



Kimberling City Active Transportation Plan

September 2023



BILL NO. 2023-975

RESOLUTION NO. 508A
August 28, 2023

**A RESOLUTION OF THE CITY OF KIMBERLING CITY, MISSOURI
ADOPTING THE KIMBERLING CITY
ACTIVE TRANSPORTATION PLAN**

WHEREAS, it is in the best interest of the City of Kimberling City to develop the active transportation plan to establish guidance for the future growth of the City and that promotes the health, safety, and welfare of the public; and

WHEREAS, the Southwest Missouri Council of Governments conducted extensive study and has developed a Active Transportation Plan for the City; and

WHEREAS, proper notice was published in the Branson Tri-Lakes Daily News, which has general circulation within the City of Kimberling City, at least fifteen (15) days prior to the public hearing; and

WHEREAS, the Chairman of the Planning and Zoning Commission of Kimberling City, Missouri called the meeting to order and opened a public hearing for the Kimberling City Active Transportation Plan on August 28, 2023; and


WHEREAS, the report titled "Kimberling City Active Transportation Plan", maps, and charts were discussed; and

WHEREAS, it was moved and seconded that the report titled "Kimberling City Active Transportation Plan", maps, and charts contained therein, be approved as the Active Transportation Plan for the City of Kimberling City, Missouri, and that copies be certified to the Board of Aldermen and City Clerk, and that one (1) copy be made available in the office of the Stone County Recorder of Deeds; and

WHEREAS, the motion carried with 6 aye vote(s), 0 nay vote(s), and 0 abstention(s).

NOW, THEREFORE, BE IT RESOLVED by the Planning and Zoning Commission of the City of Kimberling City, Missouri, that said Active Transportation Plan and all maps and charts included therein are hereby adopted.

Passed and Adopted by the Planning and Zoning Commission on this 28th day of August 2023.



Chairman, Kimberling City, Missouri
Planning and Zoning Commission

ATTEST:



Secretary, Kimberling City, Missouri
Planning and Zoning Commission

**A RESOLUTION OF THE CITY OF KIMBERLING CITY, MISSOURI
ADOPTING THE KIMBERLING CITY
ACTIVE TRANSPORTATION PLAN**

WHEREAS, the Kimberling City Active Transportation Plan complies with the Missouri Department of Health and Senior Services (MDHSS) Active Transportation Plan Guidelines; and

WHEREAS, the Kimberling City Active Transportation Plan is an implementation tool to each of the SMCOC member agencies' General Plan Circulation Elements; and

WHEREAS, the Kimberling City Active Transportation Plan promotes walking and biking for transportation and recreation by all members of the community by creating a connected and complete network of trails, walkways, and bikeways that provide safe, convenient, and enjoyable connections to key destinations and neighborhoods; and

WHEREAS, the Kimberling City Active Transportation Plan promotes pedestrian and bicyclist safety and collision reduction; and

WHEREAS, the Kimberling City Active Transportation Plan will improve the accessibility of funding for pedestrian and bicycle related improvements for the City of Kimberling City; and

WHEREAS, approval of the Kimberling City Active Transportation Plan meets the eligibility requirements for Active Transportation Program funding; and

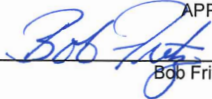
WHEREAS, proper notice for a public hearing was published in the Branson Tri-Lakes Daily News one August 12, 2023, which has general circulation within the City of Kimberling City; and

WHEREAS, The City of Kimberling City Planning & Zoning Commission reviewed and gave recommendation for approval to the Board of Alderman of the City of Kimberling City, Missouri at the August 28, 2023 Planning & Zoning Commission Regular Meeting held directly after the advertised public hearing.

NOW, THEREFORE, BE IT RESOLVED by the Board of Aldermen of the City of Kimberling City, Missouri hereby approves the following attached Kimberling City Active Transportation Plan as written and presented by the Southwest Missouri Council of Governments.

ADOPTED by the Board of Aldermen of the City of Kimberling City, Missouri, this 5th day of September 2023.

APPROVED:

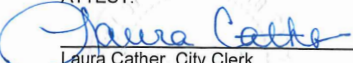


Bob Fritz, Mayor

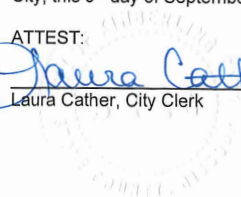
The undersigned hereby certifies that he/she is the duly authorized clerk and custodian of the books and records and seal of the City of Kimberling City, duly formed pursuant to the laws of the State of Missouri, and that the foregoing is a true record of a resolution duly adopted at a meeting of the Board of Alderman, that said meeting was held in accordance with state and local laws on September 5, 2023 and that the said resolution is now in full force and effect without modification or restriction.

IN WITNESS WHEREOF I have executed my name as clerk and have affixed the seal of the City of Kimberling City, this 5th day of September 2023.

ATTEST:



Laura Cather, City Clerk



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1 INTRODUCTION

Active transportation is a mode of transportation that is powered by humans to get from one place to another, for example through bicycling or walking. Active transportation offers an economical option that fosters physical well-being through active lifestyles while remaining environmentally friendly. By promoting active living, this mode of transportation contributes to a highly sustainable and livable community environment.

Kimberling City, a tourist destination situated on Table Rock Lake in Stone County, boasts a marina, multiple hotels and resorts, and a significant commercial center along State Highway 13. With its breathtaking natural beauty and well-planned infrastructure, Kimberling City provides numerous opportunities for residents and visitors to engage in active transportation and immerse themselves in the surrounding natural wonders.

At the heart of Kimberling City lies a bustling marina, serving as a hub for water-based activities. This not only offers a unique mode of active transportation but also encourages people to explore the scenic lake environment while engaging in physical activities. Furthermore, Kimberling City offers numerous hotels and

resorts, making it an ideal destination for travelers seeking a serene and active getaway.

Kimberling City serves as a shining example of the potential of active transportation in fostering a thriving community that prioritizes physical well-being, environmental consciousness, and an enduring appreciation for nature's beauty. By integrating human-powered modes of transportation into its infrastructure and lifestyle, Kimberling City aims to become a model of sustainable and livable city.

In 2023, the Southwest Missouri Council of Governments was granted funding through the Missouri Department of Health and Senior Services to develop an active transportation plan for Kimberling City. The Kimberling City Active Transportation Plan identifies community needs and priorities, and outlines strategies that will improve the area's safety, mobility, and connectivity. This may include the development of new infrastructure, such as sidewalks, bicycle lanes, and walking trails. The plan incorporates the community's identified needs and priorities, as determined during the planning process, to address various active transportation improvements and developments in the area.

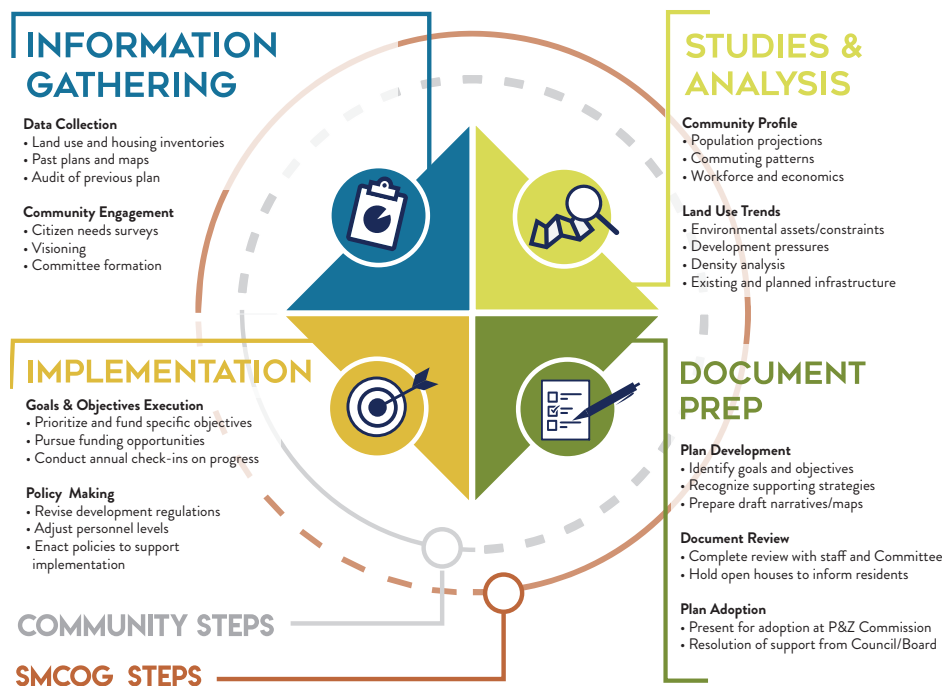


2 PLANNING PROCESS

The five-month planning process involved engaging with city officials, community members, and the Transportation Planning Committee to develop strategies that will enhance the active transportation system in Kimberling City. To ensure that the plan reflects the community priorities and needs, the following steps were taken to document and analyze existing conditions, reflect the community's visions, and identify strategies to achieve that vision:

- Engaging the Community
- Reviewing of the Past Plans and Studies
- Existing Conditions Analysis
- Implementation

The Planning Process



Community Engagement

Community engagement is an essential element of the planning process which allows for the identification of critical gaps and deficiencies in the existing transportation system, as well as the selection of future transportation goals for the community to focus on. Throughout the process, the community was involved in the development of the Kimberling City Active Transportation Plan. These opportunities included a community survey, open house, and Transportation Planning Committee meetings.

Transportation Planning Committee Meetings

A Transportation Planning Committee (TPC) was formed early in the process to help provide input and direction for the Active Transportation Plan. The TPC helped review and revise the plan during the drafting phase and helped in identifying community needs. The TPC included the following members:

Dan Jacobs | Special Events Committee

Ann Ferguson | Realtor

Anne Coleman | Community Member

Keri Brewster | Fordland Clinic

Willow Barton | Fordland Clinic

Pam Burnett | Stone County Health Department

Phil Korem | Board of Alderman

Tracy Hudson | Planning and Zoning Committee

Korina Jones | Park Board

The TPC met with SMCOG staff three times throughout the planning process to discuss and review elements of the plan.

- Orientation Meeting - The orientation meeting was held on June 5, 2023, to provide an overview of the planning process, and explain the benefits of an

active transportation plan.

- Survey Results - The survey results review meeting was held on July 17, 2023, to examine the results of the community survey.
- Needs Analysis - The needs analysis meeting was held on July 27, 2023, to analyze and rate the high-priority needs based on community priorities identified by the community and the committee and to also conduct a risk analysis for those needs.

Public Outreach

Community Survey

Following the staff kick-off meeting, a survey was developed to gain community input. This survey focused on the existing status of transportation in Kimberling City, including demographics, methods of transportation, with specific emphasis on walking and biking, and the current challenges with each of those modes.

Members of the TPC were encouraged to share the survey with other residents. The survey was also promoted by the city in several ways, including social media posts, city website, and the city's 50th anniversary event. The survey was conducted from June 5-July 2, 2023, and received 75 responses, which can be viewed in greater detail in the Appendix A.

From the survey, valuable information was collected regarding the most pressing concerns with active transportation infrastructure in Kimberling City. Of 75 total respondents, 69 reported living and/or working in the community. Furthermore, most respondents, with only 2 exceptions, reported using a personal vehicle as their primary mode of transportation. Over half (52%) of respondents reported never using sidewalks or trails for walking, and two-thirds (67%) reported never biking. Despite this, 76.7% of respondents demonstrated interest in being able to walk



Voice your opinion on the future of Kimberling City!

Your input will serve as a guide for the city's active transportation goals.

Take the survey at smcog.org/kimberlingcitysurvey

Survey closes July 2, 2023.



Scan For Survey



more, and 53.7% reported an interest in biking more.

The survey also included questions regarding the current conditions of different elements of the transportation network, and respondents were asked to rank each system on a scale of 1-5 (1 being poor; 5 being excellent). When asked about the walkability of Kimberling City, the average rating was 1.4. Respondents reported walking almost solely for the purposes of exercise or leisure, and rarely for work or errands. The primary complaints regarding the walkability of the community focused mainly on the lack of sidewalks, but also included the lack of sufficient street lighting and unsafe nature of intersections. Similarly, respondents also ranked the trail system in Kimberling City, which resulted in an average rating of 1.23. The primary complaint regarding trails was a lack of trails in the city. When questioned about the bikeability of the community, the average rating was 1.52, with many respondents reporting never riding a bike. The primary complaints included the lack of off-street bike lines and bike infrastructure, such as bike racks, as well as the poor condition of existing infrastructure, the unsafe nature of intersections, and the hilly topography of Kimberling City.

The majority of parents and guardians said they would not be comfortable allowing their child to travel on their own. The top three destinations that respondents would like to walk or bike to were parks and trails, recreational facilities, and commercial and retail services. When it comes to priority projects over the next 20 years, respondents noted the addition of sidewalks in developing areas, and the expansion of biking and recreational trails.

Popular sources for funding local transportation improvements included impact fees on developers, restructuring within the annual budget, and increased sales tax with 41, 37, and 23 votes respectively.

Safety, economic impact, mobility, and convenience were identified as the highest

priorities for the city to consider when making future investment decisions.

Open House

An open house event was held on August 22, 2023 at the Kimberling City Community Center. Residents were asked to provide feedback on the draft high-priority pedestrian and bike needs.



3

**BENEFITS AND CASE
STUDIES**

Active transportation planning, with the inclusion of sidewalks, crosswalks, bike lanes and trails, and other pedestrian infrastructure, can result in economic, safety, and health and welfare benefits for a community. Kimberling City can improve the quality of life and living standards for its residents by following the precedent of other communities across the state and nation and developing active transportation infrastructure. The following case studies provide greater detail on the potential benefits that could arise by following the recommendations set out in this plan.

Nonmotorized Transportation Pilot Program (NTPP) (2005-2010)

Nonmotorized Transportation Pilot Program was a federal pilot program aimed at determining whether concentrated investments in pedestrian and cycling infrastructure would result in a transition towards nonmotorized transportation. \$28 million in funding was granted to four communities across the country (Columbia, Missouri; Marin County, California; Minneapolis, Minnesota; and Sheboygan County, Wisconsin) to invest in their alternative transportation networks. After the five-year period, all communities reported a successful movement towards their pedestrian and cycling infrastructure.

