORRISTOWN AND JEFFERSON CITY (2002-2019)

MORRISTOWN
 # of crashes in municipal limits: 93
 # of incapacitating injuries: 27
 # of fatalities: 5



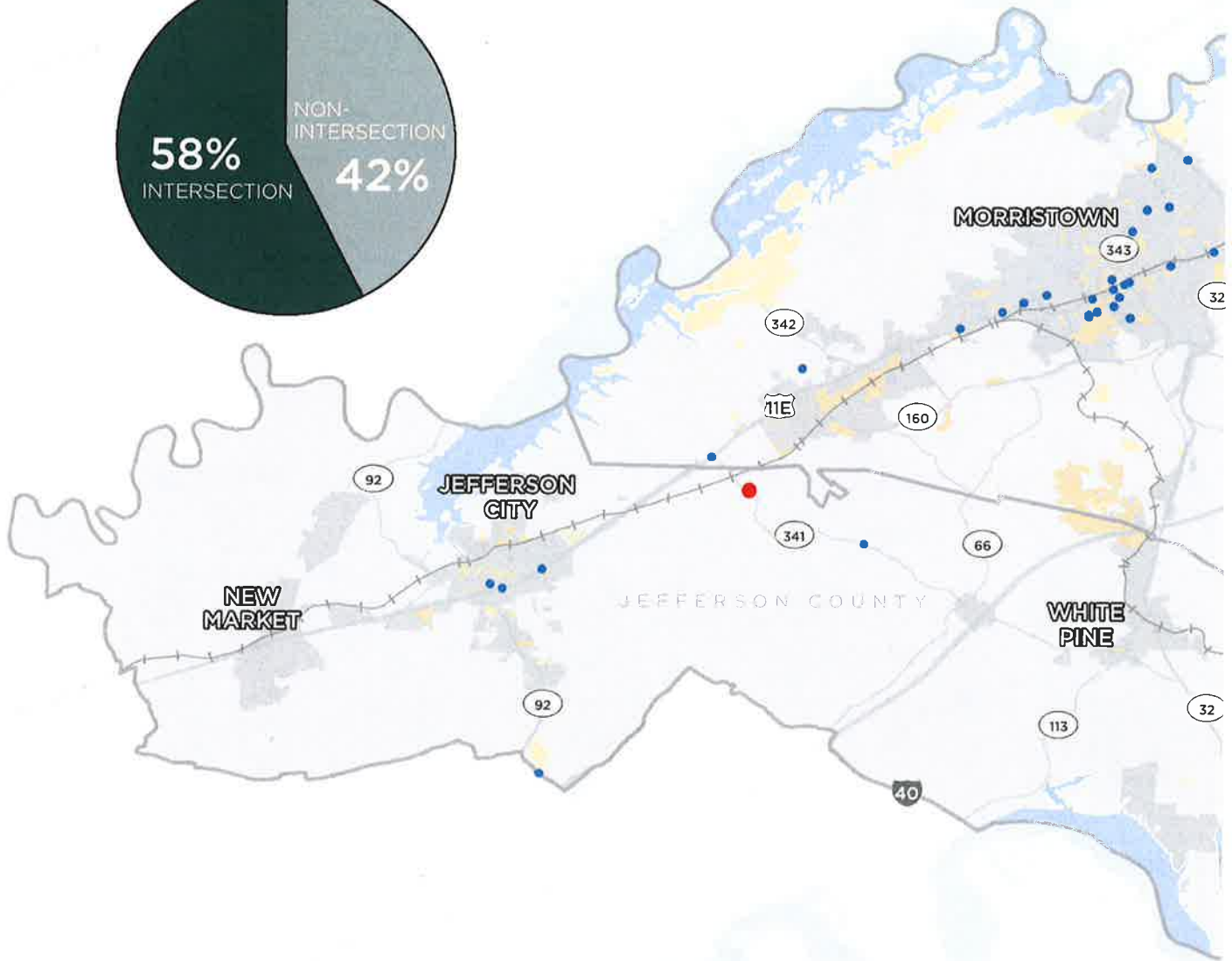
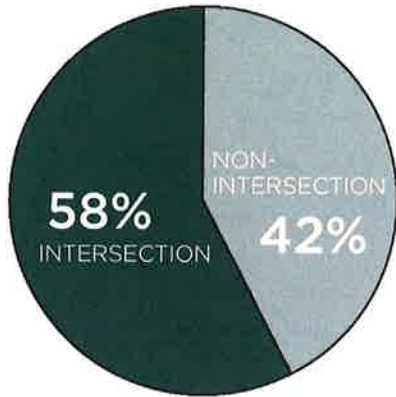
JEFFERSON CITY
 # of crashes in municipal limits: 17
 # of incapacitating injuries: 6
 # of fatalities: 1





BICYCLE CRASH ANALYSIS

BIKE CRASH LOCATIONS



BICYCLE CRASH ANALYSIS

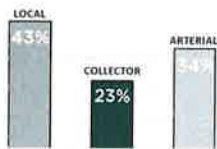
BICYCLE CRASH ANALYSIS

This map shows bicycle-motor vehicle crash locations in the LAMTPO Region, from 2002 to 2019, which included 53 crashes, two of which were fatal.

Most of the bicycle crashes were near built-up areas, with Morristown recording the majority of them (23 crashes within the municipal limits).



CRASHES BY ROADWAY TYPE



- HIGHEST CRASH CORRIDORS (2002 TO 2019):**
1. I1E Morristown (8 crashes)
 2. Cumberland Ave/TN 343 in Morristown (3 crashes)
 3. Jackson St in Morristown (3 crashes)
 4. TN 341 (3 crashes)
 5. I1E Jefferson City (3 crashes)

- Bicyclist Fatality (2)
- Bicyclist Crashes (33)



BICYCLE CRASHES NEAR DOWNTOWN MORRISTOWN AND JEFFERSON CITY (2002-2019)

MORRISTOWN
 # of crashes in municipal limits: 23
 # of incapacitating injuries: 6
 # of fatalities: 0



JEFFERSON CITY
 # of crashes in municipal limits: 5
 # of incapacitating injuries: 1
 # of fatalities: 0



PART 3

RECOMMENDATIONS

OVERVIEW

CATALYST PROJECTS

NETWORK RECOMMENDATIONS

PROGRAMS AND POLICIES

OVERVIEW

Recommendations are included here for the Lakeway Area Bicycle and Pedestrian Master Plan. The projects and programs were developed following public input, feedback from the Project Management Team, fieldwork, and a review of best practices that are applicable for a region with a small town and rural character. They are organized into the following:

CATALYST PROJECTS

Catalyst projects are meant to kickstart an on-street bikeway network in the Lakeway Region, and provide key walkway improvements in high demand areas. These projects have been reviewed for feasibility and cost-effectiveness, and details are provided here to aid in implementation.

NETWORK RECOMMENDATIONS

Network recommendations are organized into three groups:

- 1) Sidewalk and sidewalk alternatives
- 2) On-street bikeways
- 3) Shared-use paths

For each group, basic design guidance is provided, along with a regional map showing potential locations for applying these designs. However, the locations are not exhaustive, and there are many potential streets within the region that could benefit from recommended facilities that are not shown on the map. Regional stakeholders should identify opportunities for adding pedestrian or bike facilities prior to resurfacing and restriping projects. Additionally, each recommendation that is shown on the maps will require further evaluation, design, and engineering prior to implementation.

PROGRAMS AND POLICIES

Six programs/policies are recommended for the Lakeway region, which are applicable to both the LAMTPO and local jurisdictions. Research has shown that a comprehensive approach to walk- and bicycle-friendliness is more effective than a singular approach that only addresses infrastructure. Programs can and should be supported and championed by multiple partners such as nonprofit organizations, advocacy groups, foundations, private sector businesses, and interested citizens.

CATALYST PROJECTS

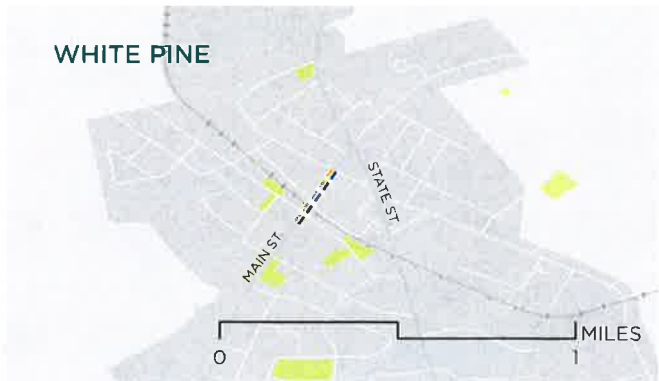
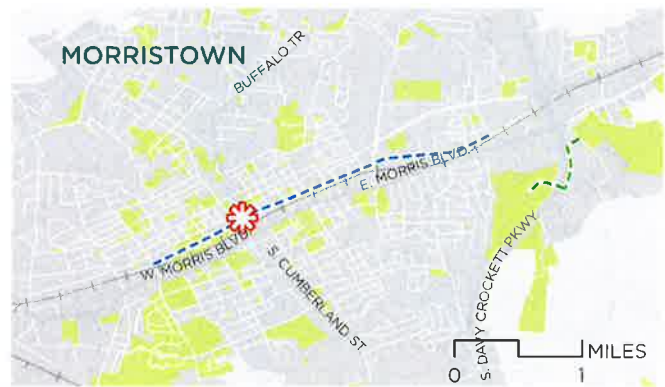
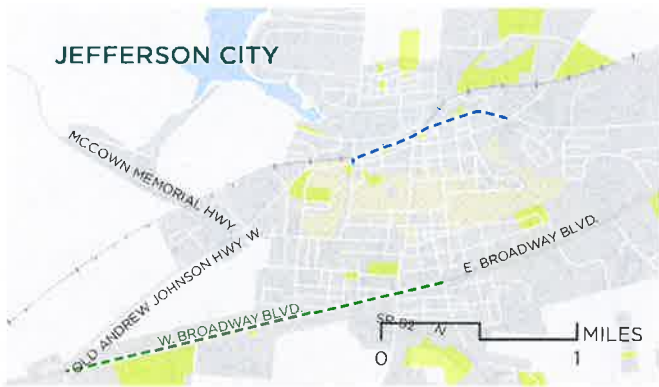
Catalyst projects are meant to kickstart an on-street bikeway network in the Lakeway Region, and provide key walkway improvements in high demand areas. The four catalyst projects included in this section are the focal point for LAMTPO Pedestrian and Bicycle infrastructure recommendations. These projects have been reviewed for feasibility and cost-effectiveness, and details are provided here to aid in implementation. They are geographically dispersed throughout the region, and local municipalities and the LAMTPO should work to identify funding for further study, design, and implementation. All four projects will benefit people on foot, and four of the five will benefit people on bike. The projects are listed below and shown on the map to the right.

CATALYST PROJECTS






1. MAIN STREET BIKEWAYS AND WALKWAYS
2. FRANK LORINO PARK SHARED-USE TRAIL
3. BROADWAY SHARED-USE TRAIL
4. US HIGHWAY 11E SAFETY IMPROVEMENTS






CATALYST PROJECT LOCATIONS



CATALYST PROJECTS

-  Walking Hub Activation
-  On-Street Bikeway
-  Shared-Use Path
-  Sidewalk and/or Pedestrian Lane
-  Sidewalk and/or Pedestrian Lane, On-Street Bikeway

BASE MAP

-  Publicly Owned Lands
-  Municipal Boundaries
-  LAMTPO (Study Area)



CATALYST PROJECT

Main Street Bikeways and Walkways

Bike facilities and improved walkways along Main Street in Morrystown, Jefferson City, and White Pine

About this Project

Morrystown

- Main Street currently has right of way for in-street bikeways, potentially buffered bike lanes
- Main Street connects downtown with Walter State Community College to the east

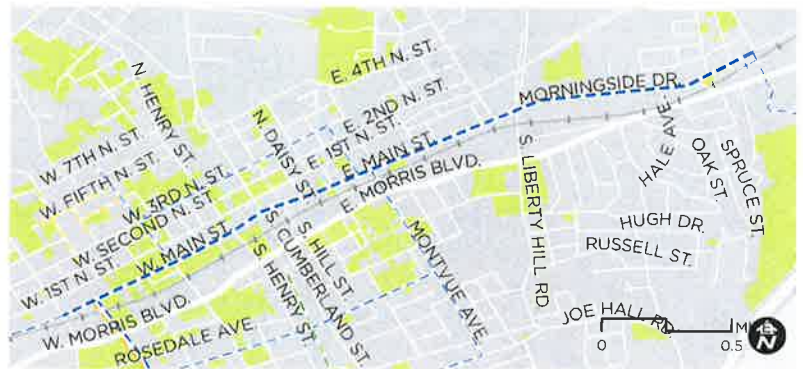
Jefferson City

- Main Street in Jefferson City has wide right of way, very little traffic, and is relatively flat in a hilly area
- Downtown Jefferson City has abundant potential for redevelopment that can attract cyclists and pedestrians

White Pine

- Downtown White Pine has a small commercial district, but lacks bike infrastructure and has few sidewalks
- A wide shoulder on Main Street can easily be converted into a bike lane

Morrystown



Jefferson City



White Pine



CATALYST PROJECT: MAIN ST WALKWAYS AND BIKEWAYS

- On-Street Bikeway
- Sidewalk and/or Pedestrian Lane, On-Street Bikeway

OTHER RECOMMENDATIONS

- On-Street Bikeway
- Shared-Use Path
- Sidewalk and/or Pedestrian Lane
- Sidewalk and/or Pedestrian Lane, On-Street Bikeway

Existing Conditions: Main Street in Jefferson City



Proposed Improvements: Main Street in Jefferson City



Priority Score: 80



0

100

Estimated Cost:

\$ 400,000

CATALYST PROJECT

Frank Lorino Park Shared Use Trail

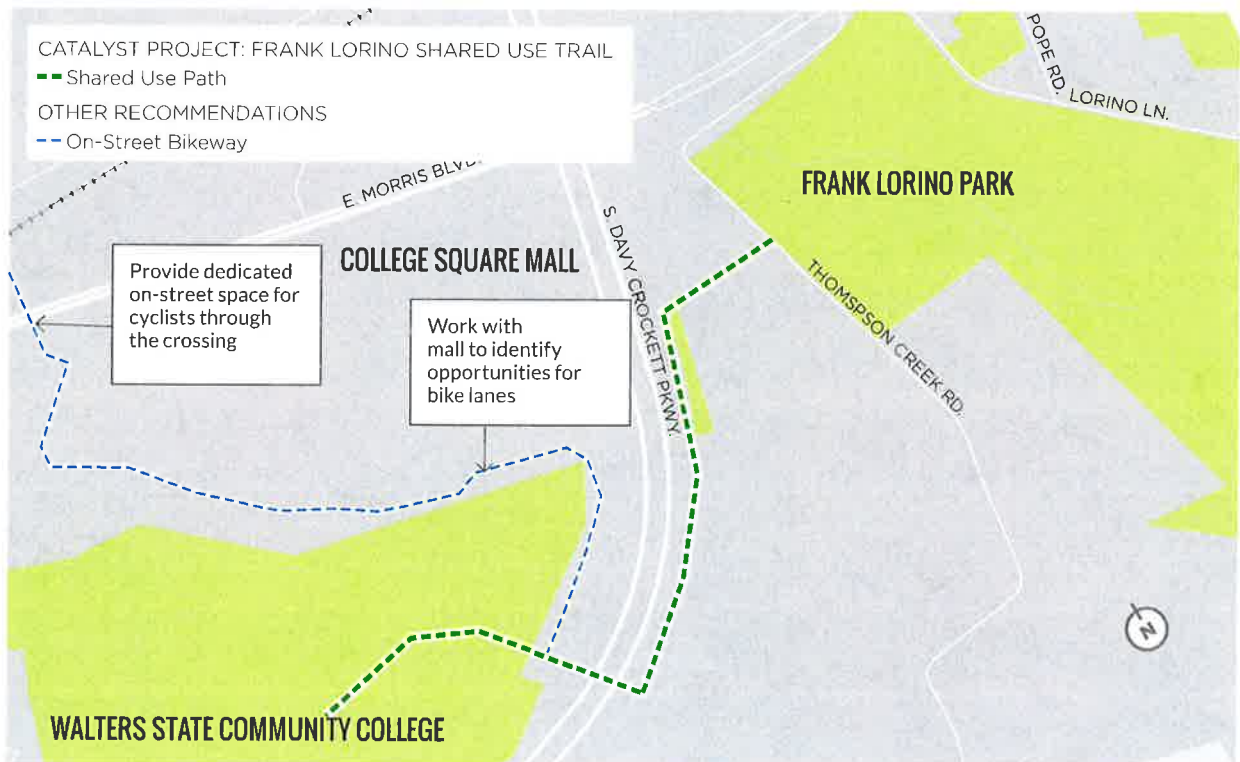
A wide off-street trail that connects Walter State Community College to Frank Lorino Park

