



# COLE CAMP CONNECTIVITY STUDY

JULY 2023





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## Acknowledgments

### **COLE CAMP WORKING GROUP**

Bob Meuschke, Cole Camp Mayor  
Charles Hunter, Bike Rider  
Debbie Anderson, Bike Rider, Registered Nurse  
Dianne Peck, Cole Camp Resident  
Jean Eckstein, Cole Camp Planning and Zoning Commissioner  
Jonathan Petersen, Cole Camp High School Principal  
Marge Lumpe, Cole Camp Community Betterment Association  
Mark Kestner, Bluebird Outdoor Adventures Owner  
Mary Donnell-Brown, Dance Instructor and Avon Distributor

### **REGIONAL PARTNERS**

Ally Brooks, Department of Health and Senior Services, Grant Evaluator  
Ashley Swartz, Kaysinger Baysin RPC, Assistant Director  
Barry Pabst, Benton County Health Department  
Cindy DeBlauw, Missourians for Responsible Transportation, Project Manager  
Emily Porter, Missouri Department of Conservation, Recreational Use Specialist  
Erika Van Vranken, Missouri Prairie Foundation  
Jackson Hotaling, Missourians for Responsible Transportation, Community Engagement Director  
Jo Ann Lane, Benton County Economic Development  
Joe Coy, Missouri Department of Conservation, Hi Lonesome Conservation Area  
Melanie Robinson-Smith, Katy Trail Coordinator  
Regan Krummen, Department of Health and Senior Services, Grant Administrator  
Ron Bentsch, Missouri State Parks, Rock Island Trail Coordinator  
Ryan Peters, Kaysinger Basin RPC  
Shannon Stewart, Kaysinger Basin RPC, Grant Manager  
Stefanie Pryor, Morgan County Health Department  
Taylor March, Missourians for Responsible Transportation, Executive Director  
William Smart, Ionia MO, Mayor

### **TECHNICAL ASSISTANCE PARTNERS**

Ashley Newson, Community Planner, National Park Service's Rivers, Trails and Conservation Assistance Program  
Zac Cody and Grace Nicole Lentz, Landscape Architect Design/GIS Assistant, Purdue University Center for Community & Environmental Design  
Tresa Carter, Director of Community Planning, BikeWalkKC



# Section 1: Introduction

Cole Camp is a vibrant community in Benton County, Missouri (MO). As the meeting point of Highway 52/Main Street and several state routes, Cole Camp is a popular destination, especially given its German heritage that is woven throughout the town's offerings. To maintain and grow Cole Camp's appeal for years to come, there are two main priorities the town must focus on:

1. Make Cole Camp a safe place to walk.
2. Make Cole Camp a safe place to bike.

In addition to the need for safe walking and biking routes in Cole Camp to ensure that community members can safely reach the places they need to go, Cole Camp also has an opportunity to connect to a linear state park. Approximately two miles north of City limits is the Rock Island Trail (RIT), which is owned by the Missouri Department of Natural Resources (MODNR) who plans to develop the 154 miles of the former Chicago, Rock Island and Pacific Railroad corridor. Development of the RIT will occur in sections over several years. The Cole Camp community recognizes the importance of developing their segment of the RIT, and this Connectivity Study evaluates how to prepare the City to do so.

With the momentum statewide to construct all components of the Rock Island Trail, the National Park Service's (NPS) Rivers, Trails and Conservation Assistance (RTCA) program is actively engaging with communities along the trail to design trailheads, amenities, and how the trail will conveniently draw users into the communities it passes through.

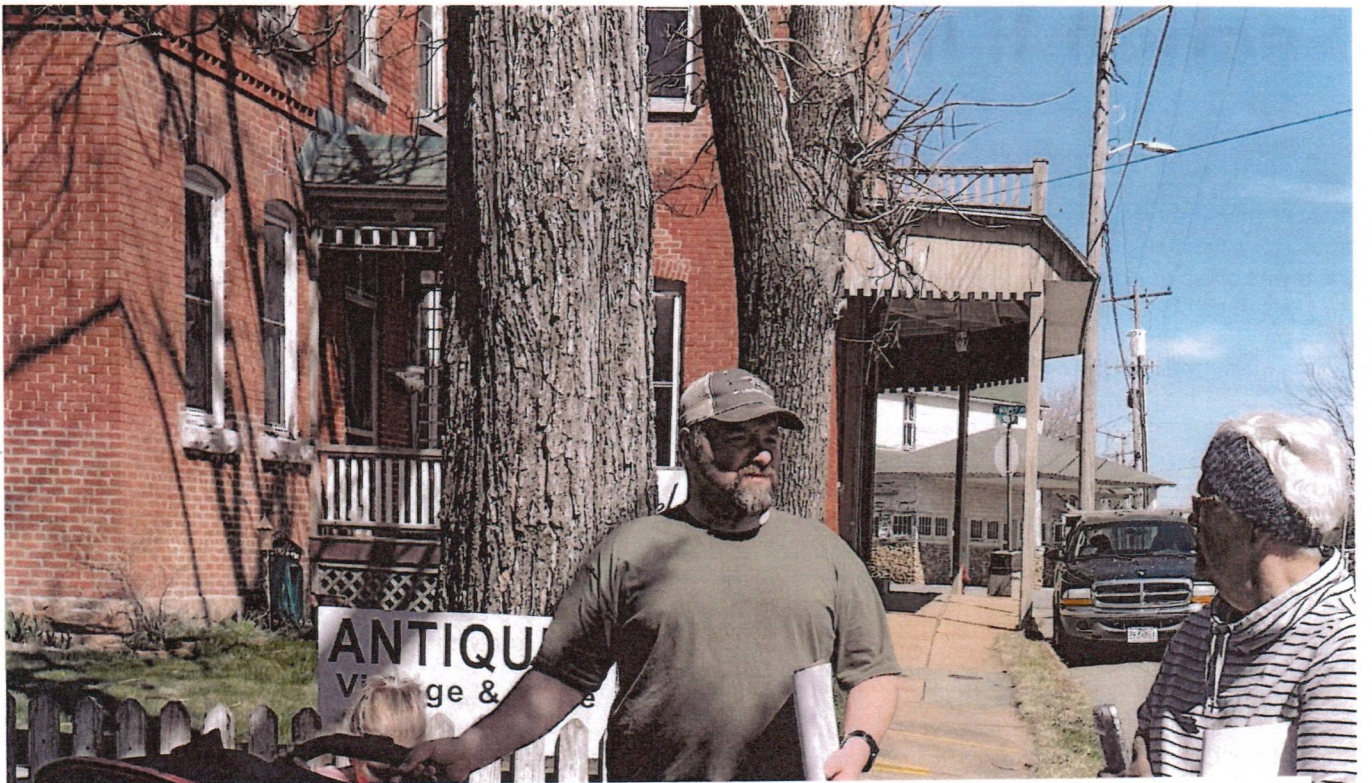
Cole Camp faces a challenge of how to connect the RIT to city limits in a safe and convenient manner for residents and visitors alike. Currently, the only bikeable connections from city limits to the RIT are on Highway U, a 55 mile per hour (MPH) roadway with curves and hills, or a chunky gravel road along the Hi Lonesome Prairie that isn't suitable for most bike tires.

This Connectivity Study layers information from the community engagement process and the existing conditions analysis to identify the following:

- Which streets or corridors in Cole Camp to prioritize for future bicycle and pedestrian amenities, such as sidewalks, crosswalks, bike lanes, bike racks, benches, lighting, and more.
- Ways to connect Cole Camp to the RIT.
- What types of amenities to offer at a future RIT trailhead.







The community was engaged in all aspects of this process to ensure their understanding and input was appropriately captured. Community engagement is crucial to develop a guiding strategy that supports the diverse interests of community members. A variety of ways were offered to engage with this planning process, both in person and online. Everything related to the Connectivity Study was advertised thoroughly, including online, newspaper announcements, meeting flyers, and through word of mouth.

The cornerstone of the community engagement strategy was a monthly gathering of dedicated community partners coined the Cole Camp Working Group. The meetings included representation from several state agencies, local business owners, City staff and elected officials, and residents. The Cole Camp Working Group shared relevant updates with one another, helped spread information to their constituencies, and discussed the latest questions and challenges.

In addition to these monthly meetings, a survey was conducted that was available online for several months. The survey input is integrated throughout the recommendations and the full results are available in *Appendix A*.

A traveling exhibit with information about safe walking and biking and partnering with the RIT was also created and displayed at various community events. The goal of this mobile exhibit was to educate residents and community partners about the RIT and also to ask for input about which streets people wanted to see more bicycle and pedestrian amenities, as well as how they envisioned the RIT being developed. Cole Camp Working Group members provided presentations and information about this project at the following events or meetings in 2023, including:

- Rock Island Day at the Capitol February 7
- Benton County Commissioners Meeting March 6
- Kaysinger Basin RPC Meeting March 30
- Cole Camp City Council April 20
- Community Meeting at the Library April 27
- Trailhead and Trail Development meeting with private landowner April 27
- American Legion May 1
- Chamber of Commerce May 9
- Community Meeting at the German Table May 16
- Missouri State Representative Rodger Reedy Meeting in Windsor June 20
- Cole Camp Fair September 9



# A Brief History of Cole Camp

The Cole Camp village began in the 1830s south of its current location. In 1839, it was officially established and known as the place "where the Ozarks meet the Great Prairies." In the 1840's, immigrants came from the Hanover province in Germany and continued their language dialect of "Low German". The religion of these original community members was Lutheran. A trading post was established along the Butterfield Stage Coach line which ran from 1856 to 1861.

Relations between the Anglo-American settlers and Germans were favorable despite cultural differences. This was to change with the coming of the Civil War when the community became bitterly divided.

The Germans were abolitionists and fervently loyal Unionists while many of the Anglo-Americans retained their sympathies for their Southern heritage. Cole Camp, being at the hub of four major roads, was to become the scene of one of the first battles of the Civil War on June 19, 1861. After the Civil War, Cole Camp saw the arrival of families of Bohemian ancestry. Many of these families attended the Catholic church.

In 1880, the narrow-gauge Pacific Railroad was built on the north side of town and many businesses moved to new locations along the railroad line. The Pacific Railroad operated until 1902 when it was upgraded to standard track and became known as Missouri Pacific Railroad. In 1904, Rock Island Railroad line was established connecting Cole Camp to Ionia to the west and Stover to the east. The depot included a side track and stockyards. The Rock Island Railroad served as a major freight line, further developing agricultural and business development.

Today, The Rock Island Railroad, now commonly referred to as the Rock Island Trail or Rock Island Corridor, is located two miles north of downtown Cole Camp. The historic town has many services and businesses including restaurants, bank, pharmacy, retail, golf course, public library, senior center, art gallery, public and Lutheran schools, skilled nursing care center, ambulance district, and community newspaper.

Cole Camp sees significant visitors traveling to the Lake of the Ozarks and Truman Lake. The community was the first to be designated as a Monarch City U.S.A. with many monarch butterfly habitat locations. North of the town and along the Rock Island Corridor is the Hi Lonesome Prairie Conservation Area that has been designated by Missouri Audubon as an Important Bird Area (IBA). IBAs are sites that have been identified by Audubon as those that are the most crucial for bird populations due to their abundance and/or diversity of birds present. The 654-acre prairie provides a home for Grasshopper sparrows, Henslow's sparrows, and Upland sandpipers. Many migratory birds also rely on this important grassland.



# Section 2: Walk & Bike Cole Camp

## WALK AUDITS

Several Working Group members completed walk audits of Cole Camp to better understand the existing conditions. The walk audits were conducted using the AARP Walk Audit Tool Kit and assessed different segments of Cole Camp's sidewalks.

The first walk audit evaluated the sidewalks along Highway 52/Main Street between Olive and Boonville Street. All sidewalks, with the exception of the sidewalks bordering the Citizens-Farmers Bank, are in need of repair or replacement. The sidewalks in this segment are too narrow for more than one person and, in addition, utility poles in the middle of the sidewalk which obstruct pedestrians. The sidewalks are cracked or crumbling, creating hazardous conditions that are not accessible, even for able bodied users. Aesthetically, the planters along the sidewalks are poorly maintained, and insufficient trash cans result in litter and debris. The benches on the north side of the street offer pedestrian rest areas, which are a nice amenity. Water fountains would be nice to provide as an additional amenity. Lastly, crossing the street would be safer and more comfortable with a traffic stop or signal at Maple Street and Highway 52/Main Street.

The second walk audit route started at the intersection of Maple Street and Butterfield Trail in downtown, then proceeded from Maple Street toward Hickory Street before crossing the street to walk the south side of Butterfield Trail. There was little traffic - either pedestrian or automotive - however this is typically a popular corridor for students and adults.