In the final report, benefits included a 15.8% increase in the pedestrian mode share, and a further 44% increase in cycling mode share. Correspondingly, it was estimated that 85.1 million vehicle miles were avoided, saving 3.6 million gallons of gasoline, and preventing nearly 35,000 tons of CO₂ emissions. The report also recognized that the network expansions improved pedestrian and cycling access to over 100,000 housing units and jobs across the four communities. These improvements were also responsible for a significant reduction in pedestrian and cyclist fatalities (20-30%) and injuries (up to 50%). It is worth noting that all these improvements resulted from funding of \$112 million, which, according to the final report, was equivalent to the construction costs for only 10 miles of a four-lane highway, a substantially less impactful development.

Active Transportation Transforms America (2019); Rails-to-Trails Conservancy

This report details a variety of benefits linked to active transportation, including potential economic, environmental, and health impacts. In terms of health, there are a multitude of chronic conditions, diseases, and afflictions that are directly linked to a lack of physical activity. These include arthritis, asthma, diabetes, cancer, cardiovascular disease, and mental health afflictions and disorders. Chronic diseases are responsible for billions in health care costs and loss of economic and productive value, and as such, increasing focus has been directed towards methods of reducing cases of chronic diseases.

One emerging option is the promotion of active transportation techniques, which can improve the health of citizens in a cost-effective manner relative to the costs of developing new infrastructure. For example, according to “A Cost-Benefit Analysis of Physical Activity Using Bike/Pedestrian Trails”, a research article referenced in this report, every dollar invested in trails in Lincoln, Nebraska saved \$2.94 in direct medical costs. This is an approach that is becoming more popular and should continue to be encouraged.

Furthermore, it was reported that people residing close to trails were 50% more likely to meet the physical activity guidelines set by the Centre for Disease Control (CDC), which recommend a 15-minute walk or a 30-minute bike ride to work. This correlation is continued with regards to sidewalks and bicycle lanes. For example,

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according to “Bicycle Commuting and Facilities in Major U.S. Cities: If You Build Them, Commuters Will Use Them”, an article published in Transportation Research Record, a major transportation journal, it was estimated that for every additional mile of bicycle lanes, there was a 1% increase in cyclist commuters.

Trails are also considered by many to be a more efficient and cost-effective way to add new transportation options to an area than traditional roadway construction. The American Road and Transportation Builders Association estimated that it costs between \$2-5 million to construct one mile of a new two-lane road, while, for the same distance, it would cost only \$200,000-\$1 million to develop a multiuse trail. Furthermore, developing trails and other similar active transportation alternatives leads to the creation of the greatest number of jobs for the lowest costs. According to the American Association of State Highway and Transportation Officials (AASHTO), 17 jobs are created for every million dollars spent on active transportation projects, including pedestrian and cycling infrastructure, as well as trails. In comparison, pavement widenings and new highway construction are each responsible for the creation of 12.5 jobs per \$1 million spent on transportation improvements; in other words, active transportation projects create 26% more jobs than any other transportation improvements. In disregard for this cost-effectiveness, active transportation projects receive only roughly 1.8% of transportation funding, despite pedestrian activity alone comprising 10.5% of all trips. As transportation development projects become more expensive, it would be wise for municipalities to consider alternatives to expensive roadway projects that achieve the same level of mobility for a fraction of the cost.

Estimating the Economic and Health Benefits of Bicycling in Northwest Arkansas (2022); University of Arkansas

This study was undertaken by the University of Arkansas’ Center for Business & Economic Research with support from the Walton Family Foundation and is intended to detail the benefits of investments to the bicycling ecosystem in

Northwest Arkansas. Among the highlights of the study was the affirmation that businesses related to the cycling ecosystem contribute significantly to the economic status of the region. In total, businesses related to the cycling ecosystem, including tourism, were estimated to contribute \$159 million in economic impact, support 1,330 jobs, and generate \$10.7 million in local and state taxes. In addition, the cycling ecosystem has been responsible for an estimated reduction of \$59 million in projected health care costs due to chronic diseases. This health benefit comes from the fact that 3.7% of Northwest Arkansas residents meet the US Department of Health and Human Services’ Physical Activity Guidelines. By performing at least 150-300 minutes of moderate-intensity physical activity per week, or 75-150 minutes of vigorous-intensity physical activity per week, residents experience a lower risk of chronic diseases, which reduces the necessary health care costs to treat such illnesses.

Razorback Regional Greenway in Arkansas



The Razorback Regional Greenway is a 46-mile trail network located in northwest Arkansas, and which runs directly through downtown Fayetteville, Bentonville, and Springdale. It is primarily rural, with relatively few sections running through urban areas, and is mainly bicycle-focused. As a result of its development, the trail has brought nearly \$137 million annually to local economies through local and tourist spending, as well as health benefits.

Indianapolis Cultural Trail in Indiana

The Indianapolis Cultural Trail is an urban trail that runs for over 8 miles through the heart of downtown Indianapolis, connecting each of the city's seven cultural districts. Designed as a central loop with three spurs connecting the trail to other greenways emanating from the city center, the Indianapolis Cultural Trail was constructed between 2007 and 2013 and was funded with a combination of private donations and federal grants and programs, such as TIGER (Transportation Investment Generating Economic Recovery), raising a combined total of over \$50



million. Since its opening in 2013, the Cultural Trail has been a great success, with some sections drawing nearly 215,000 visitors annually, per a 2015 study. This has been remarkably beneficial to nearby commercial properties, such as a boost in property values (a combined total of nearly \$1 billion), as well as the creation of nearly 100 new workplace positions. The overall economic impact of the cultural trail was estimated to be between \$7.2 and \$11.4 million, with much of this being directed towards local restaurants and hotels.

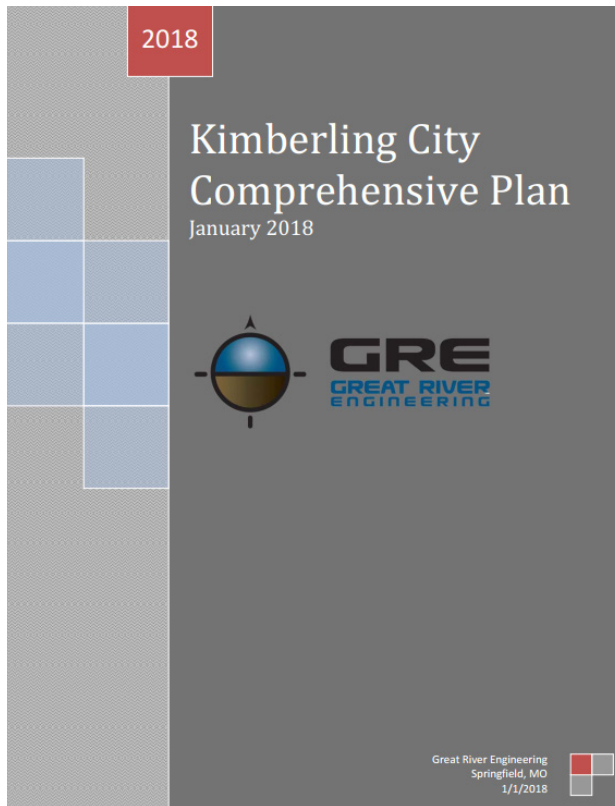
Whitefish Trail in Montana

Located deep within the Rocky Mountains, the 47-mile Whitefish Trail draws in more than 73,000 visitors annually. This results in nearly \$3.6 million in annual revenue and supports over 60 jobs related to hotels, restaurants, retail, transportation, and other related industries. In total, the Whitefish Trail is estimated to generate \$1.9 million in total economic impact.

Industrial Heartland Trails Coalition (IHTC)

This trail network, although still under development, is planned to eventually amount to over 1,500 miles of trails across four states: Pennsylvania, West Virginia, Ohio, and New York. Centered in Pittsburgh, it is planned that trails will radiate outwards and connect to various cities across the region, including Cleveland, Ohio; Morgantown and Parkersburg, West Virginia; and Erie, Pennsylvania. Upon completion, the trail will provide hundreds of thousands of residents with non-vehicular access to jobs and commercial centers. Although there remain nearly 700 miles of gaps that must be filled to meet the IHTC's goals, most are relatively short, averaging less than 15 miles. The completion of five gaps amounting to 7 miles of trails will create a continuous trail network of nearly 190 miles.

4 PAST PLANS AND STUDIES



2018 Kimberling City Comprehensive Plan

In 2018, the City of Kimberling City developed a comprehensive plan in partnership with Great River Engineering (GRE). The Comprehensive Plan includes information on a variety of important elements of Kimberling City, including housing, economic development, land use and zoning, transportation, among others, much of which was carried over from the previous 1999 plan. The transportation chapter included sections relevant to this plan, such as information related to pedestrian infrastructure, traffic safety, roadway functional classifications, and street maintenance and improvements. Overall, the 2018 Comprehensive Plan had the following recommendations towards Kimberling City's transportation network and infrastructure.

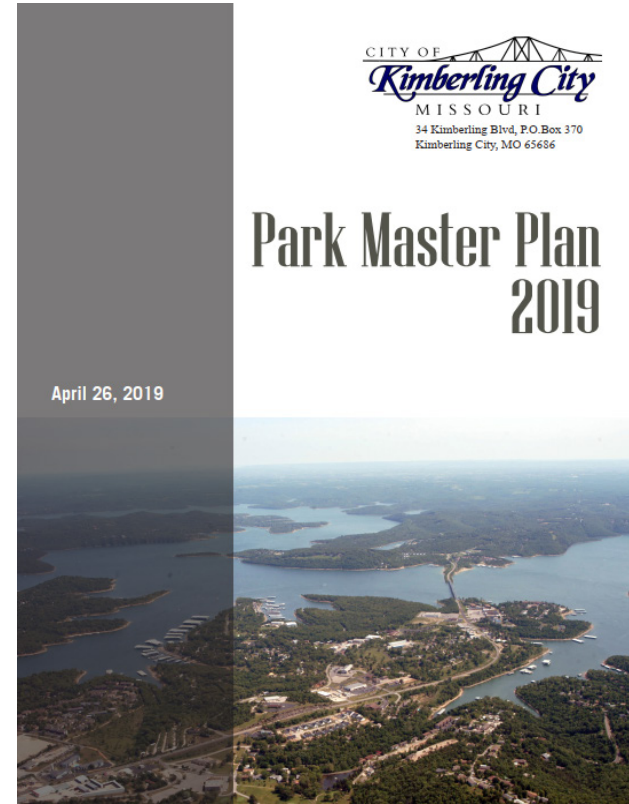
1. Coordinate land-use and transportation planning to maximize the land

development opportunities created by major transportation routes within and around the City.

2. Protect arterials from encroachment resulting from improper access to adjacent land uses.
3. Design an adequate thoroughfare system within future growth areas and acquire sufficient rights-of-way prior to land development or through the plan approval process.
4. Ensure adequate access to and circulation around commercial and industrial areas, public facilities, and other activity centers.
5. Minimize localized traffic congestion and operational problems through the use of access management; clustered developments; local intersection improvements; and the adoption of minimum roadway design standards.
6. Ensure that all roadways in the community have properly designed surfaces, curbs and gutters which are in adequate condition by adopting the appropriate standards.
7. Refine and modify the City's street classification system to clearly define the future functional role of all roadways and to meet anticipated future traffic needs.
8. Improve the overall design and appearance of roadways and to meet anticipated future traffic needs.
9. Ensure that transportation facilities are designed and developed in harmony with the natural environment and adjacent land uses.
10. Minimize non-local and commercial traffic within residential neighborhoods.
11. Ensure the provision of adequate off-street parking facilities for all activity areas.
12. Provide for safe and convenient bicycle movement within and around the City.
13. Maintain and improve pedestrian safety throughout the City by requiring new developments to provide sidewalks.
14. Ensure that decisions regarding future land development and roadway construction are closely coordinated and mutually supportive.
- 15) Ensure that

the City retains overall control over the design and location of the major street system within future growth areas.

15. Provide for the safe and efficient movement of trucks and service vehicles within the community, in a manner that does not adversely affect nearby land-uses.
16. Provide capacity for other infrastructure systems along major transportation corridors by developing utility corridors within the roadway's standard sections.
17. Develop road standards to include in development standards.
18. Generate design regulations for new developments that ensure adequate protection of public access and safety.



2019 Parks and Recreation Plan

In 2019, the City of Kimberling City partnered with Cook, Flatt, & Strobel (CFS) Engineers to develop a five-year plan to direct future development of parks and recreational infrastructure and facilities in the community. The goal was to improve recreational services in a way that protected the area's natural resources, provided health and wellness opportunities for Kimberling City's residents, and created safe places for all users. The plan's focus was on improvements to the first two parks for the city, which are the Lakeshore Park and Hilltop Park. The former was designed to be a neighborhood park for local children, while the latter would be a larger city park with large open spaces for activities and events. In addition, pedestrian and cyclist lanes, sidewalks, and trails were also identified as an essential element towards connectivity.

5 AREA PROFILE

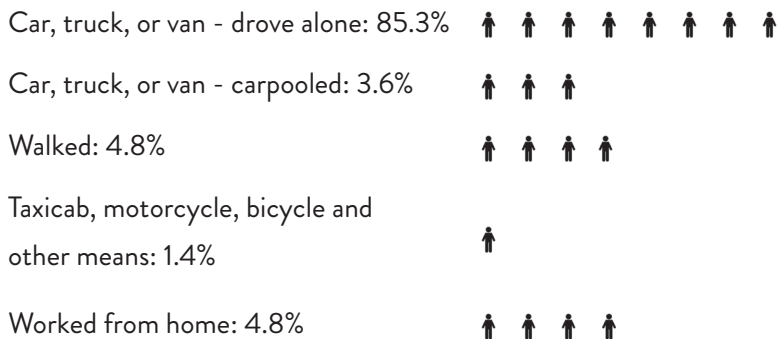
Demographics

The size of the population significantly impacts the demand for various transportation options within a community. As the population grows, there might be a necessity to expand existing roads or introduce multimodal transportation infrastructure. However, road expansion can be expensive, making it essential to offer affordable transportation alternatives, such as walking, cycling, and other active modes, to meet the community's needs. Moreover, incorporating these new active transportation modes not only brings economic and health benefits but also enhances the interconnectedness of different facilities and services in the community. Kimberling City has been experiencing a slow population decline over the past decade. According to ACS 5-year estimates, Kimberling City had 2,811 residents in 2011, then decreased to 2,604 in 2016, and slightly recovered to 2,705 residents in 2021. The city saw an overall population decrease of 3.77% between 2011 and 2021.

