

CITY OF QULIN ACTIVE TRANSPORTATION PLAN

The plan was adopted by the Qulin City Council on September 10, 2025.

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September 2025



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September 2025

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Introduction

Ozark Foothills Regional Planning Commission (OFRPC) was presented with a grant opportunity in 2024 by the Missouri Department of Health and Senior Services (MoDHSS) offering a SPAN grant (State Physical Activity and Nutrition). MoDHSS had a portion of money - \$15,000 - designated to be spent specifically in the Butler County area and when approached, Qulin was enthusiastic to develop an Active Transportation Plan (ATP).

This Active Transportation Plan (ATP) provides framework for Qulin to develop safer streets and sidewalks that will better serve and encourage active transportation users. It will provide recommendations for pedestrians and bicycle facilities and programs. The plan will also aid Qulin in creating policies that will generate and sustain a culture of healthy, active living for its citizens and visitors.

The City of Qulin is in the southeast part of Butler County, approximately 14 miles south of Poplar Bluff, 169 miles south of St. Louis metro and 192 miles north of Little Rock, AR metro. Located in the flatlands of Missouri known as the Mississippi Embayment, between the Black River to the west, and the St. Francis River to the east, Qulin is an agriculture hub. Missouri State Highway 53 connects Qulin to surrounding areas and major interstates. The city encompasses .45 sq miles.

The town was incorporated in 1952, but a post office has operated there since the 1880s.

Qulin is the home to the Qulin Elementary and Middle Schools; part of the larger Twin Rivers R-X School District of the combined Qulin, Fisk and Broseley communities. The Qulin area schools have an average yearly enrollment of approximately 300 students ages 5-14.

Retail opportunities within city limits are two convenience stores, a Dollar General store, a Mexican restaurant, a hair salon, commercial fuel provider and a NAPA Auto Parts store.

Public utilities and governmental buildings within city limits include a US Post Office, a City Hall and a Public Water Supply office.

Area citizens enjoy plenty of activities throughout the year including the yearly Qulin Homecoming, weekly Lions Club dinners, school events, parades and various business sponsored community events like movies in the park. Within the city limits is the historic Oller-Reynolds log cabin and just outside of Qulin is the historic Hargrove swing bridge.



What is Active Transportation?

Missouri Department of Health and Senior Services defines active transportation as “any self-propelled, human mode of transportation, such as walking or bicycling.” Active transportation aims to improve physical health in human beings as modern technology advancements in transportation have made it easier to disengage from physical activity. With focus on improving access to modes of active transportation, this plan hopes to achieve a goal of increasing physical health. There are many ways and options to implement modes of active transportation into plans for a rural community like Qulin, including:

- Pedestrian (walk or wheelchair)
- Bicycle
- Skateboard
- Other personal mobility devices



According to the H&T Index and USDot, 98% of all commuters who live in Qulin will use some form of Active Transportation to travel to work.

Walkscore.com scored the City of Qulin a 0 of 100 on its lack and ease of walkability based on readily accessing Dining & Drinking; Groceries Shopping; Errands; Parks; Schools and Culture & Entertainment.

Qulin also scored a 0 of 100 on its Transit Score. This measures how well a location is served by public transit based on the distance and type of nearby transit lines. No bus or train lines currently run through the City of Qulin.

Qulin’s overall bike score came in at a 34 of 100 due to the city having minimal designated bike infrastructure. This score is based on whether an area is good for biking based on bike lanes, trails road connectivity and destinations.

Benefits of Active Transportation

ENVIRONMENT HEALTH ECONOMIC QUALITY OF LIFE

Table 4 Active Transportation (AT) Benefits and Costs

	Improved AT Conditions	Increased AT Transport Activity	Reduced Automobile Travel	More Compact Communities
Benefits	<ul style="list-style-type: none">• Improved user convenience, comfort and safety• Improved accessibility for non-drivers, which supports equity objectives• Option value• Higher property values• Improved public realm (more attractive streets)	<ul style="list-style-type: none">• User enjoyment• Improved public fitness and health• More local economic activity• Increased community cohesion (positive interactions among neighbors)• More neighborhood security	<ul style="list-style-type: none">• Reduced traffic congestion• Road and parking facility cost savings• Consumer savings• Reduced chauffeuring burdens• Increased traffic safety• Energy conservation• Pollution reductions• Economic development	<ul style="list-style-type: none">• Improved accessibility, particularly for non-drivers, and transport cost savings.• Agglomeration efficiencies• Reduced sprawl costs• Openspace preservation• More livable communities• Higher property values• Increased security
Costs	<ul style="list-style-type: none">• Facility costs• Lower traffic speeds	<ul style="list-style-type: none">• Equipment costs (shoes, bikes, etc.)• Increased crash risk	<ul style="list-style-type: none">• Slower travel	<ul style="list-style-type: none">• Increases in some development costs

Active transport has various benefits and costs.

Graph source: WHO 2022



Qulin's Active Transportation Plan Goal

Qulin Dollar General



Qulin City Park



Qulin US Post Office

The goal of this plan is to prioritize improvements to Qulin's sidewalk infrastructure and connections to community areas of interest for overall user safety. The plan will help identify ways to improve the short and long-term health outcomes of Qulin residents.



Existing Infrastructure Conditions



Before sidewalk and transportation mobility recommendations can be made, it is important to note the condition of the existing infrastructure. Overall, the City of Qulin has a poor to little pedestrian network. With approximately 7,175 linear feet (1.359 miles) of sidewalk, the community is lacking necessary pedestrian infrastructure that connects businesses and neighborhoods along Highway 53 and within the city limits.

In the neighborhood areas of the city, sidewalks are outdated and do not comply with ADA accessibility while others are in desperate need of repair. There are currently no designated bike paths nor crosswalks for pedestrians. Increased and more efficient street lighting is also a strong need for the city.

While stakeholders and city leaders identified the need for improved sidewalks, pedestrian and bike ways as imperative; they noted cost and the lack of funding resources as making infrastructure and similar improvements more difficult.



Priority Areas

Stakeholders and community leaders identified areas of interest or community destinations during the Active Transportation planning process. These areas included focus areas of education, recreation, essential goods and public services.

Through meetings, surveys and a walk audit determined that most of Qulin's areas of interest outside of the eastern portion of the city, had no dedicated connections for active transportation users seeking to cross State Highway 53 to the elementary school, ballpark and various businesses located in the eastern areas of Qulin.

Continuous sidewalks the length of city limits along Highway 53 and at least one designated crosswalk at the elementary school entrance to connect Qulin's east and west sides was highlighted by stakeholders and community leaders as a crucial need. Stakeholders and community leaders gave prominence to the desire for the existing turning lane to be extended the length of city limits on State Highway 53.



City of Qulin Sidewalks In Purple



Source map: [googleearth.com](https://www.google.com/maps)

Existing Crosswalks

There are currently no crosswalks designated within the City of Qulin. A proposal to add three crosswalks identified through the Active Transportation planning process will be addressed later in this plan.

Sidewalk Conditions

In the City of Qulin approximately 7,175 linear feet (1.359 miles) of sidewalks exist. Most are aging, dilapidated or unusable. The map at the left shows Qulin's existing sidewalks marked in purple.



Sidewalk Conditions



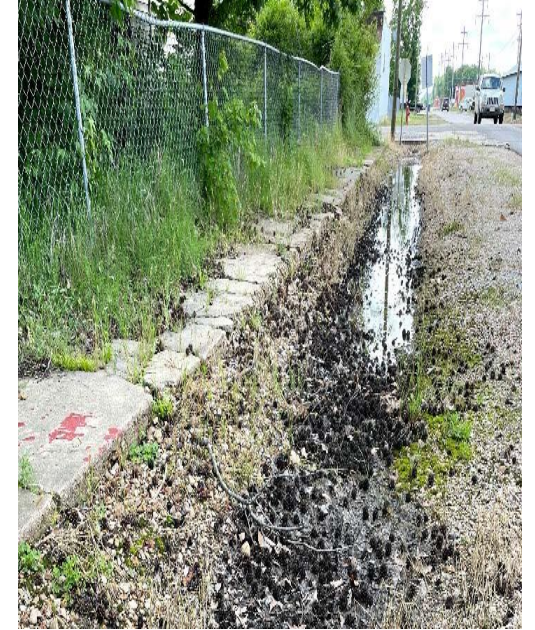
Off 5th Street



2nd Street



D Street



***2nd Street near
D Street***

None of the sidewalks in the City of Qulin are consistently linked together. Many are paved but have cracks or upturned segments that make use for pedestrians and those with mobility issues difficult. Most are also in significant disrepair, are overgrown with vegetation or are missing large segments entirely; deeming the majority of sidewalks in the City of Qulin impassable.