### What is multimodal infrastructure?

Multimodal infrastructure refers to a transportation system that provides for all roadway users, including those driving, walking, riding a bike, rolling in a wheelchair, and more. Considering all users is especially important for those who are unable to drive, would prefer not to drive, or cannot afford the costs associated with vehicle ownership.

Overall, the sidewalks are in acceptable condition on the north side of Butterfield Trail; however, the sidewalk on the south side is in disrepair. While the historic stones that date to Cole Camp's establishment offer important historical value, they make for hazardous walking conditions. Further, the sidewalks are narrow - where they are present - and do not have accessible features, such as ramps for users on wheels.

Butterfield Trail is a wide street offering opportunity for reconfiguration, such as widened sidewalks, bike lanes, and other space for pedestrians. Crosswalk striping would also alleviate safety concerns for pedestrians trying to cross the street at Butterfield Trail and Boonville Road and Butterfield Trail and Maple Street. Additional lighting would also enhance the pedestrian experience.

Lastly, additional trash cans would be useful, especially during the Cole Camp Fair when this area receives significant foot traffic.

Another walk audit started at the junction of Butterfield Trail and Spring Street, proceeding from the west side of Spring Street northerly to the intersection of Spring Street and Highway 52/Main Street.

This route is heavily trafficked with cars, trucks, and pedestrians. Overall, the sidewalk conditions range from acceptable to disrepair and there are some segments where no sidewalks exist at all.

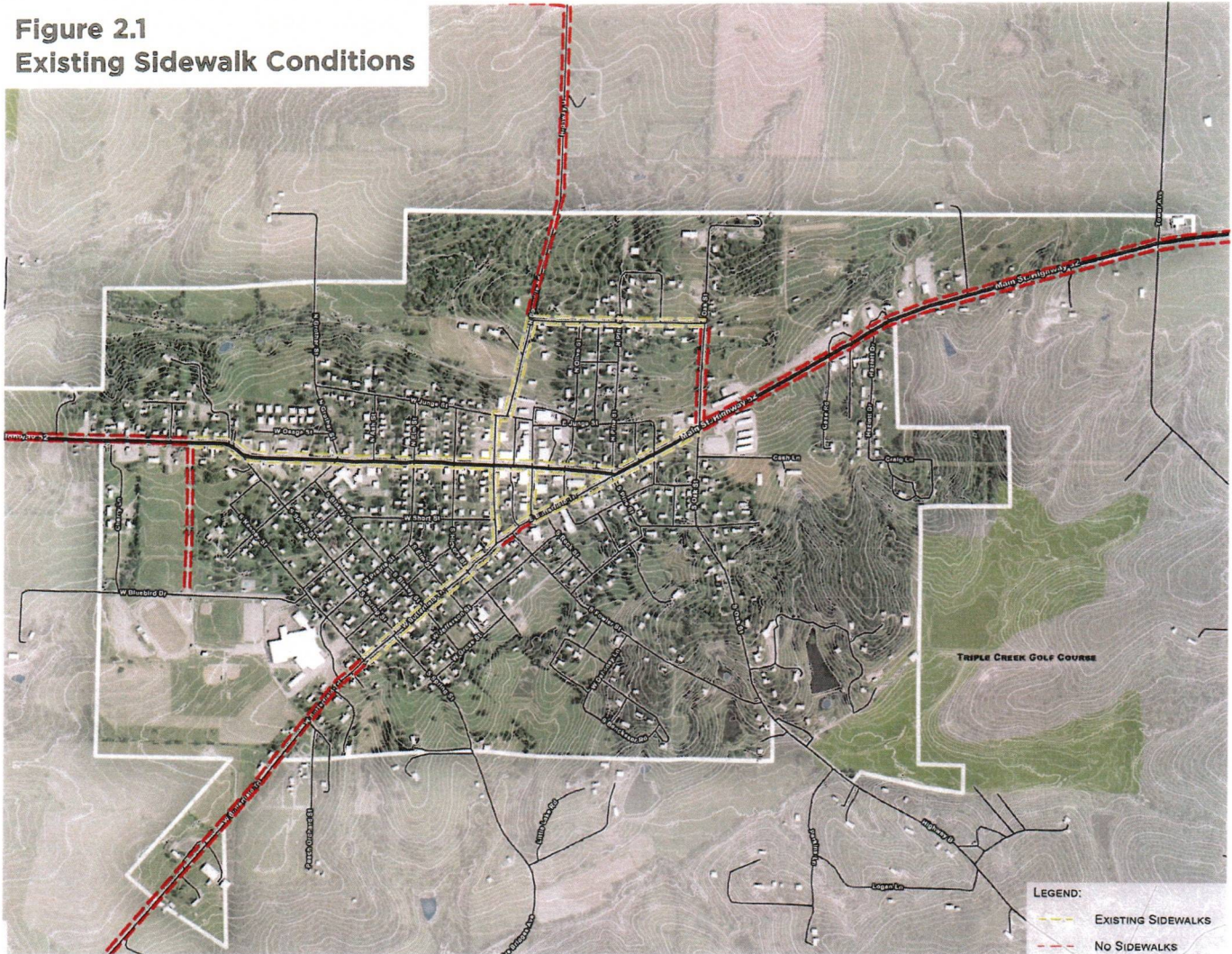
The intersections of Spring Street and Highway 52 and Spring Street and Butterfield Trail do not have crosswalks, forcing pedestrians to navigate breaks in traffic before crossing the road. Furthermore, there is not a crosswalk at Spring Street and Bluebird Drive, which is commonly used by students.

The final walk audit evaluated Keeney Street from Butterfield Trail to the point where Keeney Street dead ends. When school is in session, Keeney Street is heavily traveled, both by car and by foot; however, there were no pedestrians or car drivers observed during the evaluation. There are no sidewalks on either side of the street. Furthermore, the concrete in front of the school is uneven and would only serve able bodied persons.

There are signs that denote a school zone with a speed limit of 15 MPH, as well as two crosswalks. The crosswalks are on Keeney Street, one at Prairie Street and one at Ferguson Street. The crosswalk paint is faded and needs to be restriped.



**Figure 2.1  
Existing Sidewalk Conditions**



## EXISTING SIDEWALKS & BIKE LANES

Sidewalk connectivity is inconsistent in Cole Camp. Some streets have sidewalks, such as segments along Main Street, while others have none. Inconsistent or poorly maintained sidewalks forces pedestrians into the street and causes particular hardship for individuals with mobility challenges. The City of Cole Camp purchased sidewalk repair and construction equipment such that they can fix and construct sidewalks in house. *Figure 2.1* illustrates the existing sidewalk network.

There are currently no bike lanes or shared-road markings for people riding bikes in Cole Camp.



*Walk audit participant on Butterfield Trail.*



## PRIMARY STREETS

Most survey takers and community members indicated that without a car, walking and biking in Cole Camp is not a safe option to fulfill their everyday needs as they would fear for their personal safety. The most commonly cited streets as priorities to improve the walking and biking conditions include Main Street, Maple Street, Spring Street, and Butterfield Trail. While several other streets were indicated as important, prioritizing a few corridors streets that offer safe passage is a starting point to improve safety for those walking and biking.

### Highway 52/Main Street

Highway 52/Main Street was the most commonly cited street in need of improvement. This street is the heart of Cole Camp, bringing residents and travelers downtown that receives significant foot traffic year-round. This area needs improved and more frequent crossing opportunities from Oak Street to Dollar General, just west of Cherry Lane.

Crosswalks are proposed at three streets to improve north and south connectivity, including Spring Street, Boonville Road, and Butterfield Trail. Sidewalk improvements are needed along Highway 52/Main Street.



Sidewalks are in fair condition along Highway 52/Main Street.

### Maple Street

Maple Street is a heavily used street that crosses Highway 52/Main Street in the heart of downtown and connects to Butterfield Trail, another important corridor. There are funded and planned improvements along Maple Street thanks to the Transportation Alternatives Program (TAP) grant. The TAP grant funded project will involve the construction of a minimum five-foot wide concrete sidewalk on the east side of Maple Street north of Highway 52/Main Street to Junge Street. Sidewalks will comply with ADA and other required standards. The work will include the demolition of the existing sidewalks, curbs, and steps; modification to the existing storm inlets and culverts; and installation of access curb ramps, pavement markers, and warning devices. Construction is anticipated for 2024. The City will try to provide these same improvements on the west side of Maple Street from Highway 52/Main Street to Junge/First Street if funding allows.

Sidewalk improvements along Maple Street south of Highway 52/Main Street to Butterfield Trail are recommended in the future.



TAP grant project design along Maple Street and Highway 52/Main Street.

### Spring Street

The sidewalks on Spring Street are narrow, inconsistent, and, in some places, in need of replacement. Spring Street connects major corridors in Cole Camp from Highway 52/Main Street to Butterfield Trail, and further south to Grove Street and beyond.

Spring Street can accommodate mixed traffic for bicycles. Shared-road signs will be installed along Spring Street from Highway 52/Main Street to Butterfield trail and the street will be painted with shared-road symbols. Sidewalk improvements are recommended along this segment as well.



Spring Street sidewalks are narrow and have landscaping overgrowth.



## *Junge Street*

There are sidewalks on Junge Street intermittently that are in fair condition; however, they are in poor condition in some areas and missing altogether in others. As a mostly residential, low volume, and low speed street west of Boonville Road, at grade sidewalks may be appropriate. East of Boonville Road, the land uses transition to more commercial uses and above curb sidewalks may be preferred to offer more protection to pedestrians. In addition to sidewalks, shared-road signs and paint are recommended along Junge Street from Grother Street to Walnut Street.

## *Butterfield Trail*

The Butterfield Trail travels diagonally across Cole Camp. It is a wide road with sidewalks in fair condition. At the intersection of Butterfield Trail (Route F) and South Boonville Road (Route U) there are planned improvements to provide ADA-compliant pedestrian facilities. Construction is anticipated in 2024.

Similar to Spring Street, Butterfield Trail from Highway 52/Main Street to Keeney Street is well suited for shared-road signs and symbols. There is also room to accommodate a dedicated bike lane. Updated sidewalks are also recommended for this segment. Historically, this route was the Butterfield Stage Coach Trail. Long term, there could be opportunities for additional interpretative signage and wayfinding that celebrates its history.

## *Boonville Road*

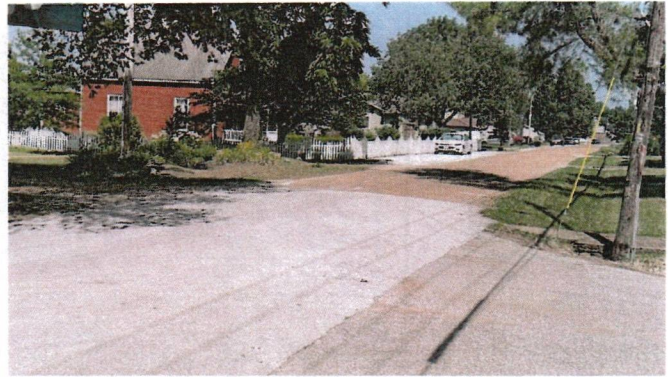
Boonville Road (Highway U) is the only paved connection from Cole Camp to the Rock Island Trail. The sidewalks along Boonville Road within current City limits are like new in some segments, but narrow, crumbling, and overgrown in others.

North of Junge Street, the sidewalks disappear and Boonville Road transitions to a highway-like environment until it reaches the RIT. North of current City limits, Highway U/Boonville Road is a highway with a 55 MPH posted speed limit, 800 vehicles per day, and hilly. The only space for pedestrians or cyclists is in the roadway.

To foster in-town connectivity, as well as important future connectivity to the RIT, sidewalk improvements are recommended along Boonville Road from Butterfield Trail to current City limits. As RIT development continues, it is recommended that a wide, shared-use path be explored along one side of Highway U north of Junge Street. Boonville Road changes to Highway U at Highway 52/Main Street.

## *Keeney Street*

A primary route for students as well as residents headed to the pool or Ezekiel Williams Park, Keeney Street would benefit from improved sidewalk infrastructure as well as shared-road signs and paint from Grother Street to Butterfield Trail.



