



Fort Scott, Kansas

Bicycle and Pedestrian Master Plan



PATHWAYS to a
HEALTHY
KANSAS

Produced by: PedNet Coalition

Prepared For: Fort Scott, Kansas

In Cooperation with: Healthy Bourbon County Action Team

November 2017

Table Of Contents

Chapter 1: Why Plan for Non-Motorized Transportation

Improved Health and Reduced Healthcare Costs	2
Reduced Transportation Costs	5
Boost Economic Development	5
Increase Quality of Life	6

Chapter 2: The Fort Scott Community and Methodology

The Fort Scott Community	9
History of Fort Scott	11
Methodology	13

Chapter 3: Current Facilities and Opportunities

Classification and Definition of Infrastructure	19
Infrastructure Category 1: Sidewalk	20
Infrastructure Category 2: Trails	39
Infrastructure Category 3: On-Street Facilities	60
Total Opportunities Costs	63

Chapter 4: Priority Projects

Why Prioritize Projects	65
Sidewalk Priority Projects	66
Trail Priority Projects	75
On-Street Facilities Priority Projects	79
Total Priorities Costs	86

Chapter 5: Plan Implementation

Best Practices: Sidewalks	87
Best Practices: Trails	90
Best Practices: On-Street Facilities	93
Fort Scott's Current Budget and Funding	97
Federal Funding	98
Non-Government Funding	99

Appendix

Priority Projects Map
Online Public Comment
Funding Chart

Chapter 1: Why Plan for Non-Motorized Transportation?



Why Plan for Non-Motorized Transportation?

The goal of this Fort Scott, Kansas Bicycle and Pedestrian Master Plan is to improve quality of life for all residents. While most people will recognize the need for and benefits of this type of policy, others may feel skepticism toward spending money on bicycle and pedestrian infrastructure, believing the money should be spent on other community needs. These concerns are reasonable and will be addressed in this section.

Spending money on bicycle and pedestrian facilities is a wise investment by the City of Fort Scott and the Kansas Department of Transportation (KDOT) because:

- It is the right thing to do;
- It will improve the health of Fort Scott citizens and reduce healthcare costs; and
- It can reduce the strain on local automobile infrastructure, diminishing transportation costs and congestion.
- It can boost economic development
- It can increase quality of life of residents



The City of Fort Scott and The Healthy Bourbon County Action Team have funded the development of the Fort Scott Bicycle and Pedestrian Master Plan through a grant from Blue Cross and Blue Shield of Kansas. Healthy Bourbon County Action Team’s goal is to, “engage key stakeholders in areas where our community members spend most of their time – where they eat, work & play. The focus on physical activity, healthy eating, and tobacco cessation directly affects outcomes of our identified community health needs.”

Creating opportunities for people to be more active will help the City of Fort Scott and Healthy Bourbon County Action Team reach its goal of improving the health of its citizens. However, more than that, on a fundamental level, building and maintaining bicycle and pedestrian facilities is simply the right thing to do.

Today, in most American communities, traveling by any means other than an automobile is difficult and dangerous. This is due in part to transportation policies throughout the past 60 - 70 years, which have focused on moving automobiles, rather than moving people. Bicyclists and pedestrians were marginalized, while moving vehicles from one place to the next as fast as

Creating opportunities for people to be more active will help The City of Fort Scott and Healthy Bourbon County Action Team reach its goal of improving the health of its citizens.

Chapter 1: Why Plan For Non-Motorized Transportation?

possible took precedence. Through this Bicycle and Pedestrian Master Plan, we hope to bring the focus back to moving people.

One hundred years ago, it would have been unprecedented for a government or private developer to build a street without meeting the needs of pedestrians. Today, this practice is commonplace. Unfortunately, this leaves many Kansans, who cannot drive, to negotiate the busy streets, while their transportation needs remain unmet.

Though it may be hard to imagine, a substantial portion of the population uses another means of transportation besides an automobile. Whether they are too young, cannot afford to drive, have a physical or mental disability that prevents driving, or have lost their ability to drive due to complications of aging, there are many Kansans who do not drive.

Sadly, these residents are left with few options. They must rely upon others (who are not always available) for transportation, or navigate busy, dangerous streets. Pedestrians and wheelchair users can be seen on the streets wedged between fast moving automobiles and the curb. Or, their presence is made clear by trampled grass alongside major roads.

Beyond the fundamental question of mobility, many people who currently drive would prefer to drive less. Some people are motivated by a concern for their health, the environment, the need to save money, or because they think it is fun. Whether they want to replace all of their trips or only a portion with walking and bicycling, they are more likely to do so when it is convenient and safe.



Inconsistencies in sidewalk, like the photo above, make it difficult for people to travel safely and easily.

As previously mentioned, building a bicycle and pedestrian network is simply the right thing to do. Our federal, state, and local governments are in the business of providing a transportation network for their citizens. This includes everyone: automobile drivers, pedestrians, wheelchair users, and bicyclists. All forms of transportation need to be considered when building infrastructure.

Improved Health and Reduced Healthcare Costs

The United States is facing a public health crisis caused by a population that is increasingly sedentary. Much of that sedentary behavior can be linked to the overuse of the private automobile, and it begins with children being driven to school.

In 1969, about 50 percent of American children walked or rode a bicycle to school, but by 2001 that number had dropped to just 13 percent (Safe Routes to School National Partnership, 2012).

Even worse, half of children who live within ½ of a mile (a 10-minute walk or less) are driven to school (Safe Routes to School National Partnership, 2012). Many adult residents are also making trips in their automobiles that could be made by foot or bicycle. For example, of trips that are less than one mile, over two-thirds are taken by private automobile (League of American Bicyclists, 2010). The automobile is a wonderful device that allows us travel to destinations our great-grandparents may have never thought possible, but its overuse, especially for short distances, is leading to severe health consequences.

Obesity truly has become an epidemic in the United States. As of 2015, Kansas has the seventh highest adult obesity rate in the nation, with nearly 35 percent of the adult population obese (State of Obesity, 2016). In 2012, 36.6 percent of adults in Bourbon County were obese and 32.1 percent were overweight (Community Commons, 2017). While the percentage of obese adults in Bourbon County has decreased since 2011, it is still above the Healthy People 2020 target for adults, which is 30.6 percent (Community Commons, 2017).

Obesity increases the risk for many chronic diseases such as diabetes, heart disease, hypertension, blood lipid disorders, and certain types of cancers (Centers for Disease Control, 2016). All of these obesity effects raise the already staggering cost of healthcare in the State of Kansas. In fact, in 2010, total healthcare costs to treat obesity related disease in Kansas were over \$5 billion (Health, 2012). If the obesity trends continue unabated, the costs could be as much as \$5.6 billion, crippling the Kansas economy (Health, 2012). These figures do not even include other costs such as the loss of productivity at work by unhealthy employees. The health complications of obesity are tremendous, and the amount of preventable human suffering is heartbreaking, but there is something we can do about it.

Our sedentary lifestyle and reliance on the automobile have no doubt contributed to these healthcare costs. The Fort Scott Bicycle and Pedestrian Master Plan will design streets to make physically active transportation safe, enjoyable, affordable, and convenient, helping to address the obesity epidemic.

We are rewarded with a substantial return on investment when we build facilities that encourage and support bicycling and

The Fort Scott Bicycle and Pedestrian Master Plan will design streets to make physically active transportation safe, enjoyable, affordable, and convenient.

For every \$1.00 spent on a walking and bicycling trail, the community saves over \$3.00 in healthcare costs. – American Heart Association

walking. For example, the American Heart Association found that for every \$1.00 spent on a walking and bicycling trail, the community saves over \$3.00 in healthcare costs. Figures like these are powerful. Nonetheless, it sometimes can be hard for policymakers, like City Council members, to incorporate them into the development of city budgets. While everyone wants people to be healthy, those healthcare costs are borne by the individual, their insurance company, their employer, or the federal or state government—not usually the government entity paying to build the trails.

However, more employers are realizing the benefits and importance of a healthy community for their business. If the average citizen in Fort Scott is less healthy than the average citizen elsewhere, then employers will face increased healthcare costs and decreased productivity if they build in Fort Scott. In fact, a morbidly obese employee can cost employers over \$8,000 in medical claims, sick days, short-term disability, and workers' compensation compared to a non-obese person, who would cost just over \$4,000 (American Journal of Health Promotion, 2014). This price tag could cost a city new employment opportunities. Given these obesity statistics, and the fact that about 27 percent of Bourbon County adults are physically inactive, increasing the health of the people in Fort Scott is everyone's responsibility and should be on everyone's list of concerns.

To fully appreciate the effect an increase in bicycling and pedestrian infrastructure can have on the health of Fort Scott residents, let us imagine a resident who uses the new bicycle and pedestrian facilities to change their lifestyle.

Imagine a Fort Scott resident who lives near Fort Scott National Cemetery and works at Eugene Ware Elementary. For years, this employee has driven to work every day and never considered using their bicycle for transportation. One day, they use a new trail in town, and it rekindles the love of bicycling that they remember from their childhood. Then, on their drive to work, they begin to notice new bicycle lanes and sharrows along the street. Soon, the idea hits them that they could enjoy their new favorite recreational activity on the way to work, and they begin bicycling the 1.4 miles (2.8 miles round-trip) to work most days of the week.

This individual typically drives to work in approximately 4 minutes, but after beginning to bicycle it, the trip length increases to 9 minutes. Therefore, their new vehicle choice has added 10 minutes to their daily round-trip commute, but they

have gained 18 minutes a day of cardiovascular exercise. Thirty minutes of daily exercise will reduce their risk of heart disease, stroke, diabetes, certain types of cancer, and other ailments. In addition, it is helping them maintain a healthy weight by burning calories on their commute to and from work.

Reduced Transportation Costs

Simply put, any time a Fort Scott resident decides to walk or ride a bicycle instead of drive, it saves Fort Scott and its taxpayers money. Every time a driver in Kansas purchases a gallon of gasoline, he or she pays two types of tax: a state tax (24 cents per gallon) and a federal tax (18.4 cents per gallon). In addition to these fuel taxes, drivers also pay license and registration fees and personal property taxes on their automobiles. While these taxes have built and repaired thousands of miles of roads and bridges over the years, they do not provide enough revenue to maintain or enhance the entire road network.

Driving a car is a heavily subsidized activity. For every dollar in user fees that someone pays, society pays another dollar to operate the road system. That is because, even though the fees might seem expensive to the motorist, the cost to move and store automobiles is enormous. A nonpartisan initiative of the Pew Charitable Trust called "Subsidyscope" examined the extent to which driving an automobile is subsidized. It analyzed all user fees and all of the non-user fees that also fund roads, such as sales taxes, income taxes, and property taxes. It found user fees fund only 51 percent of road and highway costs.

Some trips are more expensive to a community than others. Trips during peak demand times (like school pick-up and drop-off) are more expensive than others that have more varied time demands on the road network. Constructing roads to meet the peak traffic demand is the principle force behind road expansion and other congestion mitigation efforts.

Allowing people to replace automobile trips with bicycle and walking trips will reduce the strain on the road network, and will result in substantial long-term savings to the taxpayers of Fort Scott.

Boost Economic Development

A walkable and bikable community has been shown to boost economic development. This can happen in a variety of ways. For



An adult riding his bike along 6th Street near Wilson.

Driving a car is a heavily subsidized activity. For every dollar in user fees that someone pays, society pays another dollar to operate the road system.

example, one study found that people who biked or walked spent more money at bars, restaurants, and convenience stores per month than those who drove. (Clifton et al., 2011). This is often thought to be the case because it is easier for people who are on foot or bicycle to stop at a business compared to motorists. Pedestrians and bicyclists are moving slower and can more easily stop and shop while motorists are driving through the area quickly.

For every \$1 invested in bicycling and walking, \$11.80 in benefits can be gained.

Non-motorized transportation infrastructure has a high return on investment (ROI). The Alliance for Walking and Biking (2012) found that for every \$1 invested in bicycling and walking, \$11.80 in benefits can be gained. This comes in the form of tourism, jobs, healthcare, and more.

Finally, a community that has chosen to plan and build for non-motorized transportation also decreases the “brain drain.” Brain drain happens when an educated populace begins leaving one community for another, more desirable community. The growing trend, especially for the younger generations, is to live in cities where they can walk, bike, or ride public transportation (National Association of Realtors, 2015). If the community does not have infrastructure in place to accommodate these desired modes of travel, individuals will move to a community that does have bike lanes, trails, sidewalks, etc. Therefore, in order to keep local residents and attract new ones, a city should focus on improving and expanding non-motorized transportation options. The goal of this plan is to provide Fort Scott with projects that will increase a resident’s ability to travel safely without a vehicle.

Increase Quality of Life

The phrase “quality of life” (QOL) originated from the medical community around the 1980s and focused primarily on human health (Spencer et al., 2014). Since then, the idea to study QOL has spread to the economy, transportation, the environment, and more. With the diverse use of the term, comes a diverse definition. For example, Felce and Perry (1995) categorize quality of life into five dimensions: “physical wellbeing, material wellbeing, social wellbeing, emotional wellbeing, and development and activity.” QOL has also been defined as, “how well human needs are met or the extent to which individuals or groups perceive satisfaction or dissatisfaction in various life domains” (Costanza et al., 2007). No matter the definition used, addressing the mobility needs in Fort Scott can positively impact the residents’ QOL.

Addressing the mobility needs in Fort Scott can positively impact the residents’ quality of life.

As previously mentioned in this chapter, planning for and implementing the infrastructure necessary for non-motorized

transportation can improve the health and healthcare of citizens, decrease transportation costs, and boost economic development. All of these factors play a role in a person's QOL.

Having safe and efficient route options for people, especially those without a vehicle, allows them access to recreational and residential areas, businesses, schools, community centers, etc., that may have been difficult or even impossible to reach previously. Providing residents with independence and options in how they travel can improve their physical and mental health, which impacts their QOL.

For example, ADA-compliant sidewalks allow families with wheelchairs and strollers a safe place to travel outside of the roadway to reach doctor's appointments, libraries, and schools. Bike lanes and trails allow recreational and commuter bicyclists to exercise outdoors, to connect with the environment, and to reach businesses.

Mobility affects a wide variety of factors that influences a person's QOL. By improving transportation, especially non-motorized transportation, the City of Fort Scott can improve their residents' quality of life.

Bibliography

- Alliance for Walking and Biking (2012). *Bicycling and Walking in the United States: 2012 Benchmarking Report Facts Sheet* retrieved September 27, 2017 from http://www.peoplepoweredmovement.org/site/images/uploads/Media_Fact_Sheet_-_Benchmarking_2012.pdf
- Centers for Disease Control. (2016). *Obesity and Overweight for Professionals: Data and Statistics: Adult Obesity*. Retrieved May 18, 2017 from www.cdc.gov/obesity/data/adult.html
- Clifton et al. (2012) *Cyclists and Pedestrians Can End Up Spending More Each Month Than Drivers* retrieved September 27, 2017 from <https://www.citylab.com/transportation/2012/12/cyclists-and-pedestrians-can-end-spending-more-each-month-drivers/4066/>
- Community Commons (2017). *Community health needs assessment; health indicators report for Bourbon County, Kansas*. Retrieved on May 18, 2017 from <https://assessment.communitycommons.org/CHNA/report?page=5&id=306&reporttype=libraryCHNA>
- Costanza et el. (2007) *Quality of Life: An Approach Integrating Opportunities, Human Needs and Subjective Well-Being*. Retrieved September 27, 2017 from <https://sites.google.com/site/aristhesis/home/notes/costanza-et-el-2007-quality-of-life-an-approach-integrating-opportunities-human-needs-and-subjective-well-being>
- Felce and Perry. (1995). *Research in Developmental Disabilities. Quality of life: its definition and measurement*. Retrieved September 20, 2017 from <https://www.ncbi.nlm.nih.gov/pubmed/7701092>
- Graham, S. (2005). *Scientific American*. *Study Assesses Annual Cost of Obesity to Employers* Retrieved May 18, 2017 from <https://www.scientificamerican.com/article/study-assesses-annual-cos/>
- Health, T. F. (2012). *Bending the Obesity Cost Curve in Kansas*. Retrieved May 18, 2017 from http://healthyamericans.org/assets/files/obesity2012/TFAHSept2012_KS_ObesityBrief02.pdf
- League of American Bicyclists. (2010). *National Household Travel Survey - short trip analysis*. Retrieved May 18, 2017 from <http://www.bikeleague.org/content/national-household-travel-survey-short-trips-analysis>
- National Association of Realtors (2015). *Millennials Favor Walkable Communities, Says New NAR Poll* Retrieved on September 27, 2017 from https://nacto.org/wp-content/uploads/2016/02/1_Natl-Assoc-of-Realtors-2015-Community-Preference-Survey.pdf
- Safe Routes to School National Partnership. (2012). *Quick Facts and statistics*. Retrieved May 18, 2017 from Safe Routes to School National Partnership: <http://www.saferoutespartnership.org/healthy-communities/101/facts>
- The State of Obesity (2016). *Better policies for a healthier America, the state of obesity in Kansas*. Retrieved on May 18, 2017 from <http://stateofobesity.org/states/ks/>
- Van Nuys K, Globe D, Ng-Mak D, et al. (2014) *The association between employee obesity and employer costs: evidence from a panel of U.S. employers*. *Am J Health Promotion*. 28(5):277-285.

Chapter 2: The Fort Scott Community Methodology



The Fort Scott Community

Located in the southeastern corner of Kansas, Fort Scott was established in 1842 as a military outpost and was named after General Winfield Scott (National Park Service, 2017).

Fort Scott Demographics

The U.S. Census of 2010 states Fort Scott has a population of 8,087 (U.S. Census, 2010). The median age in Fort Scott is 37.3 years with 47.7% male and 52.3% female. Just over 30% of the population is 19 years old and under, about 52% is 20-64 years old, and about 18% is 65 years and over (U.S. Census, 2010).

The racial composition of Fort Scott was 90.3% White, 4.7% African American, 0.8% Alaska Native or American Indian, and 0.6% Asian. Hispanic or Latino of any race accounted for 2.5% of the total population (U.S. Census, 2010). Of the 3,285 households in Fort Scott, 59.1% were family households of which 28.2% had children under the age of 18 (U.S. Census, 2010). The average household size was 2.34 (U.S. Census, 2010).

According to the U.S. Census (2010) 16.3% of people in Fort Scott live below the Federal poverty level, while 22.3% of Fort Scott's children live below the Federal poverty level. According to the 2011–2015 American Community Survey's 5-year Estimates, .9% of workers 16 years and over in households had no vehicle available. Also, the mean travel time to work is 15.4 minutes (2015). Finally, 1.7% of the community's workers over the age of 16 walked to work and 0% biked to work (American Community Survey, 2015).

Education

Schools are significant attractors for pedestrian and bicycle traffic. Fort Scott, Kansas is home to the Unified School District (USD) 234. In USD 234 there are 4 schools: Winfield Scott Elementary (grades PK-2), Eugene Ware Elementary (grades 3-5), Fort Scott Middle School (grades 6-8), and Fort Scott Senior High (9-12).

According to the National Center for Education Statistics (2014), USD 234 serves a total of 1,905 students. During the 2016-2017 school year 61% of students qualified for free or reduced price lunches (Kansas Department of Education, 2017).

The U.S. Census of 2010 states Fort Scott has a population of 8,087 with a median age of 37.3 years. The population is 47.7% male and 52.3% female (U.S. Census, 2010).



USD 234 is home to four public schools in Fort Scott.

Improvements to Fort Scott's walkability and bikeability could encourage residents to use other means of transportation to access to healthy grocers, employment, education, and opportunities to lead healthy, active lives.

Fort Scott, Kansas, also include three private schools: Christian Learning Center (grades PK-12), St. Mary's Catholic School (PK-5), and Fort Scott Christian Heights (PK-12). Christian Learning Center serves 63 students, and Fort Scott Christian Heights serves 96 students (National Center for Education Statistics, 2014).

Finally, Fort Scott is home to Fort Scott Community College, which is a public, 2-year school. During Fall 2015, they had an enrollment of 1,758 students (National Center for Education Statistics, 2016).

According to the 2000 U.S. Census, the highest level of education obtained for 18-24 year olds is as follows: about 28% have a high school graduate or equivalent degree, 48% have some college or associate degree, and 4% have bachelor's degree or higher (2000). When looking at the population 25 years old and over, about 82% have a high school graduate degree or higher and almost 18% have a bachelors degree or higher (U.S. Census, 2000).

Some Preliminary Conclusions Based on the Above Demographics

- According to the 2011 – 2015 American Community Survey's 5-year estimates 1.7% of Fort Scott's workforce over the age of 16 walked to work and 0% biked to work. Additionally, the mean travel time to work is 15.4 minutes with 71% of people working in Fort Scott (American Community Survey, 2015). Thus, the City has a real opportunity to encourage some of its local population to travel without a motor vehicle via the provision of additional walking and bicycling amenities.
- According to the 2011 – 2015 American Community Survey's 5-year estimates, 84% of workers 16 years and older drive to work alone. Thus, improvements to Fort Scott's walkability and bikeability could encourage those residents to use other means of transportation to access to healthy grocers, employment, education, and opportunities to lead healthy, active lives.

History of Fort Scott, Kansas

Military In Fort Scott

The army left Fort Scott in 1853 and by 1855, the military began selling the buildings to turn it into a new town. However, the Civil War (1861-1865) and railroad construction (1869-1873) saw the return of the Army to Fort Scott (National Park Service, 2017).

In 1978 the National Park Service identified Fort Scott as a National Historic Site. The area covers roughly 17 acres and is home to 11 buildings that are open to the public (National Park Service, 2017). According to the National Park Service, “visitors can view an 1840s military fort and connect with the lives of the soldiers, laundresses, the sutler, the surgeon, and others who strived to create a semblance of a home at a frontier military post” (2017).

Railroads in Fort Scott

Fort Scott was not left out of the railroad boom that was happening across the country. Railroads in Kansas increased from 71 miles in 1865 to 1,234 in 1870 to 8,763 in 1890 (National Park Service, 2017).

As a military base and with a desire to be a trade hub, Fort Scott pushed for railroad construction beginning around the Civil War (National Park Service, 2017). Eventually, the citizens of Fort Scott passed a vote to purchase \$150,000 worth of bonds from the Kansas and Neosho Valley Railroad, and with their investment, the name changed in 1868 to the Missouri River, Fort Scott, and Gulf Railroad, also known as the Border Tier Railroad (The Frisco, 2017).

The goal of the railroad was to head south to the Gulf of Mexico and by December of 1869, tracks were laid in Fort Scott. Unfortunately, just south of Fort Scott, settlers opposed the railroad. Because of this conflict, the military were called in and established the Post of Southeast Kansas to protect railroad workers. Military was stationed there from 1869 until 1873, when they finally left Fort Scott for good (National Park Service, 2017). While the Missouri River, Fort Scott, and Gulf Railroad never officially made it to the Gulf of Mexico, the railroad did help develop a connection to the east (National Park Service, 2017).

In June of 1874, the Fort Scott Southeastern and Memphis Railway



In 1978 the National Parks Service identified Fort Scott as a National Historic Site.

was incorporated with the goal of serving the coal beds, which were operating in Fort Scott at the time. Eventually this route made its way east where it ended in Pensacola, Florida (The Frisco, 2017).

Jefferson Highway

In 1915 the Jefferson Highway Association was formed and they held their first meeting in New Orleans, Louisiana, to identify the route (Iowa DOT, 2017). Edwin T. Meredith, the general manager of the *Farmers' Tribune*, had the idea to build the Highway and establish the Jefferson Highway Association. Meredith believed this route would economically benefit farmers in the area. The Highway begins in Winnipeg, Manitoba, Canada and ends in New Orleans, Louisiana. In addition to those two locations, the Jefferson Highway travels through Minnesota, Iowa, Missouri, Kansas, Oklahoma, Arkansas, and Texas (Iowa DOT, 2017).

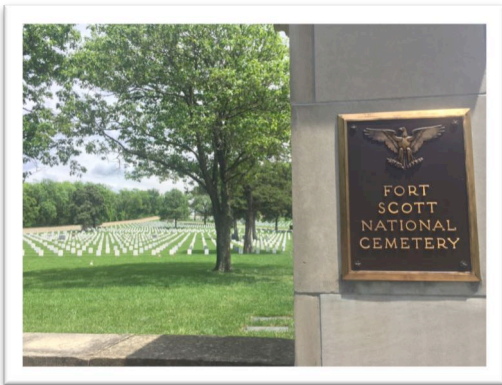
The Jefferson Highway only kept its name until the 1920's when the standardized numbering system took over (Jefferson Highway Association, 2017). However, the Association continues to hold conferences to celebrate the route even though the name has been changed. In Fort Scott, National Avenue is the former Jefferson Highway.

Frontier Military Scenic Byway

The Kansas Legislature identified The Frontier Military Scenic Byway on June 15, 1990 (Miners Hall Museum, 2017). The nearly 170-mile route follows the military trail the Army used to travel between forts.

This historic trail leads travelers to Fort Leavenworth, Fort Scott, Mine Creek Battlefield, John Brown Museum, and more. Fort Scott National Historic Site, Fort Scott National Cemetery, and Fort Scott Restored Victorian are a few key sites along the byway, which follows Highway 69 (Miners Hall Museum, 2017). Further, the Fort Scott Chamber of Commerce, the Kansas Department of Wildlife and Parks, and Quail Unlimited, planted native wildflowers along the route (Kansas Department of Wildlife, Parks, and Tourism, 2011).

In 1915 the Jefferson Highway Association was formed and they held their first meeting in New Orleans, Louisiana, to identify the route (Iowa DOT, 2017).



The Fort Scott National Cemetery is one of many key sites along the Frontier Military Scenic Byway.

Methodology

The citizens of Fort Scott, Kansas primarily guided the development of the Fort Scott Bicycle and Pedestrian Master Plan. Healthy Bourbon County Action Team directly oversaw the plan's development, and offered suggestions and feedback during the process. In addition, the public's suggestions were collected via a public meeting and a website that was online throughout the project.