Transportation Methods and Accessibility

Analyzing transportation demographics can offer valuable insights into the current state of the transportation network, thereby guiding future development decisions more effectively. Automobiles are overwhelmingly the primary mode of transportation in Kimberling City, as can be seen in the chart below:

Means of Transportation



This predominance of cars can be attributed to the steep terrain and rural, low-density character of Kimberling City. According to ACS 5-year estimates, Kimberling City has 27 residents who do not own vehicles. Therefore, it is important for the city to take steps to provide residents with alternative methods of transportation to help reduce traffic, and expand the opportunities and mobility of residents, especially those who lack reliable transportation.

Housing and Transportation Costs

The Housing and Transportation Index, a tool created by the Center for Neighborhood Technology (CNT), shows that Kimberling City has a healthy housing supply, as the average monthly housing cost in Kimberling City is currently \$1,038, which is only 25% of the annual income for an average resident. According to CNT, the average household owns 1.83 vehicles, and each vehicle is estimated to travel an average of 19,029 miles per year. This results in an annual transportation cost of \$12,690, which amounts to an average of 28% of a resident's income. These high costs could be reduced by decreasing transportation costs which would arise from the implementation of active transportation facilities and services.

Between the average housing and transportation costs, the average Kimberling City resident spends **53%** of their annual income on these two essentials alone, leaving only **47%** as disposable income.

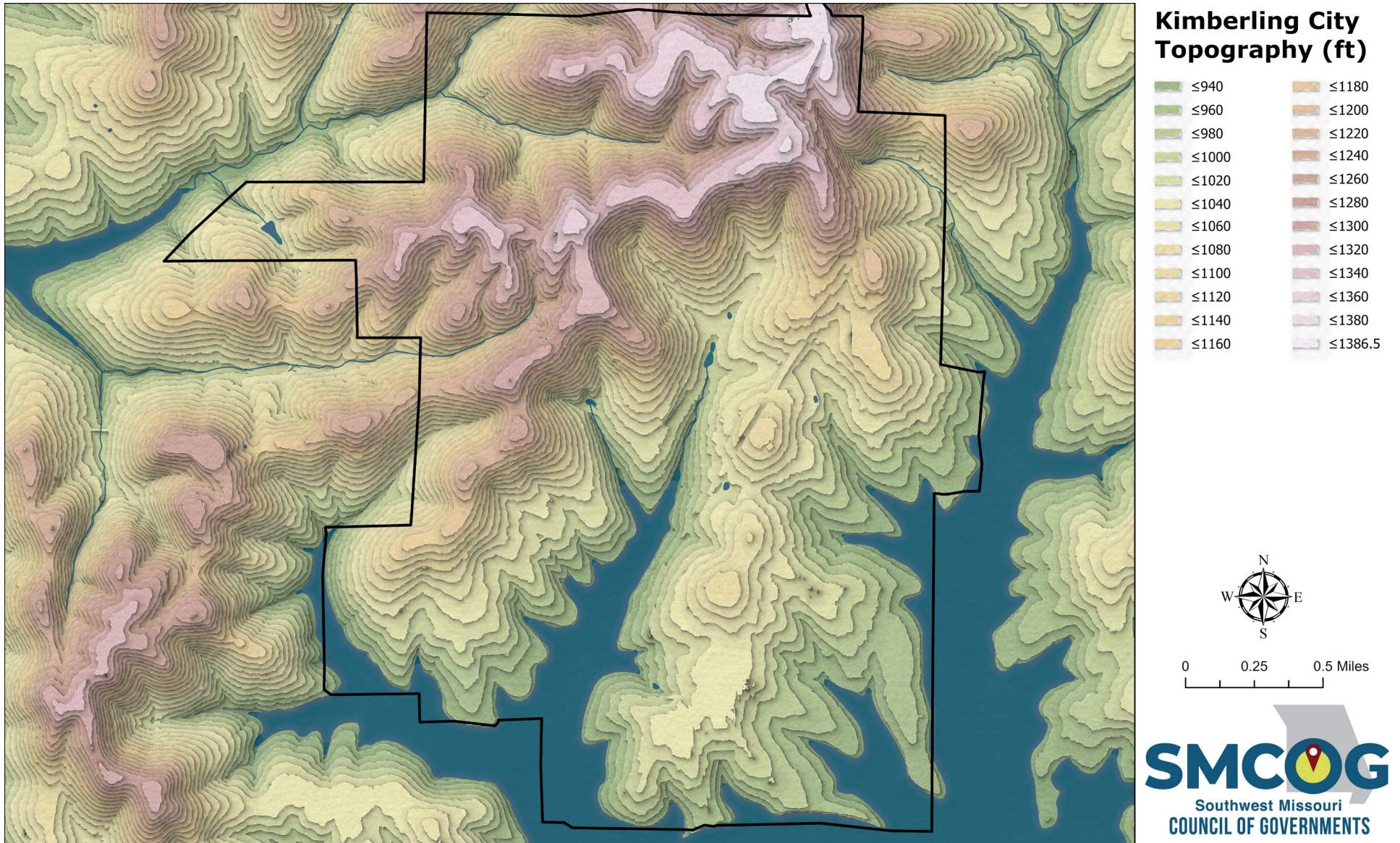
Topography

The topography of Kimberling City poses distinctive challenges for the development of sidewalks and bike lanes. The presence of steep slopes in certain areas of the city will significantly complicate the implementation of a



comprehensive network to cater to residents' needs. The demographic makeup of Kimberling City will also add another layer of complexity, as older residents may find it particularly challenging to navigate the sidewalk network given the steep

inclines present. Furthermore, the cost of these sidewalk projects may also be prohibitive for the city, as the high grade of the road network will likely complicate the building process further.



Land Use

Land use is a term that describes how a piece of land is currently being used. Current land use designations in Kimberling City include residential, commercial, institutional, parks, and vacant. Although often confused with zoning, land use is quite different. Zoning is the desired designation of a parcel of land by the city, while land use is the current use of the property, regardless of what the current or future zoning of the land is. For example, while vacant properties retain a zoning designation that determines what structures are allowed there, its current land use would be considered vacant.

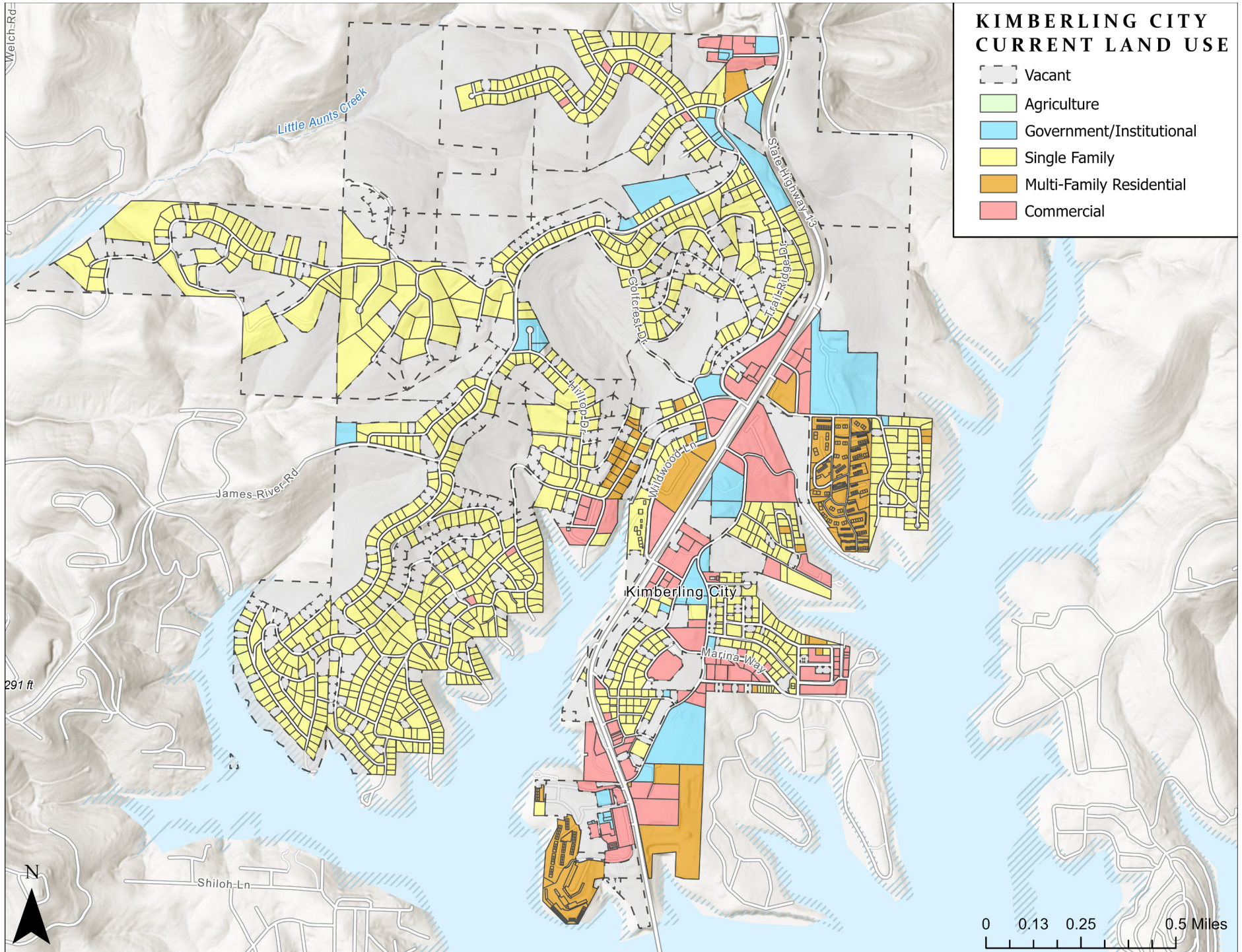
Analyzing the existing land uses in Kimberling City is important to identify key roadways and destinations and understand the issues that need to be addressed for the road network to function efficiently and safely. The current land use map for Kimberling City can be seen on the following page.

The City of Kimberling City consists of the following land uses:

- Single-Family Residential: 30.06%
- Multi-Family Residential: 5.39%
- Commercial: 6.80%
- Government/Institutional: 4.81%
- Vacant: 52.94%

The land use map can help show some key areas in need of connection to the active transportation network, including the commercial corridor on MO 13, Kimberling Boulevard, and Marina Way, and multiple government buildings around the city. Using the land use map can help identify areas in need of additional segments, as well as create a better understanding of the broader transportation network of Kimberling City.





6

EXISTING FACILITY
CONDITION

Most rural Missouri communities, such as Kimberling City, have transportation networks centered around vehicles and roadways, with relatively few pedestrian and bicycle alternative pathways or sidewalks. Diversifying a city's transportation infrastructure can allow for a variety of safety and welfare improvements for residents.

Active Transportation Facility Overview

Sidewalks

In Kimberling City, the inadequacy of sidewalks has been a challenge despite a growing desire to establish a comprehensive pedestrian network. Sidewalks play a pivotal role in fostering community connections by facilitating easy access to various essential destinations within and beyond the city limits. They are not merely concrete pathways; they represent the embodiment of connectivity, convenience, and progress.

A well-designed and interconnected sidewalk network is an indispensable feature that seamlessly links residents and visitors to key locations such as neighborhoods, schools, places of worship, parks, employment centers, government buildings, and bustling business districts. These pedestrian pathways offer much more than a means of getting from point A to point B; they become vibrant threads that weave together the fabric of a community.

By developing sidewalks, the city can create a sense of unity, enabling individuals of all ages and abilities to traverse the city safely and confidently. No longer confined by the limitations of vehicular travel, residents can embrace a self-reliant and active lifestyle, fostering a healthier and more vibrant community.

Beyond personal benefits, a well-connected network of sidewalks contributes to a sustainable and eco-friendly environment. Encouraging pedestrian traffic reduces

the dependence on motor vehicles, leading to lower emissions and a diminished carbon footprint. Such strides toward sustainability align with the city's collective responsibility to safeguard the natural beauty of the city for generations to come.

Furthermore, sidewalks act as catalysts for economic growth and prosperity. By facilitating easy access to local businesses and commercial hubs, they stimulate foot traffic, encouraging more people to patronize local establishments. This will foster a cycle of growth and reinvestment that will improve the entire area.

The significance of sidewalks in Kimberling City extends far beyond their physical presence. They represent a vision of a thriving and tightly knit community, where everyone can access essential services, appreciate the beauty of our surroundings, and contribute to a sustainable future. By embracing the development of sidewalks, the city can pave the way for a brighter tomorrow, where connectivity, well-being, and environmental consciousness converge harmoniously.



Network Connectivity

Establishing network connectivity is a fundamental aspect of developing an efficient transportation system that caters to individuals of all ages, abilities, and modes of transportation. Enhancing mobility through well-connected paths enables pedestrians and cyclists to access essential areas throughout the city, resulting in a more inclusive and accessible transportation network for everyone.

Over the years, the city's expansion has not been matched by a proportional growth in sidewalk and biking facilities. There is a significant lack of multimodal infrastructure, necessitating its expansion. Given the impracticality of completing the entire network at once, the focus is on identifying and prioritizing high-priority need locations for improvements as resources become available.

One major challenge in expanding connectivity is accommodating pedestrians and cyclists on high-speed arterial roads, which serve as crucial corridors for city travel. While these corridors are a priority for active transportation infrastructure, safety is of utmost concern. The high speeds and congestion on arterial roads make it difficult to implement multimodal infrastructure that is both safe and responsive to residents' needs.

An integral part of the multimodal network is the inclusion of bike lanes, providing an alternative to motor transportation and fostering community health through increased physical activity. Safety remains a key consideration, and both residents and city officials advocate for separated bike paths instead of on-road bike lanes to minimize accidents and protect cyclists and drivers alike. Currently, it is not legal to ride bicycles on sidewalks in business districts in Missouri and must yield to pedestrians. The most effective approach involves widening sidewalks alongside roads with identified bike needs to 10', accommodating both cyclists and pedestrians. The Federal Highway Administration (FHWA) recommends 10' two-directional paths in most cases, with 8' being adequate in exceptional circumstances, such as areas with low pedestrian/cyclist density or those with good

alignment for safe passing opportunities.

Trails

In Kimberling City, the absence of comprehensive trails has left untapped potential for fostering a stronger sense of community and a deeper connection with the surrounding natural beauty. Trails are a vital element in transforming the city into a haven for outdoor enthusiasts, promoting health and wellness, and enhancing our quality of life.