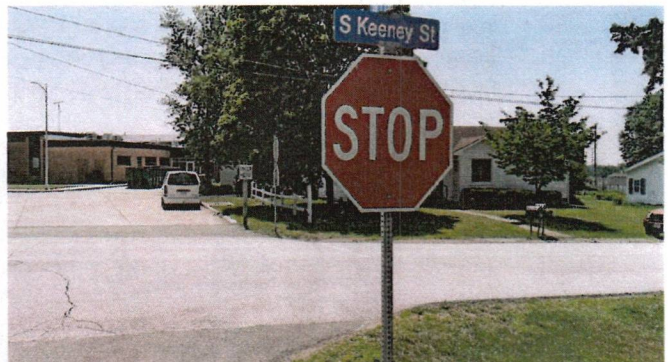
*Sidewalks on Junge Street are inconsistently available. Where there are sidewalks, they are in poor condition.*



*Sidewalk improvements are needed along Butterfield Trail to accommodate all users.*

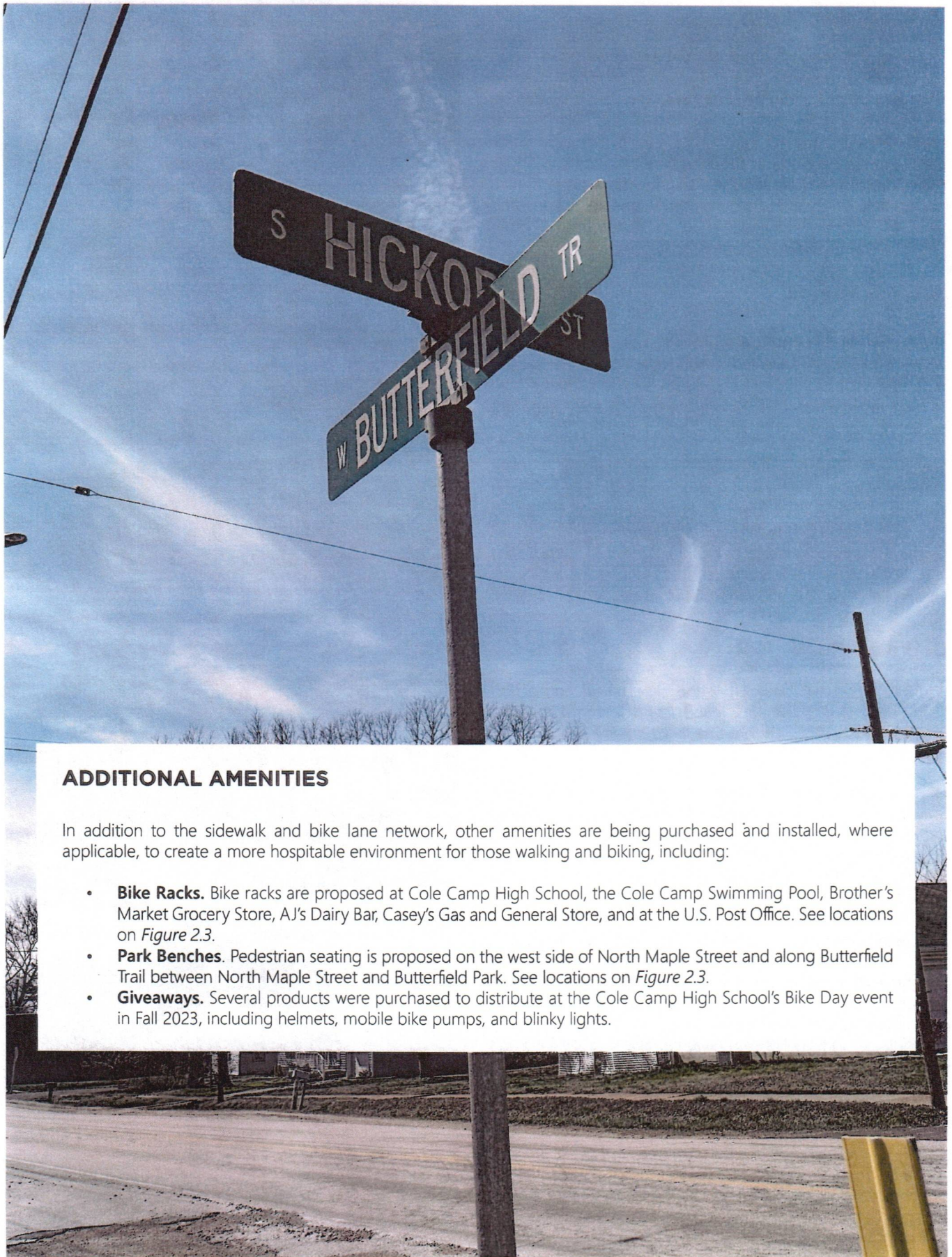


*A crosswalk is needed at the intersection of Highway 52/Main Street and Boonville Road (Highway U).*



*In certain sections of Keeney Street, there are no sidewalks present.*





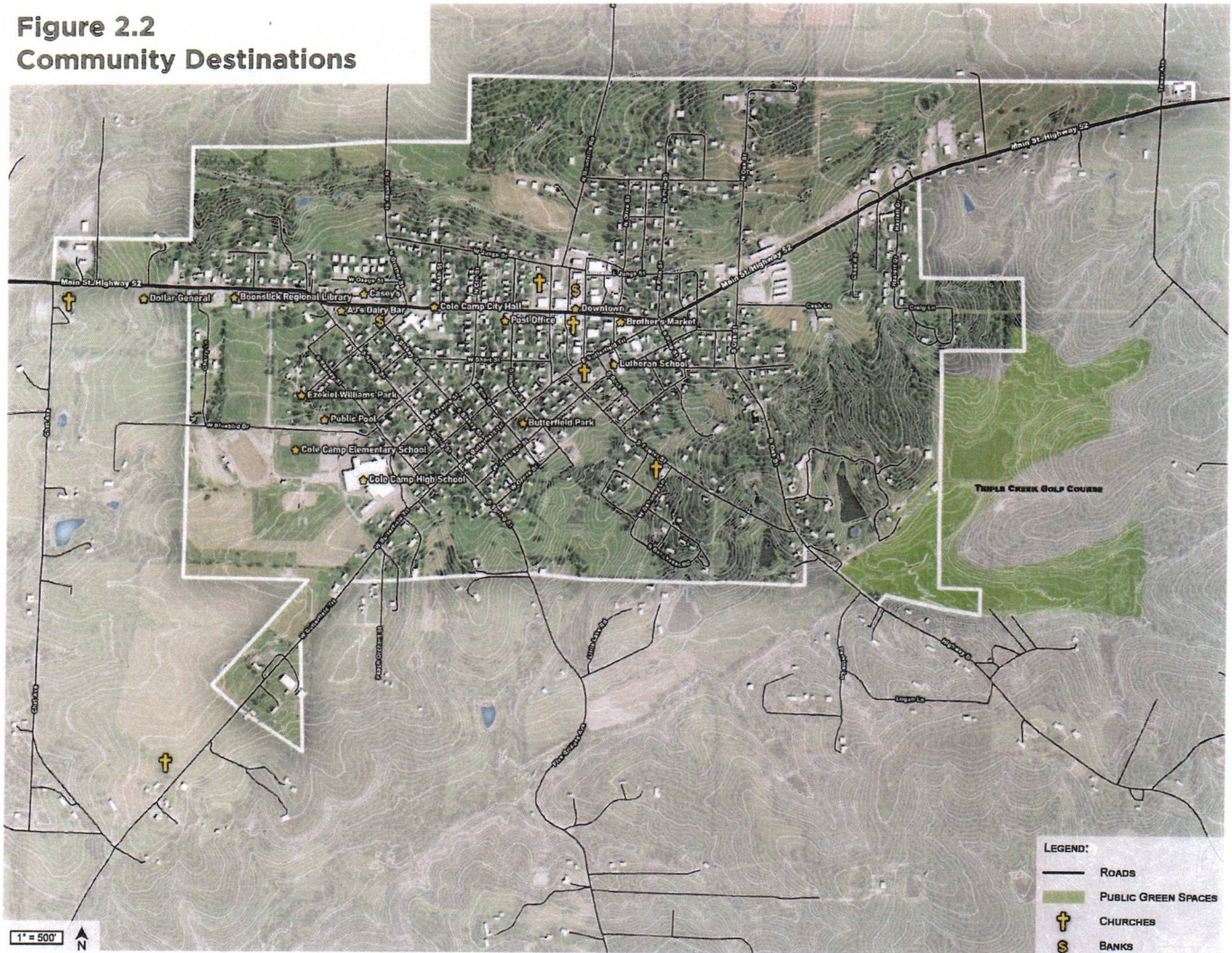
## ADDITIONAL AMENITIES

In addition to the sidewalk and bike lane network, other amenities are being purchased and installed, where applicable, to create a more hospitable environment for those walking and biking, including:

- **Bike Racks.** Bike racks are proposed at Cole Camp High School, the Cole Camp Swimming Pool, Brother's Market Grocery Store, AJ's Dairy Bar, Casey's Gas and General Store, and at the U.S. Post Office. See locations on *Figure 2.3*.
- **Park Benches.** Pedestrian seating is proposed on the west side of North Maple Street and along Butterfield Trail between North Maple Street and Butterfield Park. See locations on *Figure 2.3*.
- **Giveaways.** Several products were purchased to distribute at the Cole Camp High School's Bike Day event in Fall 2023, including helmets, mobile bike pumps, and blinky lights.



**Figure 2.2  
Community Destinations**



## IMPORTANT COMMUNITY DESTINATIONS

Another layer in this process is to understand where people want to travel to and why. Community members listed important destinations for them to reach in the survey, as illustrated on *Figure 2.2*. Community members were asked to think not only about everyday destinations - such as the bank, grocery store, or school - but also where visitors along the future Rock Island Trail may want to visit. Important community destinations include:

- Cole Camp High School
- The Lutheran School
- Boonslick Regional Library
- Casey's Gas and General Store
- Dollar General
- Pharmacy
- Downtown
- Churches
- Cole Camp Senior Center
- Good Samaritan Care Center
- Butterfield Park
- Ezekiel Williams Park
- Citizens-Farmers Bank
- Brother's Market

In addition to these important community destinations, the Cole Camp community also wants to provide extra amenities to walkers and bikers. Cole Camp currently does not have downtown restrooms or many green spaces/parklets. These amenities would enhance quality of life for downtown visitors, such as RIT users and residents.

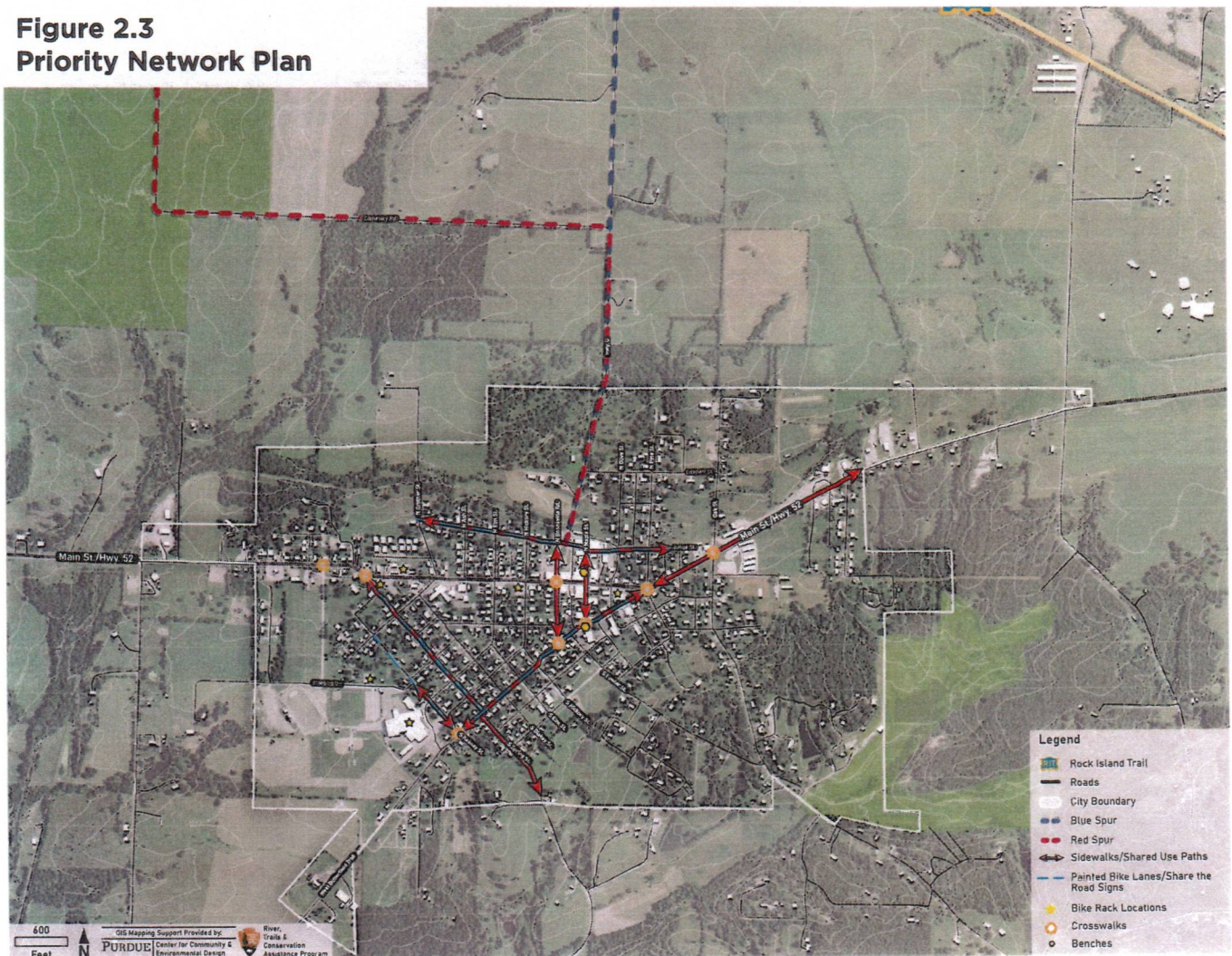
Two locations for a downtown restroom and parklet are being explored:

1. The first location is across from the coffee shop next to Happy Feet. A few parking spaces would need to be relocated on the east side of Happy Feet to make room for these new facilities.
2. The second location is north of The German Table restaurant.