Steering Committee

The steering committee consisted of the following people: Jody Hoener (Mercy Hospital), Craig Campbell (Mercy Hospital), Sherise Beckham (Mercy Hospital), Rhonda Dunn (City of Fort Scott), Rachel Pruitt (City of Fort Scott), Dr. Randy Nichols (City of Fort Scott), and Alysia Johnson (Fort Scott Community College). The aforementioned people provided the key guidance, recommendations, and edits to the plan. The steering committee and PedNet staff communicated throughout the entire project via in-person meetings, videoconferences, telephone calls, and emails. During each meeting, specific sections of the plan were discussed and feedback was received.

The General Public

The general public's input was collected via a public meeting held on June 27, 2017. Public input for these types of planning documents is critical as it provides feedback that may not have otherwise been identified.

At the meeting, PedNet and Healthy Bourbon County Action Team staff spoke to the public to provide background to the project and highlight the benefits of this type of planning for their community. Further, the Healthy Bourbon County Action Team assisted the PedNet team in facilitating discussions during which the public could offer their project ideas by drawing directly on maps. The public provided input on areas of concern and areas where they would prefer to see improvements made in their community.

In addition to the public input meeting, a project website was created where comments were collected and analyzed during the project period.



Fort Scott community members reviewing potential trails map and providing feedback on how to improve streets.

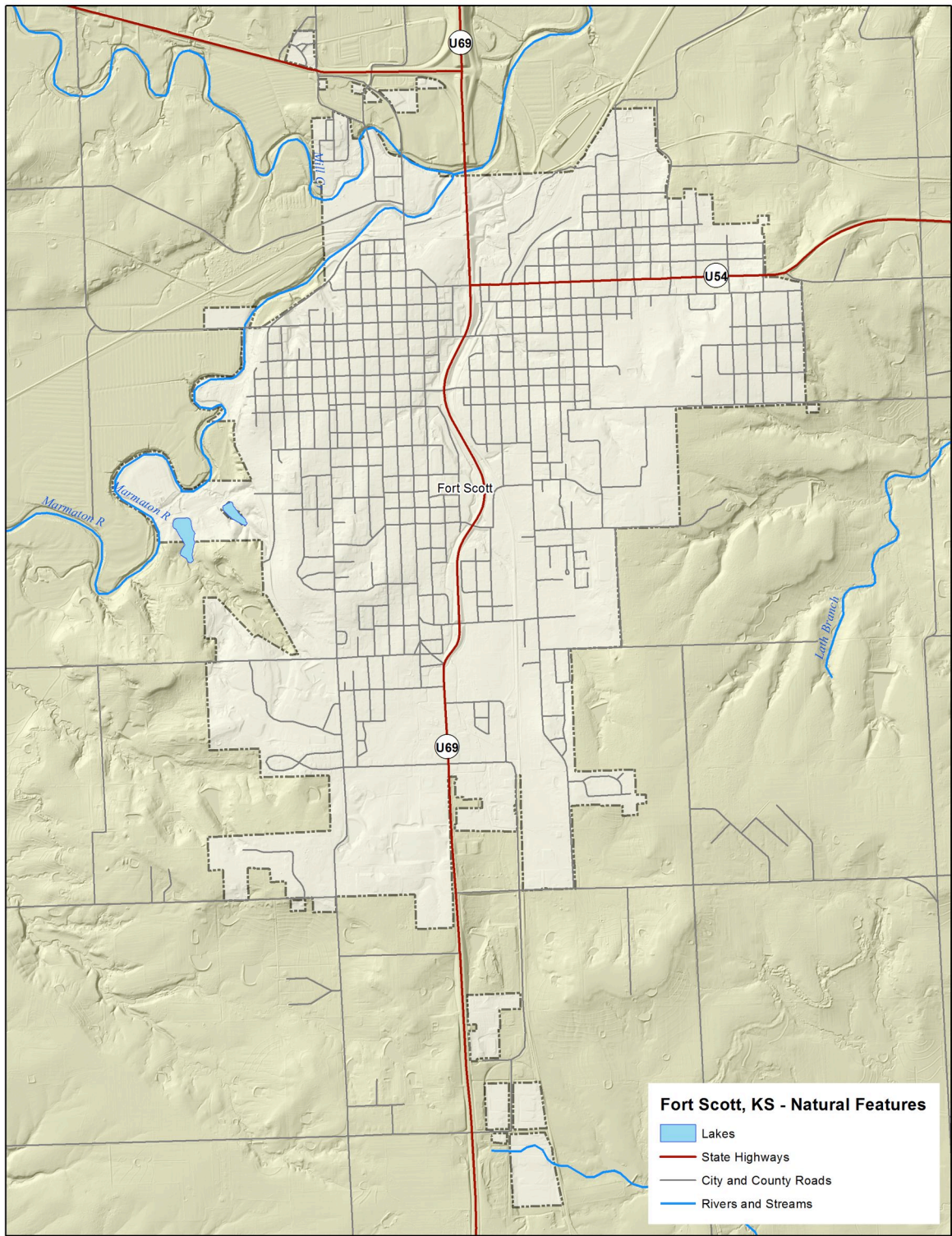
Data Collection

Information was collected from a variety of sources. The digital aerial photography, state and local roadways, streams, railroads, lakes and ponds and municipal boundaries were provided by the Kansas GIS Center. The Office of the Bourbon County Assessor provided the tax parcel geography. The City of Fort Scott provided information on transportation budget and projects and various travel data.

Field reconnaissance and surveys were used to map the following information:

- Location, design, building material, and Americans with Disabilities Act (ADA) condition of existing sidewalks along all city streets
- Location of schools, parks and other attractors for bicycle and pedestrian traffic
- Location of areas with non-residential land uses
- Location of public lands, streams, railways, and floodplain areas for potential trail sites
- Location of future sidewalk and trail projects

Road width, and sidewalk condition and location rounded out the data gathered for completion of the plan.



Fort Scott Natural Features Map

Topography, Creeks, and Floodplains

Digital resources from the Kansas GIS Center were used to map the streams, floodplains, and topography in the Fort Scott area. A digital elevation model (DEM) provided the base data for the examination of the elevations and slopes. The map on the previous page highlights this information.

Streets and Highways

State and local roadways and municipal boundaries were provided by the Kansas GIS Center. Fort Scott is accessible by U.S. Highway 69, which runs north-south through the middle of the city, and U.S. Highway 54, which runs east-west.

Parks and Government Owned Land

Parks and recreation facilities, community centers, libraries, and city, state, and federal offices are also locations that attract bicycle and pedestrian activity. Vacant government land may be a site for future trails because it is undeveloped and its potential development is likely to be unopposed.

Locating and mapping these community resources was completed using digital tax parcels, field investigation, and data provided by Fort Scott and Kansas GIS Center.



Parks, like the one pictured above, attract bicycle and pedestrian activity.

Bibliography

The Frisco (2017). A look back at the Saint Louis San Francisco railway, history of the Frisco retrieved on May 17, 2017 from <https://thelibrary.org/lochist/frisco/history/1962history.cfm>

Iowa DOT (2017). Historic Auto Trails, History of the interstate trail, Jefferson highway, and Jefferson association retrieved on June 20, 2017 from <https://iowadot.gov/autotrails/history-of-the-jefferson-highway>

Jefferson Highway Association (2017). About the Jefferson Highway Association retrieved on May 17, 2017 from <http://www.jeffersonhighway.org/about-jha/>

Kansas Department of Education (2017). 2016-2017 USD % of students approved for free- or reduced- prices lunches. Retrieved on April 12, 2017 from http://datacentral.ksde.org/GIS_reports.aspx

Kansas Department of Parks, Wildlife, and Tourism (2011). Frontier Military Scenic Byway retrieved on April 26, 2017 from <http://www.naturalkansas.org/frontier.htm>

Miners Hall Museum (2017) Franklin's Rich History Retrieved May 2017 from <http://minershallmuseum.com/historic-sites-in-franklin/>

National Center for Education Statistics (2015). Search for Schools and Colleges. Retrieved on April 12, 2017 from <https://nces.ed.gov/globallocator/index.asp?search=1&State=KS&city=fort+scott&zipcode=&miles=&itemname=&sortby=name&School=1&PrivSchool=1&College=1&Status=Search+Finished&Records=8&CS=D2E61B8D>

National Park Service (2017). Soldier vs settler retrieved on May 17, 2017 from <https://www.nps.gov/fosc/learn/historyculture/postofsek.htm>

National Park Service (2017). History and Culture retrieved on May 17, 2017 from <https://www.nps.gov/fosc/learn/historyculture/index.htm>

U.S. Census (2010). Community Facts, Fort Scott, Kansas Retrieved April 12, 2017 from https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml

Page Left Black

Chapter 3: Current Facilities and Opportunities



Classification and Definition of Infrastructure

The language within this plan aligns with the most commonly used national definitions and classifications.

Sidewalk: a paved path for pedestrians that parallels a roadway, and usually exists in the roadway's right-of-way. The sidewalk's width does not influence its designation.

Sidepath: a type of non-motorized transportation facility that, like a sidewalk, typically parallels a roadway and exists in the roadway's right-of-way.

Trail: a path that is open to the public for use by non-motorized transportation users. Trails generally exist outside of the roadway right-of-way. Trail width does not influence its definition.

Bicycle Lane: a roadway section designated exclusively for bicyclists' use via striping and marking. Bicycle lanes normally exist on the outer edges of a roadway.

Sharrow: a painted symbol placed in existing traffic lanes to alert motorists that bicyclists may be using the full lane. A sharrow by itself does not indicate a bicycle boulevard.

Bicycle Boulevard: a low speed, typically residential street that gives priority to bicyclists by allowing through bicycle traffic and local automobile traffic only. Many have a physical barrier, which directs motorists off the roadway, while allowing bicyclists' access.

Note about Sidepaths: There are some safety considerations with providing bicyclists' facilities along an existing roadway's right-of-way. The "Guide for the Development of Bicycle Facilities, 4th Edition" by the American Association of State Highway Transportation Officials (AASHTO) lists 14 ways that pathways of this type may increase the risk of bicycle/automobile crashes.

In summary, sidepaths are only appropriate along long stretches of roadways with infrequent driveways and intersections, such as a rural highway. In most cases, they are not appropriate for city streets. Sidewalk widening only increases the potential danger to bicyclists by allowing them to achieve increased bicycling speeds. For those reasons, the PedNet team tends to discourage the use of wide sidewalks as substitutes for trails.

There are ways to create safer infrastructure for bicyclists that exist in the roadway right-of-way. For example, “protected bicycle lanes” are being built across the United States. These are bicycle lanes that are protected from adjacent traffic by bollards, concrete barriers, floating parking, or other means. However, these protected bicycle lanes require extensive planning and specialized signals at every intersection in order to work properly.

Note About Estimating Project Costs

All of this plan’s potential projects had an estimated cost calculated by applying generalized construction costs to the project length. Cost estimates for each project type (e.g., trail, sidewalk, and on-street facilities) were derived from a variety of sources, such as comparisons with similar municipal projects, generally accepted professional estimates, and other available literature.

It was not practical or necessary to do a detailed cost analysis for each of the potential projects, because it would take decades to fund and build all of these projects. Over time, the cost estimates would lose their relevance due to inflation, property transfers, and other economic factors. In Chapter 4, priority projects are identified with more detailed cost analyses, maps, and artistic renderings.

This extensive data collection is of tremendous benefit to Fort Scott. It allows the city to know the exact amount of sidewalk missing, sidewalk present, and the condition of the sidewalk.

Infrastructure Category 1: Sidewalk

Important components of evaluating the quality of the pedestrian environment are the condition and connectivity of the sidewalk network, and its relationship to the street network. Evaluating the sidewalk condition is also critical to the development of a prioritized sidewalk plan for Fort Scott.

Existing Sidewalk Conditions

To move forward with the development of an integrated pedestrian transportation network in Fort Scott, the existing sidewalk infrastructure was evaluated and opportunities were identified. Each block was evaluated down to the property lot level. This means that, if a block had seven property lots on each side of the street, there were fourteen pieces of data collected.

This extensive data collection is of tremendous benefit to Fort Scott. It allows the city to know the exact amount of sidewalk missing, sidewalk present, and the condition of the sidewalk. Not many communities in the United States have completed this type of sidewalk inventory.

The Ranking System

The sidewalk classification system used to rank the sidewalk at each property's lot is described as follows:

- Classification #1. Non-functional: Sidewalk exists, but is broken and non-functional. Needs total replacement.
- Classification #2. Hazardous: Sidewalk exists, but the majority is in a state of disrepair. Non-ADA compliant and presents severe trip hazards.
- Classification #3. Usable, but non-ADA compliant: Sidewalk surface is generally usable by the general public, but is not ADA-compliant. Sections of sidewalk need to be repaired, because there are severe cracks, upheavals, and excessive cross-slope. Repair is needed, but not total replacement.
- Classification #4. Acceptable, but non-ADA compliant: Sidewalk surface is generally in good repair, but is not ADA-compliant.
- Classification #5. Acceptable and ADA-compliant: Sidewalk is in good repair and ADA-compliant.

The rating system did not include physical measurements for width, slope, or cross-slope. It is quite possible that a property lot was rated a "5," but had a minor issue that made it non-ADA compliant. As a result, the ADA compliance was determined visually, and is therefore more of an estimate than an absolute measure.

Current Fort Scott Sidewalk Conditions and Needs

In total, roughly 149 miles of roadway was evaluated for sidewalk condition. Of that, 112 miles, or roughly 75%, lacked any sidewalk. Of the sidewalk that exists, (37.2 miles of total roadway frontage) 3.6 miles of sidewalk is in "non-functional" condition, meaning that it cannot be repaired, but must be replaced. 23.6 miles of sidewalk is repairable and 10 miles in good condition, meaning no work is needed.

The City of Fort Scott was given a sidewalk audit map that identifies all of the current and missing sidewalk in Fort Scott and scores them according the rating system described above.

Consistency is Key

Many times, when sidewalk is not consistent or ADA-compliant, users will choose to walk in the roadway rather than divert on and

Sidewalk Rating



#1. Non-functional



#2. Hazardous



#3. Usable: Non-ADA
Compliant



#4. Acceptable: Non-
ADA-Compliant



#5. ADA-Compliant

off the sidewalks each time they encounter a break in the sidewalk or a curb they cannot maneuver. This can be dangerous for all road users. In June 2017, Fort Scott representatives attended a Complete Streets Policy Development workshop in Lawrence, Kansas. However, to date, no further action has been taken. To help address the inconsistencies in sidewalk, it is recommended the City of Fort Scott pass a Complete Streets ordinance.

Total to Fix and Build All Fort Scott Sidewalks

For roadways needing new sidewalk, or sidewalk repair, the cost was calculated by measuring the lot frontage and applying that length to the per-foot cost estimate for constructing or repairing sidewalk.

New sidewalk construction estimates include sidewalk and ramp installation, but not other improvements at intersections, driveway apron reconstruction, utilities and sign relocation, and many other contingencies that are frequently encountered.

With the help of the Director of Public Works, the cost for constructing new sidewalk was estimated at \$28.00/foot. The cost for repairing non-ADA compliant sidewalk was estimated at \$20.00/foot. These estimate values are general. The cost of a project, once designed, could be considerably lower or higher. A linear foot of sidewalk is along one side of the roadway. So a mile of roadway without sidewalk on either side would require 10,560 linear feet of sidewalk. Unless otherwise noted, the sidewalk referenced is 5' wide.

A cost analysis to rebuild and repair all sidewalks in Fort Scott is outlined below.

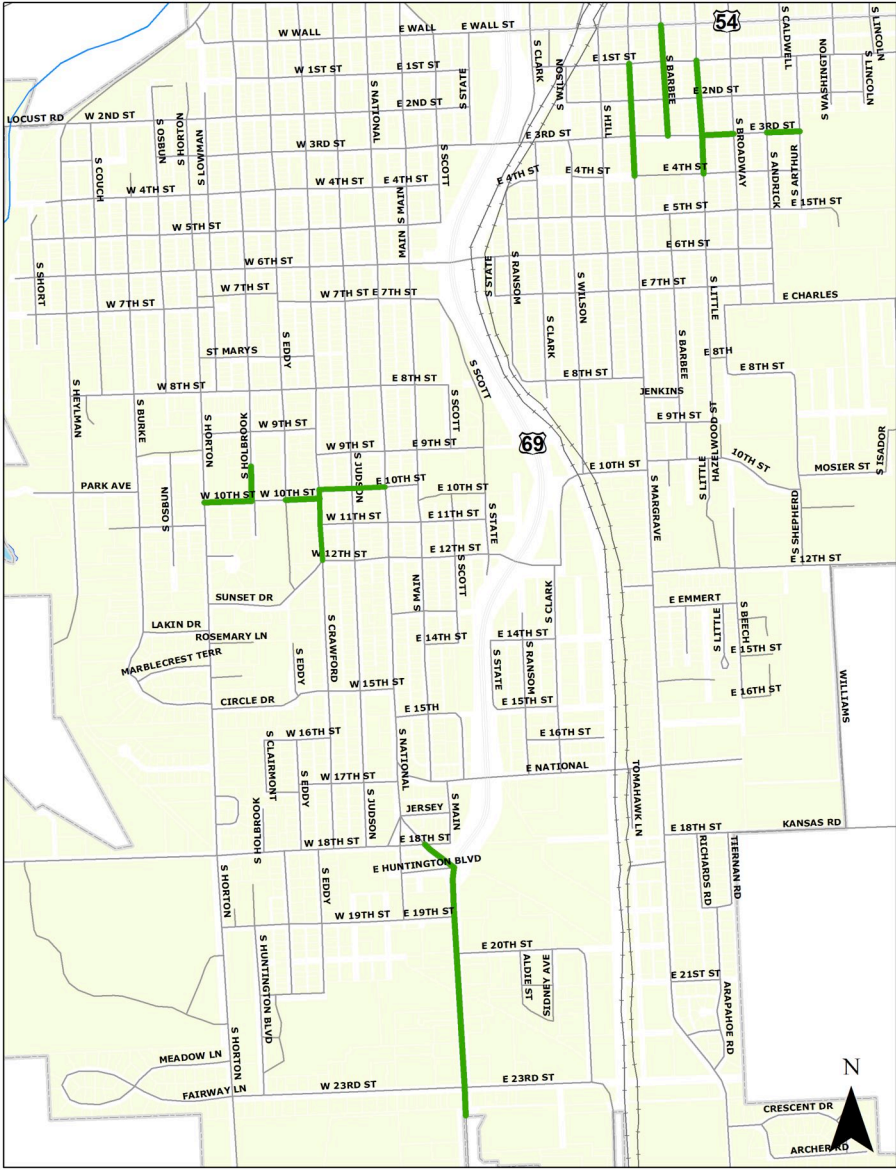


Sidewalk near the intersection of National and 10th highlighting inconsistencies in sidewalk infrastructure.

Sidewalk Condition	Linear Feet	Percent of Total	Needed Outcome	Estimated Cost	Total
Classification 5	29,226.2	3.7%	None	\$0.00	\$0.00
Classification 4	23,594.4	3%	None	\$0.00	\$0.00
Classification 3	76,849.1	9.8%	Repair as Needed	\$20.00	\$1,536,982
Classification 2	47,741.7	6.1%	Repair as Needed	\$20.00	\$954,834
Classification 1	19,103.3	2.4%	Replace	\$28.00	\$534,893
No Sidewalk	590,129.3	75%	Build	\$28.00	\$16,523,621
Total	786,644.1	100%			\$19,550,330

Specific Sidewalk Projects

The cost to repair and rebuild all Fort Scott sidewalks is too high to realize full funding in the near future. Therefore, specific sidewalk projects have been identified.



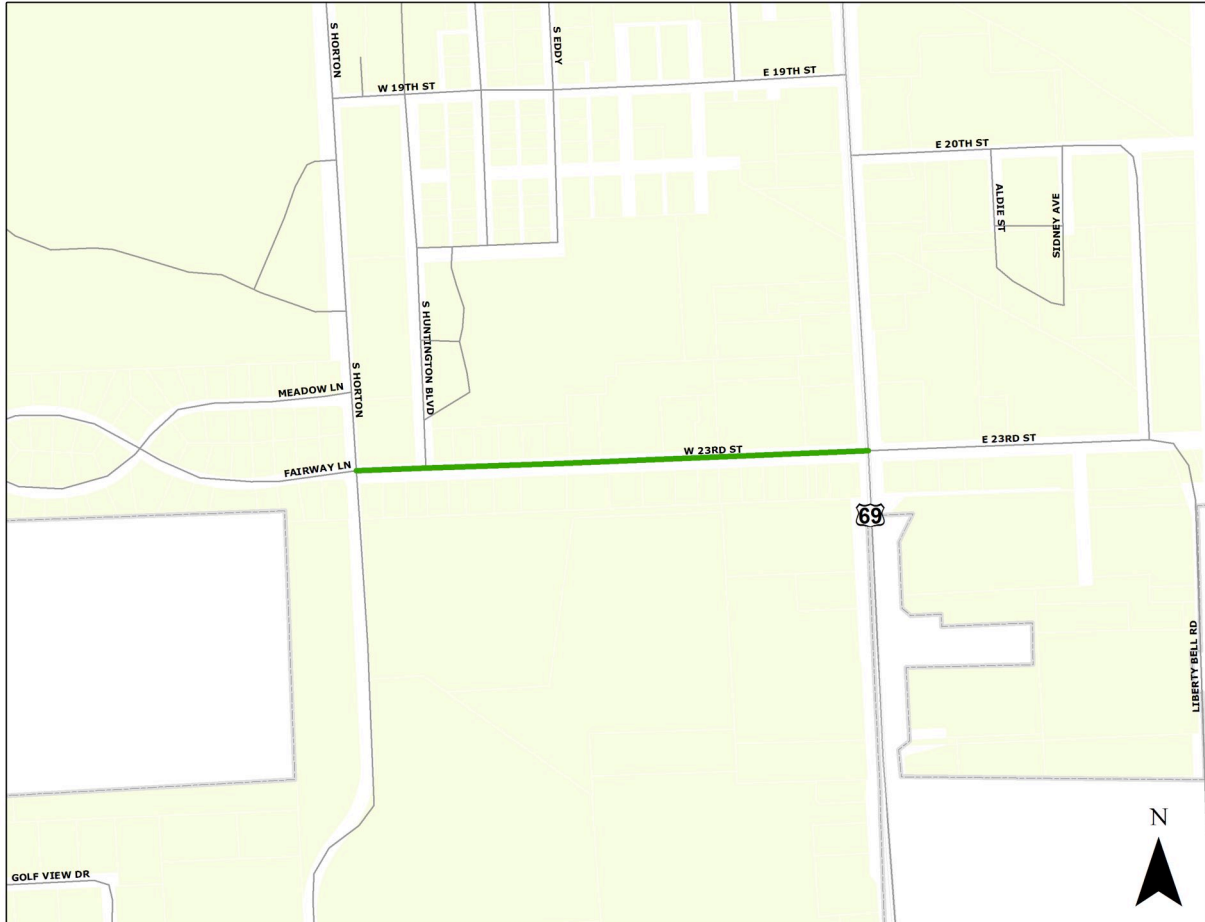
2017 Sidewalk Projects in Fort Scott

Fort Scott Kansas was awarded a Safe Routes to School (SRTS) grant to build sidewalks around their two elementary schools. As of this publication, some of the sidewalks are built, while others are expected to be completed no later than the end of the year. Additionally, Fort Scott received KDOT funding to build sidewalk along the west side of S National from 18th to Huntington Blvd and S Main St from Huntington Blvd to just past 23rd St. This sidewalk project was completed during the writing of this document. These two grant projects are shown in the map above.



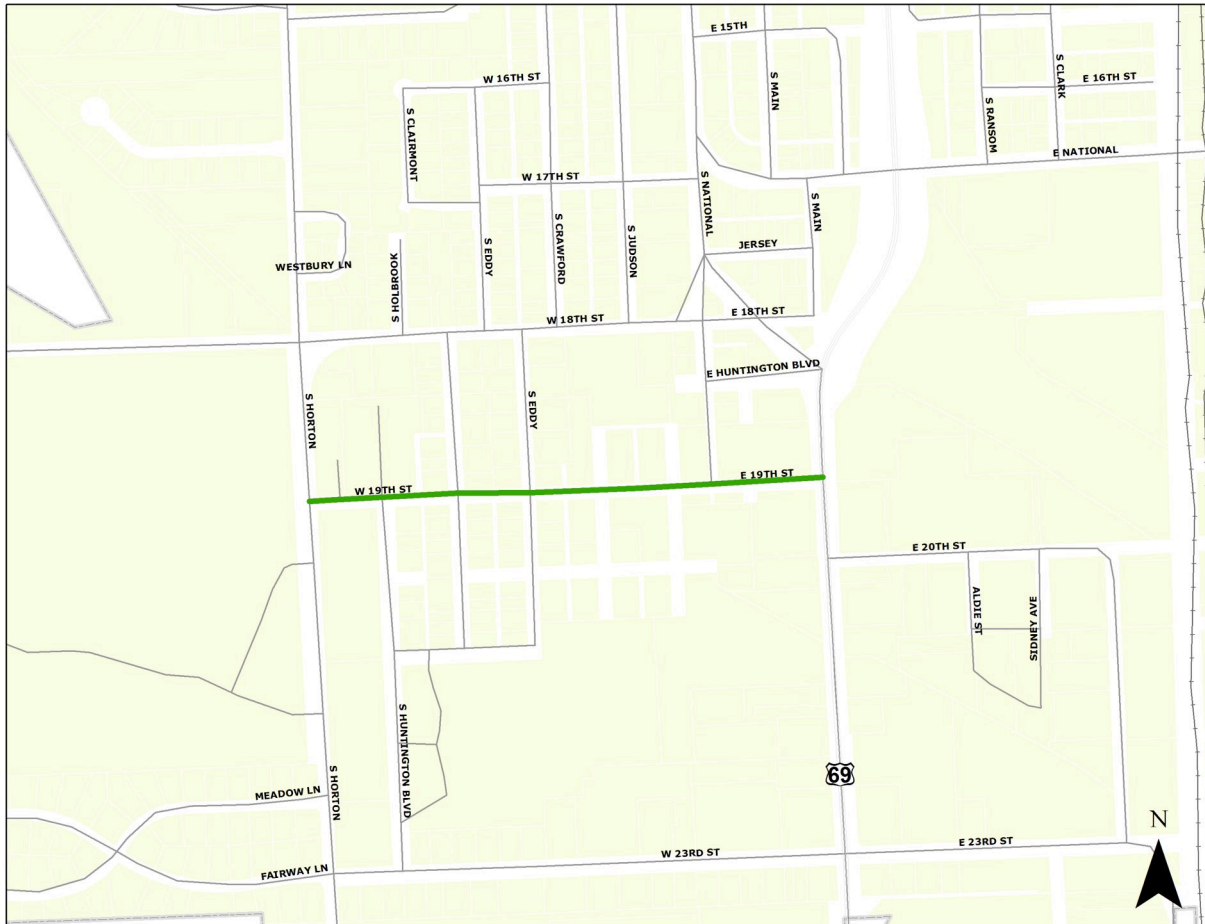
Horton from Jayhawk Rd to W. 2nd St

This is a main north-south thoroughfare in Fort Scott. Adding sidewalk along this route provides residents and Fort Scott Community College (FSCC) students a safe place to walk to and from school, the trail on FSCC's campus, and their neighborhoods. Approximate cost: \$618,762



23rd St from Horton to S. Main St.