Trails serve as inviting gateways to explore the picturesque landscapes that Kimberling City has to offer. They offer an opportunity for residents and visitors



alike to immerse themselves in the tranquility of nature, providing an escape from the hustle and bustle of daily life. Whether it's a leisurely stroll through serene forests, a brisk hike along rugged terrains, or a peaceful bike ride alongside scenic waterways, trails cater for a diverse range of interests and abilities.

By establishing an extensive network of trails, the city can open a world of recreational possibilities for everyone. Families can embark on unforgettable weekend adventures, children can discover the wonders of the great outdoors, residents and visitors can take a stroll along the lake shoreline, and fitness enthusiasts can challenge themselves in various terrains. The trails become pathways to exploration, inspiring a stronger sense of adventure and a deeper appreciation for our natural heritage.

Not only do trails promote physical activity and well-being, but they also play a crucial role in strengthening the social fabric of our community. Shared experiences along the trails foster connections between neighbors, creating a tight-knit community that supports one another in their pursuit of a healthy and active lifestyle. These shared spaces become platforms for bonding, fostering a sense of belonging that extends beyond individual neighborhoods.

Moreover, the development of trails can have positive economic impacts. As more people are drawn to our city for outdoor experiences, local businesses catering to recreational needs, such as outdoor gear shops, bike rentals, and cafes, can thrive. Trails become an attraction that draws in tourists and boosts the local economy, promoting sustainable growth and prosperity for the community.

Embracing trails also aligns with the city's commitment to environmental stewardship. By providing designated routes for outdoor activities, the city can minimize human impact on sensitive natural areas, protecting wildlife habitats and preserving the natural ecosystems for future generations. Trails serve as a reminder of the importance of maintaining a harmonious relationship with nature, reinforcing

a dedication to sustainable practices.

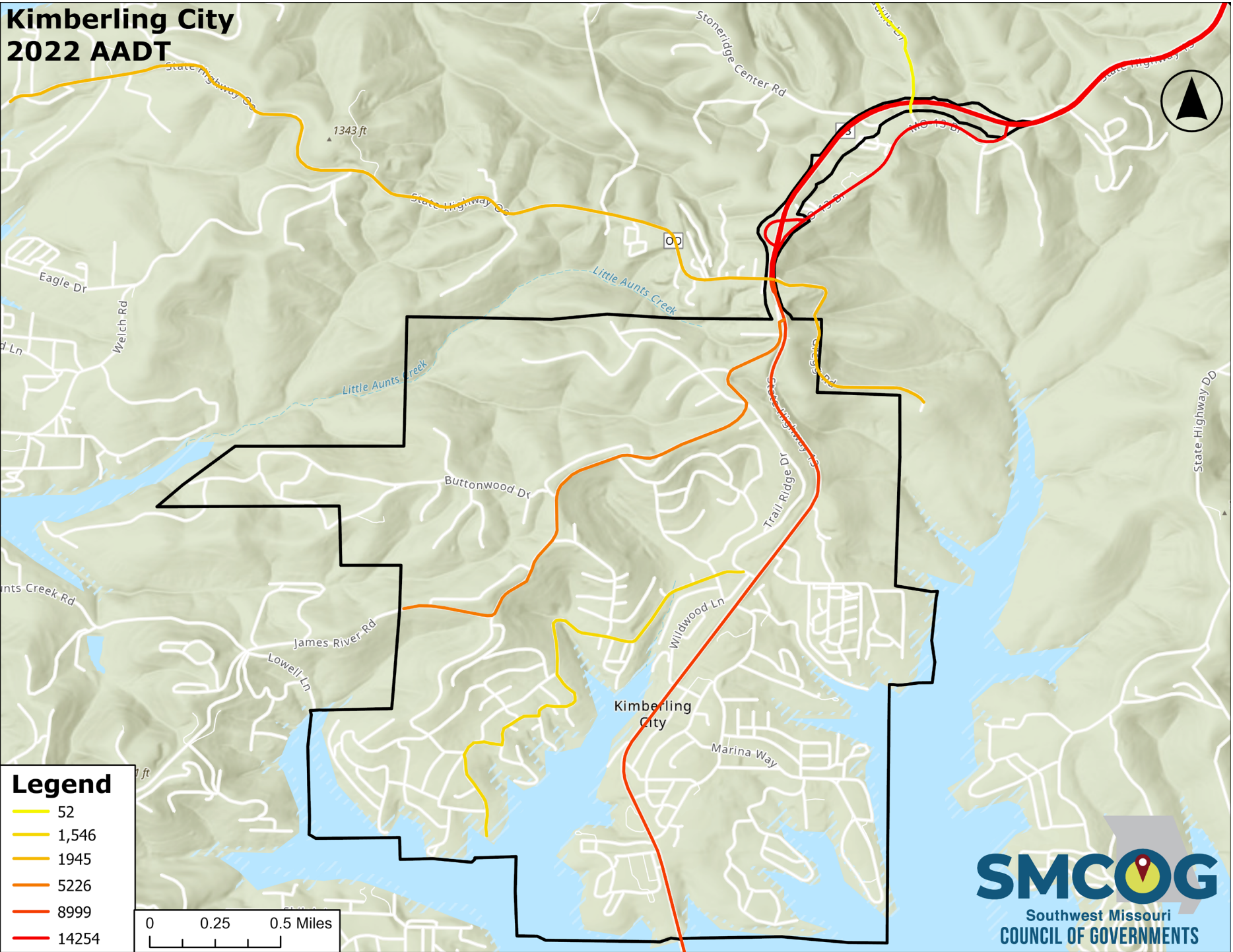
The establishment of a well-planned network of trails in Kimberling City represents a profound investment in the well-being of the residents and the prosperity of the community. These pathways to adventure and serenity offer a gateway to explore the beauty of our surroundings while fostering a sense of unity among residents.

Parks

The community of Kimberling City is currently in the process of developing a park system with the intent of connecting parks via bike trails, bike lanes, multi-use paths and sidewalks. Currently, Lakeshore Park is a small pocket park located on Lakeshore Drive. The goal is to connect Lakeshore Park to the future home



Kimberling City 2022 AADT



of Hilltop Park which is across Highway 13 on Kimberling Boulevard. Plans are underway to secure funding for the construction of Hilltop Park. From Hilltop Park, a connection to Table Rock Lake at Port of Kimberling is planned via sidewalks, multi-use paths or bike lanes. Within the Port of Kimberling area is a park area, on private property, but is open to the public and includes a tennis court, pickleball courts, basketball court and pavilion. This area is used for many family events for both citizens and visitors. Port of Kimberling is right on Table Rock Lake and has land that is desirable for recreational bike and pedestrian trails.

Roadway Network Analysis

Roadways that accommodate alternative modes of transportation such as walking and bicycling should have lower traffic density as well as speed. This creates a comfortable and safer environment for these various road users. Elements such as speed limits, traffic signals, signage, and pedestrian crossings can be incorporated into street design to improve safety for active transportation users. Analysis of the road network in Kimberling City can be used to identify suitable areas for the development of pedestrian and cycling infrastructure. In addition, the analysis will also provide a better understanding of the transportation system and how to reduce active transportation safety hazards and barriers.

Traffic Volume

Average Annual Daily Traffic, also known as AADT, is the most common metric used to measure traffic volume. The AADT provides a value which expresses road usage and its relative importance based on vehicle traffic. This value is acquired by taking the total number of vehicles that travelled on the roadway in a year and dividing it by 365 days to determine the daily average. The AADT values are considered when implementing pedestrian and cyclist facilities as safety is better on roads with a lower daily average traffic.

2022 traffic volume data from MoDOT was reviewed to analyze the AADT for the city. State Highway 13, which runs from the north to the south, fostered the

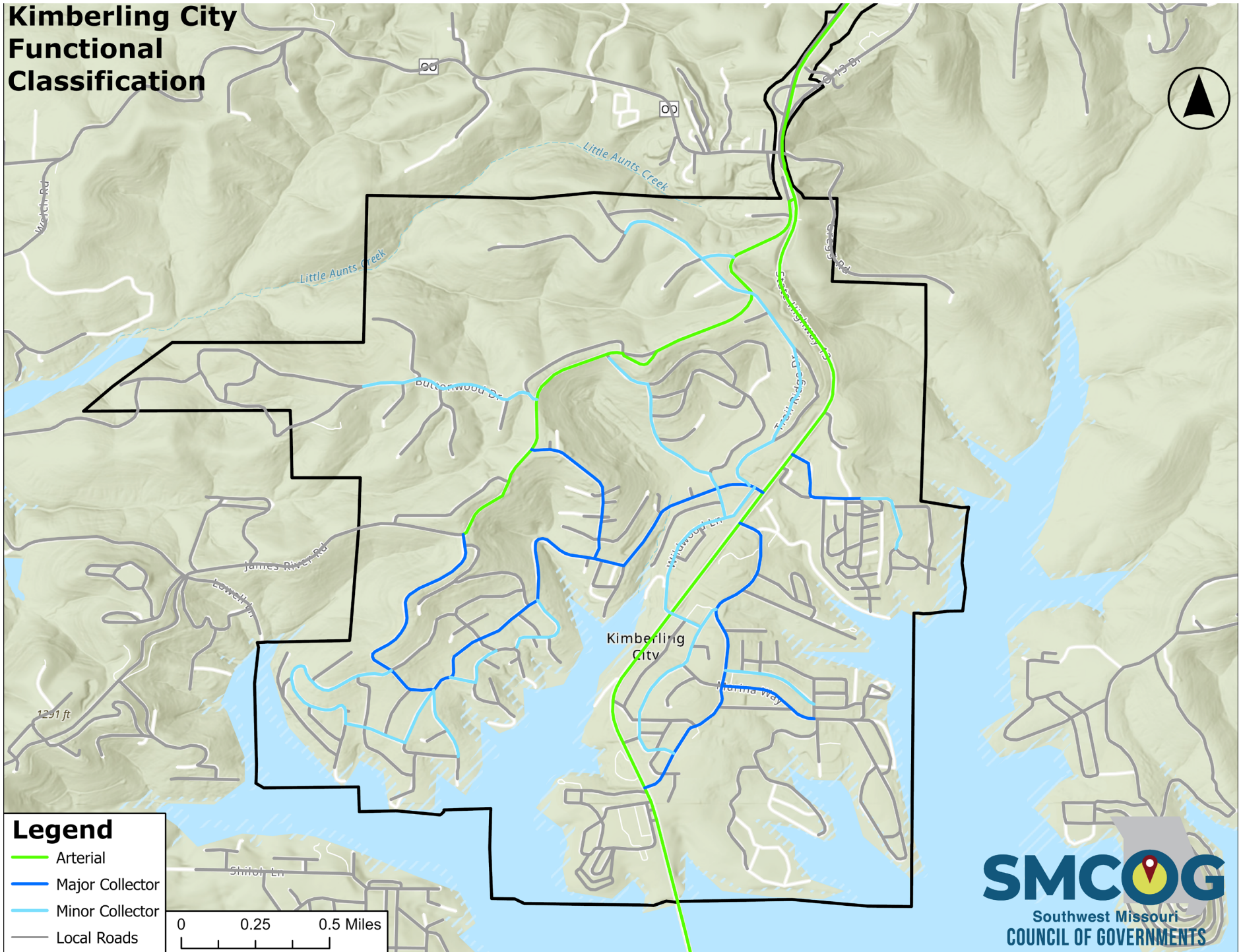
development of the city. This is a two-lane major traffic road connecting all parts of Kimberling City. Due to this there is a high density of traffic with an AADT of 8,999. James River Road is the next high-capacity road, moving traffic to the western side of the city and has an AADT of 5,226.

Functional Classifications

Functional classifications are the typology by which roadways are categorized according to a variety of characteristics, such as the Average Annual Daily Traffic (AADT), road width, concentration of access points for adjacent properties, among others. There are three classifications relevant to Kimberling City based on guidelines provided by the U.S. Department of Transportation.

- 1. Minor Arterial:** The main purpose of a minor arterial is to connect to major arterials and otherwise act as a main thoroughfare. As a result, minor arterials typically have higher speed limits and prioritize through movement. However, there may still be many access points along a minor arterial. Minor arterials typically have AADT values higher than collectors and local roads, at around 1,500-6,000.
- 2. Collector:** Collectors are intended to be an intermediary, “collecting” local traffic and funneling it towards arterial roads. Furthermore, collectors can help to circulate traffic within a local neighborhood, rather than routing it along local roads. Collectors can be expected to have higher AADT values than local roads, yet still less than that of minor arterials.
- 3. Local Roads:** Local roads provide direct access to properties and connect residential areas to higher classification roadways. These typically intersect with numerous other roadways and are lined with access points, such as driveways and crosswalks. Speed limits are often lower due to the high frequency of intersections and access points. Local roads generally have the lowest AADT volumes of any classification type, yet account for the largest percentage of total roadways in terms of mileage driven.

Kimberling City Functional Classification



Pedestrian and bicycle facilities are most appropriate for minor arterial, collector, and local roads, as the increased speeds and higher traffic volumes on major arterial roads pose significant safety risks for pedestrian and cyclists.

Traffic Signals

Kimberling City has approximately 3 traffic signals within city limits, all of which are located at the intersection of State Highway 13 and local collector roads. Although limited in number, traffic signals are an important part of any community's transportation infrastructure, as they allow for increased safety at intersections, and are the primary location for pedestrian crossings. Having a high frequency of safe pedestrian crossings is necessary to ensure residents can cross heavily travelled corridors. Currently, none of Kimberling City's traffic signals have dedicated pedestrian crossings or infrastructure.

Speed Limits

In addition to traffic signals and pedestrian crossings, imposing safe and adequate



speed limits on roadways is a crucial aspect of transportation planning. Speed limits should be placed in relation to the frequency of vehicles and access points along the street, with the former often encouraging higher speed limits and the latter lower limits. Higher speed limits also discourage pedestrian and cycling traffic and should be concentrated along key corridors with dedicated pedestrian infrastructure, such as wide sidewalks and crosswalks.

Crosswalks

Crosswalks are an essential element of a city's pedestrian infrastructure, as they allow for the safe crossing of busy streets for pedestrians and cyclists. There are currently no officially marked crosswalks in Kimberling City, despite there being an expressed need for crosswalks at multiple intersections, most notably at MO-13's intersections with Kimberling Boulevard, Lakeshore Drive, and in the vicinity of the Buttonwood Shopping Center.



