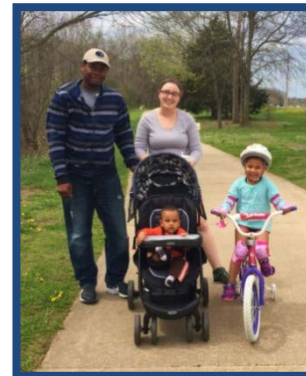
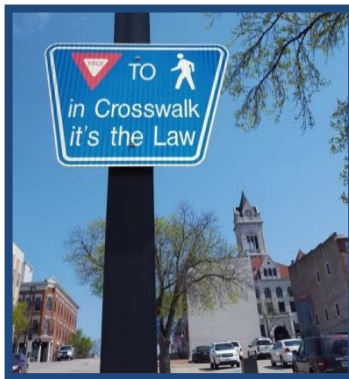


Capital Area Metropolitan Planning Organization

# Capital Area Pedestrian & Bicycle Plan 2016

Holts Summit - Jefferson City - Lake Mykee - St. Martins - Taos - Wardsville - portions of Cole & Callaway Counties

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## DRAFT

The preparation of this plan was financed in part by the US Department of Transportation, Federal Highway Administration, and Federal Transit Administration in cooperation with the Missouri Department of Transportation. The opinions, findings, and conclusions expressed in this report are not necessarily those of the Federal Highway Administration, Federal Transit Administration, or the Missouri Department of Transportation.



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Cover photos courtesy CAMPO staff and Jefferson City Parks, Recreation & Forestry

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**Acknowledgements:** The CAMPO Board of Directors, Technical Committee and MPO staff wishes to thank those who participated in the development of the plan through participation the Steering and Advisory Committees. These individuals provided valuable input and support in the development of this plan.

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Thank you than 250 people provided input in the development of this plan. While we cannot acknowledge every person who provided input, we CAMPO would like to recognize those individuals and organizations that provided input via attendance of open house events, surveys, and meetings:

Pam Allchorn	Gary Davis	David Helmick	Michael Lester	Randall Potts	Joe Scheppers	Karl Staub
James Beattie	Sharon Dowdy	Michael Henderson	Ken Luebbering	Dan Reed	Julie Shiery	Mary Telthorst
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CAMPO also extends special thank you to the Department of Health and Senior Services for financial support and thank you to Rachel Ruhlen for her support in development of this plan.

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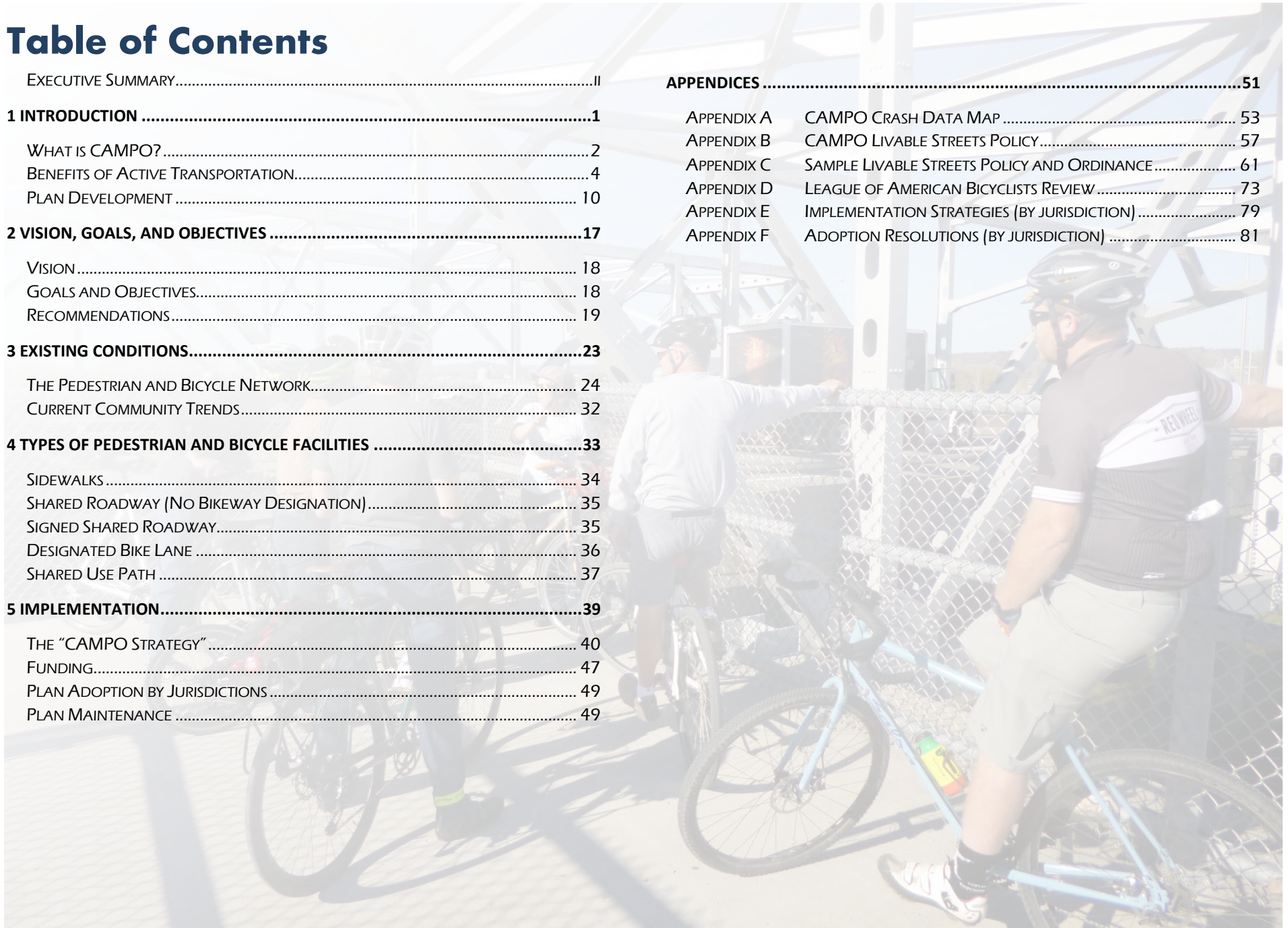


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(Insert Resolution)

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## Executive Summary

The Capital Area Pedestrian & Bicycle Plan is intended as a resource to improve safety, connectivity, and mobility for pedestrian and bicycle users in the Capital Area Metropolitan Planning Organization (CAMPO) planning area. The goals, recommendations, and strategies outlined in this plan can be used by jurisdictions to develop an individualized implementation strategy to fit the unique pedestrian and bicycle needs of that community. The plan is also intended to be a guide for future growth by recommending strategies, policies, and procedures to guide future development and improve existing infrastructure, making the CAMPO planning area a great place to walk and bike.

This regional plan includes information for all communities within the CAMPO planning area, including: Holts Summit, Jefferson City, Lake Mykee, St. Martins, Taos, Wardsville, and parts of Cole and Callaway Counties.

The process to develop the plan included intensive public outreach, gathering input from local, state, regional, and federal planning partners, city and county staff, local business owners, advocacy groups, and most importantly, the general public. Through the use of surveys, committee input, and public comments, CAMPO staff was able to access a wide range of public input. This public input was used to create the goals and strategies used in this plan. It is hoped that jurisdictions within CAMPO will:

- Formally adopt the Capital Area Pedestrian and Bicycle Plan.
- Develop an Implementation Strategy specific to that jurisdiction.
- Adopt a Livable Streets policy appropriate for their community.

Any resolutions, strategies, and/or policies that result from this planning process are located in the appendices.

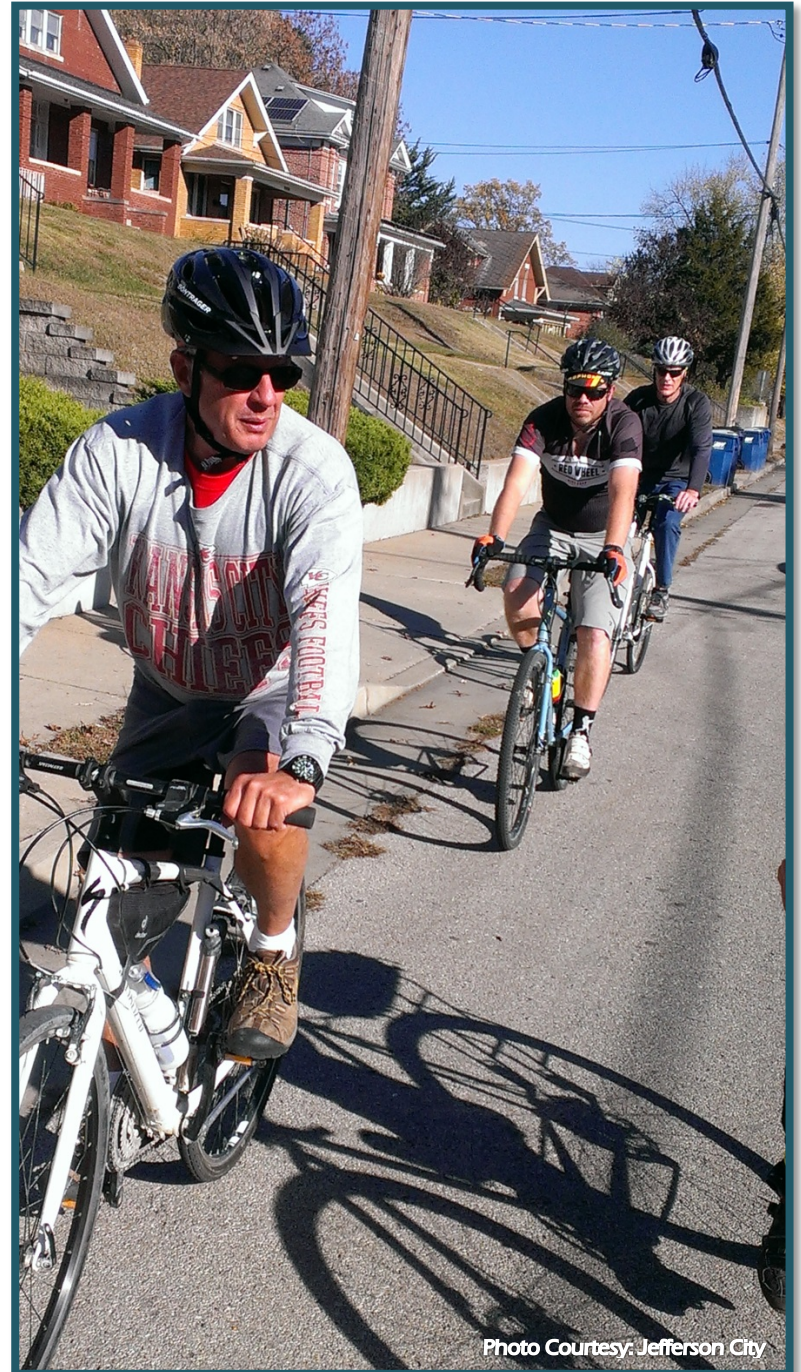


Photo Courtesy: Jefferson City

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# 1 Introduction

Walking and bicycling are important aspects of a community's public health, economic vitality, safety, environmental sustainability, and mobility. These modes of transportation are especially important for children, the elderly, the disabled, and those with fixed or low incomes. As seen in Figure 1.1, walkability and bikeability are important to attracting tourists and attracting or retaining residents alike.

**Figure 1.1 Riders gather during the July 2016 Salute to America "Red, Bike, and Blue" bicycle event. The annual event is a patriotic themed bicycle ride that includes a scenic seven-mile loop encompassing the Capitol, the Missouri River Pedestrian Bridge and the Katy Trail access.**



Photo Courtesy: Salute to America

Walking and bicycling provides an inexpensive and easy to maintain form of transportation for the individual. Commonly referred to as *active transportation*, walking and bicycling helps people increase their levels of physical activity, resulting in positive health benefits and disease prevention.

Today, the number of people using active transportation is growing. According to the US Census Bureau, in Missouri, the number of persons walking to work increased 14.3% between 2005 and 2013 and number of person bicycling to work increased 79.1% during the same period.

The CAMPO planning area encompasses both urban and rural areas. The communities of Holts Summit and Jefferson City are generally walkable with sidewalks, trails, and connectivity to Katy Trail State Park. Smaller communities have limited connectivity and have little to no public sidewalks. The need for greater connectivity, access, and safety are important. Improving connectivity and access will provide more direct, convenient, and safe travel routes for walking and bicycling while also providing more travel choices, reduce dependency on automobiles, and improve general quality of the life.

Although this plan is the first *regional* pedestrian and bicycle Plan, it should be noted that the City of Holts Summit has a *Pedestrian, Bicycle, and Transit Plan* and Jefferson City has a *Greenway Plan* and a *Sidewalk Plan*. Portions of this plan may be used in updates of the CAMPO Metropolitan Transportation Plan, City of Jefferson Comprehensive Plan, and other plans. It is hoped that each jurisdiction will adopt this plan and develop a strategy to better address pedestrian and bicycle needs in the planning area.

## What is CAMPO?

The Capital Area Metropolitan Planning Organization (CAMPO) is the designated metropolitan planning organization for the Jefferson City urbanized area. This area includes Holts Summit, Jefferson City, Lake Mykee, St. Martins, Taos, Wardsville, and portions of Callaway and Cole Counties.

CAMPO is governed by a Board of Directors that consists of representatives from jurisdictions within the planning area and Missouri Department of Transportation (MoDOT). The Board is responsible for providing official action on:

- MPO plans and documents
- Transportation Improvement Program
- MPO work programs
- MPO boundary changes
- MPO representation and bylaws

*Figure 1.2 CAMPO staff coordinated with the Mid-Missouri Regional Planning Commission to hold a joint Livable Streets training in December 2015 workshop.*



Photo Courtesy: CAMPO Staff

Core functions of CAMPO include:

- Establishment and management of a fair and impartial setting for effective regional decision making in the metropolitan area.
- Identify and evaluate alternative transportation improvement options.
- Maintenance of the Metropolitan Transportation Plan (MTP).
- Develop a Transportation Improvement Program (TIP).
- Involve the general public and other affected constituencies in the above activities.

CAMPO is responsible for long range multimodal transportation planning, including:

- Automobile and truck transportation, passenger and freight
- Bicycle and pedestrian trails, routes, and greenways
- Public transit, and paratransit service
- Trains, passenger and freight
- Access and mobility

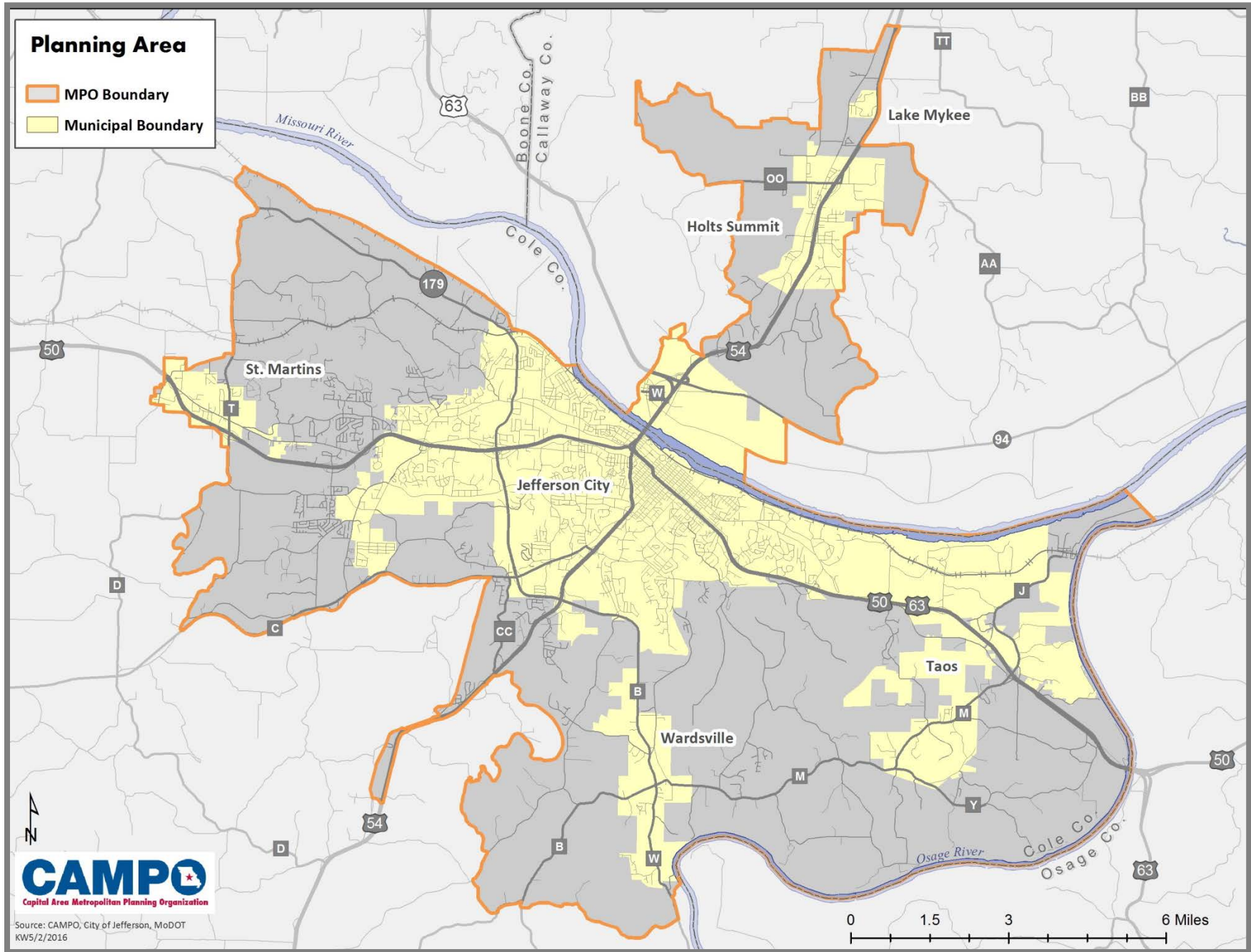
## Regional Coordination

As a regional organization, CAMPO coordinates and collaborates with a number of partners, including: MoDOT, the Federal Transit Administration, Federal Highway Administration, Chambers of Commerce, Convention and Visitors Bureaus, the Mid-Missouri Regional Planning Commission, and other various public and private groups.

Collaboration with these partner agencies is important in achieving CAMPO's core functions and responsibilities as listed above. These partnerships provide the opportunity for all regional partners to coordinate planning and implementation activities. Through this, efficiency is improved and funding can be maximized. Figure 1.2 is an example of regional coordination. Figure 1.3 depicts the CAMPO Planning Area.



Figure 1.3 CAMPO Planning Area



## Benefits of Active Transportation

Active transportation can include walking, bicycling, skating and skateboarding, and public transit. Using active transportation supports local trips, such as, accessing local employment, shopping, restaurants, parks, entertainment, or to visit friends. It is an easy way for people to get a regular dose of physical activity and contribute to the local economy.

The benefits of a more bicycle and pedestrian friendly community are varied and complex. Planning for such a community contributes to resolving many issues, including;

- **Health** - Physical activity such as walking and bicycling can reduce incidences of chronic health problems and improve quality of life. Figure 1.4 depicts two young girls preparing to run in a 5k in downtown Jefferson City.
- **Economic Development** - Walkable and bikable communities support the local economy by increasing traffic at local businesses, tourism, and increased home values.
- **Safety** - Improving the safety of people walking and bicycling improves the safety of everyone, including people in cars.
- **Congestion** – Improving facilities for walking and bicycling is an essential component of reducing traffic congestion.
- **Environmental Impacts** - Fewer cars on the road mean lower greenhouse gas emissions and a reduction in noise pollution.
- **Accessibility** - Walking and bicycling are low cost transportation options that all members of the community can access.

By guiding the region toward bicycle and pedestrian friendly development, this plan can affect all of these areas, collectively influencing existing and future quality of life in the CAMPO planning area.

*Figure 1.4 Two young girls sit on a downtown Jefferson City curb while waiting to run in the Color Vibe 5K. This 5K is one of several races that take place annually in the CAMPO region.*





## Health

Almost two-thirds of Missourians are overweight or obese, according to the Missouri Department of Health and Senior Services, impacting all ages, genders, ethnicities, and socioeconomic groups.

*“Even small increases in light to moderate activity, equivalent to walking for about 30 minutes a day, will produce measurable benefits among those who are least active.”*

- University of North Carolina - Highway Safety Research Center

**Figure 1.5** A couple walks on the recently completed Niekamp Park trail in the City of St. Martins.



According to the Centers for Disease Control, the health benefits of regular physical activity can include: reduced risk of coronary heart disease, stroke, diabetes, and other chronic diseases; lower health care costs; and improved quality of life. Regular exercise provides the opportunity for health benefits for older adults such as a stronger heart, a more positive mental outlook, and an increased chance of remaining indefinitely independent—a benefit that will become increasingly important as our population ages in the coming years.

Physical activity doesn't need to be very strenuous for an individual to reap significant health benefits. A casual stroll in the park, as seen in Figure 1.5, can have significant positive health impacts. According to a 2009 study on active transportation conducted by Active Living Research, certain aspects of the transportation infrastructure such as public transit, greenways/trails, sidewalks, bicycle paths, and traffic-calming devices are associated with more walking and bicycling, greater physical activity, and lower obesity rates.