About this Project

- 12' paved sidepath along Campus Drive between the school and Davy Crockett Pkwy
- Half-mile long 12' paved shared-use trail along highway right-of-way that connects between Ultimate Shine Car Wash and Frank Lorino Park
- Spur routes provide connections to nearby mall, WalMart, and mountain bike trails



Overview Map



Proposed Shared-Use Trail



Precedent Images



Priority Score: 90

0

100

Estimated Cost:
\$ 1,500,000

CATALYST PROJECT

Broadway Shared Use Trail



A wide sidepath along US 11E in Jefferson City

About this Project

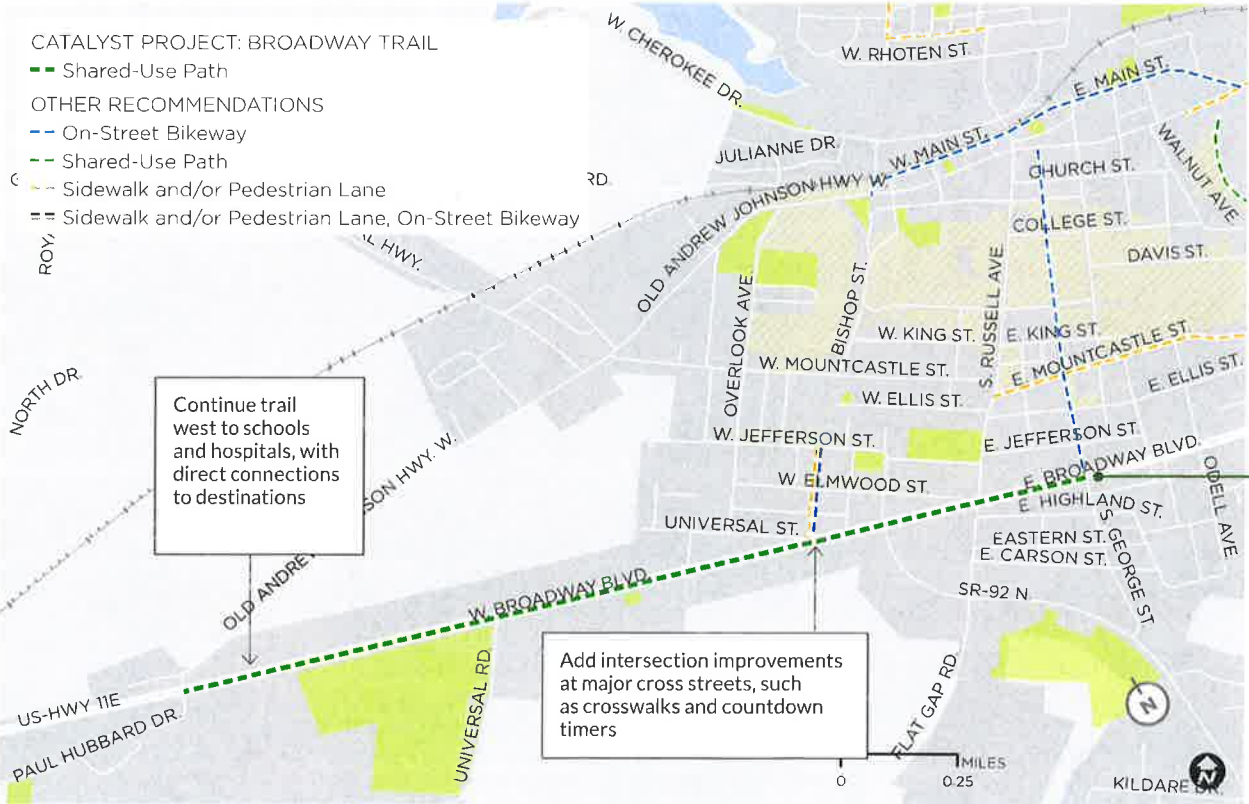
- 1.6 mile 12' paved shared use trail from W Old AJ Hwy to George Ave in Jefferson City
- Connects commercial areas to schools and the hospital
- Potential for improved crossings on 11E
- Parallels TN State Bike Route

Proposed Trail on Highway 11E



Approximately 20-50' of ROW is available along Broadway. This creates enough room for a 12' wide shared use trail with an 8-20' landscaped buffer.

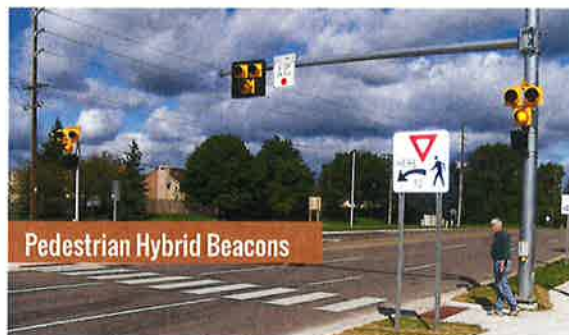
Overview Map



Sidepath Precedent Images



Intersection Improvements



Priority Score: 90



0

100

Estimated Cost:

\$ 4,800,000

CATALYST PROJECT

US Highway 11E Safety Improvements



Pedestrian safety improvements at major intersections along US 11E

About this Project

- Improve safety at key intersections along 11E in Jefferson City and Morristown with a high crash rate
- Focus on George Ave, Russell Ave, and Walters Dr
- Includes installation of new curb ramps, ped heads, push buttons, and crosswalks

Description of Improvements

FOCUS INTERSECTION

IMPROVEMENTS

George Avenue (Jefferson City)

2 new curb ramps, 4 new crosswalks, ped heads/pushbuttons, 1 new ped pole

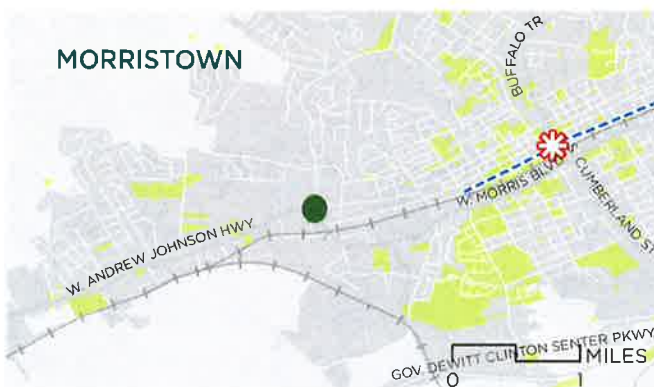
Russell Avenue (Jefferson City)

4 new curb ramps, 4 new crosswalks, ped heads/pushbuttons

Walters Drive (Morristown)

4 new curb ramps, 4 new ped heads/pushbuttons, 4 new ped poles

Overview Maps



11E Focus Intersection

CATALYST PROJECTS

- Walking Hub Activation
- On-Street Bikeway
- Shared-Use Path
- Sidewalk and/or Pedestrian Lane
- Sidewalk and/or Pedestrian Lane, On-Street Bikeway

BASE MAP

- Publicly Owned Lands
- Municipal Boundaries
- LAMTPO (Study Area)

Intersection Images

George Avenue



Russell Avenue



Walters Drive



Priority Score: 90



Estimated Cost:

\$ 230,000

SIDEWALKS AND SIDEWALK ALTERNATIVES

Sidewalks are critical to developing a welcoming environment for walking as a means of recreation and transportation. Currently, there are 94 miles of sidewalk in the Lakeway region. However, more than half (58%) of the sidewalks in the LAMTPO MPA do not meet the recommended minimum width of 5 feet. Wide sidewalks with a buffer from traffic can increase safety and comfort for pedestrians, particularly on busy, high speed arterials such as Highway 11E. Additionally, new guidance is available for developing sidewalk alternatives, where sidewalks may be infeasible due to costs or lack of available right-of-way. These treatments may be feasible on neighborhood streets with low traffic volumes. For recommended implementation locations for sidewalks and sidewalk alternatives, see the map on pages 40-41.

SIDEWALKS

Sidewalks provide dedicated space intended for use by pedestrians that is safe, comfortable, and accessible to all. Sidewalks are physically separated from the roadway by a curb or unpaved buffer space. Many streets in the central parts of Jefferson City and Morristown already have sidewalks. LAMTPO and partner jurisdictions should be opportunistic about constructing new sidewalk during roadway or utility projects.

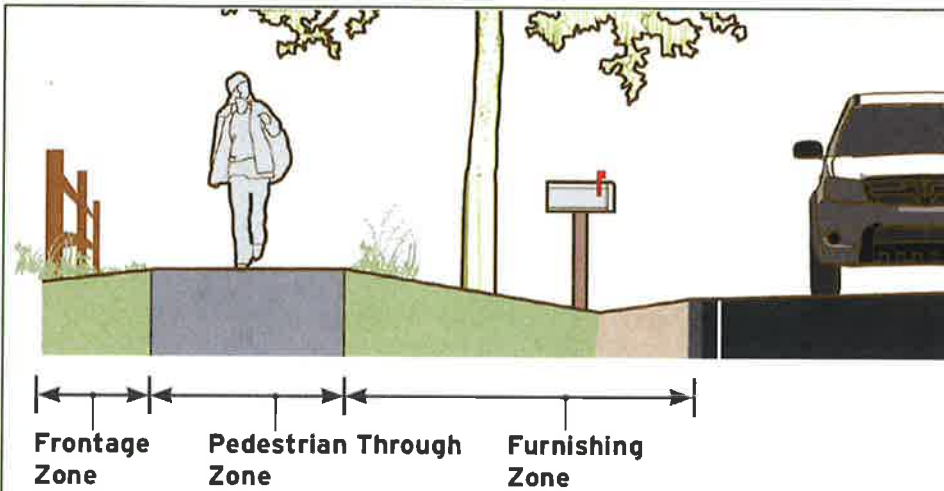


PEDESTRIAN LANE

A pedestrian lane is an interim or temporary pedestrian facility that may be appropriate on roads with low to moderate speeds and volumes. A pedestrian lane is a designated space on the roadway for exclusive use of pedestrians. The lane may be on one or both sides of the roadway and can fill gaps between important destinations in a community. Pedestrian lanes may be a good interim treatment for neighborhood streets and other areas where sidewalk installation is infeasible in the near term.

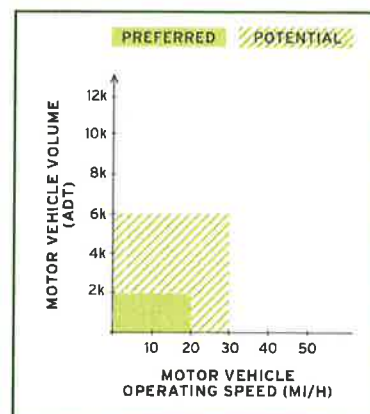
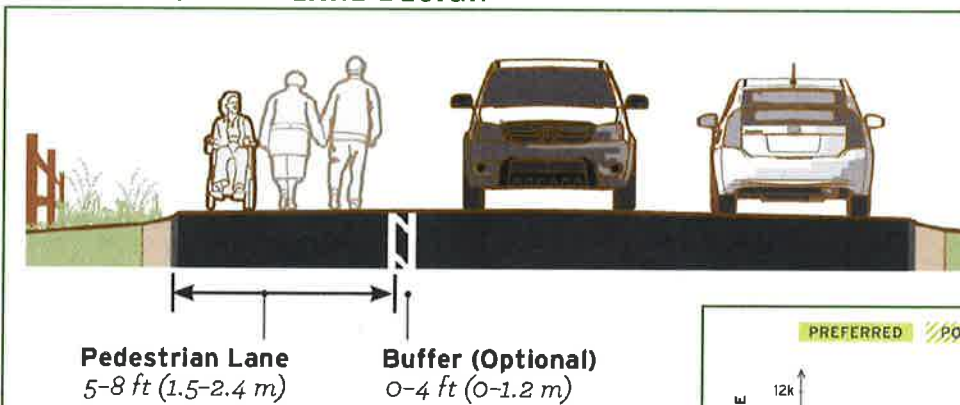


SIDEWALK DESIGN

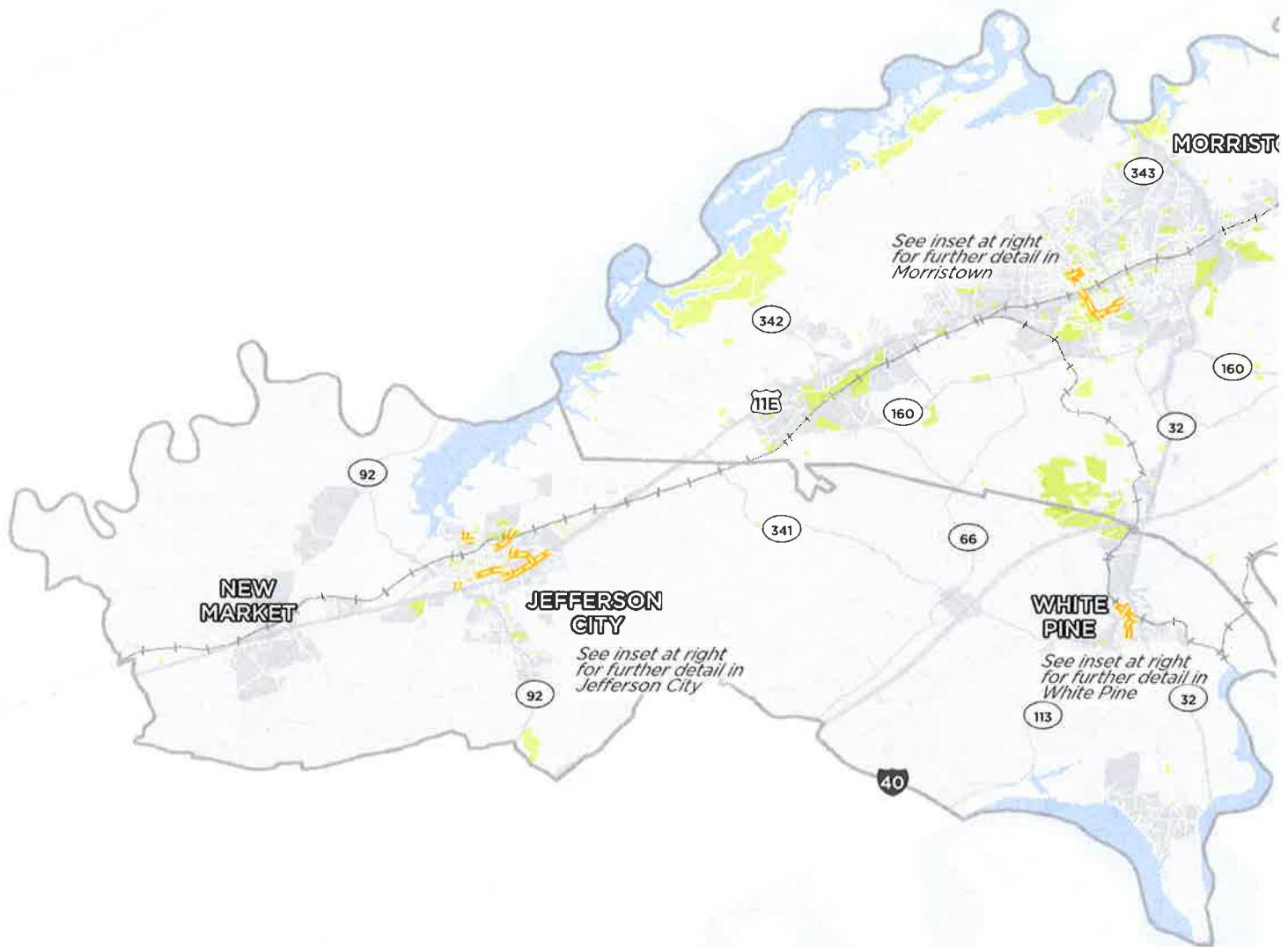


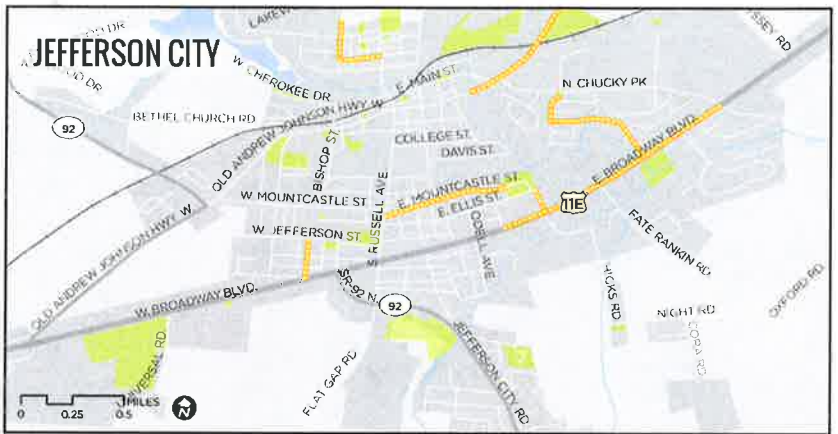
VOLUME & USER MIX	FRONTAGE ZONE	THROUGH ZONE	FURNISHING ZONE	TOTAL WIDTH
Constrained Minimum	1 ft (0.3 m)	5 ft (1.2 m)	2 ft (0.6 m)	8 ft (2.4 m)
Recommended Minimum	2 ft (0.6 m)	6 ft (1.5 m)	4 ft (1.2 m)	12 ft (3.6 m)

PEDESTRIAN LANE DESIGN



SIDEWALKS AND PEDESTRIAN LANES -- POTENTIAL LOCATIONS





 Proposed Sidewalks and/or Pedestrian Lanes

 Publicly Owned Lands

 Municipal Boundaries

 LAMTPO (Study Area)



ON-STREET BIKEWAYS

On-street bikeways provide dedicated lanes that create accessible connections to area destinations. This may take the form of physically separated or protected bike lanes, as well as visually separated **bike lanes** and **paved shoulders**, which are the focus of the recommendations for the Lakeway region given the small town and rural context.