7 ACTION PLAN

Decision-Making Process

A decision-making process was developed for the Kimberling City Active Transportation Plan, to help the city determine higher priority active transportation needs to pursue. For each need, a goals analysis was completed based on community priorities identified through the community survey and committee meetings, and risk analysis was completed to assess the ease of implementation. Each listed need includes a matrix table that outlines these two analysis processes to guide the city to determine the best course of action when prioritizing active transportation projects. An overview of the methodology on which projects were analyzed is shown below.

Goal Analysis

Community goals were identified through the results of the community survey and confirmed using input from the TPC. The four goals listed below provide a foundation for decision-making to maintain and improve the active transportation system for the City of Kimberling City.

- **Safety:** Promotes safety and security for all users of the transportation network.
- **Health:** Improves the health of users by encouraging physical activity such as walking and cycling.
- **Economic Impact:** Encourages economic growth by providing transportation infrastructure that ensures job accessibility and access to opportunities and provides connectivity to commercial areas.
- **Mobility and Convenience:** Supports an efficient transportation system that provides access to necessary locations in a timely and accessible manner.

Risk Analysis

It is important to assess the ease of implementation for each need. Although all these needs are feasible, some can be implemented more easily than others for a

variety of reasons. As such, the following should be considered when determining the feasibility of, and risks associated with, a project.

- **Right-of-Way:** Right-of-Way is a type of easement granted for transportation purposes. The process of obtaining right-of-way may involve numerous organizations and interested parties. The costs and time required to obtain right-of-way vary and can be influenced by factors such as laws and regulations, relationships between property owners and the city, and the individual characteristics of the plan and the parcel in question.
- **Financing Partnerships:** Depending on the project type and location, there are a variety of potential funding and financing options that are available through federal and state programs and grants. The lack of available funding options may impact the city's financial ability to complete a project.
- **Phasing Options:** Many projects can be implemented over time to align with the city's financial capacity. However, the construction methods or design may limit the city's phasing options.
- **Permitting:** To initiate certain projects, the city may be required to complete environmental studies and apply for certain permits. The length of time involved in this permitting process may impact the overall timeline and costs associated with a project.

Decision-Making Matrix

A matrix table was created to evaluate each need brought forward by the community survey and the Transportation Planning Committee (TPC) to assess how well they meet community goals while considering possible risks for each transportation need. Each need is scored using a filled circle, half-filled circle, or empty circle. For goal analysis, a filled circle represents meets goal, a half-filled circle represents partially meets goal, and an empty circle represents does not meet goal. For risk analysis, a filled circle represents no risk, a half-filled circle represents minor risk, and an empty circle represents major risk. While a need may

meet multiple goals, the risks might make solutions more difficult to implement. Awareness of the risks allows the city to make an informed decision to obtain the best value for their investment.

Needs should be reevaluated over time, as some needs which may be considered

a risk now, due to a lack of financial partnerships or issues with permitting, may change with time as more financing options open and policies change. This table provides a basic metric with which to evaluate needs and is subject to change as the city continues to grow and evolve. Additional comments on reasonings for scores are provided when necessary. An example of a matrix table is provided below.

Example Project		
Safety	●	History of accidents in this corridor.
Health	●	Improves health of the community.
Economic Impact	●	Provide access to jobs, activity centers, and commercial area.
Mobility and Convenience	●	Provides safe and cheap alternative mode of transportation.
Right-Of-Way/Easements	○	City does not have ROW.
Financing Partnerships	◐	Grants are available.
Phasing Options	●	Can be implemented over time.
Permitting	●	Does not require any permits.

Goal Analysis	
○	Does not meets goal
◐	Partially meets goal
●	Meets goal

Risk Analysis	
○	Major risk
◐	Minor Risk
●	No risk



Pedestrian Needs Assessments

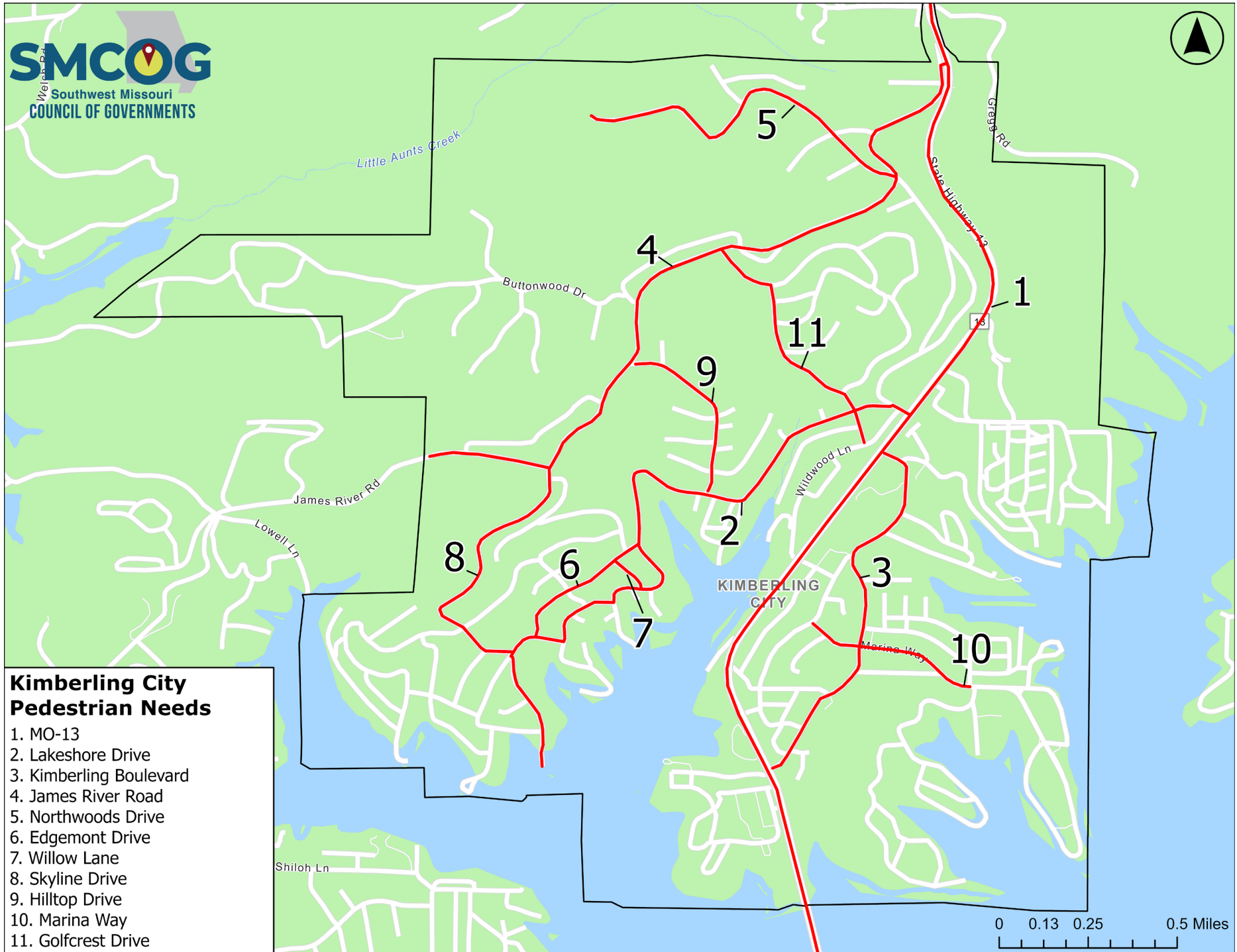
The following areas are high-priority pedestrian needs based on the community survey and needs assessment meeting held with the TPC. Below is a matrix which

outlines the top eleven locations of pedestrian needs. An explanation of each location's needs, as well as descriptions of their physical status, goals analysis, and risk analysis, is included with each matrix.

Pedestrian Needs									
	Needs	Goal Analysis				Risk Analysis			
		Safety	Health	Economic Impact	Mobility and Convenience	Right-Of-Way/ Easements	Financing Partnerships	Phasing Options	Permitting
1	MO 13	●	●	●	●	○	●	●	○
2	Lakeshore Drive	●	●	◐	●	○	●	●	◐
3	Kimberling Boulevard	●	●	●	●	○	●	●	◐
4	James River Road	●	●	○	●	○	●	●	◐
5	Northwoods Drive	○	●	○	●	○	●	●	◐
6	Edgemont Drive	○	●	○	●	○	●	●	◐
7	Willow Lane	○	●	○	●	○	●	◐	◐
8	Skyline Drive	○	●	○	●	○	●	●	◐
9	Hilltop Drive	○	●	○	●	○	●	●	◐
10	Marina Way	●	●	●	●	○	●	●	◐
11	Golfcrest Drive	○	●	◐	●	○	●	●	◐

Goal Analysis	
○	Does not meets goal
◐	Partially meets goal
●	Meets goal

Risk Analysis	
○	Major risk
◐	Minor Risk
●	No risk



**Kimberling City
 Pedestrian Needs**

- 1. MO-13
- 2. Lakeshore Drive
- 3. Kimberling Boulevard
- 4. James River Road
- 5. Northwoods Drive
- 6. Edgemont Drive
- 7. Willow Lane
- 8. Skyline Drive
- 9. Hilltop Drive
- 10. Marina Way
- 11. Golfcrest Drive



MO-13

MO-13 is a two-lane minor arterial road under the jurisdiction of MoDOT which facilitates most of the north-south travel through Kimberling City. MO-13 provides rapid through movement between Branson West to the north and Lampe and Blue Eye to the south. MO-13 also provides access to all of Kimberling City’s collectors and local roads, including Lakeshore Drive, Kimberling Boulevard, and James River Road. The posted speed limit is 30-45 MPH. The lack of sidewalks along the entire length of MO-13 within Kimberling City makes pedestrian travel unsafe and undesirable, as pedestrians are forced to either walk along the shoulder or in the grass. In many spots, particularly between Lakewood Drive and Kimberling Boulevard, the roadway is so narrow and the slope so steep along the sides of MO-13 that walking is impossible. Therefore, road widening would need to take place to allow for the development of sidewalks and shoulders. MO-13 also lacks crosswalks at any of the many intersections with Kimberling City’s collector and local roads, making pedestrian movement across MO-13 dangerous. Improvements to MO-13 will require cooperation between the city and MoDOT to ensure that changes meet the goals and priorities of both organizations.



MO 13		
Safety	●	The addition of sidewalks and crosswalks would lower the risk of pedestrian and vehicle interaction and would provide safe crossings for pedestrians.
Health	●	Encourages people to be physically active by enabling them to walk to their destinations.
Economic Impact	●	Provide direct access to a dense commercial corridor.
Mobility and Convenience	●	Provides safe and cheap alternative mode of transportation.
Right-Of-Way/Easements	○	MoDOT has ROW.
Financing Partnerships	●	Many funding sources are available for alternative modes of transportation.
Phasing Options	●	The project can be phased.
Permitting	○	There will be issues acquiring permits.

Lakeshore Drive

Lakeshore Drive is a two-lane collector road under the jurisdiction of Kimberling City which facilitates most residential traffic within the western half of Kimberling City. Beginning at the southwest section of the city, Lakeshore Drive meanders north, intersecting with many smaller local roads until it intersects MO-13 near the center of Kimberling City. The posted speed limit is 25 MPH. Despite the adjacent properties being primarily residential, there are currently no sidewalks along Lakeshore Drive. This is a safety concern, as there are reportedly many children who walk on the roadway due to the lack of sidewalks. Furthermore, the presence of many rental units in proximity to Lakeshore Drive is increasing the density of pedestrians in the area. Therefore, a priority for the city should be the addition of sidewalks along this corridor to encourage pedestrian movement between the residential sections of Kimberling City and the commercial corridor centered around MO-13.



Lakeshore Drive		
Safety	●	The addition of sidewalks would lower the risk of pedestrian and vehicle interaction.
Health	●	Encourages people to be physically active by enabling them to walk to their destinations.
Economic Impact	◐	Does not provide direct access to commercial area.
Mobility and Convenience	●	Provides safe and cheap alternative mode of transportation.
Right-Of-Way/Easements	○	City does not have ROW.
Financing Partnerships	●	Many funding sources are available for alternative modes of transportation.
Phasing Options	●	The project can be phased.
Permitting	◐	There might be issues with acquiring permits.

Kimberling Boulevard

Kimberling Boulevard is a two-lane local road under the jurisdiction of Kimberling City which facilitates movement for many residents in the eastern part of the city and provides access to Kimberling City’s municipal facilities. Kimberling Boulevard also links MO-13 to Marina Way, where the Port of Kimberling is located. The posted speed limit is 25 MPH. Kimberling Boulevard currently lacks sidewalks and has narrow or non-existent shoulders, which forces pedestrians to walk along the roadway itself, and is risky for both pedestrians and drivers. Implementing sidewalks along Kimberling Boulevard would increase the safety of pedestrian movement in the eastern half of the city and improve the ease of access to municipal facilities and the Port of Kimberling.



Kimberling Boulevard		
Safety	●	The addition of sidewalks would lower the risk of pedestrian and vehicle interaction.
Health	●	Encourages people to be physically active by enabling them to walk to their destinations.
Economic Impact	●	Provide direct access to a dense commercial area.
Mobility and Convenience	●	Provides safe and cheap alternative mode of transportation.
Right-Of-Way/Easements	○	City does not have ROW.
Financing Partnerships	●	Many funding sources are available for alternative modes of transportation.
Phasing Options	●	The project can be phased.
Permitting	◐	There might be issues with acquiring permits.

James River Road

James River Road is a two-lane minor arterial road under the jurisdiction of Kimberling City which provides primarily east-west movement for residents in the northwest corner of the city. James River Road is also the sole connection to MO-13 for all residents who live west of Kimberling City on the waterfront of Table Rock Lake. The posted speed limit is 30 MPH. Sidewalks are currently non-existent along James River Road, which, due to the lack of a shoulder along the roadway, forces pedestrians to walk on the street. James River Road is a major thoroughfare and connector between all of Kimberling City’s eastern neighborhoods and MO-13, so improvements to the safety, health, and economic opportunity of the city’s residents can be expected following the addition of new sidewalks and crosswalk, especially at Midview Road, to this area.



James River Road		
Safety	●	The addition of sidewalks would lower the risk of pedestrian and vehicle interaction.
Health	●	Encourages people to be physically active by enabling them to walk to their destinations.
Economic Impact	○	Does not provide direct access to a commercial area.
Mobility and Convenience	●	Provides safe and cheap alternative mode of transportation.
Right-Of-Way/Easements	○	City does not have ROW.
Financing Partnerships	●	Many funding sources are available for alternative modes of transportation.
Phasing Options	●	The project can be phased.
Permitting	◐	There might be issues with acquiring permits.