Community Engagement

OFRPC and the City of Qulin committed to the planning and development of active transportation. Stakeholders were invited to a variety of public meetings hosted by OFRPC and the City of Qulin.

Public meeting #1 was held during the City of Qulin Council meeting in September 2024. OFRPC explained the active transportation planning process and offered a brief presentation on what such a plan can do for Qulin's future.

Public meeting #2 in November 2024, consisted of an Active Living Communities kickoff forum sponsored by the Missouri Department of Health and Senior Services held at OFRPC and offered area planning commissions and communities a chance to give presentations of their cities' work on active transportation planning.

Public meeting #3 came in the form of a community walk audit performed in May 2025. Community leaders, stakeholders, residents, health department staff, members of Missourians for Responsible Transportation (MRT) and OFRPC staff took part in assessing the walkability and safety of Qulin's pedestrian areas.

Public meeting #4 marked the final opportunity for public input on the active transportation planning process. The meeting was held prior to the July 2025 Qulin City Council meeting.



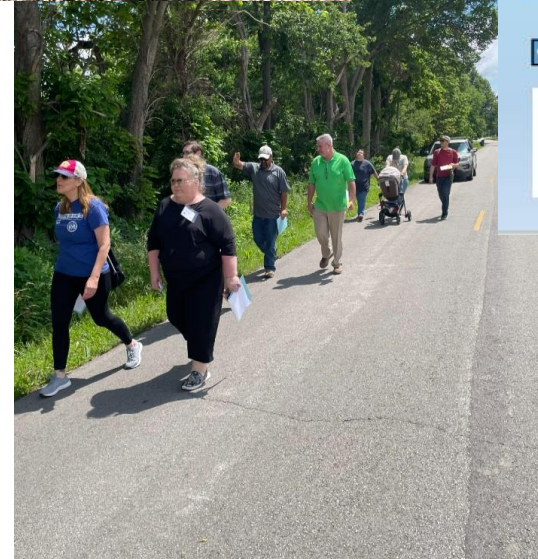
Active Living Communities meeting
at OFRPC in Nov. 2024




Walk Audit

May 28, 2025

Eleven participants from various agencies alongside stakeholders took part in the walk audit of the City of Quin. Data and feedback collected was used in outlining the active transportation planning process for the city. Participants noted the lack of sidewalks and the overall condition of existing sidewalks as an imperative need. The absence of crosswalks or medians for pedestrians attempting to cross Highway 53 was highlighted as an area of high danger.





Join Us for a Walking Audit in the City of Quin!

Walk with us to evaluate sections of Quin to provide a community perspective and help us identify ways to improve the walkability of the city for Quin's Active Transportation Plan.

WHY


Walking audits help identify concerns regarding safety and access for those who walk, bike and ride.

WHEN

Date: Wednesday, May 28, 2025 Time: 11 a.m.— noon

WHERE

Meeting Location: Quin City Hall , 245 D St., Quin, MO



This is an outdoor walking event. Please wear sunscreen and comfortable shoes.

Funding for the Active Transportation Plan was provided by a grant from the Missouri Department of Health and Senior Services.

For additional information please contact project administrator, Amber Hornbeck via email at amber@qahpn.org or by phone 573-785-6402.

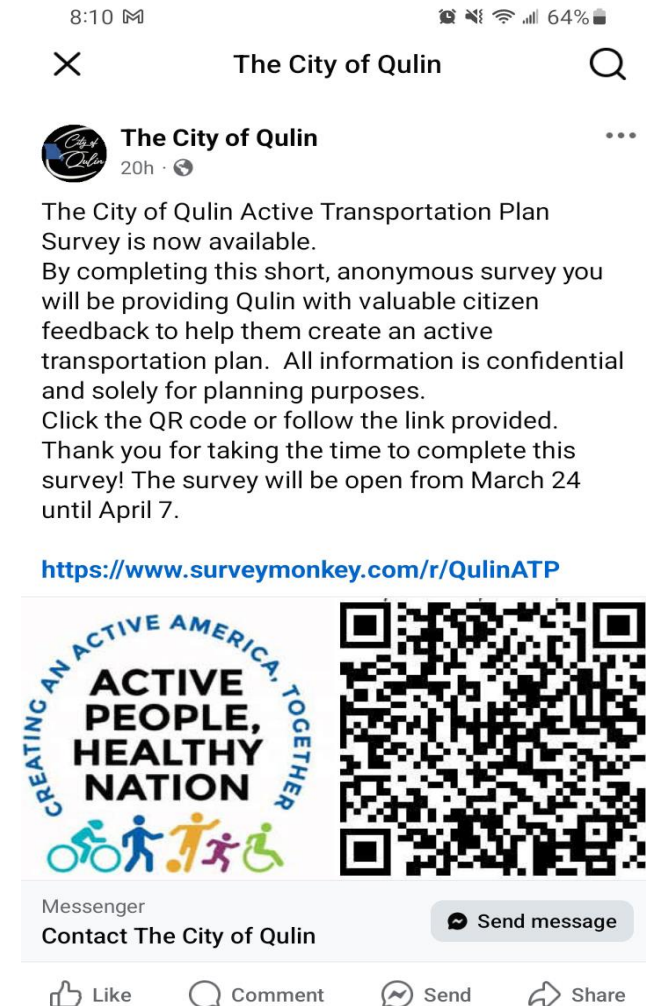


Online Survey

To understand the greater community priorities and needs, an online survey was presented to the Qulin community asking input about their experiences walking, biking and accessibility of Qulin's infrastructure. Participants were also asked for their feedback on what topics were most important to them. Surveys were open from March 24, 2025, through April 7, 2025.

Promotion of surveys was through both the City of Qulin and the OFRPC social media pages and websites. A total of (9) persons completed the survey by the April 7 deadline. Survey respondents overwhelmingly agreed that streets and sidewalks improvements should be prioritized.

Full results of the online survey can be found on the following page.



Online Survey Results

ONLINE SURVEY DATA RESULTS – 9 SURVEYS RECEIVED

AGE GROUP:

44.4% - 30-39

22.2% - 40-49

22.2% - 50-59

11.1% - 60+

MODE OF TRANSPORTATION:

77.7% - DRIVE

11.1% - WALK

11.1% - BIKE

ACCESSIBILITY NEEDS:

100% - YES

AREAS OF IMPROVEMENT NEEDS:

55.5% - STREETS

22.2% - SIDEWALKS

11.1% - PUBLIC TRANSPORTATION

11.1% - OTHER (unspecified)

BIKE/PEDESTRIAN INFRASTRUCTURE NEEDS:

100% - YES

QULIN'S INVESTMENT IN TRANSPORTATION PRIORITIZATION:

55.5% - TOP PRIORITY

44.4% - MOST IMPORTANT

IMPORTANCE OF INVOLVING RESIDENTS IN TRANSPORTATION PLANNING:

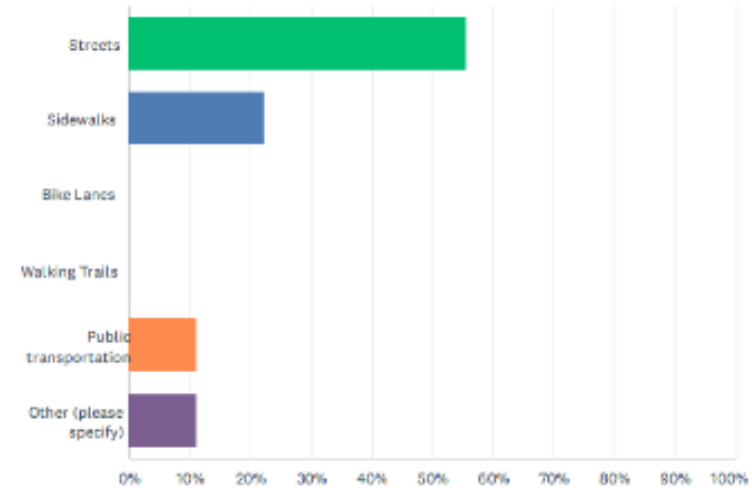
44.4% - MODERATE AMOUNT

33.3% - A LOT

22.2% - A GREAT DEAL

Q7 What areas need the most improvement in Qulin?