In addition to providing downtown restrooms and green space, providing benches, interpretive signage, pedestrian-scaled signage (i.e., wayfinding), water stations, landscaping, and other pedestrian amenities should be implemented alongside the implementation of the Priority Network Plan (see *Figure 2.3*).



**Figure 2.3**  
**Priority Network Plan**



## PRIORITY NETWORK PLAN

The Priority Corridors Map (*Figure 2.3*) is an interconnected network of routes that connect to many major destinations and neighborhoods in the community. This network identifies the best routes for direct and comfortable connections to places that people want to go. Some of these routes have sidewalks today, but there are many gaps where sidewalks are in disrepair or do not exist at all.

Many of Cole Camp's streets do not have sidewalks and many existing sidewalks are in disrepair or do not meet ADA standards. The cost and scale of providing sidewalks on every street is beyond any community's resources. The purpose of the Priority Network Plan is to provide a road map for walking and biking infrastructure that is focused on the segments with the greatest potential to benefit residents and connect important community destinations.

While the ultimate implementation of projects in the Priority Network Plan is dependent on more focused analysis, engagement, and engineering, this Connectivity Study provides a high level assessment of implementation feasibility for various bike and pedestrian features.

While the Priority Network Plan focuses on biking and walking connections in Cole Camp, as well as to the RIT, there are other regional connections to pay attention to as development furthers, including:

1. Butterfield Overland National Historic Trail was recently established as a National Park Service-designated National Historic Trail and will bring more tourism to Cole Camp if it follows Main Street/Butterfield Trail.
2. U.S. Bike Route (BR) 51 is currently under development and the proposed route will likely travel very close to Cole Camp. This is another opportunity for regional riders that could bring more visitors to Cole Camp.

Long-term, Cole Camp may have multiple routes bringing more people into the city to enjoy the local culture, nature, shops, and restaurants.



# Section 3: Explore the Rock Island Trail

## ROCK ISLAND LINE CORRIDOR BACKGROUND

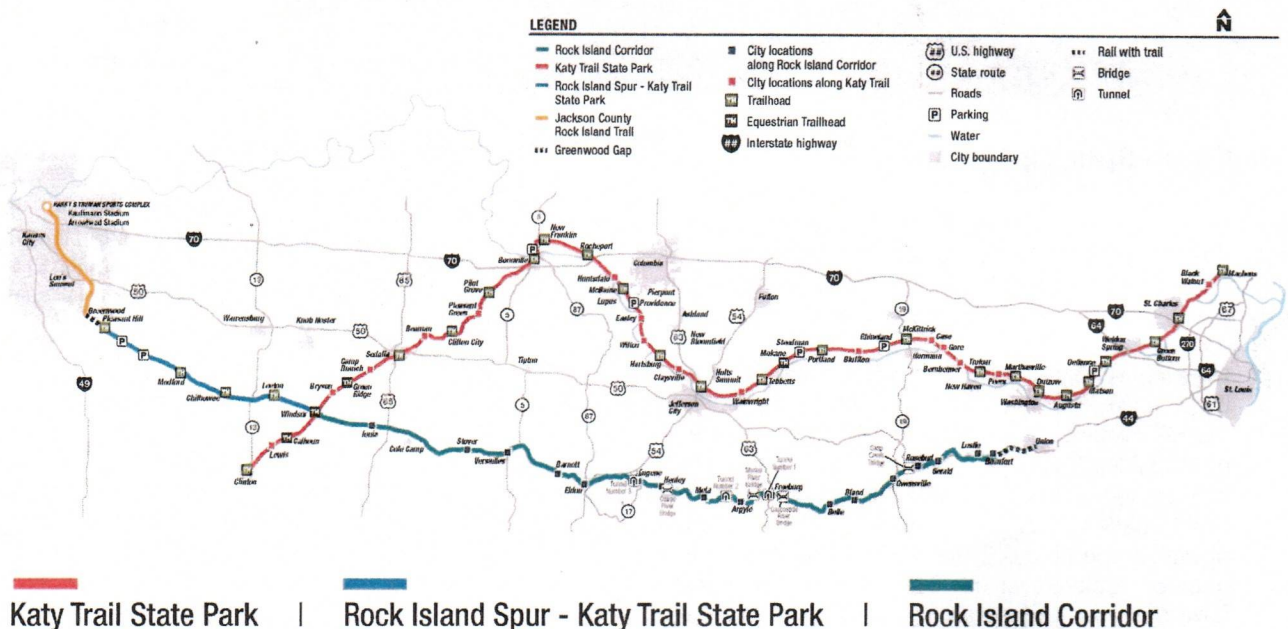
On December 14, 2021, the Missouri Department of Natural Resources (MODNR) accepted ownership of the Rock Island Corridor. The MODNR plans to develop the 154 miles of the former Chicago, Rock Island, and Pacific Railroad corridor, which stretches from Windsor to Union, Missouri into a public recreational trail. Missouri Central Railroad Company, a wholly owned subsidiary of Ameren Missouri, donated the property at no cost to the state. Development of the trail will occur in sections over several years, as each section of the corridor has different features and challenges. The graphic below shows the Rock Island Line Corridor and how it interacts with other statewide trail systems.

In January 2022, Missouri State Parks began meeting with communities along the Rock Island Line Corridor. The open house style meetings gathered public input, as well as the needs and goals of each community and the landowners along the corridor. The meetings included information about trail development and operations, public safety, landowner and real estate topics, grant opportunities, and future partnership opportunities.

In March 2022, Missouri State Parks held a community assessment meeting in Cole Camp to discuss potential grant and partnership opportunities along the corridor.

At the time of this Connectivity Study, Missouri State Parks does not have funding for full trail development. Some communities have obtained funding through grant programs, such as the Transportation Alternatives Program (TAP) and Recreational Trails Program (RTP). Communities and counties can develop the trail through an agreement with Missouri State Parks. Missouri State Parks has trailhead and trail bed design specifications that must be followed for a consistent trail experience. Communities can add their local flair on small scale design elements such as art, signage, and in the information kiosk panels.

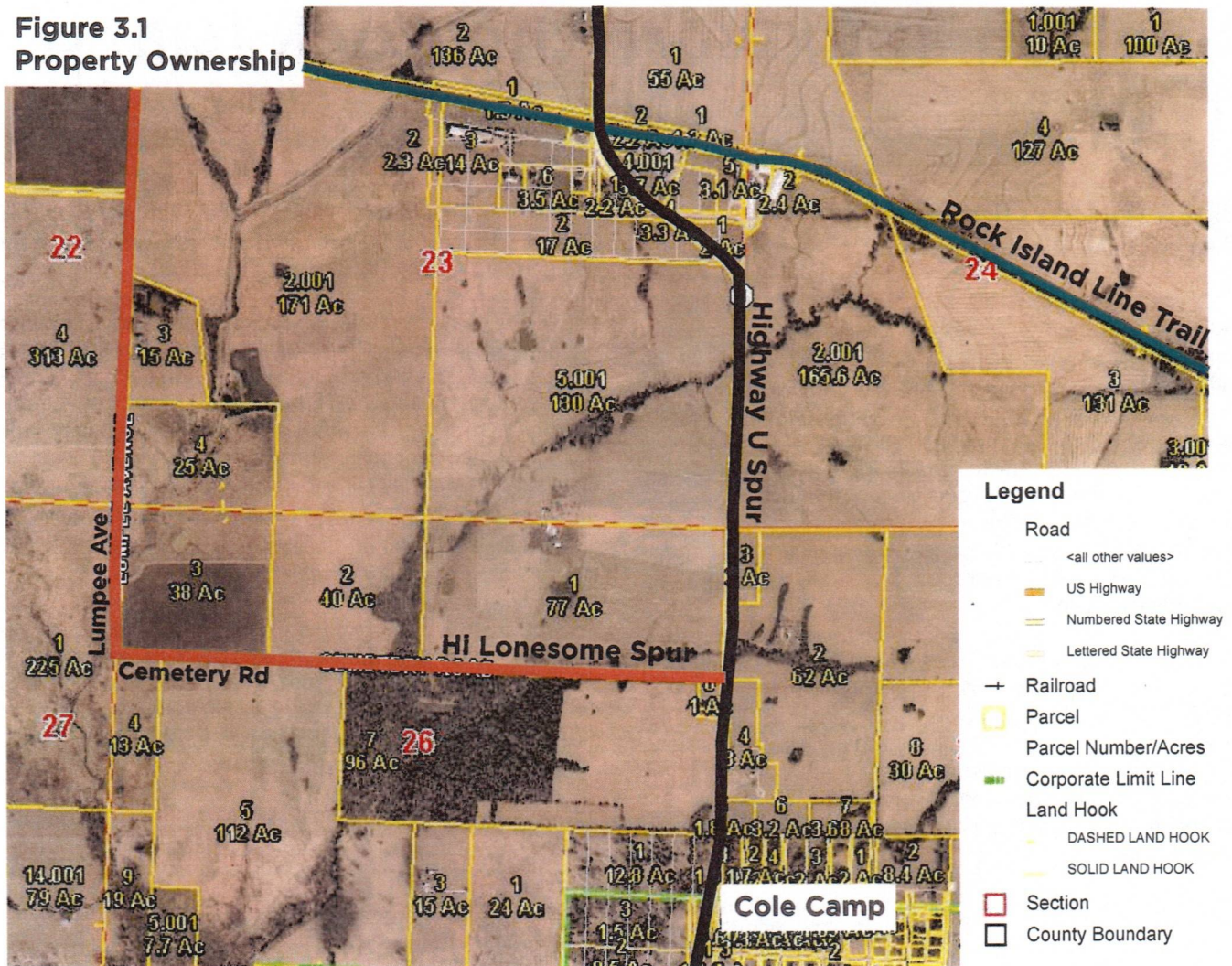
For more information on the Rock Island Line Corridor including the master plan with trail bed and trailhead specifications, visit <https://mostateparks.com>. Specific information regarding the Rock Island Trail State Park can be found here: <https://mostateparks.com/park/rock-island-trail-state-park>.



Former railroad corridors spanning from Kansas City to St. Louis, Missouri. On December 14, 2021 MODNR accepted ownership of the Rock Island Line Corridor. Development is occurring in sections over several years, depending on budget and community partnership capacity to develop and maintain the trail.