Northwoods Drive

Northwoods Drive is a two-lane local road under the jurisdiction of Kimberling City which connects a small neighborhood in the northern part of Kimberling City to James River Road. The posted speed limit is 25 MPH. This neighborhood reportedly has many pedestrians and cyclists, doing so for leisure or exercise. Despite this, there are no sidewalks anywhere along Northwoods Drive, or its subsidiary roadways. New sidewalks would connect the Northwoods neighborhood to James River Road and MO-13, both of which are also recommended for sidewalk improvements.



Northwoods Drive		
Safety	○	The addition of sidewalks would lower the risk of pedestrian and vehicle interaction. There is no history of accidents or high traffic.
Health	●	Encourages people to be physically active by enabling them to walk to their destinations.
Economic Impact	○	Does not provide direct access to a commercial area.
Mobility and Convenience	●	Provides safe and cheap alternative mode of transportation.
Right-Of-Way/Easements	○	City does not have ROW.
Financing Partnerships	●	Many funding sources are available for alternative modes of transportation.
Phasing Options	●	The project can be phased.
Permitting	◐	There might be issues with acquiring permits.

Edgemont Drive

Edgemont Drive is a short, two-lane local road under the jurisdiction of Kimberling City which intersects multiple residential roads, as well as Lakeshore Drive. The posted speed limit is 25 MPH. Edgemont Drive currently lacks any sidewalks and lacks shoulders, which forces pedestrians to walk along the road, putting themselves and others at risk. The city should consider adding sidewalks to Edgemont Drive, as it would help to connect and expand the future pedestrian network, should Lakeshore Drive also receive similar improvements.



Edgemont Drive		
Safety	○	The addition of sidewalks would lower the risk of pedestrian and vehicle interaction. There is no history of accidents or high traffic.
Health	●	Encourages people to be physically active by enabling them to walk to their destinations.
Economic Impact	○	Does not provide direct access to a commercial area.
Mobility and Convenience	●	Provides safe and cheap alternative mode of transportation.
Right-Of-Way/Easements	○	City does not have ROW.
Financing Partnerships	●	Many funding sources are available for alternative modes of transportation.
Phasing Options	●	The project can be phased.
Permitting	◐	There might be issues with acquiring permits.

Willow Lane

Willow Lane is a very short, two-lane local road under the jurisdiction of Kimberling City which connects Edgemont Drive to Lakeshore Drive. The posted speed limit is 25 MPH. There are currently no sidewalks along Willow Lane, forcing pedestrians to walk along the road, putting themselves and others at risk. The implementation of sidewalks on Willow Lane would improve the safety of pedestrians and further connect the area's pedestrian network.



Willow Lane		
Safety	<input type="radio"/>	The addition of sidewalks would lower the risk of pedestrian and vehicle interaction. There is no history of accidents or high traffic.
Health	<input checked="" type="radio"/>	Encourages people to be physically active by enabling them to walk to their destinations.
Economic Impact	<input type="radio"/>	Does not provide direct access to a commercial area.
Mobility and Convenience	<input checked="" type="radio"/>	Provides safe and cheap alternative mode of transportation.
Right-Of-Way/Easements	<input type="radio"/>	City does not have ROW.
Financing Partnerships	<input checked="" type="radio"/>	Many funding sources are available for alternative modes of transportation.
Phasing Options	<input checked="" type="radio"/>	The project does not need to be phased.
Permitting	<input checked="" type="radio"/>	There might be issues with acquiring permits.

Skyline Drive

Skyline Drive is a two-lane local road under the jurisdiction of Kimberling City which serves as a primary connection between James River Road and Lakeshore Drive. The posted speed limit is 25 MPH. There are currently no sidewalks along Skyline Drive, which forces pedestrians to walk along the road, putting themselves and others at risk. The addition of sidewalks along Hilltop Drive would help improve safety in the area and further connect households along James River Road and its subsidiary roadways to Lakeshore Drive and the commercial corridor along MO-13.



Skyline Drive		
Safety	○	The addition of sidewalks would lower the risk of pedestrian and vehicle interaction. There is no history of accidents or high traffic.
Health	●	Encourages people to be physically active by enabling them to walk to their destinations.
Economic Impact	○	Does not provide direct access to a commercial area.
Mobility and Convenience	●	Provides safe and cheap alternative mode of transportation.
Right-Of-Way/Easements	○	City does not have ROW.
Financing Partnerships	●	Many funding sources are available for alternative modes of transportation.
Phasing Options	●	The project can be phased.
Permitting	◐	There might be issues with acquiring permits.

Hilltop Drive

Hilltop Drive is a two-lane local road under the jurisdiction of Kimberling City that serves as a connection between James River Road and Lakeshore Drive. The posted speed limit is 25 MPH. There are currently no sidewalks along Hilltop Drive, which forces pedestrians to walk along the road, putting themselves and others at risk. The addition of sidewalks along Hilltop Drive would help improve safety in the area and further connect households along James River Road and its subsidiary roadways to Lakeshore Drive and the commercial corridor along MO-13.



Hilltop Drive		
Safety	○	The addition of sidewalks would lower the risk of pedestrian and vehicle interaction. There is no history of accidents or high traffic.
Health	●	Encourages people to be physically active by enabling them to walk to their destinations.
Economic Impact	○	Does not provide direct access to a commercial area.
Mobility and Convenience	●	Provides safe and cheap alternative mode of transportation.
Right-Of-Way/Easements	○	City does not have ROW.
Financing Partnerships	●	Many funding sources are available for alternative modes of transportation.
Phasing Options	●	The project can be phased.
Permitting	◐	There might be issues with acquiring permits.

Marina Way

Marina Way is a two-lane local road under the jurisdiction of Kimberling City which connects Kimberling Boulevard to the Port of Kimberling, and the many marinas, resorts, and tourist-related properties located along the eastern lakefront. The posted speed limit is 25 MPH. There are currently no sidewalks along Marina Way, which forces pedestrians to walk along the road, putting themselves and others at risk. The addition of sidewalks along Marina Way would help improve safety in the area and provide easier access between Kimberling City’s commercial corridor along MO-13 and the marinas by expanding the city’s overall pedestrian network.



Marina Way		
Safety	●	The addition of sidewalks would lower the risk of pedestrian and vehicle interaction.
Health	●	Encourages people to be physically active by enabling them to walk to their destinations.
Economic Impact	●	Provide direct access to a commercial area.
Mobility and Convenience	●	Provides safe and cheap alternative mode of transportation.
Right-Of-Way/Easements	○	City does not have ROW.
Financing Partnerships	●	Many funding sources are available for alternative modes of transportation.
Phasing Options	●	The project can be phased.
Permitting	◐	There might be issues with acquiring permits.

Golfcrest Drive

Golfcrest Drive is a two-lane local road under the jurisdiction of Kimberling City which connects James River Road and Lakeshore Drive and provides north-south access between neighborhoods on the western side of the city. The posted speed limit is 25 MPH. There are currently no sidewalks along Golfcrest Drive, which forces pedestrians to walk along the road, putting themselves and others at risk. The addition of sidewalks along Golfcrest Drive would help improve safety in the area and further connect households along James River Road and its subsidiary roadways to Lakeshore Drive and the commercial corridor along MO-13.



Golfcrest Drive		
Safety	○	The addition of sidewalks would lower the risk of pedestrian and vehicle interaction. There is no history of accidents or high traffic.
Health	●	Encourages people to be physically active by enabling them to walk to their destinations.
Economic Impact	◐	Does not provide direct access to a commercial area.
Mobility and Convenience	●	Provides safe and cheap alternative mode of transportation.
Right-Of-Way/Easements	○	City does not have ROW.
Financing Partnerships	●	Many funding sources are available for alternative modes of transportation.
Phasing Options	●	The project can be phased.
Permitting	◐	There might be issues with acquiring permits.

Bike Needs Assessments

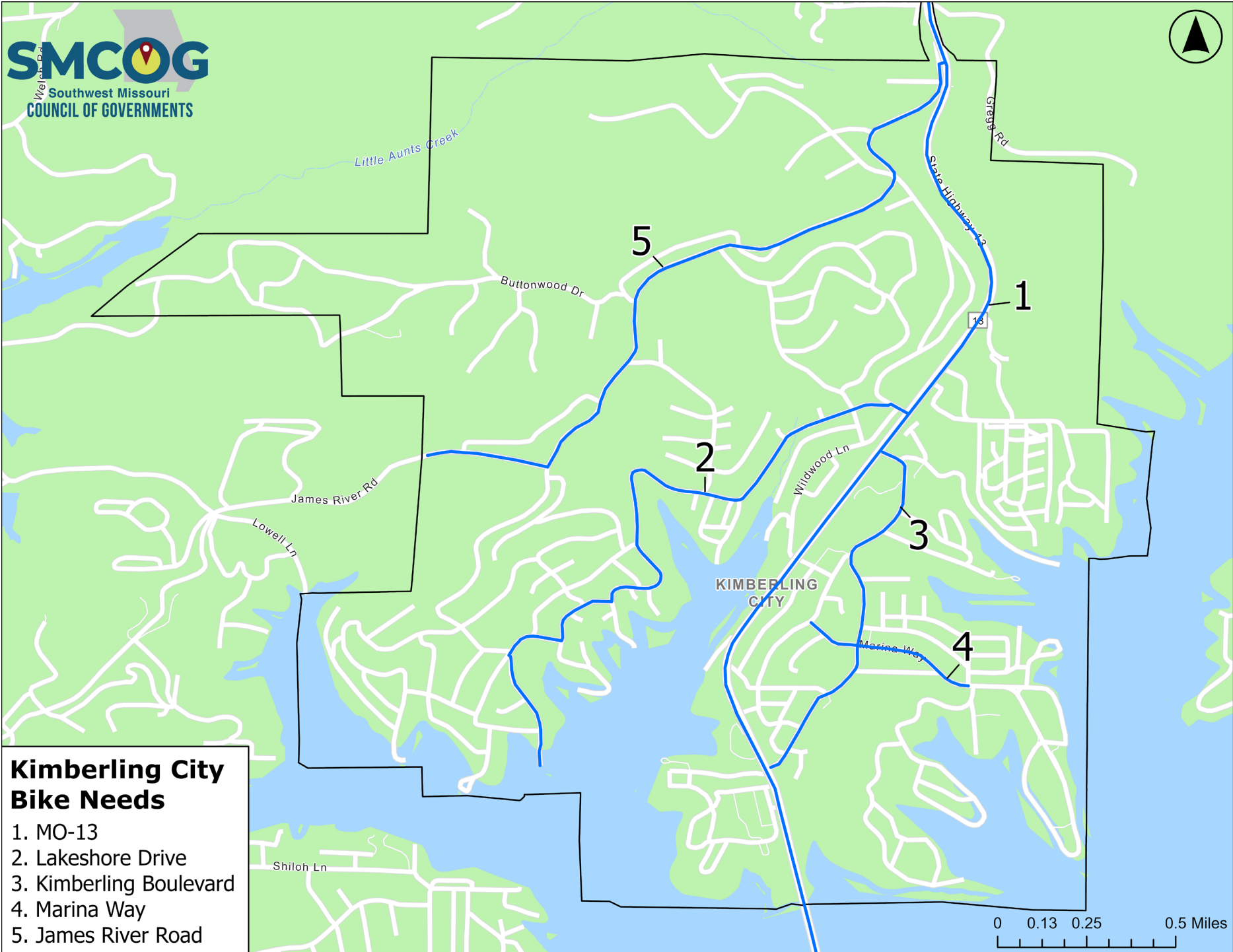
The following areas are high-priority bike needs based on the community survey and needs assessment meeting held with the TPC. Below is a matrix which outlines the top five locations of bike needs. An explanation of each location's needs, as well as descriptions of their physical status, goals analysis, and risk analysis, is included with each matrix.

Bike Needs									
	Needs	Goal Analysis				Risk Analysis			
		Safety	Health	Economic Impact	Mobility and Convenience	Right-Of-Way/ Easements	Financing Partnerships	Phasing Options	Permitting
1	MO 13	●	●	●	●	○	●	●	○
2	Lakeshore Drive	●	●	◐	●	○	●	●	◐
3	Kimberling Boulevard	●	●	●	●	○	●	●	◐
4	James River Road	●	●	○	●	○	●	●	◐
5	Marina Way	●	●	●	●	○	●	●	◐

Goal Analysis	
○	Does not meet goal
◐	Partially meets goal
●	Meets goal

Risk Analysis	
○	Major risk
◐	Minor Risk
●	No risk





**Kimberling City
Bike Needs**

- 1. MO-13
- 2. Lakeshore Drive
- 3. Kimberling Boulevard
- 4. Marina Way
- 5. James River Road

MO-13

MO-13 is a two-lane minor arterial road under the jurisdiction of MoDOT which facilitates most of the north-south travel through Kimberling City. MO-13 provides rapid through movement between Branson West to the north and Lampe and Blue Eye to the south. MO-13 also provides access to all of Kimberling City’s collectors and local roads, including Lakeshore Drive, Kimberling Boulevard, and James River Road. The posted speed limit is 30-45 MPH. MO-13 currently lacks bikes lanes, crosswalks, or any other form of cyclist infrastructure. This makes cycling along or across MO-13 dangerous and is likely to discourage most residents from attempting it. This is especially true for the length of MO-13 between Lakewood Drive and Kimberling Boulevard, where the roadway is so narrow and the slope so steep along the sides of MO-13 that any cyclists would be forced onto the road itself. Implementing off-street bike lanes and adding controlled crosswalks at major intersections would provide improved safety and access for cyclists in Kimberling City and allow for easier movement between the neighborhoods and the commercial corridor along MO-13. Improvements to MO-13 will require

cooperation between the city and MoDOT to ensure that changes meet the goals and priorities of both organizations.



MO 13		
Safety	●	The addition of sidewalks and crosswalks would lower the risk of pedestrian and vehicle interaction and would provide safe crossings for pedestrians.
Health	●	Encourages people to be physically active by enabling them to walk to their destinations.
Economic Impact	●	Provide direct access to a dense commercial corridor.
Mobility and Convenience	●	Provides safe and cheap alternative mode of transportation.
Right-Of-Way/Easements	○	MoDOT has ROW.
Financing Partnerships	●	Many funding sources are available for alternative modes of transportation.
Phasing Options	●	The project can be phased.
Permitting	○	There will be issues acquiring permits.