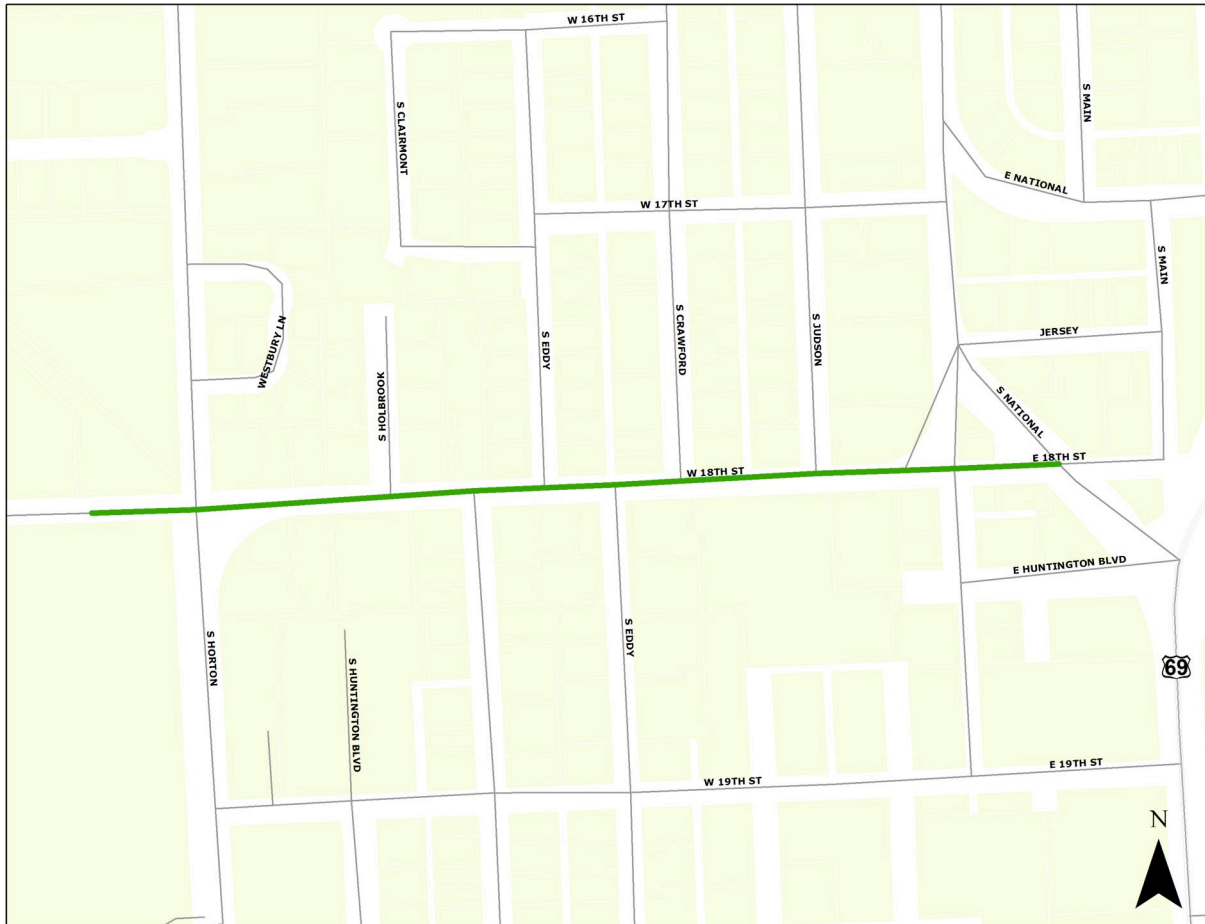
Adding sidewalk along 23rd St. would provide a safe place for FSCC students and local residents to walk from the west of town to businesses and restaurants located along S. Main St. Approximate cost: \$124,824



19th St from Horton to S. Main St.

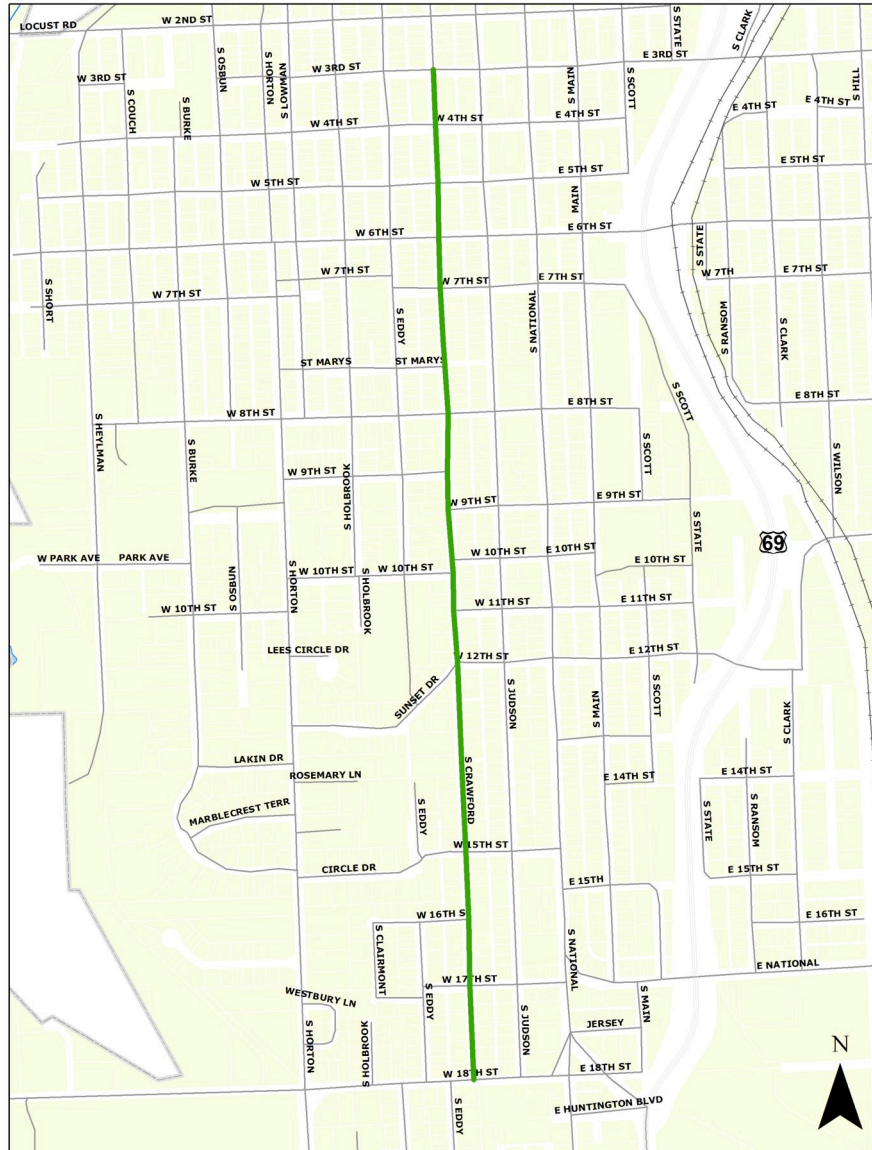
This is another east-west street where adding sidewalk would provide a place for students and residents to walk from west of town and campus to businesses and restaurants on S. Main St.

Approximate cost: \$103,911



18th St. from FSCC Trail Parking to S National Ave.

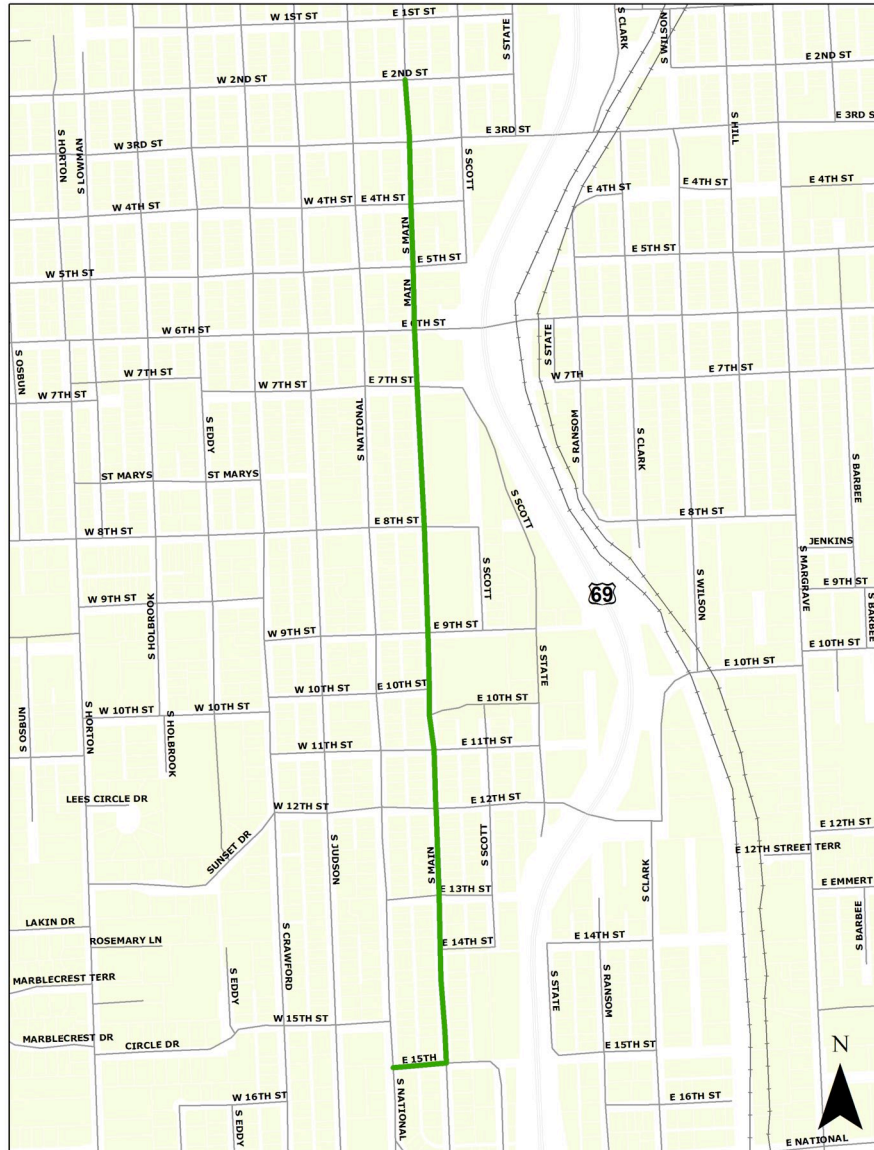
18th St. is another common east-west route for residents and FSCC students to walk from campus to businesses. The Fort Scott Cinema is also along this route. Approximate cost: \$107,940



Crawford St. from 18th St. to 3rd St.

The City of Fort Scott built sidewalks between 10th St. and 12th St. along Crawford using the SRTS grant. Extending sidewalks on Crawford St. north and south of 10th St. and 12th St. will further extend students ability to walk to and from school. Approximate cost: \$276,479

Chapter 3: Current Facilities and Opportunities



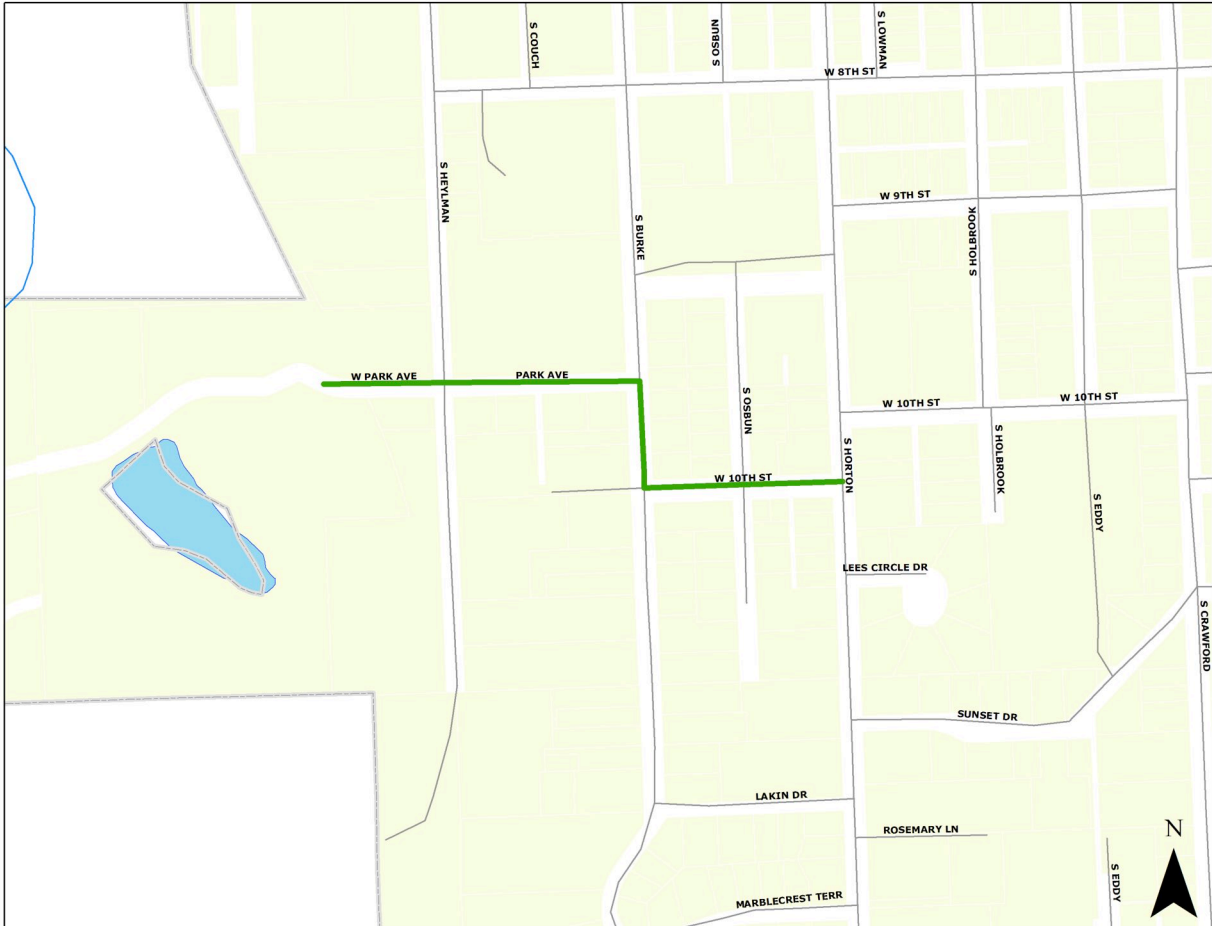
Main St. from 2nd St to 15th St. and 15th St. from S Main St. to S National St.

This route would help connect downtown, Fisher Park, Fort Scott Swimming Center, and Fort Scott High School. Adding the 15th St. section connects pedestrians to S National St., which has a variety of businesses. Approximate cost: \$154,013



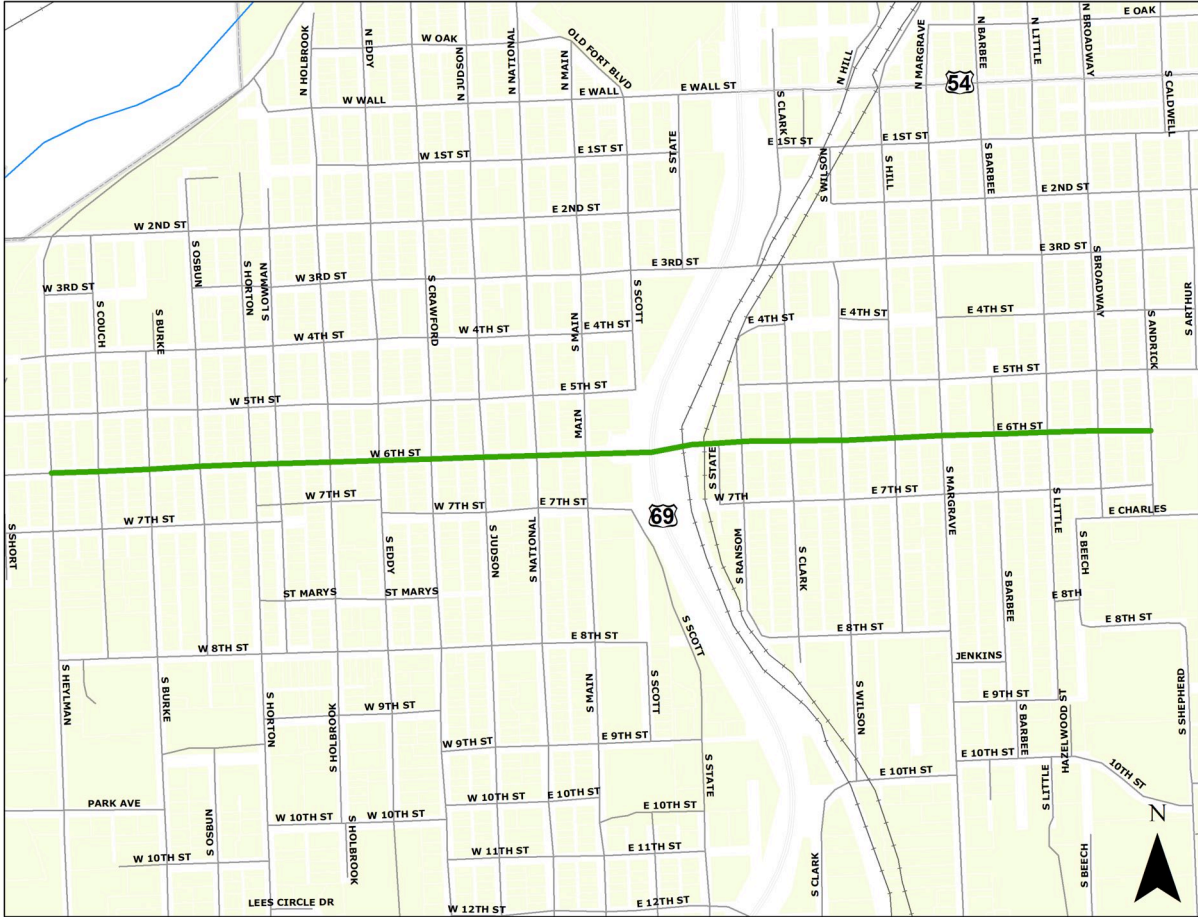
S National from 15th St. to Huntington and S Main St. from Huntington to Jayhawk Rd.

The City of Fort Scott recently built sidewalks the west side of S National from 18th St. to Huntington and S Main St. from Huntington to just past 23rd St. Extending this further south to Jayhawk Rd would connect Mercy Hospital, Wal-Mart, and many other businesses. Additionally, continuing the sidewalk north along S National would connect it to sidewalk that was built in 2016 and continues towards downtown. Approximate cost: \$341,718



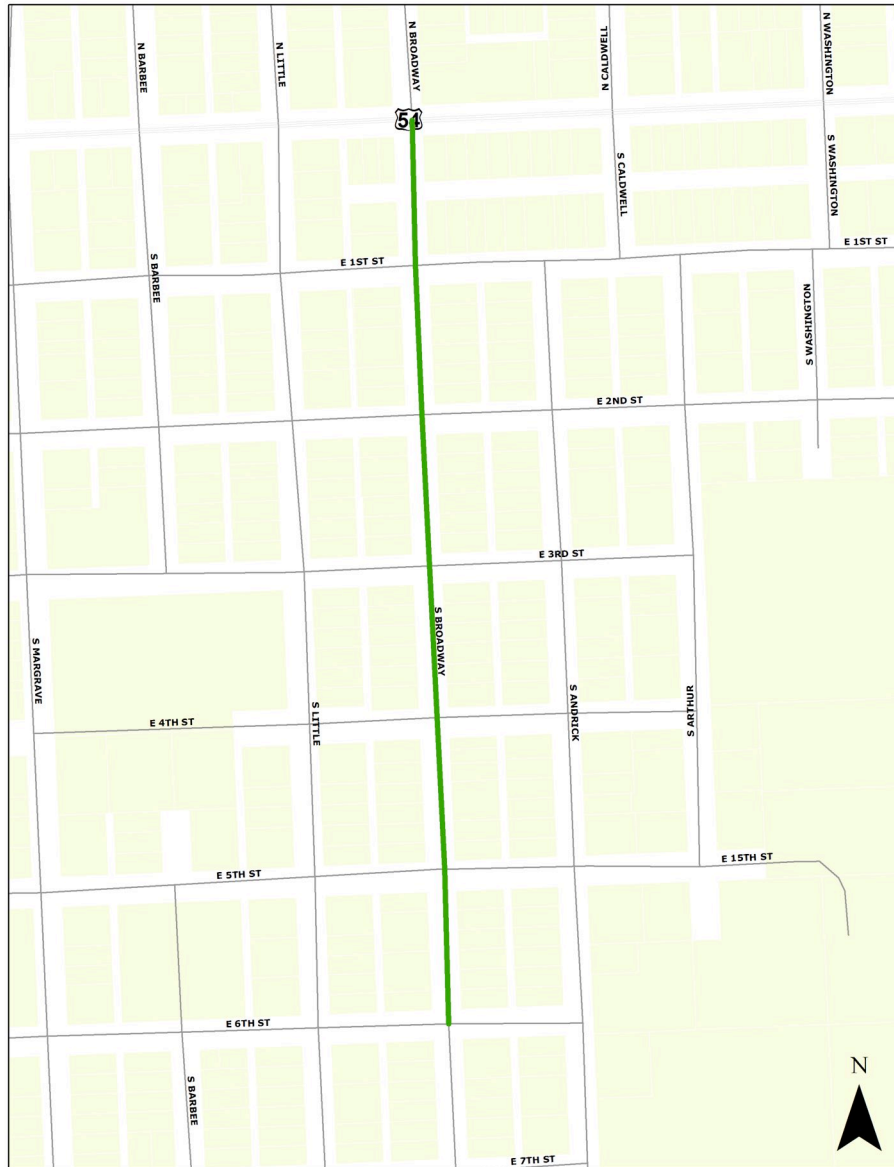
Gunn Park to S Horton

This section of sidewalk would provide an area for pedestrians to walk between Horton and Gunn Park, which is a frequented park that has trails, lakes for fishing, camping sites, and more. Approximate cost: \$94,390



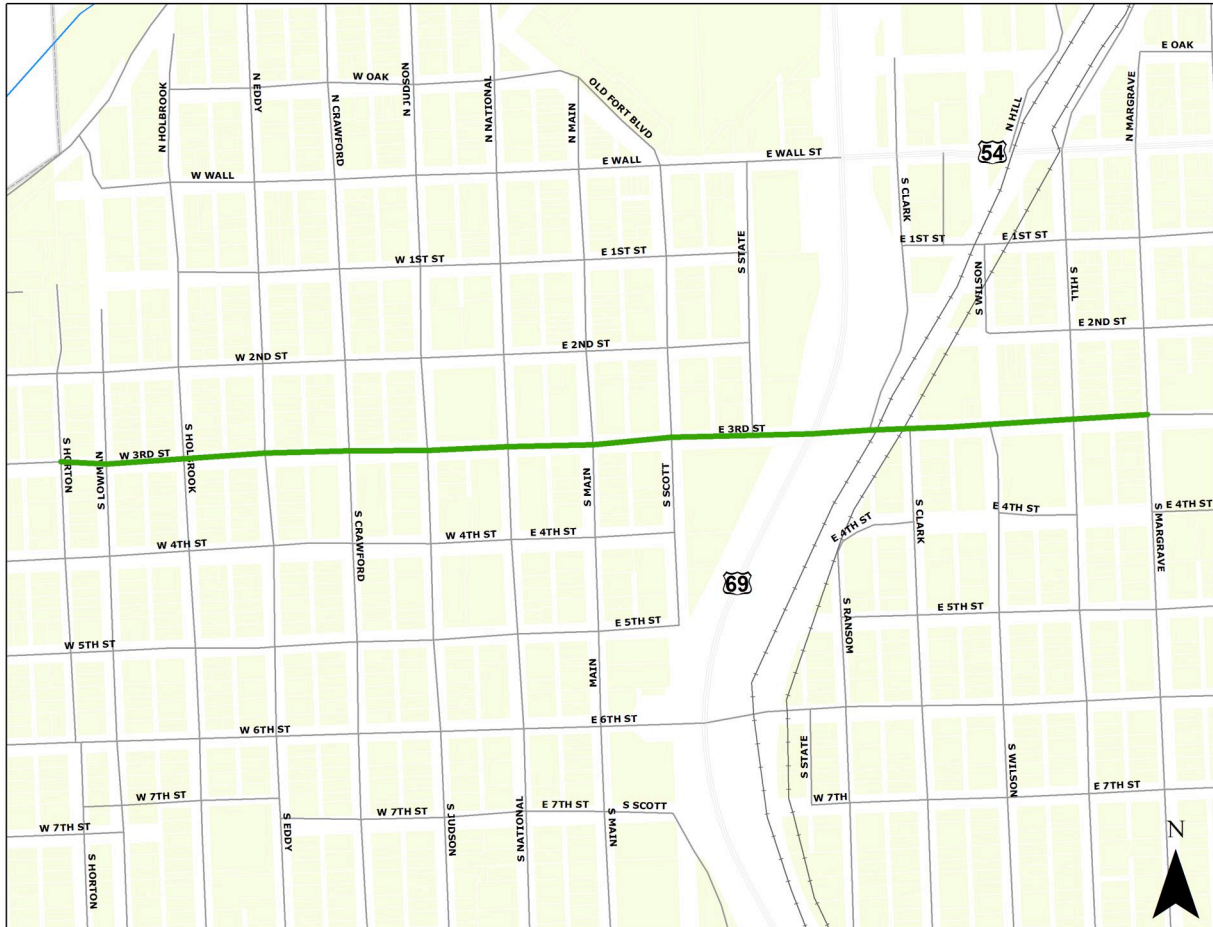
6th St. from Heylman to Andrick

6th St. is a busy thoroughfare connecting the west and east side of town by crossing over Hwy 69 via a pedestrian bridge. This bridge was built in 1969 and rehabilitated in 2005. This sidewalk would also provide pedestrian access to the local G&W Foods grocery store. Approximate cost: \$263,024