**Figure 3.1  
Property Ownership**



### Cole Camp Spur Options

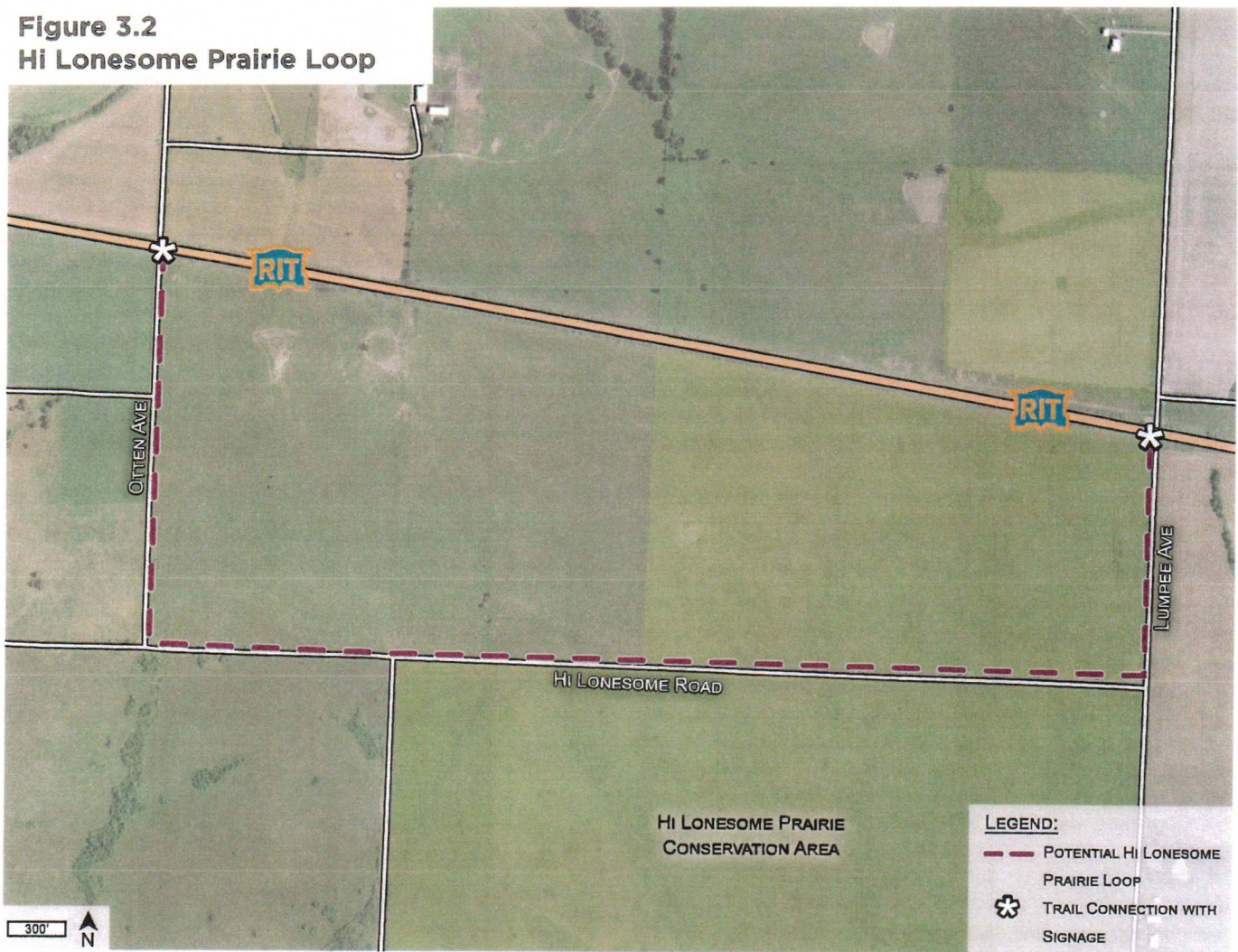
The RIT is located two miles north of Cole Camp. A spur is needed to connect the town and the trail. There are two options to travel from Cole Camp to the RIT that involve Highway U south of Cemetery Road, as shown on Figure 3.1.

1. **Highway U Spur.** This spur option uses Highway U the entire two miles from Cole Camp city limits to the RIT. Highway U has two, 10-foot travel lanes with no shoulder, although the total right-of-way, which includes the roadway itself and the area on either side of the roadway, ranges from 60 to 70 feet. There are private property, utility, and cost considerations that must be explored further; however, there is a space for a multi-use path to accommodate pedestrian and cyclist traffic off of the road. The City of Cole Camp is also considering taking over ownership of Highway U and its accompanying right-of-way from city limits to the RIT. Refer to Figure 3.1 which illustrates ownership along this spur.

2. **Hi Lonesome Spur.** This spur option uses Highway U until turning west along NE 301 BC (Cemetery Road) and then north on Lumpee Avenue. This spur option is on a chunky gravel substrate once off of Highway U. Possible future change of gravel size may make this spur effective for walkers and bikers. Signage and wayfinding would be helpful.



**Figure 3.2**  
**Hi Lonesome Prairie Loop**



**HI LONESOME PRAIRIE LOOP**

To encourage interaction with the Hi Lonesome Prairie Conservation Area, a potential loop route was explored. The Cole Camp Working Group met with the Missouri Department of Conservation and Missouri Prairie Foundation to discuss opportunities. This is a unique opportunity as this is the only place along the entire RIT corridor that passes through a conservation area.

The proposed loop route would travel south on Lumpee Avenue, west on Hi Lonesome Road, and north on Otten Avenue before reuniting with the RIT. Integrating interpretative signage and a viewing platform are desired features. *Figure 3.2* illustrates the potential trail loop.



*Hi Lonesome Prairie Conservation Area is known for wildlife viewing. The Hi Lonesome Prairie Loop Trail would provide opportunities to interact with nature. Photo source: Missouri Department of Conservation.*



## Highway U Trailhead

Two trailheads were proposed and discussed during the planning process.

A trailhead at Highway U was determined to be the most feasible and desired location for a Rock Island Trail trailhead. A trailhead at this location provides a direct, paved route between Cole Camp and the trail. Missouri State Parks right-of-way is 50 feet from the trail centerline for a total of 100 feet wide. The land is mostly flat and there is existing water and utility access.

The other proposed trailhead would be at the intersection of Lumpee Ave and Rock Island Trail. Development of this trailhead would be constrained to the Missouri State Park's right-of-way since there is private landownership to the north and east and Missouri Department of Conservation land to the south. This trailhead does not have easy access to water and utility lines. Trail users would have to travel on gravel roads and the route requires more turns to get to Cole Camp.

The trailhead at Highway U is located on private land and at this time the landowner is open to dedicating the land to the city. The Cole Camp Working Group is considering applying for a TAP grant and the land donation can count towards the grant's 20% match. The trailhead will be developed in phases, starting with essential trail user amenities first. Phase 1 could include developing pedestrian parking, such as benches, restrooms, drinking water facilities, an information kiosk, picnic tables, and planting trees and other landscaping. Phase 2 could include expanding parking to include equestrian parking (if approved by Missouri State Parks), developing primitive camping facilities, installing a playground and outdoor classroom, and expanding existing facilities and landscaping. Some grading will be necessary at this trailhead since it slopes gently downward to the north.

The Rock Island Trail will be managed similar to the Katy Trail State Park in which it is open from sunrise until sunset. Missouri State Parks does not provide camping along Katy Trail State Park, but camping is available at public and privately owned campgrounds adjacent to the trail. Camping facilities can be developed at the Highway U trailhead since it will not be owned by Missouri State Parks. When developing a camping site, consider the topography, soil, hydrology and drainage, amenities provided, and user experience. A primitive campsite offers less amenities and is a lower cost or free to stay there. A private campsite may be offered at a later time, and the amenities may include restrooms, showers, water, shade, tent shelters and platforms, parking, fire rings, grills, and picnic tables. Rules, ordinances, liability, and safety are additional considerations for developing camping. The TAP grant may include a plan to develop 1.77 miles of trail infrastructure from Highway U to Otten Avenue.

In addition to trailheads efforts adjacent to the RIT, efforts will continued to be made to identify possible camping options within city limits.



The Rock Island Trail State Park logo represents the brand for the linear state park.

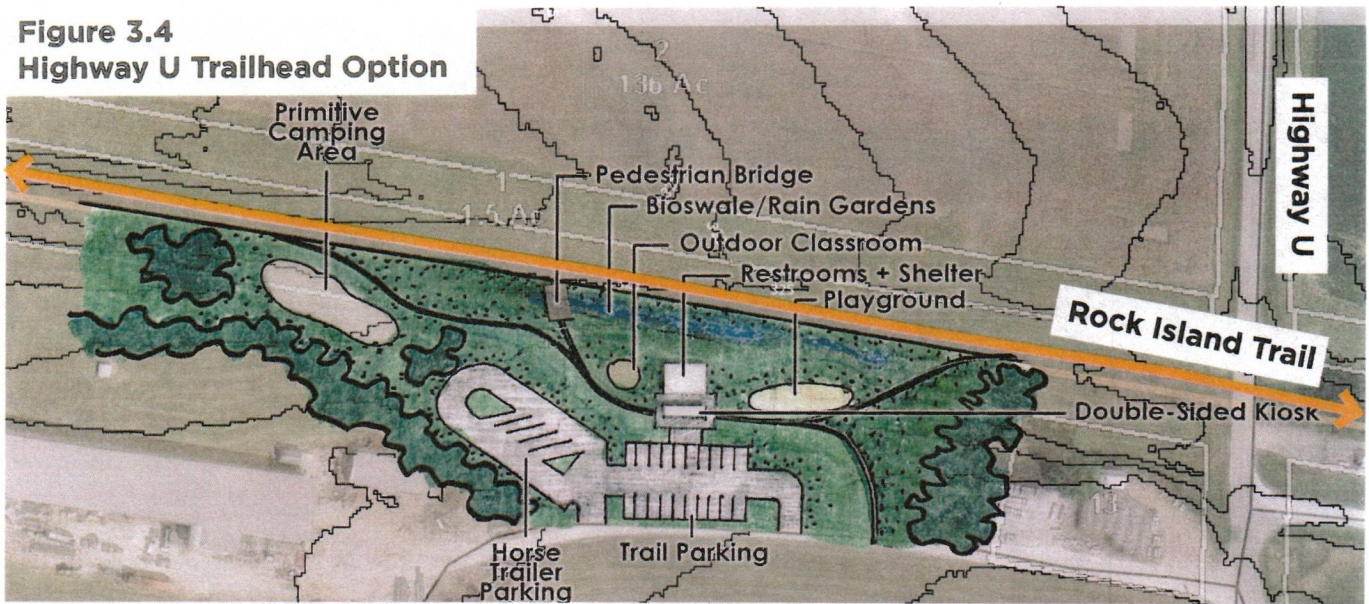
**Figure 3.3**  
**Highway U Trailhead Option**



This map shows the length of trail from the Hi Lonesome Prairie Conservation Area to the Highway U trailhead. This section of trail is proposed to be developed first along with a trailhead because of it connects to the conservation area. The length of trail developed is dependent on the amount of funding.

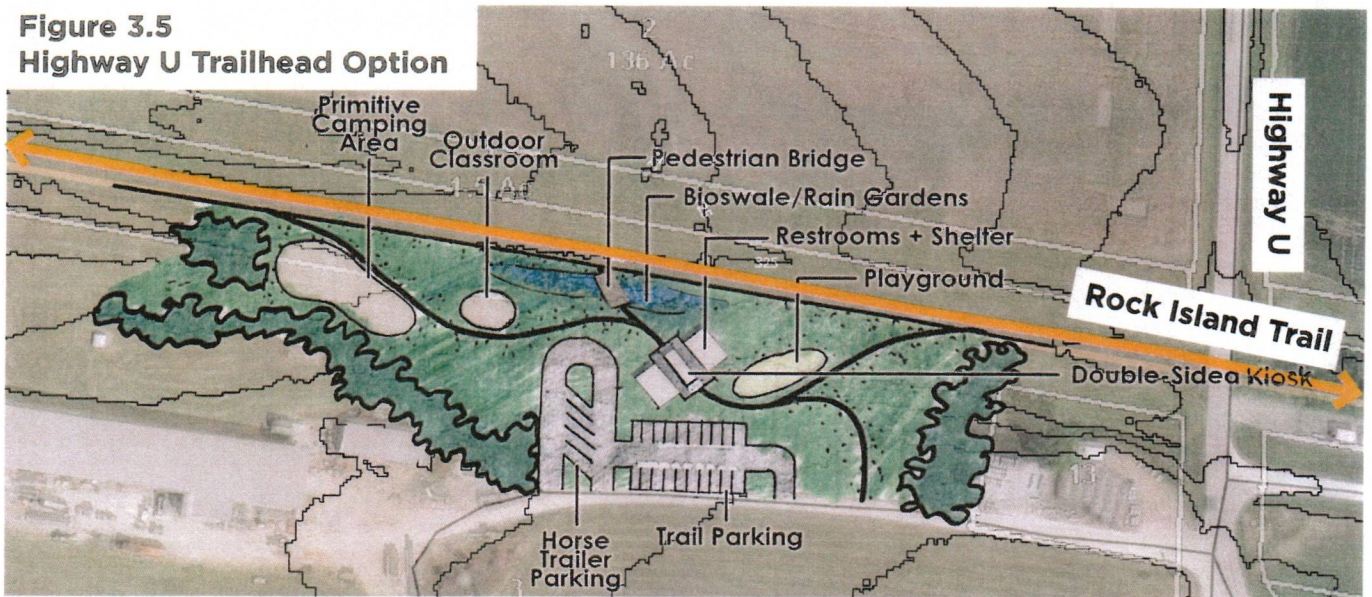


**Figure 3.4**  
**Highway U Trailhead Option**



*This conceptual drawing shows the layout and amenities for a trailhead at Highway U and the Rock Island Trail.*

**Figure 3.5**  
**Highway U Trailhead Option**



*This conceptual drawing shows the layout and amenities for a trailhead at Highway U and the Rock Island Trail.*





## EQUESTRIAN USE GUIDANCE AND CONNECTIVITY CONSIDERATIONS

Missouri State Parks has not determined if equestrian use will be allowed or not allowed on the Rock Island Trail. Equestrian use refers to only horseback riding, not buggies or wagons. It may be allowed in sections of the trail similar to the Katy Trail. Equestrian use was added to the Katy Trail after the trail was developed and already open for use. Communities can develop the trail and open equestrian use at a later date in coordination with Missouri State Parks. The main guidelines for determining if equestrian use is suitable on a trail section are:

- There is community interest for equestrian use. Is there an existing and active equestrian community nearby? Would they be interested in using the trail? Is there broad community support for having the section open to equestrian use?
- Equestrian use should not be in high volume areas like cities and attraction points such as tunnels and long bridges where trail user conflict can occur.
- Trailheads on the potential equestrian sections need to be able to accommodate the additional space for horse trailer parking. There needs to be at least two equestrian trailheads so that equestrian use can occur in a section of the trail.
- Equestrian use should not occur where there is a busy at-grade crossing.