Lakeshore Drive

Lakeshore Drive is a two-lane collector road under the jurisdiction of Kimberling City which facilitates most residential traffic within the western half of Kimberling City. Beginning at the southwest section of the city, Lakeshore Drive meanders north, intersecting with many smaller local roads until it intersects MO-13 near the center of Kimberling City. The posted speed limit is 25 MPH. Lakeshore Drive currently lacks bike lanes or shoulders, making it unsafe and unsuitable for cyclists. Without dedicated bike lanes, cyclists are forced to share the roadway with drivers, who can be difficult to see on many of Lakeshore Drive’s curves and bends. Implementing bike lanes would reduce the likelihood of an accident between drivers and cyclists and would help encourage movement between Kimberling City’s neighborhoods and the commercial corridor along MO-13 using alternative modes of transportation.



Lakeshore Drive		
Safety	●	The addition of sidewalks would lower the risk of pedestrian and vehicle interaction.
Health	●	Encourages people to be physically active by enabling them to walk to their destinations.
Economic Impact	◐	Does not provide direct access to commercial area.
Mobility and Convenience	●	Provides safe and cheap alternative mode of transportation.
Right-Of-Way/Easements	○	City does not have ROW.
Financing Partnerships	●	Many funding sources are available for alternative modes of transportation.
Phasing Options	●	The project can be phased.
Permitting	◐	There might be issues with acquiring permits.

Kimberling Boulevard

Kimberling Boulevard is a two-lane local road under the jurisdiction of Kimberling City which facilitates movement for many residents in the eastern part of the city, as well as provides access to Kimberling City’s municipal facilities. Kimberling Boulevard also links MO-13 to Marina Way, where the Port of Kimberling is located. The posted speed limit is 25 MPH. There are currently no bike lanes along Kimberling Boulevard, and the lack of shoulders forces cyclists to share the road with drivers, increasing the likelihood of an accident. The implementation of bike lanes along Kimberling Boulevard would increase the safety of cyclists in the area and provide greater connectivity between the Port of Kimberling and the commercial corridor along MO-13.



Kimberling Boulevard		
Safety	●	The addition of sidewalks would lower the risk of pedestrian and vehicle interaction.
Health	●	Encourages people to be physically active by enabling them to walk to their destinations.
Economic Impact	●	Provide direct access to a dense commercial area.
Mobility and Convenience	●	Provides safe and cheap alternative mode of transportation.
Right-Of-Way/Easements	○	City does not have ROW.
Financing Partnerships	●	Many funding sources are available for alternative modes of transportation.
Phasing Options	●	The project can be phased.
Permitting	◐	There might be issues with acquiring permits.

Marina Way

Marina Way is a two-lane local road under the jurisdiction of Kimberling City which connects Kimberling Boulevard to the Port of Kimberling, and the many marinas, resorts, and tourist-related properties located along the eastern lakefront. The posted speed limit is 25 MPH. Marina Way currently lacks bike lanes or shoulders, forcing cyclists to either share the road with drivers or ride alongside in the grass. Implementing bike lanes along Marina Way would increase the safety of cyclists moving between the Port of Kimberling and Kimberling Boulevard. This may further encourage cycling and other alternative methods of transportation, which could be of interest to both residents and tourists.



Marina Way		
Safety	●	The addition of sidewalks would lower the risk of pedestrian and vehicle interaction.
Health	●	Encourages people to be physically active by enabling them to walk to their destinations.
Economic Impact	●	Provide direct access to a commercial area.
Mobility and Convenience	●	Provides safe and cheap alternative mode of transportation.
Right-Of-Way/Easements	○	City does not have ROW.
Financing Partnerships	●	Many funding sources are available for alternative modes of transportation.
Phasing Options	●	The project can be phased.
Permitting	◐	There might be issues with acquiring permits.

James River Road

James River Road is a two-lane minor arterial road under the jurisdiction of Kimberling City which provides primarily east-west movement for residents in the northwest corner of the city. James River Road is also the sole connection to MO-13 for all residents who live west of Kimberling City on the waterfront of Table Rock Lake. The posted speed limit is 30 MPH. There are currently no bike lanes along James River Road, and the lack of shoulders forces cyclists to share the road with drivers, or ride alongside in the grass. The narrowness and curviness of the roadway makes either option dangerous for cyclists. The implementation of bike lanes along James River Road would improve the safety of cyclists in the area and provide greater access between the neighborhoods in the western side of Kimberling City and the commercial corridor along MO-13.



James River Road		
Safety	●	The addition of sidewalks would lower the risk of pedestrian and vehicle interaction.
Health	●	Encourages people to be physically active by enabling them to walk to their destinations.
Economic Impact	○	Does not provide direct access to a commercial area.
Mobility and Convenience	●	Provides safe and cheap alternative mode of transportation.
Right-Of-Way/Easements	○	City does not have ROW.
Financing Partnerships	●	Many funding sources are available for alternative modes of transportation.
Phasing Options	●	The project can be phased.
Permitting	◐	There might be issues with acquiring permits.

8

PLAN IMPLEMENTATION

Implementation of solutions for high-priority needs will require the time and commitment of city leadership and staff, as well as the support and cooperation of the community. Projects will require additional studies, partnerships, funding, and public engagement.

Local Funding

The City of Kimberling City already has multiple revenue sources in place which can help finance potential transportation projects. The largest funding source is the city's sales tax, of which \$400,000 is allocated to the City's Road and Streets Fund, which handles expenditures involved in the maintenance of roads, sidewalks, walkways, and other similar infrastructure, as well as improvements to the City's transportation systems. The Road and Streets Fund also receives revenue from local vehicle taxes, as well as from state fuel taxes, bringing in values of \$22,000 and \$75,000 respectively. A further \$30,000 is received from the city's solid waste franchise tax, and \$13,000 comes from county sur taxes. The remaining \$500 comes from interest payments. In total, Kimberling City has dedicated \$540,500 to its Roads and Streets Fund for 2023, of which only \$377,155 is currently allocated towards expense payments, leaving \$163,345 potentially available for the implementation of transportation projects.

Potential Funding Sources

One crucial element of the Plan involves identifying viable funding options to implement solutions for the high-priority needs. Several funding sources, such as federal, state, local, foundation, and private sources, can be utilized to finance active transportation improvements. Included below is a non-comprehensive list of potential funding sources that the city may pursue. However, this information is subject to alteration since programs and criteria can evolve periodically.

Transportation Alternatives Program

The Transportation Alternatives Program (TAP) is federally funded and focuses

on the improvement of non-motorized transportation projects. Eligible projects include the construction of on-road and off-road facilities for pedestrians, and other non-motorized forms of transportation to provide them with safer routes. In addition, construction of infrastructure-related projects for students to walk and bicycle to school, sidewalk improvements, and pedestrian and bicycle crossing improvements are also eligible activities.

Safe Streets and Roads for All

This program helps to prevent roadway deaths and serious injuries by providing grants to fund various regional, local, and Tribal initiatives. Projects eligible for this program include the development or update of a comprehensive safety action plan, conduct planning, design and development of activities that will support the action plan, and carry out the strategies identified in the plan.

Rebuilding American Infrastructure with Sustainability and Equity (RAISE)

The Rebuilding American Infrastructure with Sustainability and Equity provides state and local governments with funding to support multimodal and multi-jurisdictional projects. These funds can be provided directly to different public entities like counties, municipalities, port authorities, tribal governments, and many others. This program uses a merit-based process in the selection of the projects that led to the achievement of national objectives. Eligible projects include roads, bridges, rail, transit, ports, and intermodal transportation.

Traffic Engineering Assistance Program (TEAP)

This program provides different local public agencies (LPAs) with engineering assistance to study traffic engineering problems. The different traffic studies provide solutions to engineering problems as well as funding. Examples of engineering-related projects include speed limit review, sign inventory, pedestrian/ bike route analysis, parking issues, and other related traffic studies.



Recreational Trails Program (RTP)

The Recreational Trails Program funds local and state governments, nonprofit organizations, and school districts for projects that aim toward the development and improvement of recreational trails. These projects include the restoration of existing recreational trails, assessment of trail conditions for accessibility and maintenance, construction of new recreational trails, and acquisition of easements and property for recreational trails or recreational corridors.

Land and Water Conservation Fund (LWCF)

The Land and Water Conservation Fund provides a 50 percent match on a variety of projects up to a maximum of \$500,000 per project and is open to any local government, city and county, and public school. Eligible projects include



playgrounds, pools and water parks, camping facilities, picnic areas, trails, golf courses, and more. Guidelines on grant requests can be found on the Missouri State Parks Website.

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

This program provides funding to state and local governments for surface transportation projects that contribute towards the requirements of the Clean Air Act such as reducing congestion and improving air quality. Funding is provided as a lump sum amount to the state and divided among the various transportation programs. Eligible projects include shared micro-mobility such as bike sharing and shared scooter systems. In addition to the purchase of diesel replacements or heavy-duty zero-emission vehicles and similar charging equipment, this program also provides operating assistance for transit systems in certain areas.

Highway Safety Improvement Program (HSIP)

The Highway Safety Improvement Program helps fund projects whose main objective is to reduce traffic fatalities and serious injuries on all public roads such as those on Tribal lands or owned by the state. This program focuses on improving highway safety by using data-driven and strategic approaches for better performance of public roads. Activities for this program include intersection safety improvements that provide safety for all road users, pedestrian security features designed to slow or stop motor vehicles, and roadway improvements that separate motor vehicles and bicyclists.

People For Bikes Community Grant Program

This program provides funds for communities that are promoting bike use. These funds are mainly used for the development and construction of bicycle infrastructure needs. The funding is available for non-profit organizations, cities, counties, or departments that support or focus on active transportation, bicycling, and community development.

Rivers, Trails, and Conservation Assistance Program

This program provides support for conservation and outdoor recreation projects. It provides assistance for the development or restoration of parks, conservation of areas, and outdoor recreation activities that lead to community engagement. Various community groups, tribal governments, nonprofit organizations, and local, state, and federal agencies are eligible for this grant.

Educating Residents on Active Transportation

The implementation of new sidewalk segments and bike paths is a positive first step in improving the transportation network. However, the city must go beyond this and focus on educating residents while also shifting away from the long-prevailing auto-dependent culture. As more people adopt multimodal transportation options, interactions between motorists and active transportation users will increase. Therefore, it is crucial to educate both drivers and active transportation users about best practices for safe travel.

Educating residents about the financial and physical benefits of walking and biking can further encourage active transportation usage. To achieve this, various resources can be utilized, including:

- Offering classes in schools that teach bike and pedestrian safety to children.
- Launching public education campaigns to raise awareness of safe practices for all residents.
- Installing new bike amenities, such as bike racks near businesses.
- Providing law enforcement training on bike and pedestrian laws to ensure proper enforcement.
- Implementing biking/pedestrian signage, including both wayfinding signs and signs alerting motorists to cyclist/pedestrian activity.
- Partnering with community agencies, such as the Stone County Health Department or Fordland Clinic, to educate about healthy lifestyles.

Beyond these educational efforts, the city should also consider organizing events and promoting local activities centered around active transportation. These could include cycling events, community runs/walks, and other engaging activities to encourage more residents to participate in active transportation. By combining infrastructure improvements with effective education and community engagement, the city can create a safer and more sustainable transportation network that benefits everyone.



9 APPENDICES

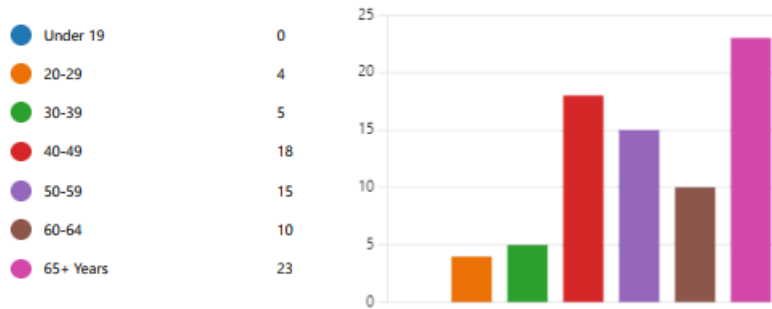
Kimberling City Active Transportation Plan Survey

75
Responses

12:17
Average time to complete

Active
Status

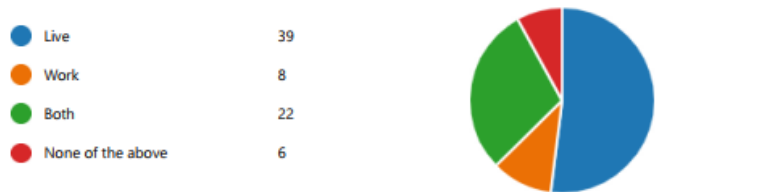
1. What is your age?



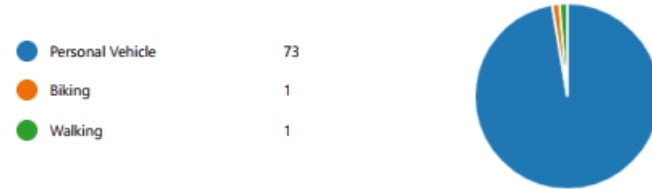
2. What is your gender?



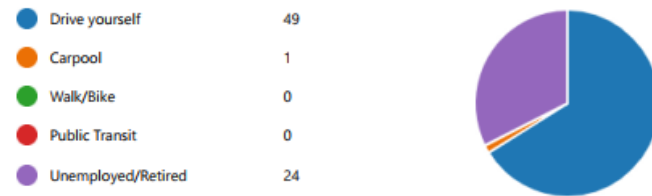
3. Do you live/work in Kimberling City?



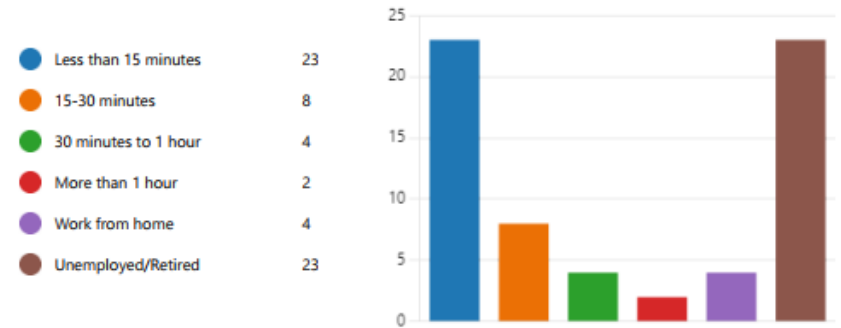
4. What is your primary mode of transportation?