## Economic Development

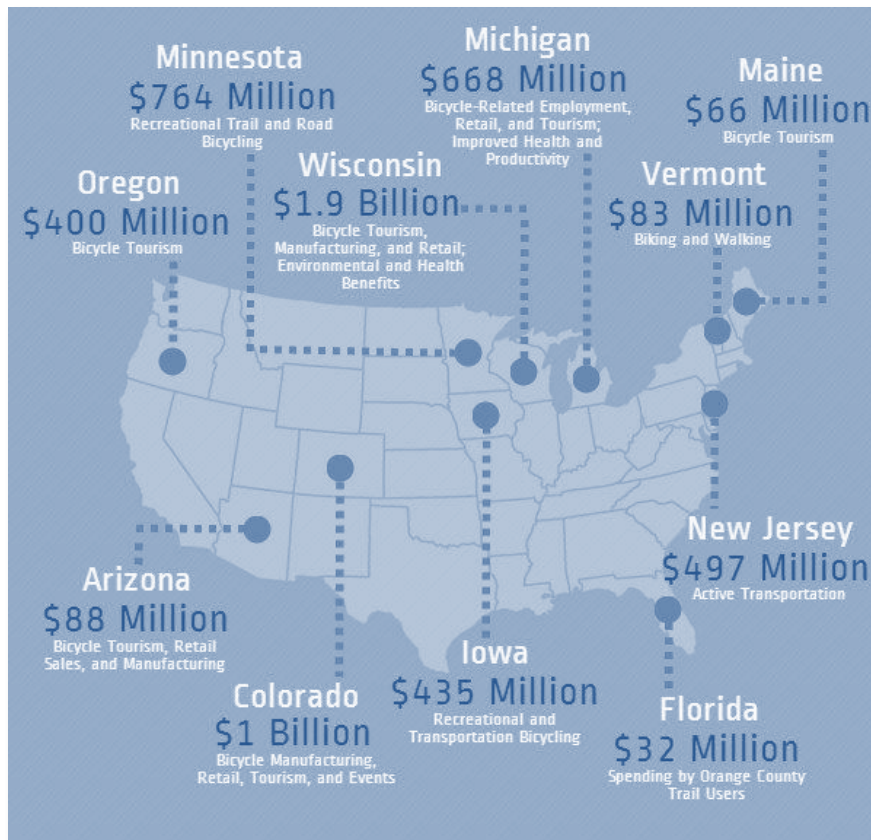
Economic benefits are also associated with improved conditions for walking and bicycling. According to a 2015 study by the American Planning Association, these benefits may include higher property values, an increase in visitors, an increase in pedestrian and bicycle traffic near businesses, and job creation for construction and maintenance of bicycle and pedestrian facilities. Pedestrians and bicyclists may be more likely than motorists to stop at local establishments, as they are moving at a slower pace and may be more likely to notice shops, restaurants, or other services.

Investing in the improvement of active transportation systems not only contributes to a healthier community, but also create dynamic, connected communities which promote small business development, encourage tourism, and improve the economic health of the community.

Across the nation, several states have conducted economic impact studies looking at the impacts of bicycling or active transportation in terms of recreation, bicycle manufacturing, spending, and tourism. Figure 1.6, provided by *bikeutah.org*, includes statewide economic impact studies that have been conducted in the last ten years.

Similar economic impact studies in Washington, North Carolina, Montana, and Missouri show similar economic findings of beneficial economic impact of bicycling activities.

**Figure 1.6 Nationwide pedestrian and bicycle economic impact studies**



Source: Bike Utah

In 2012, the *Katy Trail Economic Impact Report* found that the more than 400,000 annual visitors to the Katy Trail State Park have an economic impact of \$18,491,000 per year, supporting 367 jobs. Approximately 85% of visitors bicycled the trail and 87% of respondents said the trail was the main reason for their visit to the area. One in five Katy Trail visitors stopped at a small town along the trail, contributing \$8 million in total value added to the local community. The report also estimated that the Tour of Missouri bicycle events, held between 2007 and 2009 had a direct economic impact of more than \$80 million, with \$38 million in tax revenues. Connectivity to the Katy Trail provides great economic benefits to the CAMPO planning area.

Obtaining national designations, such as a “Bicycle Friendly Community” sponsored by the League of American Bicyclists or a “Walk Friendly Community” sponsored by the US Department of Transportation, can provide a community with a positive image that can assist with both attraction and retention of people and businesses. These national designations also provide communities with valuable resources, tools, and planning assistance.

CAMPO applied to be a “Bike Friendly Community” in 2014. While CAMPO area does not currently meet the criteria necessary to attain this status, it is hoped that this plan will assist individual communities in future applications.

*“The walkability of cities translates directly into increases in home values. Houses with the above-average levels of walkability command a premium of about \$4,000 to \$34,000 over houses with just average levels of walkability in the typical metropolitan areas studied.”*

- CEOs for Cities, August 2009

## Safety

Planning for and implementing pedestrian and bicycle improvements such as those referenced in this plan can contribute to safer conditions for all roadway users.

In the United States, crashes involving pedestrians, bicyclists and wheelchair users represent a small number of total crashes (1% and 0.5% of all crashes, respectively); although when a pedestrian or bicyclist is involved in a crash, the potential for harm is much greater.

According to MoDOT, statewide between 2011 and 2013, there were 234 fatal pedestrian-involved crashes and 807 serious injury pedestrian-involved crashes. During that same time period, there were 11 fatal bicycle-involved crashes and 212 serious injury bicycle-involved crashes. Of the 11 persons killed in bicycle-involved crashes, all were the bicyclists.

In the CAMPO planning area, between 2006 and 2013, there were 121 pedestrian or bicycle related crashes, 87 of which involved pedestrians and 34 involved bicyclists. Of these crashes, there were 3 pedestrian fatalities, all occurring along US 54. A map of crash locations is included in Appendix A.

Creating designated spaces for pedestrians and bicyclists, separated from motorized traffic, can increase safety for all users. Sidewalks, shared and separated bicycle lanes, and shared-use paths are all designed to create a safe space for these vulnerable road users.

### Missouri Boulevard Safety Assessment

In May of 2016 CAMPO staff conducted the *Missouri Boulevard Pedestrian, Bicycle, and Transit Safety Assessment*. The assessment was a collaborative effort by CAMPO and several planning partners, including; Jefferson City Police Department, Jefferson City Public Works, JEFFTRAN (Jefferson City Transit), Missouri Department of Transportation, Federal Transit Administration, Federal Highway Administration, National Highway Traffic Safety Administration, Capital Region Medical Center, and Mid-America Regional Council.

Participants assessed existing safety concerns for pedestrians, bicyclists, and transit users along Missouri Boulevard between MO Highway 179 and West Main Street.

The assessment revealed several deficiencies and opportunities along Missouri Boulevard, including:

- Poor pedestrian and transit connectivity.
- Need for upgrades to ADA compliance.
- Design improvements.
- Need for crosswalks near transit stops.
- Lack of bicycle lanes or signage.

The goal of the assessment was to develop a tool to assist in planning and applying for funds to help improve the area.

### Myth:

**If you see the driver, the driver sees you.**

Drivers may not see you in time to stop, particularly if you are coming from the right and they are looking left for oncoming cars. To be safe, make eye contact with any driver whose path will cross yours and proceed only when certain the car will stop. On multi-lane roads, do not start across until vehicles in all lanes have stopped. If there is a median, make separate decisions about crossing each direction of traffic.



## Congestion

Drivers in the United States drove over three trillion miles in 2015, according to the US Department of Transportation. Despite decades of gradual expansion of roads, the commute times for Americans continues to increase. This suggests that the traditional solutions are, at best, having no effect, and at worst, increasing congestion. Livable Streets, a key component for this plan, offers a chance to reduce the number of vehicles on the road during peak travel times.

Livable Streets, also known as Complete Streets, is a design and planning approach that considers the needs and safety concerns of all residents and users, including vehicles, pedestrians, bicyclists, transit users, seniors and the mobility-impaired. Because Livable Streets are designed for many modes of transportation and provide travel choices, they offer a reduction of congestion during the highest trafficked times of the day. More detail on Livable Streets can be found further in this chapter.

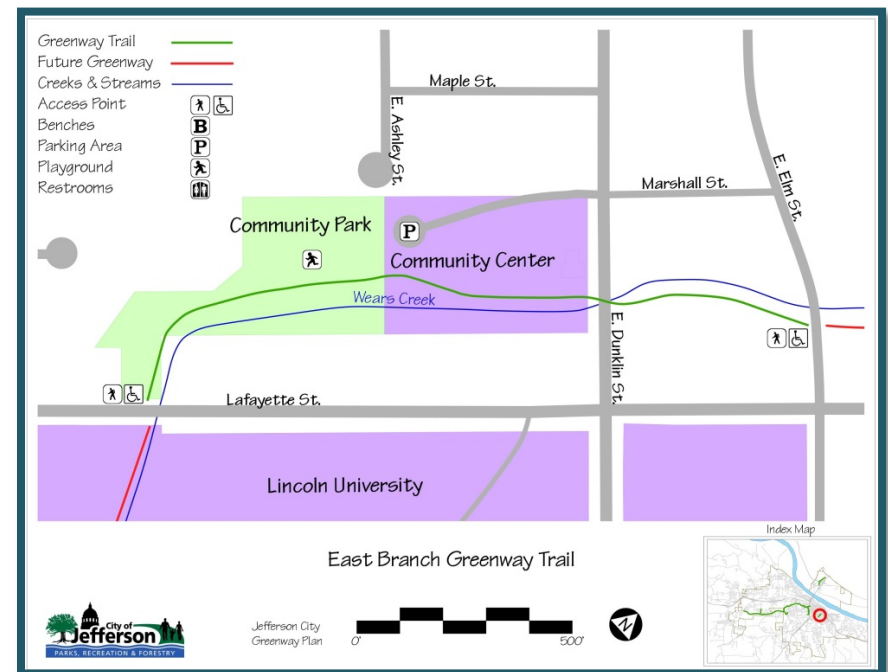
Combining access to public transportation with pedestrian and bicycle infrastructure can reduce short-range car trips to work or errands, reducing congestion. Figure 1.9 depicts the East Branch section of the Greenway Trail. This trail provides connectivity for pedestrians and bicyclists between downtown residential areas and transit routes with Lincoln University and nearby community facilities

## Environmental Impacts

Walking, bicycling, and public transit use can have significant positive impact on the environment. Motor vehicles create a substantial amount of air pollution. According to the US Environmental Protection Agency, motorized vehicles are responsible for nearly 80% of carbon monoxide and 55% of nitrogen oxide emissions in the United States. Many urban areas do not meet the air quality standards specified in the 1990 Clean Air Act Amendments. Although cars are much more fuel efficient and cleaner than in previous years, if total traffic continues to grow, overall air quality will deteriorate. Moreover, every day cars and trucks burn millions of barrels of oil, a non-renewable energy source.

Walking and bicycling reduces driving and related pollution. Multiple studies and reports have concluded that better air quality and increased physical activity provide quantifiable health benefits which outweigh the cost of building pedestrian and bicycle facilities. According to a 2011 Centers for Disease Control and Prevention report, between 1990 and 2009, vehicle miles traveled for light-duty trucks and passenger cars increased by 39%, which was a result of economic growth, relatively low fuel prices, population growth, and dispersed land use practices.

**Figure 1.9 East Branch Greenway Trail**



Source: Jefferson City Parks, Recreation & Forestry



## Accessibility

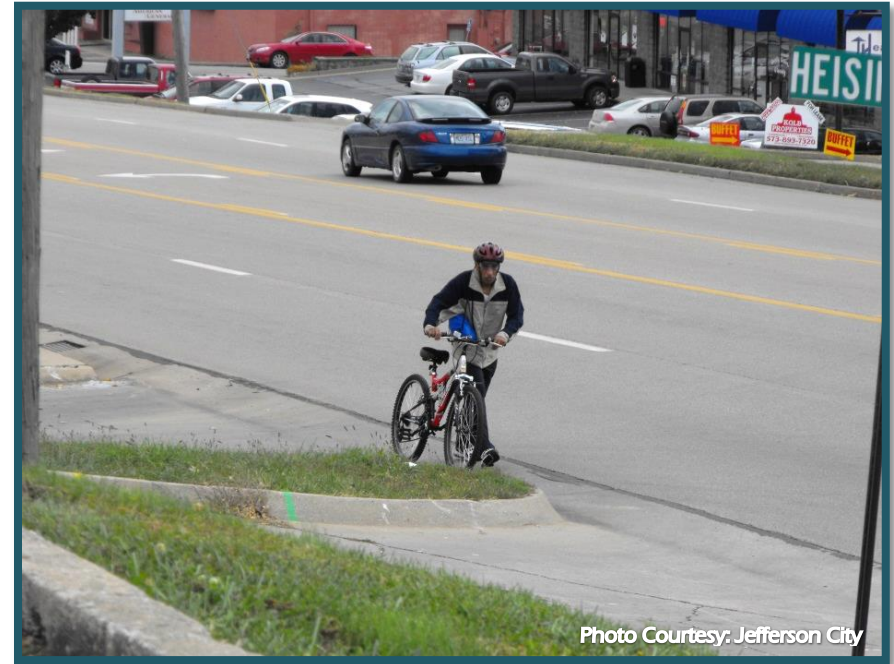
Not providing facilities for alternative transportation options such as walking, bicycling, and public transit may prohibit certain populations from accessing important local resources. Facilities such as sidewalks, crosswalks, and bicycle lanes allow people to choose how they want to travel. Travel by personal vehicle is not an option for all people due to income, disability, age or other socio-economic factors and a lack of choice in transportation options creates a barrier to mobility.

Active transportation alternatives such as walking and bicycling provide people with options in accessing businesses, employment, services, and recreation. Individuals, such as the bicycle rider seen in Figure 1.10, directly benefit from improved infrastructure.

The high cost of car ownership means that low-income families will have to spend a greater portion of their income on owning and operating a car or choose not to have one. By providing safe and convenient pedestrian and bicycle facilities, the community ensures that all citizens have access to viable modes of transportation.

Recently, the term “invisible cyclists” has been used to identify the majority of those that bicycle as their only means of reliable transportation. The term stems from the idea that there are a number of people, many of whom are minorities or persons living in poverty, that bicycle out of necessity to access employment or services. It is important to keep this demographic in mind when planning new bicycle infrastructure.

*Figure 1.10 A man is seen pushing his bicycle along Missouri Boulevard where there are no designated bicycle lanes or signage.*



## Plan Development

In the spring of 2015, the CAMPO Board of Directors approved the creation of two committees to support the development of this plan. These two committees, the Advisory Committee and the Steering Committee, were key participants in the creation of this plan, as they were comprised of a number of public and private stakeholders and provided invaluable input and commentary to CAMPO staff as the plan was developed. A full list of participants is located on the acknowledgements page at the beginning of this plan.

### Advisory Committee Members

The Advisory Committee was created to provide a forum to collect thoughts and ideas about how the CAMPO planning area could improve pedestrian and bicycle conditions. These ideas were used to develop goals, objectives, and recommendations that were then forwarded to the Steering Committee for review. Along with several private citizens, the following public and private entities listed below participated in the Advisory Committee meetings.

- City of Jefferson
- Holts Summit
- St. Martins
- Cole County
- Federal Transit Administration
- Federal Highway Administration
- Missouri Department of Health and Senior Services
- Missouri Department of Transportation
- Cole County Health Department
- Missouri Bicycle and Pedestrian Federation
- Lincoln University
- Red Wheel Bike Shop
- Hartsburg Cycle Depot
- Independent Living Resource Center
- Missouri River Regional Library
- Capital Region Medical Center
- Jefferson City Convention and Visitors Bureau

- Jefferson City Area Chamber of Commerce
- Jefferson City Public Schools
- AARP – Missouri

### Steering Committee Members

The Steering Committee was created to review and finalize the goals, objectives, and look at the feasibility of the recommendations. The Steering Committee was also used to review draft versions of the plan as it was developed. The entities listed below participated in the Steering Committee meetings.

- City of Jefferson Staff (Planning and Protective Services; Public Works; Parks, Recreation & Forestry; Police Department)
- Cole County Public Works
- Missouri Department of Transportation
- CAMPO Board and Technical Committee Members
- City of St. Martins
- Federal Transit Administration
- Federal Highway Administration
- Missouri Bicycle and Pedestrian Federation

*Figure 1.11 Advisory Committee members learn about bus bicycle racks.*



## Meetings and Public Outreach

From spring 2015 to the summer of 2016 several meetings and public outreach events were held to collect input, including; 10 committee meetings, booths at local festivals, training events, and three open house events. All of these meetings and events are listed below.

- Steering Committee Meeting – April 2, 2015
- Advisory Committee – April 14, 2015
- Joint Committee Meeting – May 19, 2015
- Thursday Night Live – June 18, 2015
- Open House – June 25, 2015
- Joint Committee Meeting – July 14, 2015
- Joint Committee Meeting with Trailnet – September 17, 2015
- Joint Committee Meeting – October 27, 2015
- League of American Bicyclist Visit – November 10, 2015
- Livable Streets Workshop – December 1, 2015
- Joint Committee Meeting – January 27, 2016
- Steering Committee – February 4, 2016
- Steering Committee – March 3, 2016
- Open House – May 25, 2016
- Steering Committee – June 16, 2016
- Open House – October 13, 2016

Topics at these meetings or events included discussion and identification of problem areas, opportunities for improvement, gaps in connectivity, and ordinances and policies. As seen on the previous page in Figure 1.11, meeting participants learned about engineering, enforcement, education, transit, disabilities, and the economic impact of bicycling and walking. Each meeting featured a field trip, or a 20-minute outing involving walking or using transit, usually with a wheelchair present. Meeting surveys and open house events, as seen in Figure 1.12, created a forum for direct interaction with the public.

*Figure 1.12 More than 50 people attended the June 25, 2015 Open House event, providing CAMPO staff with a range of useful comments and suggestions on improving pedestrian and bicycle access. Photo courtesy CAMPO Staff*



In addition to the public meetings and committee meetings CAMPO also invited comment and participation of several other stakeholders including:

- Local Law Enforcement
- Private Schools
- Tourism Promoters
- Local Non-Profits and Advocacy Groups

## Outreach to CAMPO Jurisdictions

Presentations were given and/or meetings held with each CAMPO jurisdiction during the development of the plan and during the adoption process. Each jurisdiction was given the opportunity to develop an Implementation Strategy specific to their community needs and capabilities. More on this process is available in Section 5.



## Trailnet

Trailnet, based in St. Louis, provided support to CAMPO in the development Capital Area Pedestrian and Bicycle Plan. CAMPO entered into a Memorandum of Understanding (MOU) with Trailnet to assist with the development of the plan's vision and goals. Trailnet has contracted with the Missouri Department of Health and Senior Services to promote the Missouri Livable Streets Initiative, which "seeks to support and improve the health, well-being and economic vitality of all people and communities across the state through transportation and active living policy development and education."

The MOU included goals and community responsibilities that were used to guide the planning process, including:

- Attending or hosting a Livable Streets Training
- Guidance in development of policy and street design standards
- Assistance implementing Livable Streets policies in the CAMPO planning area
- Identifying best practices
- Creation of informational & policy briefs

## Livable Streets

In December 2015 CAMPO hosted a Livable Streets Workshop, funded by the Missouri Department of Health and Senior Services and lead by Trailnet. CAMPO partnered with the Mid-Missouri Regional Planning Commission in hosting the event, which was attended by staff and elected officials from several communities in the Mid-Missouri region. Figure 1.13 depicts attendees of the event.

Livable Streets, also known as Complete Streets, is a design and planning approach that considers the needs and safety concerns of all residents and users, including vehicles, pedestrians, bicyclists, transit users, seniors and the mobility-impaired. The workshop was intended to enable local planners to apply designs that accommodate all users of the roadway whether they are on foot, bicycle, bus, or wheelchair. Participants in the workshop took part in walking, biking, and wheelchair tours to better understand Livable Streets designs.

Attendees included both Jefferson City and Fulton mayors, MoDOT staff, and public works staff, planners, and engineers from several cities and counties.

Jefferson City is the only community within CAMPO to have passed a resolution in support of Livable Streets. The resolution was passed in November of 2011.

The CAMPO Livable Streets Policy can be found in Appendix B and a sample Livable Streets Policy can be found in Appendix C.

**Figure 1.13**  
*Attendees of the December Livable Streets workshop take a bicycle tour of downtown Jefferson City, looking at infrastructure gaps and challenges.*



## League of American Bicyclists

The League of American Bicyclists conducted an assessment and provided assistance to CAMPO and Jefferson City staff with the goal of helping Jefferson City become a “Bicycle Friendly Community.” The Bicycle Friendly Community program “provides a roadmap to improve conditions for bicycling and the guidance to make a community’s distinct vision for a better, bikable community a reality.”

According to the League, “between 2000 and 2013 the percentage increase of people commuting by bicycle was more than three times the growth in cities that have received BFC designation than those that have not.”

The assessment event included:

- Hands-on technical assessment of city bicycling infrastructure (via a group bicycle ride/audit) and review of efforts to encourage cycling;
- Meeting with planners, city staff, and local bicycle advocates to discuss best practices and provide feedback on how to achieve the Bicycle Friendly Community designation;
- A post-visit Bicycle Friendly Community Report Card that provides a quick action plan and an initial assessment, focusing on priority actions that will have the greatest impact.

The event, as seen in Figure 1.14, was a great opportunity to leverage the League’s knowledge and expertise during the development of the Capital Area Pedestrian and Bicycle plan. While Jefferson City and CAMPO have both submitted applications to become a Bicycle Friendly Community, infrastructure improvements and changes in policies and planning are still needed before either entity can be approved. The CAMPO feedback and report card from the 2014 application can be found in Appendix D.

**Figure 1.14** League of American Bicyclists, together with CAMPO Board members, staff, and local stakeholders take a bicycle tour of downtown Jefferson City, looking at best practice recommendations.



### Myth:

#### Bicyclists should ride on the sidewalk.

A review of 23 studies on bicycling injuries found that bike facilities (e.g. off-road paths, on-road marked bike lanes, and on-road bike routes) are where bicyclists are safest.