Answered: 9 Skipped: 0



ANSWER CHOICES	RESPONSES
Streets	55.56% 5
Sidewalks	22.22% 2
Bike Lanes	0.00% 0
Walking Trails	0.00% 0
Public transportation	11.11% 1
Other (please specify)	11.11% 1
TOTAL	9



Paper Surveys

To garner more survey participation, and to offer those who missed the online version, a hard copy survey was made available to the Qulin community from April 15, 2025, until May 1, 2025. Participants were given the same topics and asked the same questions as the online survey.

Surveys were available for pickup at the Qulin Senior Center, Qulin City Hall and the OFRPC office. Surveys were also available via email request to either Qulin City Hall or OFRPC.

Paper surveys were made available from April 15, 2025, through May 1, 2025.

Promotion of surveys was through both the City of Qulin and the OFRPC social media pages and websites plus.

A total of (21) persons completed the survey by the May 1 deadline. Survey respondents overwhelmingly agreed that streets and sidewalk improvements should be prioritized. Street lighting improvements were also noted by many survey respondents as a need for the city.

Full results of the online survey can be found on the following page.

QULIN ACTIVE TRANSPORTATION PUBLIC SURVEY

By completing this short, anonymous survey you will be providing Qulin with valuable citizen feedback to help Qulin create an active transportation plan.
All information is confidential and solely for planning purposes.

THANK YOU!

Please place your completed surveys in the designated box or email to amber@ofrpc.org

Circle or write in your answers to the following questions:

-What is your age? Under 20 20-29 30-40 41-50 51-59 60+

-What is your occupation? _____

-How do you typically get around in Qulin?
Walk Bike Drive
☐ ☐ ☐

-Are there any transportation challenges or issues you think Qulin needs to address? _____

-Do you have any accessibility needs when it comes to transportation?
Yes No Maybe
☐ ☐ ☐

-If yes, what are your needs? _____

-What areas need the most improvement in Qulin? Please circle one or more:
Streets? Sidewalks? Bike Lanes? Walking Trails? Public Transportation?

-What are your thoughts on the current streets and sidewalks in Qulin?



Paper Survey Results

PAPER SURVEY DATA – 21 SURVEYS RECEIVED

AGE GROUP: 85% - 60+

14% - 51-59

1% - 20-50

MODE OF TRANSPORTATION: 100% - drive

ACCESSIBILITY NEEDS: 75% - NONE

24%-YES

1%- MAYBE

AREAS OF IMPROVEMENT NEEDS:

66% - STREETS

20% - SIDEWALKS

14% - PUBLIC TRANSPORTATION

1% - BIKE LANES/TRAILS

BIKE/PEDESTRIAN INFRASTRUCTURE NEEDS:

57% - YES

28% - MAYBE

14% - NO

QULIN'S INVESTMENT IN TRANSPORTATION PRIORITIZATION:

66% - TOP PRIORITY

34% - MOST IMPORTANT

IMPORTANCE OF INVOLVING RESIDENTS IN TRANSPORTATION PLANNING:

52% - A GREAT DEAL

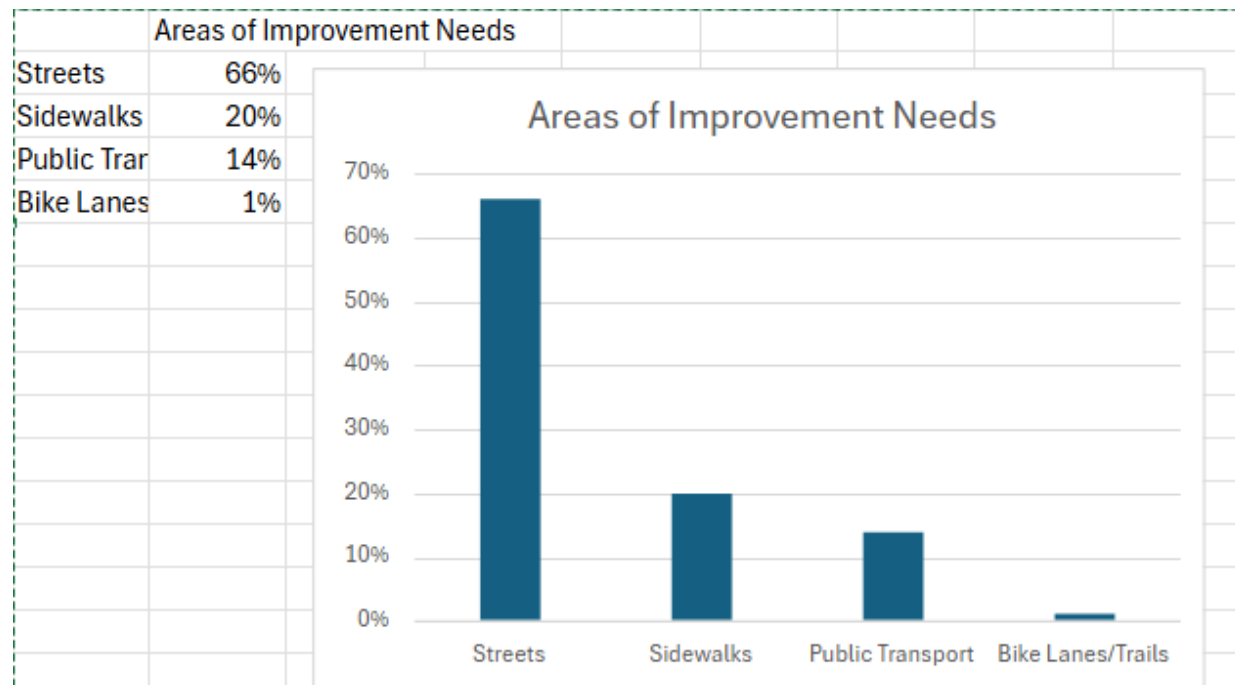
19% - A LOT

19% - MODERATE AMOUNT

1% - A LITTLE

POSITIVE FEEDBACK:

-Qulin was praised many times for doing a good job with very few resources.



Recommendations

The City of Qulin's Stakeholder group has carefully considered a variety of projects and community improvements to better serve citizens and visitors. Special consideration was given to areas where safety was a concern for pedestrians, especially those of the school-age and elderly populations.

Major concerns were streets and sidewalk conditions and daily travel along Highway 53, as well as pedestrian traffic throughout the city.

All potential projects identified in this plan will require a more detailed design process for any can be finalized and construction. All recommendations are conceptual only. The city will need to work with the public to develop the final design and location of sidewalk improvements. Land or right-of-way acquisition may be required for the city to construct the proposed improvements.

The following pages will outline an overview of trail, sidewalk and crosswalk priorities with suggestions for potential improvements.



The City of Qulin's active transportation plan includes a proposed mid-block crosswalk at Highway 53 and 2nd Street.



Recommendation Priorities

A. Proposed Trail Development

Priority 1 – Qulin City Trail

B. Proposed Crosswalks

Priority 1 – Highway 53 at D Street (junction of Y & N)