While there are approximately 5 miles of shared-use paths in the Lakeway region, bike lanes and paved shoulders are lacking. Fortunately, both facility types are easy to implement, and often can expand capacity for bicyclists with little or no impact on the existing roadway. For recommended implementation locations for on-street bikeways, see the map on pages 44-45.

BIKE LANES

Bike lanes provide dedicated space for bicyclists between the curb and vehicle lanes, and typically follow the same direction as vehicle traffic. Pavement markings and optional signage help designate the space. Bike lanes are inexpensive and can be added through resurfacing and re-striping projects. Many streets in the LAMTPO have available space for bike lanes without the need to remove a travel lane or expand the street. Currently, there are no bike lanes in the Lakeway region, which presents a major hurdle towards creating an environment that is inclusive of cyclists.

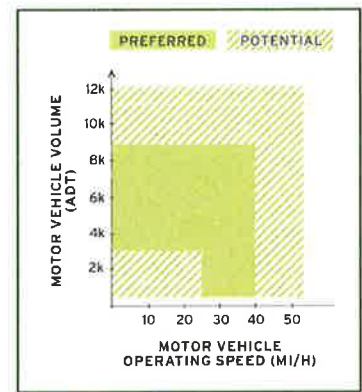
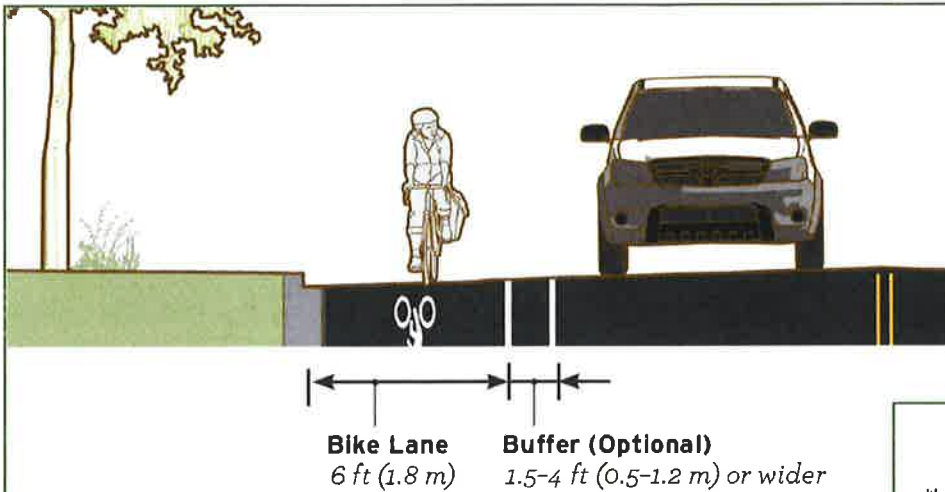


PAVED SHOULDERS

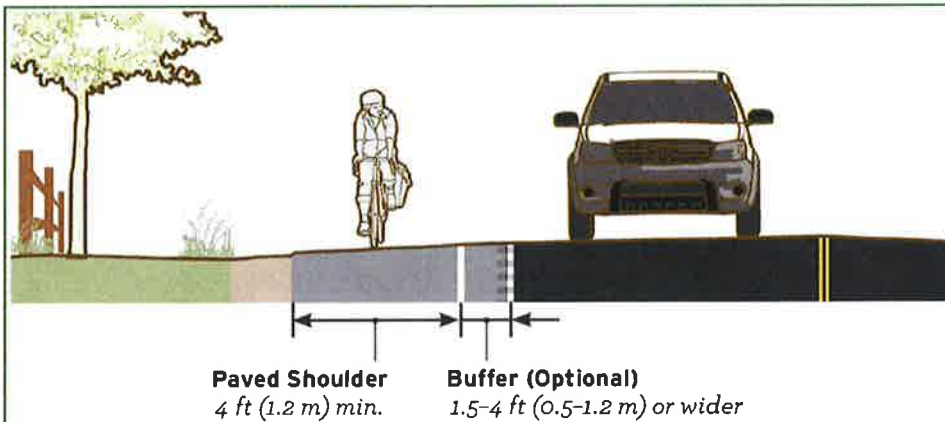
Paved shoulders on the edge of roadways can be enhanced to serve as a functional space for bicyclists and pedestrians to travel in the absence of other facilities with more separation. These facilities are appropriate on rural roadways in the region with moderate to high traffic volumes, particularly on scenic routes and roads that lead to destinations that attract people on bikes.



BIKE LANE DESIGN



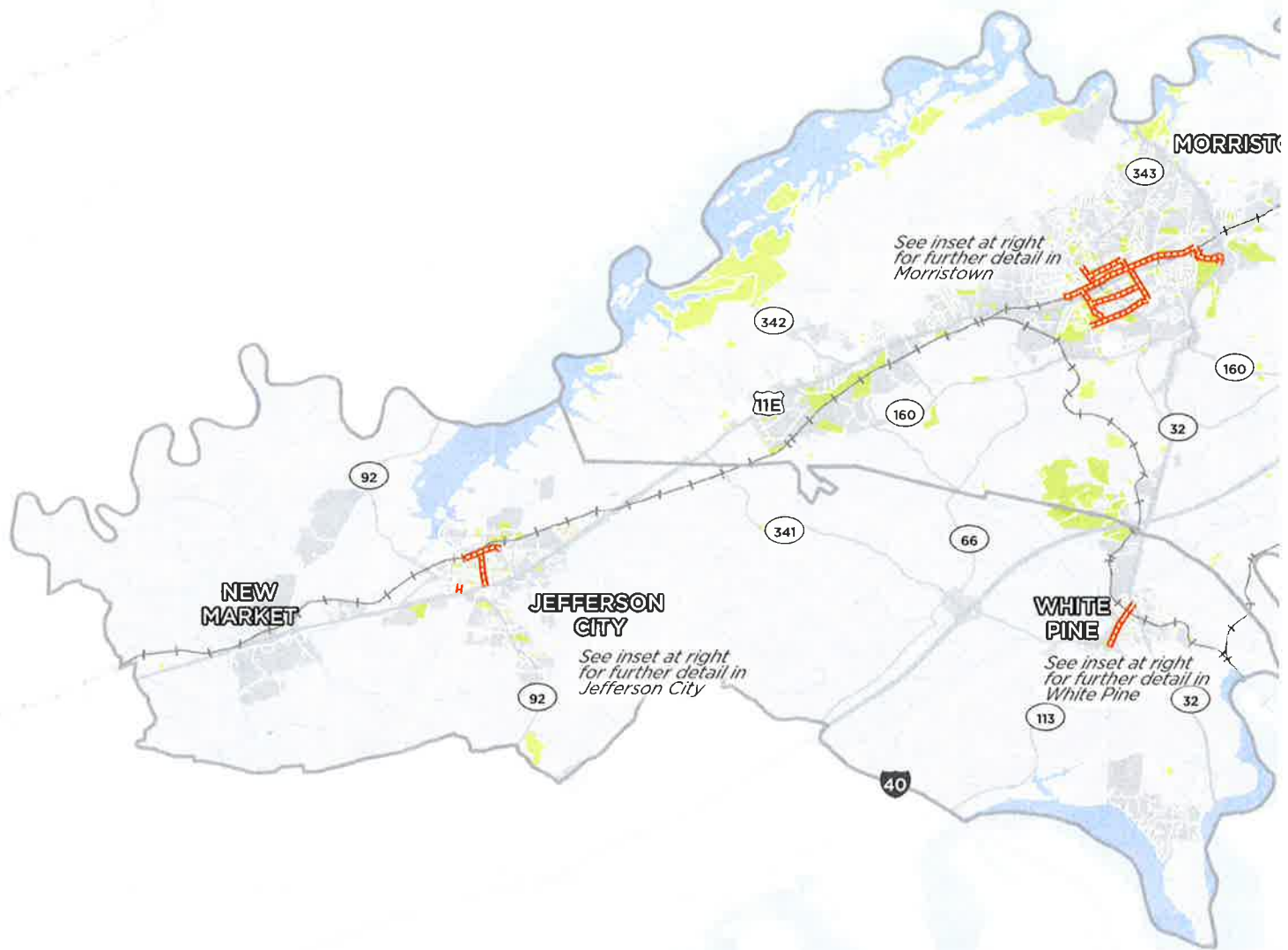
PAVED SHOULDER DESIGN



* Based on TDOT minimum, other recommendations in chart below based on FHWA recommended minimums

FUNCTIONAL CLASSIFICATION	VOLUME (AADT)	SPEED (MI/H)	RECOMMENDED MINIMUM PAVED SHOULDER WIDTH
Minor Collector	up to 1,100	35	5 ft
Major Collector	up to 2,600	45	6.5 ft
Minor Arterial	up to 6,000	55	8 ft*
Principal Arterial	up to 8,500	65	8 ft

ON-STREET BIKEWAYS -- POTENTIAL LOCATIONS





- Proposed On-Street Bikeways
- Publicly Owned Lands
- Municipal Boundaries
- LAMTPO (Study Area)



SHARED-USE PATHS

Shared-use paths are two-way facilities that follow an independent right of way separate from traffic. They make up the extent of the current bike network within the LAMTPO MPA. This largely takes the form of loop trails within parks, and segments of sidepath along Martin Luther King Jr Parkway, as well as the Turkey Creek Phase 4 trail in Morristown. However, the current design and location of paths supports recreational but not transportation use. An extended shared-use path network that connects key destinations can form a spine of high-quality bikeways for a regional bike network. Additionally, shared-use paths can generate substantial economic activity and serve as a regional attraction. Feasible locations for developing a shared-use path include utility corridors, stream banks, and abandoned rail lines. For recommended implementation locations for shared-use paths, see the map on pages 48-49.

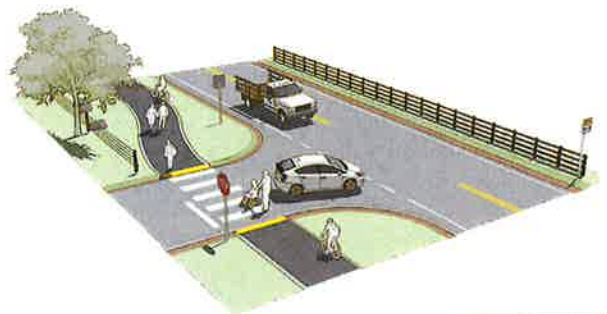
SHARED-USE PATHS

A shared-use path is an off-street trail that provides a low-stress experience for non-motorized traffic, including bicyclists, pedestrians, wheelchair users, runners, and skaters. Shared-use paths serve both a recreational and transportation purpose, and may take several forms, from rural rail trails to urban connectors.

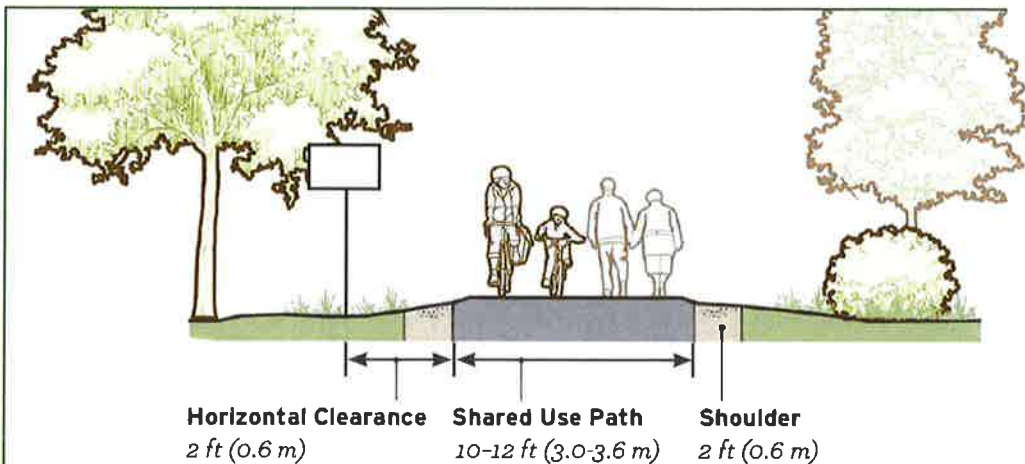


SIDEPATHS

A sidepath is a form of shared-use path that is located parallel and adjacent to a roadway. When separated from traffic by a physical barrier or significant buffer space (>5 ft), sidepaths can provide an enjoyable experience for pedestrians and cyclists of all ages and abilities. Sidepaths are appropriate in rural areas and can create crucial trail connections where an independent right-of-way for trails is infeasible. The design of the crossings and intersections are critical to maintaining a safe and comfortable facility.