One would think that bicyclists are safest on sidewalks, separated from automobile traffic. Riding on the sidewalk does reduce the incidence of crashes involving cars passing bicyclists, but sidewalk riders significantly increase the risk of being hit by turning drivers. It also endangers pedestrians.

## Previous Planning Efforts

Prior to this planning process, several previous planning efforts have identified projects, strategies, and/or activities that indicate the desire to improve pedestrian and bicycle facilities and access in the CAMPO planning area.

The following list includes local planning documents that identify these improvements:

- 2013-2035 CAMPO Metropolitan Transportation Plan
- CAMPO Regional Wayfinding Plan
- Holts Summit Bicycle, Pedestrian, and Transit Plan 2014
- City of Jefferson Central East Side Neighborhood Plan
- City of Jefferson 1996 Comprehensive Plan
- Sidewalk Plan for Jefferson City, Missouri
- Jefferson City Area Greenway Master Plan – 2007
- Callaway County and Cole County Sidewalk Inventories
- Katy Trail Economic Impact Report
- Missouri State Penitentiary Master Plan
- Missouri On The Move (State Long-Range Transportation Plan)

Due to the specific nature of each plan, some documents provided more pertinent information than others and have been highlighted below.

### **Jefferson City Area Greenway Master Plan – 2007**

Continuing the efforts of the *1991 Greenway Develop Plan*, the purpose of the *Jefferson City Area Greenway Master Plan* is to create a cohesive greenway network to serve both recreation and transportation needs of Jefferson City area residents. This plan includes on-street, off-street, and mountain trail bicycle and shared path facilities, not only within the municipal limits, but extending into Callaway and Cole counties. Two projects of note outside of the municipal limits which have been developed include a connector from the Katy Trail to S. Summit Drive in Callaway County and a section of greenway on US Business 50 West near Pioneer Trails Elementary school in Cole County.

### **Sidewalk Plan for Jefferson City, Missouri**

The 2010 plan was intended to complement the Greenway Plan and help set the expectation that sidewalks are an important component of the entire transportation system. The goals of the plan include: developing a Master Sidewalk Plan to guide private and public investments in sidewalks; promote and encourage personal mobility by providing a pleasant, safe and efficient walking experience; and strive for responsible stewardship of existing and planned pedestrian facilities. The outcome of this plan was a city ordinance adopting the plan and associated map of required sidewalks, which identifies most arterial and collector streets as requiring sidewalks.

### **Holts Summit Bicycle, Pedestrian, and Transit Plan 2014**

The goal of the plan is to “increase opportunities to walk or ride a bicycle as part of their everyday life [and] to improve the transportation network that offers choices (bicycle, pedestrian, transit, or personal auto) among travel modes...” The Holts Summit plan identifies sidewalk improvements along all of the city’s arterial streets, a pedestrian overpass, connectivity to the Katy Trail, and future locations for transit stops for the City of Jefferson’s JEFFTRAN bus service.

### **City of Jefferson Central East Side Neighborhood Plan**

In 2005, the City of Jefferson Central East Side Neighborhood Plan was published. In it, the community identified the need for “tree lined streets and sidewalks”. Additionally, a key planning provision of the Plan is the need to improve the streetscape environment in order to meet the needs of the neighborhood. The plan further identified safe walkable sidewalks and to “provide [a] pleasant sidewalk environment” as necessary for continued and future growth of the neighborhood. The plan continues by further discussing ideal neighborhood elements as identified by stakeholders, which includes walkable and safe streets, open space, and a pedestrian oriented retail district.



### **CAMPO Regional Wayfinding Plan**

The 2015 CAMPO Regional Wayfinding Plan was developed as a regional economic development tool. The plan seeks to help visitors and residents locate districts, landmarks and other venues in the region through signs and informational kiosks. This will include wayfinding directing visitors to local and regional trails.

### **Missouri on the Move**

As part of the MoDOT 2014 Missouri on the Move, long range planning process, a massive public involvement process led to the development of four goal areas. Two notable goals are:

- “Keep all travelers safe, no matter the mode of transportation.”
- “Give Missourians better transportation choices (more viable urban and rural transit, friendlier bike and pedestrian accommodations, improvements in rail, ports and airport operations).”

MoDOT also sought feedback from Missourians in the Central District about projects to include in Missouri’s transportation future. Types of important projects identified:

- Consider bike/pedestrian elements on all projects and integrate bike/pedestrian elements as much as possible.
- Upgrade sidewalks in smaller cities to improve mobility for residents.
- Provide wayfinding signs on all major national bike routes and add shoulders where possible.

### **Katy Trail Economic Impact Report**

The report was used to determine the economic impact of Katy Trail State Park and its visitors on the Missouri economy. The report recommendations include:

- Attraction of new overnight visitors to the Katy Trail.
- Promotion of restaurants, bars, and overnight lodging near the Katy Trail.
- Improvements to the condition of the trail surface.
- Improvement of the availability of food/grocery stores, bicycle repair/maintenance services and drinking water in the local communities.

### **Missouri State Penitentiary Redevelopment Plan**

The 2000 plan outlines redevelopment standards and design guidelines that can be used in the redevelopment of the now closed Missouri State Penitentiary property. The plan includes suggested designs and locations for new sidewalks, bicycle racks, crosswalks, landscaping, and connectivity to nearby parks and trails.

*“I love to ride my bike on the Katy trail outside of Jefferson City once to twice a week during the seasons of spring, summer, and fall. It’s a wonderful experience.”*

- Public comment from the Katy Trail Economic Impact Report

## Surveys

As a compliment to the public meetings and events, the public was asked to provide comment via survey. The surveys were provided at all public meetings and made available online.

Survey questions included general questions about:

- Reasons for wanting better walking and bicycling facilities, such as:
  - Tourism and economic development
  - Improved access and mobility option
  - Increasing health and physical activity
  - Safety
  - Environmental impact
  - Quality of life
- Existing facilities that are used
- Challenges to walking and bicycling in the region
- Demographics

More than 162 online or paper surveys were completed by the public. Survey results were an important resource during the development of the goals and recommendations used in this plan and guided much of the content. Survey results and comments showed a great interest in:

- Improvement of trails, sidewalks, and bike lanes
- Relief of traffic congestion
- Improvement of safety
- Improvement of access to natural areas in the region

## Issues and Challenges

After reviewing public comments, survey responses, and committee input, several repeated concerns became evident. These areas of concern were used to develop a list of challenges and opportunity areas across the region.

- Lack of connectivity of sidewalks.
- Lack of sidewalk connectivity to transit stops, especially in regard to ADA compliance.
- Lack of sidewalk connectivity between businesses and residential areas.
- Very few areas with designated bike lanes or “Share the Road” signage.
- Not enough pedestrian and/or bicycle signalized crossings along US 54 in Holts Summit, US 50 in St. Martins, and US 50/63 , MO 179, and Missouri Boulevard in Jefferson City.
- Many sidewalks are not ADA compliant, especially important in commercial areas and dense residential areas such as downtown Jefferson City, school zones in most communities, and along Missouri Boulevard.
- Lack of trees along sidewalks.
- Need for walking school bus programs at local schools.
- Install traffic cameras at dangerous intersections, areas, or in school zones.
- Not enough bicycle parking at bus stops, along the Greenway Trail, and at commercial businesses.
- Install wayfinding signage along greenways, bicycle routes, and sidewalks.
- Need for better speed limit enforcement on Missouri Boulevard, McCarty St., Summit Dr., and Business 50.
- Lack of shoulders for walking or bicycle along state routes in rural areas.
- Better connectivity between Greenway Trail and sidewalks.

## 2 Vision, Goals, and Objectives

The Vision, Goals, and Objectives developed for this plan are the foundation for developing and improving pedestrian and bicycle travel in the CAMPO region. A wide variety of stakeholders, and the public contributed to the development of the vision statement, which establishes the basic principles used to develop the goals, objectives, and recommendations identified. This plan seeks to provide guidance for the region to become more pedestrian and bicycle friendly through improvements to safety, access, and mobility.

The goals have been created to complement the Vision statement. Working with St. Louis-based Trailnet, through the Missouri Department of Health and Senior Services, a joint Advisory and Steering Committee meeting helped refine the goals. Both the vision statement and goals were subsequently approved by the Steering Committee.





## Vision

*"A vibrant, comprehensive transportation network where all persons can safely walk, bike, & ride the bus efficiently and conveniently with continuous collaboration from the community."*

## Goals and Objectives

Each goal was assigned specific objectives, which supports the achievement of the goal and realization of the vision. The goals and objectives were used to develop the CAMPO Strategy, which can be found in Chapter 5 of this plan.

A large amount of public input went into the development of the goals and objectives. Multiple Steering Committee and Advisory Committee meetings like the one seen in Figure 2.1 were used to gather valuable input about needs in the planning area.

*Figure 2.1 Trailnet staff members lead discussion in the development of a vision and goals at a joint committee meeting.*



Photo Courtesy: CAMPO Staff

1. **Improve user safety of all modes of transportation.**
  - Review existing laws regarding safety for people walking and biking.
  - Improve planning and engineering procedures and policies.
  - Improve enforcement and increase penalties for violation of traffic laws.
  - Create an ongoing education program for pedestrians, bicyclist, and motorists.
2. **Increase the number of people walking, bicycling and using transit.**
  - Encourage people to walk, bike and ride public transit.
  - Increase walking, bicycling, and bus access to existing community events.
  - Educate people about walking, bicycling and riding public transit.
3. **Stimulate economic development within the community.**
  - Enhance tourism.
  - Increase access to local stores, restaurants, and other businesses.
  - Improve access to employment and commerce.
4. **Educate the community on the benefits of well-connected transportation system that includes vehicles, walking, biking, and transit.**
  - Increase awareness regarding transportation using non-personal motor vehicles.
5. **Improve the health and well-being of all members of the community.**
  - Incorporate a health consideration component in all policies.
  - Reduce health issues associated with sedentary lifestyles (e.g. type 2 diabetes, heart disease and obesity).
6. **Foster a continued, collaborative, and cooperative relationship with the public in the development of a well-connected transportation system.**
  - Encourage community and regional involvement.

## Recommendations

In order to reach the Goals and Objectives that were developed as part of the planning process, the Steering Committee and CAMPO staff created a list of recommendations. These recommendations represent a range of activities that jurisdictions within CAMPO can use to develop a community specific implementation strategy as outlined in Chapter 5.

The Steering Committee developed the list of recommendations, as seen being discussed in Figure 2.2, by using the recommended “5E” approach. The League of American Bicyclists and the Federal Highway Administration both recommend this approach when developing a plan for pedestrian and bicycle improvements.

## The Five “E”s

**Engineering** – Creating operational and physical improvements to the infrastructure surrounding schools that reduce speeds and potential conflicts with motor vehicle traffic, and establish safer and fully accessible crossings, walkways, trails and bikeways.

**Education** – Teaching people about the broad range of transportation choices, instructing them in important lifelong bicycling and walking safety skills, and launching driver safety campaigns near area schools.

**Enforcement** – Partnering with local law enforcement to ensure traffic laws are obeyed in the vicinity of schools (this includes enforcement of speeds, yielding to pedestrians in crossings, and proper walking and bicycling behaviors), and initiating community enforcement such as crossing guard programs.

**Encouragement** – Using events and activities to promote walking and bicycling.

**Evaluation and Planning** – Monitoring and documenting outcomes and trends through the collection of data, including the collection of data before and after the intervention(s).

**Figure 2.2** An area resident discusses recommended improvements with CAMPO staff at the May 2016 open house event in Jefferson City.



Photo Courtesy: CAMPO Staff

## Engineering

1. Improve pedestrian and bicycle routes connecting communities in the area.
2. Develop a bicycle route between the Katy Trail and Rock Island Trail.
3. Improve multi-modal access to on-street and off-street. (bike lanes, public racks, bus stop racks, crosswalks, wayfinding etc.)
4. Connect walking, bicycling, and transit facilities to housing, employment, businesses, and essential services.
5. Install wayfinding signage along greenways, bicycle routes, and sidewalks as well as trailblazing signs (for example, a connection between the Katy and Rock Island Trails through the region) throughout the CAMPO area.
6. Provide support to CAMPO jurisdictions with the development of routes for pedestrians and bicyclists (land use mapping, topography, design standards).
7. Incorporate trees and other plantings into the design of existing and future pedestrian and bicycling routes.

## Education

1. Develop and support public education campaigns, such as:
  - Bicycling skills and bicycle maintenance classes for adults.
  - Training for use of public transportation for the general public and disabled persons.
  - Distributing bicycle/pedestrian safety educational brochures to bicycle shops, schools, gyms and post on websites.
2. Encourage training of local law enforcement on changes in laws pertaining to operation of bicycles on the roadway.
3. Develop a bike app to access local information about resources, events, and routes.

## Encouragement

1. Join alliances such as MoCAN (Missouri Council on Action and Nutrition), Central Missouri WeCan (Ways to Enhance Children's Activity), Healthy Living Alliance (HLA), and other organizations working to encourage healthy, active living.
2. Conduct transit awareness activities, such as free ride the bus periods.
3. Encourage membership in the Bicycle Friendly America program.
  - Obtain Bicycle Friendly Community status for each jurisdiction and strive to reach the Diamond Level.
  - Obtain Bicycle Friendly University status for Lincoln University.
  - Obtain Bicycle Friendly Business status for local business and governmental agencies.
4. Encourage employers to incentivize and promote walking and bicycling for their employees and customers (provide shower / locker facilities, for example).
5. Encourage event or festival organizers to provide bicycle parking and free transit.
6. Promote walking, cycling, and transit throughout the year with family-oriented community and charity rides, free bike valet parking and transit at events, and bicycle-themed festivals, parades, or shows.
7. Organize walking- and bicycling-centric tourism events.
8. Promote mobility options available to tourists visiting the area.
9. Publish bicycle maps and make maps easily available online by providing links (QR code, bar code, etc.) along bicycling routes.
10. Leverage social media in regard to activities, events, news releases, etc. about pedestrian and bicycling in the area.
11. Issue proclamations recognizing important dates and events related to walking, bicycling and transit.
12. Establish walking school bus programs.
13. Encourage formation of middle and high school cycling clubs.



## Enforcement

1. Adopt or enforce ordinances to protect vulnerable road users, such as anti-harassment ordinances.
2. Develop an education and enforcement campaign for all modes, emphasizing changing behavior, not as a ticketing campaign, but through education in an instructive atmosphere.
3. Investigate crashes involving pedestrians and bicycles to ensure proper citations are issued.
4. Ensure law enforcement agencies are aware of changes in traffic laws concerning pedestrians/bicyclist and drivers.
5. Install traffic cameras at dangerous intersections, areas, or in school zones.
6. Research interventions to increase the safety surrounding off-street bicycle facilities during peak hours and evenings.
7. Review existing bicycle registration programs (local and national) to determine the best registration program to meet the needs of area bicyclists and to increase bicycle registrations.

*"Our most fundamental problem with pedestrian travel in Jefferson City is a lack of [an] overall sidewalk network to businesses from residential areas and other businesses. (There are sidewalks, but in many cases they aren't connected)"*

- Public comment from June 2015 Open House event

## Evaluation & Planning

1. Adopt a Livable Streets policy in jurisdictions currently without such a policy.
2. Adopt and implement streetscape design guidelines (e.g. specifications for lights, trees and landscaping, and street furniture), such as the National Association of City Transportation Officials Urban Bikeway Design Guide.
3. Allow a mix of uses throughout the community or adopt a form or design-based code to allow for flexible land uses.
4. Create a Pedestrian & Bicycle Committee or assign responsibility to an existing committee.
5. Increase the amount of bicycle parking throughout the community, including high density residential areas.
6. Develop an on-street bicycle plan.
  - Evaluate new road plans for potential pedestrian and bicycle facilities.
  - Review pedestrian and bicycle related crash report data in order to mitigate future crashes.
  - Develop a procedure to review speed limits on streets for possible reduction where pedestrian and bicycle safety warrants a review.
7. Develop a plan to improve pedestrian and bicycle access across US and Missouri highways in the CAMPO area.
8. Require bicycle parking for new commercial and medium to higher density (multi-family) residential developments.
9. Encourage the use of Health Impact Assessments for regionally significant transportation projects within the CAMPO region.
10. Create a schedule to maintain/update the CAMPO Bicycle and Pedestrian Plan.
11. Encourage adoption of the CAMPO Bicycle and Pedestrian Plan by all CAMPO jurisdictions.

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### 3 Existing Conditions

This chapter provides an overview of the existing transportation network conditions, including pedestrian, bicycle, and transit infrastructure.

On average, the transportation network in the CAMPO planning area is used by more than 72,000 regional residents, plus an estimated 540,000 commuters and tourists annually according to the Jefferson City Convention and Visitors Bureau. The transportation network consists of more than 641 miles of roads, 160 miles of sidewalks and trails, and six public transit routes. In addition, the planning area includes an airport, passenger and freight rail connectivity, and recreational and private river accesses.

#### Myth:

**A pedestrian is always safe in a crosswalk.**

Many pedestrians are in crosswalks when hit by a motor vehicle. Many motorists do not look for pedestrians when approaching a crosswalk, especially when preparing to make a turn. A motorist may be looking for a gap in traffic or distracted.



Photo Courtesy: CAMPO staff



## The Pedestrian and Bicycle Network

Sidewalks and trails play an essential role in the pedestrian network. The CAMPO region includes more than 140 miles of sidewalks and paved trails and an additional 15 miles of unpaved recreational trails. These systems link people to many community destinations such as shopping, healthcare, schools, parks, recreation, and entertainment. Sidewalks and trails also provide connectivity and access for transit users, contributing to the multimodal transportation system. Figure 3.1 depicts miles of sidewalk and trails in the CAMPO planning area. Figure 3.2 depicts the locations of sidewalks and trails in the CAMPO planning area.

*Figure 3.1 Miles of sidewalks and trails within the CAMPO region*

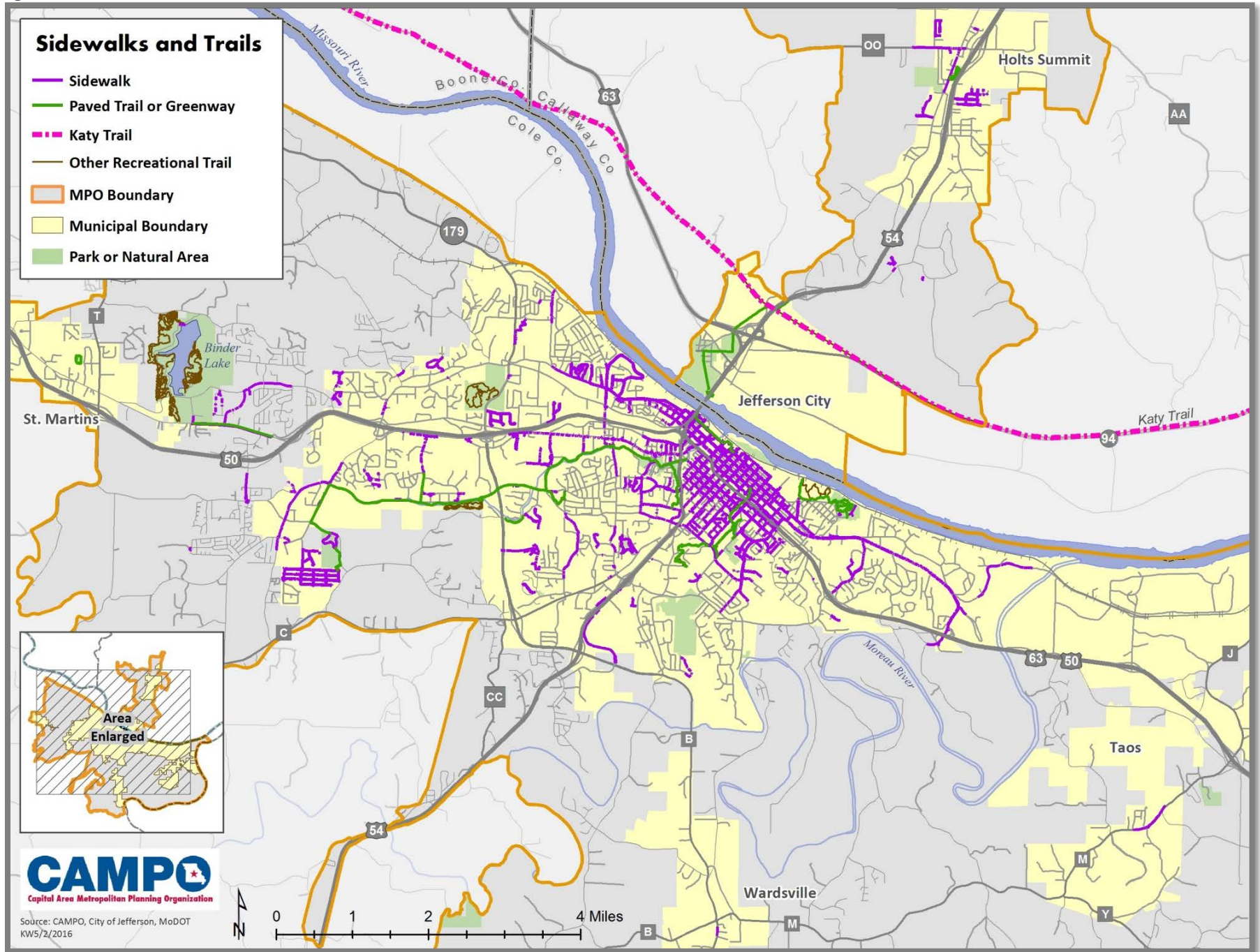
Sidewalks	Miles
Cole County	4
Holts Summit	5.6
Jefferson City	118.5
Taos	0.5
Wardsville	0.18
Trails	Miles
Greenway Trails and Spurs	14.9
Park/Fitness Trails	3.45
Mountain Bike Trails	15.35
State Owned Trails	3.3

## Sidewalks

Sidewalk accessibility and connectivity is limited by gaps, obstructions, and poor conditions in some areas. That being said, there are several areas in the CAMPO region where recent improvements have increased accessibility and condition dramatically. Replacement and improvement to sidewalks and crosswalks along Missouri Boulevard in 2016 will provide much needed connectivity between the Boulevard's commercial strip and downtown Jefferson City. The 2014 construction along US Business 50 east of St. Martins included installation of 3.5 miles sidewalks and signalized crosswalks. The project was part of a Safe Routes to School project that provided connectivity between Pioneer Trails Elementary School, nearby residential areas, and Binder Lake Park. Recent construction of sidewalks and crosswalks in Holts Summit also improved connectivity and accessibility between nearby schools, parks, and residences.