Priority 2 – Highway 53 at 2nd Street with mid-block crosswalk

Priority 3 – Highway 53 at 2nd Street

C. Proposed Sidewalks

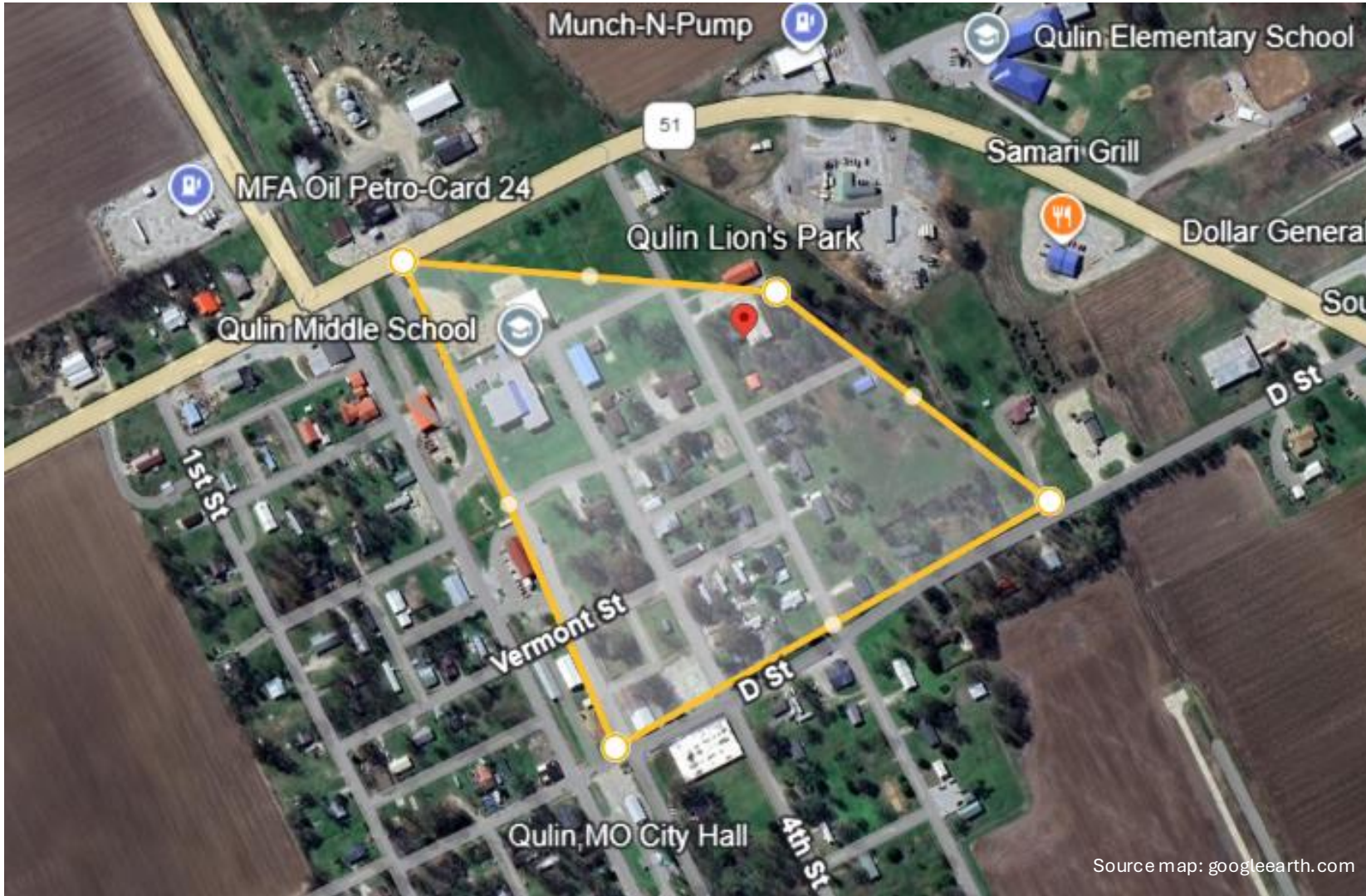
Priority 1 – Connect the entire eastern quadrant of the city and along both the east and west sides of State Highway 53 to city limits north and south. Consultation with MoDOT may be required.

D. Proposed Center Lane Expansion

Priority 1 – City of Qulin will need to consult with MoDOT on this proposed work.



Proposed Trail Development



Source map: googleearth.com

Stakeholders discussed a proposed Qulin City trail along the city's center core. They noted a trail could be a safe and recreational way to navigate around the heart of the city. The map at left shows the proposed trail marked in yellow. This trail would link the Lions Club Park's trail to key stops within Qulin's city limits; D Street, US Post Office, the Senior Center, Middle School and access to Highway 51. This trail would offer approximately 1.3 miles of accessible pathways.



Proposed Trail Development Cost Estimates And Development Strategies

COST

The **cost of building a 1.340-mile trail in the City of Qulin** can vary significantly from a **few thousand dollars** to **several thousand dollars** based on numerous factors, including:

- Distance:** Longer trails may incur higher construction costs due to increased material needs.
- Terrain:** Steep or challenging terrains can add to the complexity and cost of construction.
- Design and Engineering:** Detailed designs and engineering requirements can also impact the overall budget.
- Local Regulations:** Compliance with local zoning laws and regulations may require additional costs for permits and inspections.

For a precise estimate, it is essential to consult with local contractors or engineers who can provide a tailored budget based on the specific trail's requirements.

DEVELOPMENT STRATEGIES

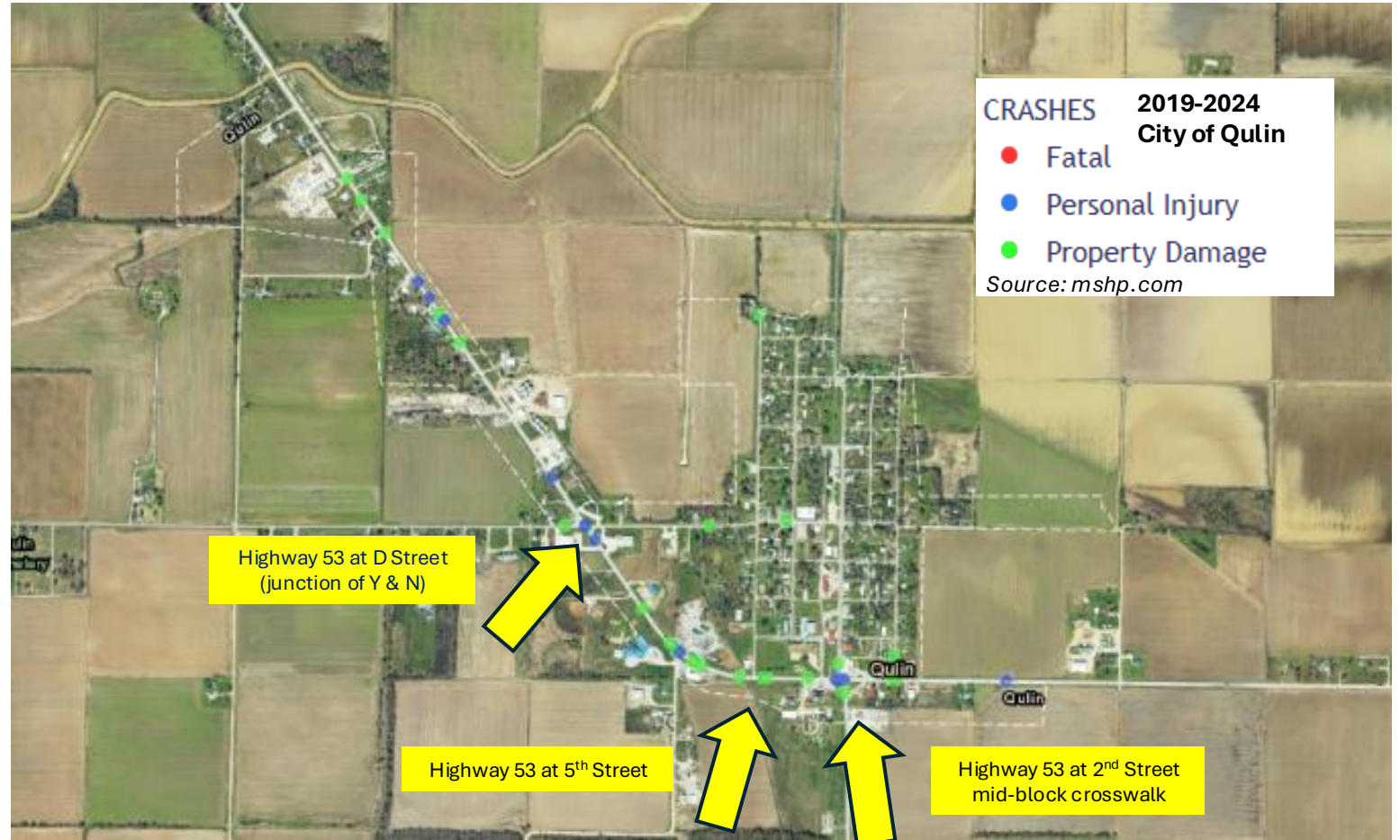
- ✓ **Planning and Design:** Focus on creating safe, accessible, and sustainable trails that meet diverse user needs and integrate with natural landscapes.
- ✓ **Community Engagement:** Involve citizens, city, county and state government leaders in the planning process to ensure the trail meets their needs and enhances their well-being.
- ✓ **Funding Strategies:** Develop a comprehensive funding strategy that includes grants, partnerships, and community support to finance trail development.
- ✓ **Environmental Considerations:** Design trails that minimize environmental impact and enhance local ecosystems, such as by connecting recreational amenities with natural resources.
- ✓ **Implementation and Maintenance:** Plan for the construction and ongoing maintenance of trails to ensure they remain functional and attractive for users.