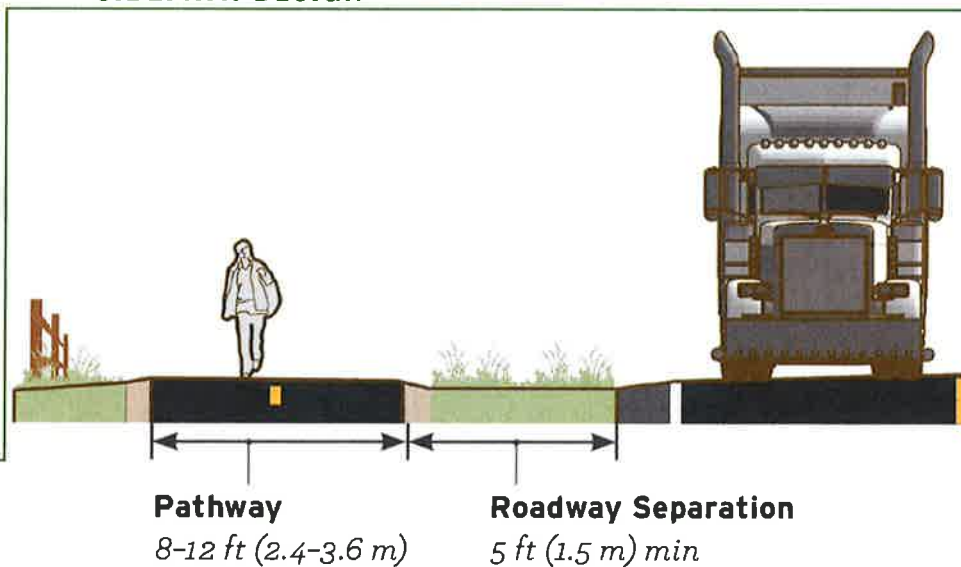


SHARED-USE PATH DESIGN

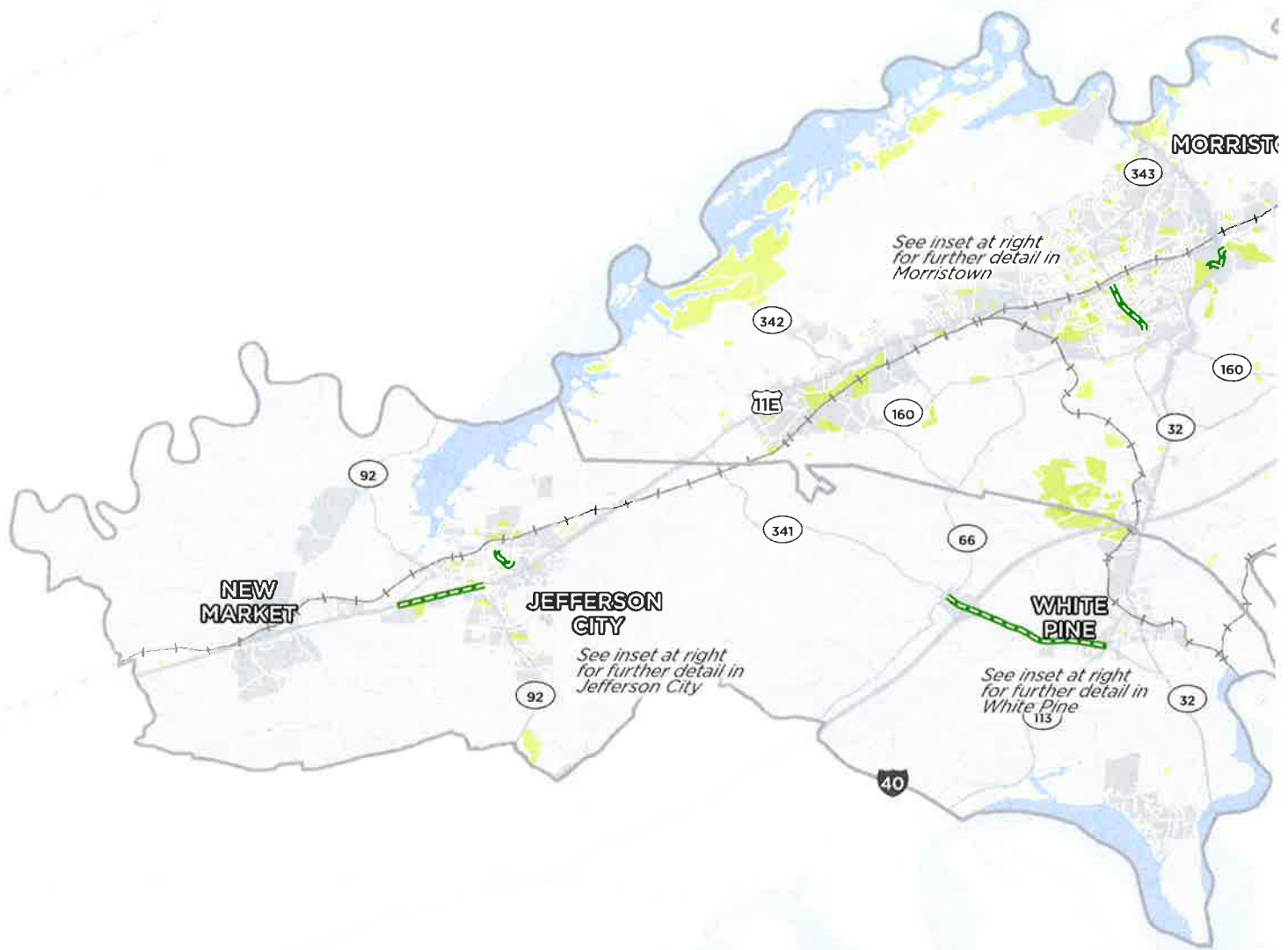


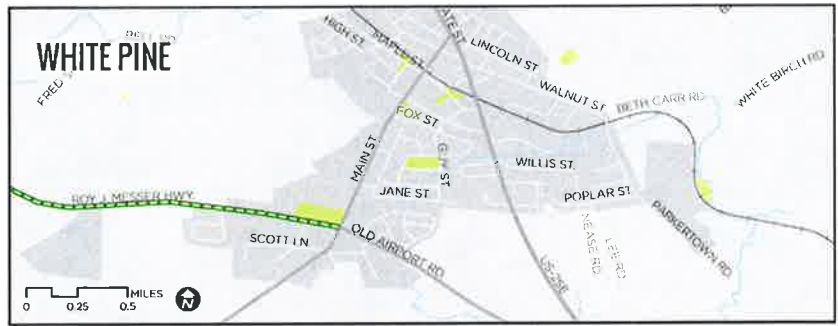
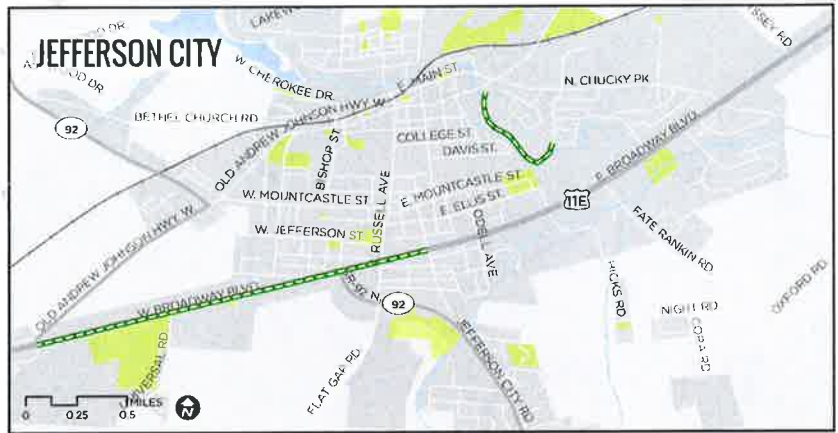
VOLUME & USER MIX	RECOMMENDED MINIMUM PATHWAY WIDTH
Low volume (less than 50 users in one direction per hour), low mix (75 percent bicyclists, 25 percent pedestrians).	8-10 ft
Low volume (less than 50 users in one direction per hour), heavy user mix (50 percent bicyclists, 50 percent pedestrians).	12 ft
High volume (150 or more users in one direction per hour), low mix (75 percent bicyclists, 25 percent pedestrians).	12-14 ft





SIDEPATH DESIGN



SHARED-USE PATHS -- POTENTIAL LOCATIONS



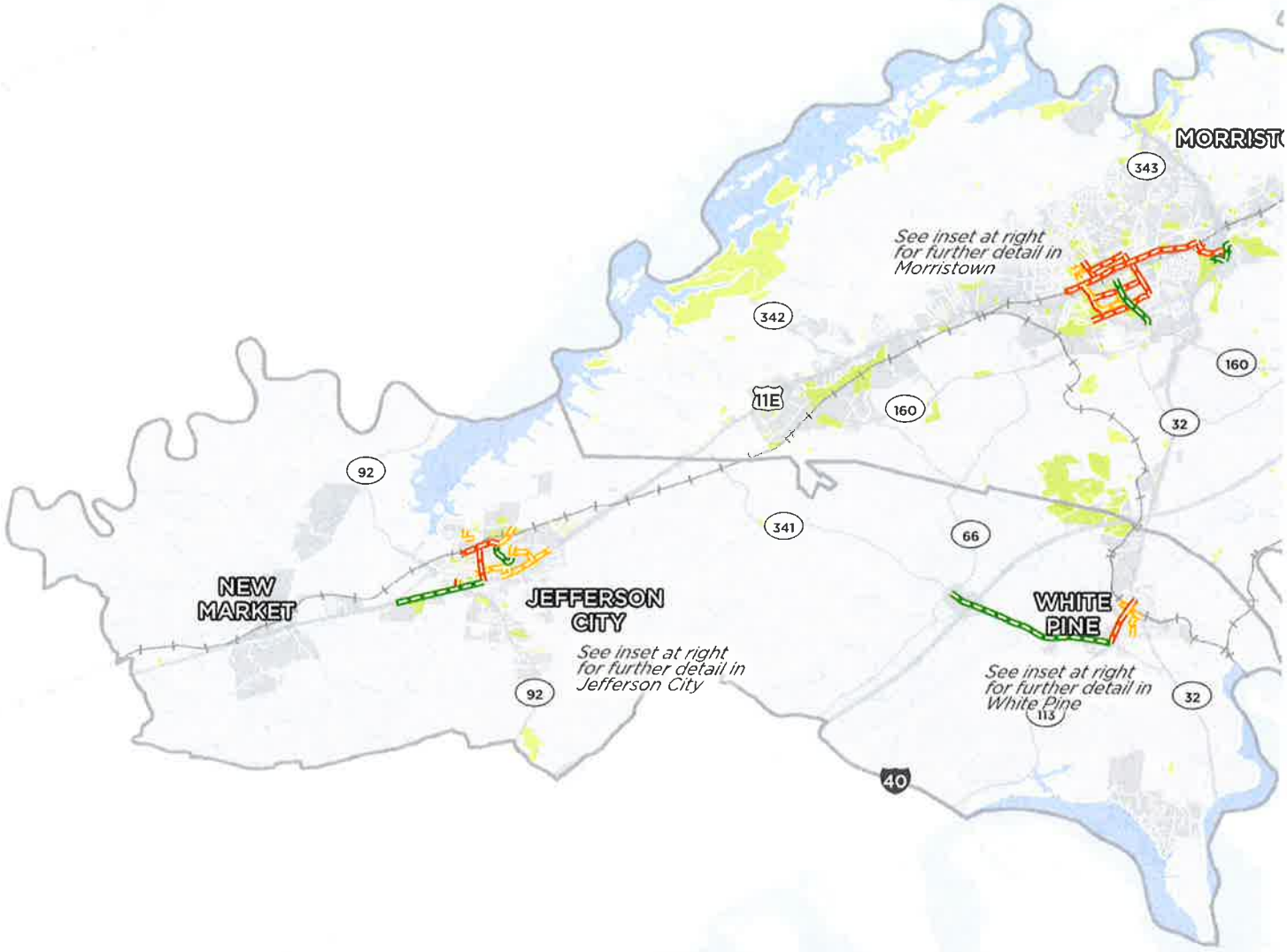


-  Proposed Shared-Use Path
-  Publicly Owned Lands
-  Municipal Boundaries
-  LAMTPO (Study Area)



LONG-TERM WALKWAYS AND BIKEWAYS

-- IMPLEMENTATION PLAN

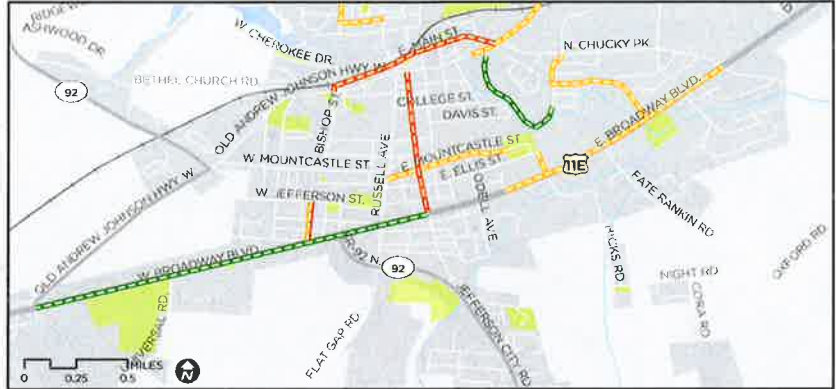




MORRISTOWN



JEFFERSON CITY

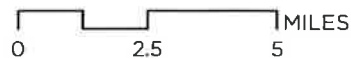


WHITE PINE



Proposed Walking and Biking Facilities

- On-Street Bikeway
- Shared-Use Path
- Sidewalk and/or Pedestrian Lane
- Sidewalk and/or Pedestrian Lane, On-Street Bikeway
- Publicly Owned Lands
- Municipal Boundaries
- LAMTPO (Study Area)



LAMTPO PROJECT LIST

#	STREET NAME(S)	FACILITY	MUNICIPALITY
1	Broadway	Sidewalk and/or Pedestrian Lane	Jefferson City
2	E. Montcastle St	Sidewalk and/or Pedestrian Lane	Jefferson City
3	Hicks Rd	Sidewalk and/or Pedestrian Lane	Jefferson City
4	Meadow Spring Dr	Sidewalk and/or Pedestrian Lane	Jefferson City
5	E Old AJ Hwy	Sidewalk and/or Pedestrian Lane	Jefferson City
6	N. Sizer Ave	Sidewalk and/or Pedestrian Lane	Jefferson City
7	W Cates St	Sidewalk and/or Pedestrian Lane	Jefferson City
8	Sizer Ave	On-Street Bikeway	Jefferson City
9	Manning Dr	On-Street Bikeway	Jefferson City
10	Main St	On-Street Bikeway	Jefferson City
11	Unnamed Trail	Shared-Use Path	Jefferson City
12	Broadway	Shared-Use Path	Jefferson City
13	McFarland St	Sidewalk and/or Pedestrian Lane	Morristown
14	Mars St	Sidewalk and/or Pedestrian Lane	Morristown
15	Hubble St	Sidewalk and/or Pedestrian Lane	Morristown
16	W 5th St N	Sidewalk and/or Pedestrian Lane	Morristown
17	Dice St/Walnut Dr	Sidewalk and/or Pedestrian Lane	Morristown
18	W Charles St	Sidewalk and/or Pedestrian Lane	Morristown
19	Louise Ave	On-Street Bikeway	Morristown
20	Montvue Ave	On-Street Bikeway	Morristown
21	Lincoln Ave	On-Street Bikeway	Morristown
22	Jackson St	On-Street Bikeway	Morristown

#	STREET NAME(S)	FACILITY	MUNICIPALITY
23	Cedar St	On-Street Bikeway	Morristown
24	3rd St N	On-Street Bikeway	Morristown
25	Haun Dr/Mall Loop	On-Street Bikeway	Morristown
26	Main St/Morningside Dr	On-Street Bikeway	Morristown
27	Morristown Rail Trail	Shared-Use Path	Morristown
28	Frank Lorino Trail	Shared-Use Path	Morristown
29	WSCC Access Rd	Shared-Use Path	Morristown
30	Main St/Morningside Dr	On-Street Bikeway	Morristown
31	Montvue Ave	On-Street Bikeway	Morristown
32	Dice St/Walnut Dr	Sidewalk and/or Pedestrian Lane	Morristown
33	Dice St	On-Street Bikeway	Morristown
34	Guy St	Sidewalk and/or Pedestrian Lane	White Pine
35	Maple St	Sidewalk and/or Pedestrian Lane	White Pine
36	Main St	On-Street Bikeway	White Pine
37	SR 341	Shared-Use Path	White Pine
38	Main St	On-Street Bikeway	White Pine
39	Main St	On-Street Bikeway	White Pine
40	Main St	On-Street Bikeway	White Pine

Two additional projects were assessed for potential bikeways and shared-use paths:

1. The extent of US 11E between Jefferson City and Morristown - removed due to bridge constraints, and total length of project would make feasibility cost-prohibitive.
2. SR 160 in Morristown - while listed as a State Bike Route, removed for lack of suitability for a bikeway, due to topographic constraints, unsupportive land use, and high-speed traffic which would necessitate a separated path.

PROGRAMS & POLICIES

Last Mile Connectivity Plan

The East Tennessee Human Resource Agency (ETHRA), in conjunction with LAMTPO, is developing a fixed route public transportation system within Morristown that is anticipated to start within a year. A Last Mile Connectivity Plan will identify programs and infrastructure improvements to create safe and efficient bicycle and pedestrian connections to bus stops.

This may include recommendations for bus stop placement or new crossing treatments that enable passengers to safely cross the street, focusing sidewalk and bike lane improvements on routes between stops and destinations, and bicycle parking plans that allow for easy transition between transportation modes.



BENEFITS

- Encourages higher bus ridership by creating easier and more enjoyable access to the bus stops
- Provides bus passengers with safer walkways, bikeways, and crossings
- Creates a connected system of transportation options to reduce reliance on the automobile

HOW TO

Implementation Strategy

- Assess the scale of a Last Mile Connectivity Plan and the potential needs, in terms of total # of bus stops that should be evaluated, and which locations should be prioritized
- Work with ETHRA and LAMTPO to create a timeline for a plan that considers the service start date
- Identify staff and partners that can assist with development of the plan

Potential Partners

- ETHRA
- LAMTPO
- Primary employers along planned bus routes

Resources

- [NACTO Transit Street Design Guide](#)

PROGRAMS & POLICIES

Sidewalk Prioritization Policy

A sidewalk prioritization policy will use a set of factors that may include land use, demographics, commercial and residential density, and proximity to destinations such as schools and parks to develop priority locations for new sidewalks and sidewalk repairs. The condition of the sidewalks and public input on desired locations may also be taken into account. These factors may be weighed based on importance to develop a basic scoring system.

A sidewalk prioritization system should be established with a sidewalk funding strategy to determine the total feet/miles of sidewalks that can be added or repaired in a given year.



