VILLAGE OF RICHMOND

BICYCLE & PEDESTRIAN PLAN

SPRING 2025

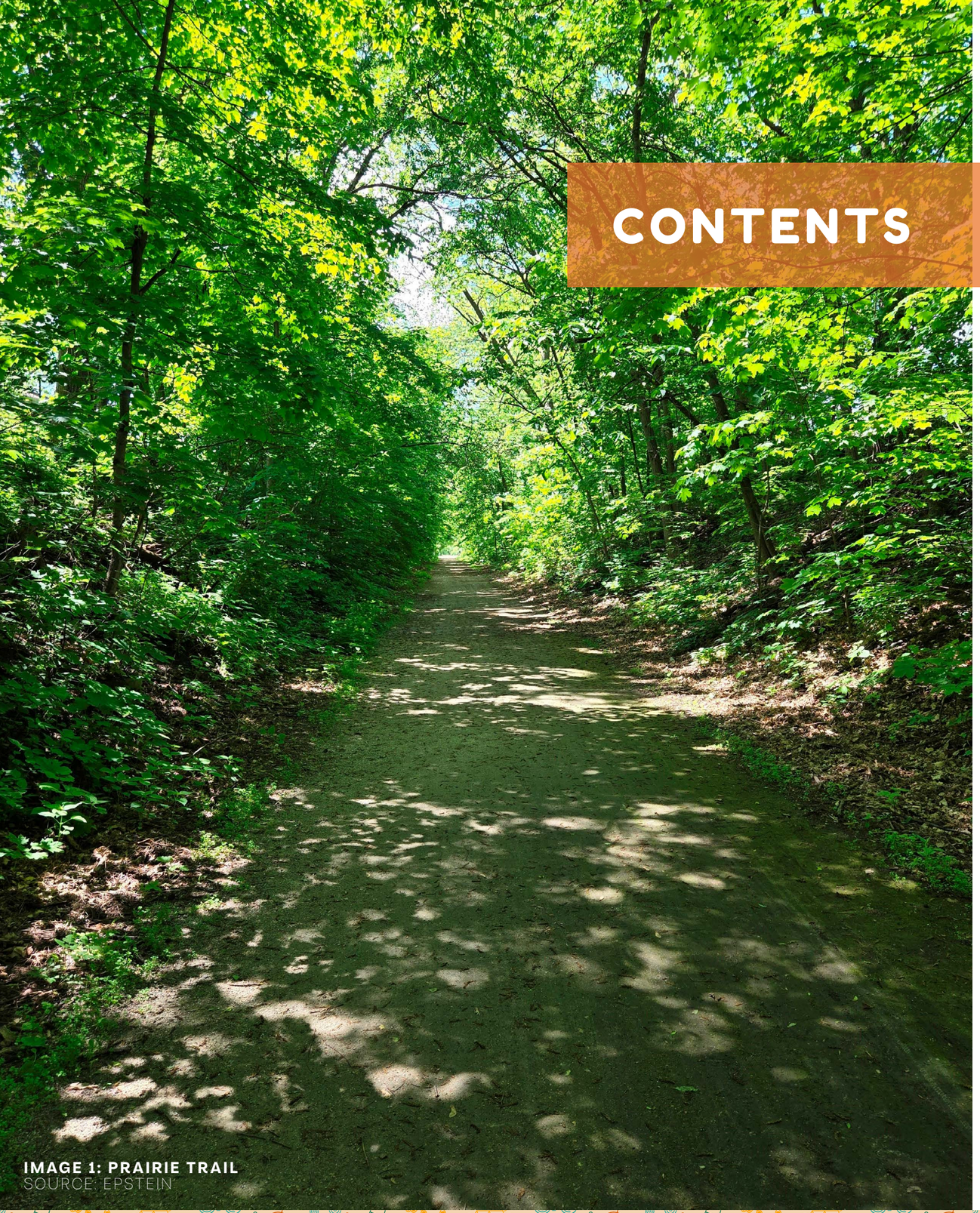

IMAGE 1: PRAIRIE TRAIL
SOURCE: EPSTEIN

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SOURCE: EPSTEIN

ACKNOWLEDGEMENTS

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- Jon Schmitt *(Public Works Director)*
- Tim Koenig *(Public Works Crew Leader)*

ADDITIONAL STAKEHOLDERS

This group is made up of local agencies and organizations, including school districts, a chamber of commerce, as well as various advocate groups. These entities bring a unique blend of perspectives and expertise to the project, representing specific community interests and providing valuable input.

COMMUNITY AGENCIES/ORGANIZATIONS

- Nippersink School District 2
- Richmond-Burton District 157
- Richmond Township Fire Protection District
- Business Owners
- Chain O'Lakes Area Chamber of Commerce
- McHenry County Conservation District
- Illinois Department of Natural Resources (IDNR)

TRANSPORTATION AGENCIES

- McHenry County Division of Transportation (MCDOT)
- Illinois Department of Transportation (IDOT)
- Richmond Township Road District

COMMUNITY/REGIONAL ADVOCATES

- McHenry County Bicycle Advocates
- Active Transportation Alliance
- Ride Illinois
- Senior Care Volunteer Network (SCVN)
- Association for Individual Development (AID)

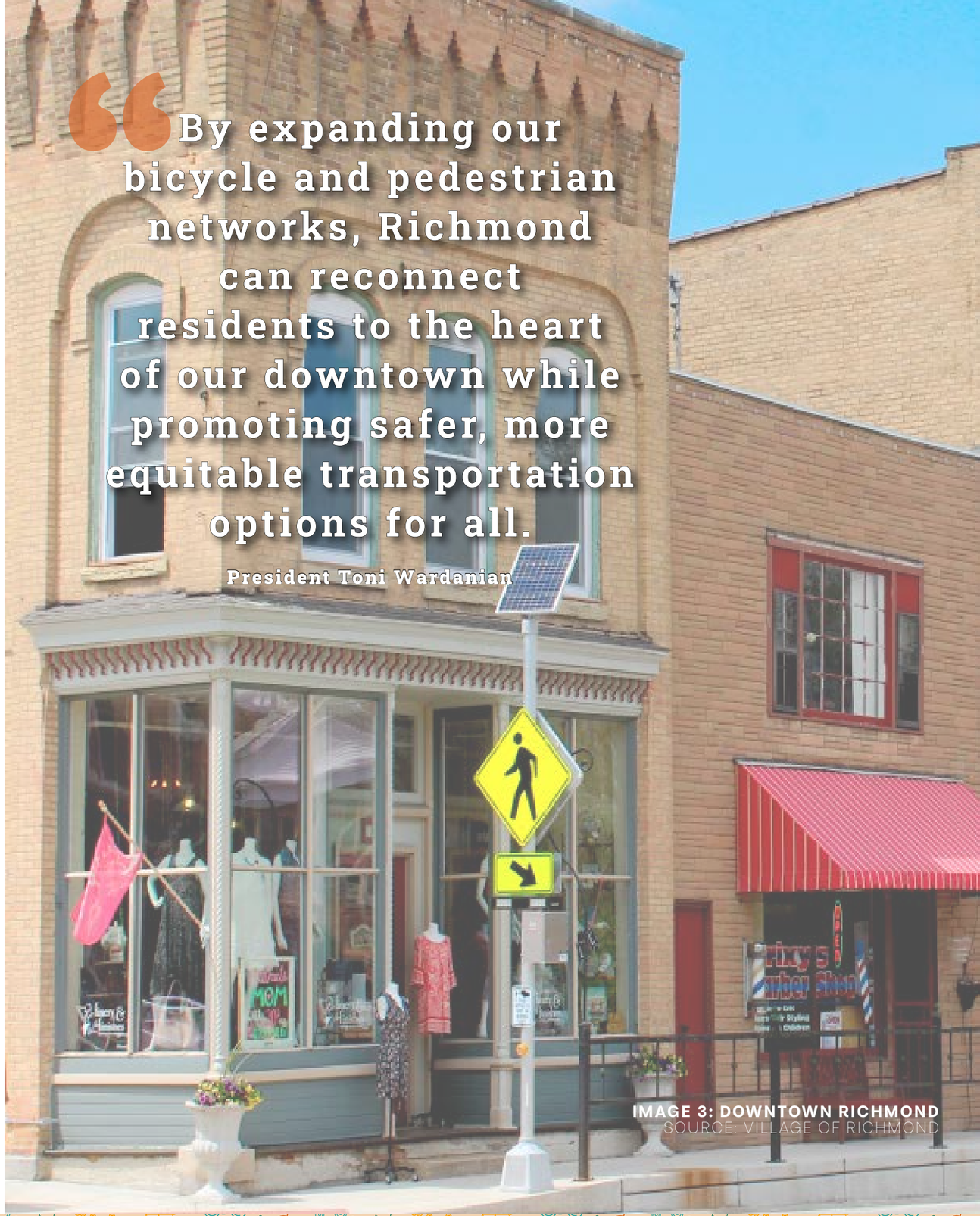


IMAGE 3: DOWNTOWN RICHMOND
SOURCE: VILLAGE OF RICHMOND

01
INTRODUCTION

Walking and biking positively impacts communities. Examining Richmond's population provides insights into the varied transportation needs across demographics. Detailing the benefits of walking and biking, such as improved public health, reduced environmental impact, and alleviated congestion, provides a foundation for understanding the importance of enhancing paths and sidewalks to support active forms of transportation.

Developing better infrastructure for biking, walking, and rolling can help the community handle growth while addressing traffic and air pollution issues. Information about local schools, businesses, and parks illustrates the practical benefits of accessible pedestrian and bicycle paths, showing how they can contribute to the economic vitality and appealing character of Richmond.

IMAGE 4: AERIAL OF RICHMOND
SOURCE: VILLAGE OF RICHMOND

PURPOSE

The purpose of this plan is to guide the Village of Richmond in developing and improving bicycle and pedestrian infrastructure and policies. As the Village's first-ever bicycle and pedestrian plan, this initiative aims to align with the community's needs and help address its concerns. By providing clear guidelines, the plan will help Richmond enhance its bikeability and walkability, making the Village more accessible and enjoyable for both residents and visitors.

BENEFITS OF BICYCLING AND WALKING

Improving bicycle and pedestrian infrastructure and policies is crucial for communities to create a safer, more welcoming environment for people to bike, walk, or roll. Such improvements offer many benefits to residents and visitors. These may include improvements to safety, connectivity, transportation costs, equity, and accessibility.

Bicycling has been shown to be an economic booster for communities and their local businesses. According to a study from the Institute for Transportation & Development Policy, bicyclists are more likely to visit local businesses than drivers and spend more money at the businesses. Additionally, the AARP found that at the national level, the bicycling industry contributes around $133 billion to the national economy annually.

Traffic violence poses a significant risk to bicyclists and pedestrians, who are more vulnerable than car occupants. Nationwide, in 2021, 1,105 bicyclists and 7,522 pedestrians were killed in traffic crashes involving motor vehicles. According to data from the National Highway Traffic Safety Administration (NHTSA), bicyclists are about 17 times more likely to be killed in a crash than occupants of passenger vehicles per mile traveled. Similarly, pedestrians are approximately 1.5 times more likely to be killed in a crash per mile traveled compared to occupants of passenger vehicles. Investing in bicycle and pedestrian infrastructure can significantly improve safety and comfort, reducing traffic incidents for bicyclists and walkers. The Federal Highway Administration (FHWA) reports that adding bike lanes can reduce crashes by 30% on two-lane undivided urban roads. High-visibility crosswalks can decrease pedestrian injury crashes by up to 40%.

In addition to improving traffic safety, bicycling, walking, and rolling represent low-cost options compared to automobile travel. According to the U.S. Department of Transportation (USDOT), in 2021, rural households spent more on transportation than urban households ($13,665 versus $10,362, respectively). Furthermore, transportation expenses accounted for a higher proportion of rural households' overall household budget than urban ones (17.3% versus 13.2%).

Access to trails has also positively impacted housing values. The National Association of Realtors says living near a trail can raise property values at an average rate of 3-5%.

Bicycle and pedestrian infrastructure can make communities more equitable and accessible for people who cannot drive, including children, seniors, and people with disabilities. These groups often face limited transportation options, restricting their mobility. Investing in bike and pedestrian infrastructure can significantly improve their connectivity to the community, allowing for greater independence and freedom of movement for children, seniors, and people with disabilities. Furthermore, enhanced infrastructure enables seniors to age in place more comfortably.

IMAGE 5: PRAIRIE TRAIL
SOURCE: EPSTEIN

PLANNING AREA

COMMUNITY CONTEXT

The Village of Richmond, located in northern McHenry County, boasts a rich history and strong community spirit. Established in 1872, this historical legacy is evident in the well-preserved Victorian architecture throughout the Village and the multi-generational families that still call it home. Over the years, Richmond has successfully maintained its historical charm while adapting to modern living needs. This blend of old and new defines the community, creating an atmosphere that is both welcoming and steeped in tradition.

The community character of Richmond is distinctly small-town, marked by a strong sense of camaraderie and a close-knit population. Local businesses, many of which have been family-owned for generations, form the backbone of the community, creating a vibrant and personal shopping and dining experience. The Village's commitment to preserving its historical integrity and supporting local businesses contribute to a unique and inviting atmosphere.

Richmond's population reflects a mix of ages, backgrounds, and lifestyles. According to the 2017-2021 five-year American Community Survey (ACS) estimates, the Village has a healthy mix of young families, working professionals, and retirees. Regarding housing, Richmond presents a nearly equal distribution between owner-occupied and renter-occupied units, with a homeownership rate of 49.9%. The Village's housing landscape is primarily characterized by single-family dwellings.

Richmond has experienced a steady increase in residents over the years. With a population of approximately 2,263 as of 2021, the Village has seen significant growth, notably around a 106% increase since 2000. The median age of Richmond's residents is 41.9 years. Richmond's population is predominantly White, comprising 82.9%, alongside a presence of multiple races (4.6%) and a Hispanic population of 12.5%.

Surrounding communities play a significant role in shaping the context of Richmond. Neighboring towns such as Spring Grove, McHenry, and Woodstock share similar historical roots and contribute to the region's overall character. These communities often collaborate with Richmond on various initiatives, from economic development to cultural events, such as Pedalpalooza, a county wide biking event that partners with local small businesses, encouraging participants to invest in the local economy.

A blend of industries characterizes the economic landscape of Richmond. Retail and service sectors dominate the local economy, supported by many small businesses and artisanal shops. Agriculture, once the cornerstone of the local economy, still plays a role in the surrounding rural areas, contributing to the region's sustainability. Additionally, the Village's strategic location near major transportation routes has attracted various light industrial and manufacturing businesses, providing a stable base for economic growth. In terms of amenities, Richmond offers a range of recreational and cultural facilities, including parks and historical sites.

TABLE 1: RICHMOND POPULATION DEMOGRAPHICS

POPULATION	MEDIAN AGE	WHITE	BLACK/ AFRICAN AMERICAN	NATIVE HAWAIIAN/ OTHER PACIFIC	TWO OR MORE RACES	HISPANIC OR LATINO
2,263	41.9	2,050	17	5	174	283

TRANSPORTATION CONTEXT

Transportation habits and patterns in Richmond reflect the community's reliance on personal vehicles, with limited public transit options. The majority of households in Richmond have access to at least one vehicle, as indicated by the 2017-2021 American Community Survey. Specifically, 46.9% of households have one vehicle, and 46.1% have two vehicles or more. This is a slightly lower percentage of multiple-vehicle households than the broader region, where 51.7% of households have two or more vehicles. This reliance on personal vehicles is further underscored by 87.7% of Richmond's working population commutes by driving alone, much higher than the Chicago Metropolitan Agency for Planning (CMAP)[1] region's average of 64.9%. Carpooling and walking or bicycling are less common modes of transportation, with only 5.6% and 1.1% of commuters using these methods, respectively. The share for these modes are both lower than in the region where 7.6% of the population carpools to work and 3.6% walk or bike.

Richmond's transportation costs and commuting patterns reveal interesting aspects of the community's lifestyle and economic dynamics. The average commute time for workers in Richmond is 31.7 minutes, aligning closely with the county and regional averages. However, the annual vehicle miles traveled per household in McHenry County, where Richmond is located, averages 20,562 miles, higher than the region's average of 15,653 miles. Meaning that even though the commute times are similar, McHenry County residents are driving more than the rest of the region.

The combined housing and transportation costs for Richmond households further highlight the economic impact of these commuting patterns. According to the Center for Neighborhood Technology (CNT) ***H + T Affordability Index (2015-2019)***, a median-income family in Richmond spends about 27% of their household income on housing costs and an additional 24% on transportation - totaling 51% of household income. These percentages are even higher for moderate-income families with 34% spent on housing and 28% on transportation - totaling 62% of household income. Similarly, a median-income family in McHenry County spends 29% of their household income on housing costs and 23% on transportation costs - totaling 52% of household income. Meanwhile, a moderate-income family in McHenry County spends 36% and 27% of their household income on housing costs and transportation costs, respectively - totaling 63% of household income.

1 CMAP is the state-authorized regional planning agency and federally designated metropolitan planning organization (MPO) for northeastern Illinois.

FIGURE 1: BICYCLE PARKING IN RICHMOND

Source: Epstein

COMMUNITY AMENITIES

Richmond offers a wide range of amenities for residents and visitors. These amenities contribute to Richmond's unique character and small-town charm. The Village features excellent educational facilities, a variety of outdoor activities, and a historic downtown lined with local businesses.

SCHOOLS

The Village has three schools: Richmond Grade School, Nippersink Middle School, and Richmond-Burton Community High School. Richmond Grade School and Nippersink Middle School are a part of Nippersink School District 2. The district covers Richmond, Spring Grove, part of Fox Lake, and surrounding townships. Spring Grove Elementary School also serves District elementary school students. Middle school students travel from all over the district to Richmond for their education. Automobiles are the predominant mode of transportion to students use to get to school.

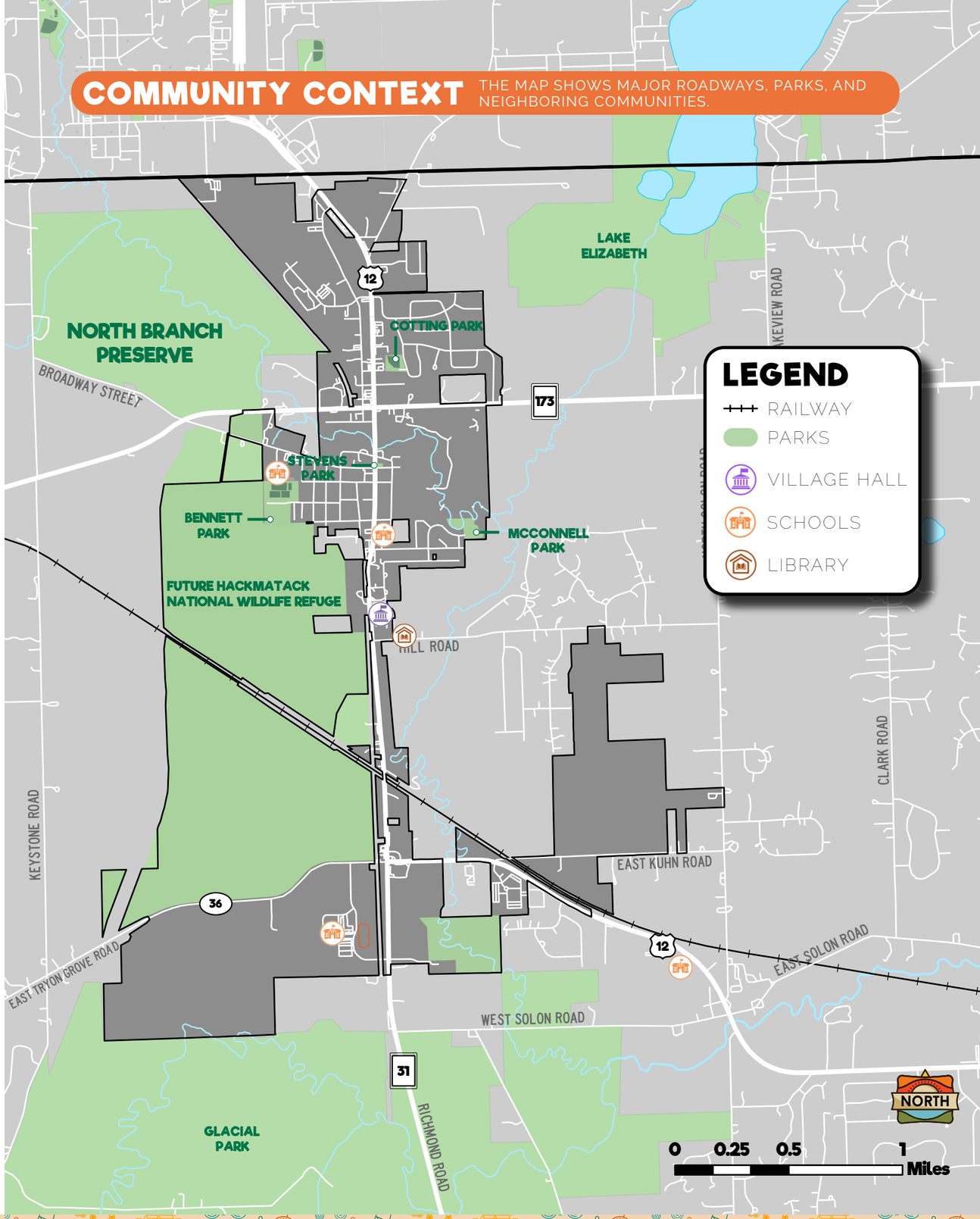
Richmond Grade School is located on Broadway Street, just west of downtown. The school has a student population of approximately 409 students, ranging from Kindergarten to 5th grade. Nippersink Middle School is for grades 6-8 and is located on U.S. 12. The school has approximately 385 students.

Richmond-Burton Community High School serves students from neighboring townships and municipalities, including Spring Grove and Fox Lake. Catering to grades 9-12, the school has an enrollment of 549 students. It is the furthest of the three schools from downtown Richmond, located on Tryon Grove Road, 2.3 miles from downtown Richmond. Students driving to school typically use U.S. 12 and Tryon Grove Road. Additionally, the Prairie Path provides a unique alternative for students to travel to school, running along the eastern boundary of the campus. However, very few students use the trail to get to school.

Additionaly, the school districts offer free bus service to only students who live 1.5 miles or more from the school. Due to the size of Richmond, this means that almost all students who live in the Village are unable to be bused to school, therefore requiring a greater need for safer bicycle and pedestrian facilities.

FIGURE 2: RICHMOND GRADE SCHOOL

Source: Nippersink School District 2



PARKS AND RECREATION

In addition to the many local shops in downtown Richmond, the Village offers several open spaces and recreational facilities for residents and visitors. Richmond has four parks, all owned and operated by the Village. The parks allow residents to gather and relax with family, friends, and the community. The four parks in the community are Bennett Park, Cotting Park, McConnell Park, and Stevens Park.

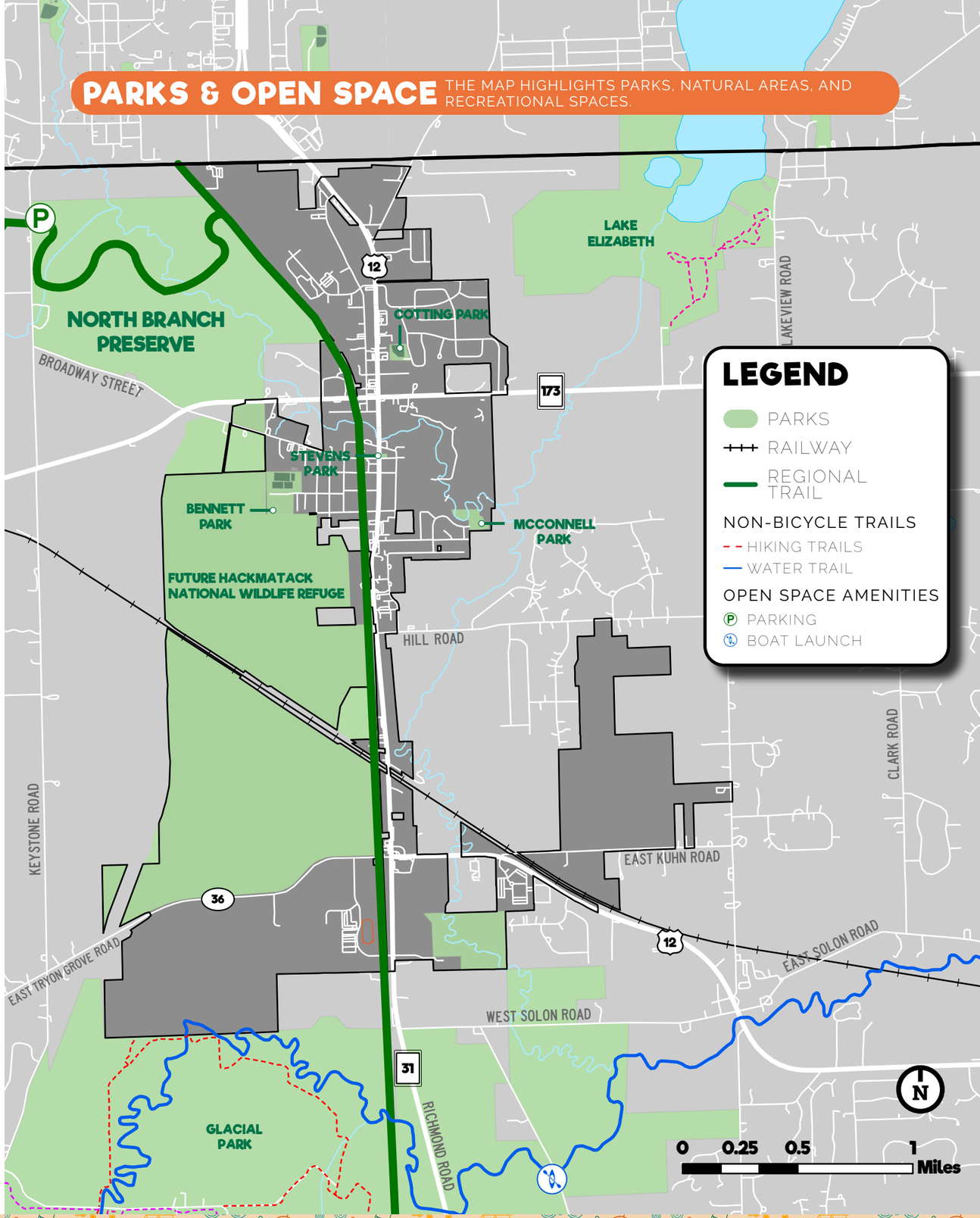
Richmond is also home to parts of the Prairie Trail. The Prairie Trail is a 26.5-mile trail parallel with U.S. 12 through Richmond. This trail allows residents to bike safely within the village and throughout the region. The trail runs just west of downtown, allowing visitors to take a break and visit the community and its businesses. Additionally, the area west of U.S. 12, north of Tryon Grove Road, and east of the western boundary has been purchased by U.S. Fish and Wildlife Service (USFWS). USFWS plans to convert the area into the Hackamatack National Wildlife Refuge. The planned amenities are currently unknown.

TABLE 2: RICHMOND PARKS

PARK	LOCATION	AMENITIES
Bennett Park	South of Richmond Grade School	Numerous ballfields, a playground, and a fieldhouse/ concessions stand with restrooms.
Cotting Park	Sunset Ridge Subdivision	Playground, a ballfield, tennis/ pickleball courts, bocce, and a fieldhouse/concessions stand with restrooms.
McConnell Park	Hillview Subdivision	A playground, picnic tables, gazebo, kayak launch, and bike racks
Stevens Park	Downtown Richmond	Picnic tables, gazebo, and bike racks

TABLE 3: PRESERVES NEAR RICHMOND

PRESERVES	LOCATION	AMENITIES
North Branch Preserve	2.2 miles northwest of downtown Richmond, IL	Trails, picnic areas, wildlife viewing, bike racks
Glacial Park	Ringwood, IL	Trails, fishing, educational programs, visitor center
Lake Elizabeth	3.2 miles northeast of downtown Richmond, IL	Boating, fishing, picnic areas, swimming beach
Hackmatack National Wildlife Refuge	West of U.S. 12, north of Tryon Grove Road, and east of western boundary	TBD



DOWNTOWN RICHMOND

Downtown Richmond, located at the corner of U.S. 12 and Broadway St., serves as the heart of the community. This bustling center is home to a variety of businesses that range from quaint shops to local eateries, each adding to the unique charm and character of the area. The concentration of commerce in this part of Richmond not only makes it a critical economic hub but also a central point for community interaction and engagement. The walkable streets encourage residents and visitors to explore the array of offerings, fostering a sense of closeness and community pride.

Downtown areas, especially in smaller communities like Richmond, are vital as gathering spaces where people come together for public events, socializing, and entertainment. These spaces often host local events, markets, pop-up events, car shows and holiday celebrations that draw crowds and strengthen community bonds. Moreover, such active downtown areas contribute significantly to residents' quality of life by providing safe, accessible places for meeting friends, dining out, or simply enjoying a leisurely stroll.

Economically, downtown Richmond acts as a driving force that sustains local businesses and attracts tourism. The success of businesses in this area is vital for the overall economic health of the community, creating jobs and generating revenue that supports public services and infrastructure. Additionally, a thriving downtown increases property values and can stimulate investment in surrounding areas, leading to broader economic development. By maintaining a lively and attractive downtown, Richmond not only preserves its heritage and small-town feel but also secures a resilient economic future that benefits the entire community.

Richmond's economy relies heavily on visitors traveling through the community on U.S. 12 to and from Wisconsin. Richmond's summer months are busy, as it hosts many vacationing travelers. Travelers to Lake Geneva make their way to several local and national businesses, such as Harper G! Mercantile, Anderson's Candy Shop, and Richmond Cafe, as they pass through the community, experiencing firsthand the welcoming, community-focused downtown that Richmond has to offer. Visitors are able to take advantage of a large, free, municipal parking lot in downtown, offering them ease of access to the different shops and restaraunts.

OTHER ECONOMIC DRIVERS

North of downtown, Richmond features a mix of locally owned businesses and nationally recognized brands within the service industry. This area also houses the community's manufacturing sector, with several businesses along Commercial Street and Ami Drive. Richmond's manufacturing industry produces various goods, including plastics, railroad equipment, and industrial fans. This sector remains an important source of employment for residents of Richmond and the surrounding region.

The community also has a vibrant wedding scene. Memorial Hall, built in the early 20th century and initially intended as a civic gathering space and to also be used for church and school activites, has been converted into a wedding venue now known as The District. The District is home to many weddings throughout the year, with many people traveling from all over the region and country. Wedding guests are greeted by Richmond's small-town charm and offered the opportunity to experience the community and invest in its local economy.