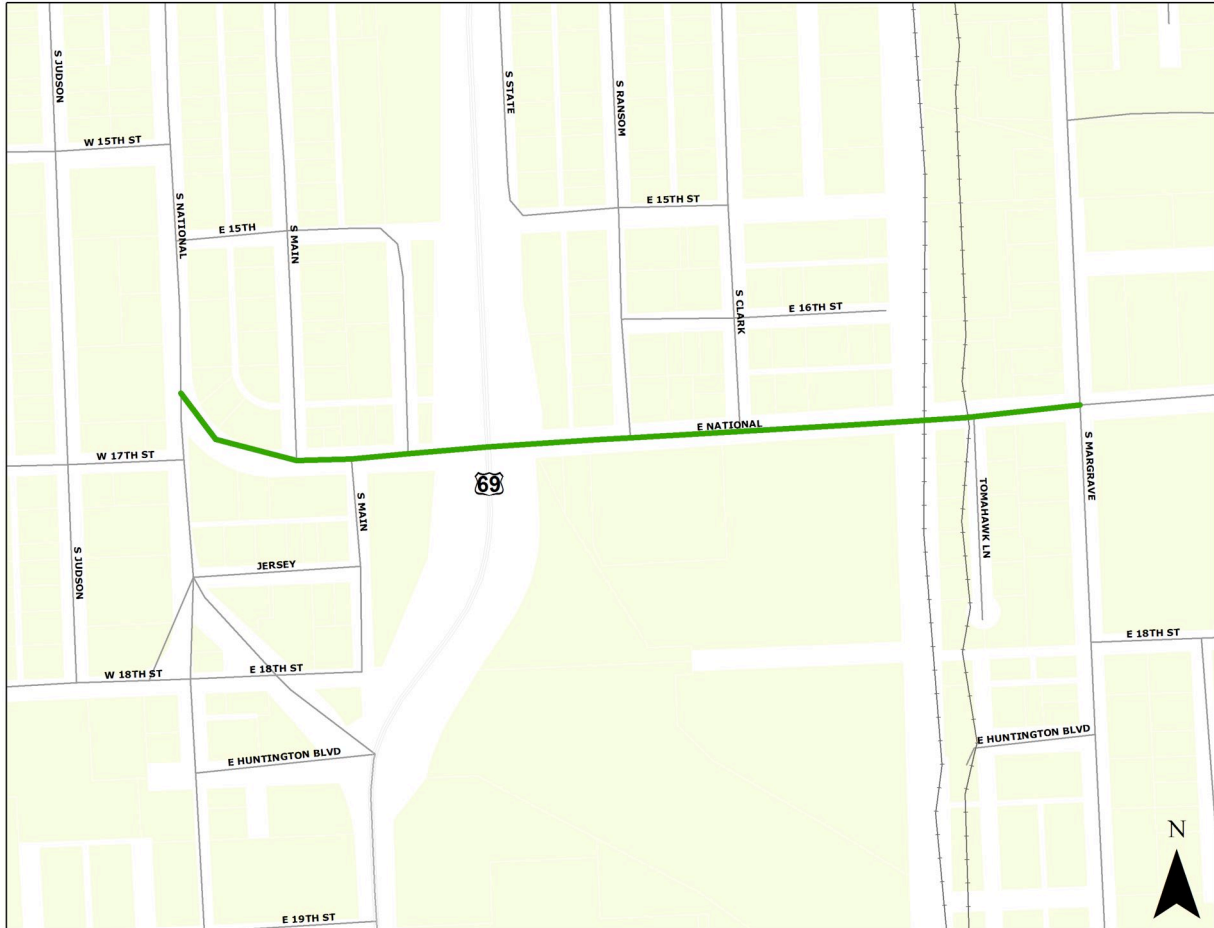
Broadway from E. Wall St to E 6th St

This stretch of sidewalk would connect to the sidewalk that was installed in 2015 on the south side of Wall St to the previous sidewalk project on E 6th St. Further, this sidewalk project would also connect to sidewalk that was recently built along E 3rd St through the SRTS grant. Approximate cost: \$73,108



3rd St from Margrave to Horton

3rd St is another thoroughfare that connects the east and west sides of town by crossing over Hwy 69 via a pedestrian bridge. The bridge was built in 1969 and rehabilitated in 2005. This recommended sidewalk would connect to the sidewalk on Margrave St that was recently built through the SRTS grant. Approximate cost: \$124,993



E National from S National to S Margrave St

This sidewalk recommendation would provide east-west travel, under Hwy 69, for those on the south side of town. It connects the residential areas on the east side of town to the businesses along S National and S Main St. Approximate cost: \$111,874



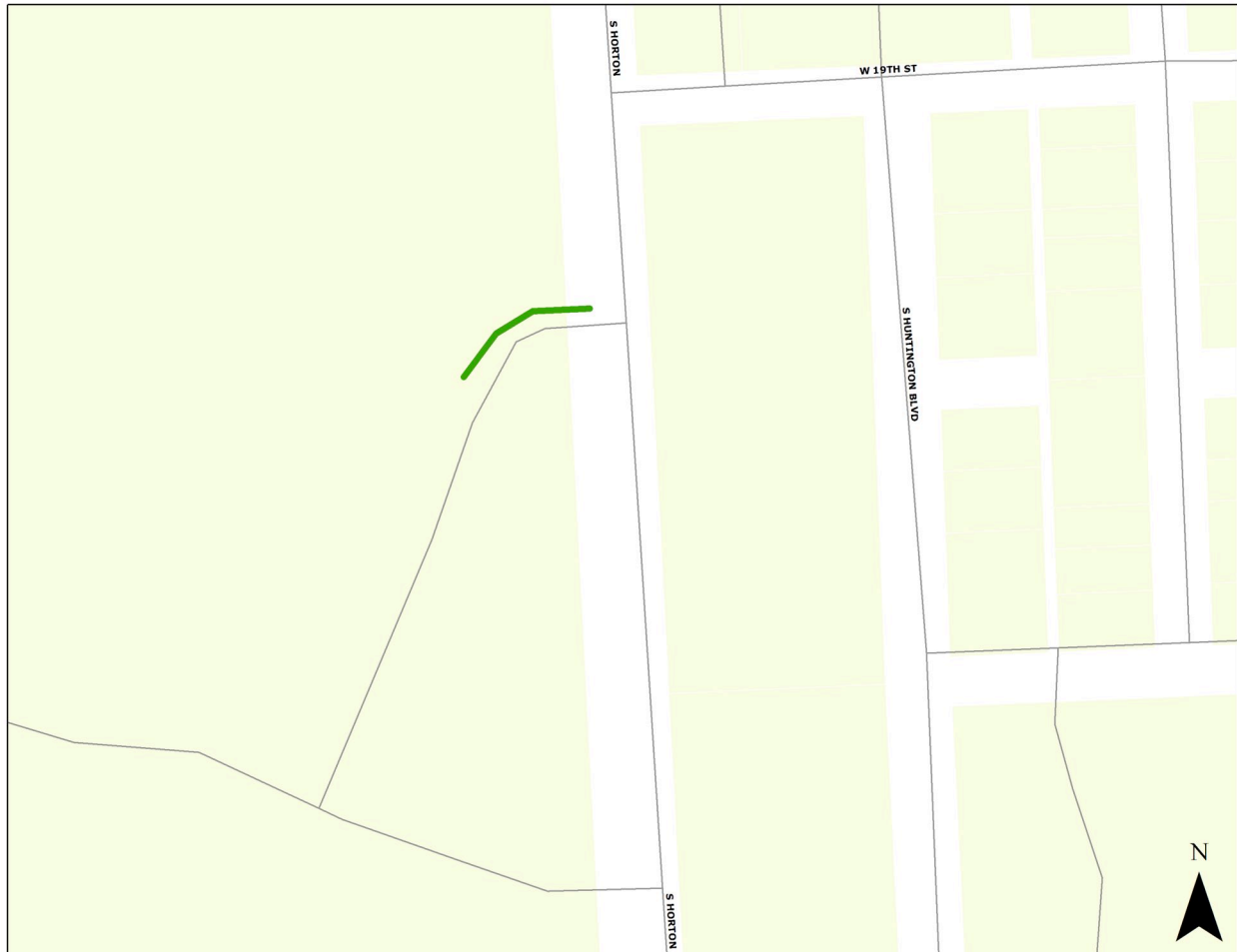
Margrave St. from 18th St. to 4th St.

Sidewalk along Margrave St. would connect to the sidewalk on 10th and 12th (which connect to Fort Scott Middle School), the new SRTS sidewalk built near Eugene Ware Elementary School, and the neighborhoods in-between. Approximate cost: \$276,725



Fort Scott Middle School Route

This sidewalk is recommended to provide a safer way for students who live on Shepherd to reach school. It also connects the sidewalk on Shepherd St. to the sidewalk in front of Fort Scott Middle School providing students with a safe place to walk outside of the school’s driveway. Approximate cost: \$104,994



Horton to Fort Scott Community College

This short sidewalk will connect students and residents to FSCC and the trail on campus. Approximate cost: \$5,880

Infrastructure Category 2: Trails

For this bicycle and pedestrian transportation plan, our sidewalk and on-street facilities recommendations focus on areas within the city limits of Fort Scott. However, as requested, the trails section includes trails within the city limits, but also investigates potential trail opportunities in Bourbon County.

Recreational trail use is popular nationwide, representing one of the highest ranked recreational demands in the United States. Trails serve a wide variety of uses ranging from functional transportation connectors, which enable citizens to travel safely from one location to another, to the passive and intimate pathways that provide opportunities to enjoy nature in a quiet and personal way. The development of this trails plan is focused on the following objectives:

- Increasing opportunities for people to partake in physical activity;
- Increasing the use of “non -motorized” transportation;
- Increasing the quality of life of Fort Scott residents;
- Making Fort Scott a more “livable” city; and
- Increasing the safety of bicyclists, pedestrians, and wheelchair users.

Existing Trail Infrastructure in Fort Scott

The Riverfront Park Trail is approximately 0.25 miles long in a really nice setting along the Marmaton River and Mill Creek.

Fort Scott Community College Lake Trail is a trail around the small lake at Fort Scott Community College. There is potential to expand upon this existing trail to offer more fitness opportunities in this part of town.

Ellis Park has a fitness loop trail that is approximately 0.5 miles long. This trail is near the Fort Scott Middle School and provides a wonderful opportunity for residents who live in the area to walk a fitness route.

Gunn Park has roughly 6.5 miles of mountain bike and single track that are mostly used by mountain bikers, trail runners, and nature enthusiasts.



Ellis Park has a roughly half-mile trail around the baseball fields.

Trail Planning

When planning trails, anything is possible, but not everything is practical. Trail locations are not limited to the public right-of-way offered by roads and streets. Open corridors, such as the floodways of streams and creeks, and nearly any undeveloped property could present a possible trail location. Ideally, trail corridors are located in areas that offer a natural setting removed from an existing roadway corridor. Reviewing trail locations outside of existing roadway corridors gives trail planners the ability to consider multiple locations that a sidewalk would prohibit. However, a proper trail plan must also maintain pragmatic points of view.

When planning trails anything is possible but not everything is practical.

In researching possible trail locations for the Fort Scott Bicycle and Pedestrian Master Plan, the investigation began with PedNet staff conducting a field study to examine potential trail options. This process involved several steps, but began by identifying options that connect trip generators like schools, stores, parks, and residential areas.

To find potential trails with the length and ambiance that would encourage Fort Scott residents to use them recreationally, publicly available rights-of-way (like government owned property and sewer easements) were investigated. Finally, railroad rights-of-way, both active and abandoned, were evaluated as prospective trail locations.

When the potential trail locations were identified, the corridor was examined to determine if there were circumstances that would disqualify a potential project from being practical by either being too expensive or too intrusive on the local environment. Items such as a creek bank that is too steep to maintain ADA compliance, or the need for expensive bridges, which can sometimes double or triple the cost of the trail, were evaluated. Sometimes, unforeseen costs removed a trail from the plan or lowered the priority of the proposed trail (e.g., a creek tunnel under a street that is two feet too short to allow a trail to travel under the road surface).

Once staff identified potential trail options, a public meeting was held to gain feedback on the proposed trails and additional areas residents would like to see trails. Residents who have decades of experience and knowledge are often the best sources of information for potential trails.

Nearly every proposed trail crosses privately held land at some point. While some landowners might be willing to give or sell an easement, others may have no interest in a trail bisecting their property. Every

effort was made to identify locations that would minimize the need to acquire privately owned land for trails. When possible, trails should run along a parcel edge to minimize impact.

This current proposed trail plan shows many potential trails. After a review of the potential trails by the citizens of Fort Scott, each trail section will need to be evaluated based on potential for construction, cost, and number of users served. A trail system is built over decades, but it is good for a community to identify potential trails early on, so that as development occurs and roads are improved, future trail sections can be accommodated.

Trail Costs

All potential trail projects identified in this plan will require more detailed planning, design, and engineering before they can be constructed. There will need to be a fairly extensive public input process to evaluate the detailed designs and further refine the exact routes of all proposed trail alignments. Once elected leaders and the public decide to pursue a trail route, detailed construction drawings will have to be drawn and construction permitting will be required. Permitting may be required from the city, county, State Department of Natural Resources, and, in some cases, the U.S. Army Corps of Engineers. Where land or right-of-way acquisition is required, the city will have to go through its internal processes for the acquisition to occur.

For proposed trail cost estimates, all of those factors have been included as well as basic labor and material costs. However, any of those individual project components could cause a project to cost more or less than expected. For the purposes of discussion and comparison, generalized per mile cost estimates have been provided based on recommended trail surface type.

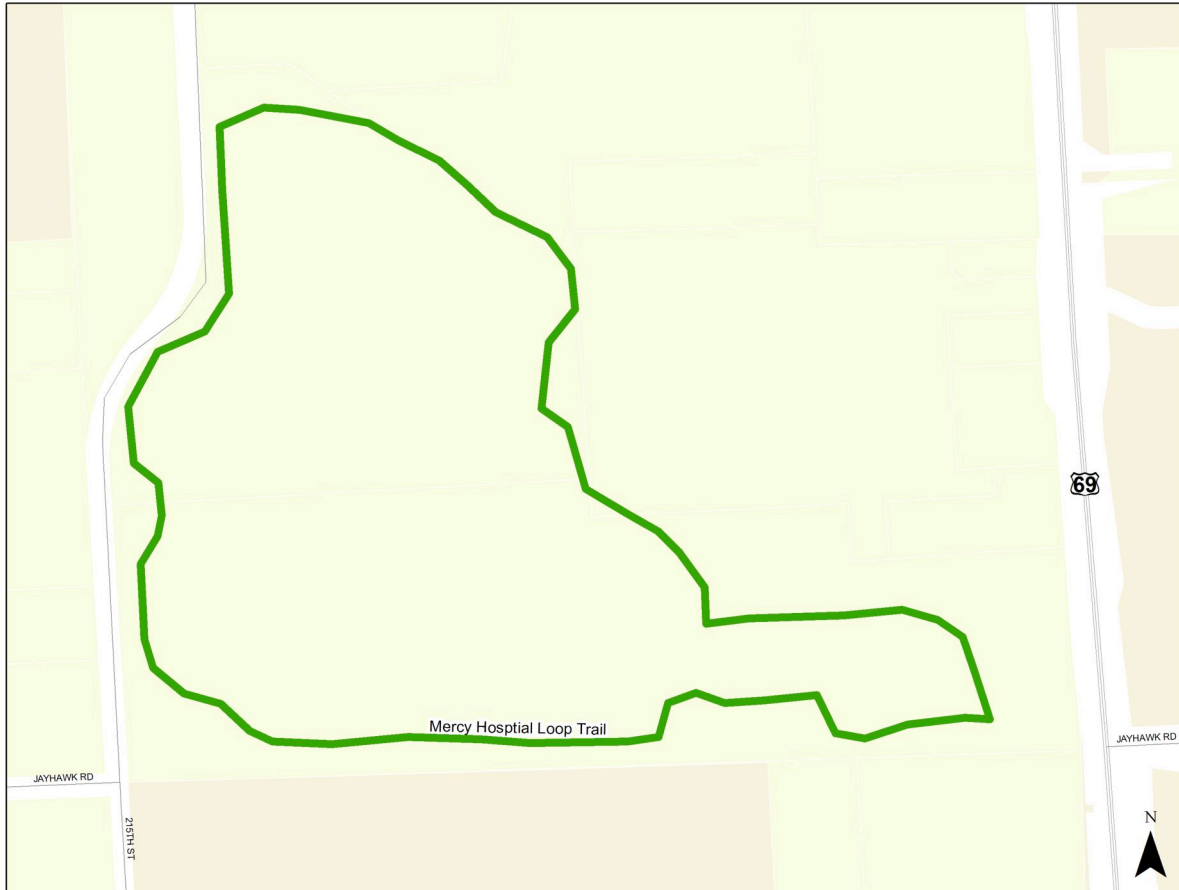
Estimated trail costs are in the table on the following page. Each trail is then individually described and mapped.

Trail Costs

Trail Project Name	Length	Trail Material	Total Cost
Highway 69 Trail	2.1	Concrete	\$1,638,000
Fort Scott Community College Trail	1.25	Concrete	\$975,000
Mercy Hospital Loop Trail	1.4	Concrete	\$1,092,000
Riverfront Park to Missouri Border Trail	5.1	Gravel	\$2,550,000
Riverfront Park to Juniper Road Trail	4.9	Gravel	\$2,450,000
Devon to Fort Scott Trail	9	Concrete	\$4,500,000
Old Pitcher Pike Trail	5.8	Gravel	\$2,900,000
Elm Creek Lake Trail	2.4	Gravel	\$1,200,000
Pitcher Pike to Cedar Creek Lake Trail	1.5	Concrete	\$1,170,000
Cedar Creek Lake Perimeter Trail	6.3	Gravel	\$3,150,000
Cedar Creek Lake to Redfield	6.3	Concrete	\$4,914,000
Redfield to Uniontown Trail	5.8	Concrete	\$4,524,000
Uniontown to Bourbon State Fishing Lake Trail	6.2	Concrete	\$4,836,000
Bourbon State Fishing Lake Trail	3.2	Gravel	\$1,600,000
Fulton to Mapleton Trail	10	Concrete	\$7,800,000
Mapleton to Xenia Trail	7.5	Concrete	\$5,850,000
Xenia to Bronson Trail	7.3	Concrete	\$5,694,000
		Total	\$56,843,000



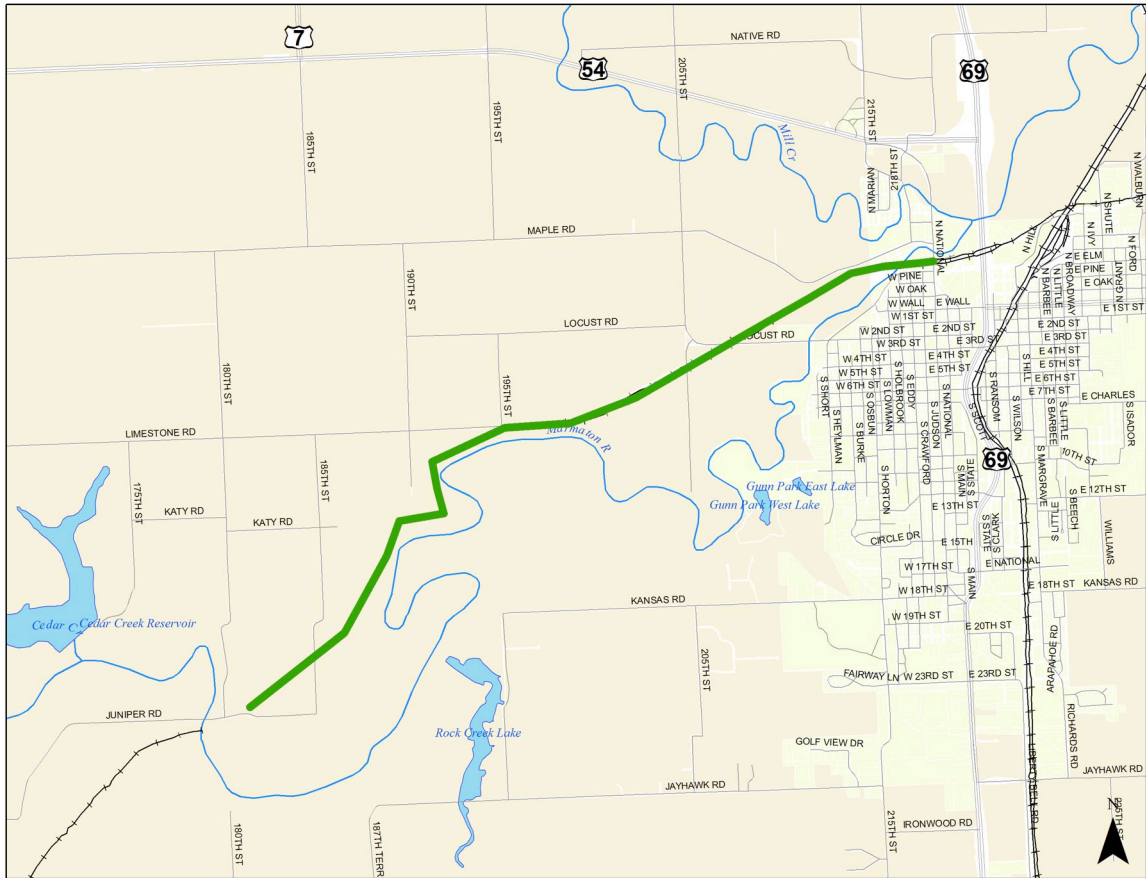
Fort Scott Community College Trail: This proposed concrete trail would extend the existing trail around the lake and add approximately 1.25 miles of distance to create a fitness loop that will serve the college as well as residents in the surrounding neighborhoods. Estimated cost: \$975,000.



Mercy Hospital Loop Trail: This 1.4 mile long proposed concrete trail would create a fitness loop for people who work in this area as well as residents in the surrounding neighborhoods. Estimated cost: \$1.092 million.



Riverfront Park to Missouri Border Trail: This proposed gravel trail utilizes the abandoned railroad from the north side of Fort Scott at National Avenue to the Missouri border approximately 5.1 miles to the east. Estimated cost: \$2.55 million.



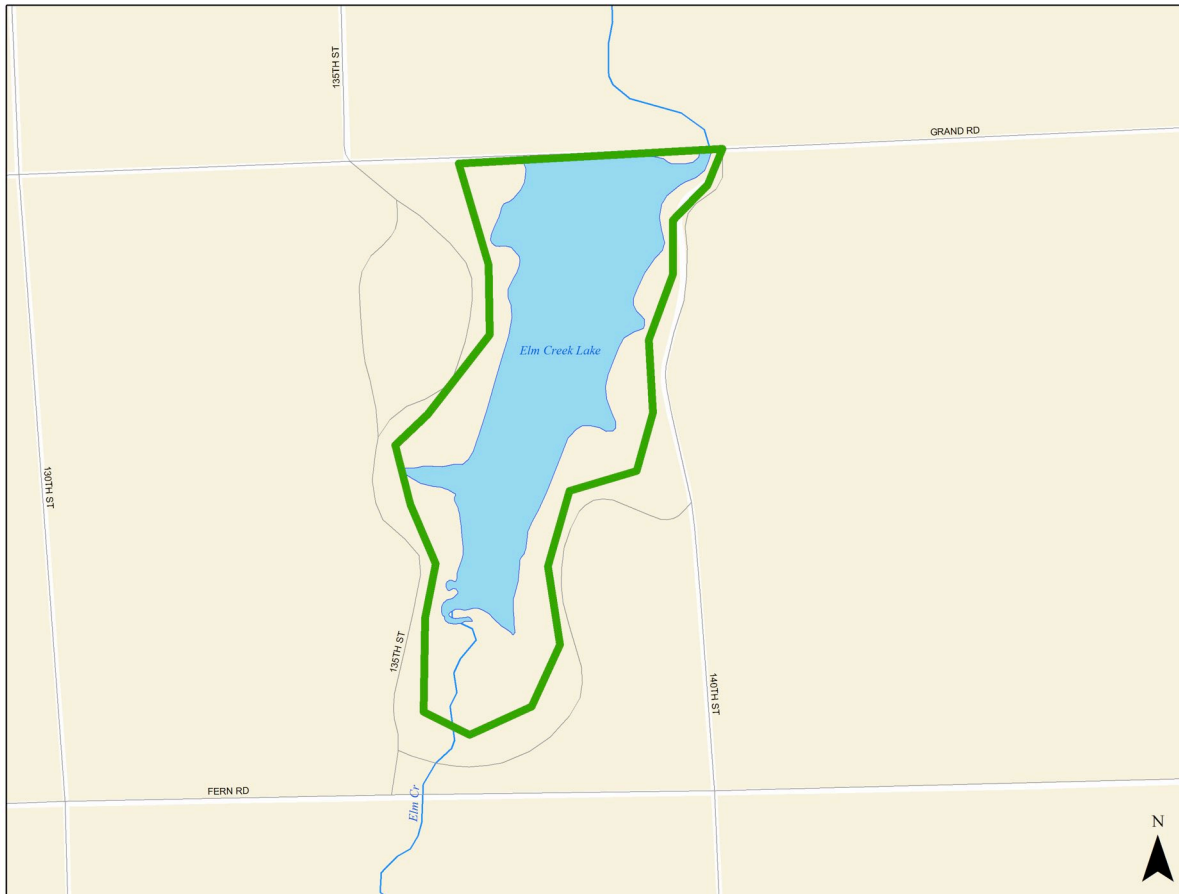
Riverfront Park to Juniper Road Trail: This proposed gravel trail utilizes the abandoned railroad from the north side of Fort Scott at National Avenue heading west to Juniper Rd., 4.9 miles to the west. Estimated cost: \$2.45 million.