BENEFITS

- Identifies the priority locations for sidewalks based on data and analysis
- Establishes a clear process for choosing where to add sidewalks that builds community trust
- Makes efficient use of limited sidewalk funding
- Creates a system that allows the regional and local government to track progress

HOW TO

Implementation Strategy

- Identify existing and potential funding strategies for sidewalks, along with the current total \$ allocated per year
- Evaluate where and how sidewalk improvement decisions are made
- Work with local jurisdictions and regional partners to create a scoring system and map the priority sidewalk locations

Potential Partners

- TDOT
- Local Municipalities (Public Works and GIS Depts)
- Neighborhood Organizations

Resources

- [Example Policy: City of Johns Creek, GA](#)

PROGRAMS & POLICIES

Safe Streets Education Program

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. Safety campaigns can be coordinated with state agencies and the LAMTPO.

Examples may include education campaigns on the 3-foot law for passing bicyclists, or the requirement to yield to pedestrians in crosswalks, whether marked or unmarked. This may take the form of a program to add 3-foot passing signage and in-street pedestrian crossing signs, and may be used in tandem with enforcement efforts.



BENEFITS

- Improves understanding of existing traffic laws that protect pedestrians and cyclists
- Can be coordinated with enforcement efforts to increase compliance of crosswalk laws and bicycle right-of-way laws
- Increases effectiveness of new crossing technologies such as Pedestrian Hybrid Beacons

HOW TO

Implementation Strategy

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

Potential Partners

- Local and State Advocacy Organizations
- Police Departments
- Area Schools and Universities
- Tennessee Highway Safety Office

Resources

- [The Tennessee Highway Safety Office Bicycle and Pedestrian Program Resources](#)

PROGRAMS & POLICIES

Dedicated Sidewalk and Bikeways Funding Stream

To fund the projects and programs listed in this plan, identify a dedicated sidewalk and bikeways funding stream in the annual budget for local municipalities. Local governments can create a dedicated funding source by setting aside portions of general transportation revenue, public school bonds, county health department funding, parking fees, and traffic violation revenue for upgrades to biking facilities.

As an example, the City of Columbia, SC implements bikeways through Richland County, which created a 1% sales tax for transportation, one-third of which goes to funding greenways and trails. This ensures a sustainable and reliable funding mechanism for regional projects.



BENEFITS

- Provides a reliable funding source for crucial transportation and recreation infrastructure, that does not rely on outside funds or grants
- Shows a willingness to invest and can assist with applying for grants that require a local match
- Establishes a set minimum budget, which allows for effective prioritization

HOW TO

Implementation Strategy

- Partner with other area governmental agencies, such as Hamblen and Jefferson Counties to identify potential funding mechanisms
- Include the funding program as part of a municipal vote or bond. Keep the focus on improving basic infrastructure that will improve quality of life for everyone, such as sidewalks

Potential Partners

- Counties and local municipalities
- Local mayors and council representatives
- Schools and health departments

Resources

- [Example Program: City of Richardson, TX Sidewalk Rehabilitation Program](#)

PROGRAMS & POLICIES

Low Cost Sidewalk Design Workshop

The LAMTPO may host a Low-Cost Sidewalk Design + Implementation Workshop for internal and external stakeholders to review national best practices and facilitate how low-cost solutions could be implemented locally. This would help to provide short term affordable solutions for projects that would likely need a full road rebuild to facilitate sidewalks and are more than 6 years out for construction.

Examples include sidewalk alternatives that are new to the Lakeway region, such as pedestrian lanes and yield roadways, along with materials and designs that are low cost.



BENEFITS

- Educates area stakeholders on best practices in sidewalk design, and alternatives that can be implemented for temporary improvements
- Allows the region to expand walkways and bikeways into larger region
- Reduces the long delays often associated with implementing sidewalks following a planning process

HOW TO

Implementation Strategy

- Partner with consulting firms or agencies that have experience with sidewalk alternatives and implementation to create an agenda
- Identify local and national speakers for the workshop
- Find a central location to host the workshop, and reach out to potential stakeholders at all levels of government

Potential Partners

- Cities with established best practices
- Government stakeholders and implementing agencies
- Neighborhood leaders/advocates

Resources

- [Small Town and Rural Multimodal Design Guide](#)
- [Tactical Urbansim Guides](#)

PROGRAMS & POLICIES

Safe Routes to School Events

Safe Routes to School (SRTS) is a national program that can be funded at the state or local level. Events such as Walk to School Day and a “Walking School Bus” can encourage more students to walk or bike to school. This is especially critical as child obesity rates continue to rise, and fewer and fewer kids use active transportation.

Currently, funding for projects such as sidewalk repairs or crossings through SRTS is limited at the state level. However, programs can be implemented locally and with assistance from school districts, teachers, and parents. By showing the demand for a student’s ability to walk or bike to school, local leaders can effectively push for better infrastructure.



BENEFITS

- Reinforces walking and biking as a positive behavior and improves health outcomes
- Reduces vehicle congestion during student dropoff/pickup
- Creates opportunities with schools to interact with parents and adjacent communities and push for positive change

HOW TO

Implementation Strategy

- Establish a Safe Routes to School Task Force to coordinate efforts with and across local schools
- Work with parents and advocates to find “program champions” that are willing to volunteer time and energy
- Launch a program during Bike Month or Walk to School Week, and utilize existing national and state resources to promote the event

Potential Partners

- TDOT SRTS
- Health Departments
- Local Schools that are within walkable areas or walkable distance of neighborhoods

Resources

- [TDOT Safe Routes to School Program](#)

PROGRAMS & POLICIES

Policy Guidance

OVERVIEW

The policy guidance and associated strategies presented here aim to improve the underlying land use and transportation conditions that fundamentally promote walking and biking at the regional and local level. These are presented as options for consideration by local governments in the region, to adapt and incorporate into their own local regulations, as appropriate for each community.

POLICY CONSIDERATIONS BY LAND USE

The table below presents a general set of policy considerations that are organized in tabular form and calibrated to the region's range of settlement types, so that they may be considered and applied in different communities throughout the region.



Natural



Farmland



Village



Town

Transportation Network

Objective: Accommodate bicyclists through the ongoing development of a context-sensitive regional and local transportation infrastructure network.

Ensure that the region's thoroughfare system is compatible with adjacent land uses and natural/built character.	●	●	●	●
Promote positive health, recreation, transportation, economic, and environmental benefits of bicycle investments.	●	●	●	●
Coordinate with TDOT and the Complete Streets Policy along and across state roadways.	●	●	●	●
Require new development to minimize driveway accesses in order to reduce conflict points.			●	●

PROGRAMS & POLICIES

Policy Guidance

POLICY CONSIDERATIONS BY LAND USE

The table below presents a general set of policy considerations that are organized in tabular form and calibrated to the region's range of settlement types, so that they may be considered and applied in different communities throughout the region.



Natural



Farmland



Village



Town

Transportation Network (Continued)

Objective: Accommodate bicyclists through the ongoing development of a context-sensitive regional and local transportation infrastructure network.

Partner with State and local entities to explore alternative funding sources that support transportation options throughout the region, including integrating bicycle and pedestrian facilities.	•	•	•	•
Encourage local jurisdictions to require development to fund proportional share of transportation infrastructure costs.			•	•
Work with all jurisdictions to reduce motor vehicle speeds by implementing proven traffic-calming measures.			•	•
Supplement subdivision regulations with context-appropriate block size and street connectivity standards.			•	•

PROGRAMS & POLICIES

Policy Guidance

POLICY CONSIDERATIONS BY LAND USE

The table below presents a general set of policy considerations that are organized in tabular form and calibrated to the region's range of settlement types, so that they may be considered and applied in different communities throughout the region.



Natural



Farmland



Village



Town

Bikeway Infrastructure

Objective: Accommodate bicyclists through the ongoing development of context-appropriate bikeways, bicycle parking, and bikeway signing and wayfinding.

Ensure that the maintenance/expansion of the regional thoroughfare system serves bicyclists and pedestrians.	•	•	•	•
Use this Isothermal Regional Bicycle Plan to guide future planning, design, and implementation of bicycle infrastructure in conjunction with other local and regional planning and development projects.	•	•	•	•
Encourage county/municipal parking requirements to include bicycle parking at areas of regional and local significance, such as schools, government offices,			•	•
Encourage county/municipal parking requirements to follow the Association for Pedestrian and Bicycle Professionals' (APBP) bicycle parking design and location guidelines, including provisions for short- and long-term parking.			•	•
Work with state, county, and local entities to enhance the safety and visibility of the regional bicycle network by implementing appropriate safety and wayfinding signage improvements.	•	•	•	•

PROGRAMS & POLICIES

Policy Guidance

POLICY CONSIDERATIONS BY LAND USE

The table below presents a general set of policy considerations that are organized in tabular form and calibrated to the region's range of settlement types, so that they may be considered and applied in different communities throughout the region.



Natural



Farmland



Village



Town

Environmental Protection

Objective: Protect natural land by directing public infrastructure spending and private development to areas where they will have the greatest social and economic benefit and the least environmental impact and transportation cost.

Establish a regional Transfer of Development Rights (TDR) program and/or support existing or new conservation easement, land trusts, and other tools to preserve the region's rural and working landscapes.	•	•		
Protect regional wetlands, wetland buffers, floodways, floodplains, aquifer recharge areas, woodland, productive farmland, wildlife habitat and important scenic views by disallowing new development along certain scenic roadways.	•	•		
Help property owners maintain the agricultural use of their land through a regional tax relief or land valuation mechanisms calibrated to agricultural production value, as opposed to its commercial or residential real estate value.		•		
Encourage the protection, preservation and enhancement of riparian corridors within new development and the redevelopment of existing, underutilized parcels to maximize public access, connectivity, and recreational bicycling.			•	•

PROGRAMS & POLICIES

Policy Guidance

POLICY CONSIDERATIONS BY LAND USE

The table below presents a general set of policy considerations that are organized in tabular form and calibrated to the region's range of settlement types, so that they may be considered and applied in different communities throughout the region.



Natural



Farmland



Village



Town

Regional Growth

Objective: Direct public infrastructure spending and private development to developed areas where the greatest social and economic benefit can be realized with the least environmental and transportation costs.

Ensure that adequate public services, infrastructure, and facilities are available or funded prior to approval of new development to ensure that the cost is not unnecessarily burdensome to existing residents.

Encourage county and local governments to replace use-based zoning code with form-based, pedestrian-oriented zoning, especially within existing or proposed residential neighborhoods and mixed-use main street / commercial corridors.

Prioritize application processing and/or create other financial incentives for projects within previously developed areas or areas regulated by form-based codes zoning.

Wherever practical, incentivize land devoted to surface parking lots to be developed into more productive uses.

Encourage and support the evolution of auto-oriented, strip-style commercial development into mixed-use activity centers that support a more walkable and bicycle-friendly environment.

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		•	•
			•
		•	•

PROGRAMS & POLICIES

Policy Guidance

POLICY CONSIDERATIONS BY LAND USE

The table below presents a general set of policy considerations that are organized in tabular form and calibrated to the region's range of settlement types, so that they may be considered and applied in different communities throughout the region.



Natural



Farmland



Village



Town

Regional Growth (Continued)

Objective: Direct public infrastructure spending and private development to developed areas where the greatest social and economic benefit can be realized with the least environmental and transportation costs.

Encourage the LAMTPO counties and local municipalities to evaluate the strength of proposed development projects through the creation of a smart growth scorecard, or similar tool.

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PART 4

PART 4

IMPLEMENTATION

OVERVIEW

ACTION STEPS FOR THE NEXT 5 YEARS

OVERVIEW

The implementation of the Lakeway Area Bicycle and Pedestrian Master Plan recommendations will require a comprehensive approach that includes multiple sources of funding, partnerships, design, construction, and management. It will also require the dedication of LAMTPO and municipal staff and a commitment to the vision established by the Project Management Team and this plan.

Communities across the country that have successfully implemented bicycle and pedestrian programs 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 potential funding sources can be found in this section.

The resources provided herein – the safety analysis, the opportunities and constraints, the program and infrastructure recommendations – can serve as a daily reference material for the LAMTPO and its implementing partners.



ACTION STEPS FOR THE NEXT 5 YEARS

1) CONTINUE THE STAKEHOLDER COMMITTEE

A team effort is required to move the plan forward. The PMT process includes stakeholders that can partner to make programs and projects a reality. Capitalize on this momentum, and formalize the PMT as an LAMTPO Bicycle and Pedestrian Commission that meets quarterly, at a minimum.

2) PRIORITIZE FUNDING FOR CATALYST PROJECTS

To kickstart the funding conversation, partner with municipalities to identify eligible TAP projects and matching funds. Continue the Plan's momentum by sharing catalyst projects directly with the region's funding partners. This includes TDOT, the Tennessee Department of Health, City Councils and County Commissions, and private sector partners. The funding analysis included in the appendix provides a resource for matching grants with programs and projects.

3) DEVELOP AND IMPLEMENT ONE PROGRAM AT A TIME

Programs have a big impact 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 a Bicycle and Pedestrian Commission to develop a list of communications strategies to promote each program and attract volunteers. Make a goal to implement each program within six months of announcing the program.



ACTION STEPS FOR THE NEXT 5 YEARS

4) BUILD ON EXISTING EVENTS

Events like the downtown Morristown Concert Series and Farmers Market present excellent opportunities to build community interest and showcase demonstration projects, such as those recommended for downtown Morristown. This is also a great time to gather public feedback and register volunteers due to the large and diverse audience at community events.

5) SHARE THE PLAN

Continue to share the Plan with residents and affiliated groups and organizations. Spread the word about proposed improvements and program opportunities that directly respond to residents' concerns and ideas for improving their community.

6) KEEP COLLABORATING WITH TDOT, TOWNS, AND UNIVERSITIES

The local municipalities, TDOT, and area universities such as Walters State Community College have forged a strong working relationship through this project and other cross-jurisdictional efforts. Continue this collaboration and information-sharing to ensure an efficient use of time and resources for both entities.



APPENDIX

FUNDING MECHANISMS

PLAN REVIEW

BICYCLE ROUTE MAPS

SURVEY RESULTS



FEDERAL FUNDING SOURCES

SOURCE	SUMMARY	MORE INFORMATION
FAST ACT	<p>In Tennessee, federal monies are administered through the Tennessee Department of Transportation (TDOT) and Council of Governments (COG's) or Metropolitan Planning Organizations (MPOs). Most, but not all, of these programs are oriented toward transportation versus recreation, with an emphasis on reducing auto trips and providing inter-modal connections. Federal funding is intended for capital improvements and safety and education programs, and projects must relate to the surface transportation system.</p> <p>There are a number of programs identified within the FAST Act that are applicable to pedestrian and bicycle projects. These programs are discussed below.</p>	<p>http://www.fhwa.dot.gov/map21/summary-info.cfm</p>
TRANSPORTATION ALTERNATIVES	<p>Transportation Alternatives as defined by Section 1103 (a)(29). This category includes the construction, planning, and design of a range of pedestrian and bicycle infrastructure including "on-road and off-road trail facilities for pedestrians, bicyclists, and other active forms of transportation, including sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic calming techniques, lighting and other safety-related infrastructure, and transportation projects to achieve compliance with the Americans with Disabilities Act of 1990." Infrastructure projects and systems that provide "Safe Routes for Non-Drivers" is a new eligible activity. In Tennessee, the local agency pays 100% for the PE-NEPA, PE-Design, and ROW. Local agencies provide a 20% match for construction costs.</p>	<p>For the complete list of eligible activities, visit: http://www.fhwa.dot.gov/environment/transportation_enhancements/legislation/map21.cfm</p>
CDC GRANTS	<p>The CDC provides funding opportunities for several different organization and jurisdiction types that can potentially support pedestrian and bicycle infrastructure, planning or other support programs.</p>	<p>An overview of these different programs and funding cycles can be found here: http://www.cdc.gov/chronicdisease/about/foa.htm,</p>



FEDERAL FUNDING SOURCES

SOURCE

SUMMARY

MORE INFORMATION

RECREATIONAL TRAILS

These funds may be used to develop and maintain recreational trails and trail-related facilities for both active and motorized recreational trail uses. Examples of trail uses include hiking, bicycling, in-line skating, equestrian use, and other active and motorized uses. These funds are available for both paved and unpaved trails, but may not be used to improve roads for general passenger vehicle use or to provide shoulders or sidewalks along roads.

Recreational Trails Program funds may be used for:

- Maintenance and restoration of existing trails
- Purchase and lease of trail construction and maintenance equipment
- Construction of new trails, including unpaved trails
- Acquisition or easements of property for trails
- State administrative costs related to this program (limited to seven percent of a state's funds)
- Operation of educational programs to promote safety and environmental protection related to trails (limited to five percent of a state's funds)
- Grant applications are typically due in April each year.