All sidewalks have been assessed and inventoried in the CAMPO region, reflecting the improvements listed above. CAMPO staff maintains a sidewalk database that is regularly updated and incorporates data that has been collected in cooperation with several regional partners. Data collected from the *2010 Jefferson City Sidewalk Plan*, *Callaway County Sidewalk Inventory*, and *Cole County Sidewalk Inventory* have been incorporated into this database. Additionally, more than 350 marked or designated crosswalks are also found in the database.

Figure 3.2 CAMPO Sidewalks and Trails



## Trails

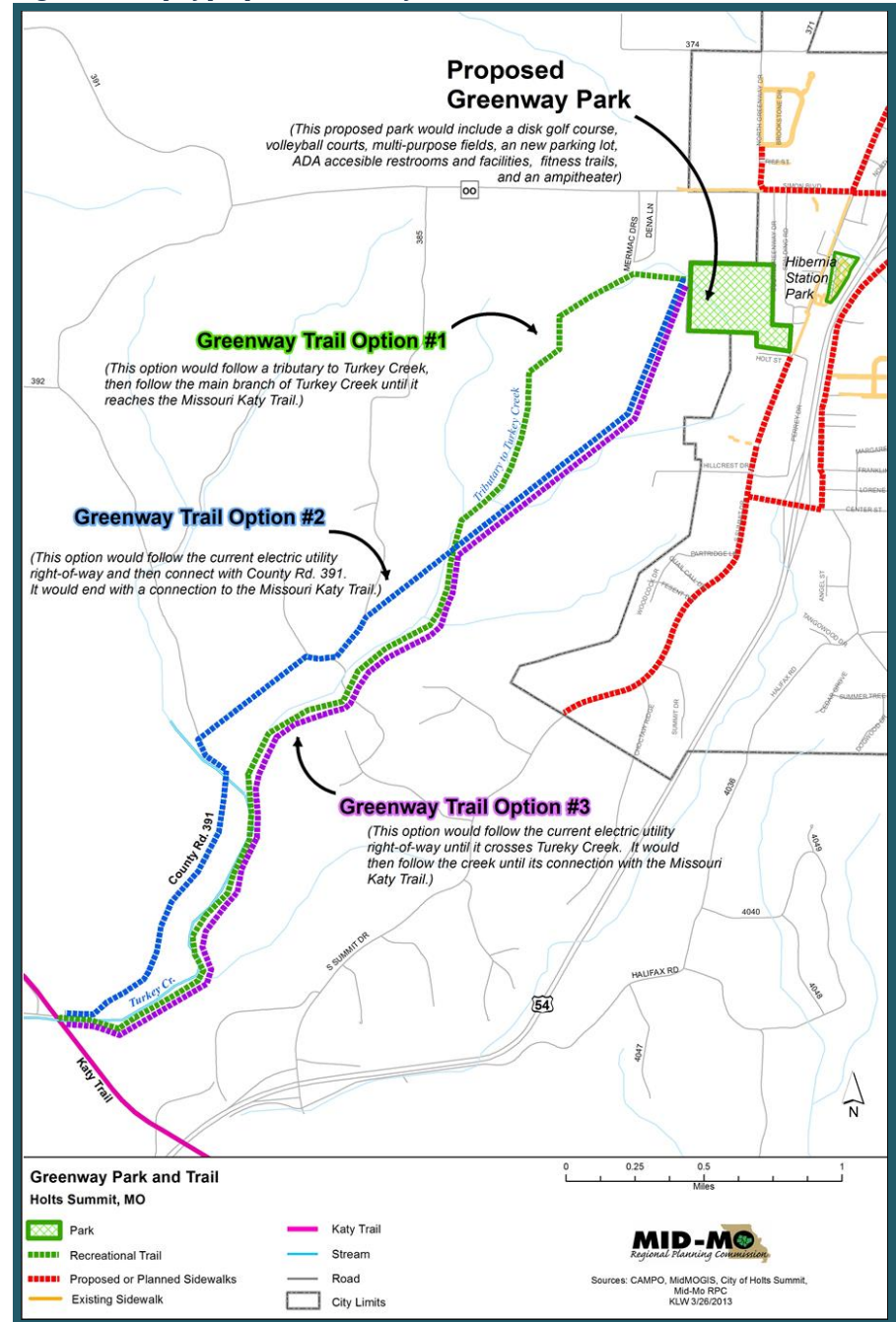
Trails make an important contribution to the connectivity of the existing pedestrian, transit, and bicycle networks. Existing trail connectivity between Holts Summit, the Katy Trail, and Jefferson City serves as a complement to existing pedestrian, bicycle, and transit networks.

Both Holts Summit and Jefferson City have plans to expand their existing trail systems. Improvements in Holts Summit include creation of a Greenway Trail that would link the Greenway Park with the Katy Trail along the western side of the City. This trail would be located in unincorporated Callaway County. Figure 3.3, taken from the *2014 Holts Summit Bicycle, Pedestrian, and Transit Plan*, depicts existing and future trails and sidewalks in Holts Summit.

Improvements in Jefferson City include several miles of trail that would increase connectivity across the City and into portions of unincorporated Cole County and Binder Lake. Figure 3.4, taken from 2015 update of the Greenway Master Plan depicts existing and future trails in Jefferson City.

Additionally, St. Martins also has plans to connect to the Jefferson City Greenway Trail via sidewalks. The community would like install sidewalk and a short trail that would link a local private school and Niekamp Park to sidewalk and trails connections at Binder Lake.

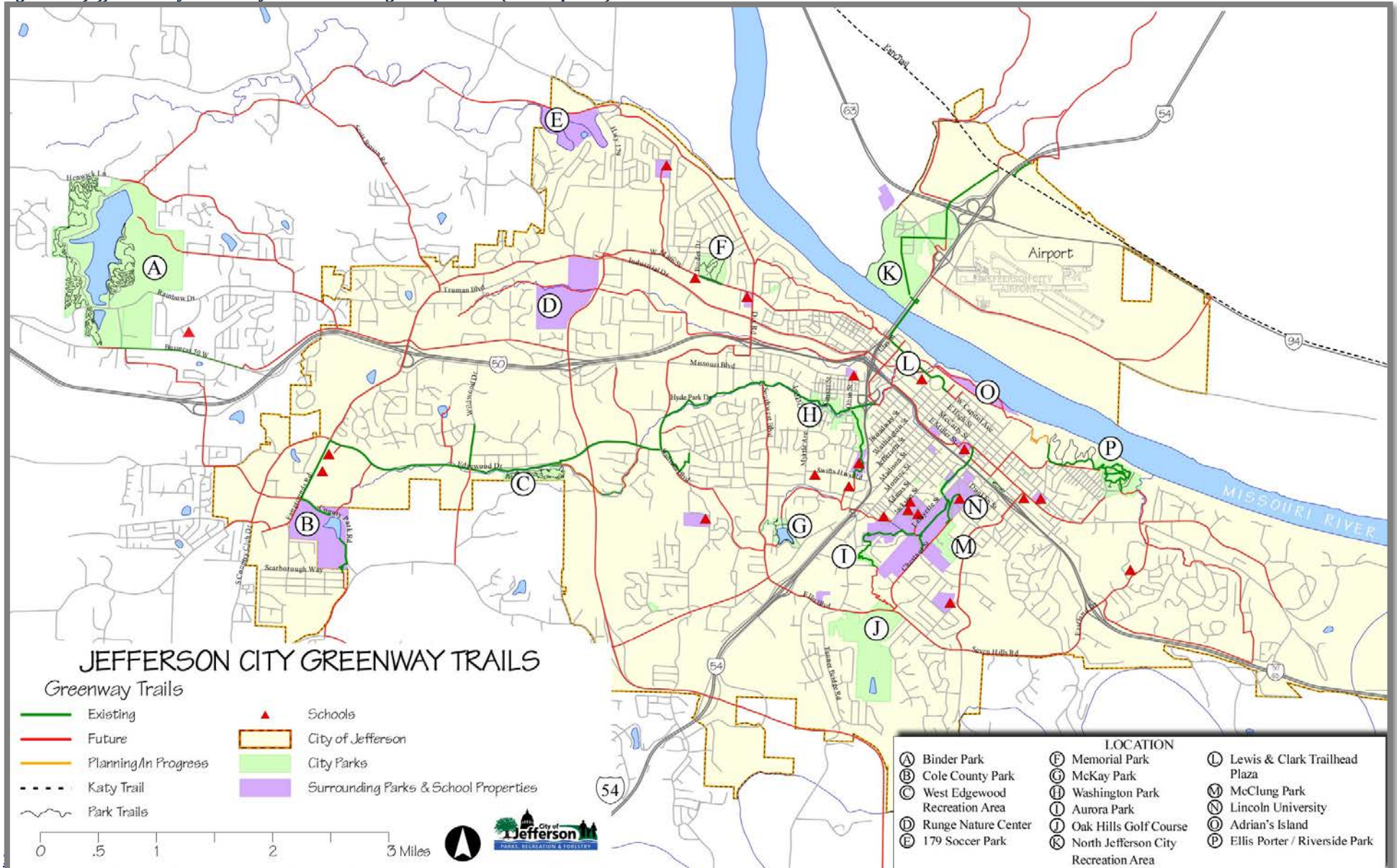
Figure 3.3 Map of proposed Greenway Trails in Holts Summit



Source: 2014 Holts Summit Bicycle, Pedestrian, and Transit Plan



Figure 3.4 Jefferson City Greenway Trails – existing and planned (2015 update)





## Bicycle Infrastructure

In addition to the multiple trails mentioned in the previous section, there also exist other facilities accessible to bicyclists in the region. The planning area has more than 50 bicycle parking areas or racks, with the heaviest concentrations in downtown Jefferson City. Racks are also available on all city transit buses. A bicycle locker facility is available on state owned property near the Capitol. A limited number of bicycle lanes also exist in the region. These lanes provide connectivity between the Katy Trail, downtown Jefferson City, and the Greenway Trail.

Trail connectivity is a high priority in the area. Connectivity to parks and recreational trails, like the one shown in Figure 3.5, are highlighted in several community plans. The *Holts Summit Bicycle, Pedestrian, and Transit Plan* and the *Jefferson City Greenway Plan* both list connectivity as a goal in trail development. Figure 3.6 depicts the locations of bicycle parking and bicycle lanes in the CAMPO region.

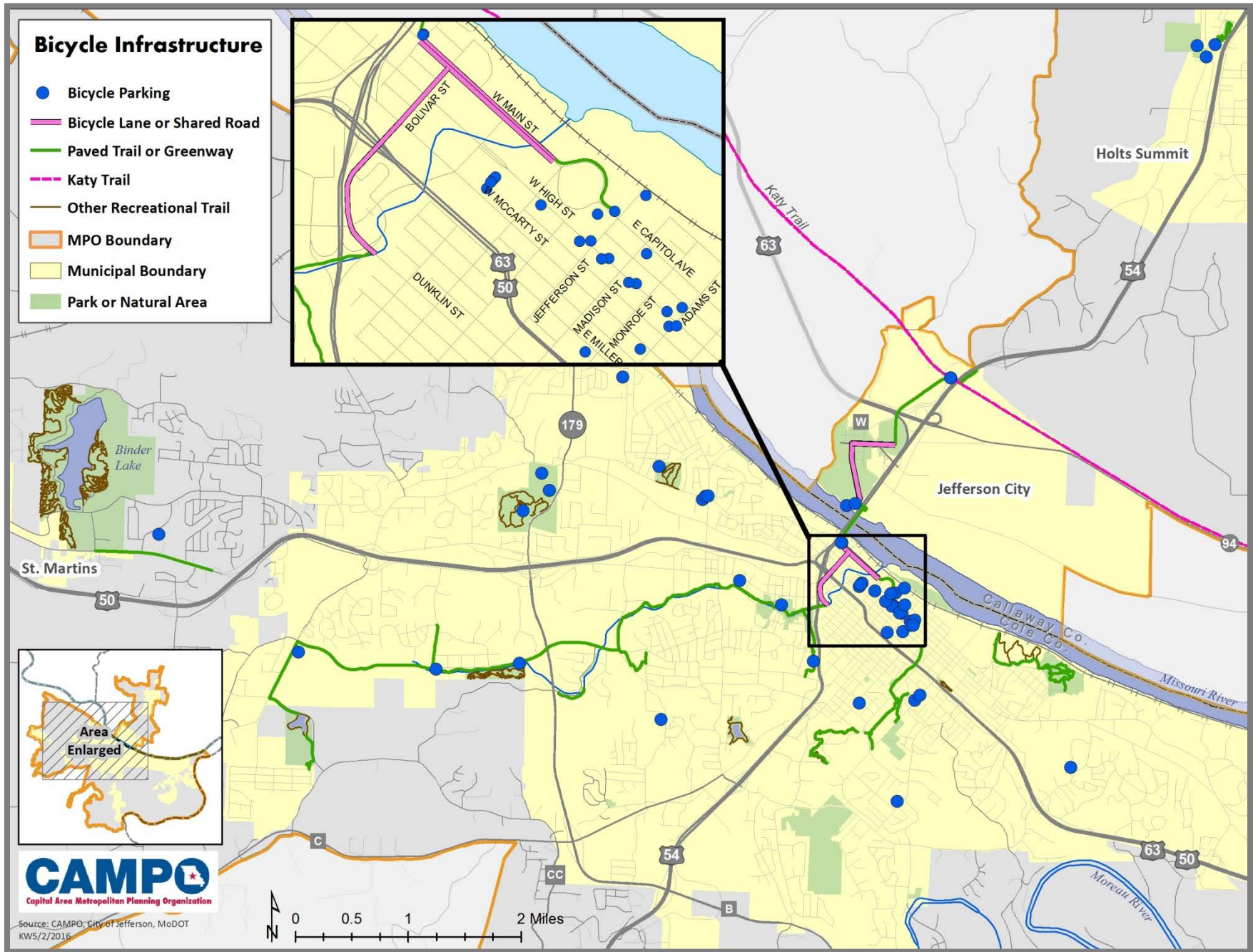
Figure 3.5 Trail sign at the West Edgewood Recreation Area.



Photo Courtesy: CAMPO Staff



Figure 3.6 CAMPO Bicycle Infrastructure





## Transit

Transit is an important component of the pedestrian network, linking pedestrians and bicyclists with resources, shopping, and services that are generally too far away or unsafe to access otherwise. Maintaining good access to transit services should be a high priority in maintaining and efficient pedestrian and bicycle network. While there are other transportation providers in the CAMPO region, this section will focus on JEFFTRAN and Amtrak.

### JEFFTRAN

JEFFTRAN, operated by Jefferson City, provides fixed route transit service inside the city limits as well as curb to curb service for people with disabilities via the Handi-wheels paratransit service. Figure 3.7 depicts a JEFFTRAN bus providing service to Missouri Boulevard in Jefferson City.

Buses run Monday through Friday from 6:45am to 5:30pm along six fixed routes, as seen in Figure 3.8, and three seasonal “Tripper” routes. Handi-wheels operates six vehicles and has two spares providing as many as 300 riders each day with curb to curb service. The Tripper routes provide expanded service between and 3:00 pm and 4:00 pm during the school year (August through June). These routes provide transportation to an estimated 480,000 passengers per year. According to a 2006 ridership survey, 51% of riders use JEFFTRAN for getting to and from work.

### Amtrak – Missouri River Runner

Amtrak operates the only passenger rail service in Mid-Missouri with a stop in downtown Jefferson City. The Missouri River Runner operates between St. Louis and Kansas City, with connections to Chicago, Los Angeles, and San Antonio among other places.

The Missouri River Runner provides two trips each day and, according to Missouri’s LRTP, had an 89% on-time performance in 2012. Each year, about 500,000 passengers ride Amtrak trains in Missouri, which includes 200,000 on the state supported route. In 2011, the Missouri River Runner provided service to approximately 191,000 passengers according to the Missouri State Rail Plan. Passenger rail in Missouri is

seen as a growing industry for business travelers, students and commuters alike.

*Figure 3.7 A transit user is seen loading his bicycle on a bus bicycle rack on Missouri Boulevard in Jefferson City.*



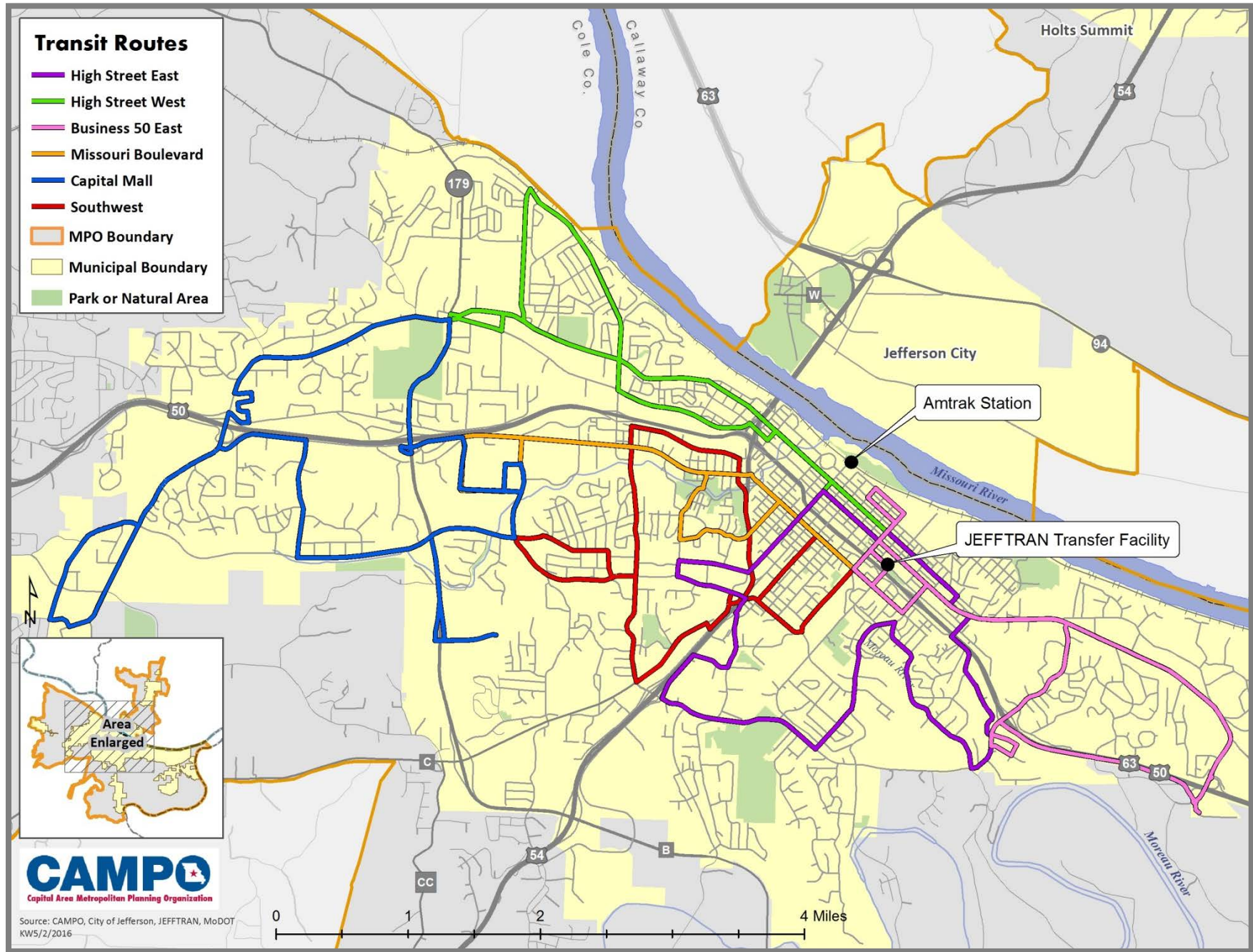
Photo Courtesy: Federal Highway Administration staff

### Myth:

#### Public transit benefits only those who use it.

Public transit offers benefits to entire communities, as well as transit riders. Those who use transit have more opportunity to travel to work, school, doctor’s offices, or to visit family and friends. Additionally, those living in areas served by public transportation save an estimated 646 million hours in travel time and 398 million gallons of fuel annually in congestion reduction alone. - *American Public Transportation Association*

Figure 3.8 JEFFTRAN Bus Routes





## Current Community Trends

Progress towards improving conditions for pedestrians and bicyclists has been steady. There have been several projects, programs, and events that show a strong community desire to improve facilities, build new infrastructure, and encourage tourism and economic development.

## Improvements

Several grant applications to fund pedestrian or bicycle improvements have been submitted in the last few years, including proposals to build sidewalk and pedestrian crossings in Holts Summit, Jefferson City, St. Martins, and unincorporated Cole County. This following list illustrates just a few of the many ongoing construction projects that have been recently implemented the CAMPO planning area.