IMAGE 6: HARPER G! MERCANTILE
SOURCE: VILLAGE OF RICHMOND

02

COMMUNITY INPUT

Public input is key to any bicycle and pedestrian plan. By engaging with the public, the planning team gathers valuable insight based on community preference and lived experiences.

This insight guides the planning team to make the appropriate recommendations to improve Richmond's pedestrian and bicycle network. By listening to the public, the plan be more responsive to the needs and concerns of the residents, visitors, and businesses of Richmond.

IMAGE 7: ANDERSON'S CANDY SHOP
SOURCE: EPSTEIN

IMAGE 8: PUBLIC ENGAGEMENT EVENT
SOURCE: EPSTEIN

PUBLIC ENGAGEMENT

STRATEGY

Engaging with people who know the area best and learning about their experience walking and biking in Richmond offered insight to the plan that data could not provide. The plan's public engagement strategy prioritized listening to residents and learning about their experiences. This was done by leveraging community partners through a steering committee to maximize the engagement's reach, as well as by offering a variety of engagement opportunities for residents to take part in. Offering a variety of opportunities allowed for participation flexibility and a multitude of people to share their experiences and contribute to the plan. The contribution provided by the public, helped the plan develop into something that is for the people of Richmond by meeting their biking, walking, and rolling needs.

TIMELINE

This plan had three phases of public engagement. The first phase took place from April 2024 to June 2024, the second was from September 2024 to November 2024, and the third and final phase took place from December 2024 to April 2025.

Public engagement activities included a project website, three surveys, several tactical urbanism demonstrations, attending community events, and hosting biking and walking tours. By implementing this multifaceted approach, the planning team was able to collect a diverse range of ideas, concerns, and experiences regarding the existing bicycle and pedestrian network and what it could become.

Data Analysis & Stakeholder Engagement
February - August 2024
Collects transportation data and engages with key stakeholders to identify challenges and opportunities.

Public Engagement (Phase I)
April - June 2024
Gathers community input on transportation preferences and concerns through surveys and meetings.

Public Engagement (Phase II)
September - November 2024
Seeks feedback on the Draft Plan from the community to refine and adjust proposals.

Public Engagement *(Phase III)*
December 2024 - February 2025
Final opportunity for public input, focusing on fine-tuning and confirming the plan's direction.

Draft Plan
November 2024
Develops a preliminary version of the plan incorporating data analysis and initial public feedback.

Final Plan & Approval
May 2025
Finalizes the plan incorporating all feedback for presentation and approval by the relevant authorities.

PUBLIC EVENTS

SUMMARY

Throughout the course of the planning process, the project team attended and hosted several public events to gather feedback from residents and visitors of Richmond. The project team gathered crucial input that helped inform the plan of the experiences, concerns, and ideas that the residents of Richmond and its visitors had.

PEDALPALOOZA AND WINE WALK (MAY 18, 2024)

The first public events in the planning process were Pedalpalooza and the Village of Richmond Wine Walk, which both took place on the same day. The project team set up a table for both events and interacted with different residents and visitors throughout the day. Engagement activities included a voting exercise where people placed beads into jars associated with the mode of transportation they currently use, and a map of the Village where people could place sticky notes with their ideas and concerns.

WALKING TOUR (JUNE 19, 2024)

The next public event was a walking tour in downtown Richmond. The tour began at the municipal parking lot on Broadway Street and took people down the street to the intersection at U.S. 12. Residents were able to ask questions, talk about their experiences walking around Richmond, their concerns, and their ideas to improve walkability in the Village. The project team talked about a few different locations in the Village, as well as potential infrastructure improvements for those locations, and asked tour participants for their feedback.

BIKING TOUR (JUNE 22, 2024)

The biking tour took participants through the Village to showcase existing bicycle facilities and gather feedback. The route went from Village Hall, across U.S. 12 to reach the Prairie Trail, which they rode on until the Village's northern boundary.

WALKING BUS (OCTOBER 26, 2024)

As a part of Walk to School Day, the planning team, in coordination with Richmond Grade School, hosted a walking bus from the municipal parking lot to the elementary school along Broadway Street. The purpose of the event was to promote walking and encourage students and their parents to walk to school. More than 70 students attended the event.

DESIGN CHARETTE (OCTOBER 26, 2024)

The final public engagement event was a design charrette. The design charrette brought together residents, officials, and stakeholders to discuss and refine proposed infrastructure improvements for the Village. This interactive event offered attendees a chance to engage directly with plans for enhancing bicycle, pedestrian, and intersection safety. Displays of proposed changes, such as reconfiguring Broadway Street, integrating bike lanes, and expanding sidewalks.

OPEN HOUSE (APRIL 10, 2025)

The final public engagement event was an open house, where people were able to review the proposed recommendations for the Village. Participants were able to view and provide feedback for the proposed bicycle and pedestrian network, proposed policies and programs, and the proposed rendering of Broadway Street.

KEY FINDINGS

U.S. 12 crossings were an important theme for participants to discuss at public events. Whether it was due to unsafe crossings or no crossings at all, residents want to be able to cross U.S. 12 more frequently. Overall, residents desired improved, safer crossings across U.S. 12.

Another theme was safer biker conditions and the desire to be able to bike more. One resident said that they would like to be able to bike around the Village more, while someone else who lived just outside the Village said they wanted better bike connections to ride into the Village.

People also want to see more people, including childrem, walking around the Village more. They said improved sidewalk connectivity nad more sidewalks throughout the Village were important.

Specific locations that were mentioned by participants were the fork intersection of U.S. 12 and Burlington Road and the intersection of U.S. 12 and Broadway. At the intersection of U.S. 12 and Burlington Road, several people said they feel unsafe at the intersection. Meanwhile, at the intersection of U.S. 12 and Broadway, people said that drivers do not always see the RRFB lights when they are flashing.

At the design charette, most attendees were enthusiastic about the recommendations, particularly those that improved walkability and accessibility. Concerns emerged about certain proposals, such as converting Broadway Street to a one-way configuration, which some felt could disrupt traffic flow.

FIGURE 3: WALKING BUS

TACTICAL URBANISM

WHAT IS IT?

Tactical urbanism is an innovative urban design strategy that focuses on temporary, low-cost, and scalable interventions to improve public spaces and city infrastructure. It empowers communities and community planners to experiment with quick, often temporary, infrastructure such as pop-up bike lanes, temporary parks, or street art, to see how these alterations can enhance daily life. By testing ideas in real-time, tactical urbanism allows for immediate feedback and adjustment.

TACITCAL URBANISM DEMONSTRATIONS

PARKLET AND BULB-OUTS DEMONSTRATION #1 (MAY 18 & 31, 2024)
The first tactical urbanism demonstration took place in May and involved two different components. The first was a parklet (**Figure 4**) at Pedalpalooza/Wine Walk events. The parklet involved converting a couple parking spaces on Broadway Street into an outdoor dining/seating area. Tables and chairs were set up in the parklet, as well as umbrellas and a barrier to protect users from traffic. Several residents and visitors were able to use and enjoy the parklet throughout the event.

The second component involved painting in the marked bulb-outs at the intersection of U.S. 12 and Broadway Street. The bulb-outs were painted orange and red, and with different shapes painted inside. The purpose of the painted bulb-outs was to increase driver visibility of pedestrians, and to let them know that the bulb-outs are for pedestrians, not cars. However, after painting the bulb-outs, drivers still continuously went through them. The tactical urbanism team consisted of Village staff and members of the planning consulting team.

During the process, several people asked what was being done and were all very pleased with the desire to improve pedestrian safety at the intersection. One person said they liked the endeavor and wants to see similar demonstrations done in their town. A QR code to a public survey about the demonstration was posted near the intersection and had seven responses. Overall, respondents said the demonstraion made the intersection more visually appealing and would like to see it made permanent. For full survey results see Appendix 4.

PRAIRIE TRAIL CROSSING AND BULB-OUTS DEMONSTRATION #2 (OCTOBER 7, 2024)
The second demonstration took place in October and also consisted of two different components. The focal point of the second demonstration was a painted trail crossing on Broadway Street for users of the Prairie Trail (**Figure 5**). The purpose of the demonstration was to increase visibility of bicyclists and pedestrians using the trail, in order to alert drivers of their presence. The crossing was painted purple with yellow flowers on top.

The other component of the second demonstration was to repaint the bulb-outs at the U.S. 12 and Broadway Street intersection. The bulb-outs were refreshed with the hopes to increase driver visibility of pedestrians and bicyclists. The tactical urbanism team for the second demonstration consisted of Village staff, McHenry County Conservation District (MCCD) staff, and members of the planning consulting team.

Community reactions were positive, with many praising the mural for making the crossing more welcoming and noticeable to both pedestrians and drivers. During the Walk to School Day event, students and their parents talked about how they liked the mural and that it was nice addition to the roadway.

FIGURE 4: PARKLET

FIGURE 5: TRAIL CROSSING MURAL

Sources: Epstein

STEERING COMMITTEE

OVERVIEW

A steering committee was formed as another component to the public engagement strategy. The purpose of the steering committee was to help guide the plan, inform the community, provide input, and foster engagement. The steering committee played a crucial role for the planning team by giving them direction, sharing their thoughts and experiences, and promoting the different events with their friends and neighbors. The committee consisted of Richmond residents, local business owners, and employees of other government agencies. The team met four times over the course of the plan.

STEERING COMMITTEE MEETINGS

MEETING #1 (MARCH 22, 2024)

PROJECT KICKOFF

The first steering committee served as an introduction to the project for the members. The project team explained the purpose of the project and the role of the steering committee. The committee was asked to share their opinions and experiences with the Richmond bicycle and pedestrian network. Members were also asked about their desired goals of the plan and the future of active transportation in the community.

Steering committee members discussed how the Village lacks sidewalk connectivity in some areas and would like to see more sidewalks installed. Crossings were another important topic of conversation for the members, especially crossing U.S. 12. They expressed concern at the dangers of crossing the busy roadway. The intersection of U.S. 12 and Burlington Road was also of concern to the committee. The members said this is a dangerous area, even for drivers. Other topics discussed included traffic safety on Tryon Grove Road and the need to remain a visitor friendly community, since a lot of the local economy is supported by visitors to the Village.

The committee said a better-connected community is the goal. They would like to see people throughout the Village via bicycle, walking, or rolling. Additionally, they said they would like to see future developments better connected to downtown.

MEETING #2 (JUNE 27, 2024)

PUBLIC ENGAGEMENT / PRIORITY AREAS

The second steering committee meeting served as an update to the project and public engagement, updating the members about the current results of the first public survey and the first tactical urbanism demonstration. Additionally, there was a discussion about priority areas in the Village and what the committee members would like to be implemented in those locations.

The main focus of the priority areas was downtown Richmond. Members mentioned that they would like to see more bicycle parking, and don't feel welcome in downtown Richmond due to the lack of bike racks. Members mentioned the concern of the elevation changes of the sidewalk in downtown, and suggested there should be obvious separation between the roadway and the sidewalks. Members also expressed a desire for changes to Stevens Park, such as more programming, seating, and potentially relocating the veterans memorial to a more respectful location.

MEETING #3 (OCTOBER 2, 2024)

PUBLIC ENGAGEMENT / INFRASTRUCTURE RECOMMENDATIONS

The purpose of the third steering committee meeting was to provide more public engagement updates, such as final survey results and future events, and discuss potential project recommendations.

The project team discussed several potential recommendations with the committees, including the application for the Illinois Transportation Enhancement Program (ITEP) funding for a sidepath along IL 173 and U.S. 12, a rendering of Broadway Street (**Figure 8**), and the proposed bicycle and pedestrian networks.

Upon reviewing the Broadway Street rendering, members liked the addition of bicycle parking, as well as the addition of more lighting. Other suggestions that were made included brick pavers on side streets to slow down traffic and use pollinators for the planters, as well as using the pollinators as an opportunity to educate people about the environment and local plants.

The committee asked questions about the reason behind some of the bicycle network recommendations. Additionally, they agreed that there was a need for a sidepath on IL 173. As for the pedestrian network, some thought sidewalks on dead end streets might be unnecessary due to the lack of accessible destinations.

MEETING #4 (JANUARY 6, 2025)

POLICIES AND PROGRAMS / INFRASTRUCTURE RECOMMENDATIONS

The fourth and final steering committee meeting for the Village of Richmond Bicycle & Pedestrian Plan focused on reviewing second survey results and discussing proposed policies and programs to improve safety, accessibility, and connectivity. Key policies included adopting a **Vision Zero policy** to eliminate traffic fatalities, implementing a **Complete Streets policy** for safer, more accessible roadways, and considering an **ADA transition plan** for greater inclusivity. Additional initiatives discussed were the **age-friendly city policy** and a **vehicle ordinance** to regulate shared-path use. Programs aimed at promoting active transportation included a **Bike Month proclamation**, **Walk/Bike to School Day**, and piloting **walking buses**. Other improvements, such as **trail lighting** along the Prairie Trail and **monthly open streets celebrations** downtown, were also proposed, along with a **bicycle benefits program** offering discounts at local businesses. The committee showed enthusiasm for these ideas, especially plans for **cCreating a bicycle tourism industry** in Richmond, supported by a **wayfinding signage expansion** to enhance trail navigation and local connectivity.

Additionally, the Village and Epstein presented a proposed redesign for Broadway Street. The concept included converting Broadway into a one-way street, reducing on-street parking to allow for outdoor vendors, expanded outdoor dining, and wider sidewalks. While some committee members praised the design for its potential to revitalize the area, concerns were raised about reduced parking, particularly due to increased weekend traffic. The Village acknowledged these concerns, emphasizing the need to balance parking availability with other amenities.

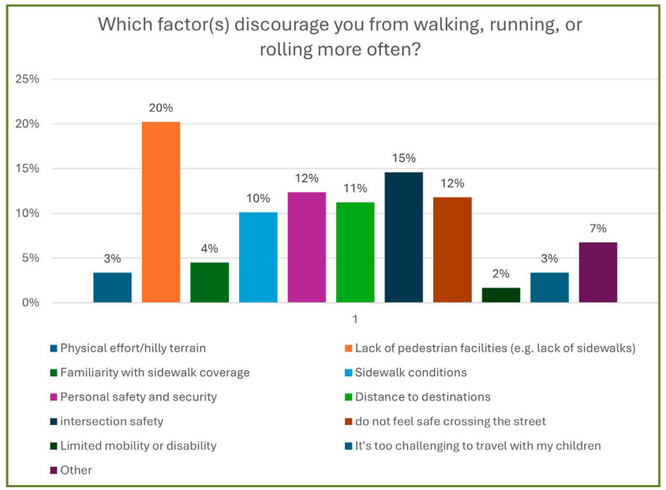
PUBLIC SURVEYS

Public surveys were a crucial part of the public engagement strategy. During the planning process, three public surveys were conducted, gathering valuable information about participants experiences, concerns, and design preferences. An interactive map was also on the project website where participants could highlight areas of concern. The surveys were advertised through social media posts and the project website, as well as promoted at events where the project team was present. Members of the steering committee disseminated the survey to their friends and neighbors.

PUBLIC SURVEY #1 - MAY 13, 2024 TO JULY 1, 2024

The first survey (**Appendix 1**) was designed to gather input on various topics, including different modes of transportation, the Village's existing bicycle and pedestrian network, barriers to biking and walking/rolling, the Prairie Trail, biking and walking/rolling to school, and biking and walking/rolling to downtown Richmond and other neighborhoods. Residents were able to share their experiences of navigating the Richmond transportation network, as well as their concerns and initial ideas for bicycle and pedestrian network improvements. Overall, 107 participants responded to at least one question.

FIGURE 6: SURVEY #1 RESULTS

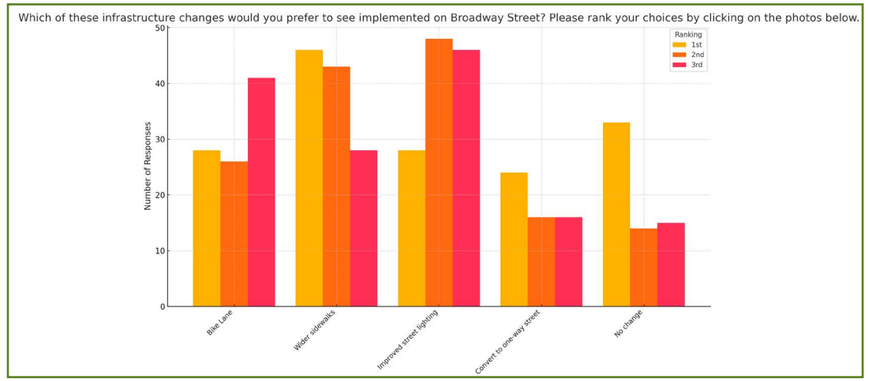


KEY TAKEAWAYS

- Safety concerns were significant factors discouraging biking, walking, or rolling.
- The main barriers to biking were traffic speed (14%), traffic volume (17%), driver behavior (13%), and lack of bicycling facilities (9%).
- For walking, the leading barriers were the lack of pedestrian facilities (20%), intersection safety (15%), personal safety (12%), and unsafe road crossings (12%).
- Despite these concerns, half of the respondents rated the existing bicycling and pedestrian networks in Richmond as "Good" or "Excellent," while 27 respondents rated them as "Neither good nor bad."
- Downtown Richmond was viewed as a bikeable/walkable area by 69% of respondents. Only 50% felt the same about traveling to other neighborhoods.
- Respondents provided several specific location recommendations to improve the overall bikeability and walkability in Richmond. Many highlighted the need for safer crossings and better signage at the intersection of U.S. 12 and South St.
- Respondents emphasized the need for continuous and well-maintained sidewalks in various parts of the Village.
- Areas around downtown Richmond, particularly near commercial establishments, were frequently mentioned.
- Another suggested improving the intersection of U.S. 12 and Burlington Rd. to enhance pedestrian safety and accessibility.

PUBLIC SURVEY #2 - SEPTEMBER 20, 2024 TO NOVEMBER 24, 2024

FIGURE 7: SURVEY #2 RESULTS



The second public survey (**Appendix 2**) was a design preference survey. Participants were asked for their thoughts and design preferences about potential projects and different locations in the Village, including the intersection of U.S. 12 and Broadway Street; the intersection of U.S. 12 and IL 173; Stevens Park; what intersections should have safer crossings; bicycle parking; and the Prairie Trail. Participants were asked to rank their choices of what designs they would like to see implemented in the Village. The survey also asked respondents to rate on a scale of 1-10 their interest in the possibility of a roundabout being constructed at the intersection of U.S. 12 and Tryon Grove Road. Overall, 159 participants responded to at least one question.

KEY TAKEAWAYS

- When asked to prioritize infrastructure changes on Broadway Street, respondents ranked wider sidewalks and additional bike parking as top priorities.
- Survey participants expressed strong support for revitalizing downtown Richmond.
- Popular suggestions included widening sidewalks, planting trees, and adding outdoor seating areas to create a more inviting atmosphere.
- When asked about possible roundabouts, supporters cited the potential for smoother traffic flow and enhanced safety for pedestrians and cyclists. Conversely, opponents expressed concerns about disrupting current traffic patterns and questioned the practicality of accommodating larger vehicles.

PUBLIC SURVEY #3 - JANUARY 15, 2025 TO FEBRUARY 5, 2025

The third survey (**Appendix 3**) served to gather feedback about the plan's proposed policies and programs. Participants were asked to rank the proposed policies and programs on a scale of 1-10, as well as provide feedback and any other policies and programs they think should be included.

KEY TAKEAWAYS

- The survey results indicated strong support for policies aimed at improving pedestrian and cyclist safety in Richmond. The highest-rated policy was the Complete Streets Policy. This was followed by the Vision Zero Policy and the Age-Friendly City Policy.
- Among the proposed programs, the highest-rated initiative was the Monthly Open Streets Celebration. Other well-supported programs included Wayfinding Signage Expansion and Promoting Bike Safety Curriculum.

03

COMMUNITY CONDITIONS & SAFETY ANALYSIS

The analysis of current conditions for bicycling and walking/rolling in Richmond integrates both the rising national trends and existing local context, enhancing the overall planning approach. A detailed safety analysis pinpoints critical areas within Richmond that require immediate attention to improve safety. The examination extends to barriers to safety, identifying physical and policy-related obstacles that currently hinder bicyclists and pedestrians.

Incorporating these elements, recommendations will be developed with an acute awareness of the local context, ensuring alignment with previous strategies implemented in McHenry County and the wider region. This approach ensures that the initiatives proposed not only address immediate safety concerns but also systematically remove barriers to create a safer, more accessible environment for all.

IMAGE 9: U.S. 12
SOURCE: EPSTEIN

PAST PLANS

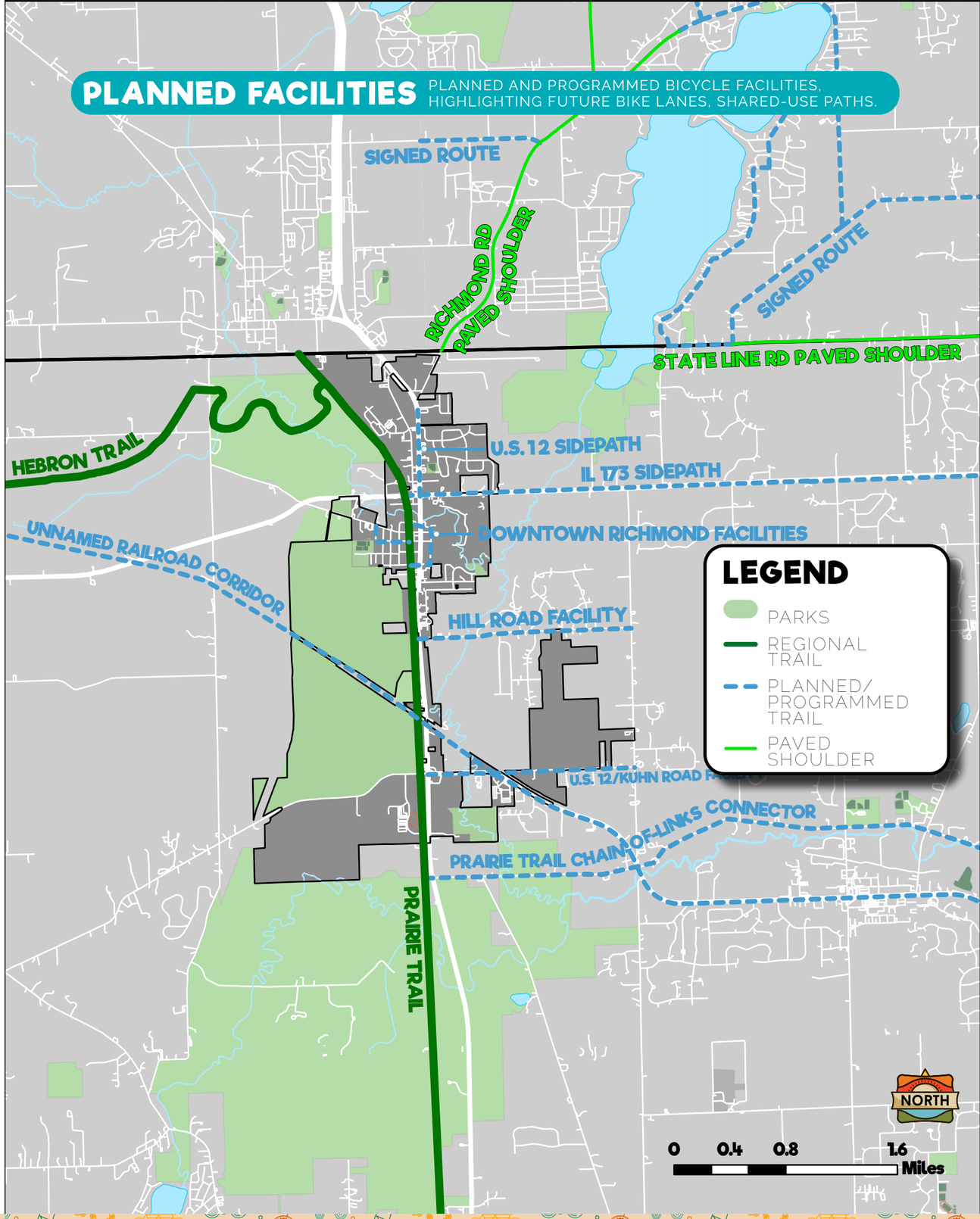
This plan will be the first comprehensive bicycle and pedestrian plan developed by the Village of Richmond. It builds on the momentum of other regional plans, such as CMAP's Northeastern Illinois Regional Greenways and Trails Plan. Existing regional trail plans, however, lack the specificity that the Village's plan will offer. While Richmond has not published a bicycle and pedestrian plan before, other regional plans have proposed different trail connections within and near Richmond.

McHenry County Connection Pedestrian, Bicycle and Trails Master Plan: The 2022 master plan for all things bicycle, pedestrian, and trails for McHenry County. The plan makes recommendations for bicycle, pedestrian, and trail connections throughout McHenry County, including in and around Richmond. Recommendations include an off-street facility on IL 173, an off-street facility on U.S. 12 before it merges with IL 31, on-street facilities on Hill Road, and on-street facilities in downtown Richmond. Additionally, the plan calls for a trail that follows the railway corridor northwest to the Wisconsin border. Within the plan, downtown Richmond and Northern Richmond are identified as equity areas. According to the plan, the equity areas were chosen due to their ability to improve connectivity for underserved communtities in McHenry County. A goal for these equity areas in the plan is to change the auto-centric culture by prioritizing pedestrian and bicycle facilities. The plan says that priority area recommendations should be prioritized.

Northeastern Illinois Regional Greenways and Trails Plan: This plan is a part of CMAP's ON TO 2050 long-range plan. The plan has a few recommended facilities linking to Richmond. The first is a sidepath on IL 173, better linking the Village to Lake County to the east. Additionally, the Prairie Trail Chain-of-Lakes Connector is a proposed trail that will connect to IL 31 just south of the Richmond border, and offer a new east-route connection, linking to Lake County. Finally, an extension of the Hebron Trail is proposed in the plan. This extension would have the Hebron Trail continue further west, linking with other trails and creating a route for residents to travel from Richmond to the western border of McHenry County.

McHenry County Comprehensive Plan: The updated McHenry County Comprehensive Plan is the official guide for planning in the County for the next 25 years. Amongst the recommendations are different on-street and off-street bicycle recommendations for in and around Richmond, including a sidepath on IL 173 east of the Village, off-street facilities on U.S. 12/Kuhn Road and on Hill Road, as well as the Prairie Trail Chain-of-Lakes Connector just south of the Village. Additionally, the plan calls for a trail that will travel northwest from U.S. 12, along the railway corridor to the Wisconsin border, and the Midwest Interstate Trail (not pictured on map), a proposed shared-use trail that would link McHenry County trails with those in Kenosha County, Wisconsin.

A Planning Priorities Report for the Village of Richmond: In 2017, CMAP completed a priorities report for the Village, making several planning recommendations for the Village to prioritize. The purpose of the report was to assess the Village and help decide the kind of planning project that would be most appropriate for Richmond to pursue. The primary recommendation made within the report was for the Village to develop a master plan for downtown Richmond.The report stated that a downtown master plan could help in improving economic development, walkability, sustainability, and livability in downtown Richmond. Other recommendations in the report include a developer discussion panel and updating the Village's Unified Development Ordinance (UDO).



CRASH ANALYSIS

TRENDS

The 2018-2022 IDOT crash data from Richmond provides a detailed look into the patterns and specifics of vehicle incidents in the area. Initially, the majority of crashes resulted in property damage only, with a smaller proportion leading to injuries. Notably, fatal crashes are rare. This general pattern suggests that while crashes are frequent, they are often not severe enough to cause fatalities or serious injuries. However, it is important to recognize that while crash data is informative, it does not tell the entire story of traffic violence and safety, or lack thereof. This data may not capture the full extent of non-fatal injuries, psychological impacts, or near-miss incidents that also significantly contribute to the overall understanding of transportation safety.

From 2018-2022, there were 358 crashes within Richmond. In 2020, the Village saw a decrease in crashes from 77 to 60. However, crashes started to rise again in 2021, with 68 crashes occurring in Richmond. In 2022, the Village saw an even larger jump in annual crashes, up to 90, a 24% increase. Out of the 358 crashes that occurred, there were 123 injuries. No one was killed during this time. Over the same period, there were 3 crashes with bicyclists (1 in 2019 and 2 in 2020) and one crash with a pedestrian in 2018.