More info on administration of the Recreational Trails Program in Tennessee can be found through the following site: <https://www.tn.gov/environment/about-tdec/grants/grants-recreation-grants/recreation-education-trail-program.html>

HIGHWAY SAFETY IMPROVEMENT PROGRAM

HSIP provides \$2.4 billion nationally for projects and programs that help communities achieve significant reductions in traffic fatalities and serious injuries on all public roads, bikeways, and walkways. Infrastructure and non-infrastructure projects are eligible for HSIP funds. Pedestrian and bicycle safety improvements, enforcement activities, traffic calming projects, and crossing treatments for active transportation users in school zones are examples of eligible projects. All HSIP projects must be consistent with the state's Strategic Highway Safety Plan.

The Tennessee Highway Safety Office (within TDOT) administers grants to programs that aim to reduce injuries and fatalities on state roads. These grants are available to non-profits, law enforcement agencies, and local governments. TDOT allots a percentage of its overall funding towards pedestrian safety improvements that is consistent with the pedestrian fatality rate (about 11% and rising).

Information on the TN Highway Safety grants are found here: <https://tntrafficsafety.org/applying-for-grants>



FEDERAL FUNDING SOURCES

SOURCE	SUMMARY	MORE INFORMATION
RIVERS, TRAILS, AND CONSERVATION ASSISTANCE PROGRAM	<p>The Rivers, Trails, and Conservation Assistance Program (RTCA) is a National Parks Service (NPS) program providing technical assistance via direct NPS staff involvement to establish and restore greenways, rivers, trails, watersheds and open space. The RTCA program provides only for planning assistance—there are no implementation monies available. Projects are prioritized for assistance based on criteria including conserving significant community resources, fostering cooperation between agencies, serving a large number of users, encouraging public involvement in planning and implementation, and focusing on lasting accomplishments. This program may benefit trail development in the region indirectly through technical assistance, particularly for community organizations, but should not be considered a future capital funding source.</p>	<p>More information: http://www.nps.gov/orgs/rtca/apply.htm</p>
COMMUNITY DEVELOPMENT BLOCK GRANTS (CDBG)	<p>The Community Development Block Grants (CDBG) program provides money for streetscape revitalization, which may be largely comprised of pedestrian improvements. Federal CDBG grantees may “use Community Development Block Grants funds for activities that include (but are not limited to): acquiring real property; reconstructing or rehabilitating housing and other property; building public facilities and improvements, such as streets, sidewalks, community and senior citizen centers and recreational facilities; paying for planning and administrative expenses, such as costs related to developing a consolidated plan and managing Community Development Block Grants funds; provide public services for youths, seniors, or the disabled; and initiatives such as neighborhood watch programs.”</p> <p>Trails and greenway projects that enhance accessibility are the best fit for this funding source. CDBG funds could also be used to create an ADA Transition Plan. States designate CDBG funds to “entitlement communities” – generally major cities with more than 50,000 people – and “non-entitlement communities”, whereby DHEC communities may be eligible for funding.</p>	<p>More information: https://www.hud.gov/program_offices/comm_planning/communitydevelopment/programs</p>
EPA GREEN INFRASTRUCTURE GRANTS	<p>The EPA offers a number of grant resources that serve to improve clean water in communities such as the EPA Clean Water State Revolving Fund, EPA Clean Water Act Nonpoint Source Grant and EPA Community Action for a Renewed Environment (CARE) Grants.</p>	<p>More information on these, and other funding sources can be found through the EPA’s website: https://www.epa.gov/green-infrastructure/green-infrastructure-funding-opportunities</p>



FEDERAL FUNDING SOURCES

SOURCE	SUMMARY	MORE INFORMATION
<p>ENHANCED MOBILITY OF SENIORS & INDIVIDUALS WITH DISABILITIES</p>	<p>Section 5310 of the FAST ACT – Enhanced Mobility of Seniors and Individuals with Disabilities provides capital and operating costs to provide transportation services and facility improvements that exceed those required by the Americans with Disabilities Act. Examples of pedestrian/accessibility projects funded in other rural communities include installing Accessible Pedestrian Signals (APS), enhancing transit stops to improve accessibility, and establishing regional one-click systems.</p>	<p>More information: https://www.transit.dot.gov/funding/grants/enhanced-mobility-seniors-individuals-disabilities-section-5310</p>
<p>ADDITIONAL FTA FUNDING SOURCES FOR BIKE/PED INFRASTRUCTURE</p>	<p>Most FTA funding can be used to fund pedestrian and bicycle projects “that enhance or are related to public transportation facilities.”</p> <p>According to the FTA, an FTA grantee may use any of the following programs under Title 49, Chapter 53, of the United States Code to fund capital projects for pedestrian and bicycle access to a public transportation facility:</p> <ul style="list-style-type: none"> • Section 5307 Urbanized Area Formula Program; • Section 5309 New Starts and Small Starts Major Capital Investment Programs; • Section 5309 Fixed Guideway Modernization Program; • Section 5309 Bus and Bus Facilities Discretionary Program; • Section 5310 Elderly Individuals and Individuals with Disabilities Formula Program; • Section 5311 Non-Urbanized Area Formula Program; • Section 5311 Public Transportation on Indian Reservations; • Section 5316 Job Access and Reverse Commute Formula Program; • Section 5317 New Freedom Program; and, • Section 5320 Paul S. Sarbanes Alternative Transportation in Parks and Public Lands. 	
<p>ADDITIONAL FEDERAL FUNDING</p>	<p>The landscape of federal funding opportunities for pedestrian and bicycle programs and projects is always changing. A number of Federal agencies, including the Bureau of Land Management, the Department of Health and Human Services, the Department of Energy, and the Environmental Protection Agency have offered grant programs amenable to pedestrian and bicycle planning and implementation, and may do so again in the future.</p>	<p>For up-to-date information about grant programs through all federal agencies, see: http://www.grants.gov/</p>



TENNESSEE STATE FUNDING SOURCES

SOURCE	SUMMARY	MORE INFORMATION
TENNESSEE MAIN STREET PROGRAM	The Tennessee Main Street program is coordinated by the Tennessee Department of Economic and Community Development's Community and Rural Development Division. Communities of any size may apply for Main Street funding and assistance. The program follows the National Four Point model; organization, promotion, design, and economic restructuring. Benefits to becoming a Main Street program include developing a work plan, customized workshops, design services, and training for staff committees. Morristown is currently a Main Street Community.	For more information: https://www.tn.gov/ecd/rural-development/tennessee-main-street/tennessee-main-street.html
MULTIMODAL ACCESS GRANT	The TDOT Multimodal Access Grant funds infrastructure projects that benefit pedestrians, bicyclists, and transit users along state routes. The state provides 95% and local municipalities provide a 5% match. The total project costs must be under \$1 million. Communities must submit a notice to apply, typically at the end of June for each year.	For more information: https://www.tn.gov/tdot/multimodal-transportation-resources/multimodal-access-grant.html
LOCAL PARKS AND RECREATION FUND (LPRF) GRANTS	The Tennessee Department of Environment and Conservation provides funding for counties and municipalities to build trails, greenways, and park projects. At least 60% of the funding will go towards municipalities and local jurisdictions must provide a 50% match.	For more information: https://www.tn.gov/environment/about-tdec/grants/grants-recreation-grants/grants-local-parks-and-recreation-fund-lprf-grants.html
TENNESSEE DEPARTMENT OF HEALTH	The Tennessee Department of Health occasionally has funding opportunities to address health issues related to the built environment, particularly in rural and underserved parts of the state.	For a list of current funding opportunities: https://www.tn.gov/health/funding-opportunities.html



LOCAL FUNDING SOURCES

SOURCE	SUMMARY
LOCAL IMPROVEMENT DISTRICTS	<p>Local Improvement Districts (LIDs) are most often used by cities to construct localized projects such as streets, sidewalks or bikeways. Through the LID process, the costs of local improvements are generally spread out among a group of property owners within a specified area. The cost can be allocated based on property frontage or other methods such as traffic trip generation.</p> <p>Several cities have successfully used LID funds to make improvements on residential streets and for large scale arterial projects. LIDs formed to finance commercial street development can be "full cost," in which the property assessments are entirely borne by the property owners.</p>
BUSINESS IMPROVEMENT AREA OR DISTRICT	<p>Trail development and pedestrian and bicycle improvements can often be included as part of larger efforts aimed at business improvement and retail district beautification. Business Improvement Areas collect levies on businesses in order to fund area wide improvements that benefit businesses and improve access for customers. These districts may include provisions for pedestrian and bicycle improvements, including as wider sidewalks, landscaping and ADA compliance.</p>
SALES TAX	<p>Local governments that choose to exercise a local option sales tax can use the tax revenues to provide funding for a wide variety of projects and activities.</p>
EXCISE TAXES	<p>Excise taxes are taxes on specific goods and services. These taxes require special legislation and the use of the funds generated through the tax are limited to specific uses. Examples include lodging, food, and beverage taxes that generate funds for promotion of tourism, and the gas tax that generates revenues for transportation-related activities.</p>
GENERAL FUND	<p>The General Fund is often used to pay for maintenance expenses and limited capital improvement projects. Projects identified for reconstruction or re-pavement as part of the Capital Improvements list should also incorporate recommendations for bicycle or pedestrian improvements in order to reduce additional costs.</p>
LOCAL BOND MEASURES	<p>Local bond measures, or levies, are usually general obligation bonds for specific projects. Bond measures are typically limited by time based on the debt load of the local government or the project under focus. Funding from bond measures can be used for engineering, design and construction of trails, greenways, and pedestrian and bicycle facilities.</p>
STREET USER FEES	<p>Many cities administer street user fees through residents' monthly water or other utility bills. The revenue generated by the fee can be used for operations and maintenance of the street system, and priorities would be established by the Public Works Department. Revenue from this fund can be used to maintain pedestrian facilities such as sidewalks.</p>
UTILITY LEASE REVENUE	<p>A method to generate revenues from land leased to utilities for locating utility infrastructure on municipally owned parcels. This can improve capital budgets and support financial interest in property that would not otherwise create revenue for the government.</p>



OTHER FUNDING SOURCES

SOURCE	SUMMARY
VOLUNTEER WORK AND PUBLIC-PRIVATE PARTNERSHIPS	<p>Individual volunteers from the community can be brought together with groups of volunteers from church groups, civic groups, scout troops and environmental groups to work on greenway development on special community workdays. Volunteers can also be used for fundraising, maintenance, and programming needs. Local schools or community groups may use the bikeway projects as a project for the year, possibly working with a local designer or engineer.</p> <p>Work parties may be formed to help clear the right-of-way where needed. A local construction company may donate or discount services. A challenge grant program with local businesses may be a good source of local funding, where corporations 'adopt' a bikeway and help construct and maintain the facility.</p>
PRIVATE INDIVIDUAL DONATIONS	<p>Private individual donations can come in the form of liquid investments (i.e. cash, stock, bonds) or land. Municipalities typically create funds to facilitate and simplify a transaction from an individual's donation to the given municipality. Donations are mainly received when a widely supported capital improvement program is implemented. Such donations can improve capital budgets and/or projects.</p>
INNOVATIVE FUNDING SOURCES	<p>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 kickstarter.com.</p>
DEMONSTRATION PROJECTS	<p>Temporary pop-up or "demonstration projects" can demonstrate the success of walking and biking infrastructure without a long-term commitment and a big budget. Pop-up projects include temporary protected bike lanes, painted sidewalks, parklets, pedestrian plazas in formerly vacant spaces, and traffic calming techniques.</p> <p>A "Space Activation" program can identify the best candidates for pop-up projects in local communities within the river region. Pop-up 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 City and County. This enables increased communication and allows for neighborhoods and the city or county 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.</p>
FUNDRAISING	<p>Organizations and individuals can participate in a fundraiser or a campaign drive. It is essential to market the purpose of a fundraiser to rally support and financial backing. Oftentimes fundraising satisfies the need for public awareness, public education, and financial support.</p>

REVIEW OF PREVIOUS PLANS

This section provides a summary of recent pedestrian and bicycle planning-related efforts in the Lakeway region. Seven relevant plans have been created in recent years for the study area; the Morristown Greenway Plan, the LAMTPO Bicycle and Pedestrian Plan, the School Safety Audit for Hamblen and Jefferson Counties, the ADA Transition Plans of White Pine, Jefferson City, Morristown, Hamblen and Jefferson counties, the Lakeway Region 2040 Long Range Transportation Plan (LRTP), the NCS Community Livability Report, and the TDOT Roadway Design Guidelines.

MORRISTOWN GREENWAY PLAN, 2002

The Morristown Greenway Plan was developed to identify potential routes for greenway trails, and to establish feasibility of the Turkey Creek Sanitary Sewer Interceptor project. The plan includes three primary greenway types:

- Type A: On-street facilities designated by striping and signage
- Type B: Low-volume traffic streets that provide an opportunity for shared streets
- Type C: Fully separated multi-use trails

For each greenway type, a sub-grouping of facility types is provided with a list of proposed roadways and trails that fit each proposed facility. Additionally, intersection improvements are identified to increase safety at major crossings. However, many relevant crossing treatments that have been developed since 2002, such as Pedestrian Hybrid Beacons (PHBs) and Rectangular Rapid Flashing Beacons (RRFBs) are not included.

Relevant Recommendations

The Greenway Plan includes specific recommendations for trail locations as well as designs for trail amenities, such as signage, benches, trash receptacles, shelters, lighting, and bike parking. The plan also mentions needed upgrades to the downtown Morristown Skywalk system, which is a series of elevated walkways along Main Street. This includes enhancing access points and ADA accessibility.

PLANS

2019
TDOT Roadway Design Guidelines

2018
NCS Community Livability Report

2017
Lakeway Region 2040 Long Range Transportation Plan (LRTP)

2016
ADA Transition Plan for White Pine, Hamblen County, and Morristown

2012
School Safety Audit for Hamblen and Jefferson Counties

2008
LAMTPO Bicycle and Pedestrian Plan

2002
Morristown Greenway Plan

PLANS

LAMTPO BICYCLE AND PEDESTRIAN PLAN, 2008

The previous bicycle and pedestrian plan for the Lakeway Area MPO was completed in 2008. The plan included:

- A set of goals and objectives
- An overview of existing and planned bicycle, pedestrian, and transit facilities
- A list of major trip generators
- Opportunities and constraints to walking and biking

Recommendations are organized around policies and programs, education and encouragement activities, bicycle and pedestrian facilities, cost estimates, and funding mechanisms. A number of opportunities are listed for improving walkability and bikeability in the LAMTPO. This includes:

- Wide roads with abundant right-of-way for adding bike lanes and sidewalks
- Existing trails that form a backbone for an expanded greenway network
- Abandoned rail corridors
- Walkway and bikeway improvements with new developments

Relevant Recommendations

Policies and Ordinances

The LAMTPO Bike Ped Plan provides many specific recommendations for improving safety and connectivity for people on foot or bike. Examples include:

- Requiring sidewalks on all new local, collector, and arterial streets within ½ mile of a school, public housing, commercial center, civic building, or other activity center
- Require marked crosswalks at all signalized intersections
- Require bicycle-friendly storm grates on all new roads, and develop a program for replacing hazardous grates

Facility Recommendations

The plan also lists locations for recommendations oriented around 4 basic facility types: sidewalks, greenways, bicycle routes, and bicycle lanes.

SCHOOL SAFETY AUDIT FOR HAMBLLEN AND JEFFERSON COUNTIES, 2012

In 2012, the LAMTPO conducted a Safe Routes to School (SRTS) audit of all Hamblen County grade schools, along with Jefferson Elementary, Jefferson Middle, and White Pine Elementary/Middle Schools. The primary objectives met the goals of the SRTS program and included:

- Enhancing safety around schools, reducing traffic and associated air pollution in school zones and increasing the number of students walking and biking to school

A total of 23 schools were evaluated, with site visit details, observations, and recommendations listed in the report. Recommendations are grouped under each campus on page 8. Key findings include:

- Few schools had crossings guards, but most would benefit from their use
- Most schools had appropriate School Zone notification facilities (signage, striping, signalization)
- Congestion and access were most challenging at the two-school campuses

Relevant Recommendations

Many specific recommendations for School Zone improvements include construction projects that can be at least partially funded through Safe Routes to School. However, many recommendations focus on vehicle access and reducing congestion, which often conflict with the goals of encouraging walking and biking to school. Nonetheless, there are sidewalk and intersection projects that should be evaluated for inclusion in the LAMTPO Bicycle and Pedestrian Plan. Examples include:

- Lincoln Heights Elementary and Middle: Add new crosswalk striping; construct sidewalks in front of the schools
- Morristown – Hamblen East High: Replace crosswalk striping at S. James St and E. Morris Blvd
- White Pine Elementary: Improve pedestrian connectivity between school and nearby sidewalks; install signage and crosswalk at existing market on SR-341



PLANS

PLANS

WHITE PINE, JEFFERSON CITY, JEFFERSON COUNTY, HAMBLLEN COUNTY, AND MORRISTOWN ADA TRANSITION PLANS, 2016

In 2015 and 2016, the communities of White Pine, Hamblen County, and Morristown conducted a self-evaluation report to communicate the accessibility compliance needs in accordance with the Americans with Disabilities Act. The reports are meant to be live documents, with an update on the progress of the plan provided on a yearly basis.