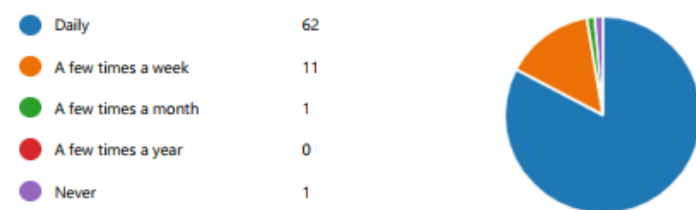
5. How do you get to work?



6. If you live and work in Kimberling City, how long does it take for you to get to work?



7. How often do you drive a car?



8. How often do you use sidewalks/trails for walking?

Daily	9
A few times a week	15
A few times a month	6
A few times a year	6
Never	39



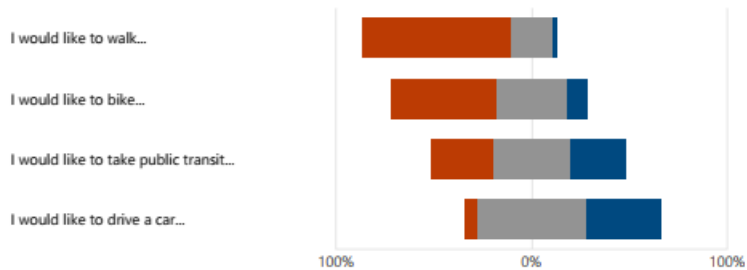
9. How often do you bike?

Daily	0
A few times a week	9
A few times a month	7
A few times a year	9
Never	50



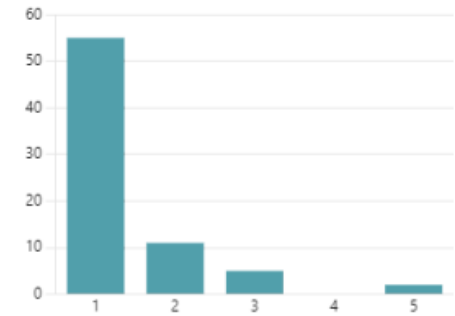
10. Are there any changes you would like to make to your transportation

More The same amount Less



11. How would you rate the walkability (how easy is it to walk around town) of Kimberling City?
(On a scale of 1 – 5, 1 = Poor and 5 = Excellent)

1.40
Average Rating



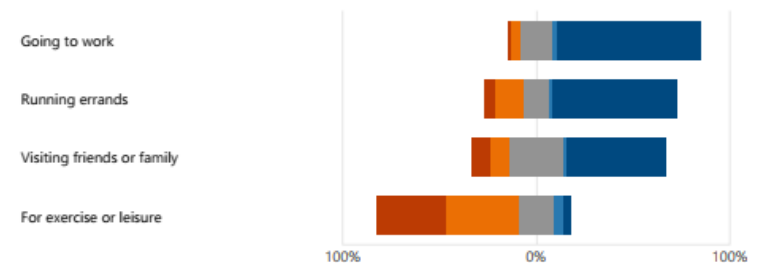
12. How far do you walk in an average week?

Less than 1 mile	13
1 to 4 miles	31
5 to 9 miles	15
10 miles or more	12
I do not walk	4

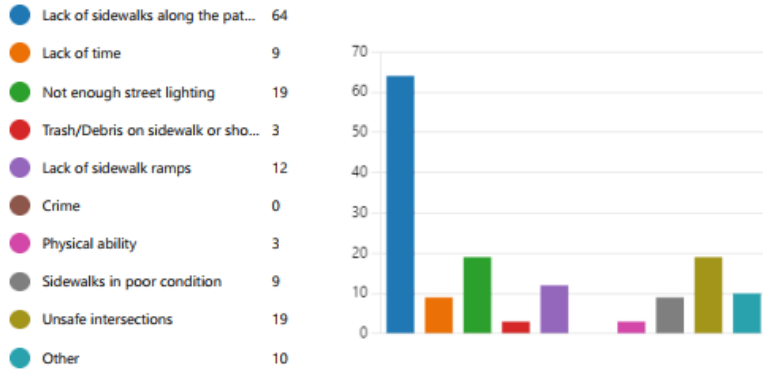


13. How often and for what purposes do you walk?

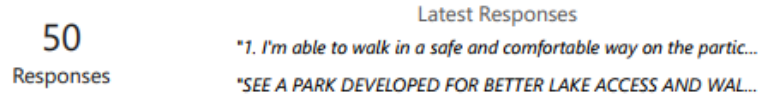
Every day Few times a week Few times a month Few times a year Never



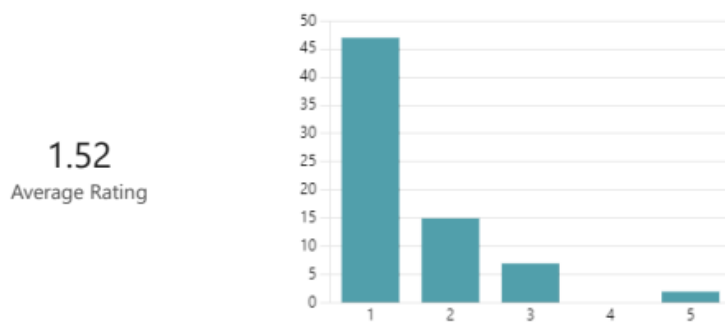
14. What prevents you from walking more in Kimberling City? (Select all that apply)



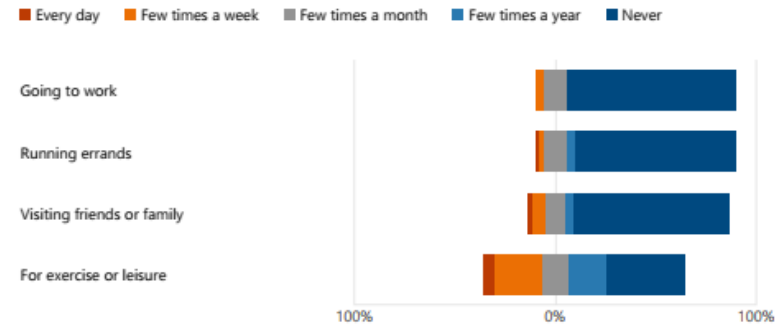
15. List up to 5 changes you would like to see to be able to walk more often. Are there any streets that are particularly difficult to walk on? Please be as detailed as possible. (Example: "improved sidewalks on xx streets" or "sidewalks to connect to parks/lake" or "crosswalk on xx intersections")



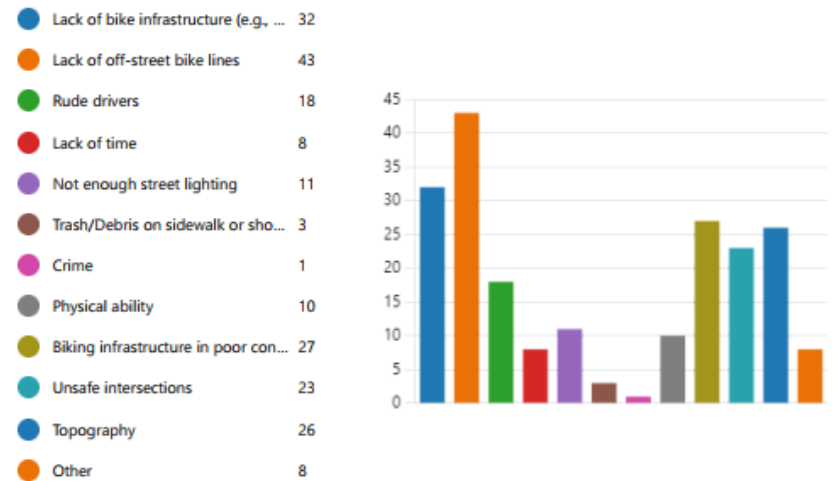
16. How would you rate the bikeability (how accessible it is for biking) of Kimberling City? (On a scale of 1 – 5, 1 = Poor and 5 = Excellent)



17. How often and for what purposes do you ride a bicycle?



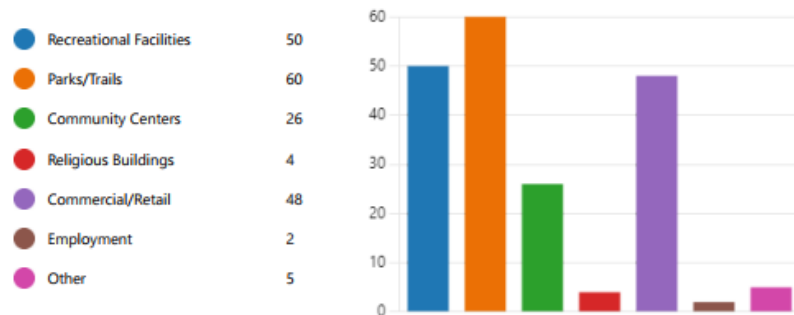
18. What prevents you from bicycling more in Kimberling City? (Select all that apply)



19. List up to 5 changes you would like to see to be able to bike more often. Are there any streets you know of which are particularly difficult to bike on? Please be as detailed as possible. (Example: "safe bike path to connect to parks/lake" or "bike parking/racks at destination")

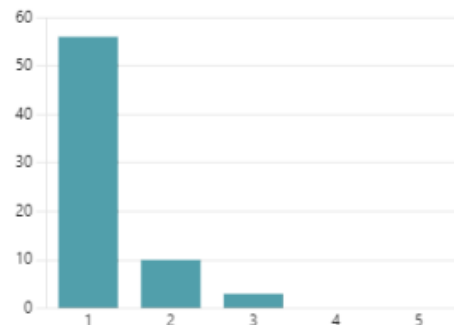


20. What are the **top three** destinations you would like to bike or walk to in Kimberling City?



21. How would you rate the condition of trails in Kimberling City? (On a scale of 1 – 5, 1 = Poor and 5 = Excellent)

1.23
Average Rating



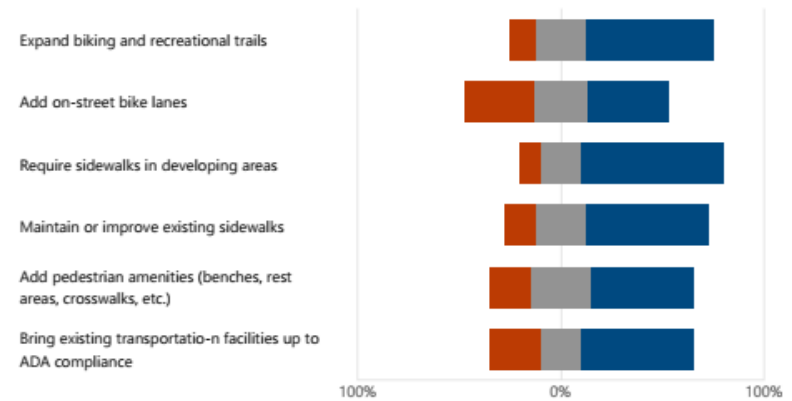
22. List up to 5 changes you would like to see that would increase your use of trails.

35
Responses

Latest Responses
"READ # 15"

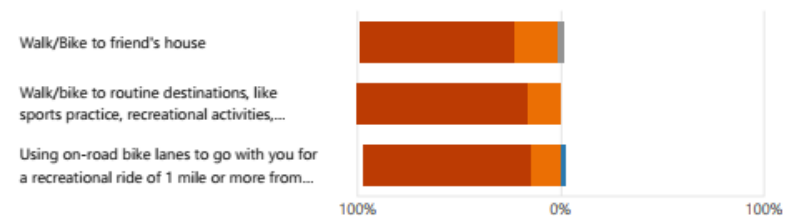
23. How high of a priority should the following improvements to transportation facilities be over the next 20 years?

Low Medium High

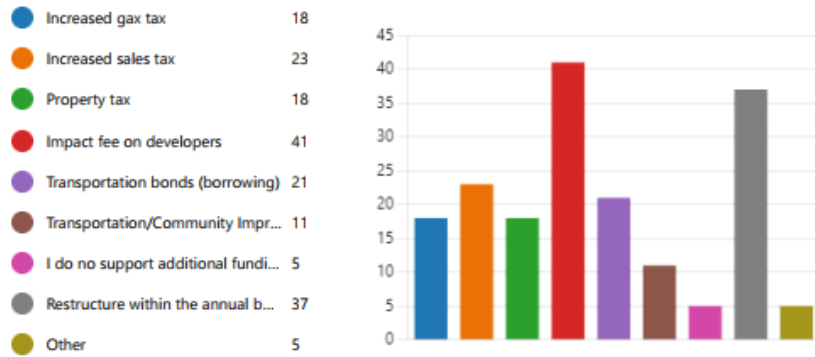


24. If you are a parent or guardian, on a scale of 1-5 (1 = least comfortable, 5 = most comfortable), what is your comfort level with allowing your child to...

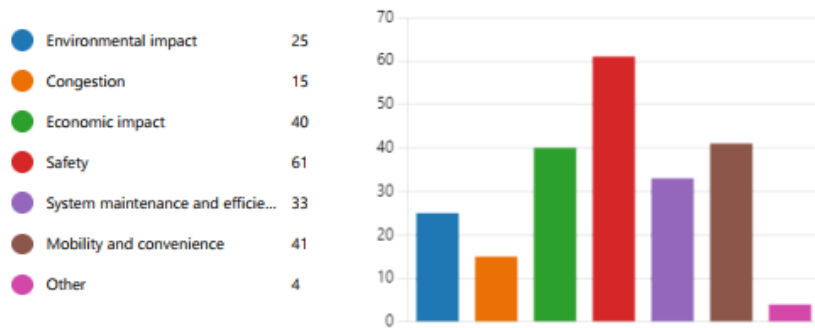
1 2 3 4 5



25. Which of the following sources would you support to fund transportation improvements? (check all that apply)



26. What are the **top three** factors the city should consider when making transportation decisions?



Appendix B: Acronyms

AADT: Average Annual Daily Traffic

ACS: American Community Survey

CMAQ: Congestion Mitigation and Air Quality Improvement Program

CNT: Center for Neighborhood Technology

HSIP: Highway Safety Improvement Program

LPA: Local Public Agencies

LWCF: Land and Water Conservation Fund

MoDOT: Missouri Department of Transportation

MPH: Mile Per Hour

RAISE: Rebuilding American Infrastructure with Sustainability and Equity

ROW: Right-of-Way

RTP: Recreational Trails Program

SMCOG: Southwest Missouri Council of Governments

TAP: Transportation Alternatives Program

TEAP: Traffic Engineering Assistance Program

TPC: Transportation Planning Committee

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