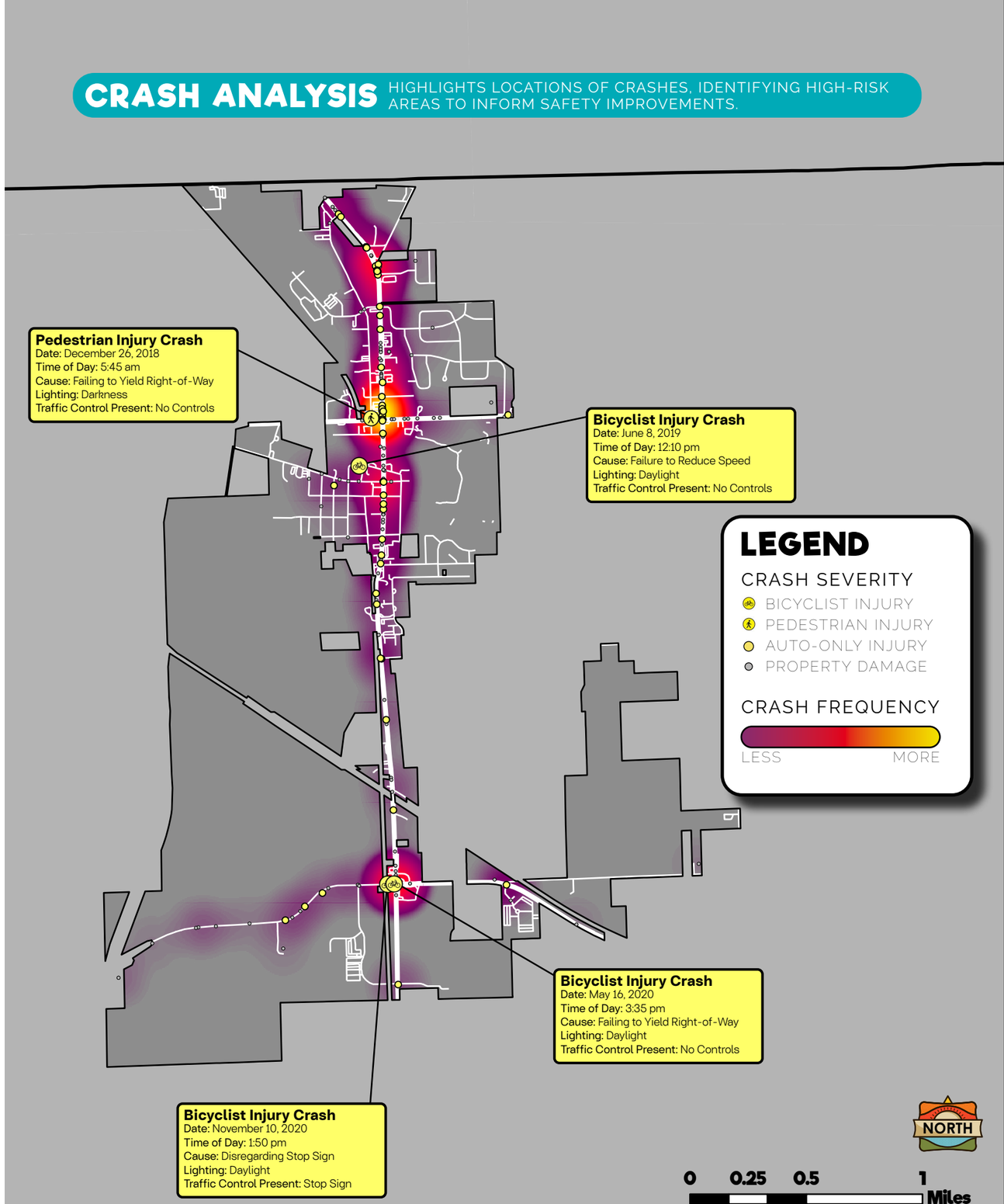
Three major causes of crashes in Richmond are failing to yield the right of way, failure to reduce speed, and following too closely. All three bicycle crashes happened during daylight hours, while the single pedestrian crash occurred very early in the morning on a well-lit road. In front of Nippersink Middle School on U.S. 12, there were ten crashes. Half of these occurred in the early to mid-afternoon, while two happened in the morning, one before 7 a.m. and the other at 8:30 a.m. This pattern highlights the need for heightened safety measures around school zones, especially during busy school hours.

A useful tool for analyzing crashes is a heat map, which shows the density and locations of crashes throughout the village. Red areas on the map indicate higher crash densities, while blue areas signify lower densities. The heat map clearly shows that the most crash-prone areas are in and around U.S. 12, specifically at the intersections of U.S. 12 and Tryon Grove Road, U.S. 12 and Broadway Street, U.S. 12 and IL 173, and U.S. 12 and Burlington Rd.

According to the Federal Highway Administration (FHWA), the fatality rate in transportation planning refers to the number of deaths that occur as a result of traffic crashes per 100,000 people annually. The injury rate indicates the number of injuries sustained from traffic crashes per 100,000 people each year.

TABLE 4: CRASH ANALYSIS

MUNICIPALITY	TOTAL CRASHES	FATALITY RATE	INJURY RATE	BICYCLE FATLAITIES	PEDESTRIAN FATALITIES	BICYCLE INJURIES	PEDESTRIAN INJURIES
Richmond	***370***	***0***	***1,138.57***	***0***	***0***	***3***	***1***
Fox Lake	1,011	5.56	563.07	0	1	4	7
Greenwood	23	0	429.69	0	0	0	1
Hebron	26	0	151.10	0	0	0	0
Ringwood	64	51.35	667.52	0	0	0	0
Spring Grove	335	14.05	625.22	0	1	1	0



BARRIERS TO SAFETY

SPECIFIC BARRIERS

Within a transportation network, there are many safety barriers that create an unsafe environment for people to comfortably bike, walk, or roll within a community. These barriers can be due to both physical infrastructure and policy that has been put in place. When barriers to safety exist, residents may choose driving as opposed to active transportation. Barriers include truck traffic, crossings, and high speed limits.

TRUCK ROUTES

Truck routes are busy roadways that are designated for large freight trucks to use. The presence of large trucks causes potentially already busy routes to become even busier, with larger, more dangerous vehicles present. These roadways act as barriers to bicyclists and pedestrians as they are typically more dangerous and cause bicyclists and pedestrians to be more alert when crossing. Due to the size of freight trucks, a decrease in driver visibility and the risk of serious injury from impact are increased.

CROSSINGS

Another barrier for bicyclists and pedestrians to safely travel is crossings. In addition to the crossing of major roadways at intersections, other crossings that exist are railroad crossings and trail crossings, where a trail is broken up by a roadway.

Railroad crossings act as a physical barrier, separating bicyclists and pedestrians from the other side of the roadway. This barrier can be due to both the presence of large trains passing through and the physical nature of the railroad itself. If the railroad crossing is not designed for bicyclists and pedestrians to safely cross, it can create inaccessible paths due to the uneven tracks.

Road crossings can be a barrier to bicyclists and pedestrians on trails as they try to cross busy roadways. Often times trails have to cross roadways in order for users to access the rest of the trail, at times the roadways they cross are busy and are often not located at intersections, where stoplights or pedestrian crossing signals exist. Because of this, road crossings can be unsafe for bicyclists and pedestrians if the proper safety technology is not in place, as trail users are forced to attempt to cross a roadway where speeding vehicles are passing through. Difficulty crossing a roadway can be a cause of concern and prevent people from using trails.

HIGH SPEED LIMITS

Physical barriers are not the only type of safety barriers that exist for bicyclists and pedestrians in a community. Existing policies can also play a role in creating unsafe environments, preventing people from biking, walking, or rolling throughout their community. Speed is an important factor to consider when trying to make roadways safer and in 2022 was a contributing factor for 29% of fatal crashes that occurred according to the National Highway Traffic Safey Administration (NHTSA). The higher the speed in which an automobile is travelling, the greater the risk of death or serious injury for a bicyclist or pedestrian if they are hit. According to the National Association of City Transportation Officials (NACTO), a person who is hit by an automobile at 20 mph is 5 times less likely to die than if they were hit by an automobile at 35 mph.

Because of this, speed limit policies that allow vehicles to travel at higher speeds pose greater risks to everyone. This creates a safety barrier and may cause bicyclists and pedestrians to feel unsafe and prevent them from travelling on or across certain roadways.

IMAGE 10: INTERSECTION OF U.S. 12 & BROADWAY
SOURCE: EPSTEIN

RICHMOND BARRIERS

Within Richmond, these existing safety barriers have the potential to discourage residents and visitors from biking, walking, or rolling throughout the Village.

Barrier: Truck Routes
Richmond Context: Truck routes are an important part of the Richmond roadway network. All of the main roadways that run through Richmond (U.S. 12, IL 173, IL 31) are truck routes. Additionally, these roadways are operated by the State of Illinois and are classified as Strategic Regional Arterials (SRAs).

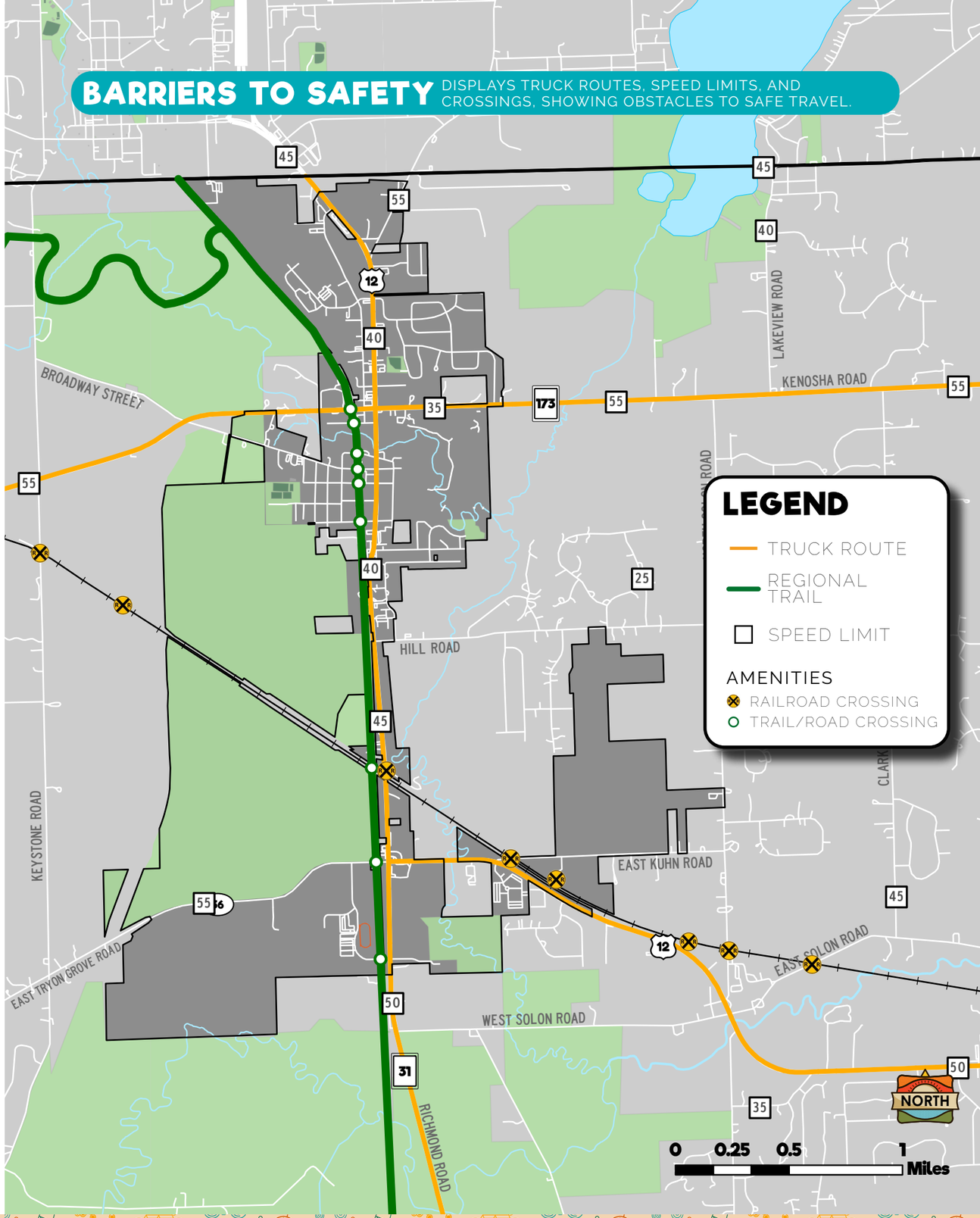
SRAs are roadways that are meant to handle more regional traffic, at greater speeds. Level of service on SRAs is meant to be maintained. This focus on maintaining traffic flow and speed can sometimes mean that other modes of transportation are not adequately accommodated.

Barrier: Crossings
Richmond Context: Within Richmond there are 7 roadways that Prairie Trail users will need to cross. The most dangerous of these crossings is at IL 173, a busy roadway with a higher volume of traffic and greater speeds, with a speed limit of 35 mph. Another dangerous crossing is at Tryon Grove Rd near the high school, where the speed limit is 45 mph.

Although other crossings are at intersections and roadways with less automobile traffic, proper safety features are still necessary to facilitate a safe crossing environment for both bicyclists and pedestrians.

Barrier: Speed Limits
Richmond Context: Richmond has an ordinance that stipulates a 20 mph speed limit for all roadways unless a different speed is specifically mentioned in the ordinance. The highest speed limit per the ordinance is 55 mph on Burlington Road and part of Tryon Grove Road.

Within the Village, U.S. 12 has a speed limit ranging anywhere from 30 mph to 50 mph. The stretch of U.S. 12 that runs through downtown has a speed limit of 30 mph, while just north of downtown has a speed limit of 35 mph. IL 173 has a speed limit of 35 mph for the majority of the Village.



EQUITY

Equity in transportation planning is crucial as it ensures that all community members, particularly those from marginalized or underserved groups, have fair access to mobility options. This is essential for connecting individuals to essential services, employment opportunities, and social activities, thereby improving overall quality of life and reducing social inequities.

WHY IS EQUITY IMPORTANT?

Equity helps in building a cohesive society where economic and social opportunities are not limited by one's ability to travel. Prioritizing equity in transportation planning also addresses historical imbalances where certain groups may have been marginalized or overlooked, promoting a fairer distribution of resources and opportunities.

HOW IS EQUITY MEASURED?

Although numerous metrics can assess transportation equity, this plan structures the equity analysis into three key categories: *Demographic Representation and Population Needs*, *Accessibility and Connectivity*, and *Affordability and Financial Accessibility*.

- **Demographic Representation and Population Needs** focuses on aligning transportation services with the diverse characteristics and requirements of the population. Learn more about these metrics in Table 5.
- **Accessibility and Connectivity** evaluates how well different areas are linked to essential services and each other through modes like walking, cycling, and public transit. Learn more about these metrics in Table 6.
- **Affordability and Financial Accessibility** examines the economic aspects of transportation, using metrics such as Transportation Costs, which measure the percentage of household income dedicated to transportation. Learn more about these metrics in Table 7.

Within these three categories, Richmond has been compared to neighboring municipalities Fox Lake, Greenwood, Hebron, Ringwood, and Spring Grove. Additionally, Richmond has been compared to McHenry County and the CMAP region which is made up of McHenry County, Cook County, DuPage County, Lake County, Kane County, Kendall County, and Will County.

DEMOGRAPHIC REPRESENTATION AND POPULATION NEEDS

The demographic and socio-economic metrics of a municipality are critical in shaping its active transportation planning. These metrics provide insights into the community's needs, potential ridership, and the specific challenges that might influence transportation policy and infrastructure development. For instance, a younger population may be more inclined to use active transportation modes, such as biking and walking, while higher median incomes can influence the ability to fund and sustain such infrastructures. Understanding the needs of individuals with disabilities and the foreign-born population can help tailor the active transportation facilities to be more inclusive and accessible.

According to the 2017-2021 five-year ACS estimates, Richmond, when compared to its neighbors, McHenry County, and the entirety of the CMAP region, shows a steadily growing community, has the largest population percentage growth from 2000-2020. Demographic data shows Richmond as having a lower median household income than its neighbors, with a median household income of $55,964, whereas Spring Grove to the east of the Village has a median income of $131,735. The neighboring community with the closest median income to Richmond is Fox Lake with a median income of $64,221.

Richmond has a proportion of residents with disabilities similiar to the County and region as a whole, however the number of residents with a disability has declined over the past 20 years. Among neighboring communities, Richmond is in the middle when it comes to proportion of residents with a disability. Regardless, the number of residents with disabilities, as well as the rising number of residents over the age of 60, indicates a need for the community to focus on accessibility and safety.

TABLE 5: DEMOGRAPHIC AND POPULATION NEEDS

MUNICIPALITY	POPULATION	PERCENTAGE POPULATION CHANGE		MEDIAN HOUSEHOLD INCOME	INDIVIDUALS WITH DISABILITIES	NATIVITY	
		2000-2020	2010-2020			NATIVE	FOREIGN BORN
Richmond	***2,263***	***91.5%***	***11.5%***	***$55,964***	***272***	***2,229***	***34***
Fox Lake	10,945	19.6%	3.8%	$64,221	2,127	10,336	609
Greenwood	427	32.8%	27.1%	$100,833	33	408	19
Hebron	1,540	31.8%	12.5%	$76,080	200	51,042	68
Ringwood	713	79.2%	1.0%	$128,000	59	54,410	16
Spring Grove	5,713	41.4%	-5.0%	$131,735	342	27,887	160
McHenry County	**310,749**	**19.3%**	**0.5%**	**$93,801**	**29,216**	**283,400**	**27,349**
CMAP Region	**8,570,533**	**5.3%**	**1.7%**	**$81,102**	**832,569**	**6,938,399**	**1,632,134**

SOURCE: *CMAP COMMUNITY DATA SNAPSHOTS; 2017-2021 FIVE-YEAR ACS ESTIMATES*

ACCESSIBILITY AND CONNECTIVITY

The transportation metrics of a municipality play a pivotal role in shaping its active transportation landscape. These metrics not only reflect the existing transportation infrastructure but also influence future urban planning and development strategies.

According to the 2017-2021 five-year ACS estimates, when compared to its neighboring municipalities, McHenry County, and the region, Richmond has one of the higher automobile shares for commuting to work at 87.7%. Only Hebron has a higher share of 90.7%. Even though Richmond has a high driving alone to work share, the percentage of residents who bike or walk to work is 1.1%, higher than Fox Lake, Greenwood, and Spring Grove. The high share of residents driving to work in both RIchmond and Hebron, is due to the low transit accessibility in both communities. Richmond and Hebron are the only two communities who do not have residents taking public transit to work. Because of this low access to transit, in both Richmond and Hebron, there are 0 jobs that are accessibile within a 30-minute transit ride for residents, according to the Center for Neighborhood Technology's (CNT) Housing + Transportation Affordability Index.

While Richmond has one of the highest driving alone to work shares when compared to its neighbors, it also has the second highest percentage of households with no vehicle access at 7%, second to Hebron at 9.5%. The share of Richmond residents with no access to a vehicle is higher than McHenry County, but it is still lower than the region as a whole.

The lack of transit, high autmobile driving rates, and higher percentage of residents with no vehicle access, underlines the necessity for improvements to the Richmond bicycle and pedestrian network and the importance of having a bikeable and walkable downtown for residents to visit and work in.

TABLE 6: ACCESSIBILITY AND CONNECTIVITY

MUNICIPALITY	MODE OF TRAVEL TO WORK					HOUSEHOLDS WITH NO VEHICLE ACCESS (%)	AVERAGE COMMUTE TIME (MINUTES)	WALKABILITY INDEX RATING	JOBS ACCESSIBLE IN 30-MINUTE TRANSIT RIDE
	CAR	CARPOOL	BIKING & WALKING	PUBLIC TRANSIT	OTHER				
Richmond	***87.7%***	***5.6%***	***1.1%***	***0.0%***	***1.1%***	***7.0%***	***31.7***	***59***	***0***
Fox Lake	76.0%	8.6%	0.0%	3.9%	0.8%	5.4%	39.6	68	9,321
Greenwood	71.3%	1.7%	0.8%	5.9%	0.0%	0.6%	22.6	14	3,326
Hebron	90.7%	3.8%	2.4%	0.0%	0.0%	9.5%	33.5	36	0
Ringwood	74.3%	5.1%	6.0%	1.8%	0.7%	5.3%	33.5	26	10,281
Spring Grove	76.7%	4.0%	0.0%	1.3%	0.6%	0.4%	33.5	28	741
MCHENRY COUNTY	**78.9%**	**6.5%**	**0.9%**	**1.8%**	**0.9%**	**3.8%**	**31.3**	**X**	**4,710**

("X" indicates data is unavailable)

Source: *CMAP Community Data Snapshots; 2017-2021 five-year ACS Estimates; Walk Score; CNT H+T Index*

AFFORDABILITY AND FINANCIAL COST

Transportation costs include, cost of vehicle, gas, insurance, registration fees, transit fares, etc. Car ownership results in higher transportation costs for a household which disproportionally affects low-income families. Reaching equitable solutions requires improving transportation systems that do not require individual car ownership. It goes beyond ensuring that services are available; it also involves making them safe and reliable. Residents experiencing this financial burden can have limited access to essential services, employment opportunities, and social mobility. Therefore, addressing transportation equity involves both increasing the accessibility and affordable transportation options.

According to CNT's Housing + Transportation Affordability Index, Richmond finds itself with similar transportation and housing costs to McHenry County. When compared to its neighboring municipalities, Richmond finds itself on the lower end of annual transportation costs at $16,964. When it comes to transportation costs as it relates to income share, Richmond is similar to its neighboring communties, at 24%.

As expected, housing costs make up more of the expenses than transportation costs for almost all of the communities. In Richmond, housing costs make up around 27% of income and the average monthly housing costs for residents is $1,642. Overall, Richmond residents on average spend 51% of their budget on housing and transportation costs. This is similar to the other communities, with only Fox Lake and Hebron residents spending less than 50% of their budget on housing and transportation costs. Spring Grove had the highest share at 61% of income.

While Richmond is close in numbers to to the other communities and McHenry County as a whole, it still highlights a need for more affordable transportation. The high cost of transportation is typically associated with automboile ownership and maintenance.

TABLE 7: TRANSPORTATION COST

MUNICIPALITY	HOUSING & TRANSPORTATION COSTS (% OF INCOME)	HOUSING COSTS (% OF INCOME)	TRANSPORTATION COSTS (% OF INCOME)	AVERAGE MONTHLY HOUSING COSTS	ANNUAL TRANSPORTATION COSTS	ANNUAL VEHICLE MILES TRAVELED PER HOUSEHOLD
Richmond	***51%***	***27%***	***24%***	***$1,642***	***$16,964***	***23,687***
Fox Lake	44%	23%	21%	$1,395	$15,174	19,734
Greenwood	51%	26%	25%	$1,566	$18,030	25,390
Hebron	47%	23%	24%	$1,353	$17,148	24,883
Ringwood	55%	30%	24%	$1,814	$17,478	23,954
Spring Grove	61%	36%	25%	$2,128	$18,110	24,839
MCHENRY COUNTY	**52%**	**29%**	**23%**	**$1,744**	**$16,423**	**22,008**
CMAP REGION	**X**	**X**	**X**	**X**	**X**	**X**

("X" indicates data is unavailable)

Source: *CNT H+T Index*

04

EXISTING INFRASTRUCTURE

The examination of Richmond's existing infrastructure provides a basis for informed recommendations that address local needs and areas of concern. Key focus areas include the evaluation of bicycle facilities, and their usage stress levels, pedestrian amenities, the safety of intersections, and the conditions of roadways.

By thoroughly assessing the existing infrastructure within and surrounding the Village of Richmond, the Plan can craft recommendations that are finely tuned to the specific requirements of the community. This careful consideration ensures the development of a cohesive and comprehensive network for bicycles and pedestrians, enhancing connectivity and safety across the Village.

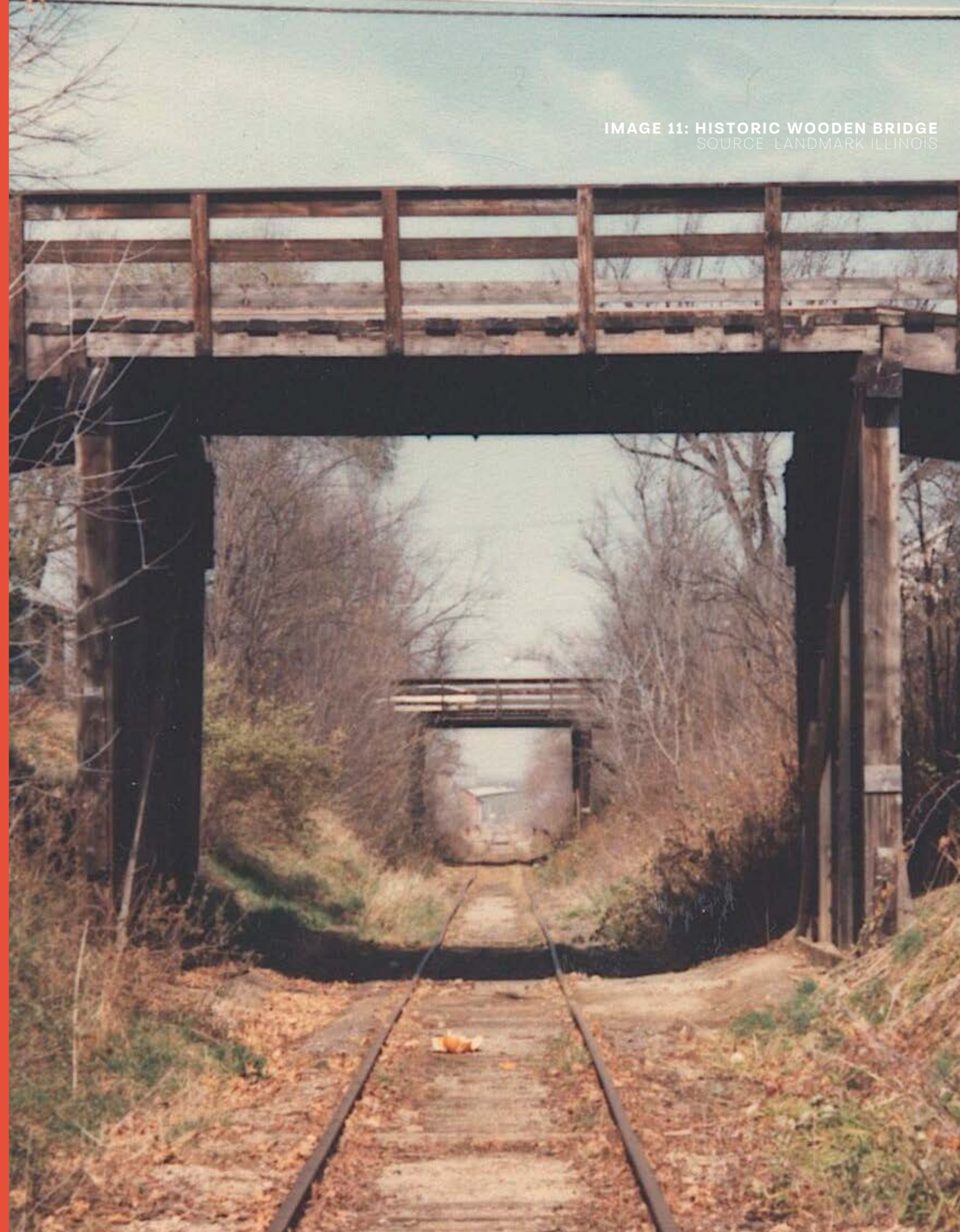


IMAGE 11: HISTORIC WOODEN BRIDGE
SOURCE: LANDMARK ILLINOIS

BICYCLE INFRASTRUCTURE

EXISTING BICYCLE FACILITIES

While bicyling is not a mode that many residents use for commuting, Richmond has trail connections to neighboring municipalities to the north and the south. The Village offers a great location for future trail connections, ultimately better connecting the region.

The Village is currently home to a portion of the Prairie Trail. The Prairie Trail connects Richmond to Wisconsin to the north, to the Hebron Trail to the northwest, and the Fox River Trail to the south, just outside of Carpentersville. The trail eventually terminates in Yorkville, in Kendall County, allowing access to communities like Elgin, Batavia, and Aurora. McHenry County Conservation District maintains Richmond's section of the Prairie Trail.

The Village does not have any on-street bicycle facilities. However, the lack of facilities does not prevent residents from bicycling within their neighborhoods. Richmond neighborhoods offer residents an already existing network of low-stress streets that are comfortable for riders. However, these low-stress streets are disconnected from others due to the presence of busy state-run routes, such as U.S. 12 and IL 173. Bicyclists who wish to cross these roadways lack safe crossing options. While there are some intersections with traffic lights, other intersections lack the necessary infrastructure to allow bicyclists to feel safe when crossing state roads.

BICYCLE AMENITIES

In addition to bicycle lanes and trails, other amenities are important to the overall comfort level of the bicycling experience. While physical separation or protection from automobiles is important for bicyclists to feel safe and comfortable while riding, they are more impactful with the addition of other amenities such as bicycle parking and proper wayfinding signage.

Bicycle Parking

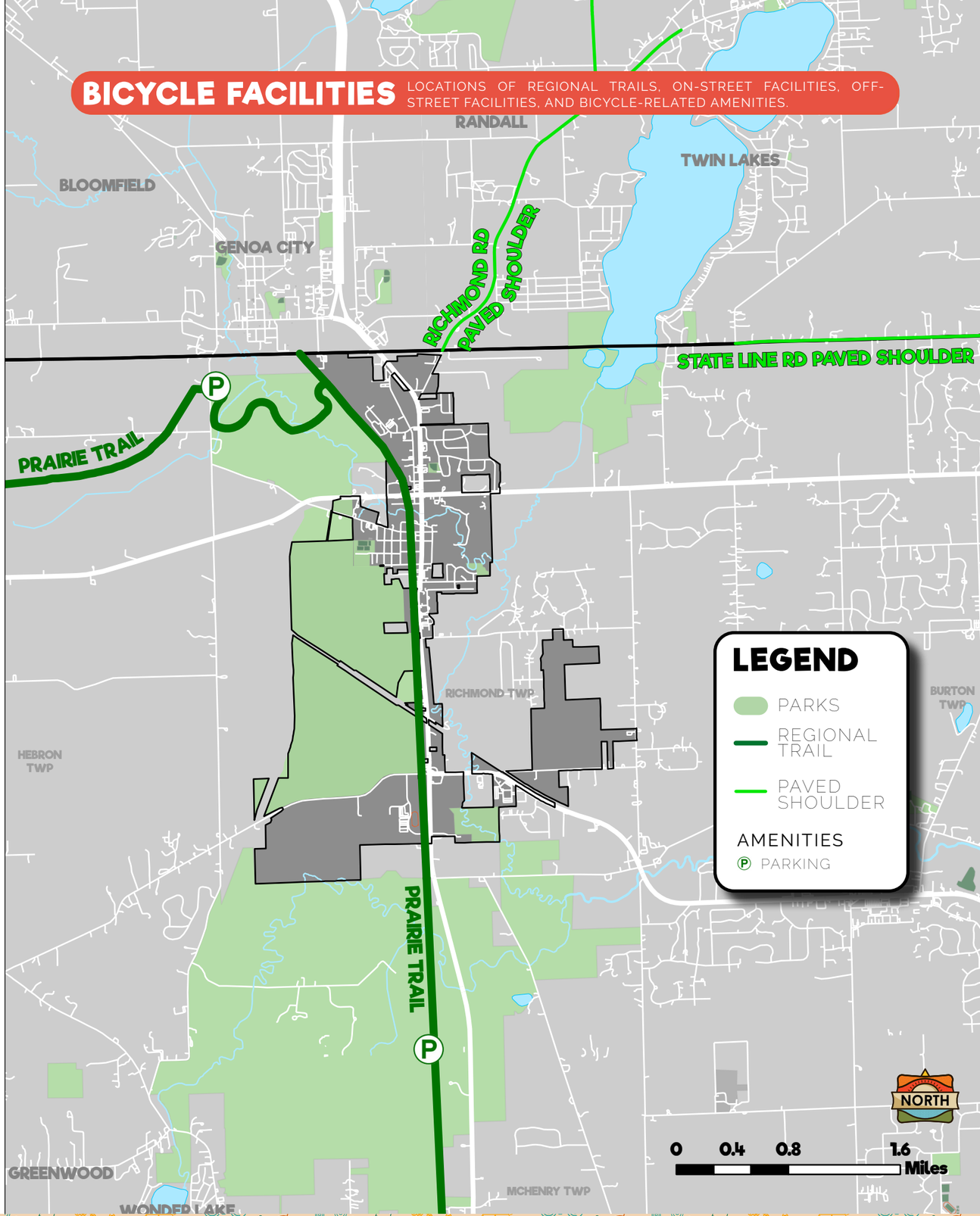
Bicycle parking offers a place for riders to securely lock up their bicycle when visiting a place. If adequate parking is not available for bicyclists, they might be less inclined to visit a business or other destination, due to a fear of the bicycle being stolen or not wanting to attempt to take the bicycle into the different locations.