Source: americantrail.com



Proposed Crosswalk Development

Crosswalks in the City of Qulin are some of the most important improvements needed to ensure pedestrians and cyclists can safely navigate the high traffic areas in the city. During the planning process, stakeholders determined three proposed crosswalk locations along the State Highway 51 route that runs through the middle of the city and separates the east and west sides of Qulin. These locations prioritize connectivity of the east and west sides of Qulin and reflect the need for safe and convenient routes for pedestrians to cross a major thoroughfare. The crash map at right shows Missouri State Highway Patrol data from 2019-2024 for the City of Qulin. The green dots are sites of non-injury traffic crashes. As you can see the concentrated area of these crashes is along the curve and ending at the southern city limits. The yellow arrows indicate the approximate placement of proposed crosswalks and proposed signals into those areas of highest traffic incident reporting. The following pages will outline the proposed crosswalk plans in more detail.



Proposed Crosswalk Development



Priority 1 – Highway 53 at D Street (junction of Y & N) includes a solar signal crosswalk- the highest prioritized, this crossing would provide safe pedestrian access to cross from the highest trafficked of Qulin's main streets (Route Y or D St.) to the west side of the city to a main business attraction – Dollar General.



Proposed Crosswalk Development



Priority 2 – Highway 53 at 2nd Street is another high trafficked area near the middle school in Qulin in need of a signaled crosswalk, possible mid-block which would allow safe access to the west side of the city limits.



Proposed Crosswalk Development

Priority 3 – Highway 53 at 5th Street is near the busy Lions Club Park and walking trail area. A signaled crosswalk in this area would allow for safe access to the west side of Qulin’s city limits during public events at the park.



Proposed Crosswalk Development Cost Estimates

COST

The **cost of installing mid-block crosswalks** can vary significantly based on the design and materials used. Here are some estimates:

- **\$5,000 to \$12,000** for basic installations.
- **\$14,000** m/l for raised crosswalks
- Up to **\$15,000** per intersection for more complex installations with raised platforms and special signage.

Costs will vary based on location, project specifics, and additional features like lighting and signage.

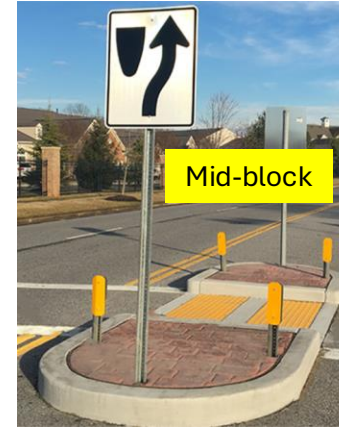
The **cost of installing a solar signaled crosswalk** can vary based on the system type and installation specifics. Here are some key points:

Solar-powered crosswalk systems can reduce costs associated with traditional electric systems by eliminating the need for power lines and cabling.

- **HAWK Pedestrian Crosswalk System (high-intensity activated crosswalk beacon)** offers a cost-effective solution with customizable configurations. Cost estimated: **\$80,000 - \$150,000**
- **Solar Series Crosswalk System** is designed for high visibility and safety, requiring minimal installation. Cost estimated: Up to **\$8,000 - \$10,000** per sign. Not including installation.

For specific pricing, it is advisable to contact suppliers directly for quotes based on your project requirements.

- **Striped crosswalks:** Approximately **\$750**
- **Raised crosswalks:** Costs range from **\$7,000 to \$30,880**, with an average around **\$8,000**.
- **General pedestrian crossings:** Typically cost between **\$5,000 and \$20,000**.



Sources: *US Barricades.com*; *SRTS Guide: Marking and Signing Crosswalks*



Proposed Crosswalk Development Strategies

Of the aforementioned crosswalk proposals, it is recommended to use signage and markings highly visible to other pedestrians and oncoming traffic. Such measures include reflective signage, flashing lights and/or painted lines on the pavement. These improvements would require pedestrians and cyclists to use a button to trigger a flashing light to stop oncoming traffic. However, it is recommended that warning lights, rumble strips and signs be placed at a distance far enough in advance to warn vehicles.

The City of Qulin will need to collaborate with the Missouri Department of Transportation (MoDOT) on any proposed action involving State Highway 53 right-of-ways.

Crosswalk education is another important issue that should be considered as a part of construction. Pedestrians and motorists can both benefit from educational opportunities to teach people how to safely utilize these enhancements. The links below are all related to pedestrian safety training opportunities in Missouri, including crosswalk safety:

[MOVERS – Missouri Vital Enterprise Resource System](#)

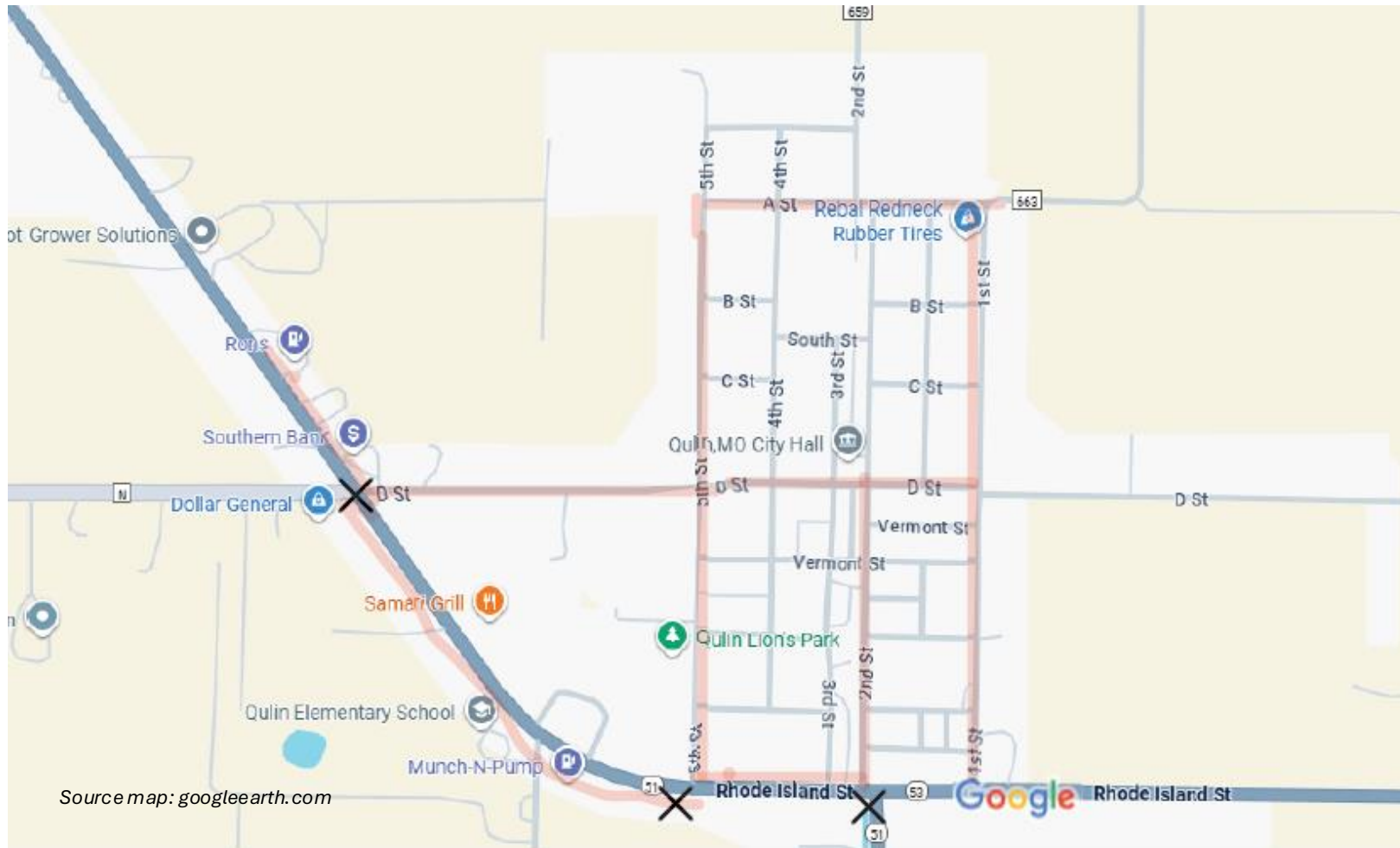
mobikefed.org/2024MissouriActiveTransportationSummit

<https://www.savemolives.com/mcrs/pedestrian-safety-campaign>

www.modot.org



Proposed Sidewalk Development Phase I



The entire sidewalk infrastructure in the City of Qulin needs development. The map to the left shows current existing sidewalks in grey with the proposed sidewalk repair/creation areas in pink. Those areas will create a uniform connected pathway of sidewalks to key points in the city. Recommendations are to perform sidewalk rehabilitation and/or replacement of existing streets in the City of Qulin.