**Cole County** - 2013-2014 Installation of sidewalks and crosswalks along US Business 50 in Apache Flats and along Pioneer Trail Drive. The joint project between the county and Jefferson City Parks and Recreation includes a combination of sidewalk and paved trail connecting residential areas and an elementary school. Funded using Transportation Alternative Program (TAP) funds and local funds.

**Holts Summit** - 2016 Installation of sidewalk and crosswalks along South Summit Drive, increasing access between residential areas and the elementary school. Funded using TAP funds.

**Jefferson City** - 2016 Installation of wayfinding signage, directing residents and visitors to trails and several points of interest. Funded using TAP funds.

**Jefferson City** - 2016 ADA improvements along Missouri Boulevard. This MoDOT project creates better access and increase mobility with the installation of crosswalks, sidewalks, and curb ramps.

**Jefferson City** - 2017 Capitol Avenue streetscape, sidewalks and beautification improvements.

**Jefferson City** - 2016 Expansion of the Greenway Trail along Frog Hollow Road.

**St. Martins** – 2014 Niekamp Park improvements, providing a paved walking path, benches, water, and restrooms. Funded using a Recreational Trails Grant.

## Local Events and Tourism

There are many local, state, and national events involving active transportation, like walking and biking that take place in the CAMPO planning area. Many of these events are competitive races, but several are community awareness or charity events. No matter the purpose of the event, the goal is usually to get as many participants as possible to attend, spectate, or participate. Many times the event hosts are coordinating with several public and private organizations. The list below includes several regular or annual biking or walking/running events that are hosted in the area.

### Biking Events

- State Criterion (downtown)
- State Time Trial (MO 94)
- Parks moon light bike ride
- Red, Bike, and Blue
- Katy Trail Ride (sponsored by state parks)
- RAAM event (goes through Jefferson City) – ride takes place on US 54 and MO 94

### Walking /Running Events

The following list represents only a handful of the many walking and running events that are held annually in CAMPO planning area:

- Prison Break 5k
- Color Run 5k
- Kicks in the Sticks 5k
- Thanksgiving Day Pie Run



## 4 Types of Pedestrian and Bicycle Facilities

This section provides an overview of various types of pedestrian and bicycle facilities that can be utilized in the CAMPO region. Facility descriptions are based primarily on the national guidelines established by the American Association of State Highway and Transportation Officials' (AASHTO) 2012 Guide for the Development of Bicycle Facilities, AASHTO 2004 Guide for the Planning, Design, and Operation of Pedestrian Facilities, and other Federal Highway Administration's (FHWA) Bicycle and Pedestrian Program publications.

Facility types include:

- Sidewalks
- Shared Roadway (No Bikeway Designation)
- Signed Shared Roadway
- Designated Bicycle Lanes
- Shared Use Paths

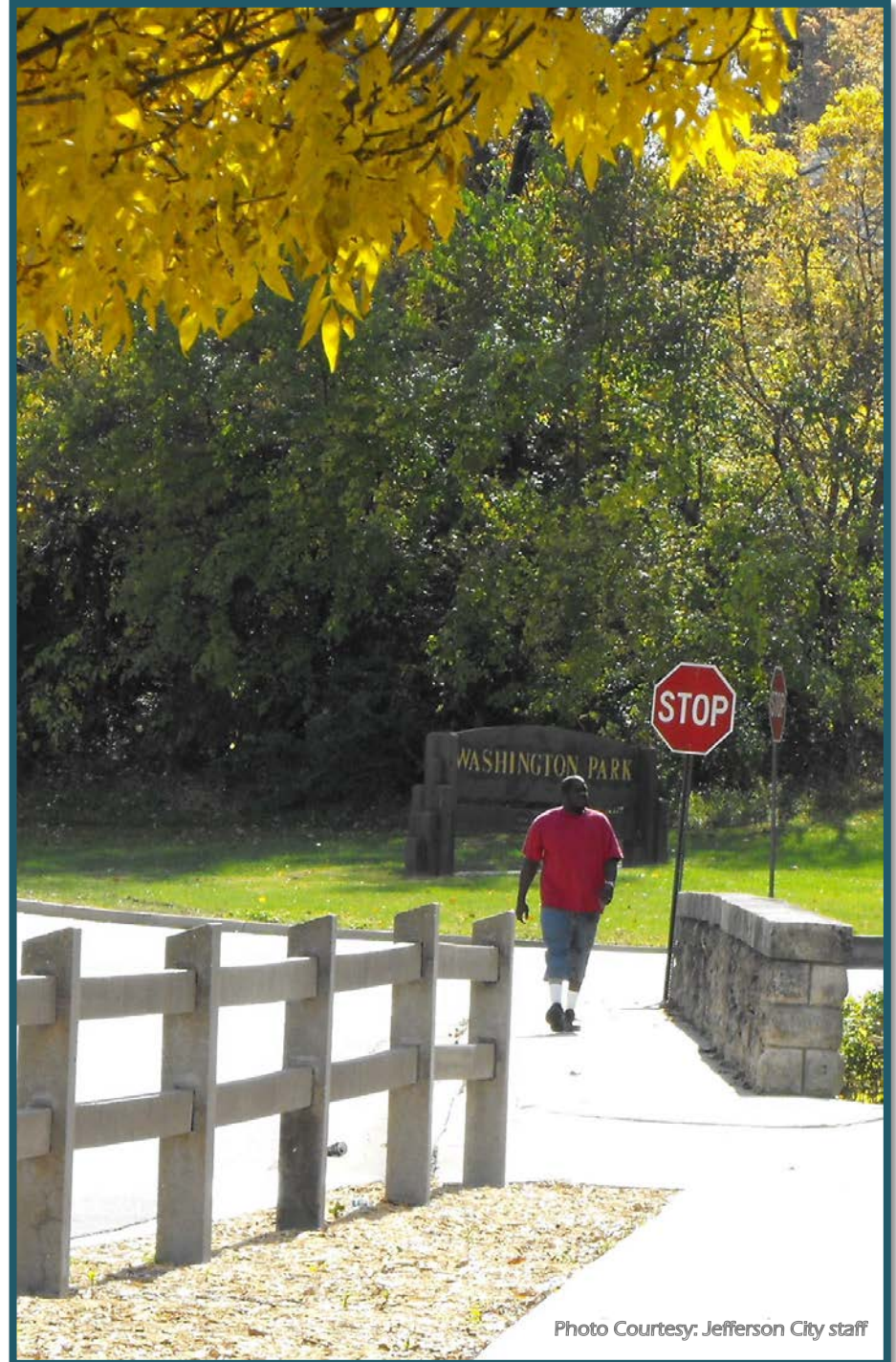


Photo Courtesy: Jefferson City staff

## Sidewalks

Accessible pedestrian facilities should be considered part of every new public right-of-way and linking of pedestrian routes to transportation stops and major corridors should always be a priority. The decision to install sidewalks should not be optional. "Sidewalks should be built and maintained in all urban areas, along non-Interstate public highway rights-of-way, in commercial areas where the public is invited, and between all commercial transportation stops and public areas" (Institute of Transportation Engineers, Technical Council Committee 5A-5, 1998).

Sidewalk characteristics that have the greatest impact on accessibility include; condition, grade, surface type, location, type of street, and climate. Access characteristics directly affect usability of a sidewalk and the amount of attention paid to these details will determine whether a facility is accessible or not.

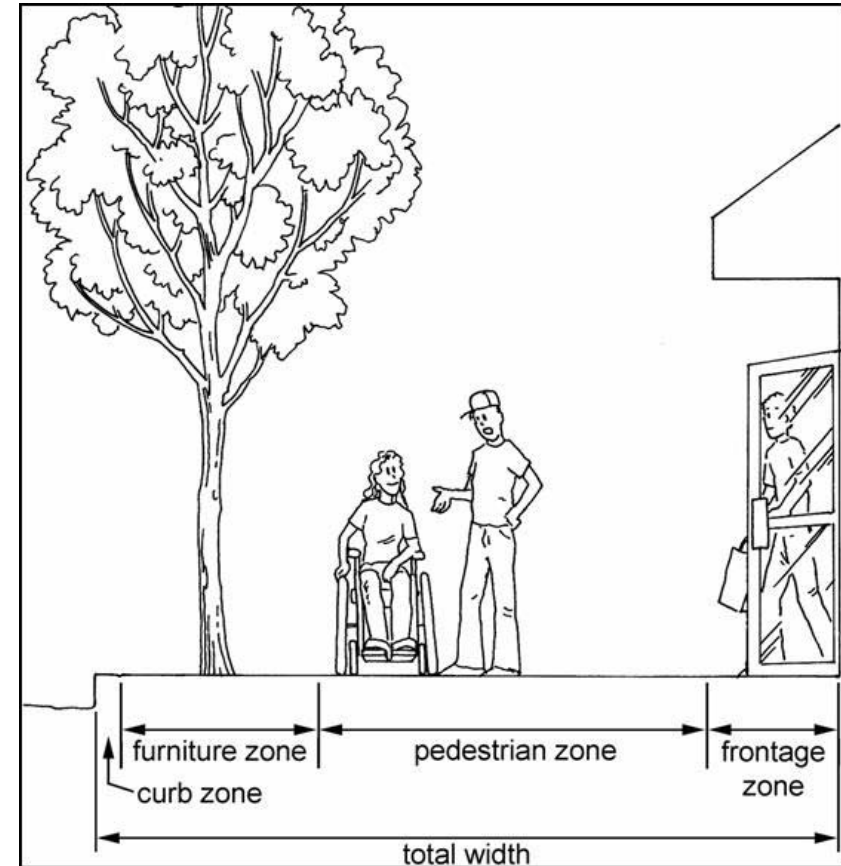
The width of the sidewalk corridor is one of the most significant factors in determining the type of pedestrian experience that the sidewalk provides. In many locations, the sidewalk corridor is paved from the curb to the property line. In other areas, the paved portion of the sidewalk corridor is set back from the street by a surface, such as grass, which is not intended for pedestrian travel. Planting strips (sidewalk setbacks that are grass or another type of vegetative cover) provide:

- Shade
- Space for utilities and traffic control equipment and signs
- Space for trash cans and newspaper boxes
- Separation from roadway
- Aesthetic relief

Just like a roadway corridor, a sidewalk corridor is made up of different zones as shown on the Figure 4.1 to the right. The pedestrian zone is specifically reserved for walking. The zone must be completely free of overhanging and protruding obstacles, including vegetation. According to the Americans with Disabilities Act *Accessibility Guidelines* (ADAAG), objects must not protrude: (1)

lower than a height of 80 inches, (2) higher than 27 inches from the ground, and (3) outward more than 4 inches from posts, buildings, or free-standing fixtures. Tree branches or shrubs that protrude into the sidewalk corridor must be cut or trimmed.

**Figure 4.1** The zone system divides the sidewalk corridor into four zones to ensure that pedestrians have a sufficient amount of clear space to travel.



[FHWA Bicycle and Pedestrian Program](#)

## Shared Roadway (No Bikeway Designation)

According to the Federal Highway Administration (FHWA), most bicycle travel in the United States now occurs on streets and highways without bikeway designations. In some instances, a community's existing street system may be fully adequate for efficient bicycle travel, and signing and striping for bicycle use may be unnecessary. In other cases, some streets and highways may be unsuitable for bicycle travel and it would be inappropriate to encourage bicycle travel by designating the routes as bikeways. Additionally, some routes may not be considered high bicycle demand corridors, and it would be inappropriate to designate them as bikeways regardless of roadway conditions (e.g., minor residential streets). Some rural highways are used by touring bicyclists for intercity and recreational travel. In most cases, such routes should only be designated as bikeways where there is a need for enhanced continuity with other bicycle routes. However, the development and maintenance of 4-foot paved shoulders with a 4-inch edge stripe can significantly improve the safety and convenience of bicyclists and motorists along such routes. Figure 4.2 provides an example of a shared roadway with no signage or bikeway designation.

*Figure 4.2 Example of a "Shared Roadway"*



[Source: FHWA University Course on Bicycle and Pedestrian Transportation](#)

## Signed Shared Roadway

Signed shared roadways are designated by bicycle route signs, and serve to either:

- a) Provide continuity to other bicycle facilities (usually bike lanes); or
- b) Designate preferred routes through high-demand corridors.

As with bike lanes, signing of shared roadways should indicate to bicyclists that particular advantages exist to using these routes compared with alternative routes. This means that responsible agencies have taken actions to assure that these routes are suitable as shared routes and will be maintained in a manner consistent with the needs of bicyclists. Signing also serves to advise vehicle drivers that bicycles are present.



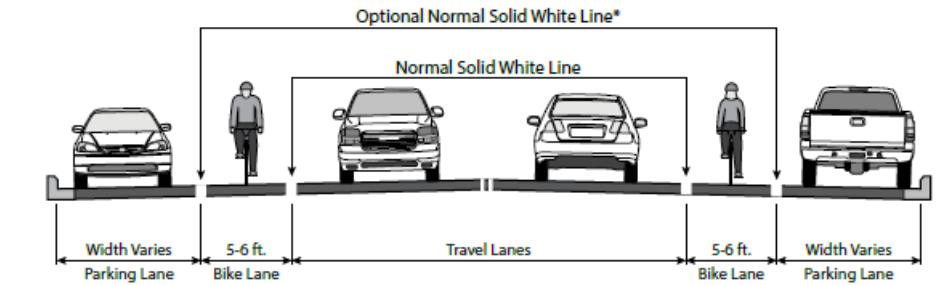
## Designated Bike Lane

According to the 2012 AASHTO Guide for the Development of Bicycle Facilities, Bike lanes should be established with appropriate pavement markings and signing. Designated bike lanes should be located along streets in areas where there is significant bicycle demand and where there are distinct needs that can be served by them. The purpose should be to improve conditions for bicyclists on the streets. Bike lanes are intended to delineate the right of way assigned to bicyclists and motorists and to provide for more predictable movements by each. Bike lanes also help to increase the total capacity of a roadway carrying mixed bicycle and motor vehicle traffic. Another important reason for constructing bike lanes is to better accommodate bicyclists where insufficient space exists for comfortable bicycling on existing streets.

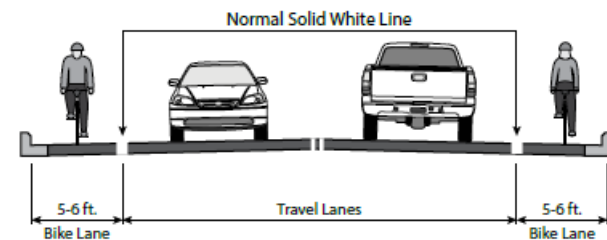
This may be accomplished by reducing the width of vehicular lanes or prohibiting parking in order to delineate bike lanes. In addition to lane striping, other measures should be taken to ensure that bicycle lanes are effective facilities. In particular, bicycle-safe drainage inlet grates should be used, pavement surfaces should be smooth, and traffic signals should be responsive to bicyclists. Figure 4.3 provides an example for design of a designated bike lane.

Currently, there are only three streets with designated bike lanes within the CAMPO region, Bolivar Street, W. Main Street, and Dunklin Street. Bolivar Street and W. Main Street, as of 2016, have “advisory lanes” that provide connectivity between the Jefferson City Greenway Trail and Missouri River pedestrian bridge leading to the Katy Trail. An advisory bike lane is used on low-volume streets that are narrow and is marked with a solid white line on the right (next to parked cars) and a dotted line to the left. These markings give bicyclists a space to ride, but are also available to motorists if space is needed to pass oncoming traffic. The Dunklin Street bike lanes are only 500 feet long and complete the connection between Bolivar Street and the Greenway Trail. Figure 4.4 depicts W. Main Street in Jefferson City.

Figure 4.3 Designated Bike Lane



On Street Parking



Parking Prohibited

Source: FHWA

Figure 4.4 An advisory bike lane on W. Main Street in Jefferson City.



## Shared Use Path

Generally, shared use paths may be used to serve corridors not served by streets and highways or where wide utility or former railroad right-of-way exists, permitting such facilities to be constructed away from the influence of parallel streets. Figures 4.5 and 4.6 provide examples of shared use paths.

Shared use paths should offer opportunities not provided by the road system. They can provide a recreational opportunity or, in some instances, can serve as direct commute routes if cross flow by motor vehicles and pedestrians is minimized. The most common applications are:

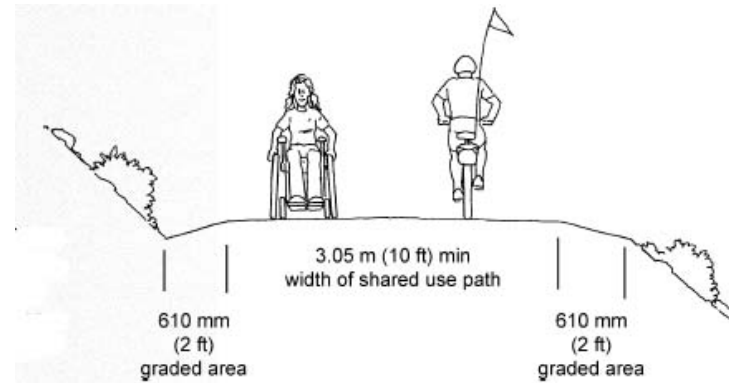
- Along rivers, flood plains, or riparian corridors
- Ocean fronts or canals
- Rights-of-way, (utilities, former or active railroads)
- College campuses or parks

There may also be situations where such facilities can be provided as part of planned developments. While shared use paths should be designed with the bicyclist's safety in mind, pedestrians will likely also use such paths.

In selecting the proper facility, an overriding concern is to assure that the proposed facility will not encourage or require bicyclists or motorists to operate in a manner that is inconsistent with the rules of the road. The needs of both motorists and bicyclists must be considered in selecting the appropriate type of facility.

Shared use paths in the CAMPO region include the Katy Trail, the Jefferson City Greenway Trail, which links Jefferson City and Holts Summit, and several paved park trails in Holts Summit, Jefferson City, and St. Martins.

**Figure 4.5 Shared Use Path**



[Source: FHWA](#)

**Figure 4.6 A family using the Greenway Trail in Jefferson City.**



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## 5 Implementation

This section lays out an implementation strategy for the CAMPO region to achieve the goals and objectives of this plan. Included, are strategies, performance measures, and timelines to guide and track the implementation process. Also included is an illustrative list of projects and a list of funding options that can be used to support these items.

It is important to reiterate the role of CAMPO in the implementation of this plan. Although the CAMPO region includes six incorporated communities and portions of two counties, it has no direct influence over any jurisdiction within its borders. However, CAMPO can assist local jurisdictions with developing a community specific implementation strategy referencing the goals and recommendations laid out in this plan. It is the jurisdictions responsibility to implement the plan.

Individualized implementation strategies will contain projects and policies that will fit the needs and capabilities of the small communities and/or rural areas that lie within the CAMPO planning area. The Implementation Strategies for each jurisdiction are located in Appendix E.

All activities undertaken by CAMPO staff must be supported by the Unified Planning Work Program (UPWP). The UPWP identifies the planning priorities and activities to be carried out by CAMPO within a fiscal year. For CAMPO, that fiscal year runs from November 1 to October 31. The UPWP also serves as a management tool for scheduling, budgeting, and monitoring planning activities and serves as the basis for funding agreements with the Missouri Department of Transportation (MoDOT). All implementation activities identified within the following “CAMPO Strategy” will be guided by the UPWP. These activities may provide guidance for the next year’s UPWP.



## The “CAMPO Strategy”

The following pages include a list of strategies that CAMPO has identified as tasks that can be addressed or started within the next one to five years. Using the goals and recommendations as a guide, the strategies were grouped into four categories reflective of the public comments and input received.

- Policy & Planning
- Education and Safety
- Tourism
- Pedestrian & Bicycle Network Improvements

The strategies include a timeline for completion as shown in Figure 5.1 below.

*Figure 5.1 CAMPO Strategy timeline definitions*

Timeline	Description
Short Range	Activity may begin in 1 to 3 years
Medium Range	Activity may begin in 3 to 5 years
Long Range	Activity may begin in 5 to 10 years

As strategies are implemented and funding is made available projects may be programed into the CAMPO Transportation Improvement Program (TIP). The pedestrian bridge in Figure 5.2 is an example of a pedestrian project that was able to be funded and programed into the TIP.

Figures 5.3 through 5.6 outlines the CAMPO Strategy.