Bicyclists seeking to visit downtown Richmond face limited bicycle parking options. Bicycle parking exists at Stevens Park, where Village-branded bike racks for riders are installed. However, bicycle parking does not exist elsewhere in downtown Richmond or adjacent to downtown Richmond.

Wayfinding

Wayfinding signage is a useful tool to help bicyclists navigate a community. Wayfinding signage is typically used to direct riders to different businesses, destinations, and routes within and around a community. This could mean signage that tells a rider which road to take to reach a business or a map to show them what is in the area they could visit. Wayfinding can also direct riders to which roads to take in order to have a safer and more comfortable riding experience.

Currently, Richmond does not have any existing wayfinding for bicylists or pedestrians either in downtown or along the Prairie Trail.



FACILITY DESIGN

DESIGNING FACILITIES FOR ALL

Designing cycling facilities to accommodate all skill levels involves a strategic approach that ensures safety and accessibility across a spectrum of cyclist confidence, from beginners to the experienced. This inclusive planning not only enhances the comfort and safety of all cyclists but also integrates seamlessly into various urban and suburban landscapes. For more detailed descriptions of each level of cyclist infrastructure—from Compete Separation from Traffic to No Separation—refer to **Figure 6**. In environments where cyclists share roads directly with motor vehicles, designing with a focus on education and shared

road etiquette becomes crucial. No Separation settings require intensive educational campaigns aimed at both drivers and cyclists to foster a mutual respect and understanding for shared road use. These initiatives are complemented by traffic calming measures such as reduced speed limits and visible crosswalks, ensuring safer interactions in mixed traffic conditions. To better understand the specific features and safety measures associated with each level of cyclist infrastructure, please see **Figure 6**.

FIGURE 8: FACILITY DESIGN

BICYCLIST COMFORT LEVELS

INTERESTED BUT CONCERNED
This group includes people who are curious about biking but hesitant due to safety concerns. They are typically not comfortable riding in traffic and prefer biking on dedicated paths, quiet streets, or not at all. The availability of safe, well-connected cycling infrastructure can greatly influence their decision to ride more frequently.

SOMEWHAT CONFIDENT
Somewhat confident cyclists are comfortable riding on streets with less traffic or those that have bike lanes. They have a moderate level of cycling experience and skills, which makes them willing to navigate through some traffic situations but still cautious about more complex environments.

CONFIDENT OR FEARLESS
These cyclists are very comfortable riding in a variety of traffic conditions and do not shy away from riding on busy streets, even without bike lanes. They possess strong biking skills which makes them feel confident navigating alongside motor vehicles. This group includes those who use their bicycle as their primary mode of transportation.

LEVEL OF PERCEIVED SAFETY, COMFORT, AND LIKELIHOOD OF BICYCLING ACROSS THE VARIOUS EXPERIENCE LEVELS

FACILITY SEPARATION LEVELS

COMPLETE SEPARATION
These facilities provide complete separation from motor vehicle traffic. This category includes protected bike lanes with barriers. It also encompasses bike paths or greenways through parks or natural settings, completely isolated from roadways.

MOSTLY SEPARATED FROM TRAFFIC
Facilities that are mostly separated typically include bike lanes that are demarcated by less substantial barriers such as plastic bollards or painted buffers. These lanes are on the roadway but offer some form of physical delineation that provides a degree of protection from adjacent traffic.

SOMEWHAT SEPARATED FROM TRAFFIC
This category includes bike lanes that are part of the roadway with only painted lines separating cyclists from motor vehicle traffic. These lanes require cyclists to be more vigilant and comfortable sharing space close to moving vehicles. They are suited for somewhat confident to confident cyclists who are comfortable with some exposure to traffic but appreciate a designated space on the road.

NO SEPARATION FROM TRAFFIC
No separation facilities refer to shared roadways where bicycles and motor vehicles are mixed without any specific bike infrastructure. Cyclists use the same traffic lanes as cars, adhering to the same road rules. This setup demands a high level of comfort and confidence from cyclists, as they navigate alongside motor vehicles without any physical protections. Such environments are best suited for confident or fearless cyclists.

PEDESTRIAN INFRASTRUCTURE

EXISTING PEDESTRIAN FACILITIES

With its distinct rural character, Richmond faces challenges in pedestrian connectivity that are typical of many small, semi-rural communities. The village's layout, heavily reliant on personal vehicles for transportation, underscores a lack of comprehensive pedestrian infrastructure. This rural character, while contributing to the charm and appeal of Richmond, simultaneously creates gaps in pedestrian connectivity, making it difficult for residents to move around safely and efficiently without a vehicle. Addressing these gaps is crucial for enhancing the quality of life in Richmond. Developing sidewalks, crosswalks, and bike paths would not only promote safer, healthier lifestyle options but also foster a more mobile and interconnected community.

Almost all of the sidewalk network is located north of May Avenue, with sidewalks on Main Street beginning just south of May Avenue (the only sidewalk south of May Avenue) and continuing to north of Walnut Street. Overall, 18% of the Richmond roadway network has a sidewalk on at least one side of the road. The majority of sidewalks in the Village exist near downtown west of Main Street, and Sunset Ridge subdivision. Sunset Ridge has nearly complete sidewalk connection, with only a few sidewalk gaps. Meanwhile, the Pheasant Ridge subdivision has some sidewalks, and the Hillview subdivision has no sidewalks. The Highlands apartment complex in southern Richmond does not have sidewalks leading into the community or on U.S. 12 which connects to the apartments.

The one traffic crash that involved a pedestrian occurred on Commercial Street, near the intersection of Commercial Street and IL 173, where there are no sidewalks.

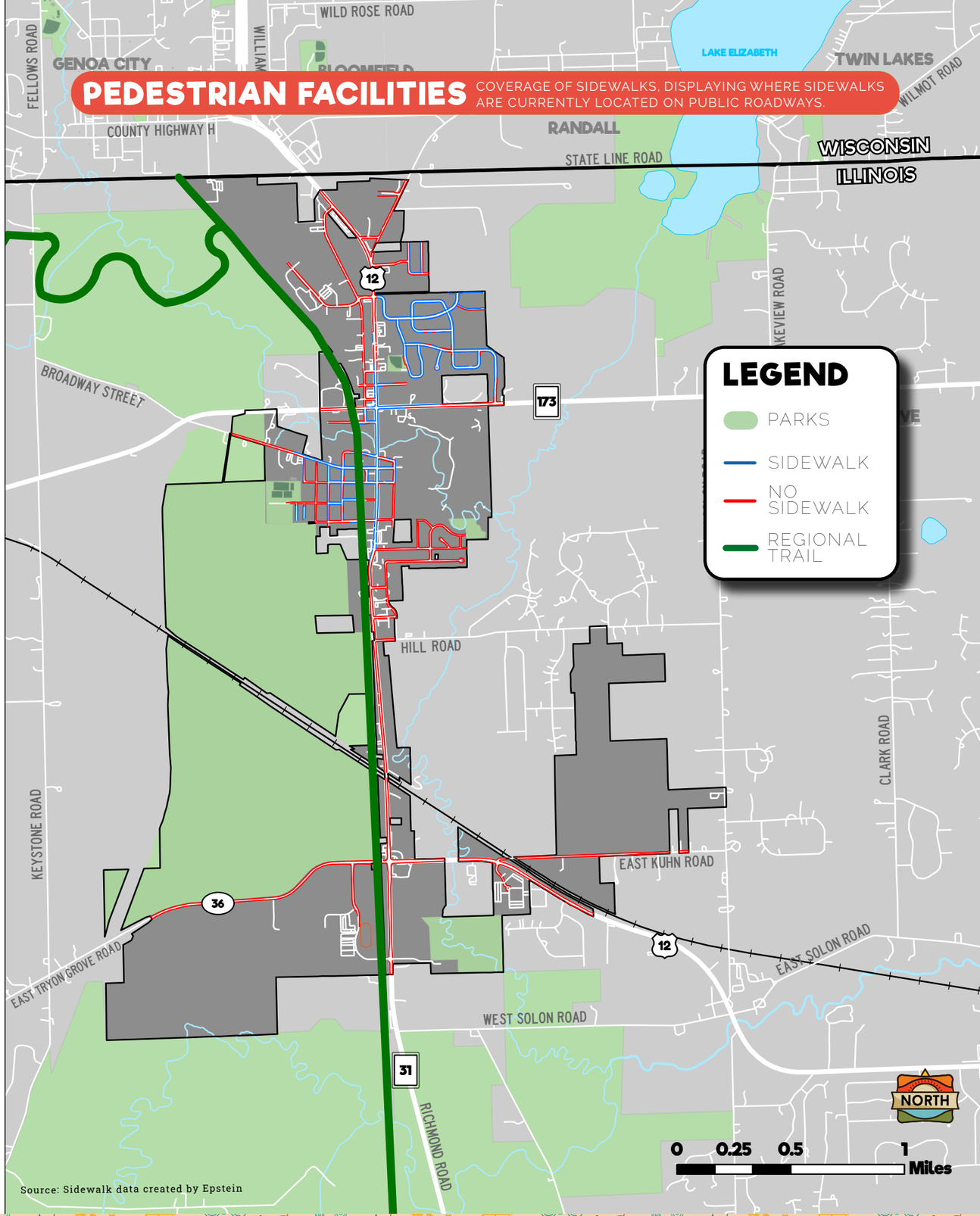
Sidewalk connectivity in and around schools can create a safe traveling environment that allows for children to bike and walk to school. Richmond schools vary in the amount of sidewalk that exist in and around the campuses.

- Richmond Grade School has sidewalks outside of the school to the west side of McConnell Drive and on both sides of Broadway Street leading up to the school. However, there are no sidewalks on the south side of Broadway Street directly in front of the school.
- Nippersink Middle School has sidewalks in front of the School on Main Street, but not on any of the other streets surrounding it.
- Richmond Burton Community High School has no sidewalks leading up to it or on Tryon Grove Road, where the school entrance is located.

ADA compliance

Having sidewalks for residents to walk and roll on is important in the overall walkability of a community, however sidewalks by themselves are not very impactful if they are not ADA compliant. The American with Disabilities Act (ADA) mandates many aspects of a sidewalk including the width of a sidewalk, the slope of a sidewalk, and the existence of ADA tactile warning strips that let people with visual impairments know when they have reached an intersection. These regulations help provide the proper sidewalks for people with disabilities to travel around communities in a safe and comfortable manner.

Some areas of concern for Richmond are located in downtown and the adjacent neighborhood. In downtown just north of Broadway along U.S. 12, the sidewalk has stairs to get down to another level, however these stairs are the only way to get down and access the other sidewalks. Additionally, tactile warning strips are present in newer neighborhoods and at the intersection of IL 173 and U.S. 12, but are not found throughout the neighborhood adjacent to downtown Richmond.



WALKABILITY

WALKABILITY INDEX

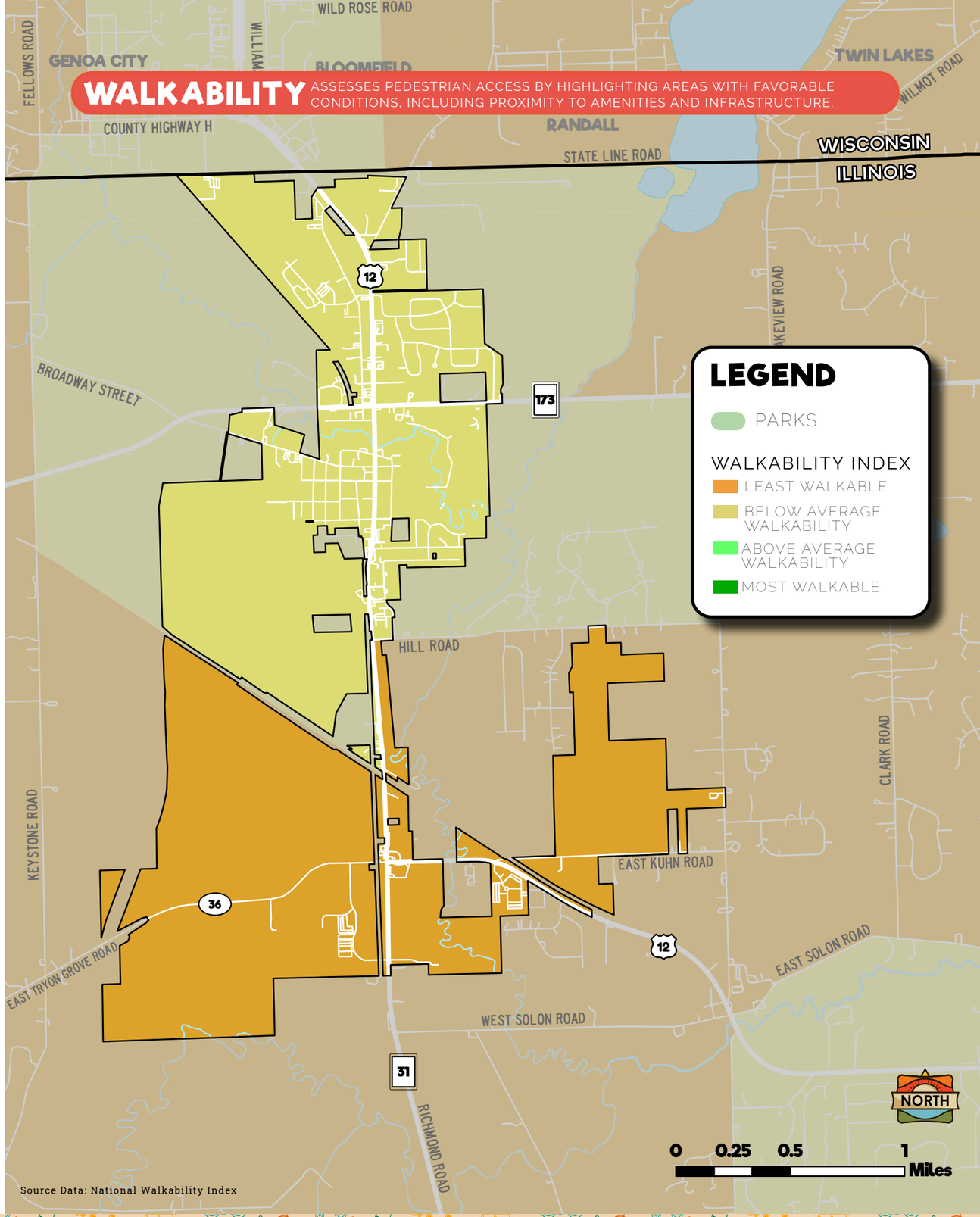
The Walkability Index, created by the U.S. Environmental Protection Agency (EPA), assesses how conducive areas are for walking, rating them across a spectrum from 'Least Walkable' to 'Most Walkable'. the index is a quantitative tool used to evaluate how friendly an area is for walking. It factors in various elements such as the density of the road network, availability and proximity of pedestrian infrastructure (like sidewalks and crosswalks), safety measures (including street lighting and pedestrian signals), and access to amenities like shops, parks, schools, and public transport. The calculation of the Walkability Index typically involves aggregating scores from these categories to produce a single metric that reflects the overall ease and appeal of walking in a specific locale. Higher scores indicate a more walkable neighborhood that encourages pedestrians to walk for commuting, recreation, or accessing services.

The Walkability Index generally classifies areas into various levels, ranging from poor to excellent. Each level corresponds to the extent to which the environment supports and promotes walking. For instance, an area with a 'Most Walkable' walkability score would have well-maintained sidewalks, ample pedestrian crossings that are safely designed, low traffic speeds, and a wide range of accessible amenities. Conversely, a 'Least Walkable' walkability score might be attributed to areas with sparse or nonexistent pedestrian infrastructure, high traffic volumes and speeds, and limited access to local services and amenities. These levels help urban planners and local governments identify areas where improvements are needed and prioritize interventions that can enhance the overall pedestrian experience.

Below are the categories and the environment for each classification:

- **Least Walkable:** These areas lack sufficient pedestrian infrastructure and experience high traffic, making walking unsafe and inconvenient. Safety measures and accessible amenities are minimal, discouraging walking as a viable mode of transport.
- **Below Average Walkability:** Such areas have some pedestrian infrastructure, though often inadequate or poorly maintained. Traffic occasionally hinders pedestrian movement, and while there are safety features, they are not comprehensive. Amenities may require other transportation means for accessibility.
- **Above Average Walkability:** These areas feature well-maintained sidewalks and crosswalks, with low traffic volumes enhancing pedestrian safety and enjoyment. Safety measures are robust, and amenities are within a comfortable walking distance, encouraging a pedestrian-oriented lifestyle.
- **Most Walkable:** The highest category, these areas boast extensive, high-quality pedestrian infrastructure and prioritize pedestrian safety with very low traffic. Comprehensive safety features ensure secure walking conditions, and a wide range of amenities is easily accessible on foot, supporting a walk-first lifestyle.

The Village is considered to have "Below Average" walkability in and around downtown Richmond. The rest of the community, south of the railroad, is considered to be in the "Least Walkable" category. This is likely due to the lack of a complete sidewalk network throughout the VIllage and the diversity of amenities that pedestrians can access.



SAFETY

APPROACHES TO SAFETY

Suburban roadway design has historically favored vehicular traffic, often neglecting the safety of pedestrians, cyclists, and public transit users. Traditional designs feature wide, straight roads optimized for high speeds, with limited safety measures for non-vehicle users. As suburban demographics and uses diversify, however, there is a shift towards more inclusive planning strategies that address these shortcomings.

TRADITIONAL SAFETY APPROACH

The prevalent suburban road systems are designed to maximize vehicle flow with multi-lane roads, traffic signals, and turn lanes, which can create high-speed environments that increase crash severity. Often, pedestrian and bike infrastructure lacks adequate protection from fast-moving vehicles. This efficiency-driven design frequently overlooks the needs of vulnerable road users, leading to higher incidents of road-related injuries and fatalities and limited public transit options.

NEW APPROACHES

In response to these challenges, newer, safer approaches like FHWA's Safe System Approach are being adopted. This approach, which is becoming a global best practice, prioritizes human life and health, accommodating human error and aiming to reduce the consequences of accidents through forgiving road systems. It includes:

- **Safe Roads:** Introducing traffic calming measures like road diets, chicanes, and roundabouts to slow traffic, alongside enhanced crosswalks and protected bike lanes.
- **Safe Speeds:** Implementing stricter speed limits and automated enforcement to regulate traffic speeds, often supplemented by physical changes that encourage slower driving.
- **Safe Vehicles:** Promoting the use of vehicles with advanced safety technologies and supporting local policies that favor environmentally friendly transport options.
- **Safe Road Users:** Focusing on educational programs that foster safer driving, walking, and bicycling habits.
- **Post-Crash Response:** Enhancing emergency services accessibility and medical response capabilities to reduce the impact of road crashes.

These evolving strategies are transforming suburban roadways into safer, more user-friendly environments, significantly reducing traffic fatalities and injuries while promoting sustainable urban development.

STOP CONTROLLED & SIGNALIZED INTERSECTIONS

Safety Asset: High-Visibility Crosswalks
Description: High-visibility crosswalks create a designated space for pedestrians to cross and can create better visibility for pedestrians crossing for drivers. High-visibility crosswalks can have different types of patterns, such as continental crosswalks, which are made up of horizontal bars that have the appearance of a ladder.
Richmond Locations: In Richmond, there are 29 crosswalks at ten different intersections, eight of which are high-visibility. Of the nine intersections with crosswalks, only two have four crosswalks, and one has three. The two intersections with four crosswalks are U.S. 12/Broadway Street and U.S. 12/Kenosha Street.

Safety Asset: Pedestrian Signals
Description: Pedestrian signals help increase pedestrian safety at intersections, by giving them priority for crossing a roadway. These signals should countdown how much time a pedestrian has left to cross, Pedestrian signals can be timed with the traffic signals or can be requested by a pedestrian through a button.
Richmond Locations: Currently, the only pedestrian signals in Richmond are push button signals at the intersection of U.S. 12 and IL 173

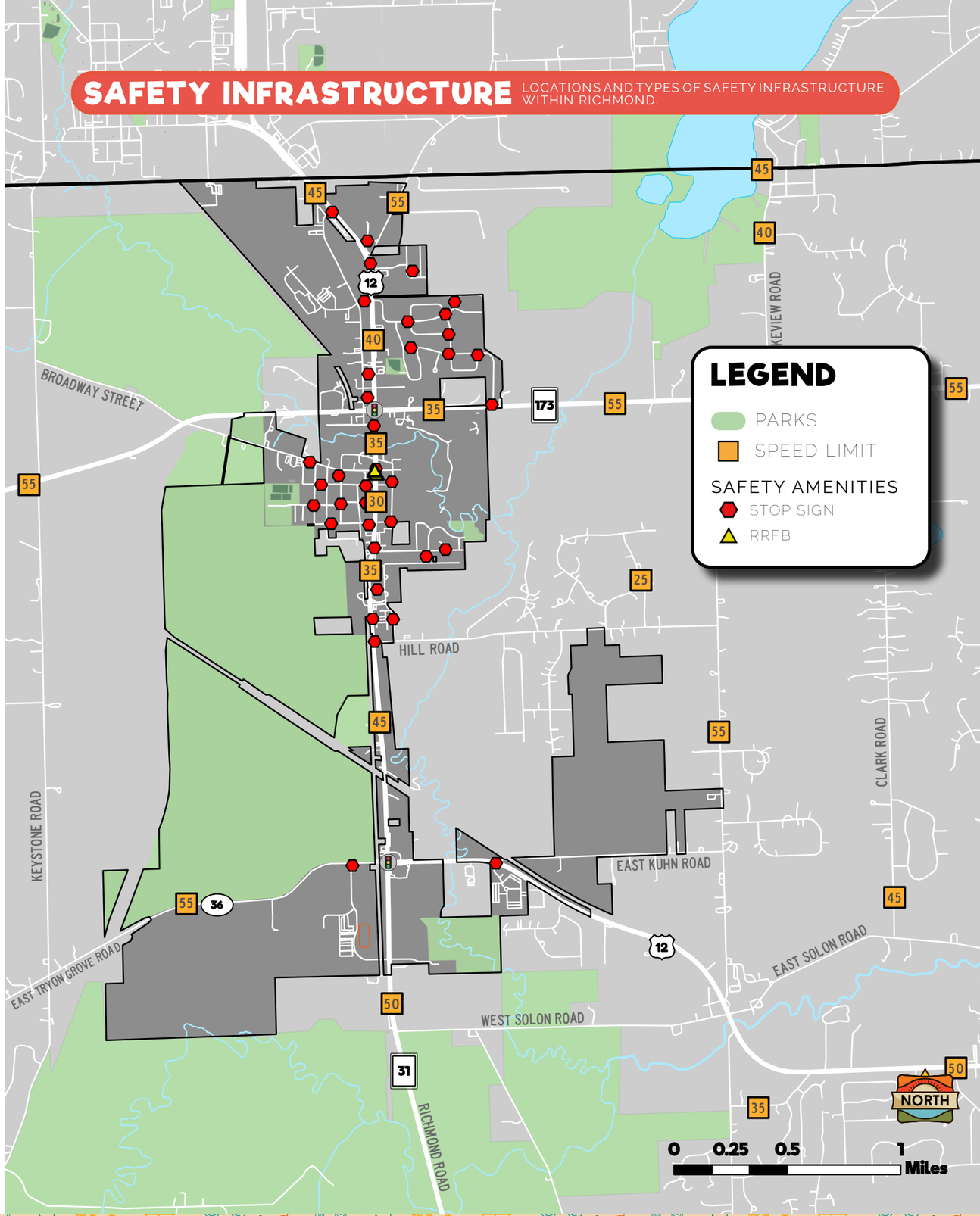
Safety Asset: Bulb-Outs
Description: Bulb-outs extend the area where pedestrians are safe from cars. Bulb-outs create a car-free space for pedestrians to wait before crossing a roadway, while also creating a shorter crossing for pedestrians and an increasing in visibility for drivers.
Richmond Locations: There are marked bulb-outs at the intersection of U.S 12 and Broadway Street. These bulb-outs do not actually physcially extend the curb, but do so with a painted outline which extends to the outer parking lane line on U.S. 12.

MID-BLOCK CROSSINGS

Safety Asset: RRFBs
Description: Rectangular Rapid Flashing Beacons (RRFBs) can be a helpful safety tool for bicyclists and pedestrians. RRFBs are pedestrian/bicyclist-activated traffic signals that can help create safer crossings. When activated, RRFBs omit a flashing light at oncoming traffic to let drivers know someone is about to cross the roadway.
Richmond Locations: While recommended for mid-block crossings, the only RRFBs in Richmond are located at the intersection of U.S. 12 and Broadway Street, with the purpose of creating a safer crossing across U.S. 12.

Safety Asset: Curb Extensions
Description: Similar to bulb-outs, curb extensions extend physical curb further into the street, createing more area where pedestrians are safe from cars. Curb extensions create a car-free space for pedestrians to wait before crossing a roadway, while also creating a shorter crossing for pedestrians and an increase in visibility for drivers.
Richmond Locations: Currently there are no mid-block curb extensions in Richmond.

Safety Asset: Signage
Description: Appropriate pedestrian signage is used to alert drivers of the potential of a pedestrian crossing the roadway. These signs are bright yellow and should be placed before the crossing to increase driver awareness of pedestrians. The signs can also be placed at high-volume crosswalks as well, for additional visibility.
Richmond Locations: Richmond has signage located at the U.S. 12/Broadway Street intersection, as well as at the intersection of U.S. 12/South Street.



LEVEL OF SERVICE

BICYCLE LEVEL OF SERVICE

Bicycle Level of Service (BLOS) is a planning level metric used to evaluate the quality and safety of roadway conditions for bicyclists. It considers various factors that impact a cyclist's experience, such as roadway width, traffic volume, the presence of bike lanes, and environmental elements. The BLOS rating helps urban planners and traffic engineers understand the current cycling conditions and identify areas that require improvement to make cycling safer and more appealing. By assessing roads through this metric, communities can prioritize enhancements and design more bicyclist-friendly infrastructures, thereby promoting bicyling as a viable and attractive mode of transportation.

The BLOS is generally calculated using a combination of objective data regarding roadway features and traffic patterns, which are scored and combined into a final grade. This grade classifies roads ranging from A, representing the best conditions for cycling, to F, indicating poor conditions that are unsuitable for most bicyclists. These categories help planners and decision-makers visually understand the quality of bicycling infrastructure in relation to cyclist comfort and safety, making it easier to allocate resources effectively and advocate for necessary changes.

For example, Richmond staff could use BLOS ratings to plan future bicycle facilities by analyzing roads that currently score poorly, such as those rated D or F. If a key corridor connecting residential neighborhoods to downtown Richmond or local schools has a low BLOS score due to high traffic volumes and narrow lanes, staff could prioritize this corridor for improvements. Potential enhancements might include adding dedicated bike lanes, widening shoulders, reducing traffic speeds, or implementing traffic calming measures. Additionally, BLOS data could inform decisions on where to build shared-use paths or protected bike lanes, particularly in areas where survey feedback highlights safety concerns. By aligning these improvements with areas of high demand or strategic connectivity, Richmond can create a cohesive bicycle network that encourages more residents to choose cycling for daily trips.

TABLE 8: BLOS RATING BY PERCENTAGE OF RICHMOND ROADS

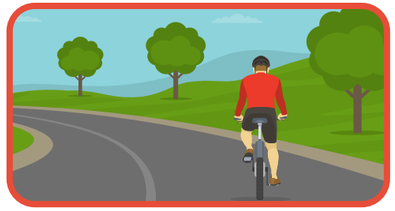
RATING	% OF TOTAL NETWORK
BLOS A	38%
BLOS B	40%
BLOS C	6%
BLOS D	2%
BLOS E	0%
BLOS F	14%

The below images illustrate the different levels of BLOS and where examples of them can be found in Richmond. Understanding the BLOS levels in the Village helps the planning team to better understand where safety interventions are most needed.

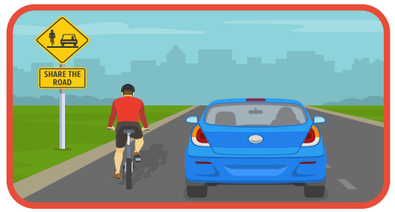
BLOS A: Offers wide bike lanes or dedicated paths, low traffic volume, and calm speeds, making it suitable for all types of bicyclists, including beginners. Ideal for families, children, and recreational cyclists.
Example: Commercial St. and Chukar Ct. are the only roadways in Richmond with a BLOS A rating.

BLOS B: Provides adequate bike lanes, moderate traffic, and reasonable speeds, comfortable for most cyclists. These routes feature designated lanes on roads with moderate flow and speeds, offering a safe and comfortable experience.
Example: Almost all of the neighborhood roadways in Richmond are BLOS B.

BLOS C: Features basic bike facilities, higher traffic volumes, and speeds, suitable for regular cyclists with some experience. These routes may have narrow lanes or sharrows and require more vigilance.
Example: Tryon Grove Rd. and Burlington Rd. have BLOS ratings of "C."



BLOS D: Minimal bike facilities, high traffic, and faster speeds, only advisable for experienced cyclists. These routes might have limited or no designated lanes, requiring cyclists to navigate alongside busy traffic.
Example: The only stretch of roadway in Richmond that has a BLOS D is IL 173, outside of Grace Lutheran Church.



BLOS E: Lacks specific cycling infrastructure, very high traffic and speeds, not recommended for less experienced cyclists. These roads are designed for vehicles with little consideration for cyclists, offering a challenging environment.
Example: No roadways in Richmond have a BLOS rating of "E."

BLOS F: Unsuitable for cyclists, with no bike facilities, extreme traffic, and high speeds, only navigable by the most experienced cyclists. These routes are highly dangerous due to heavy traffic and high speeds, requiring extreme caution.
Example: U.S. 12 and IL 173 (east of U.S. 12) have a BLOS rating of "F" throughout the entire community.