Some equestrian use considerations specific to Cole Camp are:

- There are no high volume areas of the trail around Cole Camp. The trail is north of town, which is an advantage for reducing high volume areas typically found in towns. The Hi Lonesome Prairie Conservation Area would be an attractive destination for equestrian users to enjoy viewing from the trail.
- There is room for equestrian parking at the trailhead location at Highway U. Equestrian parking could be developed in a later phase at the trailhead.
- There is existing equestrian use on the Rock Island Spur of the Katy Trail State Park. Equestrian use is open on that trail from Purvis Road outside of Pleasant Hill to Windsor. It would be advantageous for the section of trail outside of Cole Camp to tie into this existing equestrian section.
- There is an at-grade crossing at Highway U which poses a safety consideration for all trail and road users. Consultation with Missouri State Parks and MODOT is recommended when considering development east of Highway U.
- The missing bridges over Highway 65 and Highway 52 pose a challenge for equestrian, bicycle, and pedestrian use occurring in a longer section that connects to neighboring communities. From Highway 65 to Highway U is approximately 3.8 miles on the trail and from Highway U to Highway 52 is approximately 3.4 miles. Missouri State Parks has met with MODOT to discuss these missing bridges. When the trail bridges were removed MODOT's agreement stated that MODOT would replace those bridges in the future if necessary. MODOT is aware of this and is waiting to replace the bridges once trail development in adjacent sections begins to formalize. Missouri State Parks is the conduit to work with to get those bridges in MODOT's budget.



## ACTIVATING THE TRAIL AND ECONOMIC DEVELOPMENT

The Rock Island Trail will be a resource and asset to Cole Camp once the trail is developed. Residents can use the trail for exercise, recreation, education, relaxation, adventure, and transportation. The trail will attract visitors to Cole Camp and neighboring communities along the corridor. This can provide Cole Camp with an economic development strategy as tourism brings new dollars into the community. Additionally, it could attract more residents to Cole Camp for those seeking small towns with outdoor recreation and natural resources.

There are many examples of rural communities using outdoor recreation as an economic development strategy. Some of these are referred to as "trail towns" for ones that have a trail going through or nearby. A successful method of promoting outdoor recreation tourism for small communities is to develop regional partnerships and promote the region as a whole. A key component of successful marketing is to identify and communicate existing tourism assets (e.g., lodging, restaurants, sites, activities, experiences, etc.). Tourists expect information to be available online on a website or social media.

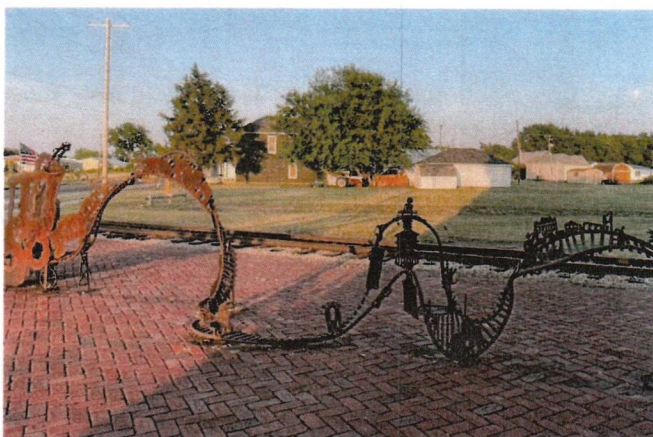
Part of the trail town model is to have a clear and tangible community identity or tourism niche. Cole Camp already embraces and promotes its history and heritage. The trail offers another avenue in which to grow the town's identity and amenities. When considering what Cole Camp's unique niche could be that is different from the other towns along the corridor, ask the following question:

- What kind of a Rock Island Trail town does Cole Camp want to be?
- What existing community identity can Cole Camp build off of with the new trail and how will the trail add a new twist to that?
- Do you want to increase the number of visitors to Cole Camp? Do you want more tourism in Cole Camp?
- What does Cole Camp have to offer visitors currently and what's missing? Consider conducting a gap analysis and developing a tourism strategy.
- How could the trail be used in creative ways that engage people, build excitement, and attract tourists?

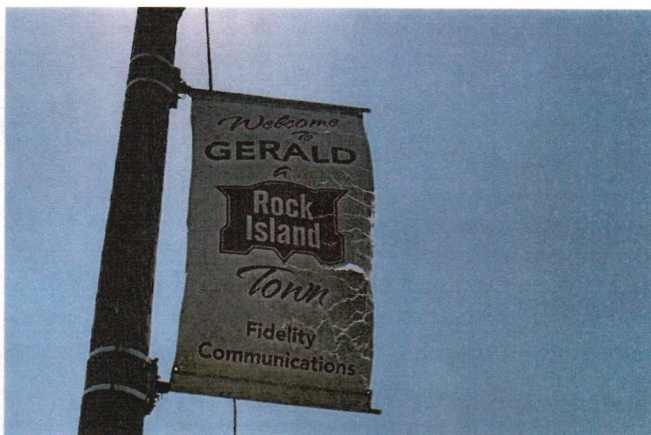
Some components of developing Cole Camp's branding for the trail include creating a town or chamber of commerce logo and color scheme, having art installations and sculptures along the trail and throughout the town, utilizing signage in a fun and effective way, and providing fun photo moments. Programming components that complement the trail include developing games like scavenger hunts (mobile or paper versions) and self guided tours, creating events that include the trail, and promoting trail prescriptions and walking challenges. Other components to complement the trail include creating pollinator and prairie habitat, developing pocket parks, areas of rest, and interpretive waysides.



*Photo opportunities are a fun feature and attraction for visitors, especially at trailheads. (Katy Trail State Park, Sedalia Trailhead).*



*Art installations are great additions to trailheads and along the trail. They can spark curiosity, capture attention, and tell a story. (Katy Trail State Park, Sedalia Trailhead).*



*Streetlight banners are one way to communicate and reinforce the Rock Island theme and brand.*



# Section 4: Implementation Strategies

## PROJECT IMPLEMENTATION STRATEGIES

Incorporating recommended projects, specifically paint only recommendations, can be implemented as part of routine city maintenance, such as:

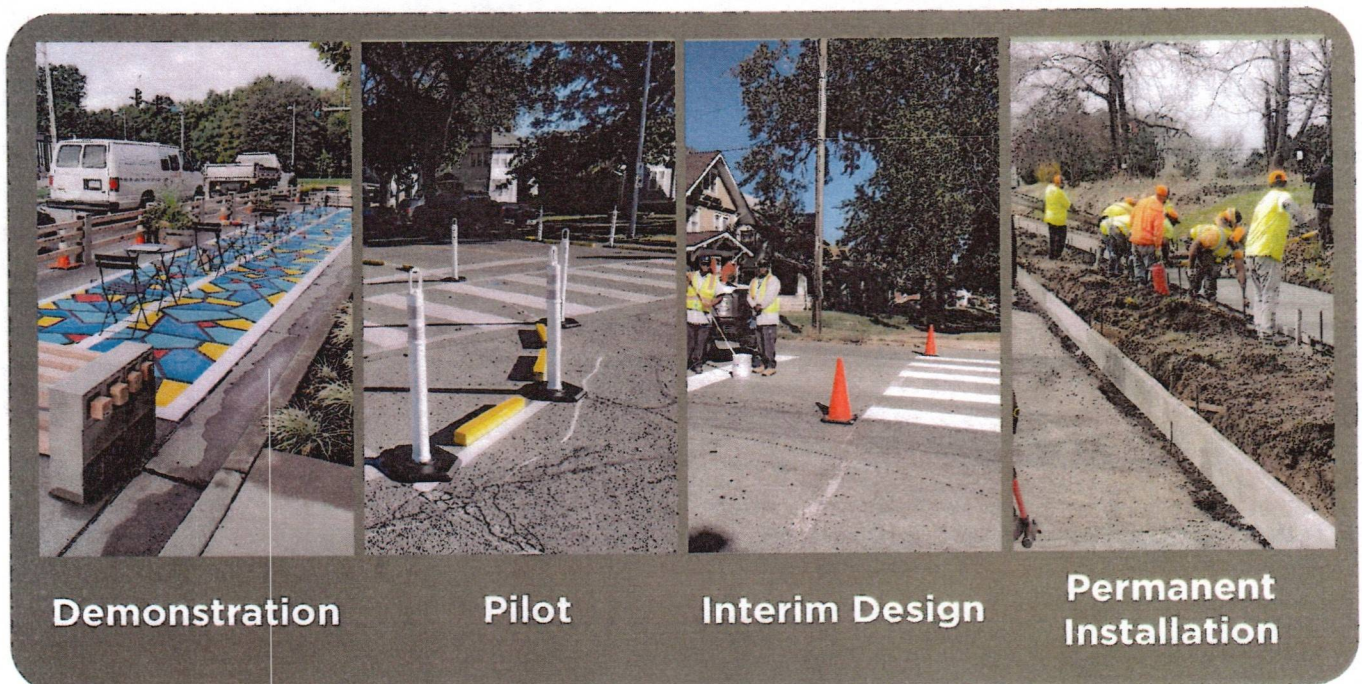
- **Coordination with Street Striping Schedules.** All streets require periodic striping. When streets and intersections identified as priorities for walking and biking improvements are scheduled for restriping, there is an opportunity to implement improvements as part of the regular striping program.
- **Coordination with Planned Resurfacing.** While street resurfacing is less frequent than restriping, all streets require regular maintenance and repair. It is likely that most streets in Cole Camp will require resurfacing over the course of implementation of the Connectivity Study. These resurfacing projects can be aligned with recommended pedestrian improvements to minimize additional costs.

Coordination with private partners is another strategy for project implementation. New development and redevelopment projects are often responsible for infrastructure improvements adjacent to their projects.

As Cole Camp walking and biking projects are implemented over the course of several years, there will likely be opportunities to coordinate private development site improvements with plan recommendations.

Projects can also be implemented in phases, as demonstrated by the chart below. Implementation can range from a day long demonstration project all the way to permanent installation.

Lastly, while some major roadways require significant design changes to accommodate all users safely (i.e., Complete Streets), not all streets need paved, off-street facilities to create a safe and comfortable environment for pedestrians and cyclists. The following options provide examples of different ways to think about implementation.





## NEIGHBORHOOD CONNECTORS

Mixed traffic options are most appropriate on roads with low volumes of traffic operating at low speeds. These facilities are shared between motorists, bicyclists and sometimes pedestrians. The low intensity of motor vehicle traffic allows users to negotiate space in comfort without the need for robust separation. The three types of neighborhood connectors include pedestrian lanes, advisory shoulders, and yield streets.

### *Pedestrian Lanes*

In some locations, Cole Camp's streets have low enough traffic volumes and speeds that pedestrian lanes may be an appropriate solution. Pedestrian lanes provide dedicated space for pedestrians within the paved area of a street. They essentially function as sidewalks that are at the same grade as adjacent auto traffic lanes.

Where existing street sections permit, reallocating excess pavement is a much less expensive strategy to provide pedestrian connections than new sidewalk construction. Because they function like sidewalks, pedestrian lanes should follow standards for accessibility, especially in advance of intersections, because it is more difficult for people with vision impairment to recognize they are entering crosswalks or areas of conflict with automobiles.

At their most basic, pedestrian lanes may consist of a striped white line with periodic PED ONLY markings in the pedestrian area. The use of concrete curb stops or flexible delineation posts can increase separation and improve safety for pedestrian lanes. However, these physical separations must be coordinated with street maintenance strategies including street sweeping and snow removal.