*Figure 5.2 People using the Missouri River pedestrian bridge that connects downtown Jefferson City with the Katy Trail, river access, and community gardens which lie on the north side of the Missouri River.*





## Policy & Planning

*Figure 5.3 Policy & Planning Strategies*

Strategies	Implementation	Measures	Timeline
Participation in or support of a Pedestrian & Bicycle Committee <ul style="list-style-type: none"> <li>CAMPO staff may participate or support committee activities in making recommendations on policies and ordinances within a jurisdiction.</li> </ul>	This would likely be formed by a jurisdiction in reviewing local projects and programs. The committee would provide a forum to review or make recommendations specific to the pedestrian, bicycle, or transit implications of a proposed project, program, or policy.	Performance measures may include tracking of membership, meetings, and public outreach.	Short Range
Cooperate with jurisdictions in the development of community specific plans, policies, ordinances, or grant applications. These activities may need to be incorporated into the UPWP depending on time and data needs. <ul style="list-style-type: none"> <li>On-Street Bicycle Plans</li> <li>Livable Streets Policies</li> <li>Design Guidelines</li> <li>Land use and/or Zoning</li> <li>Provide assistance with RFP and RFQ as needed</li> </ul>	CAMPO staff will work with jurisdictions in the development or implementation of plans, policies, ordinances, or other pertinent documents as they relate to pedestrian or bicycle improvements. These activities may need to be incorporated into the UPWP depending on time and data needs. Assistance by other regional or state agencies may be utilized.	Performance measures may include: number of communities assisted, number of grant applications, number of documents produced.	Short Range
Encourage the adoption of the Capital Area Pedestrian and Bicycle Plan by jurisdictions.	CAMPO staff will present the plan to each jurisdiction. Staff will encourage adoption of the plan and provide assistance in the development of an individualized Implementation Strategy.	Performance measures may include number of jurisdictions that adopt the plan.	Short Range
Collaborate with or form partnerships with local, state, and national organizations. <ul style="list-style-type: none"> <li>Missouri Council on Action and Nutrition</li> <li>Central Missouri Ways to Enhance Children's Activity</li> <li>Healthy Living Alliance</li> <li>Association of Pedestrian Bicycling and Professionals</li> <li>Missouri Bicycle and Pedestrian Federation</li> <li>Bicycle Friendly America Program</li> <li>Schools and Educational Institutions</li> <li>Hospitals and Healthcare Agencies</li> </ul>	CAMPO staff will actively pursue increased engagement with groups promoting active transportation and/or healthy living initiatives.	Performance measures may include partnering with these groups to hold events, serving on a board, or applying for a certification. CAMPO staff will also provide assistance to individual jurisdictions seeking similar involvement.	Medium Range



## Education and Safety

Figure 5.4 Education and Safety Strategies

Strategies	Implementation	Measures	Timeline
Assist communities with development of education campaigns that support or promote: <ul style="list-style-type: none"> <li>• Pedestrian and bicycle events</li> <li>• Pedestrian and bicycle safety</li> <li>• Bicycle skills classes</li> <li>• Education PSAs, events, or other media on public transit use</li> <li>• PSAs or other media to remind motorists to “Share the Road”</li> </ul>	CAMPO will continue to support and promote regional pedestrian and bicycle safety and education. Additionally, CAMPO staff will assist jurisdictions in promoting and hosting events or educational programs.	Performance measures may include: number of events, number of attendees at events, number of people contacted during public outreach.	Short Range (currently in progress)
Assist communities with development of a Walking School Bus Program.	CAMPO staff will provide support and/or assist with grant applications in the development of Walking School Bus Programs for any interested jurisdiction or school in the region.	Performance measures may include: number of applications submitted, number of programs created, number of volunteers, and number of children served.	Medium Range

## Tourism

Figure 5.5 Tourism Strategies

Strategies	Implementation	Measures	Timeline
Provide information for mobility options for tourists and the general public. <ul style="list-style-type: none"> <li>• Develop or assist with development of maps or brochures identifying bicycle or pedestrian routes</li> </ul>	CAMPO staff will work with public transit groups, the Jefferson City Convention and Visitors Bureau, and local jurisdictions to help develop and/or support the development of maps or other media that can be disseminated to the tourists and the general public.	Performance measures may include: number of brochures or maps produced, distribution locations.	Medium Range
Assist communities or local organizations with promotion of walking and bicycling tourism events.	CAMPO will provide assistance to and/or partner with jurisdictions or organizations seeking to host walking or bicycling tourism events.	Performance measures may include number of events created, number of attendees, number of sponsors, economic impacts.	Medium Range

## Pedestrian & Bicycle Network Improvements

*Figure 5.6 Pedestrian & Bicycle Network Improvement Strategies*

Strategies	Implementation	Measures	Timeline
Assist communities with identification of gaps in connectivity, including pedestrian, bicycle, and transit. <ul style="list-style-type: none"> <li>• Within communities</li> <li>• Between communities</li> </ul>	CAMPO staff will map areas where there are gaps in connectivity between pedestrian, bicycle, and transit networks.	Performance measures may include: maps depicting missing sidewalk, lack of bike lanes, lack of pedestrian or bicycle connectivity to transit stops.	Medium Range
Evaluate sidewalk condition and ADA compliance.	CAMPO staff will update existing sidewalk data to include more information regarding condition and ADA compliance.	Performance measures may include: percentage of jurisdictions mapped, identification of problem areas, identification of future needs.	Medium Range
Assist with identification and prioritization of future sidewalk locations.	CAMPO staff will update mapping of "future sidewalks", integrating data on high demand areas and current deferral areas.	Performance measures may include: creation of a "future sidewalk" map, assisting with the update of the Jefferson City Sidewalk Plan, assisting local jurisdictions with mapping sidewalk needs and connectivity gaps.	Medium Range
Encourage development of bicycle and/or walking route options linking CAMPO communities, Katy Trail, Rock Island Trail, Greenway Trail, Runge Nature Center Trail, and Clark's Hill/Norton State Historic Site Trail.	CAMPO staff can work with Jefferson City, Cole County, and MoDOT staff to delineate multiple options that can be designated as connecting routes.	Performance measures may include: a map of suggested routes, meetings to discuss route alternatives.	Medium Range
Assist with identification of additional areas to enhance wayfinding signage.	CAMPO will work with local jurisdictions and stakeholders to develop and maintain a list of future sites for signage if and when funding is available.	Performance measures may include: a map of suggested locations, meetings to discuss location suggestions, identification of funding options.	Medium Range
Identify areas where infrastructure is needed: <ul style="list-style-type: none"> <li>• Bicycle parking</li> <li>• Bicycle lanes</li> <li>• Crosswalks</li> <li>• Bus stop bicycle racks</li> <li>• Bus shelters</li> </ul>	CAMPO staff will work closely with local jurisdictions to inventory existing conditions and provide input on suggested improvements or enhancements. CAMPO staff will also assist jurisdictions with identifying funding sources and other resources to achieve these improvements.	Performance measures may include: inventory maps, improvement strategies and maps, development of design guidelines, number of facilities installed or improved.	Short Range (In Progress)
Review and update Capital Area Pedestrian and Bicycle Plan.	CAMPO staff will review and update plan at the direction of the CAMPO Board of Directors.	Performance measures include: update of sections or entirety of plan.	Long Range

## List of Illustrative Projects

The following list includes specific projects that have been identified as part of the planning process but are not able to be implemented with current funding allocations. Additionally, Figures 5.7 and 5.8 depict recommended bicycle routes that have been developed as part of this planning process and coincide with other community plans. In the event that additional funding is secured, these projects may be programed into the CAMPO Transportation Improvement Program (TIP) or into an individual jurisdiction's Capital Improvement Program.

### Pedestrian Crossing Improvements

- Holts Summit
  - Route OO and US 54
  - Center Street and US 54
- Jefferson City
  - US 54 and Ellis Boulevard
  - Missouri Boulevard and Dix Road
  - US 50 and Dix Road
  - US 50 and Truman Boulevard
  - Construction of a pedestrian bridge over railway that links downtown Jefferson City to a river front park.
  - Installation of signalized crossings where the Greenway Trail crosses roadways.
- St. Martins
  - US Business 50 West (at school and at various locations between school and Route T)

### Sidewalks

- Develop or purchase a sidewalk management system.
- Implement sidewalk installation as outlined in the Jefferson City Sidewalk Plan.
- Implement sidewalk installation as outlined in the Holts Summit sidewalk plan.
- Sidewalk installation in St. Martins on north side of US Business 50 West between Hillside Dr. and Binder Lake Rd.

### Trail Connectivity

- Trail connectivity between Holts Summit Greenway Park and Katy Trail.
- Create Greenway Trail connectivity between Jefferson City, Binder Lake, and St. Martins.
- Create a signed trail connection between CAMPO trail systems and Rock Island Trail.
- Create Greenway Trail connections to low-income neighborhoods and residential areas.
- Install wayfinding to help navigate greenway trail and alert them to nearby shops or services.

### Bicycle Infrastructure

- Installation of bicycle parking at transit stops, community facilities, and public housing.
- Installation of a storage locker facility for Katy Trail visitors.
- Creation of on-street signed bike routes (see Figure 5.7 and 5.8) that provide connectivity to other trails or signed bike routes.
- Create a signed bicycle route between Jefferson City and Osage City, Clark's Hill/Norton State Historic Site.

### Transit

- Improve sidewalk connectivity to transit stops.
- Improve pedestrian crossings near transit stops.
- Investigate installation of transit stops in Holts Summit and St. Martins.

### Road Improvements

- Improve or expand shoulders on state routes to provide more space for pedestrians and bicyclists.



Figure 5.7 Map 1 of 2 of Recommended On-Street Bicycle Routes

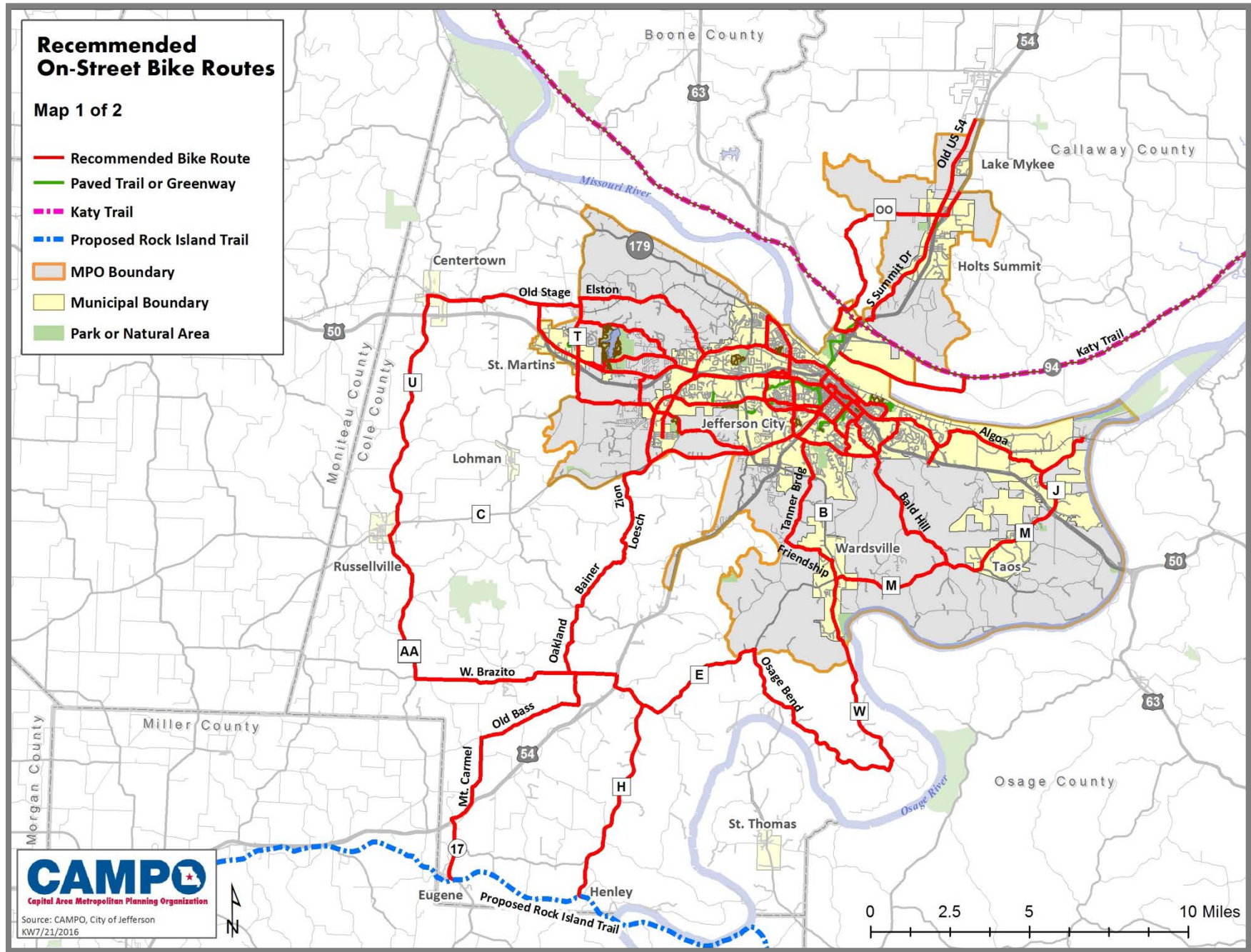
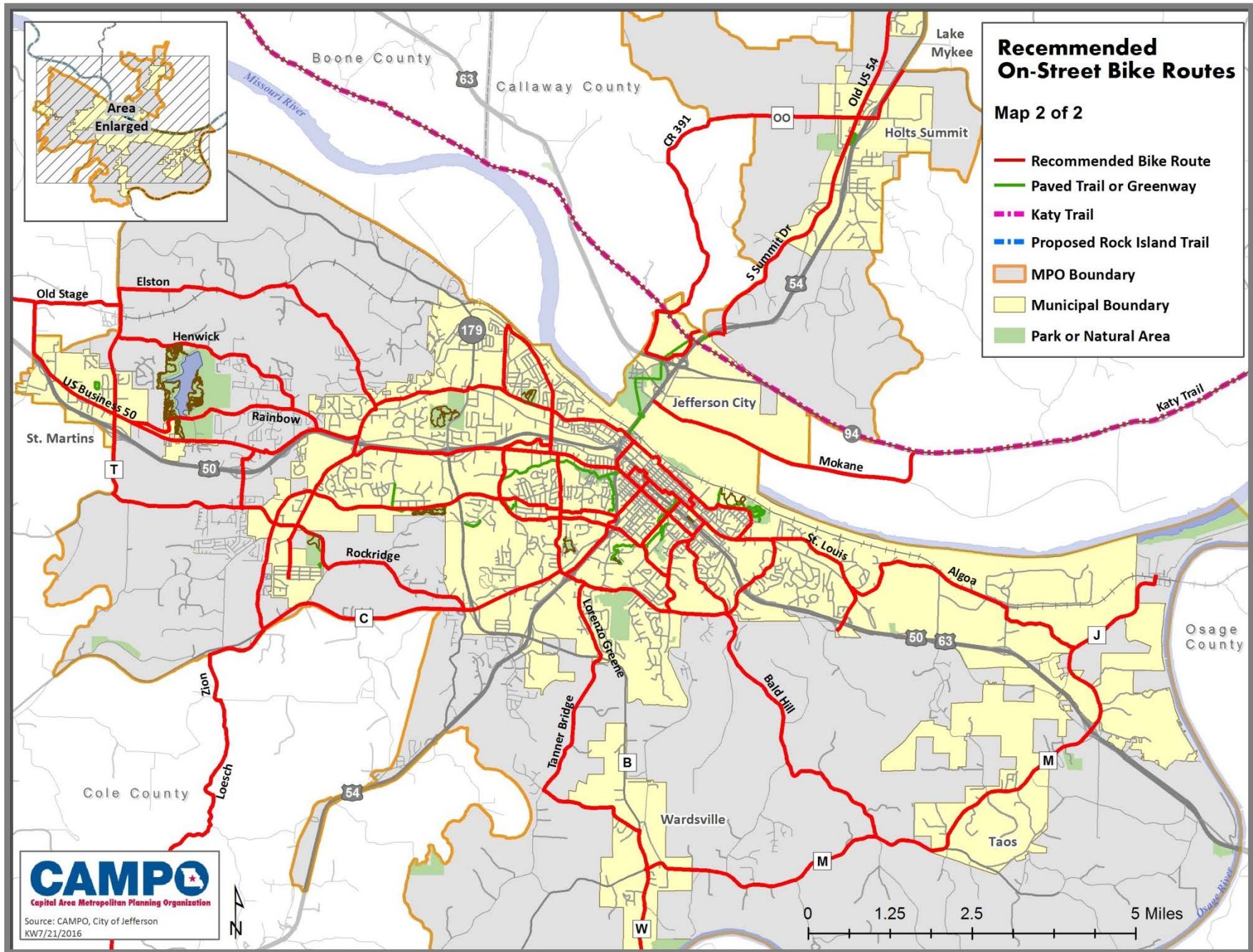




Figure 5.8 Map 2 of 2 of Recommended On-Street Bicycle Routes



## Funding

There are several funding sources available for pedestrian and bicycle improvements, including; federal, state, local, and private-sector funds. A list of available funding sources is provided below.

### Local Funding Sources

Local funds may include taxes, impact fees, and capital improvement set asides. These local funds can and should be leveraged as match for external funding. For some programs, match requirements may range from 20% to 55%.

Additionally, jurisdictions should look into forming local partnerships with private entities to invest in the growing nonmotorized network. These partnerships may be financial in nature or include other resources such as data sharing, technical assistance (either planning or engineering in nature), outreach to citizens or the media, and encouragement, such as organizing a community bike ride or a walk.

### Local Sales Tax

Missouri counties and cities have the option to institute a sales tax to pay for infrastructure improvements. Jefferson City has a half cent sales tax, which requires a public vote every five years, and City's Parks and Recreation Department has a separate half-cent sales tax that may be used for greenway development.

### Special Tax Districts

Other funding mechanisms available to communities include special tax districts. Special tax districts provide funding within a specific geographic area the funds collected may be used for studies, plans, or construction of new infrastructure within the area. These include:

- Tax Increment Financing (TIF) districts,
- Transportation Development Districts (TDD)
- Community Improvement Districts (CID)
- Neighborhood Improvement Districts (NID)

## Federal Funding Sources

In December 2015, a new transportation bill was authorized, Fixing America's Surface Transportation Act (FAST Act). There are several programs within the FAST Act that are available to fund pedestrian and bicycle improvements. In addition to the FAST Act, there are other federal funding options. All of these funding options are listed below.

### Highway Safety Improvement Program (HSIP)

The HSIP emphasizes a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance. Eligible projects include safety improvements for all roadway users.

### Transportation Alternatives Program (TAP)

The TAP program provides for a variety of alternative transportation projects that were previously eligible activities under separately federally funded programs. TAP requires an 80/20 match and is administered by the Missouri Department of Transportation.

Pedestrian, bicycle, trails, and safe routes to school projects are eligible for TAP funding, including:

- Construction, planning, and design of on- and off-road trail facilities for pedestrians, bicyclists, and other nonmotorized forms of transportation.
- Construction, planning, and design of infrastructure related projects and systems that will provide safe routes for non-drivers.

### National Highway Performance Program (NHPP)

The NHPP provides funding for projects including bicycle transportation and pedestrian walkways on principle arterials and on the Interstate Highway System.

### Recreational Trails Program (RTP)

RTP funds also stem from FAST Act Federal Highway Funds, but are administered by the Missouri Department of Natural Resources. Grants are available for trail development and renovation and require a minimum of a 20% local match.



### **Land and Water Conservation Fund (LWCF)**

LWCF is a federal grant program administered through the National Park Service. The program is intended to create and maintain a nationwide legacy of high-quality outdoor recreation areas and facilities.

In Missouri, LWCF grants are administered through the Missouri Department of Natural Resources and are open to any local government or public school.

Federal funding availability varies each year, but in recent years the maximum amount awarded per project sponsor has been \$75,000 with minimum 55% match.

Project examples include but are not limited to:

- Playgrounds
- Ball fields
- Pools and water parks
- Archery and shooting ranges
- Camping facilities
- Picnic areas
- Golf courses
- Boating and fishing facilities
- Trails
- Passive areas

### **State and Community Highway Safety Grant Program (Section 402)**

Section 402 funds are used to support state and community programs to reduce deaths and injuries and are administered by the National Highway Traffic Safety Administration and the Federal Highway Administration. Pedestrian safety has been identified as a national priority. Section 402 funds can be used for a variety of safety initiatives including conducting data analyses, developing safety

education programs, and conducting community-wide pedestrian safety campaigns.

### **Community Development Block Grant (CDBG) Program**

The Community Development Block Grant Program (CDBG) is administered by US Department of Housing and Urban Development (HUD) and offers grants to small communities to improve local facilities, address critical health and safety concerns and develop a greater capacity for growth.

The program offers funds for projects that can range from housing and street repairs to industrial loans and job training. Annual CDBG funds are allocated between States and local jurisdictions called "non-entitlement" and "entitlement" communities respectively. Entitlement communities are comprised of central cities of Metropolitan Statistical Areas (MSAs); metropolitan cities with populations of at least 50,000; and qualified urban counties with a population of 200,000 or more (excluding the populations of entitlement cities). States distribute CDBG funds to non-entitlement localities not qualified as entitlement communities.

Jefferson City is an "entitlement" area and therefore receives annual funding from the HUD. One program supported through this funding is the Public Facility and Infrastructure Improvements Program. The City utilizes CDBG funds for infrastructure upgrades in order to preserve and improve low- to moderate- income area neighborhoods. Improvements may include but are not limited to sidewalks, curb, guttering, water, sewer, roads, or other infrastructure.

## Plan Adoption by Jurisdictions

A critical part of making this plan a success and moving forward with needed improvements is the development of a strong Implementation Strategy for each jurisdiction within the CAMPO region.

As a jurisdiction moves forward with adopting the Capital Area Pedestrian and Bicycle Plan, CAMPO staff will be available to assist with the development of a community specific Implementation Strategy. The Implementation Strategy will include the projects and activities, like the trail depicted in Figure 5.9, that are specific to the unique needs of each jurisdiction.

CAMPO staff can also assist with the development of adoption resolutions, ordinances, and policy language as requested.

Adoption resolutions passed by CAMPO jurisdictions can be found in Appendix F.

## Plan Maintenance

Many of the documents that CAMPO produces require continual maintenance. While each document is on its own timeline, many are updated annually or at some other regular interval. The timeline for these updates are laid out in the CAMPO Unified Planning Work Program.

It is anticipated that this plan will be incorporated into the CAMPO Metropolitan Transportation Plan (MTP). The MTP is the Long-Range Transportation Plan for the CAMPO region. The entire MTP is updated every five years, while specific portions may be updated more frequently. The Capital Area Pedestrian and Bicycle Plan may be updated on a more frequent basis as deemed necessary by the CAMPO board.