Once existing infrastructure is completed then creating new and/or repaired sidewalks in the areas marked pink connecting all sidewalks will create a uniform citywide pathway for pedestrians to access proposed crosswalks (marked with X).



Proposed Sidewalk Development Phase I Cost Estimates and Development Strategies

COST:

- **Standard Concrete Sidewalk:** Costs between **\$1,200 and \$2,400** for a 200-square-foot walkway, with an average of **\$1,800**.
- **Cost per Square Foot:** Estimated at **\$11.78 - \$14.45** per square foot in July 2025.
- **Average Cost:** Approximately **\$20.20 per foot**, with materials costing about **\$11.20 per foot** and labor around **\$36.00 per hour**.
- **Overall Range:** A concrete sidewalk can cost between **\$1,400 and \$3,400** on average, depending on size, thickness, and design.
- **Factors Influencing Cost:** Size, thickness, reinforcement, location, and surface finish can all affect the final price.

These estimates can help you plan your budget for sidewalk construction.

Source: [constructioncalculators.com](https://www.constructioncalculators.com)

SIDEWALK DEVELOPMENT STRATEGIES:

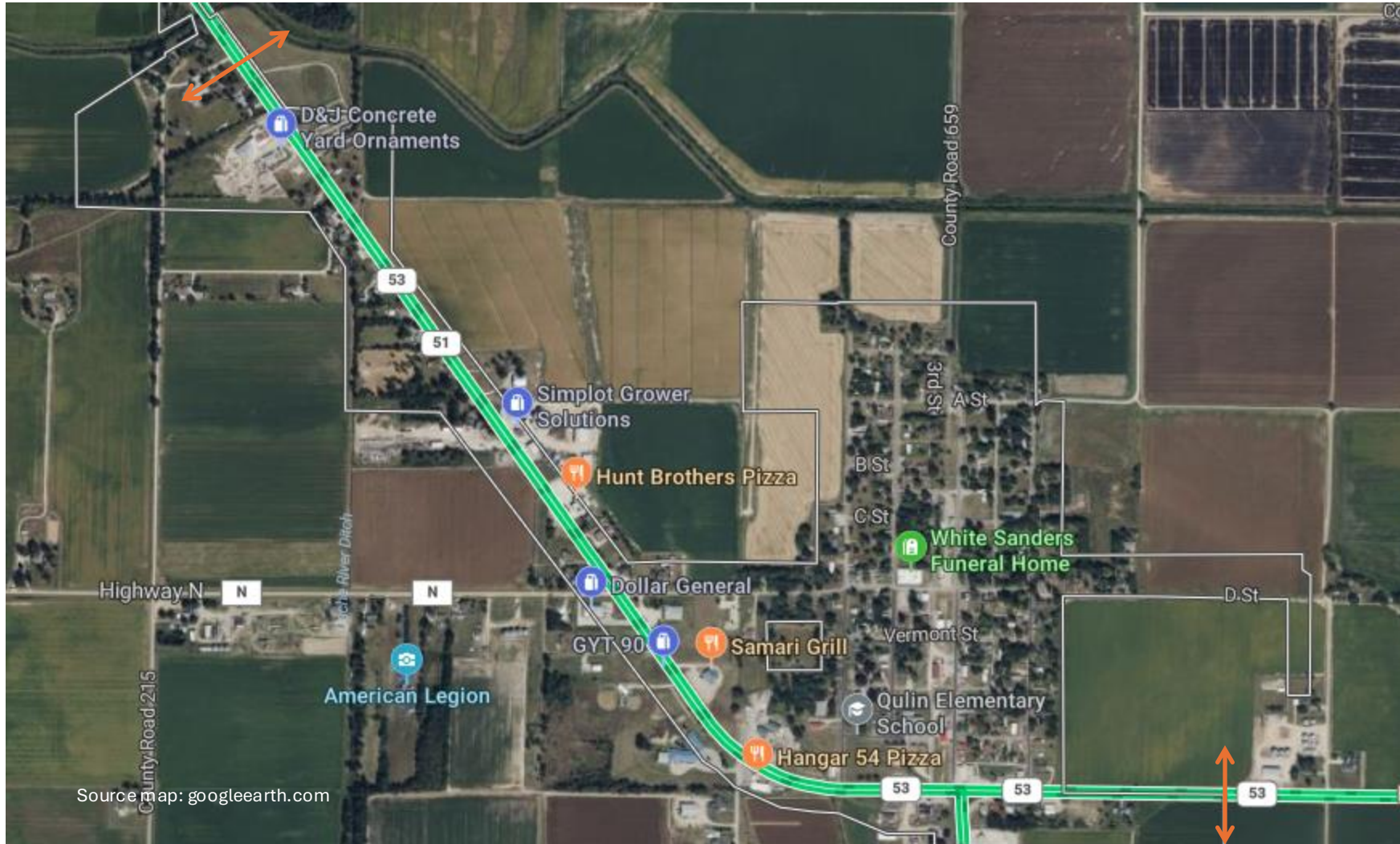
- Prioritize Social Life:** Shift focus from cars to social spaces by creating community gathering spots and allowing public displays of goods to enhance the sidewalk's liveliness.
- Design for Accessibility:** Ensure sidewalks are accessible to all, including wheelchair users and those with mobility needs, by incorporating features like curb ramps and tactile surfaces.
- Proactive Maintenance:** Regularly repair sidewalks to prevent issues like cracks and uneven surfaces, which can lead to falls and accidents.
- Tree Preservation:** Implement techniques to manage tree roots without removing trees, preserving their ecological benefits while maintaining sidewalk safety.
- Community Engagement:** Involve local communities in the design and maintenance of sidewalks to foster a sense of ownership and enhance the overall experience.

These strategies can help create safer, more vibrant, and functional sidewalks that contribute to the well-being of the community.

Source: nacto.org



Proposed Sidewalk Development Phase II



The City of Qulin finds many pedestrians are using the shoulder of busy State Highway 51 as their walkway through the city. Not only is this dangerous to pedestrians but can cause traffic slowdown and possibly accidents.

Recommendations for Phase II of sidewalk development for the City of Qulin suggests lining both the east and west sides of Highway 51 to the north hand south city limits with pedestrian pathways. Proposed areas are marked with orange arrows on the map at left. All sidewalks along state highways are recommended to be a minimum of six-feet wide to eight-feet in busier areas to accommodate two-way multimodal traffic.

The City of Qulin will need to collaborate with the Missouri Department of Transportation on appropriate mitigation measures and means to achieve this outcome.



Proposed Sidewalk Development Phase II Cost Estimates and Development Strategies

COST:

- **Standard Concrete Sidewalk:** Costs between **\$1,200 and \$2,400** for a 200-square-foot walkway, with an average of **\$1,800**.
- **Cost per Square Foot:** Estimated at **\$11.78 - \$14.45** per square foot in July 2025.
- **Average Cost:** Approximately **\$20.20 per foot**, with materials costing about **\$11.20 per foot** and labor around **\$36.00 per hour**.
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Source: [constructioncalculators.com](https://www.constructioncalculators.com)

SIDEWALK DEVELOPMENT STRATEGIES:

- Prioritize Social Life:** Shift focus from cars to social spaces by creating community gathering spots and allowing public displays of goods to enhance the sidewalk's liveliness.
- Design for Accessibility:** Ensure sidewalks are accessible to all, including wheelchair users and those with mobility needs, by incorporating features like curb ramps and tactile surfaces.
- Proactive Maintenance:** Regularly repair sidewalks to prevent issues like cracks and uneven surfaces, which can lead to falls and accidents.
- Tree Preservation:** Implement techniques to manage tree roots without removing trees, preserving their ecological benefits while maintaining sidewalk safety.
- Community Engagement:** Involve local communities in the design and maintenance of sidewalks to foster a sense of ownership and enhance the overall experience.

These strategies can help create safer, more vibrant, and functional sidewalks that contribute to the well-being of the community.

Source: nacto.org



Proposed Turn Lane Expansion of Hwy 53

D. Proposed Center Lane Expansion extending the length of both north and south city limits along State Highway 53

Priority 1 – City of Qulin will need to consult with MoDOT on this proposed work.



Proposed Turn Lane Expansion of Hwy 51 Cost Estimates and Development Strategies

COST

2.8 million per mile

The **cost of expanding lanes on state highways** can vary significantly based on several factors, including location, project scope, and complexity.