INTERSECTION LEVEL OF TRAFFIC STRESS

Intersection Level of Traffic Stress (LTS) is a framework used to evaluate cyclists' safety and comfort levels at intersections. This system categorizes intersections based on the amount of stress a bicyclist experiences, which helps in planning and implementing safer urban cycling infrastructures. LTS ratings are particularly valuable as they consider factors that directly affect a cyclist's experience, such as signalization, traffic speed, volume, and the presence of dedicated bicycling facilities. By assessing intersections through this lens, urban planners can identify critical areas that require improvements to enhance safety and encourage more people to choose cycling as a transportation mode.

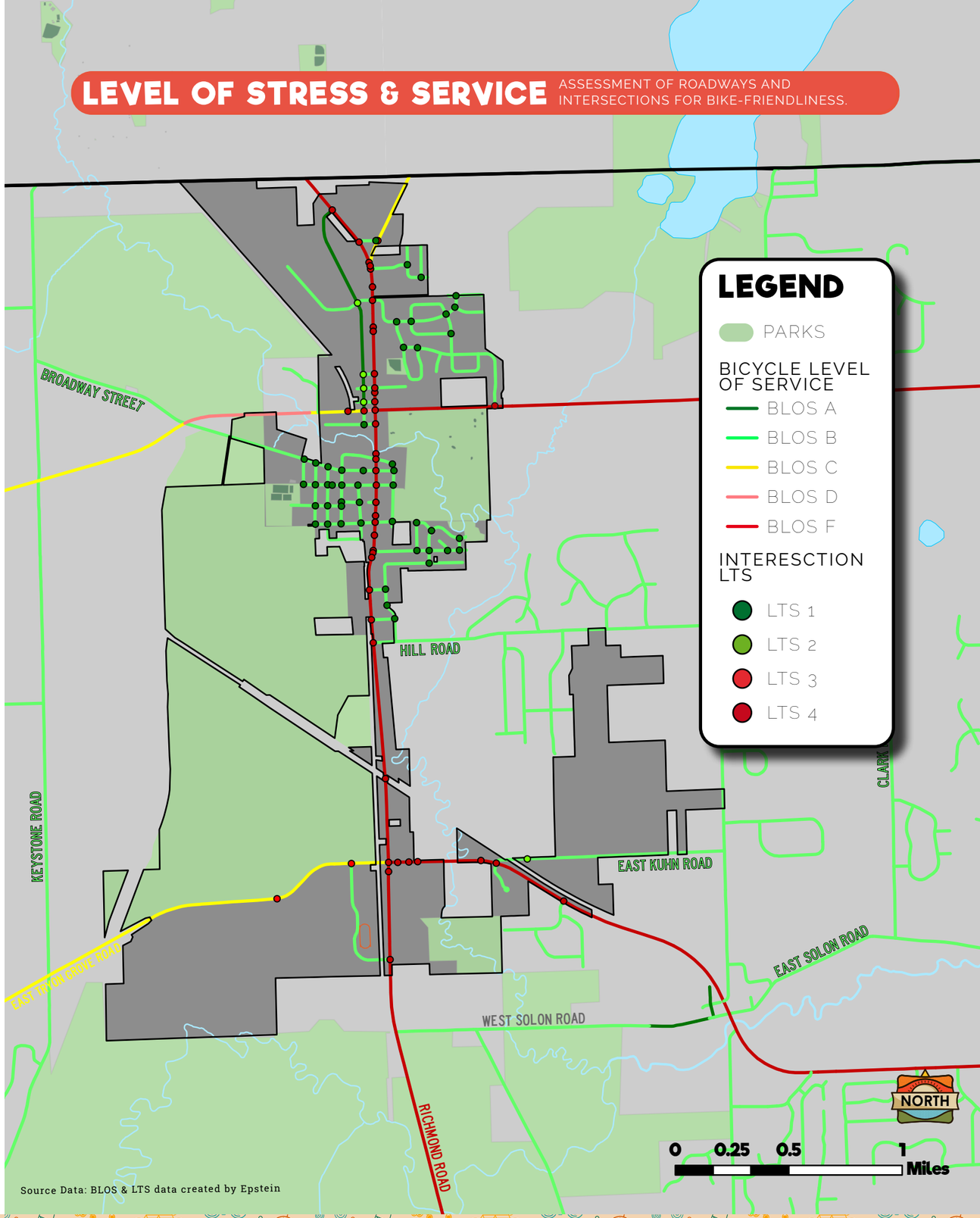
The LTS for intersections typically falls into four categories, ranging from LTS 1, which represents a low-stress environment suitable for all ages and skill levels, to LTS 4, which indicates a high-stress situation only suitable for experienced bicyclists. The specific formula for determining LTS can vary based on local conditions but generally includes inputs such as the presence of traffic signals, the number of vehicle lanes, vehicle speeds, and the presence or absence of bike lanes. This classification system helps prioritize intersections for upgrades. It can guide the allocation of resources toward making cycling a safer and more appealing option for everyone. The below images illustrate the different LTS ratings and where exmaples of them can be found in the Village.

LTS 1: Fully signalized; Low vehicle speeds (typically under 20 mph); Suitable for cyclists of all ages and abilities.
Example: Almost all neighborhood intersections are considered LTS 1.

LTS 2: Partially signalized or unsignalized with minimal cycling facilities; Moderate vehicle speeds (20-30 mph); Comfortable for most adult cyclists.
Example: The intersection of Commercial St. and Ami Dr. and the intersection of Commercial St. and Walnut Street are LTS 2.

LTS 3: Unsignalized intersections or minimal traffic calming; Higher vehicle speeds (30-40 mph); Suitable for experienced cyclists.
Example: The entrance to Richard Burton Community High School on Tryon Grove Road is LTS 3.

LTS 4: No signalization and high-speed traffic; Multiple lanes of traffic without dedicated cycling infrastructure; Recommended only for very experienced cyclists accustomed to traffic.
Example: Every intersection along U.S. 12, IL 173, and Tryon Grove Road is LTS



ROADWAYS

JURISDICTION

Richmond's roadway network consists of 27.76 miles. Not all of these roadways are under the jurisdiction of the Village. It is important to understand the different jurisdictions when planning for bicyclists and pedestrians. By knowing who operates and maintains roads, the Village can better plan for bicyclists and pedestrians by encouraging and engaging in intergovernmental coordination. Intergovernmental coordination is crucial in the planning of bicycle and pedestrian networks. This coordination allows for better connectivity within the Village and can help reduce any gaps that exist within a network.

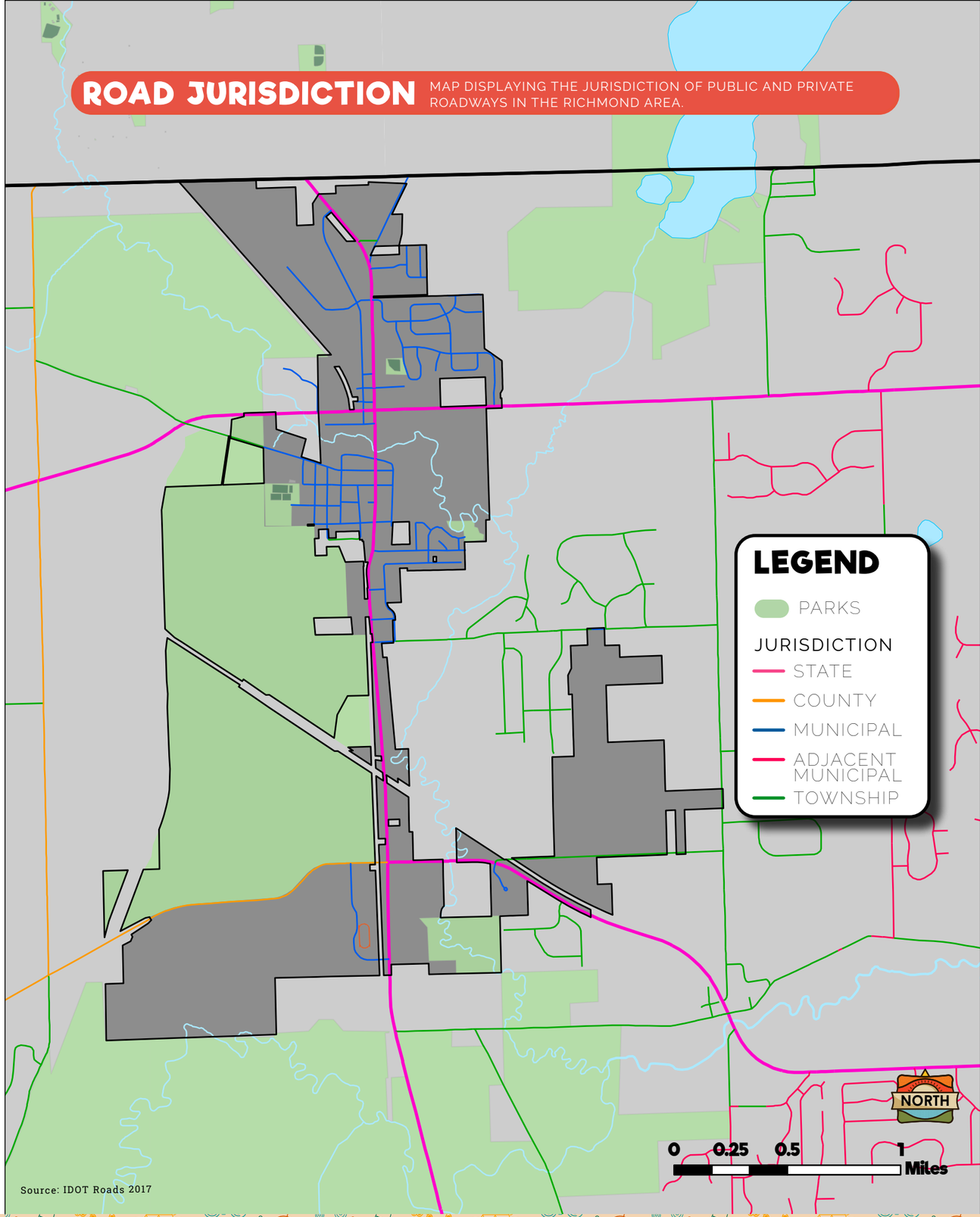
In addition to the Village, other entities that have roadway jurisdiction within Richmond include the State of Illinois, McHenry County, Richmond Township, and private owners. The majority of the roads, 12.24 miles (44%), are under Village jurisdiction. Richmond Township jurisdiction accounts for 9.04 miles (33%); the State of Illinois controls 5.38 miles (19%); McHenry County maintains 1.09 miles (4%); and .01 miles (0.1%) are under private control. The two busiest streets in Richmond, Kenosha St. (Rt. 173) and Main St. (U.S. 12), are both subject to Illinois jurisdiction.

Additionally, all of the roadways under Illinois jurisdiction in the Village are Strategic Regional Arterials (SRAs). Because of the level of service requirements on SRAs, IDOT has stricter guidelines when determining placement, spacing, and overall necessity for access points and traffic signals. Because these roadways are under Illinois jurisdiction and are SRAs, infrastructure improvements to these streets would require approval from the Illinois Department of Transportation (IDOT).

Although Richmond lacks jurisdiction over U.S. 12 and Rt. 173, intergovernmental coordination is still feasible. It is important for Richmond to focus on improvements to intersecting roadways under its jurisdiction while identifying potential enhancements to U.S. 12 and Rt. 173. These improvements can be proposed to IDOT as part of a collaborative effort.

TABLE 9: ROADWAY JURISDICTION

JURISDICTION	MILES	% OF TOTAL NETWORK
Village of Richmond	12.24	44%
Richmond Township	9.04	33%
McHenry County	1.09	4%
State of Illinois	5.38	19%
Private	0.01	0.1%
TOTAL	**27.76**	**100%**



KEY FINDINGS

The Village of Richmond features a compact community layout, allowing residents and visitors to easily access downtown and other neighborhoods to enjoy the various amenities. However, despite the proximity of these locations, there is still a disconnect between them. While residents and visitors can walk and bike within their neighborhoods, traveling elsewhere in the Village by these modes requires crossing busy state-owned routes, which often lack safe crossings.

Bicyclists: One of the Village's key strengths is the presence of the Prairie Trail, which runs north to south throughout the entire Village. This trail provides residents with a unique and continuous route for traveling within the Village. With the potential addition of several trails connecting in and around Richmond, the trail network could offer residents and visitors a more interconnected way of traveling. However, even with the existence of the Prairie Trail and the prospect of future trails around the Village, bicyclists in Richmond still lack safe crossings at busy state roadways.

Pedestrians: While the Village has sidewalk coverage in and around downtown and some neighborhoods, allowing residents and visitors to walk and roll, these areas are disconnected due to a lack of continuous sidewalk connections. Other neighborhoods and some of the busier roadways lack sidewalks altogether. Like bicyclists, pedestrians will encounter a disconnect when they eventually reach a busy state route, creating social barriers and safety hazards.

Intersections: The presence of stop signs at intersections within neighborhoods creates a safe environment. However, a lack of safe intersection crossings for bicyclists and pedestrians across busier state-run routes is a big hindrance for residents and visitors alike. While the Village has begun to address this with the addition of an RRFB and painted bulb-outs at the intersection of U.S. 12 and Broadway, other intersections lack adequate crossing infrastructure, such as crosswalks or stop control technology.

Roadways: The majority of roadways in Richmond are under Village jurisdiction. This gives the Village the freedom to make any desired and necessary changes to the roadways and their intersections. However, the two busiest roadways in the Village are under state jurisdiction. Any changes made to the roadways will need permission from the State. While this can make changing aspects of the roadways to make them safer and more walkable and bikeable difficult, it is not impossible. The Village will need to work with IDOT and other agencies who have jurisdiction in Richmond, in order to make the necessary changes to roads not under Village jurisdiction.

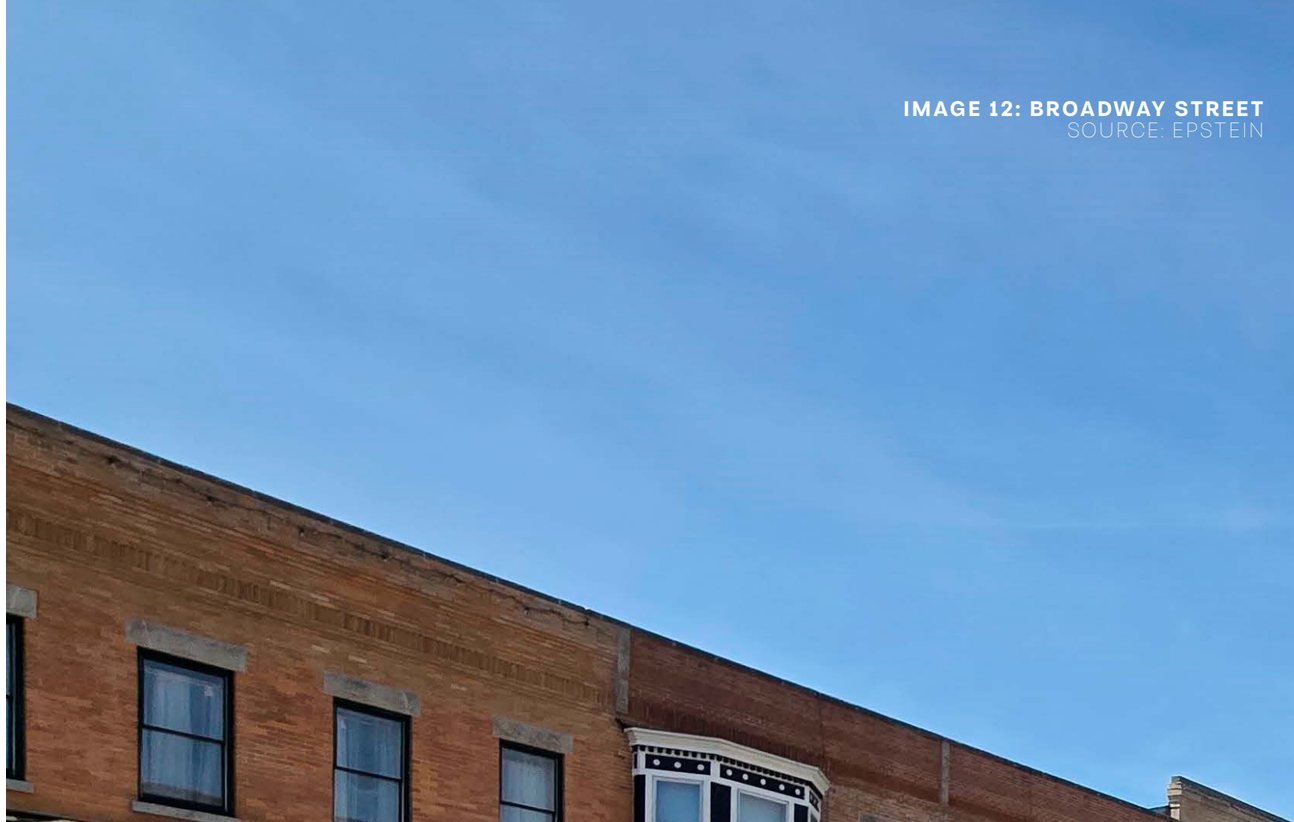


IMAGE 12: BROADWAY STREET
SOURCE: EPSTEIN

05
TOOLKIT

Relevant design guides, customized to meet the Village's unique needs, geography, and facility types, play an important role in establishing a cohesive framework for future bicycle and pedestrian infrastructure.

By aligning the plan with national, regional, and local standards, **the design guidance** supports the development of a safe, efficient, and inclusive transportation network. This alignment ensures that proposed improvements not only meet best practice guidelines but also address Richmond's community priorities, fostering a connected and accessible environment for all users.

IMAGE 13: PEDESTRIAN REFUGE ISLAND
SOURCE: STREET DESIGN MANUAL

DESIGN GUIDANCE

DESIGN GUIDANCE OVERVIEW

Incorporating design guides into a bicycle and pedestrian plan is crucial for ensuring that the facilities are not only functional but also safe, efficient, and inclusive. Design guides serve as comprehensive manuals that outline best practices, safety measures, and ergonomic designs that consider users of all ages and abilities. They provide a uniform set of guidelines that planners, engineers, and policymakers can refer to, thereby maintaining consistency in design and implementation across different projects. This standardization helps in creating a seamless, user-friendly experience, whether one is walking, cycling, or using other forms of active transport.

Notable design guides from the National Association of City Transportation Officials (NACTO) include the “Urban Bikeway Design Guide” and the “Urban Street Design Guide.” These guides offer detailed information on the latest street designs that balance the needs of all users and create more livable spaces. The American Association of State Highway and Transportation Officials (AASHTO) also offers critical resources such as the “Guide for the Development of Bicycle Facilities” and the “Guide for the Planning, Design, and Operation of Pedestrian Facilities.” These guides are based on research and case studies, and they provide a range of solutions from low-cost, short-term improvements to more comprehensive, long-term projects.

Utilizing these design guides in the planning process is an example of good planning practice for several reasons. First, it ensures that planners and engineers are relying on tried-and-true designs that have been vetted for safety and efficiency. Second, the guides offer solutions that can be tailored to specific local contexts—helping planners adapt best practices to the unique challenges and opportunities of their communities. Third, these guides often advocate for a multi-modal approach to urban transport, emphasizing how bicycles and pedestrians fit into the broader transportation ecosystem. By integrating these established design guidelines into Bicycle and Pedestrian Plans, cities and municipalities can significantly improve the quality and effectiveness of their active transportation networks.

TABLE 10: DESIGN GUIDES

GUIDE	AGENCY	DESCRIPTION	APPLICABILITY
Manual on Uniform Traffic Control Devices (MUTCD)	FHWA	National standard for traffic control devices used on all public roads in the U.S.	Designing or evaluating traffic control devices; ensuring uniformity and compliance with federal regulations.
Bikeway Selection Guidance	FHWA	Provides methodologies for selecting appropriate bicycle facilities based on factors such as traffic volume and speed.	Planning and designing new or upgraded bicycle facilities; evaluating existing facilities for potential improvements.
Public Rights-of-Way Accessibility Guidelines (PROWAG)	U.S. Access Board	Guidelines and standards to ensure that public rights-of-way are accessible to all; including those with disabilities.	Designing or renovating public rights-of-way; ensuring ADA compliance.
Small Town and Rural Multimodal Networks Guide	FHWA	Design guidance for small towns and rural communities to develelop transportation systems.	Developing or improving transportation networks in small towns or rural areas; designing multimodal facilities.
Bureau of Local Roads and Streets Manual	IDOT	Guidelines for the planning, design, construction, and maintenance of local roads and streets in Illinois.	Planning, designing, or maintaining local roads and streets; ensuring compliance with state standards.
Bureau of Design and Environment (BDE) Manual	IDOT	Comprehensive guide for the planning, design, and environmental considerations of Illinois transportation projects.	Designing or evaluating transportation projects in Illinois; ensuring compliance with state regulations.
AASHTO Guide for the Development of Bicycle Facilities	AASHTO	Guidelines for the planning, design, operation, and maintenance of bicycle facilities.	Designing, operating, or maintaining bicycle facilities; ensuring alignment with national standards.
NACTO Urban Bikeway Design Guide	NACTO	Innovative solutions for the planning and design of urban bicycle infrastructure. Includes best practices and guidelines.	Designing urban bicycle infrastructure; implementing user-friendly facilities.
Urban Street Design	NACTO	Strategies and design principles for creating functional and aesthetically pleasing urban streets.	Designing or renovating urban streets and public spaces. Creating multimodal and aesthetically pleasing areas.
Designing for All Ages and Abilities Guide	NACTO	Best practices and guidelines to create bicycling environments for all ages and skill levels.	Designing inclusive bicycle facilities; creating an inclusive bicycling culture.
Urban Bikeway Design Guide and Sets an All Ages & Abilities	NACTO	Cohesive approach integrating urban bikeway design principles for all ages and abilities.	Designing urban bicycle infrastructure for all ages and skill levels. Creating inclusive and safe urban environments.

TABLE 11: DESIGN TOOLBOX

FACILITY TYPE	DESCRIPTION	WHERE APPLICABLE	ROADWAY TYPE				MAX SPEED (MPH)	MAX AADT	COST PER MILE (USD)	MAINTENANCE REQUIREMENTS	KEY OPERATIONAL CONSIDERATIONS
			LOCAL	ARTERIAL	COLLECTOR	FREEWAY					
BICYCLE FACILITIES											
Marked Bicycle Route	A low-speed street prioritizing bicycle movement, marked by wayfinding signage.	Best for low-traffic commercial areas with limited ROW and a desire to preserve parking	✔				25	1,500	$20,000	Periodic sign and paint refreshment.	Wayfinding signage to direct bicyclists is required.
Bicycle Boulevard	A low-speed street prioritizing bicycle movement.	Best for residential and low-traffic areas.	✔				25	1,500	$30,000	Periodic sign and paint refreshment.	Traffic calming measures and wayfinding signage often required.
Biycle Lane	A portion of roadway designated by striping and signage for preferential or exclusive use of bicycles.	Useful on areterial and collector roads, schools, shops.	✔	✔	✔		35	15,000	$50,000	Regular paint upkeep, debris removal.	Paint, bollards, or other separators may be used.
Buffered Bicycle Lane	A bicycle lane with a buffer space separating it from the adjacent motor vehicle lane.	Ideal for higher-speed or higher-traffic roads.		✔	✔		35	11,000	$200,000	Regular paint upkeep, debris removal	Buffer can be enhanced with bollards, planters, or curb extensions.
Protected Bicycle Lane	A bicycle lane separated from motor traffic by physical barriers like curbs, planters, or parked cars.	Busy urban areas, especially downtown and commercial districts.		✔	✔		35	15,000	$650,000	Barrier maintenance, street cleaning	Requires regular maintenance and may necessitate changes in street cleaning.
Two-Way Cycle Track	A bicycle path that allows bicyclists to move in both directions and is separated from motor traffic.	Dense urban areas with limited road space.		✔	✔		35	20,000	$3,600,000	Signage upkeep, debris removal	Requires signage and signal phasing for side intersections.
PEDESTRIAN FACILITIES											
Sidewalk	A paved path for pedestrians alongside a road.	Universal applicability, often in residential and commercial areas	✔	✔	✔		N/A	N/A	$450,000	Regular surface inspections, ADA upkeep.	Regular maintenance and ADA compliance required.
BICYCLE & PEDESTRIAN FACILITIES											
Sidepath	A multi-use path located adjacent to a roadway, separated by a buffer or barrier.	Any area where extra separation from motor vehicles is desired.	✔	✔	✔		55	20,000	$1,300,000	Regular pathway upkeep, debris removal.	Requires clear delineation and may intersect with driveways.
Pedestrian Bridge	A bridge designed exclusively for pedestrians and, in some cases, bicyclists.	Over highways, rivers, or other barriers to pedestrian movement.				✔	N/A	N/A	$2,000,000+	Structural inspections, surface upkeep.	Accessibility, signage, and connection to other paths are key.

Not included: *Rail-with-Trail*

SELECTION GUIDANCE

SELECTION GUIDANCE OVERVIEW

The project team for Richmond's Bicycle and Pedestrian Plan embarked on a mission to create a custom selection guidance tool, drawing inspiration from the *Federal Highway Administration's (FHWA) Bicycle Selection Guidance* resource. Recognizing the need for a standardized approach to project scoping and bicycle facility selection, this innovative tool aims to eliminate subjectivity from the decision-making process.

At its core, this custom selection guidance tool (**Figure 7**) is designed to provide a systematic and objective framework for evaluating various factors when scoping projects and determining the appropriate facilities. By leveraging the valuable insights and principles found in the FHWA's resource, the tool equips Village staff with a reliable methodology that takes into account crucial variables such as traffic volumes, vehicle speeds, pedestrian demand, and roadway characteristics. This data-driven approach ensures that the selection of facilities aligns precisely with the unique conditions and requirements of each project, reducing ambiguity and promoting consistency in decision-making.

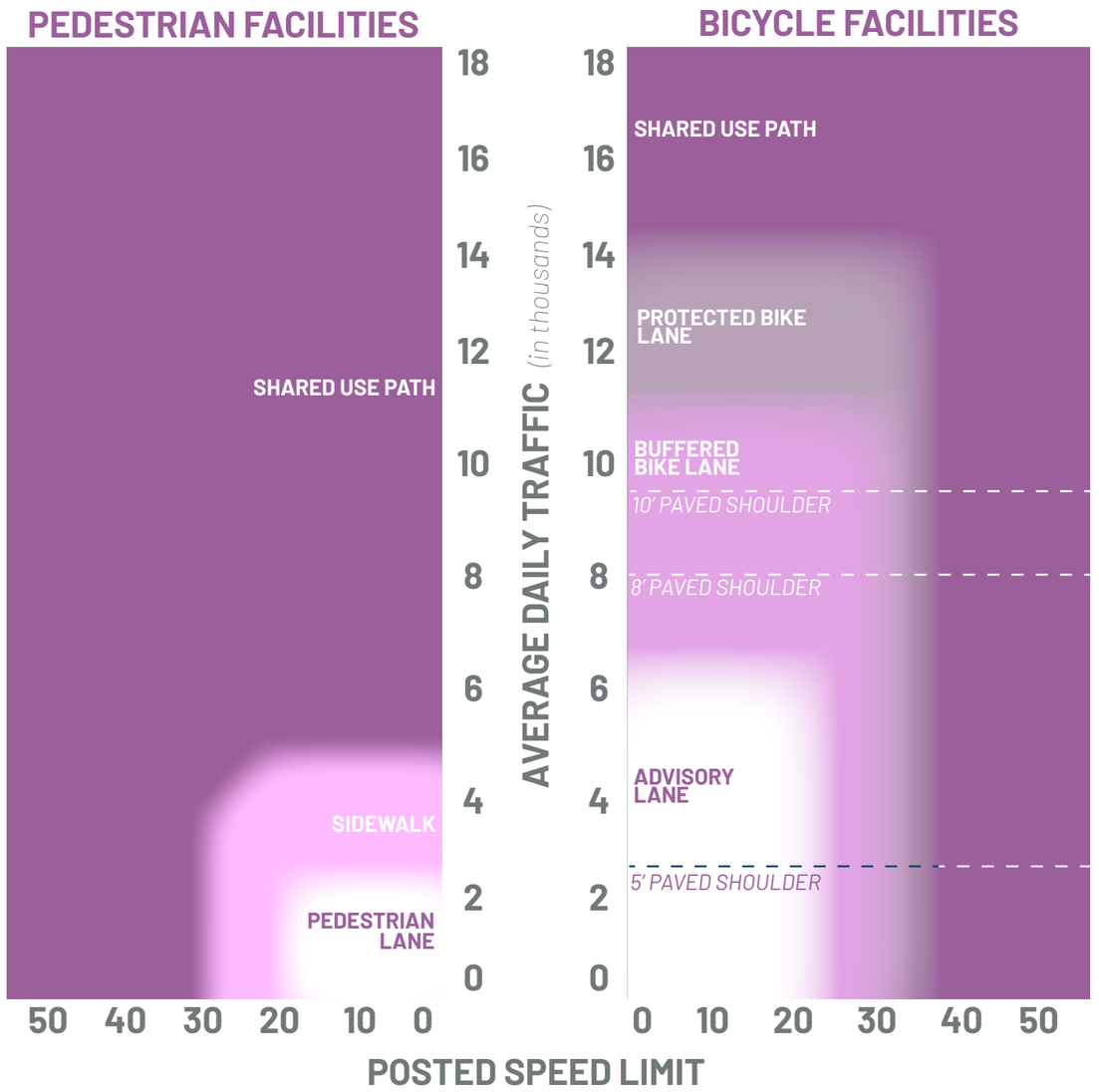
The development of a custom selection guidance tool demonstrates the project team's commitment to enhancing Richmond's bicycle and pedestrian infrastructure, prioritizing safety, accessibility, and active transportation. This tool empowers Village staff to make informed decisions by providing a comprehensive assessment of project-specific needs, ensuring the effectiveness and community responsiveness of the selected facilities. The integration of both bicycle and pedestrian facility selection guidance into the tool marks a significant advancement in the planning process, streamlining efforts to create a more bikeable and walkable city.

To further enhance the utility of the tool, a pedestrian facility selection guidance component was also incorporated. This addition ensures that Village staff can evaluate pedestrian infrastructure needs alongside bicycle facilities, promoting a holistic approach to mobility and accessibility in Richmond. By incorporating pedestrian facility selection guidance, the tool provides a comprehensive solution that addresses the diverse needs of all users, whether they are pedestrians or bicyclists. This inclusive approach underscores the Village's commitment to creating safe, accessible, and well-connected pathways for both modes of transportation. It empowers Village staff to consider a wide range of factors when scoping projects and selecting appropriate facilities, resulting in a more balanced and equitable transportation system.