### *Advisory Shoulders*

Advisory shoulders use dashed pavement markings to create usable shoulders on the existing pavement of local streets. Generally, advisory shoulders convert two narrow traffic lanes into a single, bi-directional travel lane and use the extra space to provide a place for pedestrians. Where two cars are passing in opposite directions, they encroach into the shoulder area only for the distance necessary to safely pass oncoming traffic.

Advisory shoulders are appropriate on streets with low to moderate traffic and moderate traffic speeds. They are most useful when streets are too narrow to provide two travel lanes and dedicated space for pedestrians. With wider street sections, other solutions like Pedestrian Lanes may be more appropriate because they provide greater comfort and separation from traffic.



*An example of a painted pedestrian lane with a pedestrian symbol in the lane. Photo source: Small Town and Rural Design Guide.*



*An example of an advisory lane on a narrow road that does not have space for a dedicated pedestrian lane. Photo source: Small Town and Rural Design Guide.*



## Yield Streets

Yield streets provide a low speed travel area without lane markings that is shared by motor vehicles, pedestrians, and bicyclists. Yield roadways are appropriate only in locations with very low traffic volumes and traffic speeds. In these conditions, they may effectively serve pedestrian needs for minimal cost.

A narrow, constrained roadway is an important design element to ensure vehicle speeds remain slow and that yield streets function effectively. Typically, a yield street will have a single, bi-directional travel lane for automobiles where infrequent passing cars use shoulder areas or driveways to pass. Streets with paved areas wide enough for two lanes of traffic generally encourage traffic speeds that are too high for a safe and comfortable mixing of cars and pedestrians. The Federal Highway Association's (FHWA) Small Towns and Multimodal Networks guide recommends yield streets between twelve and twenty feet wide.

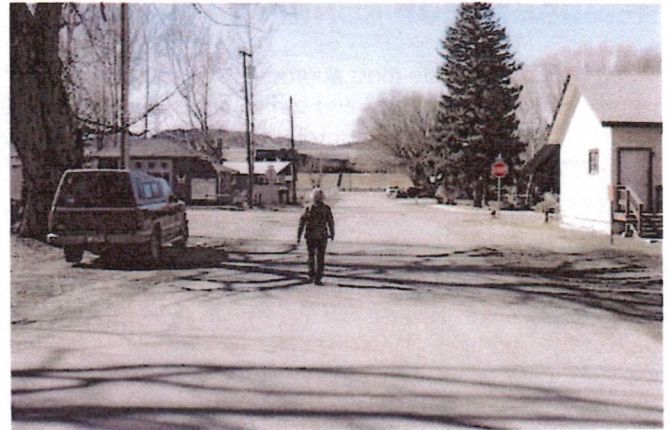
Signage and pavement markings may enhance yield streets, providing wayfinding, branding, and encouraging additional awareness for drivers that there are other users in the street.

## COMPLETE STREETS

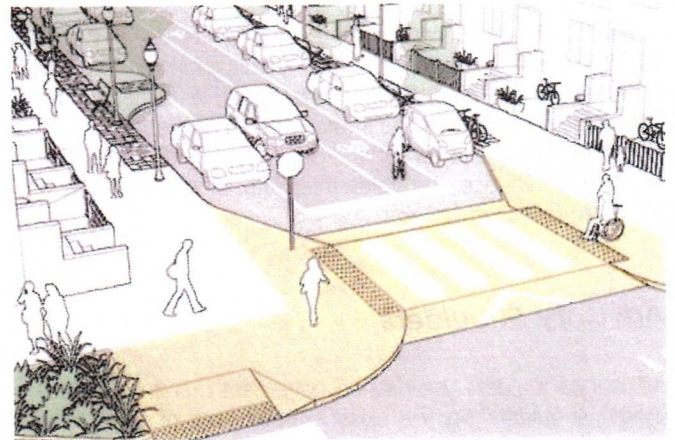
The primary corridors in Cole Camp that contain most of the community's destinations are also the ones community members shared are the most dangerous to interact with on foot or bike. Highway 52/Main Street has a goal of moving as many cars as possible in a safe and efficient manner. This strategy does not hold up when highway like corridors run through the heart of a community. The Highway 52/Main Street corridor may be an ideal Complete Street candidate long term.

A transformation like this could take many forms but would be designed in a way that all users - trucks, cars, people, and cyclists - could safely navigate them. In addition to infrastructure changes, speed limit reductions and other traffic calming mechanisms are recommended in concert with the design changes.

Given that Highway 52/Main Street houses utilities, drainage ditches, grade changes, and private property within the right-of-way, this transformation will be an investment. This represents a long term project Cole Camp can prioritize as resources become available.



*An example of a yield street that relies on signage to alert drivers that pedestrians may be in the roadway. Photo source: Small Town and Rural Design Guide.*



*An example of a Complete Street that features space for cars, trucks, pedestrians, and people riding bikes. Photo source: NACTO Urban Bikeway Design Guide.*



## PROJECT FUNDING OPPORTUNITIES

There are a variety of funding mechanisms that can be used to support bicycle and pedestrian infrastructure in Cole Camp, as well as trailhead and trail development along the RIT.

- **Missouri State Parks Recreational Trail Program (RTP).** This grant is useful for trails or alternative transportation, as well as trailhead construction or other recreational activities. It requires an 80/20 match that goes up to \$250,000 (whereas TAP has a maximum of \$500,000).
- **Land and Water Conservation Fund (LWCF).** This fund can be used for trail construction or park amenities. This grant requires a 50/50 match with a \$500,000 maximum request.
- **Missouri Department of Conservation Land Conservation Partnership Grant for Outdoor Recreation Infrastructure.** This grant can be used for enhancing public access and citizen engagement in conservation-related outdoor recreation through the development of outdoor recreation infrastructure. It could be useful for developing the trail, trail amenities such as benches, and native habitat development. This grant requires a 50/50 match and there is not a set award dollar limit at this time.
- **People for Bikes.** The PeopleForBikes Community Grant Program supports bicycle infrastructure projects and targeted advocacy initiatives that make it easier and safer for people of all ages and abilities to ride.
- **Rails to Trails Conservancy.** This program offers a trail building tool to assist communities with a variety of trail building topics including the basics of trail buildings, organizing/building community interest, funding, and maintenance. The toolkit is available here: [railstotrails.org/build-trails/trail-building-toolbox/](http://railstotrails.org/build-trails/trail-building-toolbox/). They also offer grant funds.
- **U.S. Department of Transportation Rebuilding American Infrastructure with Sustainability and Equity (RAISE) program.** The RAISE grants help urban and rural communities move forward on projects that modernize roads, bridges, transit, rail, ports, and intermodal transportation. This grant features a complex application process but funds could be well suited to the complete streets.
- **Safe Routes to School Programs.** Projects that enhance walkability and bikeability to schools are eligible for state and federal funding sources devoted to improving Safe Routes to School (SRTS). SRTS is an approach that promotes walking and bicycling to school through infrastructure improvements, enforcement, tools, safety education, and incentives to encourage walking and bicycling to school. While SRTS grants focus on connecting students to school, these projects have benefits for the entire community.
- **Transportation Alternatives Program (TAP).** Federal funds are allocated under the TAP program to transportation improvement projects that expand travel choice, strengthen the local economy, improve quality of life, and protect the environment. Many TAP projects enhance non-motorized forms of transportation like biking and walking.

- **Reconnecting Communities Pilot Program (RCP):** The RCP Program aims to advance and support reconnection of communities divided by transportation infrastructure – with a priority on helping disadvantaged communities improve access to daily needs (jobs, schools, healthcare, grocery stores, and recreation). Funds for the fiscal year (FY) 2023 RCP grant program are to be awarded on a competitive basis to support planning and capital construction activities that aim to restore community connectivity through the removal, retrofit, mitigation or replacement of highways, roadways, or other infrastructure facilities that create barriers to mobility, access or economic development.

## MAINTAINING MOMENTUM

Keeping a moving train in motion is the most important aspect of a long term and multifaceted project like this Connectivity Study outlines. Full build out of the Priority Network Plan, in addition to the RIT development, is an extensive undertaking. The Cole Camp Working Group has demonstrated the power that motivated and dedicated individuals can have on an effort of this scale.

It is strongly advised that the Cole Camp Working Group continue meeting monthly and showing up to community meetings, such as City Council and County Commissions, to keep the project top of mind. Resources come and go, such as funding, political will, and time. Maintaining enthusiasm and continuing to shed light on this project will provide consistency through the long term implementation.

Lastly, Cole Camp formed and joined the Western Missouri Rock Island Trail (RIT) Coalition. This is a collection of RIT communities including Windsor, Ionia, Cole Camp, Stover, and Versailles. The Coalition is being facilitated by the Executive Director of Missourians for Responsible Transportation (MRT). Organizations that are encouraged to participate in the Coalition include:

- Pioneer Trails RPC
- Kaysinger Basin RPC
- MARC
- Benton County Chamber of Commerce
- Warsaw Chamber of Commerce
- Benton County Economic Development
- Whiteman Air Force Base
- Cole Camp RIT Working Group
- Windsor supporters

Continuing to meet with this coalition is strongly recommended to support other RIT communities and work as a unit to get the trail developed.





**BikeWalkKC**  
1106 E. 30th Street, Suite G  
Kansas City, MO 64109  
816-205-7056  
[planning@bikewalkkc.org](mailto:planning@bikewalkkc.org)

*Our mission is to redefine our streets as places  
for people to build a culture of active living.*

BIKE  
WALK 

*Photo source: KC State Parks*



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# Appendix A: Community Survey Results



Cole Camp Transportation Survey

Q1 How do you usually travel to get to your everyday needs (work // groceries // doctor // etc.)?

Answered: 62 Skipped: 0



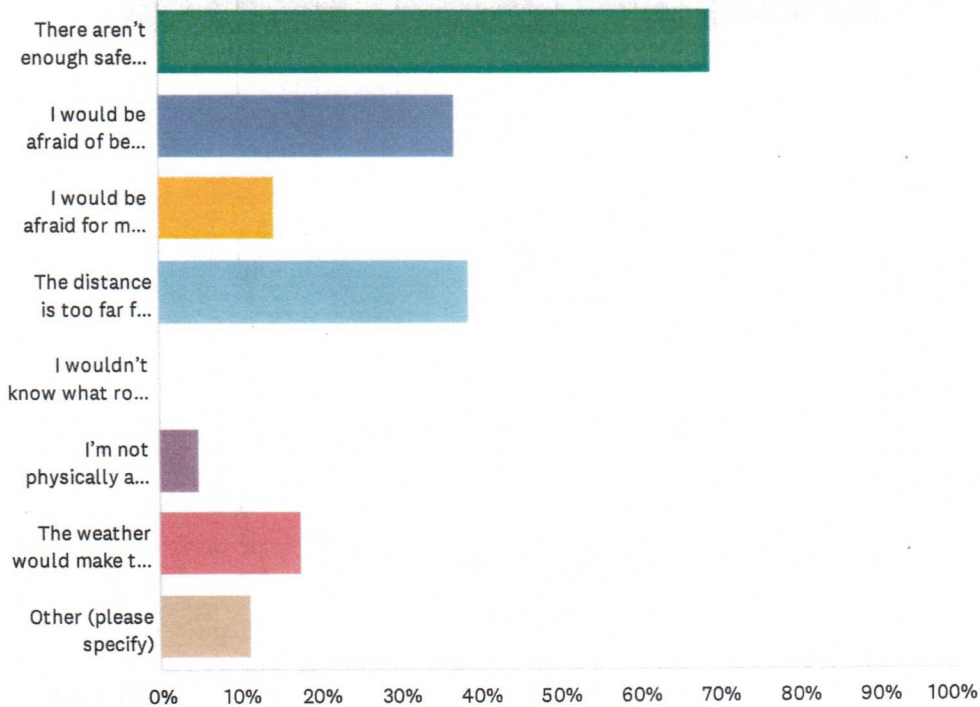
ANSWER CHOICES	RESPONSES	
Drive my own vehicle	95.16%	59
Carpool // ask a friend or relative	0.00%	0
Walk	1.61%	1
Wheelchair or other mobility assistive device	0.00%	0
Bike	1.61%	1
Other (please specify)	1.61%	1
TOTAL		62



Cole Camp Transportation Survey

Q2 If you had to walk, use a wheelchair, or push a stroller to get to your everyday needs, what would make your trip most difficult? Please check all of the options you would be most concerned about:

Answered: 62 Skipped: 0



**ANSWER CHOICES**

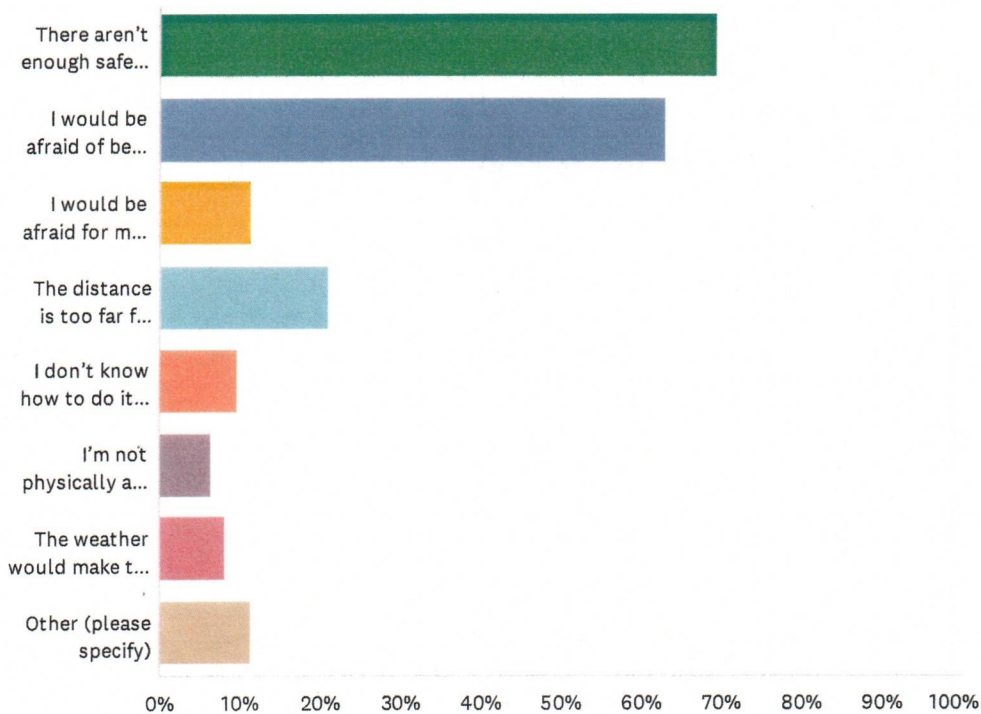
**RESPONSES**

There aren't enough safe places to walk (sidewalks // crosswalks // trails) along the route.	69.35%	43
I would be afraid of being hit by a person driving a vehicle.	37.10%	23
I would be afraid for my personal safety while walking.	14.52%	9
The distance is too far from where I live to the places that I need to go.	38.71%	24
I wouldn't know what route to take.	0.00%	0
I'm not physically able to walk very far or at all.	4.84%	3
The weather would make the trip uncomfortable (not enough shade on hot days, etc.).	17.74%	11
Other (please specify)	11.29%	7
Total Respondents: 62		



**Q3 If you had to bike on roads to get to your everyday needs, what would make your trip most difficult? Please check all of the options you would be most concerned about:**

Answered: 62 Skipped: 0



**ANSWER CHOICES**

**RESPONSES**

There aren't enough safe places to bike (safe streets // protected bike lanes // trails) along the route.	69.35%	43
I would be afraid of being hit by a person driving a vehicle.	62.90%	39
I would be afraid for my personal safety while biking (being robbed, etc.).	11.29%	7
The distance is too far from where I live to the places that I need to go.	20.97%	13
I don't know how to do it (traffic laws while riding a bike // planning a route // what type of bags to use // how to transport children // etc.).	9.68%	6
I'm not physically able to bike very far or at all.	6.45%	4
The weather would make the trip uncomfortable (not enough shade on hot days, etc.).	8.06%	5
Other (please specify)	11.29%	7

Total Respondents: 62



**Q4 Use the following map as a reference. Where would you like to see improvements for people walking, biking, using a wheelchair, etc. (new sidewalks // wider sidewalks // signage // bike lanes)?**

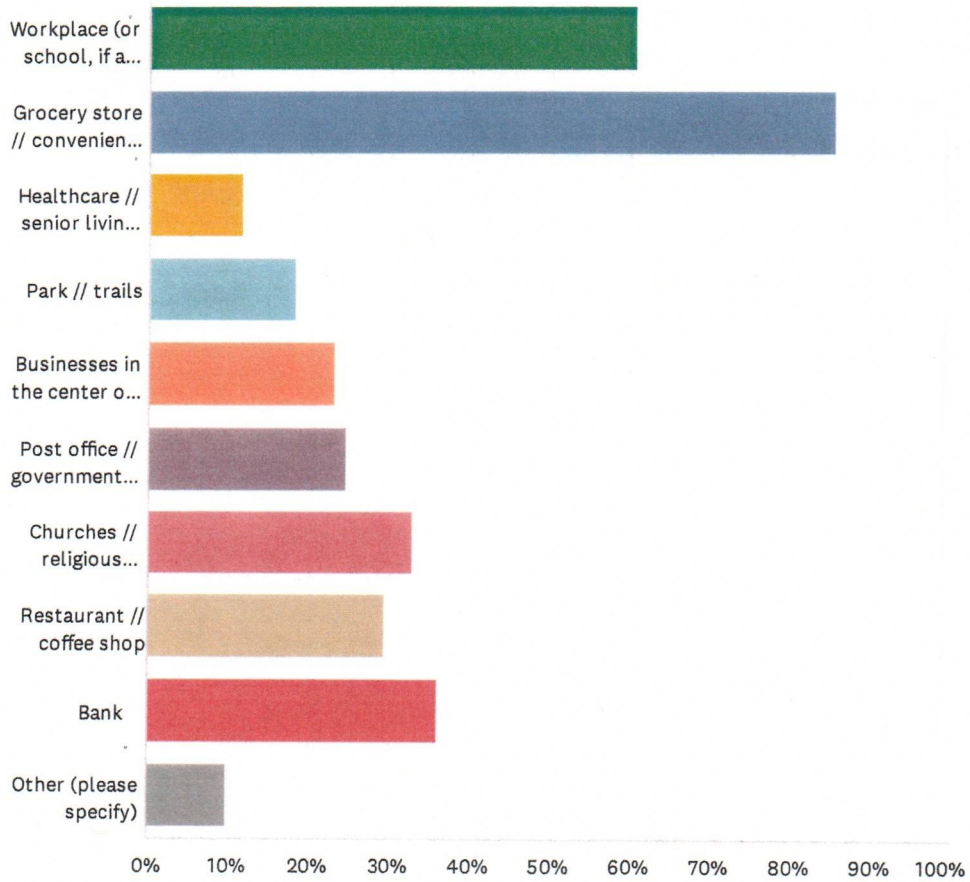
Answered: 46 Skipped: 16



Cole Camp Transportation Survey

Q5 In addition to your home, please mark the top three types of places you need to visit in order to fulfill your daily or weekly needs:

Answered: 61 Skipped: 1





## Cole Camp Transportation Survey

<b>ANSWER CHOICES</b>	<b>RESPONSES</b>	
Workplace (or school, if a student)	60.66%	37
Grocery store // convenience store	85.25%	52
Healthcare // senior living facility	11.48%	7
Park // trails	18.03%	11
Businesses in the center of town	22.95%	14
Post office // government services	24.59%	15
Churches // religious organizations	32.79%	20
Restaurant // coffee shop	29.51%	18
Bank	36.07%	22
Other (please specify)	9.84%	6
Total Respondents: 61		



**Q6 What do you want to see along Main Street/MO-52 to ensure community members have safe walking, biking, and wheelchair access along and to cross it?**

Answered: 54 Skipped: 8



**Q7** Imagine that you did not have access to a car. List places in Cole Camp that are important to you and would be difficult to visit.

Answered: 52 Skipped: 10



Q8 Which streets and crossings in Cole Camp should be the highest priority for improvements for those walking, biking, using a wheelchair, etc.  
Why?

Answered: 54 Skipped: 8



Cole Camp Transportation Survey

Q9 Based on your response to Question #8, what improvements would you like to see (e.g., new sidewalks // wider sidewalks // signage // bike lanes // etc.) in these areas?

Answered: 56 Skipped: 6



**Q10 What information is important to include at a trailhead information kiosk? Is there any local history that would be important to share?**

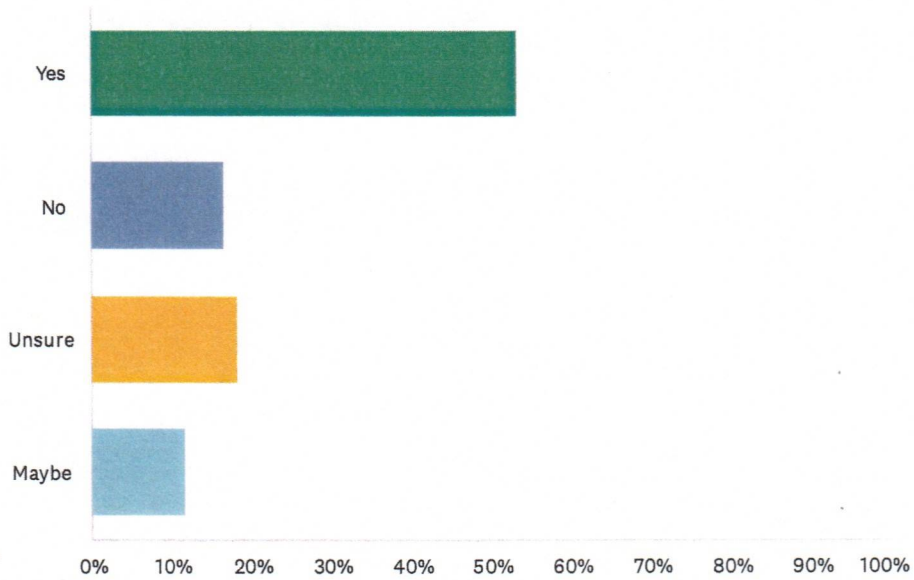
Answered: 39 Skipped: 23



Cole Camp Transportation Survey

Q11 Do you think overnight camping for trail users should be provided in town or near the trail?

Answered: 60 Skipped: 2

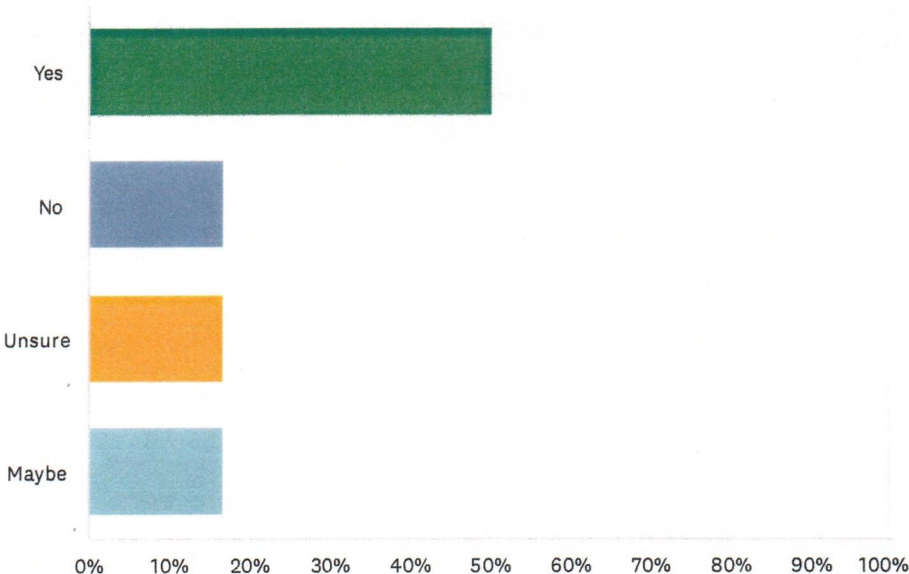


ANSWER CHOICES	RESPONSES	
Yes	53.33%	32
No	16.67%	10
Unsure	18.33%	11
Maybe	11.67%	7
TOTAL		60



### Q12 Do you think horseback riding should be provided on the trail?

Answered: 60 Skipped: 2



ANSWER CHOICES	RESPONSES	
Yes	50.00%	30
No	16.67%	10
Unsure	16.67%	10
Maybe	16.67%	10
TOTAL		60



**Q13 Basic trailhead amenities include parking, restrooms, water, and information kiosks with maps, directional signs and community information. What additional trailhead amenities and features are important to you? How can your town's trailhead be unique and represent Cole Camp?**

Answered: 35 Skipped: 27



**Q14 How might you and Cole Camp's community members use the trail or trailhead? Think big and beyond the physical trail! (Examples: scavenger hunt // art sculptures // group runs // native plantings, etc.)**

Answered: 37 Skipped: 25



**Q15 Would you like to leave your email for future updates related to the project? If so, please write in your name and email in the textbox provided.**

Answered: 23 Skipped: 39