- Basic rural interstate projects** typically cost around **\$2 million per mile**, while **urban freeway projects** can exceed **\$15 million per mile**.

- Adding turn lanes** can cost less than half the cost of widening the highway, averaging about **\$2.8 million per mile**.

- The overall cost of constructing a new lane mile of highway can range from **\$2 million for basic rural areas** to **\$15 million for complex urban projects**.

These figures highlight the significant investment required for highway lane expansions.

Source: www.modot.org

DEVELOPMENT STRATEGIES

To address **turning lane expansion development strategies on state highways**, consider the following approaches:

- Upgrade Existing Routes:** Projects like upgrading U.S. Route 67 in Butler County involve phases of expansion to improve traffic flow and safety.

- Add Turn Lanes:** Implementing left-turn lanes and right-turn lanes can significantly reduce congestion and improve safety at intersections.

- Managed Lanes:** Utilize managed lanes, such as high-occupancy vehicle (HOV) lanes, to manage traffic flow and optimize highway capacity.

- Channelization:** Incorporate channelization techniques to direct vehicles into specific movements, enhancing safety and reducing delays.

- Cost-Effective Strategies:** Adding turn lanes is often more cost-effective than widening roads, allowing for better management of existing infrastructure.

These strategies can help enhance traffic flow and safety on state highways.

Source: www.modot.org



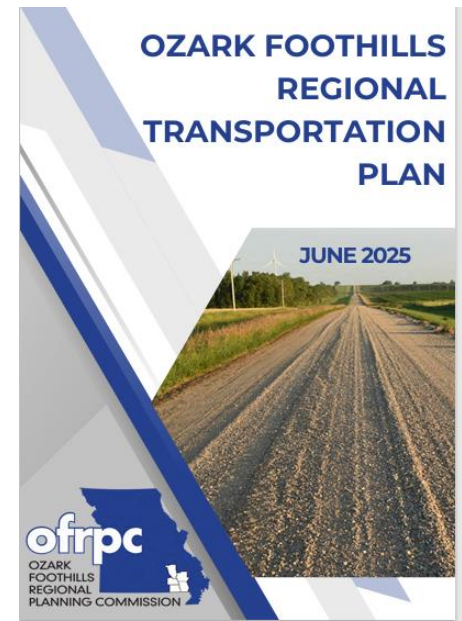
Plan Implementation Strategies

The Active Transportation Plan focuses primarily on larger infrastructure improvements that will require engineering, concrete and other materials. Planning for project to be incorporated during routing maintenance will give the City of Qulin the opportunity to implement projects at a faster rate than waiting for grant funding.

- Coordinate with planned street repairs and/or resurfacing. These streets repairs can be aligned with recommended pedestrian improvements to minimize additional costs.
- Work with private partners. This is another strategy for project implementation where new and redevelopment project are often responsible for infrastructure improvements adjacent to their development, including new or upgraded sidewalks and trails. The City of Qulin does not codify this requirement for development. As pedestrian projects are implemented over the course of several years, this creates an opportunity to coordinate private development site improvements with plan recommendations.
- It is also important to work with local and state agencies with whom the City of Qulin will need to coordinate any development plans. These agencies include, but are not limited to, MoDOT, Butler County and any businesses within city limits who may be affected.

Prioritized projects in this plan are recommended to be incorporated into other existing plans and programs that include active transportation infrastructure such as:

- <https://www.ofrpc.org/cmsAdmin/uploads/2/ofrpc-ceds-2024-2029.pdf>
Comprehensive Economic Development Strategy
- <https://www.ofrpc.org/cmsAdmin/uploads/2/regional-transportation-plan-2025-final.pdf> Ozark Foothills Regional Transportation Plan



Project Funding Opportunities

✓ TRANSPORTATION ALTERNATIVES PROGRAM (TAP) 2025 TAP Guide <https://www.modot.org/media/51800>

The TAP replaces the funding from pre-MAP-21 programs including Transportation Enhancements, Recreational Trails, Safe Routes to School, and Scenic Byways, wrapping them into a single funding source. The FAST Act has continued authorization of this funding for transportation alternatives projects.

Federal TAP funds are provided through the FHWA. Projects using TAP funds are eligible for reimbursement of up to 80% of allowable costs. The LPA is required to match the project with a minimum of 20%. Refer to EPG 136.3.9 Local Match Guidelines for local match guidelines for transportation alternatives projects.

Compensation for expenditures will be authorized on a cost reimbursement basis. Expenditures incurred prior to receiving a formal notice to proceed will not be eligible for reimbursement.

MoDOT distributes TAP funds outside TMA boundaries every two years (even years) through a competitive selection process. The FAST Act provides for TMAs to receive a separate allocation of TAP funding through Surface Transportation Block Grants (STBG). TMAs develop their own TAP guide and selection criteria while still adhering to federal rules outlined in the FAST Act.

✓ RECREATIONAL TRAIL PROGRAM (RTP) GRANTS [HTTPS://MOSTATEPARKS.COM/SITES/MOSTATEPARKS/FILES/2024-RTP-PROJECT-ADMINISTRATION-GUIDE](https://mostateparks.com/sites/mostateparks/files/2024-rtp-project-administration-guide)

In Missouri, RTP grants are available to local and state governments, school districts, and nonprofit organizations. Missouri receives between \$1 million and \$1.5 million per fiscal year. The maximum amount awarded is \$250,000 for trail projects. Sponsors must have a minimum 20% match. Projects must be open to the public.

ELIGIBLE PROJECTS INCLUDE:

Restoration of existing recreational trails.

Development and rehabilitation of trailside and trailhead facilities and trail linkages for recreational trails.

Construction of new recreational trails (with restrictions for new trails on Federal lands).

Acquisition of easements and property for recreational trails or recreational trail corridors.

Assessment of trail conditions for accessibility and maintenance.

✓ LAND AND WATER CONSERVATION FUNDS (LWCF) <https://mostateparks.com/sites/mostateparks/files/2026-lwcf-application.pdf>

Federal funding available for LWCF grants is a maximum of \$500,000 per project, with a minimum 50% match. Grants are can be awarded to any local government, city, county or public school.

Eligible projects must be open to the public at reasonable times.

Project examples include but are not limited to:

Playgrounds

Ball fields

Pools and water parks

Archery and shooting ranges

Camping facilities

Picnic areas

Boating and fishing facilities

Trails

Passive areas

✓ PRIVATE FOUNDATIONS Private foundations in Missouri | Cause IQ www.causeiq.com



Fulfilling the Plan

The recommendation in this Active Living Communities of Practice Plan, could take from one year to decades to accomplish. Implementation is entirely dependent upon political will, funding and other factors. Some recommendations could see completion faster than others if the City of Qulin developed a codified Complete Streets policy. This policy encourages walking, bicycling, and other non-motorized forms of transit to be considered during the design, construction and maintenance phases for public transportation projects. Regular stakeholder meetings are essential in maintaining and monitoring development processes. The City of Qulin will be responsible for initiating plan reviews and updating the plan as necessary. The City of Qulin should regularly evaluate future development opportunities and how such plans will impact and better serve the community.



Ongoing Continuing to monitor existing infrastructure challenges. Research grant opportunities and possible private funding. Encourage residents to take a more active role in the city's decision-making processes for development. Put your plan to action.



0-5 years Sidewalk improvements can be constructed with the assistance of TAP and RTP grants during this time frame. Completion of prioritized sidewalk connections, crosswalks and other projects along major corridors to improve pedestrian safety.



6-10 years implementation of Phase II of the sidewalk connectivity plan to maintain the flow of improvements. Prioritized routes should be reassessed regularly.



10+ years larger projects such as the trail creation should continue to be planned and assessed for feasibility, cost and logistical issues.



POLICY RECOMMENDATIONS

Policy recommendations are being included for the City of Qulin to consider when creating more active transportation options for its citizens. Although recommended, they are only policies to consider. Implementation of these policies is supported by the city council and is encouraged for consideration when moving forward with development in Qulin. These policies hope to encourage improvements in physical health and improving access to modes of active transportation. The following policies are recommended:

1. When repairing streets, the city will ensure an ADA-compliant sidewalk on at least one side of the street.
2. The city will incorporate a combination of complete street* elements when approaching street design.
3. Annual review of and reconsideration of speed limits and signage near new or improved sidewalk networks and trails.
4. Annual inspections of crosswalks around the schools to keep kids safe when walking and biking to school.
5. Regular citizen engagement opportunities.