*Figure 5.9 Workers constructing the Niekamp Park trail in St. Martins.*



Photo Courtesy: Missouri Department of Natural Resources

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# Appendices

**Appendix A CAMPO Crash Data Map**

**Appendix B CAMPO Livable Streets Policy**

**Appendix C Sample Livable Streets Policy and Ordinances**

**Appendix D League of American Bicyclists Review**

**Appendix E Implementation Strategies (by jurisdiction)**

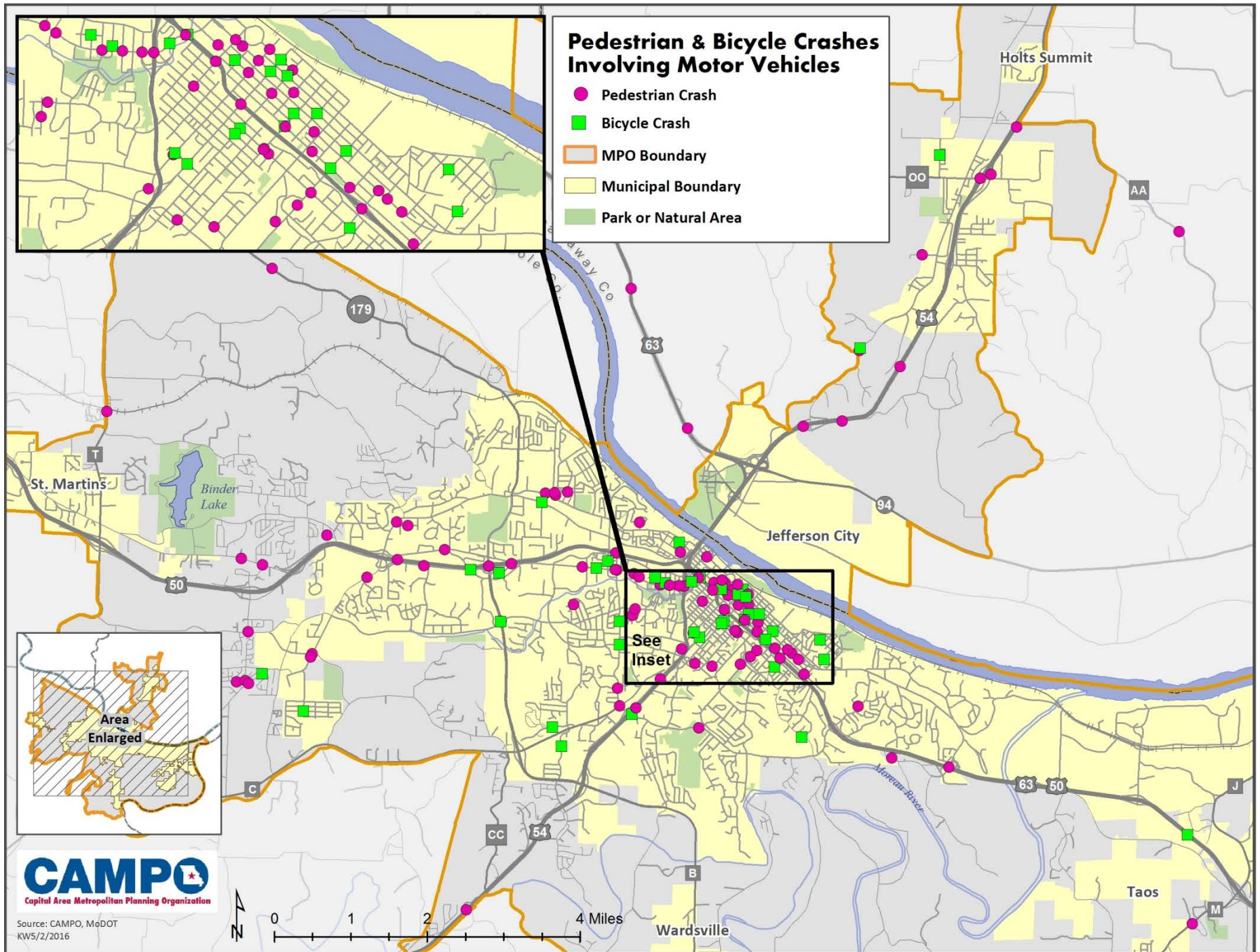
**Appendix F Adoption Resolutions (by jurisdiction)**

DRAFT

## **Appendix A   CAMPO Crash Data Map**











## **Appendix B   CAMPO Livable Streets Policy**



## Draft CAMPO Livable Streets Policy

The CAMPO Livable Streets Policy works to achieve the region's long range vision of a safe and context-sensitive multimodal street system promoting equal use of road. It is modeled from the Mid-America Regional Council Complete Streets Policy.

Through the adoption of this policy by the CAMPO Board of Directors, CAMPO will actively promote Livable Streets and encourage all jurisdictions throughout the region to additionally adopt and implement Livable Streets policies of their own.

This Livable Streets Policy applies to all CAMPO activities programming federal funds for projects in the Transportation Improvement Program (TIP) or the Metropolitan Transportation Plan:

### Requirements

1. This policy does not supersede any federal, state or local policy or law.
2. Planned and programmed projects incorporated into the CAMPO TIP shall provide safe accommodations for all users who have legal access and who may reasonably be expected to use the projects, while being sensitive to both current and future community needs and context.
3. This policy applies to all phases of a project, including planning, design, right-of-way acquisition, construction, construction engineering, and operations and maintenance.
4. Planned and programmed projects shall make use of policies, guidelines and design standards that reflect best practices. Project sponsors retain design decision authority over their projects.

### Recommendations

1. CAMPO encourages local jurisdictions to stay current of best practices by reviewing design guidelines, standards, and resources.
2. CAMPO encourages local jurisdictions to include performance measures in their adopted Livable Streets, recommended in the policies and procedures.
3. CAMPO encourages local jurisdictions to coordinate and collaborate with one another, specifically in strategies for livable communities, as well as in the integration of land use and environment with transportation.

### Exceptions

Projects in the CAMPO TIP are not necessarily roadway or construction projects. Projects or programs that are clearly not "streets" are exempt from this policy. All project activities made possible by funds programmed through CAMPO should still attempt to integrate elements of this policy, such as impacts to all modes of transportation and users.

Additionally, not every street can be, or should be, designed for all users, and exceptions to this policy will need to be made for some projects. However, exceptions should not be common. Federal funding programmed in CAMPO's TIP should enable complete and direct connections to be made throughout the transportation network for everyone, even where specific streets cannot accommodate all users.

The CAMPO Board of Directors may grant exceptions to this policy. Staff will review requests for exceptions and make recommendations to the Technical Committee, which will in turn make a recommendation to the Board of Directors. Exceptions may be granted in the following cases:

1. *Where using specific modes of travel are prohibited by law.* In such cases, efforts should be made to accommodate prohibited modes elsewhere, as appropriate for each mode, to ensure

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## Draft CAMPO Livable Streets Policy

network connectivity. Where a proposed project for a limited-access facility would cross a major barrier (such as a river, railroad or highway), consideration should be given to including access across the barrier for otherwise limited modes.

2. *Where the cost of providing facilities for all users, especially pedestrians and bicyclists, would be excessively disproportionate to the need or likely use.* Federal guidance defines this as exceeding 20 percent of the total project costs; however, this exception should also be context sensitive. (For example, downtown streetscapes may have a larger percentage of project costs for pedestrians and bicyclists.)
3. *Where population scarcity or other factors indicate an absence of need for both current and future conditions of the anticipated project life.*

### Performance Measures

To assist with evaluation of this policy, CAMPO will continue to encourage meaningful progress in the region.

### Implementation

To implement this Livable Streets Policy into planning and programming processes at the metropolitan level, CAMPO will take the following steps:

1. Ensure this policy is reflected in ongoing planning and programming work and current policies.
2. Review all TIP applications seeking federal transportation funding for compliance with the Livable Streets Policy.
3. Monitor all projects receiving federal transportation funding through CAMPO's programming process for compliance with the Livable Streets Policy.
4. Re-evaluate this policy periodically.

To carry out this Livable Streets Policy and encourage all local communities to address context sensitive solutions and the needs of all roadway users on all public rights-of-way, CAMPO will take the following steps:

1. Encourage all local jurisdictions to adopt Livable Streets policies/resolutions and incorporate their policies into facility designs.
2. Provide assistance to local jurisdictions seeking to develop a Livable Streets policy.
3. Distribute best practices and other pertinent documentation for Livable Streets implementation to member jurisdictions.
4. Help facilitate discussion and coordinate efforts between CAMPO member jurisdictions.

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## **Appendix C Sample Livable Streets Policy and Ordinance**

Courtesy of *Missouri Livable Streets* and *ChangeLab Solutions*

<http://livablestreets.missouri.edu/2016/01/27/policy-resource-model-resolution-for-local-governments/>







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NATIONAL POLICY & LEGAL ANALYSIS NETWORK  
TO PREVENT CHILDHOOD OBESITY

# Model Complete Streets Resolution for Local Governments

July 2015

*The National Policy & Legal Analysis Network to Prevent Childhood Obesity (NPLAN) is a project of Changelab Solutions. Changelab Solutions is a nonprofit organization that provides legal information on matters relating to public health. The legal information in this document does not constitute legal advice or legal representation. For legal advice, readers should consult a lawyer in their state.*

*Support for this document was provided by a grant from the Robert Wood Johnson Foundation.*

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Resolution No. \_\_\_\_\_

## A RESOLUTION OF THE [City Council/Board of Supervisors] OF THE [Jurisdiction] ADOPTING A COMPLETE STREETS POLICY

**WHEREAS**, safe, convenient, and accessible transportation for all users is a priority of [Jurisdiction];

**WHEREAS**, the term “Complete Streets” describes a comprehensive, integrated transportation network with infrastructure and design that allow safe and convenient travel along and across streets for all users, including pedestrians, bicyclists, persons with disabilities, motorists, movers of commercial goods, users and operators of public transportation, seniors, children, youth, and families;

**WHEREAS**, the lack of Complete Streets is dangerous for pedestrians, bicyclists, and public transportation riders,<sup>1-3</sup> particularly children,<sup>4,5,6</sup> older adults,<sup>7</sup> and persons with disabilities<sup>8,9</sup>; on average, a pedestrian was killed every two hours and injured every seven minutes in traffic crashes in 2012<sup>10</sup>;

**WHEREAS**, [add local data on traffic injuries if desired and available];

**WHEREAS**, low- and moderate-income areas, whether they be located in rural, urban, or suburban communities, are typically the least safe for pedestrians and bicyclists,<sup>11</sup> especially for children walking and biking to school,<sup>12</sup> due to long-standing infrastructure disparities<sup>13-15</sup> and a higher concentration of streets with faster-moving and/or higher-volume traffic<sup>16,17</sup>;

**WHEREAS**, Complete Streets improve public health and safety by reducing the risk of injuries and fatalities from traffic collisions for users of all modes of transportation<sup>1,2,18-24</sup>;

**WHEREAS**, streets that are designed with the safety and convenience of pedestrians and bicyclists in mind increase the number of people walking and bicycling<sup>25-27</sup>;

**WHEREAS**, a balanced transportation system that includes Complete Streets is conducive to streets that are lively with people walking and bicycling to everyday destinations, such as schools, shops, restaurants, businesses, parks, transit, and jobs, which in turn enhances neighborhood economic vitality<sup>20,22,28-32</sup> and livability<sup>33-35</sup>;

**WHEREAS**, encouraging people to walk, bicycle, and use public transit saves energy resources, reduces air pollution, and reduces emissions of global warming gases<sup>36-38</sup>;

**WHEREAS**, [add local data on obesity, chronic disease, etc., if desired and available];

**WHEREAS**, Complete Streets encourage an active lifestyle by creating opportunities to integrate exercise into daily activities,<sup>39,40</sup> thereby helping to reduce the risk of obesity and its associated health problems, which include diabetes, heart disease, high blood pressure, high cholesterol, as well as certain cancers, stroke, asthma, and depression<sup>41-45</sup>; and

**WHEREAS**, in light of the foregoing benefits and considerations, [Jurisdiction] wishes to improve its commitment to Complete Streets and desires that its streets form a comprehensive and integrated transportation network promoting safe, equitable, and convenient travel for all users while preserving flexibility, recognizing community context, and using the latest and best design guidelines and standards.

**NOW, THEREFORE, BE IT RESOLVED**, by the [City Council/Board of Supervisors] of [Jurisdiction], State of [\_\_\_\_], as follows:

1. That the [Jurisdiction] adopts the Complete Streets Policy (“Policy”) attached hereto as Exhibit A, and made part of this Resolution.
2. That the next substantive revision of the [Jurisdiction]’s [Comprehensive/General/Master] Plan [or insert name of comparable local planning document if different] shall incorporate Complete Streets policies and principles consistent with the Policy.

**PASSED AND ADOPTED** by the [City Council/Board of Supervisors] of the [Jurisdiction], State of [\_\_\_\_], on \_\_\_\_\_, 20\_\_, by the following vote:

Attachment: Exhibit A



**EXHIBIT A**

This Complete Streets Policy was adopted by Resolution No. \_\_\_\_\_ by the [City Council/Board of Supervisors] of the [Jurisdiction] on \_\_\_\_\_, 2\_\_\_\_.

**COMPLETE STREETS POLICY OF [JURISDICTION]****A. DEFINITIONS**

1. “Complete Street” means a street or roadway that allows safe and convenient travel by all of the following categories of users: pedestrians, bicyclists, people with disabilities, motorists, movers of commercial goods, users and operators of public transportation, seniors, children, youth, and families [*insert other significant local users if desired, e.g., drivers of agricultural vehicles, emergency vehicles, or freight*].
2. “High Need Area” means (1) any census tract in which the median household income is less than [80%] of the statewide average median based on the most current census tract-level data from the U.S. Census Bureau American Community Survey, (2) any area within two miles of a school in which at least [50%] of the children are eligible to receive free and reduced-price meals under the National School Lunch Program, or (3) any area that has a high number of pedestrian and/or bicycle collisions.
3. “Transportation Project” means any development, project, program, or practice that affects the transportation network or occurs in the public right-of-way, including any construction, reconstruction, retrofit, signalization operations, resurfacing, restriping, rehabilitation, maintenance (excluding routine maintenance that does not change the roadway geometry or operations, such as mowing, sweeping, and spot repair), operations, alteration, and repair of any public street or roadway within [Jurisdiction] (including alleys, bridges, frontage roads, and other elements of the transportation system).

**B. COMPLETE STREETS REQUIREMENTS**

[Jurisdiction] shall work toward developing an integrated and connected multimodal transportation system of Complete Streets that serves all neighborhoods. Toward this end:

1. Every Transportation Project, and phase of that project (including planning, scoping, funding, design, approval, implementation, and maintenance), by [Jurisdiction] shall provide for Complete Streets for all categories of users identified in Section A(1) of this Policy.

2. The [insert relevant internal departments and agencies by name] shall routinely work in coordination with each other, any Bicycle or Pedestrian Coordinator, and any relevant advisory committees, to create Complete Streets and to ensure consistency with any existing Pedestrian/Bicycle/Multi-Modal Plans [or insert name of other comparable plans].
3. Wherever possible, Transportation Projects shall strive to create a network of continuous bicycle- and pedestrian-friendly routes, including routes that connect with transit and allow for convenient access to work, home, commercial areas, and schools.
4. The [insert names of departments and agencies identified in Section B(2)] shall coordinate with adjacent jurisdiction(s) and any other relevant public agencies, including [insert relevant regional/state agencies], to ensure that, wherever possible, the network of continuous bicycle- and pedestrian-friendly routes identified in Section B(3) extends beyond [Jurisdiction]'s boundaries into adjacent jurisdictions.
5. [Jurisdiction] shall rely upon the current editions of street design standards and guidelines that promote and support Complete Streets.

**COMMENT:** Current examples of street design standards and guidelines that promote and support Complete Streets [add as of date when draft is finalized]

- *Urban Street Design Guide* and *Urban Bikeway Design Guide* (National Association of City Transportation Officials)
  - *Designing Walkable Urban Thoroughfares: A context sensitive approach* (Institute of Transportation Engineers/Congress for the New Urbanism)
  - *Pedestrian Safety Guide and Countermeasure Selection System* (U.S. Department of Transportation, Federal Highway Administration)
  - *Bicycle Safety Guide and Countermeasure Selection System* (U.S. Department of Transportation, Federal Highway Administration)
  - *Separated Bike Lane Planning and Design Guide* (U.S. Department of Transportation, Federal Highway Administration)
6. This Policy shall be implemented in all neighborhoods, with particular attention to High Need Areas.
  7. All Complete Streets shall reflect the context and character of the surrounding built and natural environments, and enhance the appearance of such. At the planning stage,

[*Jurisdiction*] shall work with local residents, business operators, neighboring jurisdictions, school districts, students, property owners, and other stakeholders who will be directly affected by a Complete Streets project to address any concerns regarding context and character.

#### C. LEAD DEPARTMENT

The [*insert name of lead department or agency (e.g., Transportation or Planning Department) and title of person accountable (e.g., Director or Bicycle/Pedestrian Coordinator)*] shall lead the implementation of this Policy and coordinate with [*insert names of other relevant departments or agencies*].

#### D. IMPLEMENTATION

The following steps shall be taken [*immediately upon/or within one–two years of*] the effective date of this Policy:

1. All street design standards used in the planning, designing, and implementing phases of Transportation Projects shall be reviewed to ensure that they reflect the best available design guidelines for effectively implementing Complete Streets.
2. [*Insert names of all relevant departments and agencies*] shall incorporate this Policy into relevant internal manuals, checklists, rules, and procedures.
3. [*Insert name of lead agency*] shall assess whether any municipal and zoning codes, land use plans, or other relevant documents, including the Capital Improvement Program [*include all relevant programs, e.g., pavement management program, traffic signal program, tree program, ADA curb ramp program, etc.*], conflict with this Policy, and shall submit a report, along with a proposal for addressing any conflicts, to the [*City Manager or insert relevant position*].
4. [*Insert name of lead agency*] shall provide training on Complete Streets and the implementation of this Policy to all relevant staff, and develop a plan for providing such training for new hires.
5. [*Insert name of lead agency*] shall identify all High Need Areas and develop benchmarks to ensure that Complete Streets are implemented in such areas consistent with their need.
6. [*Insert name of lead agency*] shall identify an existing process or develop a new process that allows for public participation (including participation by bicycle, pedestrian, and Complete Streets advisory committees) in decisions concerning the design, planning, and use of streets and roadways covered by this Policy.
7. [*Jurisdiction*] shall actively seek sources of public and private funding to assist in the implementation of this Policy.



## E. EXCEPTIONS TO POLICY

1. A specific category of user may be excluded from the requirements of Section B of this Policy only if one or more of the following exceptions apply:
  - a. Use of the roadway is prohibited by law for the category of user (e.g., pedestrians on an interstate freeway, vehicles on a pedestrian mall). In this case, efforts shall be made to accommodate the excluded category of user on a parallel route; or
  - b. There is an absence of both a current and future need to accommodate the category of user (absence of future need may be shown via demographic, school, employment, and public transportation route data that demonstrate, for example, a low likelihood of bicycle, pedestrian, or transit activity in an area over the next 20 years); or
  - c. The cost would be excessively disproportionate to the current need or future need over the next 20 years.
2. An exception shall be granted only if:
  - a. a request for an exception is submitted in writing, with supporting documentation, and made publicly available with a minimum of [30] days allowed for public input; and
  - b. the exception is approved in writing by the [identify governing body, e.g., City Council or head of lead agency, e.g., Director of the Department of Public Works], and the written approval is made publicly available.

## F. PERFORMANCE MEASURES

In order to evaluate whether the streets and transportation network are adequately serving each category of users, [insert names of relevant agencies and departments] shall collect and/or report baseline and annual data on matters relevant to this Policy, including, without limitation, the following information:

1. Mileage by [district/neighborhood] of new bicycle infrastructure (e.g., bicycle lanes, paths, and boulevards)
2. Linear feet [or mileage] by [district/neighborhood] of new pedestrian infrastructure (e.g., sidewalks, trails, etc.)
3. Number by [district/neighborhood] of new curb ramps installed
4. Number by [district/neighborhood] of new street trees planted
5. Type and number by [district/neighborhood] of pedestrian- and bicycle-friendly signage and landscaping improvements, including street furniture and lighting

6. Bicycle and pedestrian counts, including in High Need Areas
7. Commute mode percentages by [district/neighborhood] as provided by the American Community Survey conducted by the U.S. Census Bureau (e.g., drive alone, carpool, transit, bicycle, walk)
8. The percentage by [district/neighborhood] of transit stops accessible via sidewalks and curb ramps
9. The number, locations, and cause of collisions, injuries, and fatalities by mode of transportation
10. The total number [or rate] by [district/neighborhood] of children walking or bicycling to school
11. Vehicle Miles Traveled (VMT) or Single Occupancy Vehicle (SOV) trip reduction data as made available by [insert name of Metropolitan Planning Organization, county, or other relevant governmental body or agency].

## G. REPORTING REQUIREMENTS

One year from the effective date of this Policy, and annually thereafter, the lead agency shall submit a report to the [insert name of governing body, e.g., city council] on the progress made in implementing this Policy that includes, at a minimum, the following: (1) baseline and updated performance measures as described in Section (F); (2) a summary of (a) all Transportation Projects planned or undertaken and their status, including a full list and map, with clear identification of which projects are located in High Need Areas; (b) all exceptions granted pursuant to Section E of this Policy, including identification of exceptions granted in High Need Areas; (c) the progress made in achieving the benchmarks for High Need Areas developed pursuant to Section D(5); (d) updates to street design standards, internal department and agency manuals and procedures, zoning and municipal codes, and land use plans, pursuant to Sections D(1)–(3); (e) all funding acquired for projects that enhance the Complete Streets network; (f) all staff trainings and professional development provided pursuant to Section D(4); and (3) any recommendations for improving implementation of this Policy.