The tool's effectiveness lies in its simplicity. Staff begin by determining the speed limit and Annual Average Daily Traffic (AADT) of a roadway segment under consideration for improvement or development. These two key variables are essential in evaluating the appropriate type of facility needed to ensure safe and efficient mobility for all users.

For instance, let's consider a scenario where Village staff is tasked with evaluating a local roadway with a speed limit of 25 mph and an AADT of 2,000 vehicles. Using the custom selection guidance tool, they would locate the intersection of these two parameters on the provided chart. This intersection point on the chart corresponds to the recommended bicycle and pedestrian facility types that align with the specific characteristics of the roadway. In this example, the tool might suggest the implementation of a 8' paved shoulder and a sidewalk on either side of the roadway, accommodating both cyclists and pedestrians. By relying on this data-driven approach, Village staff can ensure that their project aligns with the appropriate facility types.

FIGURE 9: SELECTION GUIDANCE



CROSSWALK COUNTERMEASURE SELECTION GUIDANCE

The guidance provides countermeasures to enhance visibility, reduce crashes, and address additional safety concerns. Table 12 categorizes the specific safety issues each countermeasure can address. Table 13 offers initial countermeasure options for different roadway conditions, but agencies should consider factors like surrounding development, pedestrian travel patterns, effectiveness, and costs when selecting countermeasures.

For multilane road crossings with high traffic volumes, marked crosswalks alone may not suffice, necessitating more substantial treatments. Table 13 advises agencies to pair marked crosswalks with other countermeasures based on specific conditions. It also encourages integrating multiple countermeasures, such as combining pedestrian hybrid beacons with advance stop markings and signs, or implementing road diets with pedestrian refuge islands and curb extensions, while considering roadway geometry and the Manual on Uniform Traffic Control Devices (MUTCD) guidelines.

TABLE 12: COUNTERMEASURES AT UNCONTROLLED PEDESTRIAN CROSSINGS

PEDESTRIAN CRASH COUNTERMEASURE FOR UNCONTROLLED CROSSINGS		SAFETY ISSUE ADDRESSED				
		CONFLICTS AT CROSSING LOCATIONS	EXCESSIVE VEHICLE SPEED	INADEQUATE CONSPICUITY/ VISIBILITY	DRIVERS NOT YIELDING TO PEDESTRIANS IN CROSSWALKS	INSUFFICIENT SEPARATION FROM TRAFFIC
1	High-Visibility Crosswalk	☑		☑	☑	
2	Raised Crosswalk	☑	☑	☑	☑	
3	Advance Yield Here to (Stop Here For) Pedestrian Sign	☑		☑	☑	☑
4	In-Street Pedestrian Crossing Sign	☑	☑	☑	☑	
5	Curb Extension	☑	☑	☑	☑	☑
6	Pedestrian Refuge Island	☑	☑	☑	☑	☑
7	Rectangular Rapid-Flashing Beacon (RRFB)	☑		☑	☑	☑
8	Road Diet	☑	☑	☑	☑	☑
9	Pedestrian Hybrid Beacon	☑	☑	☑	☑	
10	Parking Restriction on Crosswalk Approach	☑		☑	☑	
11	Improved Nighttime Lighting	☑		☑		

COUNTERMEASURES AT UNCONTROLLED PEDESTRIAN CROSSINGS

The Field Guide for Selecting Countermeasures at Uncontrolled Pedestrian Crossing Locations, developed by the Federal Highway Administration (FHWA), aids transportation professionals in enhancing pedestrian safety at uncontrolled crossings. It systematically assesses factors like traffic volumes, speeds, pedestrian demand, and roadway characteristics to recommend effective countermeasures. These measures include visibility enhancements, warning signs, markings, pedestrian islands, curb extensions, and warning beacons, each with its benefits and limitations.

TABLE 13: SELECTING COUNTERMEASURES AT UNCONTROLLED PEDESTRIAN CROSSINGS

ROADWAY CONFIGURATION	SAFETY ISSUE ADDRESSED								
	AADT <9,000			AADT 9,000 - 15,000			AADT > 15,000		
	<30 MPH	35 MPH	>40 MPH	<30 MPH	35 MPH	>40 MPH	<30 MPH	35 MPH	>40 MPH
2 Lanes *(1 Lane in Each Direction)*	**1,10,11** 2,4,5,6	**1,10,11** 5,6,7,9	**1,7,9, 10,11** 4,5,6	**1,10,11** 4,5,6	**1,10,11** 5,6,7,9	**1,7,9, 10,11** 5,6	**1,10,11** 4,5,6,7,9	Custom	Custom
3 Lanes with Raised Median *(1 Lane in Each Direction)*	**1,10,11** 2,4,5,6	**1,3, 10,11** 5,6,7,9	**1,3,7,9, 10,11** 5	**1,3, 10,11** 5,6	**1,3,7,9, 10,11** 5,6	**1,3,7,9, 10,11** 5,6	**1,3, 10,11** 4,5,6,7,9	**1,3,9, 10,11** 5,6,7	**1,3,9, 10,11** 5,6,7
3 Lanes with Striped Median or Left Turn Lane *(1 Lane in Each Direction)*	**1,10,11** 2,3,4,5, 6,7,9	**1,3, 10,11** 5,6,7,9	**1,3,9, 10,11** 5,6	**1,10,11** 3,4,5,6 7,9	**1,3,7,9, 10,11** 5,6	**1,3,9, 10,11** 5,6	**1,3,9, 10,11** 4,5,6,7	**1,3,9, 10,11** 5,6	**1,3,9, 10,11** 5,6
4+ Lanes with Raised Median *(2 or more Lanes in Each Direction)*	**1,3, 10,11** 5,6,7,8,9	**1,3, 10,11** 5,6,7,8,9	**1,3,9, 10,11** 5,6,8	**1,3, 10,11** 5,6,7,8,9	**1,3,9, 10,11** 5,6,7,8	**1,3,9, 10,11** 5,6,8	**1,3,9, 10,11** 5,6,7,8,9	**1,3,9, 10,11** 5,6,8,9	**1,3,9, 10,11** 5,6,8,9
4+ Lanes W/O Raised Median *(2 or more Lanes in Each Direction)*	**1,3, 10,11** 5,6,7,8,9	**1,3, 10,11** 5,6,7,8,9	**1,3,6,9, 10,11** 5,8	**1,3,6, 10,11** 5,7,8,9	**1,3,6,9, 10,11** 5,7,8	**1,3,6,9, 10,11** 5,8	**1,3,6,9, 10,11** 5,8	**1,3,6,9, 10,11** 5,8	**1,3,6,9, 10,11** 5,8

 # RECOMMENDED INFRASTRUCTURE
Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgement at a marked uncontrolled crossing location.

 # CANDIDATE INFRASTRUCTURE
Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.

1 HIGH-VISIBILITY CROSSWALK
2 RAISED CROSSWALK
3 YIELD/STOP LINE
4 IN-STREET PEDESTRIAN CROSSING SIGN
5 CURB EXTENSION
6 PEDESTRIAN REFUGE ISLAND
7 RRFB
8 ROAD DIET
9 PEDESTRIAN HYBRID BEACON
10 PARKING RESTRICTION ON CROSSWALK APPROACH
11 IMPROVED NIGHTTIME LIGHTING

06
CAPITAL IMPROVEMENTS

Planned upgrades to Richmond's intersections, bicycle routes, and pedestrian facilities are designed to address key safety concerns, enhance connectivity, and support the growing demand for safe, accessible transportation options. The focus includes upgrading intersections for safer crossings, expanding and improving bike routes to reduce stress for riders, and adding or enhancing sidewalks and pedestrian paths to create a more walkable community.

By prioritizing these infrastructure improvements, the plan aims to develop a well-connected network that makes walking and biking safer and more convenient throughout Richmond. These strategic investments will not only improve daily travel for residents and visitors but also contribute to a more vibrant, accessible, and healthy community.

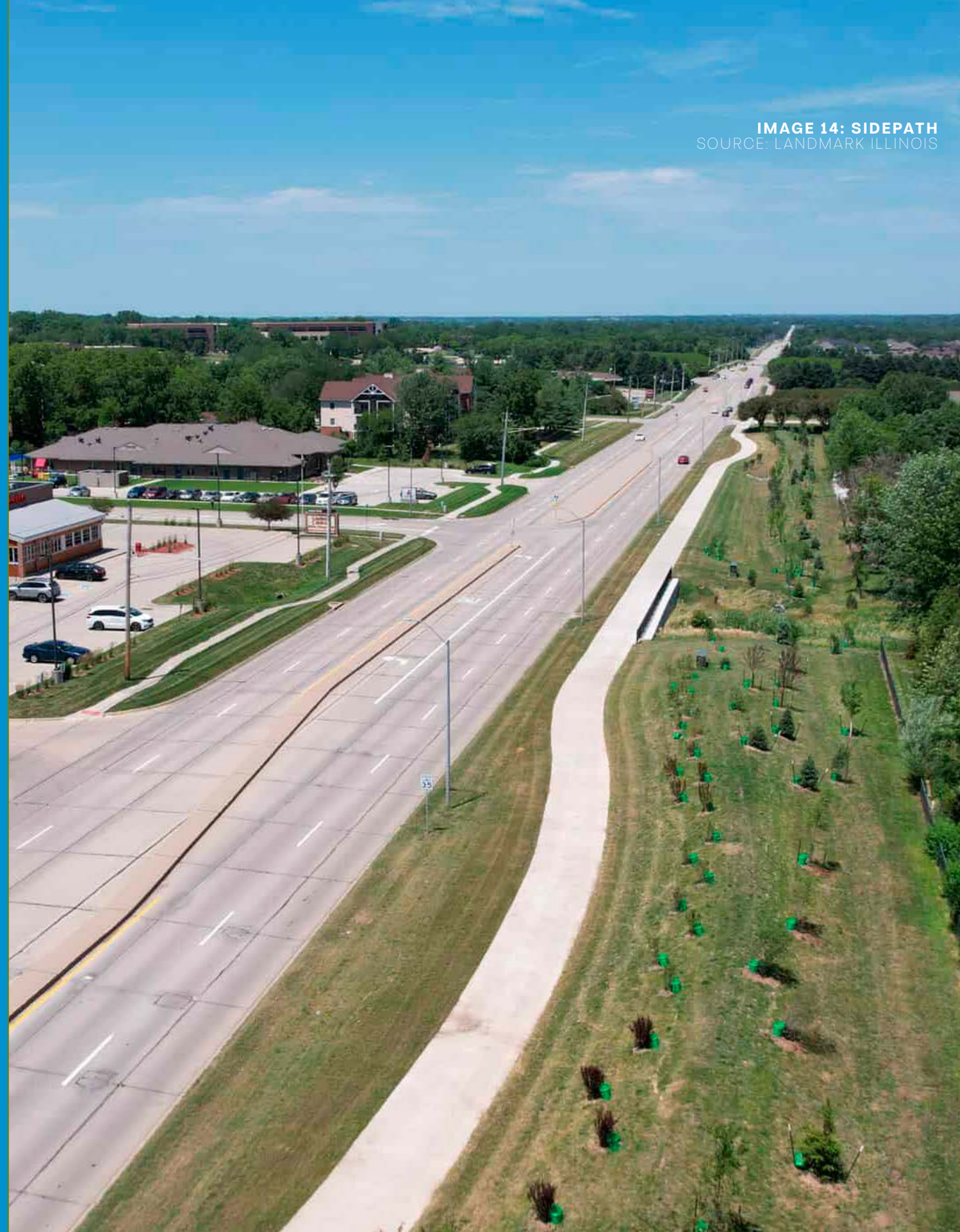


IMAGE 14: SIDEPATH
SOURCE: LANDMARK ILLINOIS

RECOMMENDATIONS

RECOMMENDATIONS OVERVIEW

Infrastructure recommendations are an important part of a bicycle and pedestrian plan. The facilities this plan recommends are not just proposed projects, they are the results of the planning process, the desires of the community and an embodiment of the plan's goals, in an effort to create a safer, healthier, and more sustainable bicycle and pedestrian network in the Village of Richmond. Bicycle facilities, pedestrian facilities, and intersection improvements are crucial to creating a network that is best for the community.

A comprehensive, holistic approach was taken to develop the recommendations in this plan. This strategy was crucial in making the appropriate recommendations, making sure they serve all residents, regardless of age and ability, and promote an accessible and inclusive environment.

The recommendations made in this plan help encourage more active transportation use for residents and visitors alike, offering many benefits to the community. By encouraging active transportation, the Village is actively promoting transportation modes which are more sustainable and environmentally friendly. Additionally, the creation of safer infrastructure for biking, walking, and rolling can contribute to healthier lifestyles and wellbeing for residents and visitors.

Improved facilities also offer economic and social benefits to the community as well. Improved bicycle and pedestrian facilities can attract tourism and support local businesses. By improving intersection safety, people could be able to cross roadways to other businesses, without a fear of being hit by a car. Creating a more walkable and bikeable Richmond also increases the opportunities to interact with other people, creating stronger communal ties.

Although these recommendations are key for creating a more active Richmond, there is no guarantee or mandate these projects will be constructed, and the implementation of these facilities depends on a variety of factors. These factors include feasibility studies, funding availability, community support, and support of the Village's long-term strategic goals. Additionally, not all of the proposed facilities are under Richmond's jurisdiction. Collaboration with other government agencies will be vital for the implementation of the recommended infrastructure.

INFRASTRUCTURE RECOMMENDATIONS

For bicycle facilities, this section recommends numerous projects which would have significant impacts on the Village: 3.6 miles of bicycle boulevards at an estimated cost of $105,000; 0.7 miles of marked bike routes at an estimated cost of $14,000; 1.5 miles of 8' paved shoulders at an estimated cost of $21,000; 0.3 miles of bike lanes at an estimated cost of $16,000; 17.3 miles of sidepaths at an estimated cost of 29,113,000; 7.9 miles of rail-with-trail at an estimated cost of 4,211,000; and 1.7 miles of trails at an estimated cost of $879,000.

The plan also recommends 15.8 miles of new sidewalks at an estimated cost of $8,743,000. Intersection improvement recommendations include Rectangular Rapid Flashing Beacons (RRFB), a pedestrian bridge, high visibility crosswalks, ADA-compliant curb ramps, pedestrian signals, pedestrian refuge islands, curb bumpouts, and a roundabout.

TABLE 14: OVERALL INFRASTRUCTURE RECOMMENDATIONS

FACILITY TYPE	EXISTING	PROPOSED	TOTAL COST
BICYCLE FACILITIES			
Bicycle Boulevard	0.0	3.6	$105,000
Marked Bike Route	0.0	0.7	$14,000
8' Paved Shoulder	0.0	1.5	$21,000
Bike Lane	0.0	0.3	$16,000
Sidepath	0.0	17.3	$29,113,000
Rail-with-Trail	0.0	7.9	$4,211,000
Trail	3.8	1.7	$879,000
PEDESTRIAN FACILITIES			
Sidewalk	10.0	15.8	$8,743,000
INTERSECTION FACILITIES			
Crosswalks	29	144	$611,520
Rectangular Rapid Flashing Beacon (RRFB)	2	4	$120,000
Curb Ramps	N/A	280	$1,120,000
Pedestrian Bridge	1	1	$651,880
Curb Bumpouts	N/A	4	$30,195
Roundabout	0	3	$20,735,000

BICYCLE FACILITIES

An important step when improving bikeability in a community is the implementation of new bicycle facilities. This section recommends 36 different bicycle facilities for Richmond. These recommendations make up 33 miles of new bicycle infrastructure that will help create a more safe and accessible biking experience for Richmond residents and visitors. The facilities were selected through a careful evaluation that looked at several different criteria such as connectivity to important amenities, cost effectiveness, and safety.

Key projects include the development of several sidepaths along major routes such as U.S. 12, IL 173, Tryon Grove Road, and Broadway Street, with the goal of connecting residents to schools, downtown Richmond, and the rest of the Village. A sidepath on U.S. 12 would run from the Prairie Trail and part of IL 173 to Swallow Ridge Drive, and would serve as a key connection for residents in the Pheasant Ridge and Sunset Ridge subdivisions who wish to travel to the trail, downtown, and schools without having to take a car. Another sidepath is recommended for U.S. 12, from U.S. 12/Tryon Grove Road to Kuhn Road This sidepath would run directly in front of the Highlands of Kensington apartments, creating a safe route for its residents to get to the Prairie Trail and high school, and ultimately downtown Richmond and the rest of the Village.

In addition to the sidepaths, the plan recommends several other facilities such as marked bike routes, an 8’ paved shoulder, bike lanes, trails, a rail-with-trail, and 3.6 miles of bicycle boulevards, as well as trail crossing improvements at seven different locations. These improvements include painted crossings, an RRFB, wayfinding signage, and amenities such as benches and bicycle repair stations.

TABLE 15: BICYCLE NETWORK IMPACTS

FACILITY	EXISTING MILEAGE	PROPOSED MILEAGE	TOTAL MILEAGE
Bicycle Boulevard	0.0	3.6	3.6
Marked Bike Route	0.0	0.7	0.7
8’ Paved Shoulder	0.0	1.5	1.5
Bike Lane	0.0	0.3	0.3
Sidepath	0.0	17.3	17.3
Rail-with-Trail	0.0	7.9	7.9
Trail	3.8	1.7	5.5
TOTAL	**3.8**	**33.0**	**36.8**

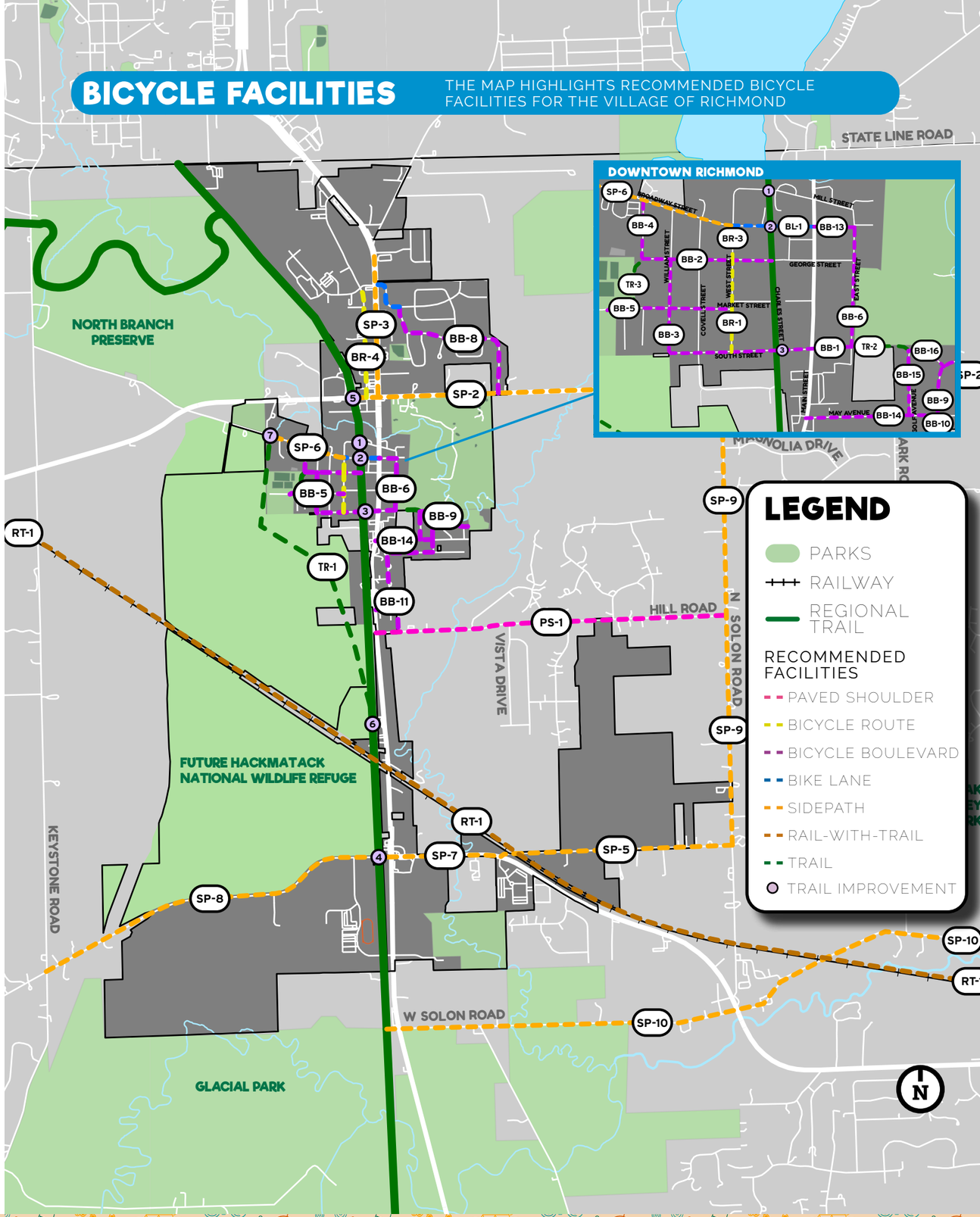


TABLE 16: BICYCLE FACILITY RECOMMENDATIONS

ID	NAME	FACILITY	FROM	TO	COST	JURISDICTION
PS-1	Hill Road	8' Paved Shoulder	U.S. 12	North Solon Road	$21,000	Township
BB-1	South Street	Bicycle Boulevard	William Street	East Street	$10,000	Municipal
BB-2	George Street	Bicycle Boulevard	McConnel Drive	Prairie Trail	$7,000	Municipal
BB-3	William Street	Bicycle Boulevard	George Street	South Street	$5,000	Municipal
BB-4	McConnel Drive	Bicycle Boulevard	Broadway Street	George Street	$3,000	Municipal
BB-5	Milwaukee Avenue	Bicycle Boulevard	Bennett Park	West Street	$7,000	Municipal
BB-6	East Street	Bicycle Boulevard	George Street	South Street	$5,000	Municipal
BB-7	East Street	Bicycle Boulevard	Broadway Street	George Street	$2,000	Municipal
BB-8	Partridge Tr/Pheasant Ln/Hunt Club Rd	Bicycle Boulevard	Golden Hawk Road	IL 173	$22,000	Municipal
BB-9	Nippersink Drive	Bicycle Boulevard	May Avenue	McConnel Park	$8,000	Municipal
BB-10	North Lane	Bicycle Boulevard	May Avenue	Valley Drive	$2,000	Municipal
BB-11	Valley Drive/Prairie Ridge Road	Bicycle Boulevard	Valley Drive	Hill Road	$16,000	Municipal
BB-12	Hunter Drive	Bicycle Boulevard	U.S. 12	Prairie Ridge Road	$3,000	Municipal
BB-13	Broadway Street	Bicycle Boulevard	U.S. 12	East Street	$2,000	Municipal
BB-14	May Avenue	Bicycle Boulevard	U.S 12	Nippersink Drive	$7,000	Municipal
BB-15	North Golf Avenue	Bicycle Boulevard	North Drive	May Avenue	$4,000	Municipal
BB-16	North Drive	Bicycle Boulevard	North Golf Avenue	Nippersink Drive	$2,000	Municipal
BL-1	Broadway Street	Bike Lane	West Street	U.S. 12	$8,000	Municipal
BL-2	Golden Hawk Road	Bike Lane	U.S. 12	Partridge Trail	$8,000	Municipal
BR-1	West Street	Marked Bicycle Route	George Street	South Street	$3,000	Municipal
BR-2	West Street	Marked Bicycle Route	Broadway Street	George Street	$1,000	Municipal
BR-3	Commercial Street	Marked Bicycle Route	Ami Drive	IL 173	$10,000	Municipal
RT-1	Wisconsin & Southern Railroad	Rail-with-Trail	Hebron Trail	Solon Mills Road	$4,211,000	Railroad

ID	NAME	FACILITY	FROM	TO	COST	JURISDICTION
SP-1	Tryon Grove Road	Sidepath	Prairie Trail	U.S. 12	$94,000	County
SP-2	IL 173	Sidepath	U.S. 12	County Line	$8,532,000	State
SP-3	U.S. 12	Sidepath	Swallow Ridge Drive	IL 173	$2,343,000	State
SP-4	IL 173	Sidepath	Prairie Trail	U.S. 12	$175,000	State
SP-5	Kuhn Road	Sidepath	U.S. 12	North Solon Road	$1,764,000	Township
SP-6	Broadway	Sidepath	450' West of Richmond Grade School Entrance	West Street	$482,000	Municipal
SP-7	U.S. 12	Sidepath	U.S. 12/Tryon Grove Road	Kuhn Road	$857,000	State
SP-8	Tryon Grove Road	Sidepath	Keystone Road	U.S. 12	$2,627,000	County
SP-9	North Solon Road	Sidepath	IL 173	Kuhn Road	$2,674,000	Township
SP-10	Prairie Trail Chain-of-Links Connector	Sidepath	Prairie Trail	State Park Road	$9,565,000	Township
TR-1	Hackmatack Trail	Trail	Broadway Street	Prairie Trail	$777,000.	Federal
TR-2	Hillview Subdivision Trail	Trail	South Street	North Drive	$56,000	Municipal
TR-3	Richmond Grade School Trail	Trail	George Street	Milwaukee Avenue	$46,000	Municipal

TABLE 17: TRAIL IMPROVEMENT RECOMMENDATIONS

ID	TREATMENT(S)	ID	TREATMENT(S)
1	Painted crossing	5	RRFB | Painted crossing
2	Painted crossing	6	Wayfinding signage | Benches | Bicycle repair station
3	Painted crossing	7	Wayfinding signage | Benches | Bicycle repair station
4	Pedestrian bridge		

PEDESTRIAN FACILITIES

This plan makes numerous recommendations for new sidewalks in the Village of Richmond. The primary objective of this section is to establish what is known as universal mobility or establishing sidewalks in every feasible location. By pursuing a goal of universal mobility, the Village will help make the community more accessible for residents and visitors of all ages and abilities. A total of 151 sidewalk projects have been recommended. Overall, these new sidewalks will cover 15.8 miles and will bring the Village's sidewalk total up to 25.8 miles.

The recommended sidewalks offer a strategy for a more sustainable, safer, and accessible pedestrian network in Richmond. No matter what destination people are traveling to, schools, shops, restaurants, commuting to work, or other amenities in the community, the recommended sidewalks will help create a more enjoyable and safe walking/rolling experience.

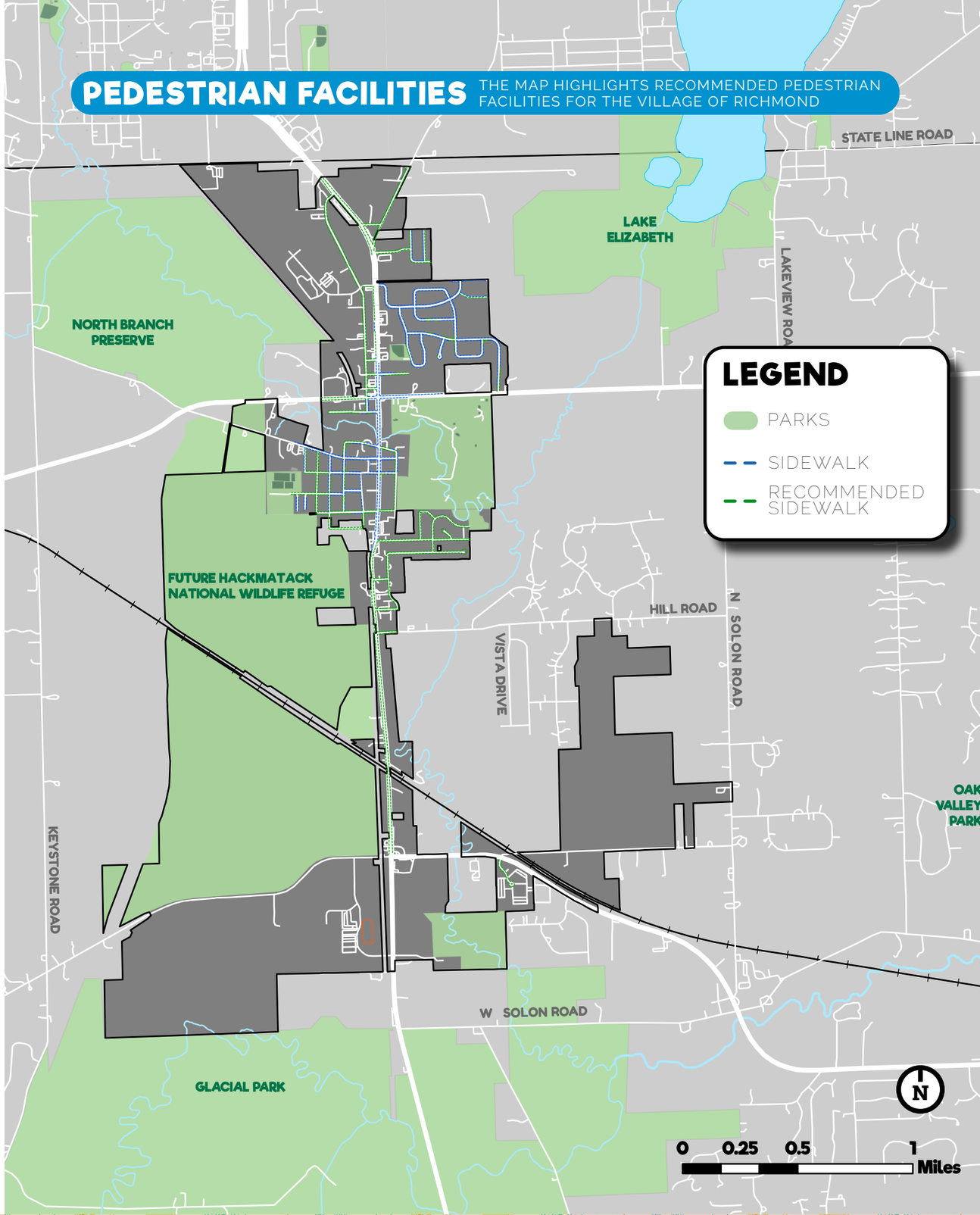
By implementing universal mobility, the increase of sidewalks in the Village has the ability to improve the overall quality of the community. Sidewalks promote a convenient, enjoyable, and safe walking environment for all residents and visitors. They help promote an active, healthier lifestyle and can help reduce vehicular traffic, ultimately lowering air pollution. Pedestrian-centered areas also help build community as pedestrians are more likely to have opportunities to interact with their neighbors, ultimately improving the overall well-being of the community, making Richmond a more welcoming place.

It is essential that all recommended sidewalks must be ADA compliant. Making sure sidewalks are accessible is important for a diverse range of residents and visitors, including people with disabilities, older residents, and parents with young children. A pedestrian network that does not meet the needs of everyone, does not meet the needs of the community. To have a truly effective pedestrian network, it must be accessible for all.