***COMPLETE STREETS** www.mocompletestreets.com is an approach to planning, designing, and building streets that enables safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. See pages 36-39 to view Joplin, Missouri's Complete Streets Ordinance.

Sources: www.smartgrowthamerica.org; www.mocompletestreets.com;



COMPLETE STREETS: JOPLIN, MISSOURI Part I

Approved by the Joplin City Council on January 3, 2022

Complete Street Ordinance for Joplin, Missouri

Vision and Intent

Complete Streets are designed and operated to provide safety and accessibility for all users of our roadways and trail systems, including pedestrians, bicyclists, trolley users, motorists, emergency vehicles, freight and commercial vehicles, and people of all ages and abilities. Complete Streets principles contribute to the safety, health, equity, and economic viability of a community by providing accessible and efficient connections between home, school, work, recreation, and retail destinations and improving the transportation environment throughout the City of Joplin. The City of Joplin intends to formalize the planning, design, operation and maintenance of streets so they are safe for all ages and abilities and provide a multimodal transportation network.

Diverse Users

Joplin recognizes that users of various modes of transportation, including, but not limited to, pedestrians, bicyclists, transit users, motorists, emergency responders, freight and commercial drivers, are legitimate users of the transportation network and deserve safe facilities. “All Users” includes users of all ages and abilities. While this ordinance applies throughout the community, Joplin shall develop plans and set goals to prioritize and ensure the successful implementation of Complete Streets in neighborhoods which have experienced historic underinvestment, poor health outcomes, or can be otherwise categorized as low-income neighborhoods. “Low-income neighborhoods” are defined as neighborhoods where 51% or more of residents are low-income.

Full Commitment

Approved by the Joplin City Council on January 3, 2022, The City of Joplin recognizes that all transportation projects must apply Complete Streets design principles; this shall include new projects, reconstruction, or maintenance. Joplin will, to the maximum extent practical, design, construct, maintain, and operate all streets to provide a comprehensive and integrated street network of facilities for people of all ages and abilities. While any such Complete Streets projects are being constructed or repaired, Joplin will ensure that appropriate accommodations are provided to support the safe, reliable movement of all users within the project area, regardless of their preferred mode of transportation.

Clear Exceptions

Transportation infrastructure may only be excluded where documentation and data indicate that the costs or impacts of accommodation are excessively disproportionate to the need or probable use or future use upon approval of the Complete Streets Committee. Any and all documentation or data provided for the purpose of demonstrating a proposed exception must be made publicly available and identified as such via public notice at least 30 days prior to granting said exception.



COMPLETE STREETS: JOPLIN, MISSOURI Part II

Approved by the Joplin City Council on January 3, 2022

Jurisdiction

Implementation of the Joplin Complete Streets ordinance will be carried out cooperatively within all relative departments in Joplin and, to the greatest extent possible, among private developers, and state, regional, and federal agencies. Joplin shall, when applicable, work to encourage collaboration across jurisdictions within its borders on appropriate projects.

Implementation of the Joplin Complete Streets ordinance will be carried out by the Complete Streets Committee. The Complete Streets Committee will be made up of internal City of Joplin staff and community members from the following groups:

- Department of Public Works • Department of Planning, Development and Neighborhood Services • Department of Parks and Recreation • Joplin Police Department • Department of Health • Convention and Visitors Bureau • Joplin Trails Coalition • Trails and Connectivity Working Group • 2 Representatives from neighborhoods which have experienced historic underinvestment, poor health outcomes, or can be otherwise categorized as low-income neighborhoods.
- 2 Representatives from the general public Joplin shall train pertinent staff and decision-makers on the content of Complete Streets principles and best practices for implementing policies. Such a training opportunity must occur at least once per calendar year.

Design

Complete Streets design recommendations shall be incorporated into all publicly and privately funded projects, as appropriate. All transportation infrastructure and street design projects requiring funding or approval by the City of Joplin as well as projects funded by the State and/or Federal government shall adhere to Joplin's Complete Streets policy. The Joplin Complete Streets policy will focus on developing a connected, integrated network that serves all road users.

Complete Streets will be integrated into policies, planning, and design of all types of public and private projects, including new construction, reconstruction, rehabilitation, repair, and maintenance of transportation facilities on streets and redevelopment projects. To the greatest extent possible, Joplin shall work to incorporate native plant species and sustainable landscaping elements into Complete Streets projects. The latest design guidance, standards, and recommendations available will be used in the implementation of Complete Streets. A list of guiding documents will be maintained and updated by the Complete Streets Committee and can be found on the Complete Streets page of the City of Joplin website.

Land Use and Context Sensitivity

The endeavor to reorient Joplin towards the principles of Complete Streets also necessitates a greater consideration for how transportation intersects with broader land use decisions. As a result, all new or revised land use policies, plans, zoning ordinances, and other documents shall be required to specify how they will support Complete Streets. In order to ensure that full consideration is being given to Joplin's physical, economic, and social setting, Complete Streets principles, in both development and implementation, shall include community context as a factor in decision making. The context-sensitive approach will include a range of goals by giving significant consideration to stakeholder and community values. The overall goal of this approach is to preserve and enhance scenic and historic resources while improving or maintaining safety, mobility, and infrastructure conditions. Such significant changes, while necessary, can impose a burden on vulnerable communities if significant care is not taken from the outset to discover and avoid such harms. Thus, to the greatest extent possible, when implementing this policy, Joplin shall work to identify and mitigate unintended consequences, such as involuntary displacement due to the rising costs of living.



COMPLETE STREETS: JOPLIN, MISSOURI Part III

Approved by the Joplin City Council on January 3, 2022

Performance Measures

In order to monitor and fully understand progress that is being made towards the implementation of Complete Streets, Joplin shall establish internal and external performance measures as part of the Complete Streets policy. Joplin shall use the categories and metrics listed below to measure the internal implementation of the Complete Streets policy:

Category	Metrics
Policy	Number of policies updated to comply with the Complete Streets policy
	Number of exemptions granted
Personnel	Number of staff trainings completed
	Number of community engagement activities

Joplin shall use the categories and metrics listed below to measure the external implementation of the Complete Streets policy:

Category	Metrics
Safety	Number of crashes resulting in fatalities and/or serious injury
	Crash location
Infrastructure	Amount of new sidewalks built
	Amount of existing sidewalks repaired
	Amount of new trails and/or bike lanes built
	Number of connective* projects completed
Usage	Number of users on existing infrastructure
	Number of users on new infrastructure
	Breakdown of transportation mode usage on existing roadways

*Connective projects link existing infrastructure, e.g., a project that connects two trails via bridge.

Additionally, the data related to external performance measures outlined within this policy shall be disaggregated to measure how implementation affects neighborhoods with historic disinvestment, poor health outcomes, and areas with diminished access to transportation options. Approved by the Joplin City Council on January 3, 2022, Data related to both the internal and external performance measures outlined within this policy shall be collected, analyzed, and released to the public every two years.



COMPLETE STREETS: JOPLIN, MISSOURI Part IV

Approved by the Joplin City Council on January 3, 2022

Project Selection Criteria

Joplin shall establish criteria to encourage funding prioritization for Complete Streets implementation with at least the following principles in mind:

- Connectivity – connecting existing infrastructure to existing infrastructure and creating additional connections to community assets (including, but not limited to, businesses, schools, community centers, city halls, medical facilities, parks, voting locations, or libraries)
- Multimodality – implementing projects that expand infrastructure for modes of transportation other than the car
- Economic Development – proposed project supports broader efforts to enhance economic development
- Equity – project will broaden transportation options for neighborhoods with limited connectivity to community assets

Implementation Steps

Joplin shall make Complete Streets practices a routine part of everyday operations when feasible, shall approach every transportation project and program as an opportunity to improve streets and the transportation network for all users, and shall work in coordination with other departments, agencies, and jurisdictions to achieve Complete Streets. Joplin shall work to revise all related procedures, plans, regulations and other necessary processes to adhere to the principles of this policy within five years of its adoption. 7 Approved by the Joplin City Council on January 3, 2022 Further, Joplin will work to ensure that this policy remains in accordance with the optimal standards of the latest policy elements as authored by the National Complete Streets Coalition. The Complete Streets Committee, in collaboration with appropriate staff, shall collect and publicize the performance measures identified in this policy. The committee should also use community engagement to educate the public about the principles of Complete Streets. In addition to this policy, Joplin shall look for opportunities to curb dangerous driving behavior, including but not limited to, distracted driving and excessive speeding.

For more information on Complete Streets from the Department of Transportation visit:
www.transportation.gov/mission/health/complete-streets