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## **Appendix D   League of American Bicyclists Review**





## CAPITAL AREA METROPOLITAN PLANNING ORGANIZATION, MO

TOTAL POPULATION  
**71,997**  
TOTAL AREA (sq. miles)  
**148.0**

POPULATION DENSITY  
**486.0**

# OF LOCAL BICYCLE  
FRIENDLY BUSINESSES **0**  
# OF LOCAL BICYCLE  
FRIENDLY UNIVERSITIES **0**

### 10 BUILDING BLOCKS OF A BICYCLE FRIENDLY COMMUNITY

	Average Bronze	Capital Area Metropolitan
Arterial Streets with Bike Lanes	33%	1%
Total Bicycle Network Mileage to Total Road Network Mileage	26 %	5%
Public Education Outreach	SOME	NO
% of Schools Offering Bicycling Education	33%	0%
Bike Month and Bike to Work Events	GOOD	SOME
Active Bicycle Advocacy Group	MAYBE	YES
Active Bicycle Advisory Committee	MAYBE	NO
Bicycle-Friendly Laws & Ordinances	SOME	NONE
Bike Plan is Current and is Being Implemented	MAYBE	SOMEWHAT
Bike Program Staff to Population	PER 77K	8.43

### CATEGORY SCORES

<b>ENGINEERING</b> <i>Bicycle network and connectivity</i>	<b>2</b> /10
<b>EDUCATION</b> <i>Motorist awareness and bicycling skills</i>	<b>0</b> /10
<b>ENCOURAGEMENT</b> <i>Maximizing bicycling culture</i>	<b>2</b> /10
<b>ENFORCEMENT</b> <i>Promoting safety and protecting bicyclist's right</i>	<b>1</b> /10
<b>EVALUATION &amp; PLANNING</b> <i>Setting targets and having a plan</i>	<b>1</b> /10

### KEY OUTCOMES

	Average Bronze	Capital Area
<b>RIDERSHIP</b> <i>Percentage of daily bicycling</i>	12 %	<b>0.13%</b>
<b>SAFETY MEASURES</b> <i>Crashes per 100k daily bicycling</i>	370	<b>491.5</b>
<b>SAFETY MEASURES</b> <i>FATALITIES</i> <i>Relative per 100k daily bicycling</i>	4	<b>0.0</b>



### KEY STEPS TO BRONZE



- » Dedicate more staff time to bicycle planning and programming.
- » Appoint an official Bicycle Advisory Committee.
- » Adopt standards for bike parking that conform to APBP guidelines.
- » Increase the amount of high quality bicycle parking throughout the community.
- » Reducing traffic speeds. Use traffic calming measures and low speed design principles to achieve higher compliance rates.
- » Continue to expand the on and off street bike network, especially along arterials.

- » Develop a Safe Routes to School program.
- » Continue to expand your public education campaign promoting the share the road message.
- » Promote cycling throughout the year by offering or supporting more family-oriented community or social rides.
- » Ensure that police officers are initially and repeatedly educated on traffic law as it applies to bicyclists and motorists.
- » Ask police officers to target both motorist- and cyclist infractions.
- » Ensure that the new multi-modal plan is comprehensive and funded.

LEARN MORE » [WWW.BIKELIGUE.ORG/COMMUNITIES](http://WWW.BIKELIGUE.ORG/COMMUNITIES)

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## BICYCLE FRIENDLY COMMUNITY FEEDBACK



### CAPITAL AREA MPO, MO

Fall 2014

Our Bicycle Friendly Community review panel was very pleased to see the current efforts and dedication to make the Capital Area a safe, comfortable and convenient place to bicycle.

Below, reviewers provided recommendations to help you further promote bicycling in the Capital Area. **Key recommendations are highlighted in bold.**

We strongly encourage you to use this feedback to build on your momentum and improve your community for bicyclists.

There may also be initiatives, programs, and facilities that are not mentioned here that would benefit your bicycling culture, so please continue to try new things to increase your ridership, safety, and awareness.

The cost of bicycle facilities and possible funding options are discussed on the last page of this report.

## RECOMMENDATIONS

### Engineering

Develop a design manual that ensures the safe and appropriate accommodation of bicyclists or endorse the NACTO Urban Bikeway Design Guide.

Develop and implement streetscape design guidelines that foster a pleasant and comfortable environment for pedestrians and

cyclists. Beautiful streetscaping has also shown to increase community livability and pride, reduce crime and increase property values.

Require a mix of uses throughout the community or adopt a form or design-based code to allow for flexible land uses that provide a convenient and more comfortable built environment for pedestrians and cyclists.

Ensure good connectivity of your street network by adopting connectivity policies or standards. A well connected street network is associated with more walking, biking, and transit use due to greater directness of travel and more route choice options.

Regulations that require bike parking for new developments can secure private funding. See this bicycle parking ordinances for guidance.

Pass an ordinance that would require larger employers to provide shower and locker facilities.

**Adopt standards for bike parking that conform to APBP guidelines.**

**Increase the amount of high quality bicycle parking throughout the community. Ensure that people arriving by bicycle have a secure and legal place to lock their bikes at popular destinations.**

**Continue to expand the bike network, especially along arterials, through the use of different types of bicycle facilities. On roads where automobile speeds exceed 35 mph, it is recommended to provide protected bicycle infrastructure**



## BICYCLE FRIENDLY COMMUNITY FEEDBACK



**such as cycle tracks, buffered bike lanes or parallel 10ft wide shared-use paths.** Note that shared lane markings should be used sparingly and only on low speed roads. On-street improvements coupled with the expansion of the off-street system will encourage more people to cycle and will improve safety. Ensure smooth transitions for bicyclists between the local and regional trail network, and the street network. These improvements will also increase the effectiveness of encouragement efforts by providing a broader range of facility choices for users of various abilities and comfort levels.

**Increase road safety for all users by reducing traffic speeds. Lower the speed limit on arterials to 35 mph and to a maximum of 25 mph especially downtown, around schools and shopping centers, and in neighborhoods.** Use traffic calming measures and low speed design principles to achieve higher compliance rates. Speed has been identified as a key risk factor in road traffic injuries, influencing both the risk of a road traffic crash as well as the severity of the injuries that result from crashes. For instance, pedestrians and cyclists have a 90% chance of survival if hit by a car travelling at a speed of 20 mph or below, but less than a 50% chance of surviving an impact of 30 mph or above. Studies also generally report a positive association between traffic safety (perceived and/or measured) and walking and cycling, particularly among women.

Install a bicycle wayfinding system with distance and destination information at strategic locations around the community, integrating preferred on street routes and off-street facilities.

Adequately maintain your off street bicycle infrastructure to ensure usability and safety. Address potholes and other hazards faster.

**Make intersections safer and more comfortable for cyclists.** Include elements such as color, signage, medians, signal detection, and pavement markings. The level of treatment required for bicyclists at an intersection will depend on the bicycle facility type used, whether bicycle facilities are intersecting, the adjacent street function and land use. See the NACTO intersection design guidelines (preferred) and the 2012 AASHTO Guide for the Development of Bicycle Facilities for recommended intersection treatments.

## Education

**Bicycle-safety education should be a routine part of primary and secondary education, and schools and the surrounding neighborhoods should be particularly safe and convenient for biking and walking. Work with your local bicycle groups or interested parents to develop and implement a Safe Routes to School program for all schools.** Click here for an exemplary bicycle safety curriculum designed for fourth and fifth grade students. For more information on Safe Routes to School, see the National Highway Traffic Safety Administration's Safe Routes To School Toolkit or visit www.saferoutesinfo.org.

It is essential to make both motorists and cyclists aware of their rights and responsibilities on the road. **Develop a public education campaign promoting the share the road**





## BICYCLE FRIENDLY COMMUNITY FEEDBACK



**message.** Take advantage of your local bicycle groups for content development and staffing.

### Offer bicycling skills training opportunities for adults at least annually.

There are options from short videos and 1-2 hour courses to more in-depth training incorporating in-classroom and on-bike instruction. Other education materials, such as the League Quick Guide, offer the opportunity to share bike education in an easily accessible format. For more information visit <http://bikeleague.org/ridesmart>.

Host a League Cycling Instructor (LCI) seminar or sponsor the certification tuition of interested cyclists to increase the number of certified LCIs in your community. Having local instructors will enable your community to expand cycling education, recruit knowledgeable cycling ambassadors, deliver education to motorists, provide cycling education to adults and kids, and have experts available to assist in encouragement programs. Visit <http://bikeleague.org/content/become-instructor> for more information.

## Encouragement

**Celebrate Bike Month** in partnership with local bicycle advocacy groups. Proclaim May (or a month with mild and dry weather) as Bike Month. Host, sponsor and encourage bicycle-themed community events, campaigns and programs. Increase your efforts on Bike to Work Day and Bike to School Day. Ensure to widely advertise all bicycle-themed community events and programs. For ideas and more information, visit <http://bikeleague.org/bikemonth>.

Consider offering a 'Ciclovía' or Open Streets type event, closing off a major corridor to auto traffic and offering the space to cyclists and pedestrians. See Open Streets in action.

Encourage local businesses to provide discounts for customers arriving by bicycle or promote existing bicycle discount programs.

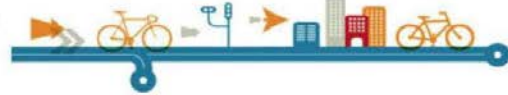
**Promote cycling throughout the year by offering or supporting more family-oriented community and charity rides, free bike valet parking at events, and bicycle-themed festivals, parades or shows.**

Launch a bike share system that is open to the public. Bike sharing is a convenient, cost effective, and healthy way of encouraging locals and visitors to make short trips by bike and to bridge the "last mile" between public transit and destinations. See what is being done across the country at <http://nacto.org/bikeshare/>

**Encourage local businesses, agencies, and organizations to promote cycling to their employees and customers and to seek recognition through the Bicycle Friendly Business program.** Businesses will profit from a healthier, happier and more productive workforce while the community will benefit from less congestion, better air quality, increased amenities and new destinations for cyclists, new and powerful partners in advocating for bike infrastructure and programs, and business-sponsored public bike events or classes. Your community's government should be the model employer for local businesses, and your chamber of commerce or local business association can help promote the program and its benefits. The



## BICYCLE FRIENDLY COMMUNITY FEEDBACK



League offers many tools to help promote the Bicycle Friendly Business program in your community.

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**Encourage local institutions of higher education to promote cycling to students, staff, and faculty and to seek recognition through the Bicycle Friendly University program.** Many colleges and universities have embraced the growing enthusiasm for more bicycle-friendly campuses by incorporating bike share programs, bike co-ops, bicycling education classes and policies to promote bicycling as a preferred means of transportation. The community will benefit as well: Communities near BFUs have a higher number of regular bicyclists (as many students bike to campus, shops and restaurants), less congestion around campus, safer streets, and university-hosted public bicycle events,

programs, and classes. The League offers many tools to help promote the Bicycle Friendly University program in your community.

## Enforcement

**Ensure that police officers are initially and repeatedly educated on traffic law as it applies to bicyclists and motorists.** Training is offered by the International Police Mountain Bike Association, the Law Enforcement Bicycle Association and the National Highway Traffic Safety Administration. Here are some recommended Law Enforcement Products: Law Enforcement's Roll Call Video: "Enforcing Law for Bicyclists", and Enhancing Bicycle Safety: Law Enforcement's Role (CD-ROM Training).

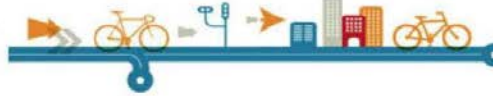
**Ask police officers to target both motorist and cyclist infractions to ensure that laws are being followed by all road users. Ensure that bicycle/motor vehicle crashes are investigated thoroughly and that citations are given fairly.**

**Ensure that police officers report cyclist crash data and potential hazards to the public works department, traffic engineers and transportation planners to timely identify sites in need of safety improvements for cyclists.**

**Pass additional ordinances that protect cyclists,** e.g. implement specific penalties for motorists for failing to yield to a cyclist when turning, make it illegal to park or drive in a bike lane (intersections excepted), implement penalties for motor vehicle users that 'door' cyclists, ban cell phone use while driving, pass



## BICYCLE FRIENDLY COMMUNITY FEEDBACK



laws/ordinances protecting all vulnerable road users, formalize a legal passing distance of at least 3 feet, and make it illegal to harass a cyclist. Ensure that local law enforcement received training on any new bicycle-related laws.

Repeal the local law that requires that cyclists ride as far to the right of the road as practicable without exceptions or adopt the exceptions recommended by the UVC.

### Evaluation & Planning

**Appoint a staff member Bicycle & Pedestrian Coordinator or create a new position.** A Bicycle & Pedestrian Coordinator works with advocates, state and local elected officials, business leaders, media, law enforcement, public health officials, transit providers and the general public to build partnerships providing leadership and vision so these groups may embrace and implement facilities and programs that increase the number of residents that are safely bicycling and walking. This staff person should also review development proposals to ensure that local bicycle/pedestrian requirements are incorporated and to assess bicycling and walking impacts, develop and implement educational and promotional programs, write grant proposals, serve as the public contact for bicycling/walking inquiries and complaints, educate other staff about state and federal facilities standards and guidelines, and coordinate with neighboring cities, transit agencies and other departments to implement policies and projects. See [this report](#) on the importance of Bicycle & Pedestrian program staff.

**Dedicate more staff time to bicycle planning and programming.** Comparing staffing levels to bicycle commuter data showed that larger bicycle and pedestrian staffs (per capita) are correlated with higher bike commuter levels. This shows that communities that make a serious commitment to bicycle planning see a greater return on investment than communities with fewer staff.

**Ensure that the new multi-modal plan is comprehensive and funded.**

Regularly conduct research on bicycle usage beyond the U.S. Census' Journey to Work report to more efficiently distribute resources according to demand. Conduct at least yearly counts using automated or manual counters in partnership with advocacy organizations. Consider participating in the [National Bicycle and Pedestrian Documentation Project](#).

Ensure that your bicycle counts capture the gender of cyclists. If women ride significantly less than men, this gender gap can be addressed through infrastructure improvements, and targeted education and encouragement efforts. Learn more at [bikeleague.org/womenbike](http://bikeleague.org/womenbike).

Adopt a target level of bicycle use (percent of trips) to be achieved within a specific timeframe, and ensure data collection necessary to monitor progress.

Establish a mechanism that ensures that bicycle facilities and programs are implemented in traditionally underserved neighborhoods.



## BICYCLE FRIENDLY COMMUNITY FEEDBACK



### COSTS AND FUNDING OPTIONS

#### Costs

Building a new roadway for motor vehicles can cost millions of dollars to construct, and many of the pedestrian and bicycle infrastructure facilities are extremely low-cost in comparison. Use [this database](#) to review up-to-date estimates of infrastructure costs of pedestrian and bicycle treatments from states and cities across the country.

#### Federal Funding

Since 1992 bicycle and pedestrian projects have been eligible for federal transportation funding. To learn more about what federal funds are available for bicycle projects, use Advocacy Advance's interactive [Find it, Fund it tool](#) to search for eligible funding programs by bike/ped project type or review the same information as a PDF [here](#).

#### State Funding

Biking and walking dollars aren't only available from the federal government. States can also have their own revenue sources that can be used to fund active transportation. Use [this report](#) and an [online tool](#) to explore your state's funding sources for bicycle and pedestrian improvements.

### Local Funding

Local governments can also create their own revenue streams to improve conditions for bicycling and walking. Three common approaches include: special bond issues, dedications of a portion of local sales taxes or a voter-approved sales tax increase, and use of the annual capital improvement budgets of Public Works and/or Parks agencies. Bicycle facility improvements can also be tagged on to larger projects to create economies of scale that results in reduced costs and reduced impacts to traffic, businesses, and residents. For example, if there is an existing road project, it is usually cheaper to add bike lanes and sidewalks to the project than to construct them separately. To learn more about public funding of bicycle infrastructure improvements, visit [pedbikeinfo.org/planning/funding\\_government.cfm](http://pedbikeinfo.org/planning/funding_government.cfm).

### Resources and Support

[Advocacy Advance](#) offers several tools, resources, and workshops to help advocates and agency staff maximize eligible funding programs.



## **Appendix E   Implementation Strategies (by jurisdiction)**





## **Appendix F   Adoption Resolutions (by jurisdiction)**

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## **Appendix G   Public Comments Received**

## DRAFT

- Our most fundamental problem with pedestrian travel in Jefferson City is a lack of overall sidewalk network (there are sidewalks but in many cases they aren't connected) to businesses from residential areas and other businesses.
- Communities that have better sidewalks and cycling lanes tend to be more people and community oriented – design for cars and roads and you get cars and roads.
- We have an EXCELLENT trail system that needs more advertising.
- WE NEED SIDEWALKS. All street improvements should include these.
- Economic impact to the area - other areas around the U.S. have these options and if the Jefferson City region doesn't, it risks being left behind.
- Trail connections are getting better but there is still not a complete, connected trails system reaching close to everyone. Everyone should be able to leave their home and walk/bicycle to a nearby trail via good on-road connections leading to a trail that is quite close.
- Jefferson City still has little to offer in terms of on-street bicycle facilities. This is probably the easiest/low hanging fruit to implement. The region needs a Complete Streets policy so that a complete, connected network of bike/ped friendly streets can be created over time. Five of Missouri's eight MPOs have now adopted Complete Streets policies, leaving CAMPO as one of only three who have not.
- The opportunity is many lightly traveled streets that can be linked together to make great low-traffic bicycle and pedestrian routes.
- Too much of the city was built without sidewalks, crosswalks, bike lanes and the distances between home, shopping, work are too great to easily walk. More integrated/mixed-use, walkable neighborhoods. No on-street bicycle route system (the cheapest/easiest way to create a region-wide, connected bicycle system).
- Connecting downtown to outlying trailheads would promote more walking and bicycling.
- Develop trails in areas outside of Jefferson City limits -- not everyone in the CAMPO area lives in Jefferson City.
- Need to connect the Dunklin St greenway trailhead to the MO River bridge via an onstreet route in the short run, this would be a huge win connecting our 12? miles of greenway with the Katy Trail (west side of town to St Charles by bike if you wanted)
- There are a few water fountains and bicycle racks in public areas, such as restaurants and stores. I especially like the bike tool station on the Katy Trail and bathrooms there and at the North Jefferson City pavilion.
- There are several nice spots around downtown with benches, bike racks, water fountains. It'd be nice to see more of that-- you could even tie those in with transit shelters.
- Especially around Jeff city, some of the sidewalks are in rough shape. I wouldn't be the first to admit I've tripped and fallen over a buckled sidewalk slab.
- Jeff city's streets are busy and I refuse to bike in town unless there are dedicated bike lanes. It's incredibly scary to share the traffic lane with cars and trucks—especially when it's difficult for them to see you.
- The city could make jefftran a little more appealing/ reconfigure routes so that it caters to more people--not just the low income crowd.
- Creating a trail link from downtown JC/Greenway to outdoor recreation in our smaller communities such as St. Martins.
- Creating a reason (linkage) for outdoor bicycling / hiking enthusiasts to visit Jefferson City because of the outdoor recreation that is offered. Possibly work with hotels to give bicycling enthusiast a room discount if they bring their bike to 'tour' JC trails events.
- There are not enough sidewalks, and I fear that biking would be a safety hazard because people are not used to seeing bicyclists in this area and would not be watching out for them.
- Taos to Wardsville is a perfect bicycling/skating/walking route, but it is far too dangerous without a trail.

## DRAFT

- ...the bottom line is that our attractions lend themselves well to bikes/walking if we made them available.
- The variety of terrain allows both athletes and casual users the choice of areas to exercise. It also spreads out the usage for traffic control or usage maximization.
- As mentioned before, the historic sites and attractive setting in JC have the potential to draw visitors and additional services and quality of walking or biking trails enhances these assets and influences visitors to come here. Also, more residents will use these facilities if they are well-designed, financed, and maintained.
- Many of the streets within the area are not bicycle friendly or safe for cyclist. It would provide many more options to connect with the Greenway, etc if folks felt safe riding on the streets.
- Sidewalks need to be connected from main part of town to outer fringes of town to enhance walking opportunities.
- Trails do not connect and require going across high traffic areas to access and/or have inadequate trailheads/parking.
- We need to utilize our river more. Provide trails along the river.
- When citizens see tourists coming in and biking, running etc. it sparks an interest in doing it themselves.
- Not enough sidewalks- frustrating that you have to drive to find a trail to run/walk/bike.
- There are no bike lanes so people will ride bikes on the sidewalks occasionally and this doesn't seem safe..
- Jefferson City is a very unfriendly town for walkers. Not enough sidewalks and crosswalks around town. You can't safely walk from one end of town to the other.
- There needs to be an awareness program/initiative to educate drivers regarding the rights of cyclists to use the road safely and without harassment.
- Tour guide led bicycling tours are becoming more popular throughout the country. This could be local (a couple hours downtown Jefferson City) or extended (a couple days exploring several towns along the Katy Trail).
- Trails are not connected so need to load stuff in car and drive to JC from Holts Summit.
- There is nothing about the city and county infrastructure that supports safe biking.
- Lack of good sidewalks on many streets discourages walking/biking with my family. I would love to take my family for a walk without having to load everyone up to go to a park or the Greenway!!!
- Some trails aren't connected and you have to get in the street. This means I can't take my kids on some of them.
- It is impossible for bike/foot traffic to get from one side of town to another or between useful areas of town without sharing the road with cars.
- A city should have 1 mile of trail per thousand residents.
- We can really use more permanently affixed bike racks all over our area to secure bicycles to. This would encourage this mode of transportation.
- More trails equal more event possibilities in addition to just being a reason to want to live here! We have some great trails at Binder and the Greenway is a good start but we have opportunity to really make a system that can provide safety in commuting around town.
- Again, you could transform certain areas of the city just by offering the option of sidewalks, increasing property value and attracting renters.
- The city is a model of suburban sprawl.