Devon to Fort Scott Trail: This approximately 9 mile long trail follows Mill Creek from Riverfront Park in north Fort Scott to 155th St. near Devon, KS. This proposed trail is recommended to be concrete due to the fact that the trail parallels a creek that will flood periodically and require a lot of maintenance were it to be gravel. Estimated cost: \$4.5 million.



Old Picher Pike Trail: This proposed gravel trail utilizes the abandoned railroad corridor from Juniper Rd. to Elm Creek Lake County Park. This trail is approximately 5.8 miles long and passes through the Hollister Wildlife Area. Estimated cost: \$2.9 million



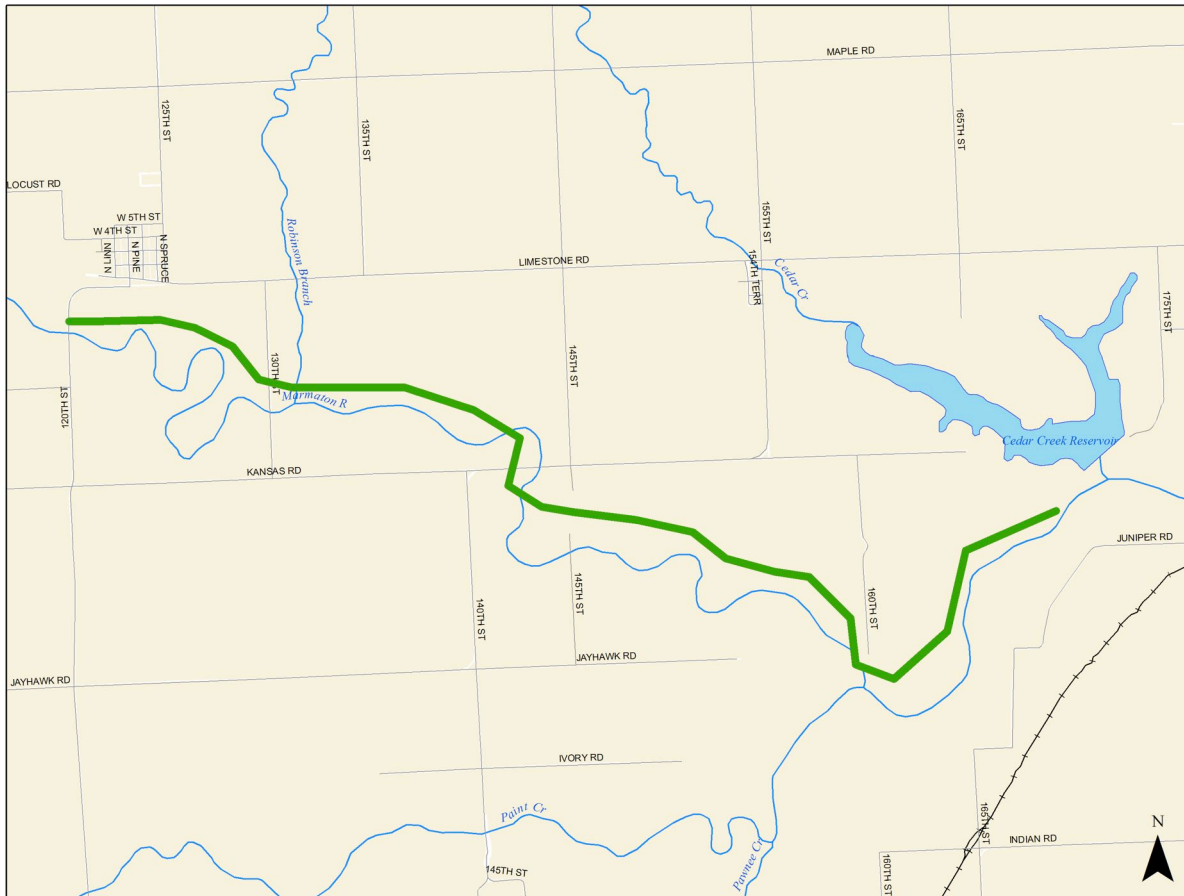
Elm Creek Lake Trail: This proposed 2.4 mile long trail is gravel and would be a popular trail for nature enthusiasts as well as fitness users. Estimated cost: \$1.2 million.



Picher Pike to Cedar Creek Lake Trail: This proposed 1.5 mile long concrete trail connects the Picher Pike Trail to Cedar Creek Lake Trail following the Marmaton River. Estimated cost: \$1.17 million.



Cedar Creek Lake Perimeter Trail: This proposed 6.3 mile long gravel trail encircles Cedar Creek Lake and would be very popular with nature enthusiasts. Estimated cost: \$3.15 million.



Cedar Creek Lake to Redfield: This proposed concrete trail parallels the Robinson Branch of the Marmaton River. It is approximately 6.3 miles long and begins at Cedar Creek Lake and ends near Redfield, KS at 120th St. Estimated cost: \$4.914 million.



Redfield to Uniontown Trail: This proposed concrete trail parallels the Robinson Branch of the Marmaton River. It is approximately 5.8 miles long. Estimated cost: \$4.524 million.



Uniontown to Bourbon State Fishing Lake Trail: This proposed concrete trail parallels the Robinson Branch of the Marmaton River. It is approximately 6.2 miles long. Estimated cost: \$4.836 million.



Bourbon State Fishing Lake Trail: This proposed 3.2 mile long gravel trail would be a popular trail for nature enthusiasts as well as fitness users. Estimated cost: \$1.6 million.

Chapter 3: Current Facilities and Opportunities



Fulton to Mapleton Trail: This approximately 10 mile long proposed trail parallels the Little Osage River from 215th St. in Fulton to 125th St. near Mapleton. It is proposed as a concrete trail because it parallels a river that will flood periodically. Estimated cost: \$7.8 million.



Mapleton to Xenia Trail: This approximately 7.5 mile long proposed trail parallels the Little Osage River and Limestone Creek from 125th St. near Mapleton to 62nd Terrace south of Xenia. It is proposed as a concrete trail because it parallels a river that will flood periodically. Estimated cost: \$5.85 million.



Xenia to Bronson Trail: This approximately 7.3 mile long proposed trail parallels the Limestone Creek from 62nd Terrace south of Xenia to Hwy. 3, north of Bronson. It is proposed as a concrete trail because it parallels a river that will flood periodically. Estimated cost: \$5.649 million.

Infrastructure Category 3: On-Street Facilities

Even if all the trails recommended in this plan were built, street connections would still be required to fill in gaps where trail development is not possible.

On-street facilities are relatively inexpensive compared to sidewalk and trail projects, but installing these projects will have an immediately noticeable impact on the community.

Crosswalk Improvements

For crosswalk improvements, we considered streets that had recommendations to build sidewalks on them and areas of concern for crossing.

Crosswalk improvements are recommended at the following locations:

- 6th and Horton
- South of 19th St. across Horton
- 18th and Horton
- Crawford St. and 6th
- E National and Margrave St.
- Margrave and 6th

A more detailed explanation of the improvements is in Chapter 4.

The estimated cost for the crosswalk improvements is \$45,800

Bicycle Lanes and Sharrows

Streets need to have at least a 30' width in order to successfully install bicycle lanes. This would include space for two 4.5' bicycle lanes (minimum and not ideal), and two 10.5' travel lanes. Therefore, on roads 30' or wider, we recommend bicycle lanes.

In some cases, streets narrower than 30' could be fitted with sharrows. For sharrow recommendations, roads were selected that would connect to the recommended bike lanes, schools, parks, trails, and downtown.

Therefore, bicycle lanes and sharrows are recommended at the following locations:

Bike Lanes

- Horton from just after Meadow to 6th St
- 6th from Horton to Broadway
- Margrave from 6th to E National
- S. National from 7th to Jersey St.
- Wall from State to Brown St.

Sharrows

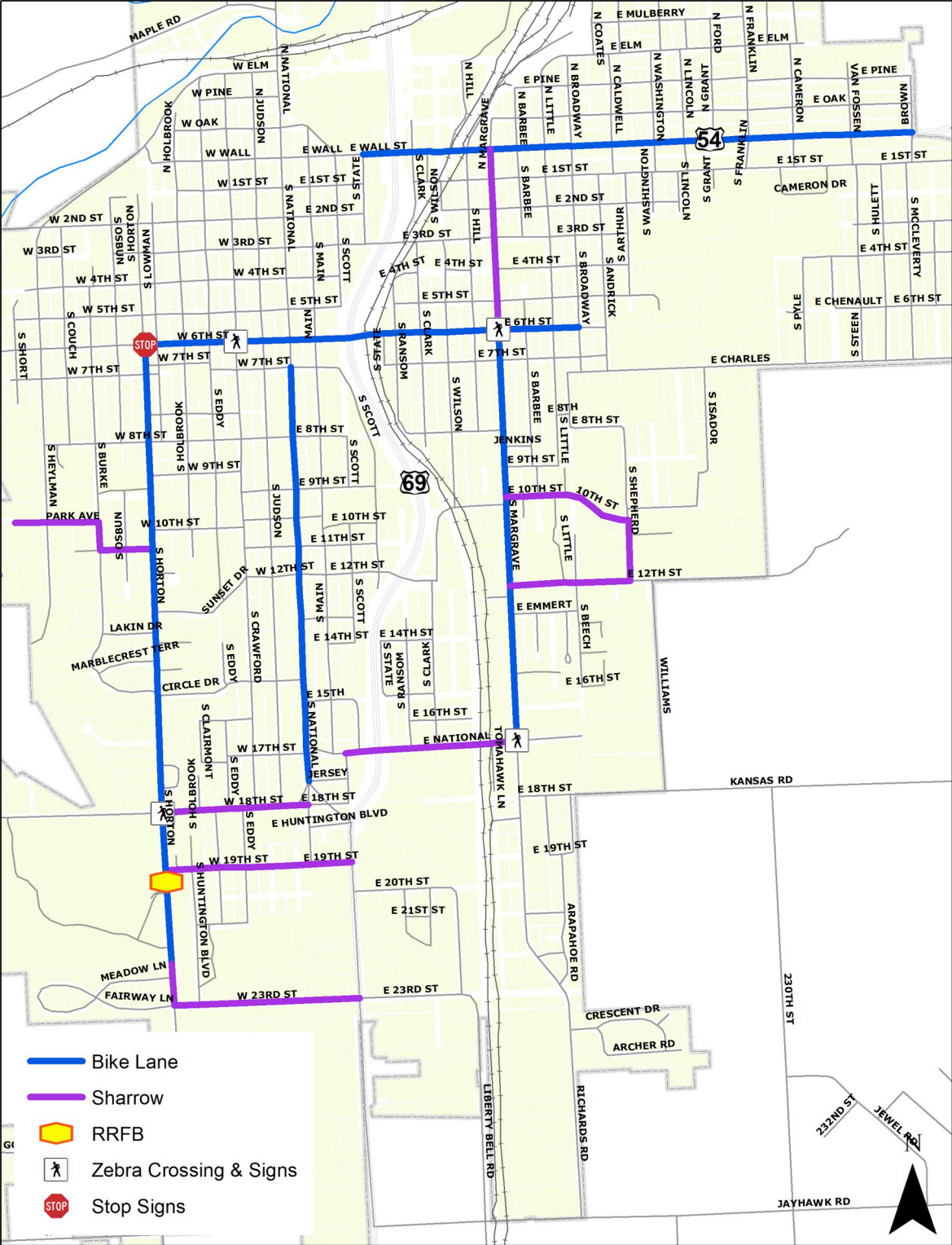
- Margrave from E Wall to 6th
- Park Ave from Gunn Park to Burke St and Burke St. from Park Ave to 9th and 9th from Burke St. to Horton St.
- E. National from S. Main St. to Margrave St.
- 18th from Horton to S. National
- 19th from Horton to S. Main
- S. Horton from just north of Meadow to 23rd and 23rd from Horton to S Main
- 10th from Margrave to Shepherd and Shepherd from 10th to 12th and 12th from Shepherd to Margrave

The estimated cost for installing the bike lanes is \$284,500.

The estimated costs for installing the sharrows is \$30,600.

The next page provides a map of the on-street recommendations.

Map of On-Street Recommendations for Fort Scott



Total Opportunities Costs

Improvement	Cost
Total Sidewalk	\$19,550,330
Total Trails	\$56,843,000
Total On-Street Facilities	\$360,900
Total	\$76,754,230

Page Left Blank

Chapter 4: Priority List

DOWNTOWN DIRECTORY

Treasure Hunt
Antiques & Collectibles
Primitives & Furniture
6 S. Main

Nu-Grille
1946
Family Style Diner
24 N. National

**Trolley Tours
Hourly**
Visitor Info Center
231 East Wall

Papa Don's Pizza
Spaghetti, Sandwiches
Hand-dipped Ice Cream
10 N. Main

**Vinedo del Álamo
Winery Outlet**
102 S. National Ave.
vinedodelalamowinery.com

**Radio Shack
& U.S. Cellular**
Corner of Wall Street & National
620.223.4501

**Main Street
Gallery & Gifts**
23 S. Main Street
620.223.2210

Bids & Dibs
Retail & Resale Shop
www.bidsanddibs.com
19 S. National Avenue

**Liberty Theatre
& Crooners Lounge**
www.libertytheatre.com
113 S. Main Street

The Bunker
Firearms-Range-Training
www.thebunkerllc.com
108 Scott Avenue

Why Prioritize Projects?

In Chapter 3, a comprehensive project list was outlined, complete with cost estimates for the construction and implementation of all the project opportunities. However, the sheer number of projects and the \$76,754,230 associated cost are far too great for Fort Scott to consider building in the immediate future. The sidewalk, trail, and on-street facilities projects that offered the highest return on investment were selected for prioritization.

Prioritized List is Not Proscriptive

The Fort Scott Bicycle and Pedestrian Master Plan, and the projects described herein, are intended as a starting point for discussion, and are not a proscriptive guide for community improvements. Hopefully, the information provided will serve as a resource to support future investment decisions by Fort Scott and others concerning sidewalks, trails, and on-street facilities.

The planning focuses on the long-term development of an integrated system of sidewalks, trails, and on-street facilities. While this priority list was created in good faith and included to focus the results of this plan, Fort Scott residents should be consulted as to which projects would most benefit the community.

The Fort Scott Bicycle and Pedestrian Master Plan focuses on the long-term development of an integrated system of sidewalks, trails, and on-street facilities.

Factors that Influenced Selection

First, the projects were ranked based upon these criteria:

- Potential to increase the mobility of bicyclists and pedestrians
- Potential to increase physical activity
- Potential to reduce automobile trips in Fort Scott
- Quality of the project (For example, would a trail project only be possible if it included several “at grade” crossings thereby reducing its comfort and safety?)

Then, the highest ranked projects were weighed against two “costs:”

- The cost to complete the project
- The ease of completion (For example, would the land acquisition process be difficult because the project crosses several private land holdings?)

Sidewalk Priority Projects

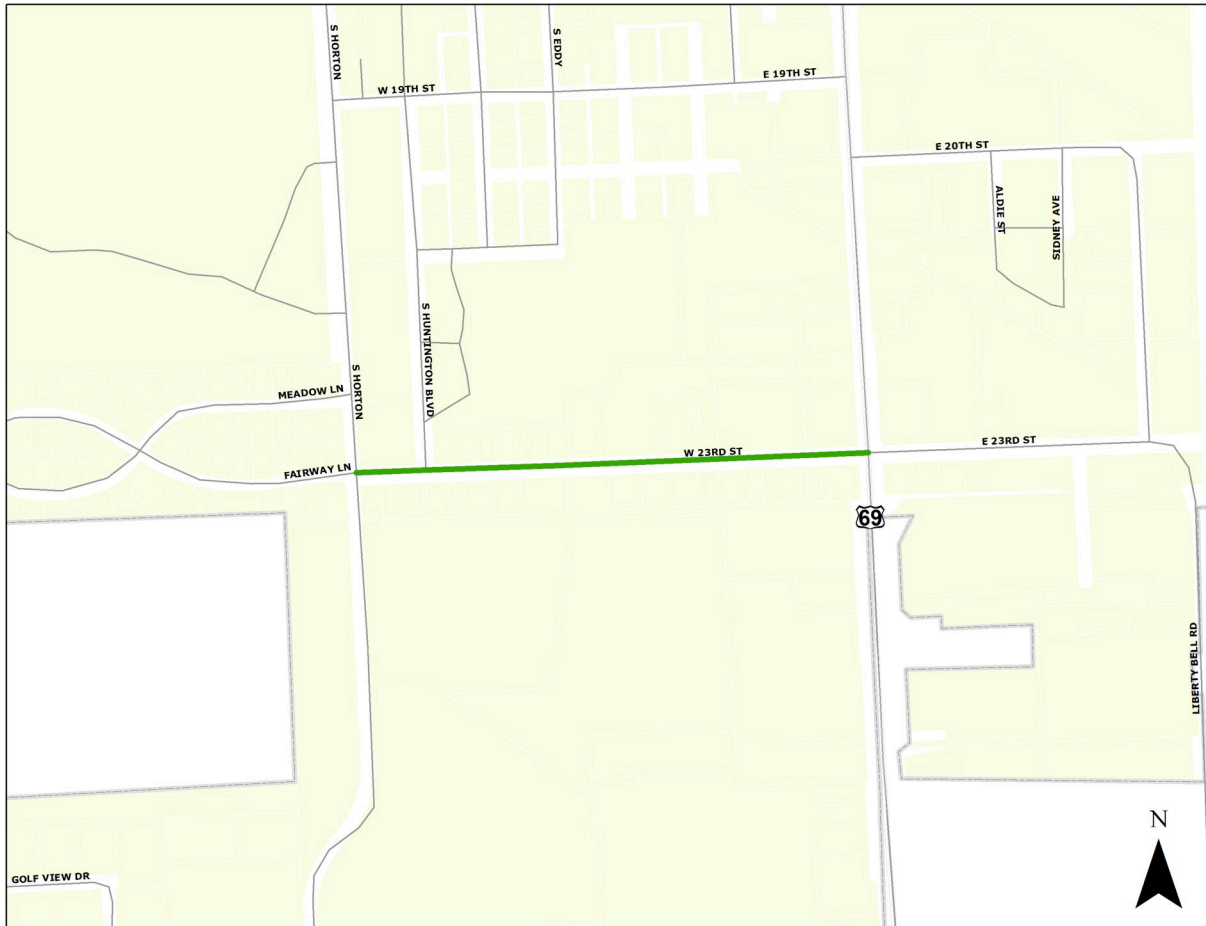
The development of the sidewalk plan focused on the following objectives:

- Improving conditions for people who are currently walking
- Improving accessibility to sidewalk facilities for pedestrians with disabilities
- Providing connections to places that attract pedestrians
- Increasing levels of walking
- Reducing the number of crashes involving pedestrians

PedNet staff, along with the Steering Committee, identified eight sidewalk priority projects. The table below shows the costs for each sidewalk and the following pages provide a map and description of each sidewalk project.

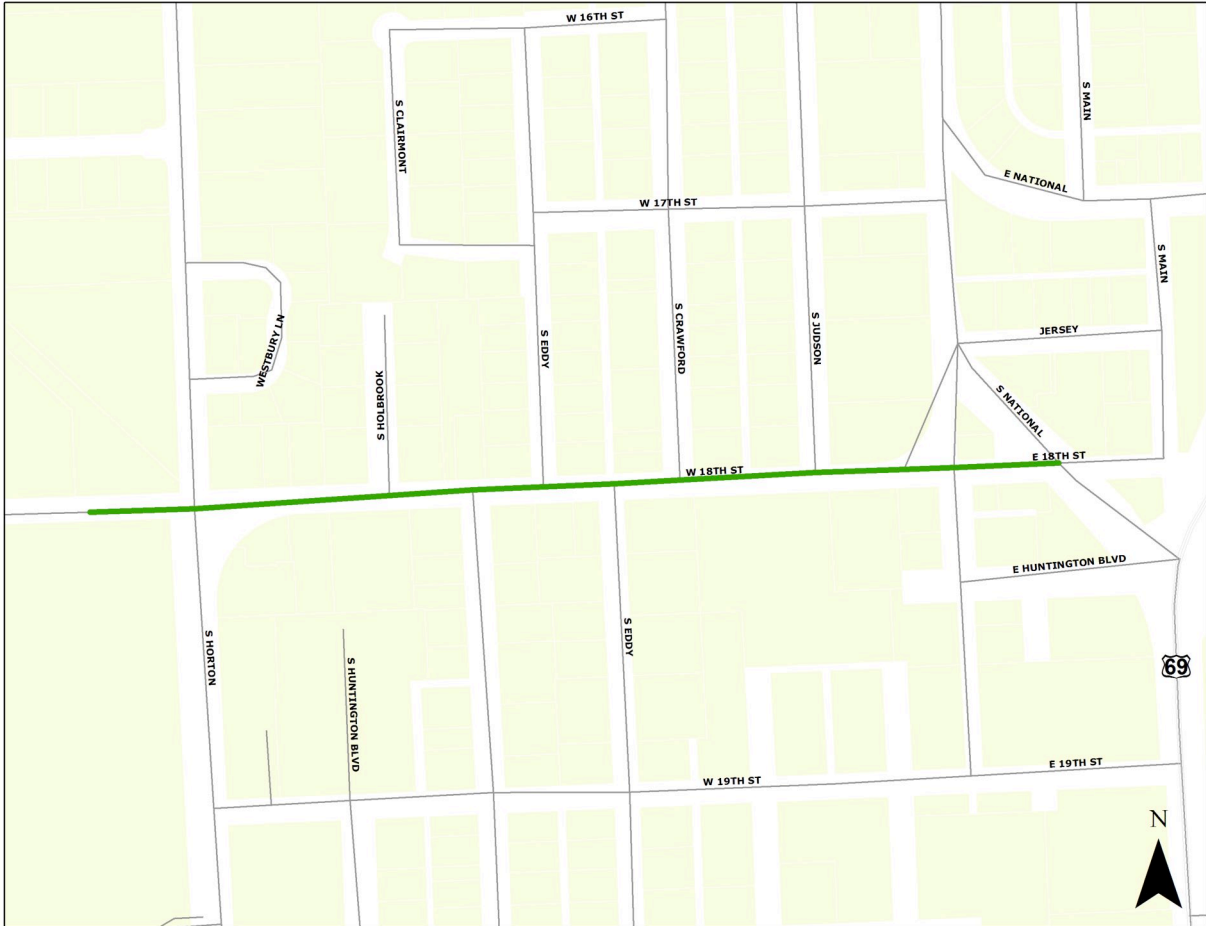
Sidewalk Priority Project Costs

Location	Cost
23rd St. from Horton to S. Main St.	\$124,824
18th St. from Fort Scott Community College Trail Parking to S. National Ave.	\$107,940
Gunn Park to Horton St.	\$94,390
6th St. from Heylman to Andrick	\$263,024
Margrave St. from 18th St. to 4th St.	\$276,725
Fort Scott Community College Route	\$375,533
Eastern Route	\$384,412
Fort Scott Middle School Route	\$104,994
Total	\$1,731,842



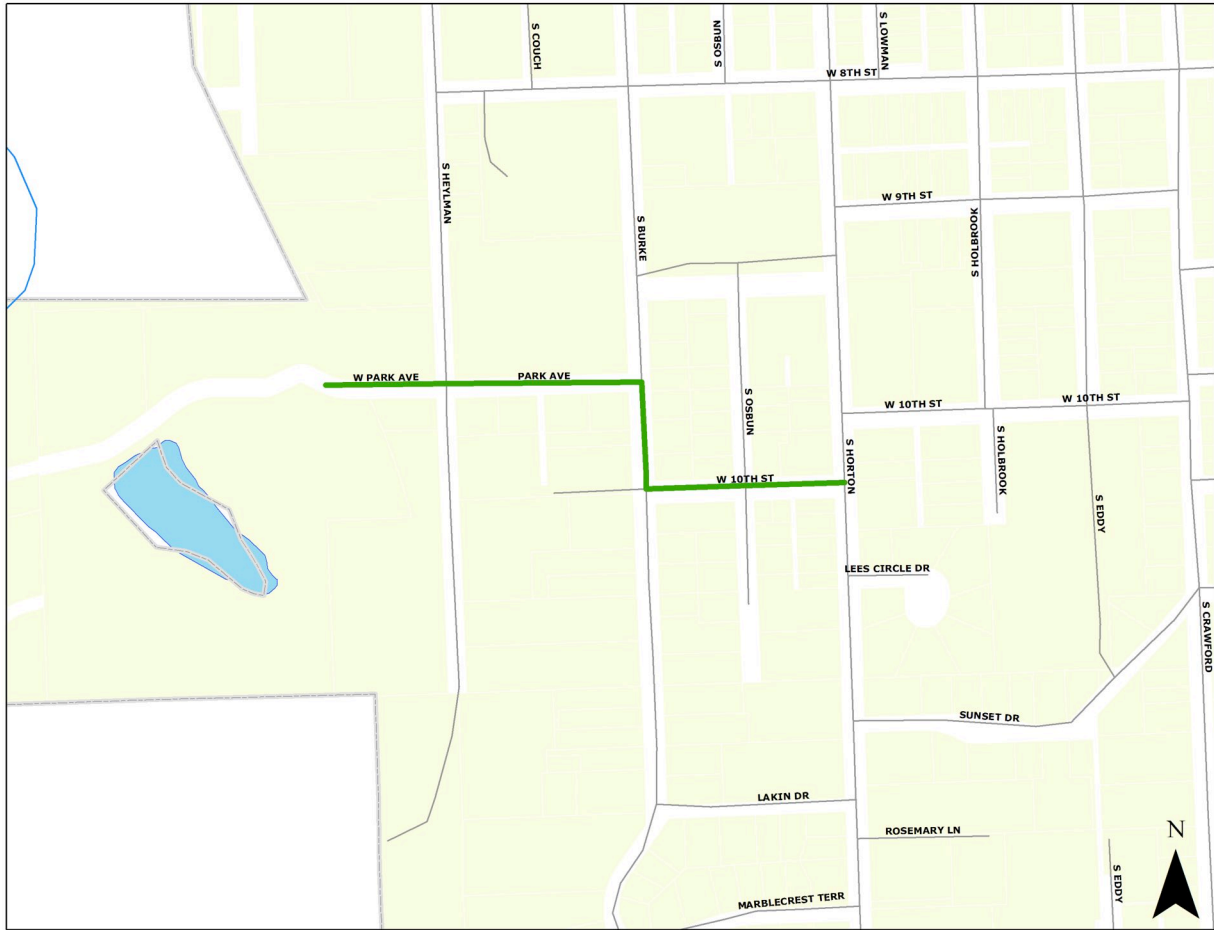
23rd St from Horton to S. Main St.