Sidewalks are not the only infrastructure improvement recommended for pedestrians. Other recommended pedestrian infrastrucure includes high visibility crosswalks and ADA compliant curb ramps (Table 19). High visibility crosswalks help provide drivers with an increased visibility of pedestrians using the facility, reducing the risk of a crash at the intersection. ADA compliant curb ramps provide pedestrians with an accessible route to access crosswalks and sidewalks, creating a more accessible and welcoming pedestrian network for people with disabilities, older adults, and parents with younger children.

TABLE 18: PEDESTRIAN FACILITY IMPACTS

FACILITY	EXISTING MILEAGE	PROPOSED MILEAGE	TOTAL MILEAGE
Sidewalk	10.0	15.8	25.8



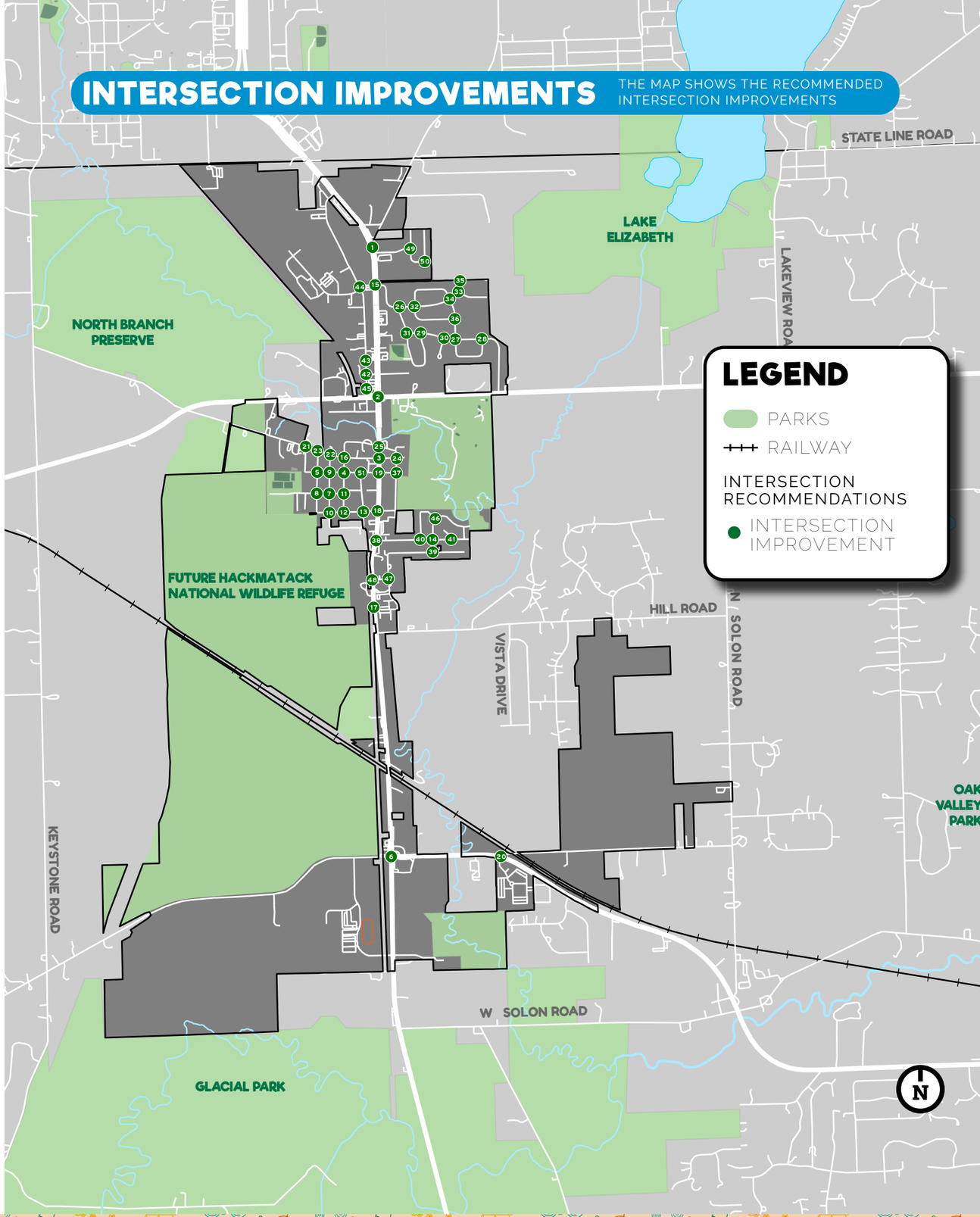
INTERSECTION IMPROVEMENTS

The implementation of bicycle facilities and sidewalks are not the only necessary means to improve safety and accessibility in Richmond. Having a safe way for pedestrians and bicyclists to cross roadways is crucial. With many residents voicing safety concerns about U.S. 12, improving crossings on it is important for residents and visitors to be able to access schools, businesses, and other parts of the Village.

Overall, this plan recommends 51 intersection improvements, as shown in Table 19. Intersection improvements are unranked and listed in no particular order. Included in these improvements are high-visibility crosswalks, ADA ramps, three roundabouts, a pedestrian bridge over U.S. 12 by Village Hall, RRFBs, and pedestrian refuge islands. Additionally, the plan recommends restoring the wooden pedestrian bridge over the Prairie Trail, with raised planters in front of the bridge preventing cars from driving over it.

TABLE 19: INTERSECTION IMPROVEMENTS

ID	TREATMENT(S)	ID	TREATMENT(S)	ID	TREATMENT(S)
1	Roundabout	18	RRFB | Crosswalks (4) | ADA ramps (8)	35	Crosswalk | ADA ramps (2)
2	Crosswalks (4)	19	Crosswalks (4) | ADA ramps (8)	36	Crosswalks (3) | ADA ramps (6)
3	Curbed bump-outs	20	Roundabout	37	Crosswalks (2) | ADA ramps (4)
4	4-way stop | Crosswalks(4) | ADA ramps (8)	21	Crosswalk | ADA ramps (2)	38	Crosswalks (4) | ADA ramps (8)
5	4-way stop | Crosswalks (4) | ADA ramps(8)	22	Crosswalk | ADA ramps (2)	39	Crosswalks (3) | ADA ramps (6)
6	Roundabout	23	Crosswalk | ADA ramps (2)	40	Crosswalks (3) | ADA ramps (6)
7	4-way stop|Crosswalks (4) | ADA Ramps(8)	24	Crosswalks (3) | ADA Ramps (6)	41	Crosswalks (3) | ADA ramps (6)
8	Crosswalks (4) | ADA ramps (8)	25	Crosswalks (4) | ADA ramps (8)	42	Crosswalks (4) | ADA ramps (8)
9	Crosswalks (4) | ADA ramps (8)	26	Crosswalks (3) | ADA ramps (6)	43	Crosswalks (3) | ADA ramps (6)
10	Crosswalks (4) | ADA ramps (8)	27	Crosswalks (4) | ADA ramps (8)	44	Crosswalks (4) | ADA ramps (8)
11	Crosswalks (4) | ADA ramps (8)	28	Crosswalks (3) | ADA ramps (6)	45	Crosswalks (4) | ADA ramps (8)
12	Crosswalks (3) | ADA ramps (6)	29	Crosswalks (3) | ADA ramps (6)	46	Crosswalks (3) | ADA ramps (6)
13	Crosswalks (4) | ADA ramps (8)	30	Crosswalks (3) | ADA ramps (6)	47	Crosswalks (3) | ADA ramps (6)
14	Crosswalks (4) | ADA ramps (8)	31	Crosswalks (3) | ADA ramps (6)	48	Crosswalks (1) | ADA ramps (2)
15	RRFB (2) | Crosswalk | ADA ramps (2)	32	Crosswalks (4) | ADA ramps (4)	49	Crosswalks (3) | ADA ramps (6)
16	Crosswalks (4) | ADA ramps (8)	33	Crosswalks (3) | ADA ramps (6)	50	Crosswalks (3) | ADA ramps (6)
17	Pedestrian bridge | Crosswalk | ADA ramps (2)	34	Crosswalks (4) | ADA ramps (4)	51	Restore wooden pedestrian bridge | Raised planters



DOWNTOWN RICHMOND

Downtown Richmond is a focal point of the plan's recommendations, specifically Broadway Street and the Broadway Street/U.S. 12 intersection. This area serves as the heart of downtown Richmond and is home to numerous shops and restaurants. It is important to create a more bicyclist and pedestrian friendly environment in this area in order to promote safety, sustainability, community, and the local economy.

The plan recommends converting Broadway Street, west of U.S. 12, into a one-way westbound street. By converting Broadway into a one-way street, the Village would not only be able to reduce vehicle traffic on the street but would also be able to dedicate more space to pedestrians and bicyclists. Additionally, a one-way westbound street would eliminate drivers from having to turn onto U.S. 12, where visibility for turning drivers is limited, which creates a dangerous situation at the intersection.

The space that is reclaimed on Broadway Street would then be made more pedestrian friendly by widening the sidewalk on the south side of the street, creating more comfortable walkways for people. The wider sidewalks will also be able to accommodate more outdoor dining and seating.

Additional improvements include trees, lighting, a bike shelter, additional crossings, and space for oudoor vendors. Street parking will be reduced and visitors will be encouraged to use the recently expanded Village lot off Broadway Street.

Next, the plan recommends several improvements to the intersection of Broadway Street and U.S. 12. Many Richmond residents made comments about the unsafe nature of crossing U.S. 12., including many comments about the aforementioned intersection. The plan recommends converting the marked bulb-outs into permanent curb bumpouts. Currently, cars often drive through the marked bulb-outs, defeating their intended purpose and creating a less safe crossing environment. By installing curb bumpouts, pedestrians will be further protected as the curb bumpouts would prevent drivers from entering the space.

The third component to creating a more bicyclists and pedestrian friendly downtown is to make improvements to Stevens Park. The plan recommends several improvements to the park, including increased seating, more trees and shrubs along U.S. 12 to provide more privacy, and an increase in park programming. Park programming can include anything from yoga in the park, to farmers markets, to live music and food trucks.

Finally, Stevens Park is currently home to Richmond's memorial for veterans. The plan recommends relocating the memorial to a more suitable place. Currently the memorial is adjacent to U.S. 12 and people who come to pay their respects are disturbed by the noise from U.S. 12. By relocating the memorial to a quieter location, family members and other visitors can pay more respectful tributes.

IMAGE 15: STERLING, KANSAS
SOURCE: ADVENTURE CYCLING ASSOCIATION

CASE STUDY

A great example of a small town leveraging bicycling and pedestrian activity for economic development is **Sterling, Kansas**. With a population of just over 2,000, Sterling recognized that investing in active transportation could boost local commerce and attract visitors. The town installed bicycle racks, wayfinding signs, and a bike repair station at Sterling Lake, making it more accommodating for cyclists. Additionally, Rice County Economic Development secured a grant in 2018 to develop a countywide bicycle and pedestrian plan, focusing on making streets safer and more accessible for all users.

The financial impact of these improvements has been notable. Local businesses, particularly restaurants and shops near bike-friendly corridors, have reported increased foot traffic and sales as more visitors arrive by bike. A study conducted after the infrastructure upgrades showed a rise in downtown spending, with cyclists spending 20-30% more per visit compared to car travelers, as they tend to stop more frequently and support small businesses. Additionally, new businesses catering to outdoor recreation, such as bike rental and repair shops, have emerged, creating jobs and further stimulating the local economy. Sterling's investments have also increased tourism revenue, as the town has positioned itself as a cycling-friendly destination, attracting regional visitors and bicycle touring groups who contribute to local lodging and dining sectors. These efforts demonstrate how even small-scale investments in active transportation can yield substantial economic benefits for small towns.

FIGURE 10: BROADWAY STREET RENDERING

KEY PROJECTS

Alongside the projects in downtown Richmond, the plan recommends other key bicycle facilities in other parts of Richmond to better support connectivity throughout the Village.

1. IL 173/U.S. 12 - PRAIRIE TRAIL TO SWALLOW RIDGE DRIVE

The first recommendation is the construction of a 10' sidepath on IL 173 and U.S. 12. The sidepath would be from the Prairie Trail to Swallow Ridge Dr. It would first travel from the trail along the northside of IL 173 to the east side of U.S. 12, where it would travel north to Swallow Ridge Drive. The creation of the sidepath would fill a large gap in the Village's bicycle and pedestrian network. Currently, residents of the Pheasant Ridge and Sunset Ridge subdivisions are unable to safely travel outside of their neighborhoods via biking, walking, or rolling. Additionally, the plan recommends improvements for the intersection of Ami Dr and U.S. 12, by implementing high visibility crosswalks and an RRFB, giving residents a safe connection to the businesses on the west side of U.S. 12.

2. U.S. 12 - U.S. 12/TRYON GROVE ROAD TO KUHN ROAD

Another recommended project that is important in filling a large network gap is a sidepath on the south side of U.S. 12 in the southern section of the Village, travelling from the U.S. 12/Tryon Grove Road intersection to Kuhn Road. This sidepath would be constructed directly in front of the Highlands of Kensington apartments complex. Currently, there are no sidewalks in front of the apartment complex and with U.S. 12 being a busy roadway, the residents of the complex are lacking safe, accessible ways to bike, walk, or roll to the rest of the Village. The sidepath would serve this need and would help connect apartment residents to the Prairie Trail, giving them a safe route to the rest of the Village. Additionally, any students living in the apartments would be able to commute to Richmond-Burton Community High School without having to drive.

3. IL 173 - U.S. 12 TO COUNTY LINE

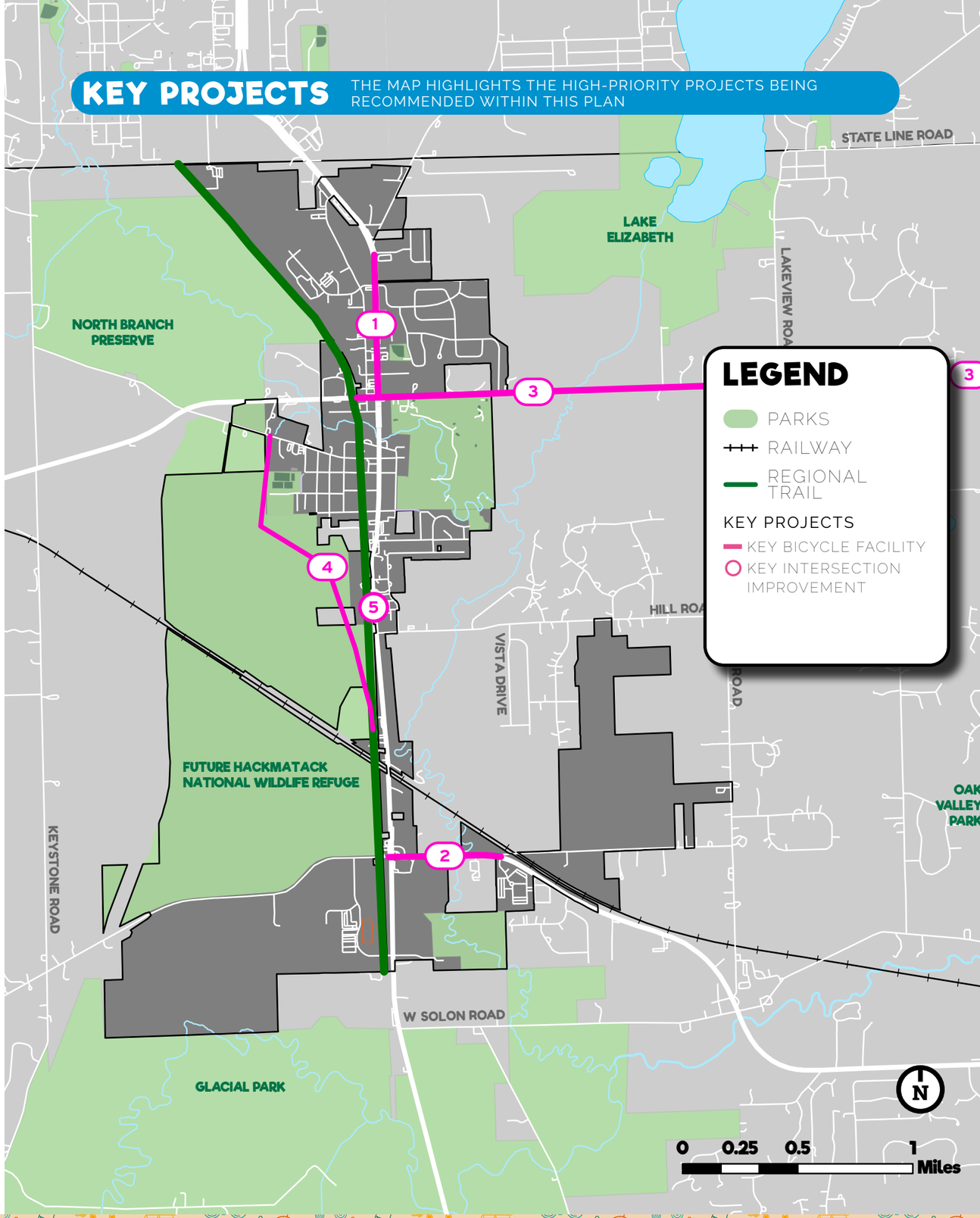
A better-connected bicycle and pedestrian network within Richmond is not the only goal of the plan. It is also important to improve connectivity with neighboring townships, municipalities, and the region as a whole. Continuing off of previous plans, this plan recommends a sidepath along the north side of IL 173, travelling from U.S. 12 to the county line. The proposed sidepath would serve as a regional connection for active transportation users, helping them safely connect to other trails and communities throughout the region.

4. HACKMATACK TRAIL

Building out the existing trail network in Richmond is another important step in creating a more connected bicycle and pedestrian network. In coordination with the future Hackmatack National Wildlife Refuge, the plan recommends the creation of a new trail that connects to the existing Prairie Trail. The trail would travel south from Broadway Street, near Richmond Grade School, through Hackmatack National Wildlife Refuge to the Prairie Trail. The creation of this trail would allow for more outdoor recreation and a new way to connect students and their families to the elementary school.

5. PEDESTRIAN BRIDGE AT HUNTER DRIVE

Throughout the planning process, residents continually said they would like safer ways to cross U.S. 12. While much of the plan focuses on the crossings further north in the Village, there also is a lack of crossings further south. South of downtown Richmond lacks not only safer ways to cross U.S. 12, but opportunities to cross it altogether. Currently, residents closer to Village Hall, such as the Hillview Subdivision, do not currently have easily accessible options to reach the Prairie Trail. To meet this need, the plan recommends constructing a pedestrian bridge over U.S. 12 at Hunter Drive, in order to help bicyclists and pedestrians safely cross U.S. 12 and access the Prairie Trail.



07

POLICIES & PROGRAMS

Policies and programs refer to the strategic approaches that support the successful implementation of the proposed plan. Policies play an essential role in shaping the built environment and ensuring that future development aligns with the goals outlined in the plan. Crafting strong policies contributes to long-term sustainability, safety, and accessibility.

Programs complement policies by fostering community engagement and encouraging the use of new and existing facilities. Programs are designed to promote awareness, build public support, and sustain momentum for the plan's initiatives. Education, outreach, and collaboration play an important role in ensuring that proposed improvements are not only built but are also embraced and effectively utilized by the community.

IMAGE 16: BIKE TOURISM
SOURCE: FAT TIRE TOURS

POLICIES & PROGRAMS

In addition to infrastructure, the adoption of strong active transportation policies and programs is important for facilitating new infrastructure and creating more accessible, sustainable, and healthy communities. These policies and programs help create active transportation infrastrucuture, ultimately promoting bicycling and walking as viable transportation options and creating a safer environment.

RECOMMENDED POLICIES AND PROGRAMS

The recommended policies and programs outlined in the Bicycle and Pedestrian Plan, detailed in the table below, serve as a comprehensive roadmap to improving bicycle, walking, and rolling in Richmond. While many of the recommended policies and programs fall under the Village's jurisdiction, several of the recommendations fall under a different agency's jurisdiction or another agency will need to be collaborated to implement. Other agencies include the McHenry County Conservation District (MCCD), Nippersink School District 2, Richmond-Burton District 157, and Naturally McHenry County.

TABLE 20: RECOMMENDED POLICIES AND PROGRAMS

POLICY/PROGRAM	TYPE	PRIORITY LEVEL	COST	IMPLEMENTING AGENCY
Vision Zero Policy	Policy	High	$	Village
Complete Streets Policy	Policy	High	$	Village
ADA Transition Plan	Policy	High	$$	Village
Age-Friendly City Policy	Policy	High	$	Village
Vehicle Ordinance	Ordinance	Medium	$	Village
Outdoor Dining Permitting	Policy	Low	$	Village
Bike Month Proclamation	Policy	Low	$	Village
Lower Speed Limits	Policy	High	$	IDOT
Wayfinding Signage Expansion	Program	Low	$	Village/MCCD
Walk/Bike to School Day	Program	Low	$	Village/School Districts
Walking Buses	Program	Low	$	Village/School Districts
Bike Rodeo	Program	Low	$	Village
Bicycle Safety School	Program	Medium	$$	VIllage/School Districts
Monthly Open Streets Celebrations	Program	Low	$$	Village/local businesses
Trail Lighting	Program	Medium	$$	MCCD
Bicycle Benefits Program	Program	Low	$	Village/Chamber of Commerce
Create a Bicycle Tourism Industry	Program	Low	$$$	Village

RECOMMENDED POLICIES

VISION ZERO POLICY

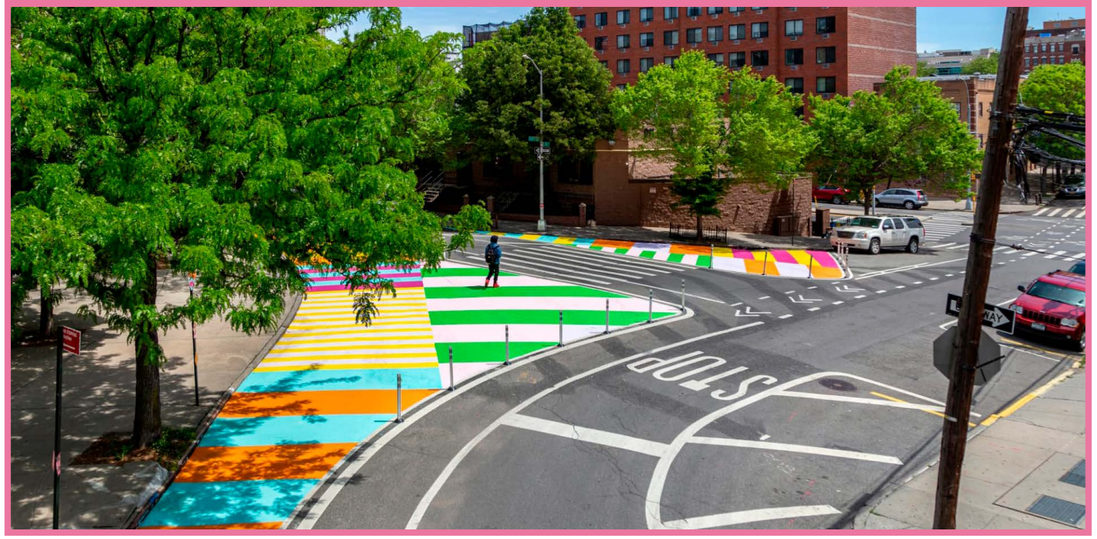
Implementing Agency	Village of Richmond
Level of Effort	Low
Timeframe	Less than 5 years
Time to Complete	0-6 months

Richmond should adopt a **Vision Zero Policy**, which establishes a commitment to eliminating traffic fatalities and severe injuries while prioritizing safe, equitable mobility for all. Vision Zero moves beyond traditional safety approaches by incorporating a Safe Systems framework, which acknowledges that human errors are inevitable and designs infrastructure to minimize their impact. Vision Zero focuses on designing streets and systems to prioritize human life and well-being, ensuring safety improvements that benefit residents of all ages and abilities.

The adoption of Vision Zero can bring significant benefits to the Village. Beyond saving lives, it contributes to creating a more livable, equitable community where walking, biking, and public transit are safe and convenient options. Reduced crash rates lead to economic benefits by lowering emergency response costs, healthcare costs, and property damage expenses. Vision Zero also creates opportunities to engage the community in identifying unsafe areas and participating in the decision-making process to address them, strengthening trust and collaboration between residents and local government.

Implementing a Vision Zero policy opens funding opportunities through the **Safe Streets for All (SS4A)** program, a federal initiative providing grants for safety action plans and infrastructure improvements. These funding mechanisms allow the Village to expand its resources for critical safety upgrades, creating a safer and more connected community.

FIGURE 11: VISION ZERO DESIGN



Source: Fast Company

COMPLETE STREETS POLICY

Implementing Agency	Village of Richmond
Level of Effort	Low
Timeframe	Less than 5 years
Time to Complete	0-6 months

Richmond should adopt a **Complete Streets Policy** to ensure future transportation projects consider the needs of all users—pedestrians, cyclists, transit riders, and motorists. This policy prioritizes the inclusion of multimodal elements, such as bike lanes, pedestrian crosswalks, and ADA-compliant sidewalks, into roadway design and construction.

The benefits of a Complete Streets Policy extend beyond improved mobility. Complete Streets create safer streetscapes by reducing conflicts between modes of transportation, encouraging walking and biking, and lowering vehicle speeds.

Moreover, adopting a Complete Streets Policy can unlock additional funding opportunities through regional and federal programs. For example, the **STP-Local funding through the Council of Mayors program** prioritizes projects that incorporate multimodal elements. By integrating Complete Streets into its projects, Richmond can position itself to secure funding for future infrastructure improvements.

Complete Streets Policies have been implemented in other municipalities within the region. The Village of Algonquin approved their Complete Streets Policy in 2014. The Policy recognizes the importance of multi-modal transportation and that pedestrians and bicyclists are important parts of the transportation network. The policy calls for the implementation of Complete Streets infrastructure into the existing transportation network. To see a draft policy see Appendix 9.

FIGURE 12: COMPLETE STREETS

Source: Broken Sidewalk Blog

ADA TRANSITION PLAN

Implementing Agency	Village of Richmond
Level of Effort	Medium
Timeframe	Less than 5 years
Time to Complete	6-18 months

An **ADA Transition Plan** would serve as Richmond's blueprint for ensuring the public right-of-way is accessible to all, including those with disabilities. This plan would identify barriers, such as noncompliant curb ramps and narrow sidewalks, and prioritize their replacement based on need and public input. While the Village is not required to have one, an ADA Transition Plan would demonstrate Richmond's commitment to inclusivity and ensures compliance with federal standards, such as the Americans with Disabilities Act (ADA) and Public Right-of-Way Accessibility Guidelines (PROWAG). Richmond would work with CMAP to develop the ADA Transition Plan, as a part of CMAP's technical assistance program.

The benefits of an ADA Transition Plan are far-reaching. Accessibility improvements increase independence for individuals with disabilities and create a more navigable environment for families with strollers, older adults, and those with temporary mobility challenges. Enhanced accessibility also benefits businesses, as accessible infrastructure encourages more people to visit downtown Richmond and participate in community events. By prioritizing inclusivity, Richmond positions itself as a welcoming and forward-thinking community.

FIGURE 13: ADA TRANSITION PLANNING

Source: SRF Consulting

BIKE MONTH PROCLAMATION

Implementing Agency	Village of Richmond
Level of Effort	Low
Timeframe	Less than 5 years
Time to Complete	0-6 months

Richmond should declare May as **Bike Month** to raise awareness about the benefits of bicycling and encourage residents to choose biking as a mode of transportation. The proclamation could include a variety of bike-centered events, such as group rides, bike rodeos, and educational programming. Additionally, Richmond could partner with local businesses and schools to host Bike to Work and Bike to School Days, promoting active transportation and engaging the entire community.

The benefits of a Bike Month Proclamation are significant. Increased biking reduces traffic congestion, lowers greenhouse gas emissions, and promotes public health through physical activity. By organizing bike-friendly events, Richmond creates opportunities for residents to connect, fostering a sense of community. Local businesses also benefit as cyclists are more likely to stop and shop, supporting the local economy. To see a draft policy see Appendix 9.

FIGURE 14: BIKE MONTH RIDE (ELGIN)

Source: Active Transportation Alliance

VEHICLE ORDINANCE

Implementing Agency	Village of Richmond
Level of Effort	Low
Timeframe	Less than 5 years
Time to Complete	0-6 months

Richmond could adopt a **Vehicle Ordinance** to clarify where different vehicle types, such as electric bikes, scooters, and other motorized devices, are allowed on village roadways. While the ordinance would not regulate the Prairie Trail or the future Hackmatack National Wildlife Refuge—both of which fall under separate jurisdiction—it could provide clearer guidance for users transitioning from these areas onto Richmond streets. This would ensure that as visitors leave the preserve or trail, they understand what modes of transportation are permitted on local roads and sidewalks, promoting a safer and more consistent travel experience. The McHenry County Conservation District (MCCD), which manages the Prairie Trail, takes a mode-agnostic approach to trail use, ensuring accessibility and safety for all users, regardless of their chosen mode of transportation. Rather than restricting specific types of vehicles, MCCD enforces a speed limit on the trail to maintain a safe environment where pedestrians, cyclists, and e-bike riders can coexist. In Illinois, e-bikes are classified as bicycles, which means they are permitted on trails where traditional bicycles are allowed, including the Prairie Trail. By implementing a speed limit instead of mode-specific restrictions, MCCD fosters an inclusive trail experience that accommodates evolving mobility trends while ensuring safety for all users.

The benefits of this ordinance would include improved safety and reduced conflicts between users on shared roadways and sidewalks within Richmond. Clear regulations would encourage responsible behavior and enhance the overall experience for residents and visitors alike. To see a draft policy see Appendix 9.

FIGURE 15: ELECTRIC BIKE

Source: Segway

OUTDOOR DINING PERMITTING

Implementing Agency	Village of Richmond
Level of Effort	Low
Timeframe	Less than 5 years
Time to Complete	0-6 months

Richmond could revise its **Outdoor Dining Permitting** process to allow businesses to create parklets by converting on-street parking spaces into outdoor seating areas. This policy would transform sections of downtown Richmond into vibrant, pedestrian-friendly spaces, fostering a sense of community and increasing foot traffic to local businesses.

The benefits of expanded outdoor dining are significant. Parklets enhance the visual appeal of the downtown area, creating a more inviting atmosphere for residents and visitors alike. They also support local businesses by increasing seating capacity and offering unique dining experiences that contribute to a lively and attractive downtown environment.