The items included in each report

- Notice of ADA Coordinator/Application of Non-Discriminatory Rules
- ADA Department Coordinators
- ADA Obstacle List
- Obstacle Removal Procedure
- Procedure for Contacting an Interpreter
- Reasonable Accommodation Request Procedures
- Complaint Intake Form

Key Takeaways

For each community, the ADA Obstacle List and Obstacle Removal Procedure are meant to be prepared and updated by the designated ADA Coordinator. The LAMTPO GIS Department has updated information on curb ramps, which is the extent of the available information of ADA compliance at a regional scale. The project team should contact the ADA Coordinator for each community to inquire on the progress of improving ADA compliance, and to better understand current obstacles.

LAKEWAY REGION 2040 LONG RANGE TRANSPORTATION PLAN, 2017

The Long Range Transportation Plan (LRTP) is a federal requirement for all Metropolitan Planning Organizations (MPOs). These plans have an outlook of at least 20 years, and establish the MPO vision and guide priority transportation projects for implementation. The LAMTPO updates the LRTP every four years to line up with the Knoxville TPO, and can be amended as a living document.

The most recent LRTP for the LAMTPO was updated in 2017. The LRTP includes a set of specific objectives and performance measures, as well as information on development trends and sustainability efforts.

Relevant Information

Chapter 9 includes a section on bicycle and pedestrian planning and includes “Best Practices for Bicycle and Pedestrian Investments.” The relevant best practices (which have not been addressed) are included here, below:

- Establish an active TPO Bicycle and Pedestrian Advisory Committee
- Implement a Complete Streets Policy
- Involve local boards of education to promote more school participation in walking and biking programs
- Increase coordination and communication
- Collect data on biking and walking rates, including biking and walking to school
- Include public health questions in the regional household travel survey
- Explore funding opportunities with public health
- Implement bicycle and pedestrian performance measures
- Create a set-aside for bicycle and pedestrian funding in current Federal funding programs

Additionally, Table 9.2 lists approximately 20 proposed bicycle and pedestrian projects in Morristown and Jefferson City, which includes sidewalks, bike lanes, greenways, and multi-use paths. These projects are also mapped in the LRTP.



PLANS

PLANS

NCS COMMUNITY LIVABILITY REPORT FOR MORRISTOWN, 2018

The National Citizen Survey (NCS) provides a snapshot of the perceived livability of Morristown. The report is statistically significant, with approximately 411 participants and a margin of error of 5%. Survey questions are organized around three community pillars (Governance, Participation, Community Characteristics), and eight central categories: mobility, safety, built environment, natural environment, economy, recreation and wellness, community engagement, and education and enrichment. For each category, the survey asks participants to rate attributes across a scale from positive to less positive.

Relevant Information

In the mobility category, residents rated their perceptions on: overall ease of travel, paths and walking trails, ease of walking, travel by bicycle, travel by car, public parking, and traffic flow.

Travel by bicycle and ease of walking received the lowest percentage of positive rankings, with 25% and 42% ranking those aspects of mobility as positive respectively. These scores are lower than the national benchmark, and among the lowest positivity ratings in the survey. Other aspects that received low ratings are also relevant to this plan, including vibrant downtown (41%) and air quality (49%).

Residents were also asked “How likely, if at all, would you be to utilize fixed route public transportation in Morristown.” A similar proportion replied that they would be very unlikely (41%) to use public transit as those that replied that they would be very likely or somewhat likely to use public transit (44%).

Key Takeaways

Based on these survey results, residents in Morristown feel that walking and biking are inconvenient and unsafe options given the current facilities. This presents the demand and need for improving walkways and bikeways, and provides a basis for revisiting the survey questions at regular intervals, perhaps every five years, to measure improvements in resident perception.

PLANS

TDOT ROADWAY DESIGN GUIDELINES, 2019

In 2019, the Tennessee Department of Transportation (TDOT) updated the Roadway Design Guidelines and Standard Drawings. These guidelines establish new standards for construction and reconstruction, and “shall be utilized while giving due regard to topography, natural conditions, availability of road material, and prevailing traffic conditions.” In addition to standard design drawings, construction, and right of way details, multimodal design guidelines are included for various bicycle facilities, shared-use paths, and transit facilities.

Relevant Information

Chapter 5 includes guidelines for bicycle facilities, which are organized into:

- Shoulder bikeways
- On-street shared-use lanes
- On-street bike lanes
- Buffered bike lanes
- Separated bike lanes/cycle tracks
- Shared-use paths

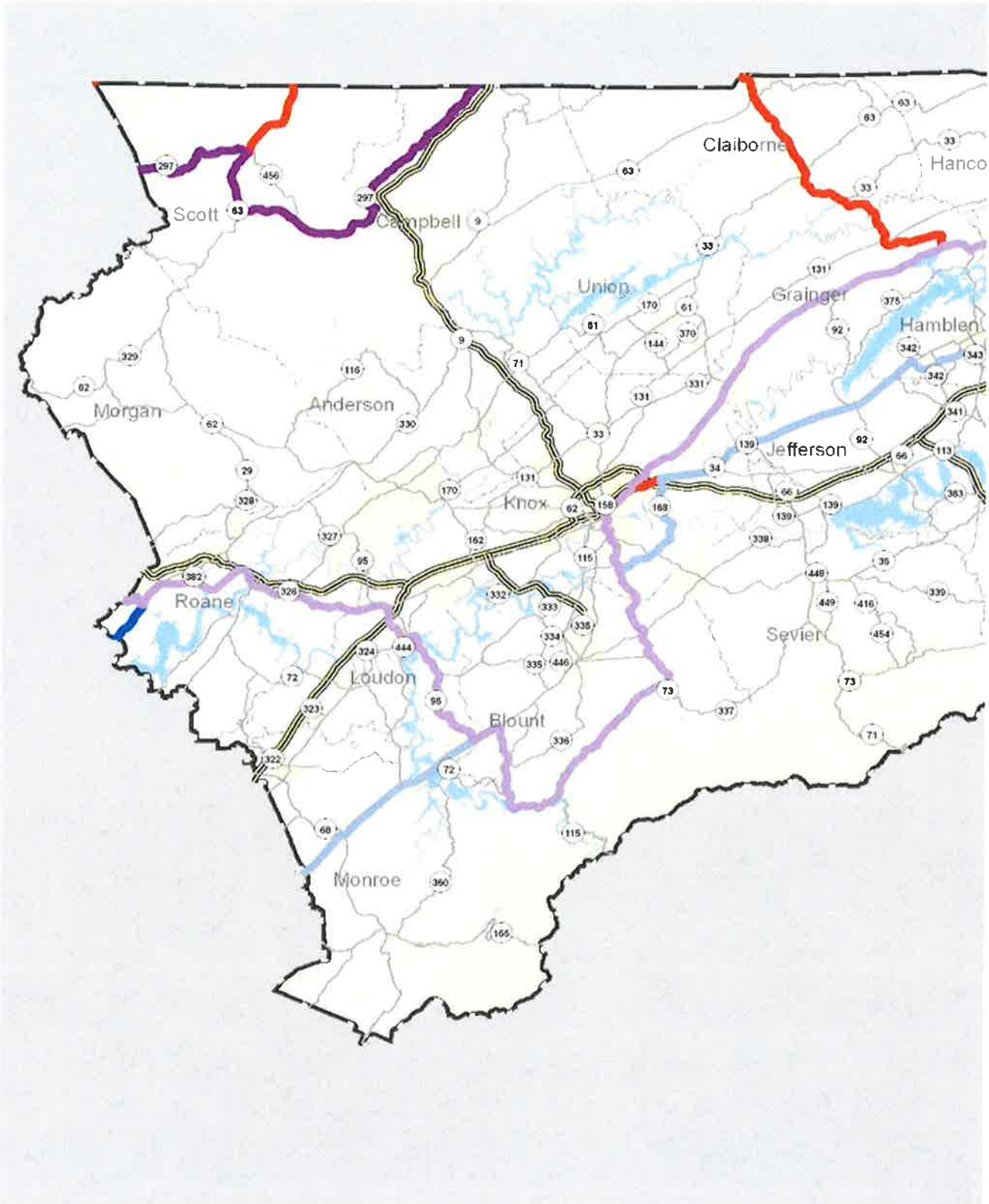
A brief description of each bikeway facility type is included, along with basic geometric design criteria. Notably, facility selection tables are split into minimum guidance for rural conditions and urban conditions. As an example, in urban conditions with an ADT of < 2,000 and a posted speed limit of 40 – 45 mph, the minimum recommendation is a bike lane, whereas a shared lane is recommended under the same conditions in a rural context. Additional guidance is provided for: bicycles at intersections, approach through lanes, bike boxes, drainage grates, pavement markings, railroad crossings, bridges, interchanges, and entrance/exit ramps.

Key Takeaways

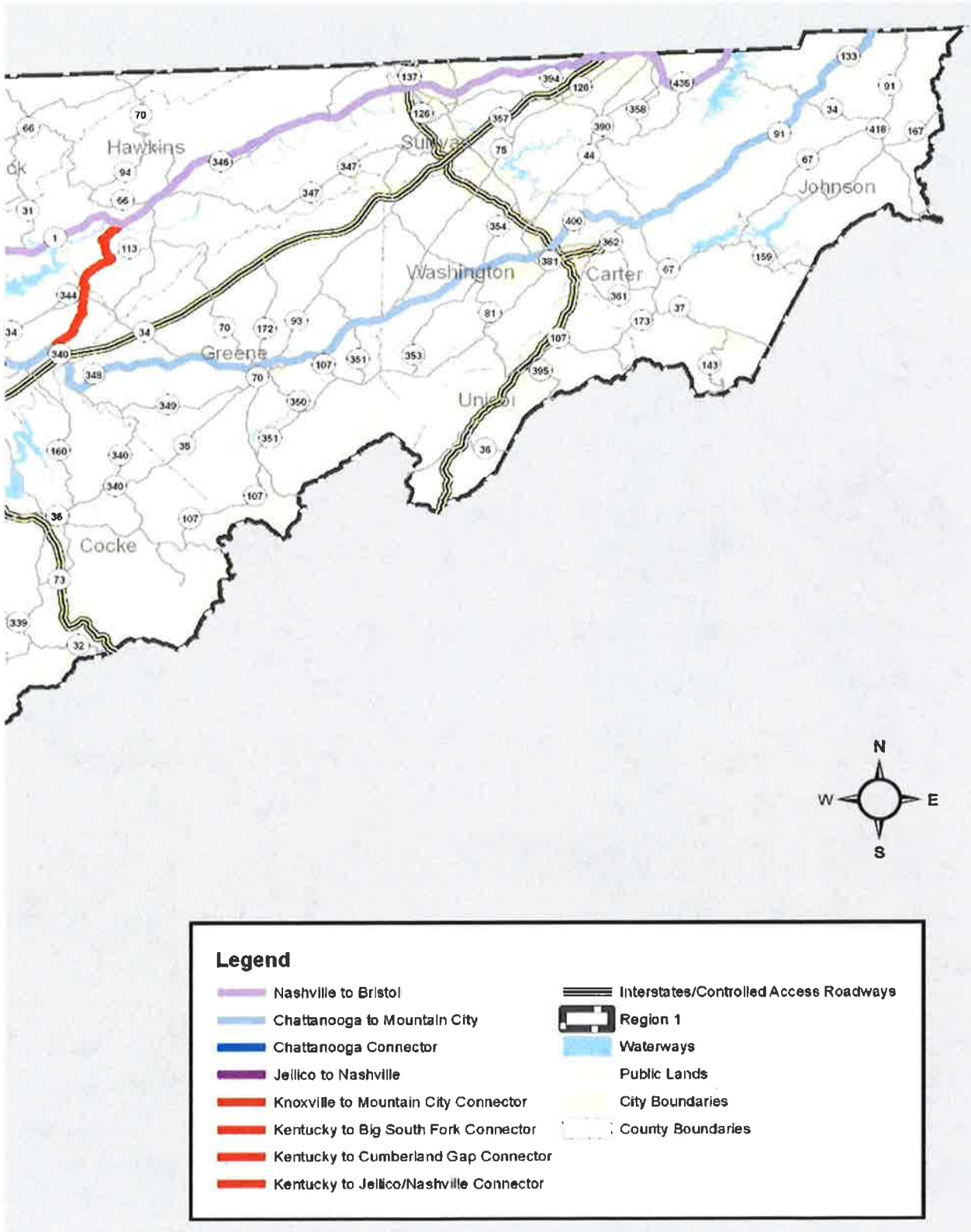
The [TDOT Roadway Design Guidelines](https://www.tn.gov/content/dam/tn/tdot/roadway-design/documents/design_guidelines/DG-S9.pdf) provide standards for municipalities and transportation authorities to follow on state roads. The LAMTPO Bicycle and Pedestrian plan may follow the TDOT facility organization for recommendations, to provide consistency between various communities in the region. See the design guidelines at: https://www.tn.gov/content/dam/tn/tdot/roadway-design/documents/design_guidelines/DG-S9.pdf