Adding sidewalk along 23rd St. would provide a safe place for Fort Scott Community College (FSCC) students and local residents to walk from the west of town to businesses and restaurants located along S. Main St. Approximate cost: \$124,824



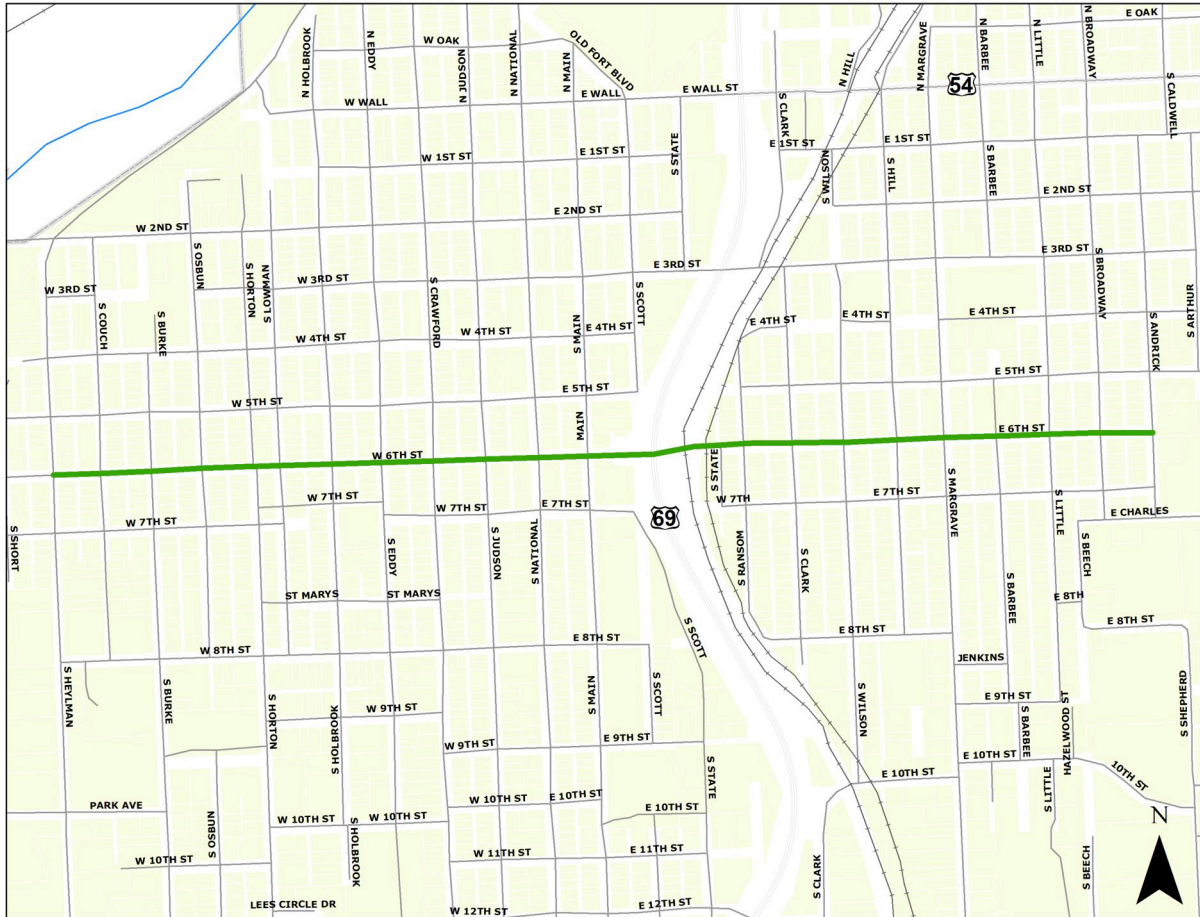
18th St. from FSCC Trail Parking to S National Ave.

18th St. is another common east-west route for residents and FSCC students to walk from campus to businesses. The Fort Scott Cinema is also along this route. Approximate cost: \$107,940



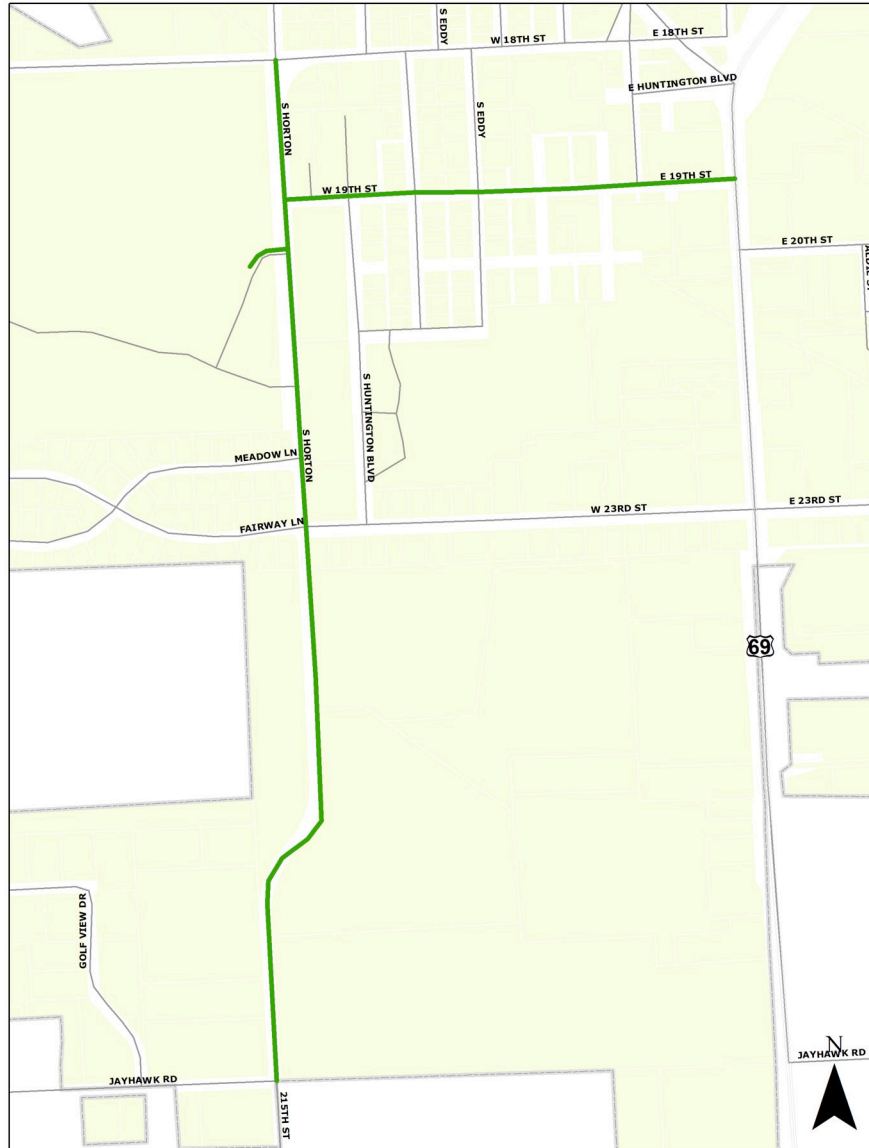
Gunn Park to Horton St.

This section of sidewalk would provide an area for pedestrians to walk between Horton and Gunn Park, which is a frequented park that has trails, lakes for fishing, camping sites, and more. Approximate cost: \$94,390



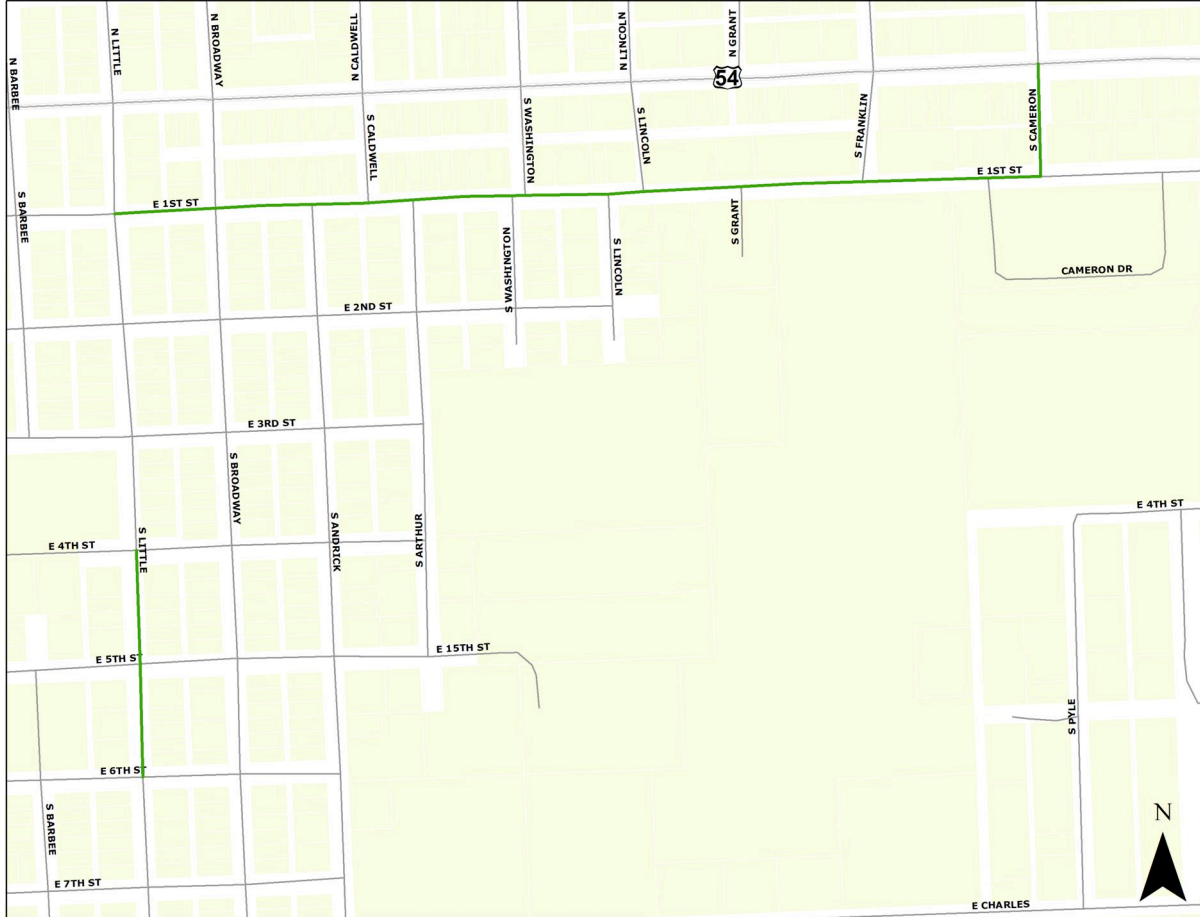
6th St. from Heylman to Andrick

6th St is a busy thoroughfare connecting the west and east side of town by crossing over Hwy 69 via a pedestrian bridge. This bridge was built in 1969 and rehabilitated in 2005. This sidewalk would also provide pedestrian access to the local G&W Foods grocery store. Approximate cost: \$263,024



Fort Scott Community College Route

This group of sidewalks will connect students and residents to FSCC, the trail on FSCC campus, Main St businesses, and the neighborhoods in-between. Approximate cost: \$375,533



Eastern Route

Combined with the SRTS sidewalks built in 2017, this group of sidewalks will provide residents in the eastern neighborhood a safer way to travel by foot to G&W Foods, Eugene Ware Elementary, Wall St. businesses, and more. Approximate Cost: \$\$384,412



Fort Scott Middle School Route

This sidewalk was recommended to provide a safer way for students who live on Shepherd to reach school. It also connects the sidewalk on Shepherd to the sidewalk in front of Fort Scott Middle School providing students with a safe place to walk outside of the school’s driveway. Approximate cost: \$104,994

Trail Priority Projects

Recreational trail use is popular nationwide, representing one of the highest-ranked recreational demands in the United States. Trails serve a wide variety of purposes. They range from functional transportation connectors, which enable citizens to travel safely from one location to another, to the passive and intimate pathways that provide opportunities to enjoy nature in a quiet and personal way.

The development of this trail plan focused on the following objectives:

- Increasing opportunities for people to partake in physical activity
- Increasing the use of “non-motorized” transportation
- Increasing the quality of life of Fort Scott citizens
- Making Fort Scott a more “livable” city
- Increasing the safety of bicyclists, pedestrians, and wheelchair users

Highway 69 Trail

The proposed Highway 69 Trail follows the Hwy 69 road corridor from the Marmaton River on the north to East National Ave. on the south. This proposed concrete trail is approximately 2.1 miles long. There is a lot of green space and drainage that parallels the corridor creating space for a trail separate from the road system. A preliminary cost estimate for the trail project is \$1.96 million. This project will most likely need to be coordinated with the Kansas Department of Transportation (KDOT).

The northern end of the trail begins at Riverfront Park on the east side of Hwy 69 and heads south, parallel to the Hwy 69 corridor. There is an open field and floodplain area that will either require the renovation of the existing abandoned railroad bridge or a new bridge with a span of approximately 100' (bridge #1). Design for the construction of this bridge, and all bridges as part of this project, will need to be completed by a structural engineer.

Several culvert pipes will also be required as part of this trail section. The trail continues south to an on-grade crossing of Hwy 54 between the Fort Scott Munitions and Hwy 69. The trail continues south between S. Clark St. and Hwy 69 to a box culvert under East 3rd St. The existing box culvert has plenty of clearance to allow for both drainage and a trail underpass.

Trails range from functional transportation connectors, which enable citizens to travel safely from one location to another, to the passive and intimate pathways that provide opportunities to enjoy nature in a quiet and personal way.



Existing abandoned railroad bridge along Hwy 69 Trail.

South of 3rd St., the proposed trail is routed between the creek and the railroad corridor. There is an existing open space that is well suited for trail development. From the north side of 3rd St. there is an opportunity to create a connection to the 3rd St. overpass.

Continuing south, the trail comes to 6th St. where there is an existing box culvert that connects under both 6th St. and Hwy 69. This is a long box culvert that has plenty of clearance for both drainage and a trail. Because of the length and the angle turn in this culvert, lights are recommended in the tunnel.

South of 6th St. the trail is now proposed on the west side of Hwy 69 and runs the length of Fisher Park between the park and the creek. There are some tight spots where the existing park roadway will have to be modified to allow for the trail, but nothing that cannot be worked out. The trail continues south in the green space between State St. and the creek.

There are some apartments to the north of Fisher Park where the trail will pass between the apartments and the creek and then climb up a small hill to the practice fields at Fort Scott Senior High School. The proposed trail will pass through high school property between the practice field and the steep bank down to the creek. At the northern end of the practice fields, the trail will be routed in the wooded area between the Parkway Church of God and the creek. It will continue south on the western side of Hwy 69.

At 12th St. there is a proposed on-grade crossing. At this location, the proposed trail is routed between Hwy 69 and the creek all the way to East National Ave. Just south of 12th St., bridge #2 will be required to span over a box culvert that feeds into the creek.

There is an opportunity to create a connector trail to 14th St. where E. 14th St. dead-ends at Hwy 69. This will require a pedestrian bridge (bridge #3) of approximately 40' span.

A detailed cost estimate and a map of the Highway 69 trail can be seen on the following pages. The cost estimate for the Hwy 69 Trail in Chapter 3 is less than the cost estimate here in Chapter 4. This is because Chapter 3 was a general cost estimate, whereas the cost estimate on the next page is much more detailed.



Open space between Fisher Park and Hwy 69



Proposed trail route between Hwy 69 and the creek corridor.

Trails Costs

Item Description	Quantity	Unit price	Cost Estimate	Notes
10' Concrete trail	10,123	\$60.00	\$607,380.00	Quantity in linear feet
Right-Of-Way acquisition	1	Lump sum	\$25,000.00	50' easement = 1 acre/400' of trail at \$5,000/acre. Land value can vary greatly.
Grubbing, tree removal	240	\$100.00	\$24,000.00	Quantity in hours
Grading (hours)	550	\$120.00	\$66,000.00	Quantity in hours
Gravel base rock	10,123	\$1.50	\$15,184.50	3" on avg. under all concrete trail
Bridge 1 Approx. 100'	1	\$250,000.00	\$250,000.00	Refurbish exist. Bridge or replace. Depending on Structural Eng. Report
60" culvert pipe	2	\$5,000.00	\$10,000.00	40' long at north end near RR lines
Bridge 2 Approx. 50'	1	\$120,000.00	\$120,000.00	Near 12th St in Hwy 69 Right-of-Way
Bridge 3 Approx. 40'	1	\$100,000.00	\$100,000.00	14th St connector
Tunnel under 3rd St.	1	\$50,000.00	\$50,000.00	Lights, concrete floor
Tunnel under 6th St.	1	\$100,000.00	\$100,000.00	Lights, concrete floor
Topsoil	30	\$200.00	\$6,000.00	
On Grade Street crossings	2	\$30,000.00	\$60,000.00	Signage, gates, street markings, 12th St. and at Wall St.
Culvert pipes for minor drainage	5	\$2,000.00	\$10,000.00	
Landscape, grass, native seed	Lump		\$15,000.00	
Trees	50	\$200.00	\$10,000.00	Approx. 1 tree every 200'
Silt fence	8,500	\$1.75	\$14,875.00	
Signs	1	Lump sum	\$10,000.00	Wayfinding signs
Sign: main sign	2	\$10,000.00	\$20,000.00	
		SUB TOTAL:	\$1,513,439.50	
Engineering/Permits (18%)	1	Lump sum	\$272,419.11	
Contingency (10% of subtotal + engineering/permits)	1	Lump sum	\$178,585.86	
		TOTAL	\$1,964,444.47	

On-Street Facility Priority Projects

Crosswalk Improvements

For crosswalk improvements, focus was given to intersections that had recommended sidewalk improvements and areas of concern based on public comment and further investigation.

Depending on the project and the assessment of Fort Scott staff, a traffic study may be warranted before implementation of these recommendations. A traffic study is a detailed examination and analysis of a transportation system that serves to quantify the extent of a transportation problem or to provide an analysis of a proposed transportation solution. Typically, a registered traffic engineer should conduct the study.

6th and Horton: Depending on what a traffic study reveals, it appears that adding a stop sign to northbound Horton and removing the stop sign for eastbound 6th would help. Alternatively and warrant dependent, this intersection may justify a four way stop. Estimated cost: \$1,000

South of 19th across Horton: We recommend adding concrete in the grassy area between the two roads and installing a rectangular rapid flashing beacon (RRFB) to cross Horton. These warning signs and lights have been found to increase motorist compliance to crosswalks from 18% to 88%. A RRFB is recommended because the crosswalk is located at an “uncontrolled intersection” meaning right-of-way is not regulated in either direction by a signal or sign. Estimated cost: \$30,000

18th and Horton: We recommend installing a crosswalk across the south side of Horton, including at the free right turn on to 18th. Updating the pork chop and creating ADA-compliant curbs will also be necessary. This will help residents and students reach campus and the FSCC trail. Estimated cost: \$5,800

E National and Margrave: We recommend painting a crosswalk and installing a crossing sign across the west side of E National. This corresponds with our recommendation to add sidewalk on Margrave and E National. Estimated cost: \$1,000

Crawford and 6th: We recommend painting crosswalks and installing crossing signs at all four crossings. Estimated cost: \$4,000



A Rectangular rapid flashing beacon (RRFB)

Margrave and 6th: We recommend painting crosswalks and installing crossing signs at all four crossings. Estimated cost: \$4,000

Total costs for crosswalk improvements: \$45,800

Bike Lane Improvements

The following five bike lane projects have street widths of 30' or wider. If the street is 30' wide, it allows for two 4.5' bike lanes and two 10.5' travel lanes. If the street is 33' or wider, PedNet recommends installing two 6' bike lanes.

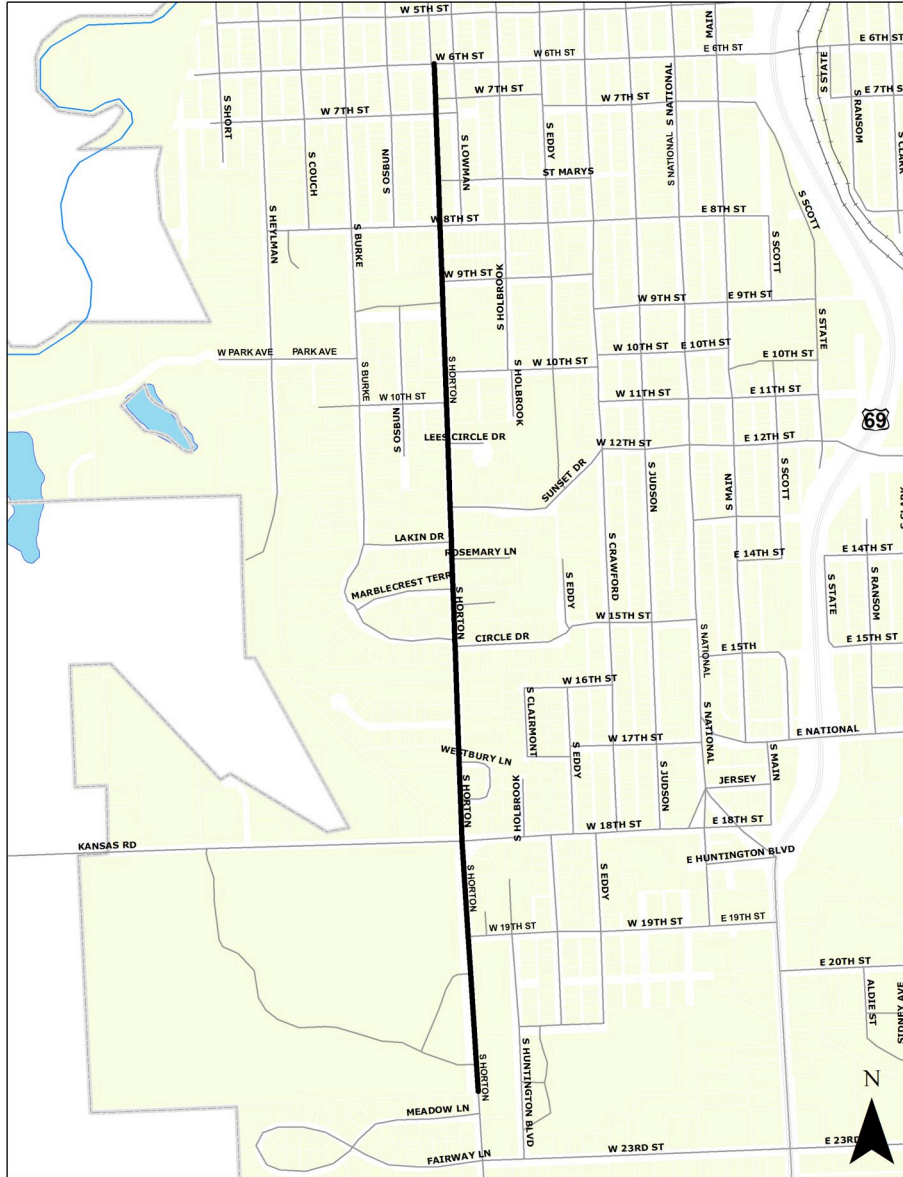
However, for E. Wall St., since it is a highway with semi traffic and a shoulder, our recommendation is slightly different. For that particular bike lane route we recommend, two 5' bike lanes, two 12' travel lanes, and two 7' parking lanes.

Cost estimates are below and individual maps can be seen on the following pages.

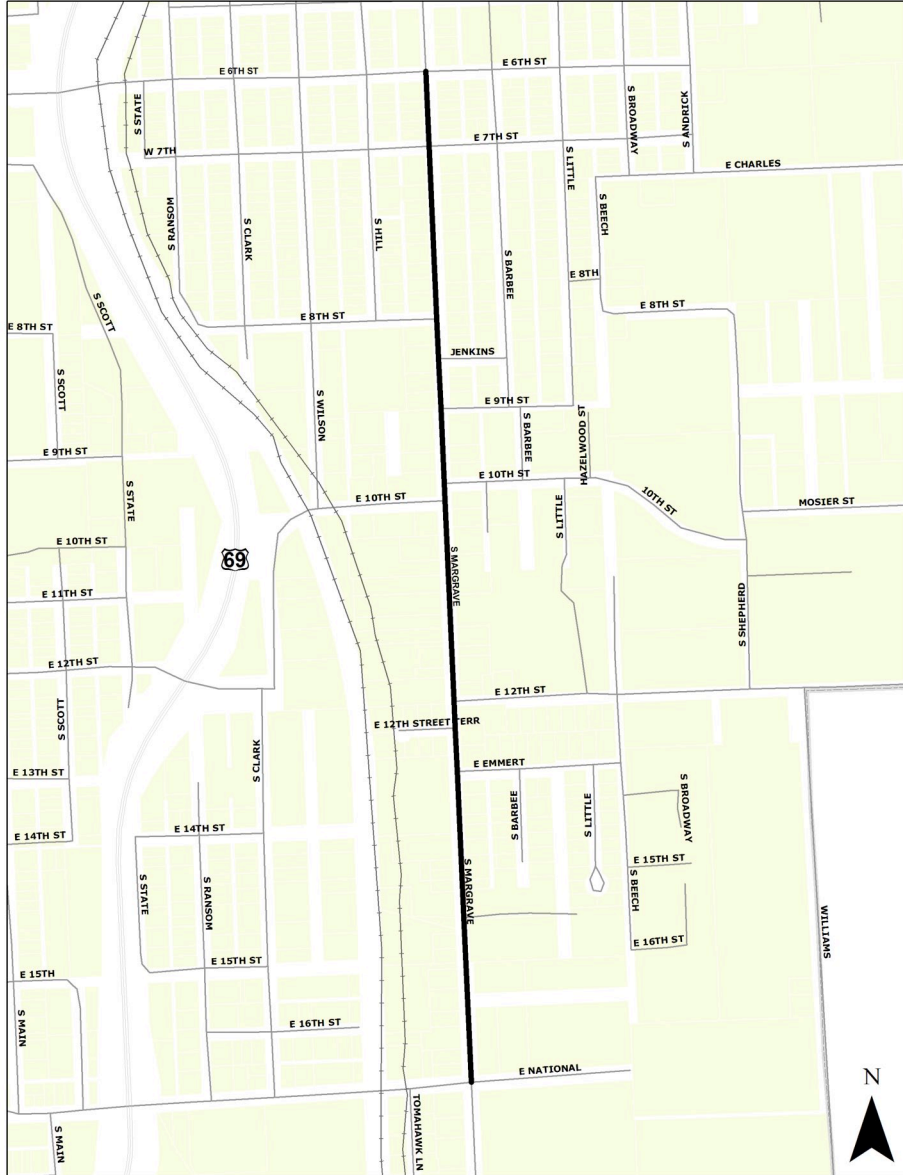
While sharrows can be beneficial, we believe bike lane installation should take precedent. Therefore, there are no priority projects for sharrows.

Location	Miles	Cost per Mile	Total Cost
Horton from just north of Meadow to 6 th	2.94	\$25,000.00	\$73,500
6 th from Horton to Broadway	2	\$25,000.00	\$50,000
Margrave from 6 th to E National	1.94	\$25,000.00	\$48,500
S National from 7 th to Jersey St	1.9	\$25,000.00	\$47,500
Wall from State to Brown St	2.6	\$25,000.00	\$65,000
		Total	\$284,500

Horton from just north of Meadow to 6th



Margrave from 6th to E National



S National from 7th to Jersey St



Total Priority Costs

Improvement	Cost
Sidewalk Priority Projects	\$1,731,842
Hwy 69 Trail Priority Project	\$1,964,444
On-Street Priority Projects	\$330,300
Total	\$4,026,586

A map of all the priority projects is located in the appendix.

Chapter 5: Plan Implementation



Plan Implementation: Design, Policy & Funding

This chapter will cover proper project design, thoughtful policy initiatives, and creative funding mechanisms, all of which are key to implementing this plan.

Best Practices: Sidewalks

While sidewalks may seem simple, the details make all the difference between a good facility and an expensive mistake. It is important that Fort Scott staff and contractors be well versed in sidewalk design and construction. Across the United States, new sidewalks are being built to comply with the Americans with Disabilities Act (ADA). However, even a minor engineering miscalculation, such as a failure to maintain the proper slope at a driveway, can result in them being too hazardous for wheelchair users.

Sidewalk Width

Five feet should be the minimum width for any sidewalk regardless of location and roadway classification. A 5' sidewalk provides adequate space for a pedestrian and personal mobility device or two pedestrians to pass. In areas that attract pedestrian traffic and/or where people may congregate, the width of the sidewalk will need to be greater than 5' to accommodate the situation and circumstances.

The suggested minimum widths for sidewalks are:

- Local Streets: minimum 5' in width
- Collector Streets: minimum of 5' in width
- Secondary Arterials: minimum of 5' in width
- Primary Thoroughfares: minimum of 6 to 8' in width
- Downtown: minimum of 8 to 12' in width

For the non-buffer design sidewalks, increased sidewalk width is needed to provide distance from the street edge or curb to accommodate passing pedestrians and any commercial activity that will share part of the sidewalk. This applies principally to the downtown areas of Fort Scott.



New sidewalk recently built along National Ave. in Fort Scott.

Sidewalk Zones



Curb Zone



Buffer/Furniture Zone



Pedestrian Zone



Frontage Zone

Sidewalk Zones

A sidewalk has four main design features that are often referred to as “zones.” These features are (1) the curb zone, (2) the buffer/furniture zone, (3) the pedestrian zone, and (4) the frontage zone. The curb and furniture zone will be discussed in this section.

One of the curb zone’s main purposes is to facilitate the proper water drainage of the street. However, the curb also works to protect pedestrians from motorists who are not maintaining control of their vehicle. For this reason, the curb along sidewalks should be of the “non-mountable,” rather than “mountable” variety.

The second zone in sidewalk design is the buffer/furniture zone. This zone serves two purposes. It serves as a buffer between the roadway and the sidewalk, and is a place where items can be stored so as to not block the sidewalk.

Furniture zones reduce pedestrians’ proximity to passing traffic, increasing their safety and comfort, especially on rainy days when water collected on the street presents a splash hazard. In residential areas, the buffer zone is often grass covered and maintained as part of a lawn. Another option, if the width is sufficient, is to plant trees. However, the trees need to have a suitable growth habit so they do not conflict with overhead utility lines. The buffer aspect of the furniture zone is extremely important to both the safety and comfort of children and people with physical disabilities.

The furniture zone also gives the government and property owners a place to store items that must be near the road. In many areas without a furniture zone, the sidewalk is often blocked several times per week due to those items. This essentially makes the sidewalk useless for its intended purpose. For homeowners, this may include refuse carts, lawn waste, or other items waiting to be picked up. For the government, these items may include utility poles, parking meters, benches, or mailboxes.

Furniture zones, the areas located between the roadway edge and the sidewalk, offer a number of practical advantages and benefits for pedestrians. The minimum widths should be:

- Local Streets: minimum 3 to 5’ in width
- Collector Streets: minimum of 3 to 5’ in width
- Secondary Arterials: minimum of 4 to 6’ in width
- Primary Thoroughfares: minimum of 6 to 8’ in width

Continuity

Sidewalks should be continuous along an entire block, from street intersection to street intersection. Sidewalks with missing sections may promote mid-block street crossings or other unsafe pedestrian movements, and are not ADA-compliant.

The Americans with Disabilities Act

The Americans with Disabilities Act (ADA) was passed by Congress and signed by President George H.W. Bush on July 26, 1990. The law affects sidewalk that has been built since its passage or sidewalk that has undergone a major repair.

Typically, when one conducts interviews with residents, regardless of their home community, concerns are expressed that there might be crashes due to individuals with disabilities frequent use of their mobility devices on the roadways, rather than on available sidewalks. Citizens will voice frustrations, suggesting that they think these individuals are simply choosing to place themselves in harm's way by using the roadway rather than the sidewalk.

However, sidewalk evaluations completed in most communities reveal that where wheelchair users are using the public streets, it tends to be because the sidewalks are not ADA-compliant. Wheelchairs on the sidewalk system can make few complete trips when compliant sidewalks are periodic and inconsistent. Thus, wheelchair users will remain in the roadway, rather than having to exit the sidewalk each time they encounter a break in the sidewalk or a vertical curb they cannot maneuver.

Right-of-Way Acquisition

Many landowners do not fully understand the concept of the public right-of-way, and may assume that their lawn extends all the way to the curb of the roadway. Even though it is well within the rights of the city to build a sidewalk, it is critical to ensure that yard disruption is minimized, and perhaps even improved with tree plantings or other landscaping, to reduce public complaints and/or opposition to future projects. Most sidewalks can be built without having to purchase right-of-way.

Ultimately, after a series of public hearings, a government entity will determine the location of new sidewalks along existing streets. It is vitally important that decision makers consider sidewalks a piece of transportation infrastructure rather than a single amenity for a single neighborhood.

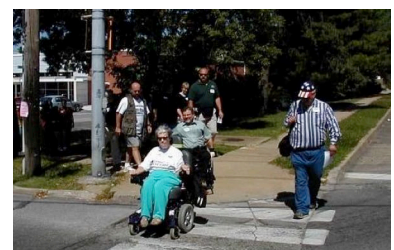
Benefits of Buffer/Furniture Zone



Space for Trash Cans and
Other Items



Room for Children to Veer
without Falling into
Roadway



More Comfort and Safety

Sidewalk Construction Costs

It is vitally important that decision makers consider sidewalks as a piece of transportation infrastructure rather than as a single amenity for a single neighborhood.

Depending on contracts the City of Fort Scott has with local contractors, it may be advantageous for Fort Scott to create a Summer Sidewalk Construction Crew. This may or may not be an option depending on the skill level of existing staff and the current contract price for flat concrete work. If the Summer Sidewalk Construction Crew is chosen, one or two skilled flat concrete foremen can lead several inexperienced workers to repair existing sidewalks, or pour new sections of sidewalk or trail, in a very cost-effective manner. However, if it costs \$30 per linear foot (LF) to pour a 5' wide sidewalk with a city crew, but a private contractor can do the work for \$28 per LF, it may not be worth the trouble to create a new construction crew.

To select the best option for Fort Scott, calculate what it would cost to employ three to five seasonal workers, two full-time employees, and the cost of concrete, rebar, and forms. Then, compare that to the costs of a contractor. It is fairly simple to contact a local concrete contractor and ask for preliminary cost estimates for various types of flat concrete work.

An advantage of having a designated city concrete crew is that you will have a trained crew that is readily available to repair or build new sidewalks. Additionally, hiring summer crews allows local workers to learn a new trade. Nonetheless, there are start-up costs associated with purchasing concrete forms and hiring additional staff.

The ideal trail system provides a safe place for recreation and a functional option for those who use non-motorized transportation.

Best Practices: Trails

Trails are a great first step to developing an active community. Initially, they serve as recreation and fitness corridors where citizens start to feel comfortable walking and biking again. As a trail system develops and spreads throughout the city, it will serve the transportation needs of those who live near the trail and work or shop at another point along the trail system. Over time, those transportation trail users become comfortable commuting on the streets. This leads to a portion of the population using both trails and streets to commute, and living a healthier lifestyle.

Trail Materials

As the popularity of trails grows, many cities are faced with a variety of decisions regarding trail design. Municipalities must balance the initial cost of development and the long-term maintenance cost

with the goal of providing the best service in the most cost-effective manner possible. The ideal trail system provides a safe place for recreation and a functional option for those who use non-motorized transportation. This requires good judgment and sound design to achieve.

Gravel trails are the least expensive to build initially, and many users prefer the natural look and perceived softness to the trail user's joints. The actual savings of going with gravel over a hard surface is usually minimal due to the majority of a trail's cost going to the land acquisition, grading, and bridge development. Gravel is a definite improvement over a natural (dirt) surface for year-round use. Additionally, gravel trails can be a good option where a trail does not have many elevation changes and where a trail is elevated out of a flood area. For this reason, many rail-to-trail conversions use the existing gravel base of the railroad line, add some fine gravel (3/8" minus) on top, and open the trail for use with very minimal expense.

However, snowfall can make gravel trails unusable for extended periods of time due to difficulty in clearing the snow, and rainfall can leave a user with mud on their clothing. Gravel trails also require year-round maintenance, since every time it rains, gravel will wash away and have to be replaced. Over time, this can be expensive.

Asphalt trails present different challenges. In parts of the country where there is well-drained rocky or sandy soil, asphalt can be an attractive surface for trails, because it has the best initial smooth surface. Nonetheless, because of seasonal cracking and ongoing maintenance requirements, it is not a good option, as the initially smooth surface lasts only a couple of years before the trails become riddled with cracks. If a hard surface trail is chosen, it should be concrete, as asphalt trails are only slightly less expensive than concrete.

Concrete trails tend to last the longest with the least amount of maintenance. They are slightly more expensive initially, but the savings in maintenance, labor, and materials compared to a gravel trail can be recovered in five to ten years. Concrete trails are necessary wherever a trail may flood or where a trail experiences slopes exceeding five percent. Therefore, any trail built in a floodplain should be a concrete trail. For these reasons, concrete trails are generally preferred.

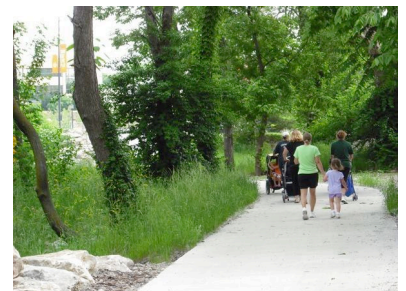
Trail Material



Gravel Example



Asphalt Example



Concrete Example

Trail Amenities



Bicycle Racks



Parking



Benches



Restrooms

Concrete and Gravel Cost

Construction estimates and bids can fluctuate greatly depending on topography, existing site conditions, site accessibility, and drainage issues. For the purpose of this comparison, we have assumed that this is new trail construction in a bottomland setting. Bridge costs, design, engineering, surveying, acquisition, signage, and amenities (e.g., restrooms, drinking fountains, and parking lots) are virtually the same regardless of material type and thus are computed in the same way for this comparison. Because surface flow is more complex with gravel trails, extra pipe and ditching is required to minimize storm water damage. Excavation time and soil removal is greater for gravel trails, because depth is greater and more soil must be hauled away.

On average, a 10' concrete trail costs about \$780,000 per mile and 12' gravel trail costs about \$500,000 per mile.

Tree Removal

Trees, especially in trail corridors, are a tremendous asset and typically, trail users demand that trees be planted and preserved along trails. Therefore, it is important to incorporate extensive tree planting to compensate for lost trees wherever tree removal is necessary.

Trail Amenities

At the outset, development of a trail system should focus on getting miles of trail built. As the trails become popular, there will be demand for additional facilities such as drinking fountains, restrooms, and parking lots, so that recreational users can drive to a trailhead. In order for users to learn where they are on a trail and where they can go, signage is essential. As the trail system develops, benches and fitness equipment can be added to further enhance the trail experience.

Trail Policies

One of the issues Fort Scott citizens will have to discuss is what level of easement and land acquisition, if any, the city wants to pursue to develop trails, and other bicycle and pedestrian improvements.

Trails are a linear facility much like roads and utility (sewer, electric, and water) lines. Typical trail development first occurs along abandoned railroad corridors and along streams where there is no

development and little opposition to trails. As the trail system grows, and trail system connections are less obvious, the communities will need to determine what level of land acquisition is acceptable.

With any proposed plan, there will be a mix of excitement and reservation from citizens. Right-of-way acquisition and utility relocation may be necessary for various types of pedestrian improvements. Parking along streets may be lost or lessened as part of proposed road improvements. There will be situations where tree removal is inevitable in order to build a trail. Therefore, it is critical to address these issues as part of initial design discussions, so there are no surprises during construction that may upset Fort Scott residents.

There are numerous examples that show trail development is positive for communities and increases residential property value. Nevertheless, it is common for citizens to be concerned about change to their city, especially if a proposed trail is near their property. However, trail users are generally people who care about the environment and are good stewards of their natural resources. They tend to pick up trash instead of leaving it. Negative activities that might otherwise occur in an isolated area, like an abandoned railroad corridor, tend to be discouraged by positive use of the area.

Trail users are generally people who care about the environment and are good stewards of their natural resources. They tend to pick up trash instead of leaving it.

Best Practices: On-Street Facilities

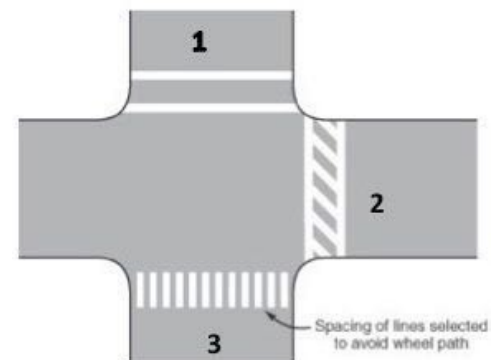
Crosswalks

Marked crosswalks are vital for pedestrian mobility and safety. They signal to pedestrians that the location is safe to cross and that they have the right-of-way in that area.

Drivers are instructed by Kansas law to “yield when a pedestrian is in a crosswalk” to allow that pedestrian to cross. However, motorists typically only stop if the crosswalk has been installed properly.

While there are a variety of crosswalk markings, three are discussed in this section (see diagram to the right):

1. Two transverse lines
2. Zebra stripe
3. Continental stripe

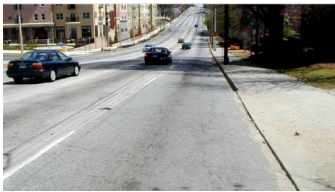


The image above showcases three types of crosswalks. Credit: Federal Highway Administration

Example, Poorly Painted Mid-Block Crosswalk



From the Pedestrian Point-Of-View, the Crosswalk Looks Visible



From the Drivers' Point-Of-View, the Crosswalk Cannot be Seen From an Appropriate Distance



On-Street Parking Blocks Motorists' and Pedestrians' Sight Lines

Photo credits: Michael Ronkin and Charlie Zegeer

“Two transverse lines” are the least visible of the three crosswalk types, and should only be used in locations where traffic would otherwise be stopped. It is recommended that either the “zebra” or the “continental” stripe design be used, especially for mid-block crossings.

Some crosswalks are located in positions known as “mid-block.” Mid-block means that there is not an intersection nearby and that traffic will only stop at the crosswalk if a pedestrian is crossing. These are the type of crosswalks where particular attention to best practices needs to be paid.

In the photos to the left, you can see that painting two transverse lines looks sufficient from the pedestrian’s point of view before she or he enters the street. However, the next photograph illustrates how difficult it is to see the crosswalk from the distance at which a driver would have to make a decision about whether or not to stop or yield to a pedestrian.

Fort Scott should use either the “zebra” or “continental” style of crosswalk in mid-block locations.

On-Street Parking and Mid-Block Crosswalks

Significant attention should be paid to mid-block crosswalks that occur in places where on-street parking is allowed. This is because the parked vehicles can block the pedestrian from the motorists’ sight lines and can block the pedestrians’ view of the street.

The final photograph to the left demonstrates how dangerous this combination of on-street parking and poorly visible crosswalks can be for all road users. A child or person using a wheelchair, traversing from right-to-left, would be completely blocked by the parked vehicle until directly in the path of oncoming traffic.

There are two solutions to this situation:

1. Restricting on-street parking near mid-block crossings
2. Creating “bulb-out” extensions for crosswalks

If the demand for on-street parking is minimal, it is encouraged to restrict parking adjacent to mid-block crosswalks.

A “bulb-out” is an extension of the curb into the street to narrow the crossing distance for pedestrians, and slow traffic via lane narrowing.

This allows the pedestrian to advance past parked vehicles to see oncoming traffic prior to crossing the street.

On-Street Parking and Bicycle Lanes

Section 9 of the Kansas Driving Handbook, “Sharing the Road,” covers how drivers should interact with bicyclists. Within the “Bicyclists” portion of this section, the Handbook states, “As a driver... Do not stop, park, or drive on a designated bicycle path or lane unless you are entering or leaving an alley or driveway, performing official duties, directed by a police officer, or an emergency situation exists.” Thus, within Fort Scott, parking is not encouraged anywhere that a bicycle lane exists except in the aforementioned circumstances.

For good reason, many communities enforce this Kansas law against parking on streets with bicycle lanes. When a motorist is driving in their traffic lane, they have the expectation that a parked automobile will not obstruct the lane. Bicyclists also deserve the ability to ride with the expectation that their travel lanes will be free of parked vehicles. Nonetheless, it often becomes contentious when a community’s citizens propose that their local governance remove existing parking or strongly enforce parking restrictions. Those who are against removal of existing parking may cite that the parking is necessary, because local homes may lack driveways and must rely on the availability of on-street parking. Occasionally, due to the controversial nature of the debate, a local government may lack the political will necessary to legislate parking removal or prohibition on a particular street.

For example, the City Council of Columbia, Missouri decided that they would never be able to install a bicycle lane system if the city was forced to ban parking in order to install this system. Consequently, they voted against the adoption of Section 300.330 of Missouri’s Model Vehicle Code, which states, “A designated bicycle lane shall not be obstructed by a parked or standing motor vehicle or other stationary object.” Therefore, parking remains legal in bicycle lanes in Columbia.

There are positives and negatives to either approach, but the issue is one about which city leaders should be aware, because it will need to be addressed.



*Bulb-out Crosswalk Design.
Credit: Federal Highway
Administration*

Funding for Bicycle and Pedestrian Projects

Compiled in this report, Fort Scott has:

- \$19,550,330 total project cost for sidewalks
- \$56,843,000 total project cost for trails
- \$360,900 worth of potential on-street facilities projects

Answers to the funding solutions include:

- Be realistic and prioritize projects;
- Adopt either a 10-year or 20-year Bicycle and Pedestrian Master Plan (priority list in Chapter 4);
- Seek external sources of funding;
- Reexamine the allotment of available revenue; and
- Identify potential new internal sources of funding.

Prioritize Projects

Fort Scott Bicycle and Pedestrian Master Plan has identified \$76,754,230 worth of potential infrastructure projects. That figure takes into account deficiencies (e.g., missing sidewalk, broken sidewalk, etc.) within Fort Scott as well as potential projects, like new trail construction. While that figure represents potential projects, the cost is too high to ever realize full funding. Thus, project prioritization is paramount. Some projects offer Fort Scott more “bang for their buck” than others.

Fort Scott Bicycle and Pedestrian Master Plan

It is important to have consensus on the projects, priorities, and potential funding in order to move forward with a coordinated program of projects that advance bicycle and pedestrian improvements. One step toward this effort would be for Fort Scott to consider the adoption of the priority projects listed in Chapter 4 as the “2027/2037 Fort Scott Bicycle and Pedestrian Master Plan.” The year would change depending on whether the City wanted it to be a 10-year or 20-year plan.

This action would formalize the plan as a goal of the City of Fort Scott, and authorize staff to identify funding to complete those projects, but would not direct any funds towards the plan. This will help staff identify potential future trail corridors and connections to protect them. For instance, if a new subdivision is being planned near a future trail, then government officials can ask the developer for an easement to allow for that subdivision to be connected to the

It is important to have consensus on the projects, priorities, and potential funding in order to move forward with a coordinated program of projects, which advance bicycle and pedestrian improvements.

future trail, whenever funding is secured to build it.

With the improvements and construction of sidewalks, bike lanes, and trails, Fort Scott residents will continue to see the quality of their lives improve. As people begin to commute and recreate by bicycle along a new trail, or walk around their neighborhood on a new sidewalk, they may begin to wonder why other areas in the community do not look the same.

This Bicycle and Pedestrian Master Plan's maps and artistic renderings are designed to positively influence public opinion when it comes to new bicycle and pedestrian projects, an impact that will be compounded by community members' experiences actually using the new multimodal infrastructure.

There exist a variety of potential funding sources to which Fort Scott has access to help pay for the projects in this plan. Yet, some sources are inconsistent or the allocation is outside of their control. For example, due to Kansas' present budget woes it is difficult to draw a conclusion as to how reliable those funds will be. Also, all federal grants (the main source of available non-motorized grants) require a 20% local match. Therefore, even if it becomes a matter of policy to rely on grants, at least some local funds will need to be spent on non-motorized transportation. The real question is where that money should come from.

Fort Scott's Current Budget and Funding for Transportation

Fort Scott's transportation budget comes from the state gasoline tax, a subsidy of the general fund, and any cash carry over from the previous year. In 2017, the total street department budget was \$825,444, which includes \$183,114 for street construction and maintenance. For 2018, the total street department budget is \$778,495, which includes \$213,399 for street construction and maintenance.

In addition to the aforementioned funding, Fort Scott has been successful in receiving money from external sources to help pay for non-motorized transportation projects. Below are a few examples of recent grants they received:

- Sidewalk along the south side of Wall St. was funded predominately from a Community Development Block Grant with additional funding from the City.
- Sidewalk along National St. was funded by KDOT Federal Funds Exchange and city funds.

- Sidewalk around Eugene Ware Elementary and Winfield Elementary schools was predominately funded by a SRTS grant with additional funding from the City.

Federal Funding

Almost all outside funding for bicycle and pedestrian facilities flows from the federal government. In fact, even grants that pass through state agencies like the Kansas Department of Transportation originate from the Federal Highway Administration by way of legislation, which dictates how federal transportation funding is spent.



There are two state agencies that administer federal funding that can be used for bicycle and pedestrian facilities: (1) the Kansas Department of Transportation (KDOT) and (2) the Kansas Department of Wildlife, Parks and Tourism (KDWP). The Kansas Department of Transportation has programs funded through the Federal Highway Administration by way of the latest federal transportation legislation.