TDOT BICYCLE ROUTE MAPS

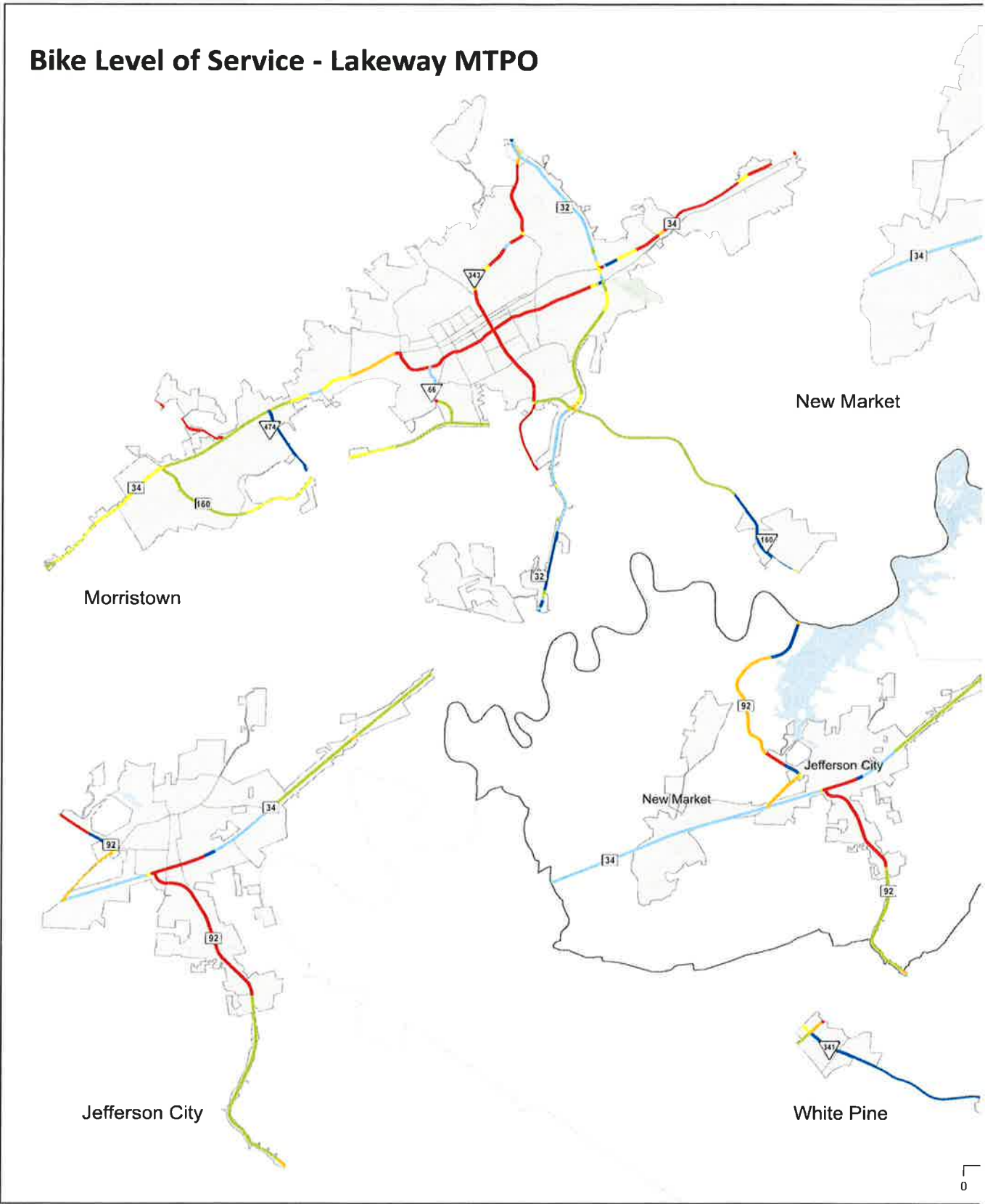
Map 7. Proposed State Highwa

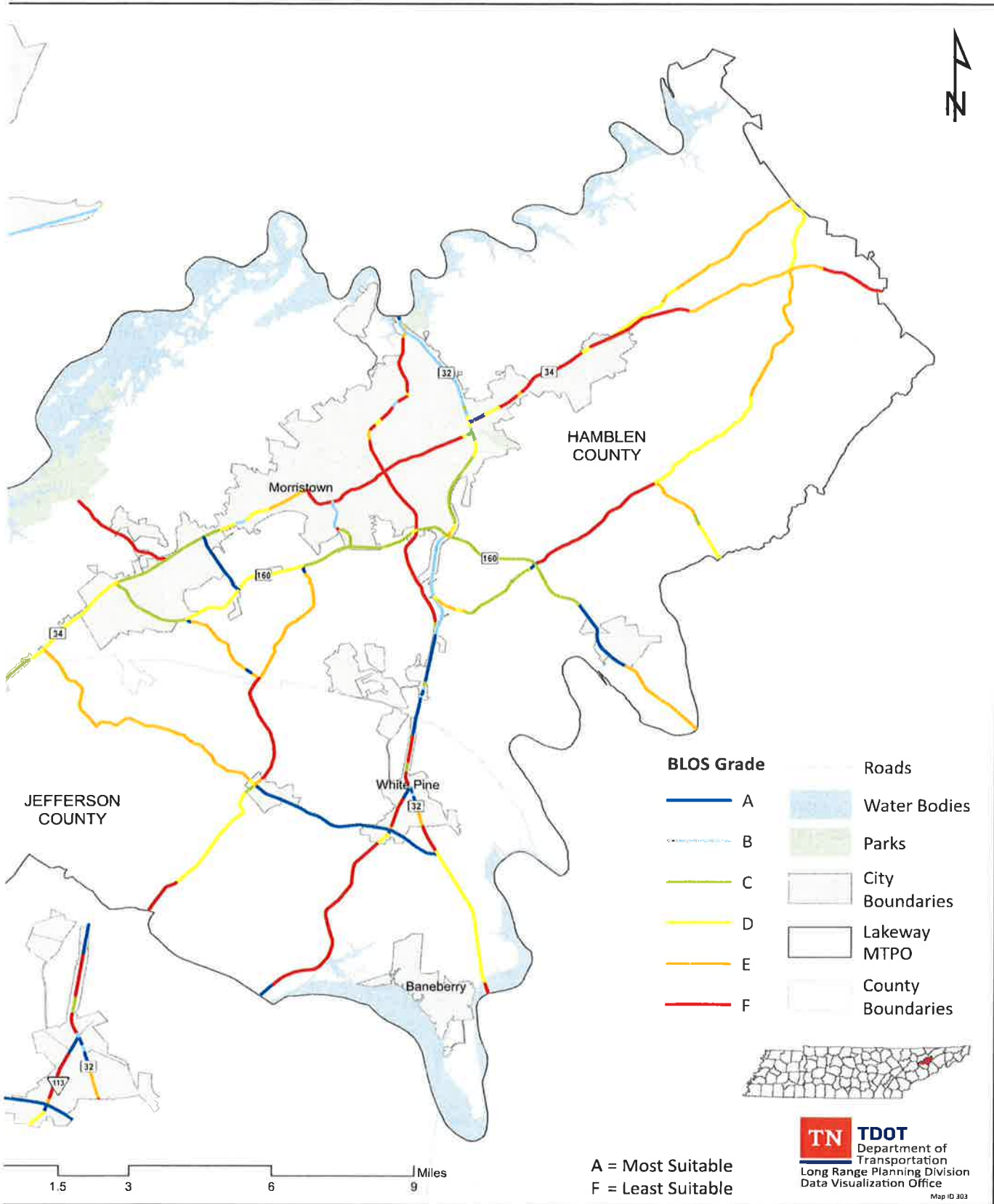


Major Bicycle Routes - Region 1



TDOT BICYCLE ROUTE MAPS





BICYCLE SURVEY RESULTS

QUESTIONS

RESPONSES 60

60 responses



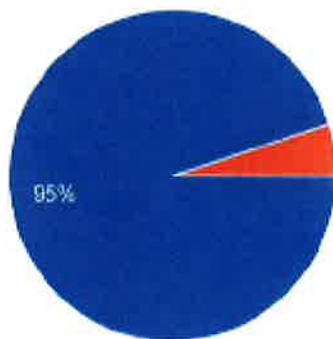
SUMMARY INDIVIDUAL

Accepting responses



1. Do you ride a bicycle?

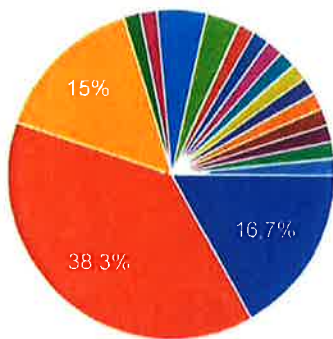
60 responses



- Yes
- No

3. What streets do you ride your bicycle?

60 responses

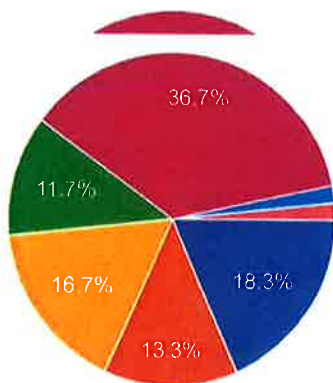


- Any Neighborhood street with sidewalks
- Any neighborhood street without sidewalks
- US Hwy 11E
- SR92
- SR113
- SR160
- SR341
- all of the above and then some

1/3 ▼

4. How many miles per week do you travel on your bicycle?

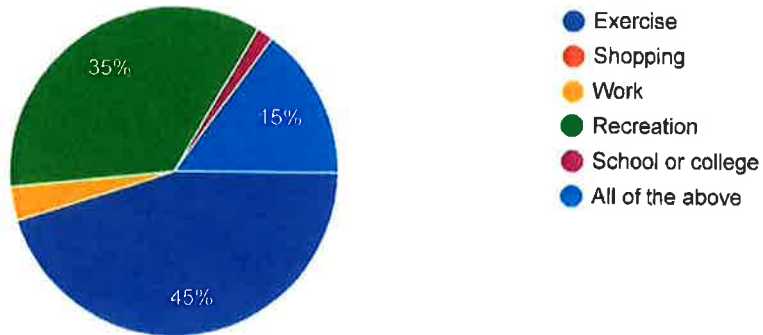
60 responses



- Neighborhood Streets with Sidewalks
- Less than 1 mile per week
- 1 to 4 miles per week
- 5 to 10 miles per week
- 11 to 25 miles per week
- more than 25 miles per week
- Seasonally, I could ride up to 25 miles a day if there were more bike lanes.
- WOULD RIDE MUCH MORE OFTEN IF THERE WERE DEDICATED SAFER LANES

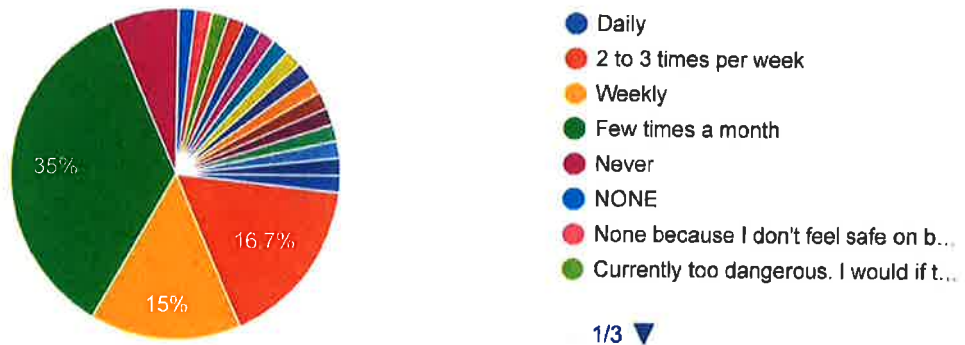
5. What type of bicycle trips do you generally take?

60 responses



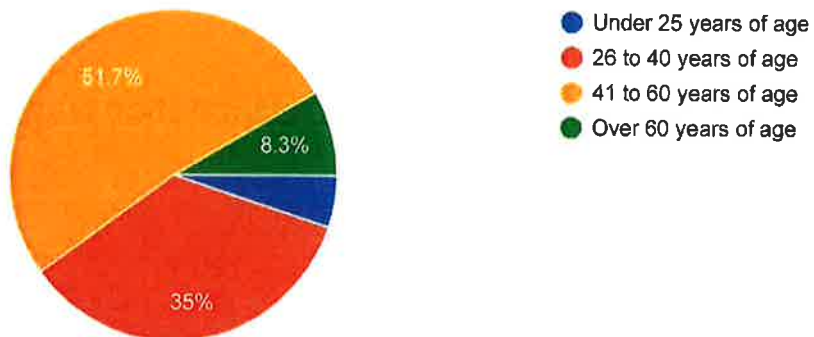
6. How often do you make a bicycle trip for transportation purposes?

60 responses



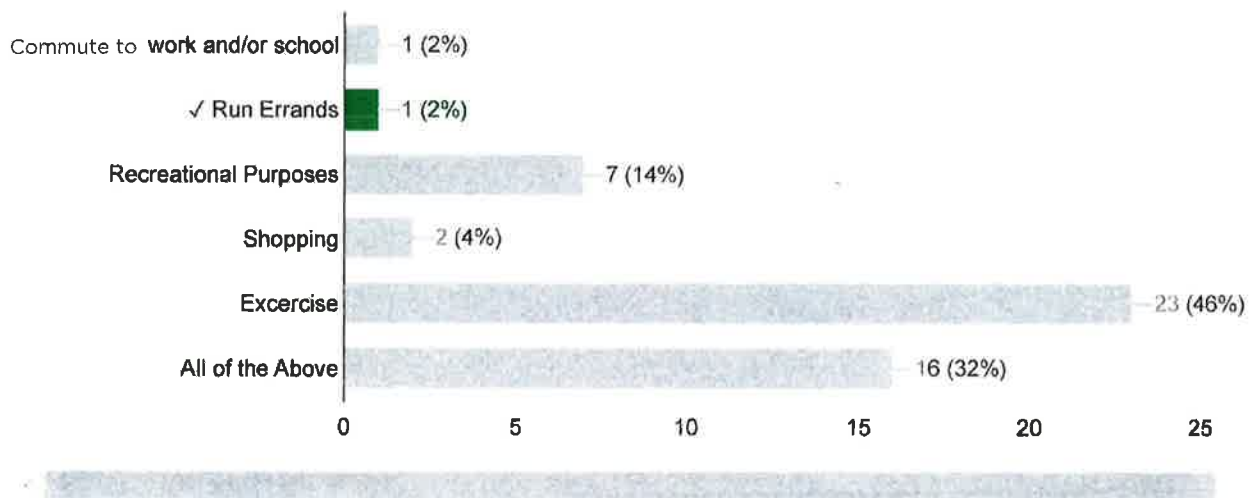
8. What is your age?

60 responses



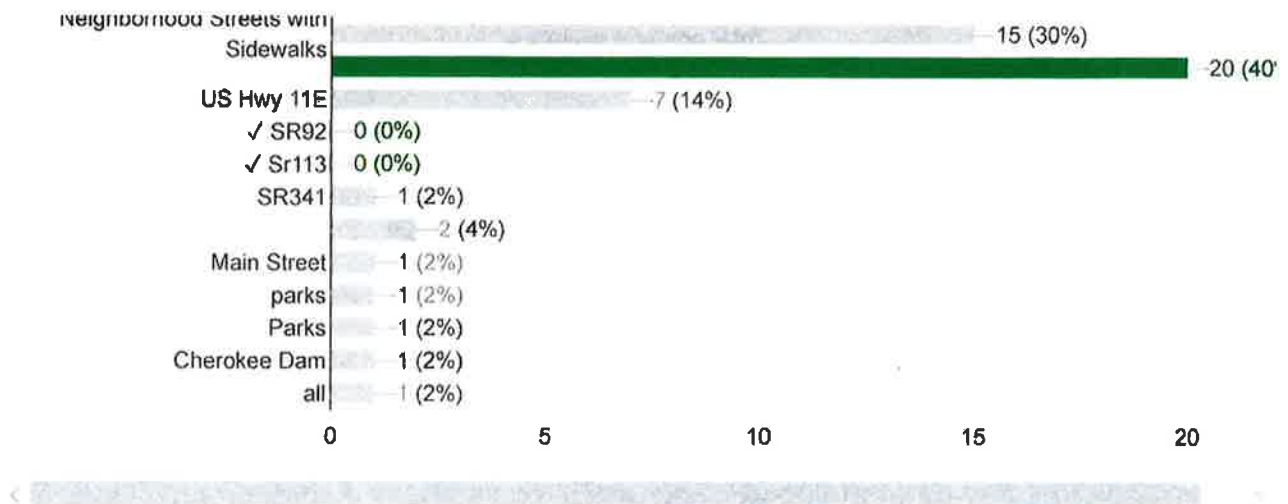
PEDESTRIAN SURVEY RESULTS

1. Primary Purpose for Walking

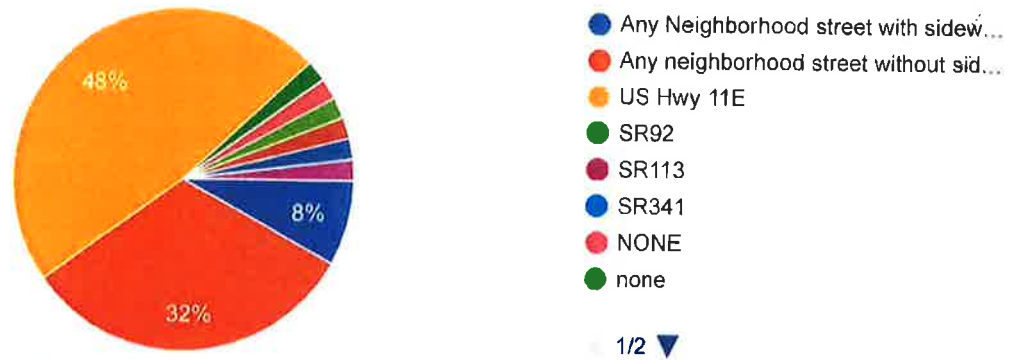


2. Along Which Streets Do You Normally Walk?

20 / 50 correct responses

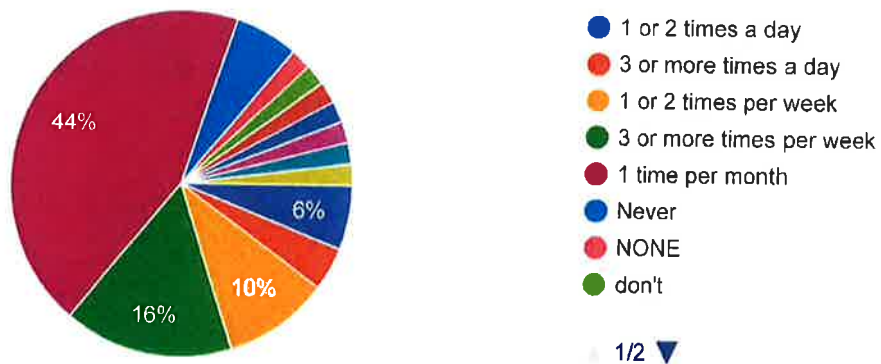


3. Which of the following streets have you experienced any type of issue crossing the street as a pedestrian?



4. How often do you use walking as your sole source of transportation to get to your destination?

50 responses



6. Are there enough sidewalks and/or greenway paths within the LAMTPO region (Morristown, Jefferson City, White Pine)?

50 responses