In December of 2015, Congress passed the “Fixing America’s Surface Transportation Act” or FAST Act. It was signed into law by President Obama on December 4, 2015 and passed as a five-year bill. Here is a breakdown of information about the FAST Act:

- The Transportation Alternatives (TA) Program has been replaced with a set-aside of Surface Transportation Block Grant (STBG) program funding for transportation alternatives and included a small increase in funding for non-motorized transportation (i.e., walking, biking, etc.) infrastructure and programming (Federal Highway Administration, 2016).
- From 2016 to 2017 funding for TA Set-Aside will be \$835 million. From 2018 to 2020, this will increase to \$850 million (Federal Highway Administration, 2016).
- A number of factors such as, population, road miles, etc. determine how much money each state receives. Kansas is expected to receive about \$11 million in 2017 and about \$7 million in 2018 for TA Set-Aside (Kansas Dept. of Transportation, 2017).
- In areas over 200,000 people, the Metropolitan Planning Organizations (MPOs) are in charge of choosing the projects and in areas under 200,000 the state department of transportation is in charge (Safe Routes to School, 2015).

- TA Set-Aside still requires a 20% state or local match, just as the TAP program did (Safe Routes to School, 2015).
- This new funding will allow large MPOs to divert up to half of their funds to transportation projects other than non-motorized transportation. While it isn't expected to be an issue, advocates, especially in larger cities, should work with their MPOs to ensure the funds are used for non-motorized transportation (SRTS National Partnership, 2015).
- States are now encouraged to adopt Complete Streets standards for the planning, development and operation of federally funded transportation projects (SRTS National Partnership, 2015).
- The TA Set-Aside program allows state and local nonprofit organizations that work on transportation safety to compete for funding (SRTS National Partnership, 2015). However, the Kansas Department of Transportation (KDOT) has decided that nonprofits are not eligible to apply for projects or funding.



The Kansas Department of Wildlife, Parks and Tourism administers two programs: (1) the Land and Water Conservation Fund (LWCF) and (2) the Recreational Trails Program (RTP). The program provides 50 percent reimbursement to select outdoor recreation projects. The applications are typically due in April every year (Kansas Parks, Wildlife, and Tourism, 2017). The Land and Water Conservation Fund Act was conceived in 1965 with a 50-year term that expired on October 1st, 2015. However, in December of 2015, the program was renewed for three years. The Recreational Trails Program provides 80 percent matching funds on a reimbursement basis. Grants are typically due on August 1st of every year (Kansas Parks, Wildlife, and Tourism, 2017).



Non-Government Funding

While there are philanthropic organizations that fund projects to increase bicycling and walking, most of these organizations prefer to fund policy changes rather than small capital improvement projects.

If given the choice between funding a particular sidewalk project or funding an initiative that would result in a policy change ensuring that bicyclists and pedestrians begin to get their fair share of transportation sales taxes in a community, most funders would prefer the second option, because they consider the policy change to be a permanent fix to the problem. After all, building a single sidewalk and then continuing with “business as usual” does not result in impactful change.

If Fort Scott hopes to compete for these philanthropic dollars, the city will need to look at the funding pursuit differently than it would the pursuit of a government grant. Groups like the Robert Wood Johnson Foundation are primarily interested in advocacy and policy change, whereas government grants usually cannot fund advocacy or policy changes. Grants with advocacy agendas are best pursued by a non-profit organization acting as the fiscal agent on behalf of the city as a potential partner. While the funders' "end goal" is often a new policy rather than the sidewalk itself, capital improvements, i.e. sidewalk and trail projects, can sometimes be part of the project.

Public-Private Partnerships

As federal sources of transportation dollars shrink, public-private partnerships are becoming more important. The Healthy Bourbon County Action Team is a great example of a public-private partnership, and Fort Scott would benefit from other partnering opportunities in the future.

Perhaps USD 234 can contribute to a "Sidewalk Fund" to be used as matching dollars on future federal sidewalk grants. \$5,000 or \$10,000 per year can go a long way towards securing potentially thousands of dollars for new sidewalks. Potential public-private partnerships might also include local employers contributing to a matching fund.

Bibliography

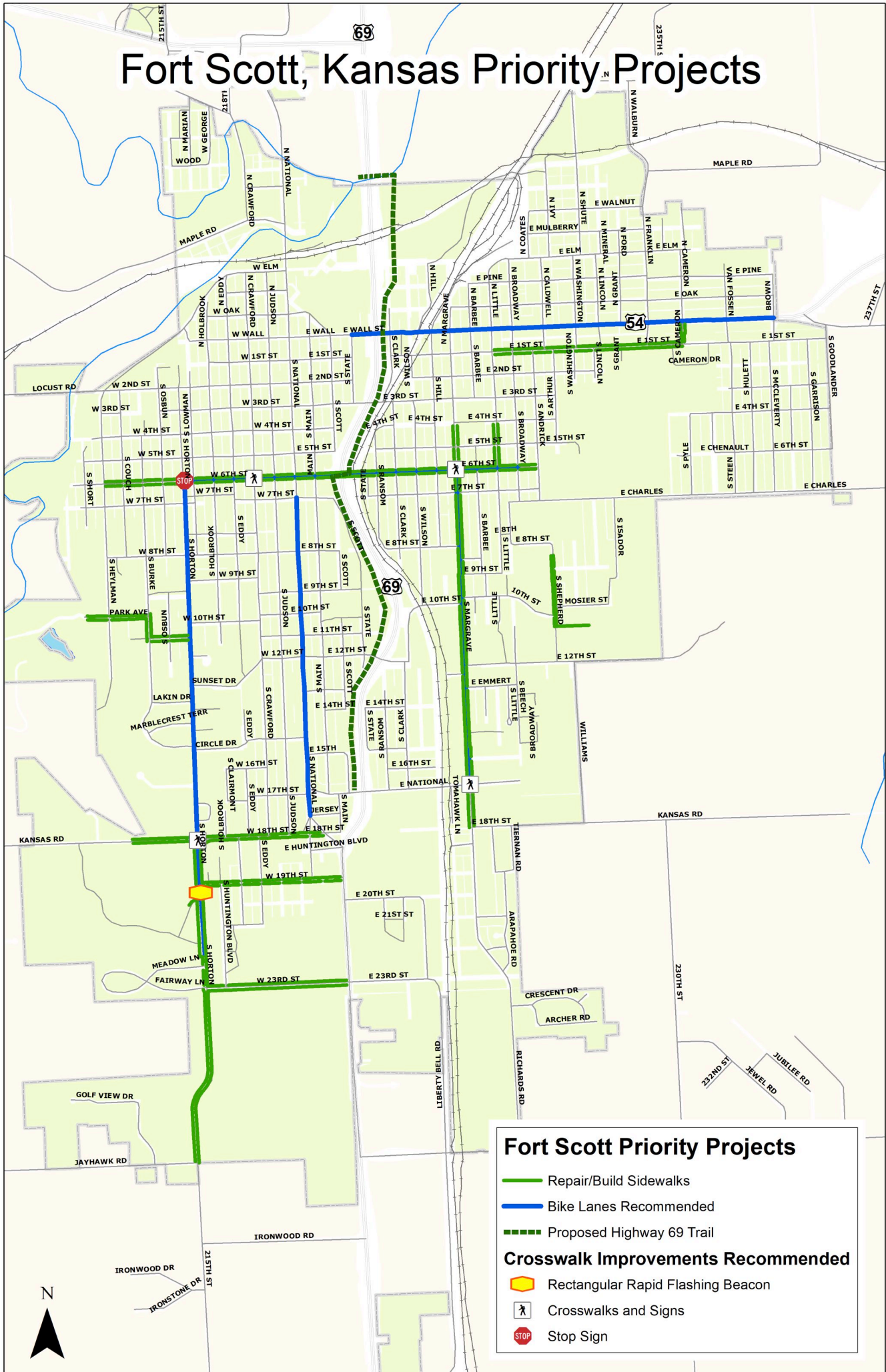
- Federal Highway Administration (2000). U.S. Department Of Transportation Federal Highway Administration. Highway Statistics 2000. Retrieved August 4, 2017 from <https://www.fhwa.dot.gov/ohim/hs00/dl22.htm>
- Federal Highway Administration (2016). U.S. Department Of Transportation Federal Highway Administration. Transportation Alternatives. Retrieved August 4, 2017 from <https://www.fhwa.dot.gov/fastact/factsheets/transportationalternativesfs.cfm>
- Kansas Department of Transportation (2017). Transportation Alternatives (TA) Program retrieved August 4, 2017 from http://www.ksdot.org/Assets/wwwksdotorg/bureaus/burTransPlan/TransAlt/TA%20Workshop_5.15.2017.pdf
- Kansas Parks, Wildlife, and Tourism (2017). Legislative update, Grants retrieved August 4, 2017 from <http://ksoutdoors.com/KDWPT-Info/Grants>
- Safe Routes to School National Partnership (2015) Resources, Congress Locks in funding for Safe Routes with New Five-Year Transportation Bill retrieved on August 4, 2017 from <http://www.saferoutespartnership.org/blog/congress-locks-funding-safe-routes-new-five-year-transportation-bill>

Page Left Blank

Appendix



Fort Scott, Kansas Priority Projects



Online Public Comment

The Feeding Families Group donated 3 bikes to individuals recently to get to and from work. 2 have already been hit. 1 one was hit around that corner south of Sonic where all the construction is now.

As an avid recreational cyclist, I have ridden all over Bourbon County. I think safety on our county blacktop roads is an issue that keeps people from cycling on them. I would really like to see "3 feet to pass" signs throughout the county.

I also think there is a great opportunity available as gravel cycling continues to gain popularity in the cycling world. Obviously, there are hundreds of miles of gravel roads in BB Co. Events like Dirty Kanza in the Flint Hills have shined a light on the cycling opportunities in Kansas.

18th Street could use a bike lane or sidewalk. It is a very busy street as it is the main route to the community college and the walking path there from the east. The movie theater is also on 18th. More students and community members could walk to the theater if there was a sidewalk along 18th.

Sidewalk from my house between 7th and 8th streets, on Crawford is dangerous in spots.

i noticed the trails at gunn park are not on the map. also the potential trail at riverfront is going straight through the path/trail/road people often use. there may be a more efficient way to incorporate what is already there.

Include distances for walking to numerous areas in Fort Scott, I.e., new sign on Skubitz plaza, distance to walk around the Fort, distance to walk the Historic district.

The sidewalk in front of our house at 802 Horton Street is used a lot. Over the years, utility companies, water department and you name it have dug up the parking area. They have parked their equipment on the sidewalks and have broken them up. Never were they repaired. It would be nice if they were replaced.

Very enlightening! Glad we have the results of this study. I would like to see a sidewalk along 23rd from Horton to 69.

It does not appear to have the old Missouri Pacific Railroads on either maps. (3)

Has anyone thought about a sidewalk from the FSCC to Walmart and from FSCC up Horton through Marblecrest and Burke St to Park Ave leading to Gunn Park? With the amount of kids playing disc golf from the college and biking and other activities offered there, would this not make sense? Gunn Park should be embraced for all that goes on there and its eventual tie in to the river front trails system. We should have many safe pathways for all to walk to the park from various locations about town in my opinion.

The Highway 69 Trail would be my recommendation. Many have asked for a trail that would run from the area of the High School to the Riverfront Park. This trail would also give the project a high visibility. High visibility would turn into high usage, with almost direct access to downtown properties. With the development of loft living and apartments downtown, this trail should be of the highest priority!

1. Mercy Hospital trail

2. FSCC trail

3. Highway 69 trail -south to East National

I agree with using the old railroad walkways for the trails. They are longer in length but not as costly, since they do not have to be paved. Community members could bike or hike on the trail. The Mercy trail that was outlined in the video is not as long but very costly since it does require a concrete path.

I'd prefer #4 (FSCC added trail) or #3 (Hwy 69 trail)

Looks promising. Is there a timeframe for any of the trail development? Would like to help see this become reality.

My preference would be for trails at Mercy Hospital and at FSCC. I'm sure the one at Elm Creek would be beautiful and scenic, but I doubt I'd drive out of town to get to it.

Highway 69 Trail

I like any of the trails that start at Maple Ridge. Particularly the Maple Ridge to Juniper trail.

I don't like the hospital trail because it is isolated from any of the current trails we have.

Mercy Hospital Loop would be my recommendation

Of the 17 options the top three in priority that I would choose are: Highway 69 trail, Maple Ridge Park to Juniper Road trail, Cedar Creek Lake perimeter trail. Another option that I did not see presented would be to connect the trails that are part of Gunpark especially in the northern extremity to the river front park trails on North national. I would love to see these trails progress westward over time, to eventually connect with Prairie spirit rail trail in Lola, or Southwind rail trail in Humboldt.

I believe that the trail from Maple Ridge (Riverfront) to East National is the most visible trail in promoting pedestrian safety. In addition, this connects pedestrians to the High School, Buck Run, Ball Park, and even those staying at hotels. It also would "beautify" the "gateway" to the city. For these reasons, I choose this one as my top priority.

Being from western Bourbon County, I'm more inclined to look at those trails than trails in the Fort Scott area. However, of all those proposed only one actually went to the city. We have a trail around the school campus in Uniontown that could be attached to but the trail proposed from Redfield to Uniontown is far enough south of town that people will not drive to utilize it. Why not utilize the abandoned railroad instead of following the river. It would cost less and actually go into the towns for easier accessibility.

Previously I suggested to do the Highway 69 trail first, but upon further thought, I wonder if a greater impact could be made, and the \$ be better spent, by designating and painting biking lanes on several major arterial streets, such as 3rd, 6th, and 12th streets. Also Horton, and National, or Main? Margrave is another major street, but it is wide enough, I don't think it needs the lanes painted.

How are these projects funded?

Can other things be done to promote a culture of walking/running/biking such as placement of bike racks, or providing bikes that can be rented such as in Denver, or Fort Collins, or NYC?

As one of the Gunn Park Trail advocates, I think it is great more trails are being considered. I also think 1/2 those proposed in the video will never see use nor maintenance that is required for a successful system. Making it a waste of funds and resources.

Uniontown Sidewalk Audit - some of the comments heard at last night's meeting, were:

Possibly put sidewalks on one side of street instead of both.

Possibly only do sidewalk from Union Station to the schools.

Add sidewalk along west elementary entrance drive to connect with sidewalk in front of building.

Possibly add sidewalk along Second or Third Street to Clay Street for children in the south area of town to get to school.

Horton Street, from Mercy Hospital to 6th street desperately needs a safe sidewalk. Lots of speeding traffic all day. No safe path to take. I walk to and from work daily via Horton and I also walk to the JUCO, the golf course and the hospital. Lots of walkers, runners, joggers are in need of a safe path on Horton St.

Federal, State, Local, and Non-Profit Funding Opportunities

Source	Program	Description	Eligible Project Types	Requirements
Federal – FAST Act	Surface Transportation Block Grant Program (STBG)	The FAST Act converts the long-standing Surface Transportation Program into the Surface Transportation <i>Block Grant</i> Program acknowledging that this program has the most flexible eligibilities among all Federal-aid highway programs and aligning the program’s name with how FHWA has historically administered it. [FAST Act § 1109(a)]. The STBG promotes flexibility in State and local transportation decisions and provides flexible funding to best address State and local transportation needs.	<p>The FAST Act’s STBG Program continues all prior STP eligibilities (see in particular 23 U.S.C. 133(b)(15), as amended). It also adds the following new eligibilities:</p> <ul style="list-style-type: none"> • A State may use STBG funds to create and operate a State office to help design, implement, and oversee public-private partnerships (P3) eligible to receive Federal highway or transit funding, and to pay a stipend to unsuccessful P3 bidders in certain circumstances [23 U.S.C. 133(b)(14)]; and • At a State’s request, the U.S. DOT may use the State’s STBG funding to pay the subsidy and administrative costs for TIFIA credit assistance for an eligible STBG project or group of projects. [23 U.S.C. 133(b)(13)]. <p>The FAST Act also adds specific mention of the eligibility of installation of vehicle-to-infrastructure communication equipment. [FAST Act §1407, 23 U.S.C. 133(b)(1)(D)]</p>	
Federal – FAST Act	National Highway Performance Program (NHPP)	The FAST Act continues the NHPP program, which was established under MAP-21. The NHPP provides support for the condition and performance of the National Highway System (NHS), for the construction of new facilities on the NHS, and to ensure that investments of federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a state’s assessment management plan for the NHS.	<ul style="list-style-type: none"> • Bicycle transportation and pedestrian walkways 	<p>NHPP projects must be on an eligible facility and support progress toward achievement of national performance goals for improving infrastructure condition, safety, mobility, or freight movement on the NHS, and be consistent with metropolitan and statewide planning requirements.</p> <p>Funding: Generally, 80% Federal/20% matching</p>
Federal	Federal Highway Safety (Section 402) Grant Program	Highway Safety Funds are used to support state and community programs to reduce deaths and injuries on the highways.	<ul style="list-style-type: none"> • Conducting data analyses, developing safety education programs, and conducting community-wide pedestrian safety campaigns. Funds can also be used for some limited safety-related engineering projects. 	

Federal, State, Local, and Non-Profit Funding Opportunities

Source	Program	Description	Eligible Project Types	Requirements
Federal – FAST Act	Highway Safety Improvement Program (HSIP)	<p>The Highway Safety Improvement Program (HSIP) is a Federal Highway Administration (FHWA) program that funds highway safety projects aimed at reducing highway fatalities and serious injuries.</p> <p>The HSIP consists of three main components:</p> <ul style="list-style-type: none"> • The Strategic Highway Safety Plan (SHSP) • State HSIP or Program of Highway Safety Improvement Program • Railroad-Highway Crossing Program (RHCP) <p>In addition, some states also have a High Risk Rural Roads (HRRR) program if they had increasing fatality rate on rural roads.</p>	<p>The FAST Act continues the requirement that HSIP funds be used for safety projects that are consistent with the State’s strategic highway safety plan (SHSP) and that correct or improve a hazardous road location or feature or address a highway safety problem.</p> <p>Examples of eligible projects include:</p> <ul style="list-style-type: none"> • Installation of vehicle-to-infrastructure communication equipment. • Pedestrian hybrid beacons. • Roadway improvements that provide separation between pedestrians and motor vehicles, including medians and pedestrian crossing islands. • Workforce development, training, and education activities 	<p>HSIP funds are used for safety projects that are consistent with the State’s strategic highway safety plan (SHSP) and that correct or improve a hazardous road location or feature or address a highway safety problem</p> <p>Funding: 90% Federal/10% matching</p>
Federal	National Park Service (NPS) Rivers, Trails, and Conservation Assistance (RTCA) Program	<p>The Rivers, Trails, and Conservation Assistance Program provides NPS technical assistance with projects having specific goals and results for conservation and recreation expected in the near future.</p>	<ul style="list-style-type: none"> • Defining project vision and goals • Identifying and analyzing issues and opportunities • Assessing and engaging partners and stakeholders • Inventory and mapping of community resources • Priority setting, consensus building, and funding source identification • Organizational development • Designing community outreach and participation strategies • Trail, park, open space, greenway, waterway planning; including option analysis, safety issue review, and engaging partners to create outdoor and conservation recreation programs. 	<p>RTCA applications are competitively evaluated based on the following criteria: 1) Project has specific goals and results for conservation and recreation expected in the near future; 2) Roles and contributions of project partners are substantive and well-defined; 3) Evidence of broad community support for the project; 4) The NPS’ role is clear and supports NPS’ mission; and 5) The project advances one or more key NPS strategic objectives.</p>
Federal	Community Development Block Grants (CDBG)	<p>The CDBG program is a flexible program that provides communities with resources to address a wide range of unique community development means.</p>	<ul style="list-style-type: none"> • Public facilities and improvements (road and street improvements) • Planning and capacity building (transportation plans) 	

Federal, State, Local, and Non-Profit Funding Opportunities

Source	Program	Description	Eligible Project Types	Requirements
Federal	Land and Water Conservation Fund (LWCF)	The Land and Water Conservation Act established a grant fund to assist state and federal agencies in meeting present and future outdoor recreation needs. The Act: 1) provides funds for land acquisition for recreation on federal fish and wildlife areas, national parks, national forests, recreation areas, and for the operation/development of national parks; and 2. authorizes federal assistance to states for planning, acquisition, and development of outdoor recreation facilities through a grants program. In turn, the states may transfer the funds to local political subdivisions to acquire land or develop outdoor recreation facilities.	Qualifying projects include development and/or acquisition of outdoor facilities for the purpose of public recreation. Eligible projects will include all required documentation, and meet needs identified in the <i>2015 Kansas Statewide Comprehensive Outdoor Recreation Plan</i> (SCORP): http://kdwpt.state.ks.us/KDWPT-Info/Grants	The Land and Water Conservation Fund provides 50 percent reimbursement to selected outdoor recreation projects that are sponsored by political subdivisions and other appropriate public agencies.
State	Kansas Department of Transportation (KDOT) School Zone Program	Funding provided by the State of Kansas as a \$400,000 set-aside of safety monies to improve school zones in towns with a population of fewer than 20,000 people.	<ul style="list-style-type: none"> The improvements to school zones that are provided include: pavement striping, school zone signage, and reduced speed assemblies. 	Funds may be requested by local and regional engineers noting areas of need, or schools and communities making funding requests from KDOT. KDOT will assist rural communities making requests for this funding on a case-by-case basis.
State	Kansas Department of Transportation (KDOT) Transportation Alternatives (TA) Program	The Transportation Alternatives (TA) Program provides funding for projects and programs defined as transportation alternatives that advance non-motorized transportation facilities. The TA Program continues to build upon the legacy of the Transportation Enhancements (TE) and Safe Routes to Schools (SRTS) programs by supporting local projects that support additional transportation options, strengthen local economies, improve quality of life, protect the natural environment, and enhance transportation infrastructure.	<ul style="list-style-type: none"> On-and-off-road pedestrian and bicycle facilities Infrastructure projects for improving non-driver access to public transportation and enhanced mobility Community improvement activities Historic transportation preservation Environmental mitigation and vegetation management activities Recreational trail program projects Safe routes to school projects Projects for planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways. 	<p>Since the Statewide TA Program is a part of the Federal-aid highway program, awarded projects are subject to certain Federal laws and regulations.</p> <p>TA projects are not required to be located along a Federal-aid highway. However, SRTS project must be located within two miles of a K-8 grade school.</p>

Federal, State, Local, and Non-Profit Funding Opportunities

Source	Program	Description	Eligible Project Types	Requirements
Local	Sales Tax	Funds from a portion of the municipality's sales tax	Pedestrian facilities and programs	
Local	Development Stipulations	Development requirements are typically placed on proposed projects at the time of entitlement approval to help develop necessary public facilities.		Project developer must agree to proposed stipulations prior to entitlement approval.
Local	Special Districts: Community Facilities District (CFD), Improvement Districts	Special District created for the purpose of financing the acquisition, construction, operation, and maintenance of public infrastructure improve.		Acceptance by the owners of at least 25% of the land area proposed to be included in the district.
Local	Development Impact Fees	An "impact fee" is a fee that is determined by a municipality, and is placed on a proposed project to help cover the additional costs associated with upgrading affected public facilities resulting from the construction.		
Non-profit	PeopleForBikes Community Grant Program	<p>The PeopleForBikes (PFB) Community Grant Program provides funding for important and influential projects that leverage federal funding and build momentum for bicycling in communities across the U.S.</p> <p>PFB generally holds 1-2 open grant cycles every year, and the Community Grant Program application has two parts:</p> <ol style="list-style-type: none"> 1. Letter of Interest (LOI): Applicants submit a LOI through PFB's website. LOIs must include applicant information, contact person, and project overview. 2. Full Application: PFB will request a full project application from a short list of qualified applicants. Invited organizations will receive access to the online application. 	<ul style="list-style-type: none"> • Includes bike paths, lanes, bridges, rail trails, as well as mountain bike trails/facilities, bike parks, pump tracks, and BMX facilities • End-of-trip facilities such as bike racks, bike parking, and bike storage • Large-scale bicycle advocacy initiatives; e.g., Ciclovías or Open Streets Days • Initiatives designed to increase ridership or the investment in bicycle infrastructure 	<p>PeopleForBikes accepts requests for funding of up to \$10,000, and does not require a specific percentage match. However, leverage and funding partnerships are considered very carefully. Grant requests in which the funding would amount to 50% or more of the project budget will not be considered.</p>

Federal, State, Local, and Non-Profit Funding Opportunities

Source	Program	Description	Eligible Project Types	Requirements
Non-profit	International Mountain Bicycling Association	Grants fund projects that maintain and improve the sustainability of local trails, preserve the environment and enhance conservation in the mountain bicycling community. Applicants should have an IMBA Teaming For Trails microsite webpage set up.	<ul style="list-style-type: none"> • Pump track, bike parks, flow trails, and gravity trails • Mountain bike trail restoration and preservation projects • Projects that promote environmental education and inspire conservation in the mountain biking community 	The IMBA grants program provides assistance to International Mountain Bicycling Association chapters and supporting organizations.
Non-profit	Kansas Health Foundation (KHF) Impact and Capacity Grants	Funds efforts that align with the KHF goal of reducing health disparities. Grants are limited to a maximum of \$25,000 and one grant award per year.	<ul style="list-style-type: none"> • Impact Grants focus on work in key health impact areas • Capacity-building grants focus on building nonprofit capacity to address health disparities 	50% or more of the organizations target audience must reside in Kansas KHF does not support ongoing programs or operational costs
Non-profit	Blue Cross Blue Shield of Kansas (BCBSKS) Healthy Habits for Life	Healthy Habits for Life is a major grant-giving program of the BCBS-KS Foundation. It is offered to help schools address childhood obesity.	Programs that will help Kansas youth: <ul style="list-style-type: none"> • Reduce their cardiovascular risk • Increase their physical activity • Learn healthy eating habits 	Must be located within the BCBSKS 103-county service area. Maximum amount is \$1,000 and only one grant per school.
Private funding	American Hiking Society's National Trails Fund	The National Trails Fund has helped hundreds of grassroots organizations acquire the resources needed to protect hiking trails.	Once a year, Alliance Organization Members have the opportunity to apply for a Micro-Grant (\$500-\$3,000) to improve hiking access or hiker safety on a particular trail.	Must be an AHS Alliance Member and a 501(c)(3) nonprofit to apply and receive funding.