Nearby municipalities have seen great success with similar initiatives. In 2020, Cary launched Alfresco Alley on Spring Street, closing the street to automobile traffic every spring to accommodate expanded outdoor dining. Similarly, Arlington Heights introduced Arlington Alfresco in 2020, transforming a section of downtown into an outdoor dining destination from May to September.

FIGURE 16: OUTDOOR DINING

Source: Hospitality Net

AGE-FRIENDLY CITY POLICY

Implementing Agency	Village of Richmond
Level of Effort	Low
Timeframe	Less than 5 years
Time to Complete	0-6 months

An **Age-Friendly City Policy** would guide Richmond in making its transportation network, public spaces, and services more accessible to people of all ages. The benefits of an Age-Friendly City Policy extend beyond infrastructure improvements. By addressing the needs of older adults and young families, the Village fosters a sense of belonging and security, encouraging greater community engagement.

Age-friendly amenities also promote active lifestyles, which can lead to improved physical and mental health. The policy aligns with broader efforts to make Richmond a destination for all age groups, enhancing its appeal to residents and visitors alike. To see a draft policy see Appendix 9.

FIGURE 17: AGE-FRIENDLY BIKING

Source: As Easy as Riding a Bike

LOWER SPEED LIMITS

Implementing Agency	IDOT
Level of Effort	Low
Timeframe	Less than 5 years
Time to Complete	0-6 months

High speeds serve as a barrier to bicyclists and pedestrians who wish to travel throughout the Village. The Village should advocate to **lower speed limits** on U.S. 12 and IL 173 to 30 mph. Parts of U.S. 12 are already 30 mph, however speed limits reach 50 mph in some sections. IL 173 has a speed limit of 35 mph for the majority of the Village.

Lowering speed limits would provide safer passage for bicyclists and pedestrians. Even by lowering the speed limit on IL 173 by 5 mph, active transportation users in Richmond would experience a much safe environment.

The benefits of lower speed limits would be felt throughout the Village. Not only would existing active transportation users feel safer, but lower speeds could encourage more people to try biking or walking more frequently. Additionally, safer streets could encourage more parents to allow their children to walk or bike to school. Lowering speeds in the Village also creates a more welcoming environment for visitors as they travel throughout the community.

FIGURE 18: SPEED LIMIT SIGN

Source: Kiawah Island Community Association

RECOMMENDED PROGRAMS

WAYFINDING SIGNAGE EXPANSION

Implementing Agency	Village of Richmond, MCCD
Level of Effort	High
Timeframe	Less than 5 years
Time to Complete	6-18 months

Richmond should implement an **expanded wayfinding signage program** to guide pedestrians, cyclists, and drivers more effectively throughout the Village. Collaborating with the McHenry County Conservation District (MCCD), Richmond can align its wayfinding efforts with the upcoming MCCD wayfinding plan while developing customized signage for downtown Richmond.

Wayfinding signage provides several benefits for the community. For residents and visitors, clear signage improves ease of movement, encouraging exploration of downtown Richmond and nearby trail systems. This, in turn, enhances local economic activity, as visitors are more likely to discover and patronize shops, restaurants, and other businesses. Additionally, attractive and uniform signage contributes to Richmond's identity, creating a cohesive and inviting aesthetic.

FIGURE 19: WAYFINDING SIGNAGE

Source: Shoal Creek Conservancy

WALK/BIKE TO SCHOOL DAY

Implementing Agency	Village of Richmond, school districts
Level of Effort	Low
Timeframe	Less than 5 years
Time to Complete	0-6 months

Richmond should partner with local schools to host **annual Walk/Bike to School Days**, encouraging students to adopt active transportation. These events could include organizing "walking buses" or "biking buses," where groups of students travel together with designated adult supervisors. By coordinating with schools and parents, Richmond can ensure safe routes and participation from a broad range of students.

The benefits of Walk/Bike to School Days go beyond reducing car traffic near schools. These events promote physical health among students, teach safe pedestrian and bicycling habits, and instill a lifelong appreciation for active transportation.

FIGURE 20: RICHMOND WALK TO SCHOOL DAY

Source: Epstein

WALKING BUSES

Implementing Agency	Village of Richmond and school districts
Level of Effort	Medium
Projected Cost	$2,000 annually
Time to Complete	0-6 months

To encourage more students to walk to school, Richmond should organize **walking buses**, where groups of students walk designated routes with adult volunteers. These routes could be mapped to pick up children along the way, ensuring safe and supervised commutes. Pilot programs could focus on neighborhoods with high concentrations of families within walking distance of schools.

Walking buses offer numerous benefits, including promoting physical activity, reducing vehicle traffic near schools, and building a sense of community. They provide parents with peace of mind, knowing their children are traveling to school safely in a group. These programs reduce environmental impact by decreasing the number of cars on the road during peak hours.

FIGURE 21: WALKING BUS

Source: The Buzzer Blog

BIKE RODEOS

Implementing Agency	Village of Richmond, police department
Level of Effort	Medium
Timeframe	Less than 5 years
Time to Complete	0-6 months

Richmond should host an **annual bike rodeo** to teach children essential bicycle safety skills. In partnership with the local police department, the rodeo could include activities such as helmet fitting, learning hand signals, and practicing safe biking techniques in a controlled environment. The event could be held at a local park or school parking lot, making it easily accessible for families.

The benefits of a bike rodeo extend to both children and the community. For young riders, it provides critical education on how to bike safely and confidently, reducing the risk of accidents. Parents gain peace of mind knowing their children are better prepared to navigate the roads. The community benefits as a whole from increased awareness of bike safety, fostering a culture of respect between cyclists and drivers.

FIGURE 22: BIKE RODEO

Source: Nippersink School District 2

PROMOTING BIKE SAFETY CURRICULUM

Implementing Agency	Village of Richmond, police department, school districts
Level of Effort	High
Timeframe	No anticipated cost
Time to Complete	6-18 months

Integrating **bicycle safety into the school curriculum** is a proactive step toward creating a culture of safe and sustainable transportation in Richmond. By introducing age-specific, skill-appropriate lessons, students can learn the essential rules of the road, how to navigate traffic safely, and the importance of wearing helmets and using hand signals. Early education would focus on foundational skills, such as understanding traffic signs and maintaining balance, while older students would engage in more advanced topics, such as route planning and defensive biking strategies. Students would be encouraged to take Ride Illinois' Bike Safety Quiz, which is available online and offers quizzes specific for adults, children, motorists, and truck drivers.This comprehensive approach ensures that students grow up with the confidence and knowledge needed to bike safely.

Expanding bicycle safety education to high school driver's education programs ensures that future drivers also understand their responsibilities when sharing the road with cyclists. This dual approach benefits both cyclists and drivers, fostering mutual respect and reducing conflicts on the road. Students learning to drive would gain insights into cyclist behavior, such as the importance of maintaining a safe passing distance and understanding bike lanes.

FIGURE 23: BICYCLE SAFETY CURRICULUM

Source: Washington Bikes

MONTHLY OPEN STREETS CELEBRATIONS

Implementing Agency	Village of Richmond, local businesses and artists
Level of Effort	High
Timeframe	Less than 5 years
Time to Complete	0-6 months

Richmond should establish a **Monthly Open Streets program**, transforming a portion of downtown, such as Broadway Street, into a car-free zone for one day each month. These events would feature food trucks, live music, family-friendly activities, and programming that highlights the Village's vibrant community and businesses. By creating a space where residents and visitors can safely walk, bike, and gather, these celebrations would foster a sense of community and promote active transportation. Partnering with local businesses and organizations could provide unique experiences, such as artisan markets, yoga sessions, or interactive workshops, ensuring every event feels fresh and engaging.

The benefits of Monthly Open Streets are multifaceted. These events draw visitors to Richmond, boosting local businesses and showcasing the Village as a welcoming, lively destination. For residents, they create opportunities to connect with neighbors, enjoy outdoor activities, and discover new businesses in a pedestrian-friendly environment. Removing cars from the streets for these celebrations also reduces noise and air pollution, creating a more pleasant and sustainable downtown atmosphere. Moreover, they provide a platform for cultural expression, as local artists and musicians can showcase their talents to a diverse audience.

FIGURE 24: OPEN STREETS

Source: Strong Towns

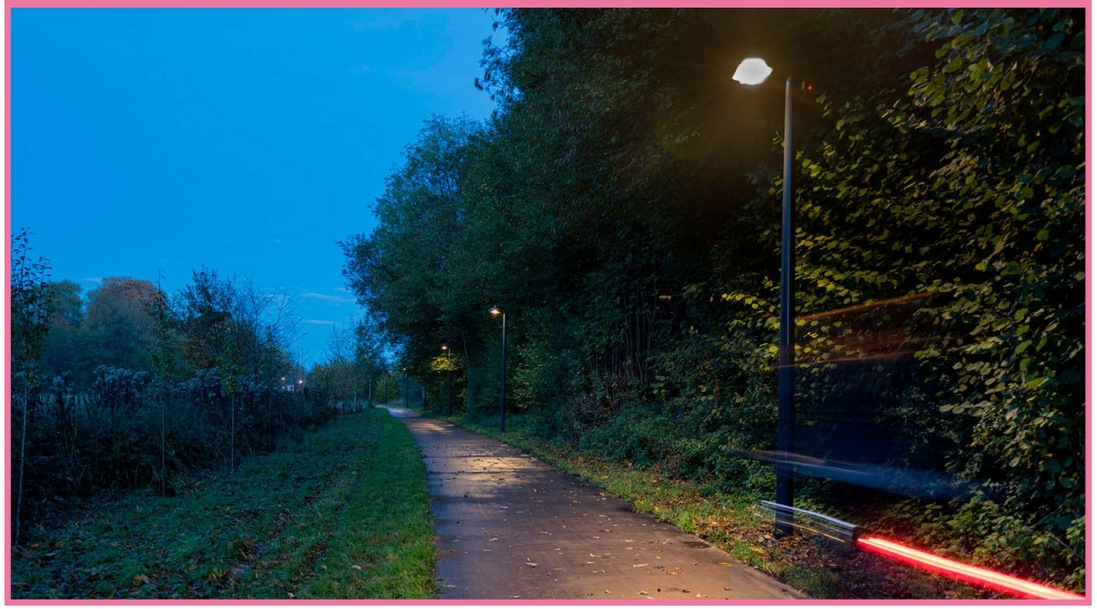
TRAIL LIGHTING

Implementing Agency	Village of Richmond, MCCD
Level of Effort	Medium
Timeframe	Less than 5 years
Time to Complete	6-18 months

Adding **trail lighting** along key sections of the Prairie Trail in Richmond is a critical improvement that enhances safety and accessibility for bicyclists and pedestrians. Well-lit trails create a more secure environment, particularly during early morning or evening hours, when natural light is limited.

By illuminating these pathways, Richmond, in cooperation with MCCD (owner of the Prairie Trail) encourages greater use of the trail during off-peak hours, making it a more viable option for commuters, recreational users, and visitors. Trail lighting also improves visibility for all users, reducing the risk of accidents and ensuring a welcoming, safe atmosphere for families and individuals alike.

FIGURE 25: TRAIL LIGHTING



Source: Schreder

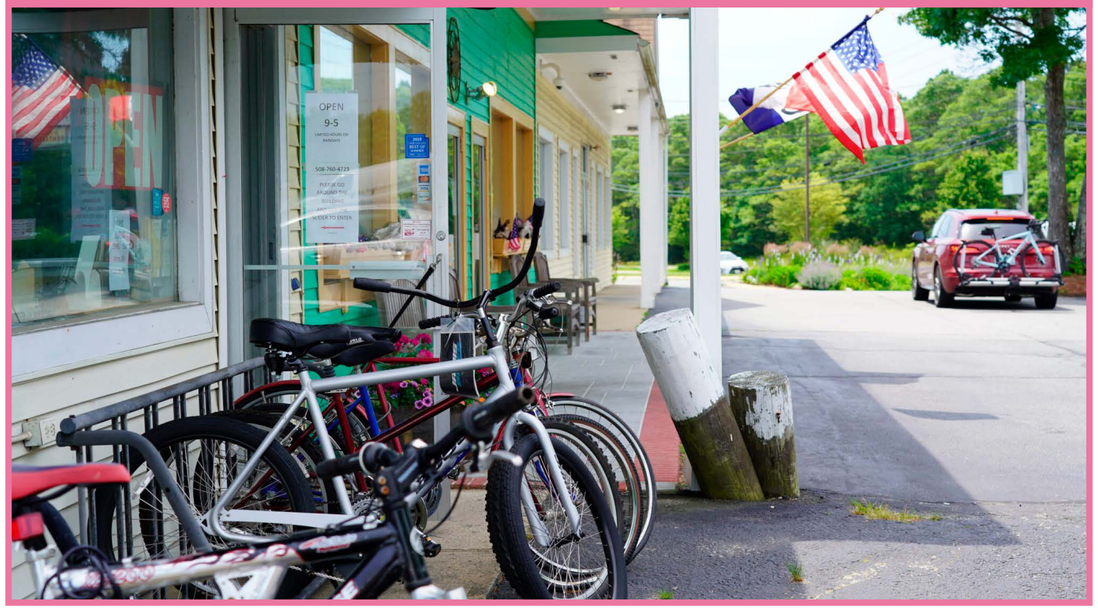
BICYCLE BENEFITS PROGRAM

Implementing Agency	Village of Richmond, local businesses, Naturally McHenry County
Level of Effort	Medium
Timeframe	Less than 5 years
Time to Complete	6-18 months

Richmond could establish a **Bicycle Benefits Program** to encourage cycling and support local businesses. This initiative could be developed in collaboration with Naturally McHenry County, the countywide visitors bureau, to align with existing efforts along the Prairie Trail and expand cycling opportunities in the region. Richmond could become part of a larger, countywide network of cycling-friendly communities, boosting visibility and participation. If a partnership with Naturally McHenry County isn't feasible, the Village could administer a program tailored specifically to its businesses, promoting cycling within the local context.

Bicyclists participating in the program would purchase a helmet sticker, which would grant discounts at participating businesses and incentivize stops at local shops, restaurants, and attractions. Stickers could feature unique designs that reflect Richmond's charm, further branding the Village as a bicycle-friendly destination. This program not only encourages more frequent visits from cyclists but also increases local business revenues by attracting a dedicated customer base that values sustainability and active transportation.

FIGURE 26: BICYCLE FRIENDLY BUSINESS



Source: Cape Light Compact

CREATING A BICYCLE TOURISM INDUSTRY

Implementing Agency	Village of Richmond, MCCD
Level of Effort	High
Timeframe	5-10 years
Time to Complete	18+ months

Creating a **bicycle tourism industry** in Richmond presents an exceptional opportunity to bolster the local economy, promote sustainable transportation, and enhance the Village's reputation as a regional hub for outdoor recreation. Bicycle tourism, which includes leisure riding, event participation, and destination-based experiences, contributes significantly to local economies, as demonstrated in similar regions. Richmond can attract cyclists by offering a range of amenities, services, and infrastructure improvements tailored to their needs.

Businesses could receive hospitality training to better accommodate cyclists, understanding their unique needs, such as secure parking, water refills, and healthy snack options. Additionally, the Village could create and distribute maps showcasing key amenities, including restaurants, grocery stores, bike repair stations, and nearby trails like the Prairie Trail. Promoting these services through Richmond's website and social media channels would further enhance visibility and attract visitors from across the region.

To ensure long-term success, Richmond must invest in bicycle-friendly amenities and accommodations. Secure, weather-protected bike parking should be installed throughout the downtown area and near key attractions. Complimentary items, such as bike pumps, coded locks, and water refill stations, can be made available at public locations or participating businesses. Encouraging establishments to provide high-calorie snacks like energy bars and packaged nuts can cater to cyclists' dietary needs.

In addition to physical improvements, Richmond should actively promote bicycle tourism through events and partnerships.

CASE STUDY

Located in Greene County, the City of Jefferson, Iowa is a small, rural city with a population of 4,100. The City serves as the terminus for the Raccoon River Valley Trail, an 89-mile multi-use trail that connects riders to not only other sections of the County, but also Des Moines, Iowa. While Jefferson does not have much in on street facilities throughout the City, Jefferson and Greene County have continued to invest in the Raccoon River Valley Trail, which has served as the focal point of bike tourism in the County, and as a way to attract bicycle tourists to Jefferson. Jefferson has invested in converting a former train station to be a part of the trail head, complete with bicycle parking, benches, and restrooms. The City also hosts Bike Around Greene County (BRAG), a 36.4 mile group ride that starts and ends in Jefferson. Jefferson has also been located on along the route for the Register's Annual Bike Ride Across Iowa (RAGBRAI). Businesses in Jefferson understand the impact of bicycle tourism in the community and have been welcoming to visiting bicyclists.

Greene County has seen a positive impact from bicycle tourism throughout the County. The **Iowa Bicycle Coalition** has estimated the economic impact from bicycle tourism at $2.2 million, with the retail industry experiencing an impact of $1.3 million. In 2024, it was estimated that bicyclists spent most of their money in Greene County on renting and buying bicycles, and local restaurants and bars. With Jefferson being the largest city in the County, making up nearly half of Greene County's population, they have directly benefited from these economic impacts.

A critical component of this initiative involves infrastructure upgrades and policy development. Passing a Complete Streets policy would ensure that future transportation projects integrate dedicated bike lanes, improved intersections, and traffic calming measures that enhance cyclist safety. Collaborating with neighboring communities to extend regional bike networks and apply for grants through programs like the League of American Bicyclists can secure funding for these improvements.

Finally, Richmond's commitment to becoming a bicycle tourism hub would create significant economic benefits for the community. Data from similar initiatives suggest that bicycle tourists often spend 40% more than motorized tourists due to their slower pace and preference for local businesses.

In order to make this bicycle tourism industry a reality in Richmond, numerous agencies and organizations will be needed as partners. From planning and community engagement, to providing amenities and hosting events to funding, multiple entities will be needed to achive these goals.

TABLE 21: BICYCLE TOURISM INDUSTRY PARTNERS AND ROLES

Village of Richmond	Lead agency for planning, community engagement, and policy adoption.
Local Businesses	Partners in providing amenities, hosting events, and engaging cyclists.
Naturally McHenry County	Collaboration on regional promotion and integration with the Prairie Trail network.
McHenry County Deparment of Transportation (MCDOT)	Partner on regional bike infrastructure planning.
Regional Advocacy Groups	Support for U.S. Bicycle Route designation and funding applications.
League of American Bicyclists	Guidance and potential funding opportunities for becoming a Bike Friendly Community.

FIGURE 27: RACCOON RIVER VALLEY TRAIL

Source: Travel Iowa

BICYCLE TOURISM INDUSTRY PROGRESS

The Village has already started the effort to become a bicycle tourism destination. The creation of the Bicycle & Pedestrian Plan shows the Village's commitment to creating a more welcoming environment for visiting bicyclists. Richmond is committed to implementing the recommendations in the plan to achieve this goal.

In September of 2024, the Village applied for a grant through IDOT's Illinois Transportation Enhancement Program (ITEP) to construct the recommended sidepath on U.S. 12, from Swallow Ridge Drive to IL 173 (See SP-3 in Table XX). If awarded the grant, the Village Board approved a resolution to fund the local match requirement. While the State has not issued grant awards for ITEP applications yet, the Village has begun to work towards implementing recommendations from this plan.

The Village has begun the process to implement bicycle friendly amenities in the Village. The Village plans to increase the number of bicycle racks in the Village, providing safe and secure locations for bicyclists to lock of their bike as they explore downtown. The Village also plans to order a bicycle repair station and new benches to be placed near the Prairie Trail on Broadway Street, creating an inviting location for bicyclists to rest and complete needed maintenance on their bikes.

After the positive reactions to the tactical urbanism demonstrations, the Village intends to continue to paint trail crossings and crosswalks throughout the Village, to increase visibility of bicyclists. The Village has also commissioned two murals in downtown Richmond and plans to commission more, in order to create a more welcoming downtown experience for residents and visitors.

The Village has also been involved with other developments in and around Richmond to improve the bicycle and pedestrian experience in the community. With the current plans by USFWS to convert land into the Hackmatack National Wildlife Refuge, a new destination for bicyclists is being created. While the planned amenities are currently unknown, USFWS plans to have multi-use trails for bicyclists and pedestrians to enjoy the area. In addition to the other amenities that will be provided, Hackmatack National Wildlife Refuge offers a unique experience for visiting bicyclists to travel to Richond to enjoy.

While the land for Hackmatack is in the process of being transferred to USFWS, the Village of Richmond has been working to make sure the Refuge benefits the Village as a whole. They have been working with USFWS and Friends of Hackmatack in selecting proper locations for trail heads in the Village, that will be of benefit to both bicyclists and the Village.

While creating a bicycle tourism industry in Richmond will take time, the Village has already begun to show its commitment to making it happen. Through the pursuit of infrastructure grants, implementing bicycle amenities and artwork downtown, and working with other agencies to create bicycle friendly destinations, the Village demonstrates their desire to create a community that is welcoming to bicyclists and pedestrians.

08

IMPLEMENTATION & FUNDING

The prioritization of projects, phasing improvements, and coordination with local, regional, and state partners is guided by a variety of strategies and resources to bring proposed projects from concept to completion. Identifying and navigating the diverse funding sources available to support infrastructure and non-infrastructure projects is essential for implementation. An overview of federal, state, regional, and local grant programs details typical award amounts, eligibility requirements, and local match obligations. It explains how communities can strategically combine multiple funding streams to support large-scale projects and how smaller, community-driven initiatives can access funding for quick wins.

IMAGE 17: SIDEWALK INSTALLATION
SOURCE: 3 GUYS CONSTRUCTION LLC

IMPLEMENTATION & FUNDING

The Village's strategy to efficiently implement the proposed network entails maximizing the use of external funding sources. The goal is to ensure that local, regional, and federal funding opportunities are fully leveraged to deliver projects as cost-effectively as possible. Since not all recommendations can be constructed simultaneously, the Village will prioritize projects based on funding availability, eligibility requirements, and alignment with community needs. Plan recommendations should be considered in the Village's capital improvement planning and budgeting process. Staying well-informed about current and upcoming funding opportunities is essential to strategically plan project timelines and phases, ensuring that high-priority improvements can move forward without placing undue financial strain on local resources.

Funding sources play a crucial role in turning proposed projects into reality. The Village's approach centers on understanding the full landscape of available funding—whether public or private, local or national—to optimize investments and secure necessary resources. Careful assessment of funding requirements, such as local match obligations and eligibility criteria, will guide decision-making, ensuring projects are feasible, sustainable, and aligned with broader mobility, accessibility, and safety goals. By remaining proactive and informed, the Village can take advantage of competitive grant programs, combining multiple funding streams when appropriate, to implement and maintain infrastructure improvements efficiently and effectively.

The funding sources described below, along with their eligibility requirements and typical project types, are further detailed in **Table 22** for easy reference and alignment with proposed improvements.

INFRASTRUCTURE FUNDING SOURCES

- **CMAQ (Congestion Mitigation and Air Quality Improvement Program):** Supports projects reducing congestion and improving air quality, such as trails and multimodal corridors. Award: $1–2M; 20% local match.
- **HSIP (Highway Safety Improvement Program):** Funds safety-focused projects that reduce severe crashes. Award: $2–5M; 10% local match.
- **ITEP (Illinois Transportation Enhancement Program):** Enhances transportation systems to support walking and biking. Award: Up to $2M; 50% local match for right-of-way acquisition.
- **IDNR Bicycle Path Program:** Assists local agencies in building and improving bike paths. Award: $100K–$200K; 50% local match.
- **Local Rail-Highway Crossing Safety Program:** Improves safety at rail-highway crossings. Award and match requirements vary.
- **OSLAD (Open Space Lands Acquisition and Development):** Funds acquisition and development of open spaces, including trails. Award: Up to $1.5M; 50% local match.
- **Railroad Crossing Elimination Program:** Eliminates at-grade rail crossings to improve safety. Award and match requirements vary.
- **Recreational Trails Program:** Funds development and maintenance of trails. Award: $200K; 20% local match.
- **RTA Access to Transit:** Improves first/last-mile transit access. Award: $150K–$1M; 20% local match.
- **STP-L (Surface Transportation Program - Local):** Supports large-scale transportation projects. Award: $150K–$4M; 0–20% local match based on need.
- **TAP-L (Transportation Alternatives Program - Local):** Funds projects aligning with the Regional Greenways and Trails Plan. Award: $100K–$1M; 20% local match.

INFRASTRUCTURE AND NON-INFRASTRUCTURE FUNDING SOURCES

- **AARP Livable Community Challenge:** Supports projects enhancing community livability and accessibility. Award: $500–$30K; no match.
- **RAISE (Rebuilding American Infrastructure with Sustainability and Equity):** Funds projects promoting equitable and sustainable infrastructure. Award and match vary by project size.
- **Reconnecting Communities Program:** Reconnects communities impacted by past infrastructure decisions. Award: Up to $100M; match varies.
- **Safe Routes to School (SRTS):** Funds infrastructure and educational projects promoting safe walking/biking to school. Award: Varies; local match may be required.
- **SS4A (Safe Streets and Roads for All):** Focuses on eliminating roadway fatalities and serious injuries. Award: $1M; 20% local match.

NON-INFRASTRUCTURE FUNDING SOURCES

- **RTA Community Planning Grant:** Supports transit-oriented development and access planning. Award: Varies; local match typically required.
- **Thriving Communities Program:** Assists underserved communities in accessing federal transportation funding. Award: Varies; no local match.
- **Transit Oriented Development Pilot Program:** Funds TOD planning efforts enhancing transit accessibility. Award: Up to $2M; 20% local match.
- **Unified Work Program (UWP):** Supports planning efforts addressing regional transportation priorities. Award: Varies; match requirements apply.

OTHER FUNDING SOURCES

There are several alternative strategies the Village can explore to support the implementation of proposed facilities:

- **Public-private partnerships (P3s)** can be a valuable approach, where private entities contribute funding or resources in exchange for naming rights, advertising opportunities, or shared maintenance responsibilities.
- **Developer contributions** and impact fees can also be leveraged, requiring developers to contribute to infrastructure improvements that support new developments, ensuring that growth aligns with community mobility and safety goals.

The Village can also explore local financing mechanisms:

- **Tax increment financing (TIF)** districts increase property tax revenues from rising property values in designated areas, which are then reinvested in public infrastructure improvements.
- **Bond referendums** can provide additional capital, allowing residents to vote on specific infrastructure investments.
- **Corporate sponsorships and community fundraising campaigns** can engage local businesses and residents in supporting projects that enhance quality of life.
- **Philanthropic grants** from foundations focused on sustainability, health, and community development may offer funding opportunities for active transportation and public space improvements.
- **Pilot projects and temporary installations**, such as tactical urbanism demonstrations, can be funded with minimal resources, providing proof of concept that can attract larger funding

TABLE 22: FUNDING SOURCES

PROJECT TYPE	BIKE PARKING	BRIDGES OR TUNNELS	EDUCATIONAL PROGRAMS	OFF-STREET BICYCLE FACILITIES	ON-STREET BICYCLE FACILITIES	PLANNING ACTIVITIES & TECHNICAL ASSISTANCE	SAFETY	SIDEWALKS	TRAFFIC CALMING	TRAFFIC SIGNALS
INFRASTRUCTURE FUNDING SOURCES										
Congestion Mitigation and Air Quality Improvement Program (CMAQ)	✓	✓	✓	✓	✓		✓	✓		✓
Highway Safety Improvement Program (HSIP)	✓	✓	✓	✓	✓		✓	✓	✓	✓
Illinois Transportation Enhancement Program (ITEP)				✓	✓		✓	✓	✓	
IDNR Bicycle Path Program				✓	✓					
Local Rail-Highway Crossing Safety Program		✓					✓		✓	
Open Space Lands Aquisition and Development (OSLAD)				✓		✓				
Railroad Crossing Elimination Program	✓						✓			
Recreational Trail Program				✓						
RTA Access to Transit	✓			✓	✓		✓	✓	✓	✓
Surface Transportation Program (STP-L)		✓		✓	✓		✓	✓	✓	✓
Transportation Alternatives Program (TAP)				✓	✓			✓		
INFRASTRUCTURE AND NON-INFRASTRUCTURE FUNDING SOURCES										
AARP Livable Community Challenge	✓	✓		✓	✓		✓	✓	✓	✓
Rebuilding American Infrastructure with Sustainability	✓	✓		✓	✓		✓	✓	✓	✓
Reconnecting Communities Program and Neighborhood Access and Equity Grant		✓		✓	✓	✓	✓	✓		✓
Safe Routes to School (SRTS)	✓	✓	✓	✓	✓		✓	✓	✓	✓
Safe Streets and Roads for All		✓	✓	✓	✓	✓	✓	✓	✓	✓
Non-Infrastructure Funding Sources										
RTA Community Planning Grant						✓				
Thriving Communities Program						✓				
Transit Oriented Development Pilot Program						✓				
Unified Work Program (UWP)						✓				

09
APPENDIX

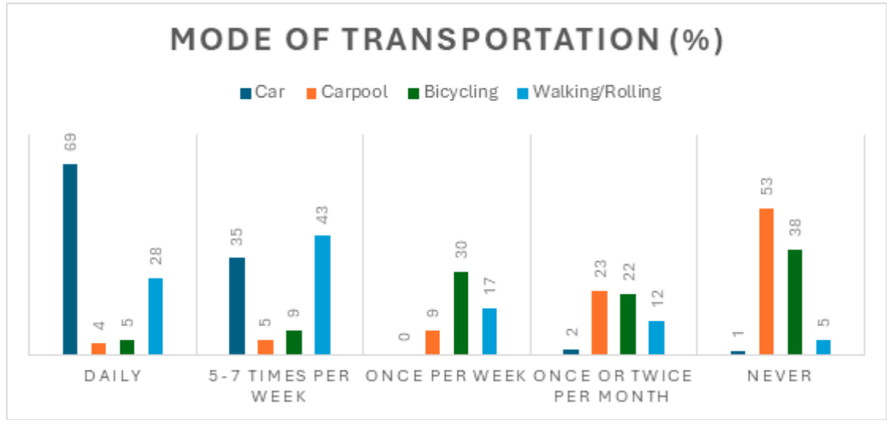
Supplemental information supports the main content of the plan, including the complete survey results and additional information on the proposed facilities. These comprehensive details ensure transparency and provide context for the recommendations presented in the plan, allowing stakeholders to review the underlying data and rationale guiding proposed improvements.

IMAGE 18: RICHMOND VILLAGE HALL
SOURCE: VILLAGE OF RICHMOND

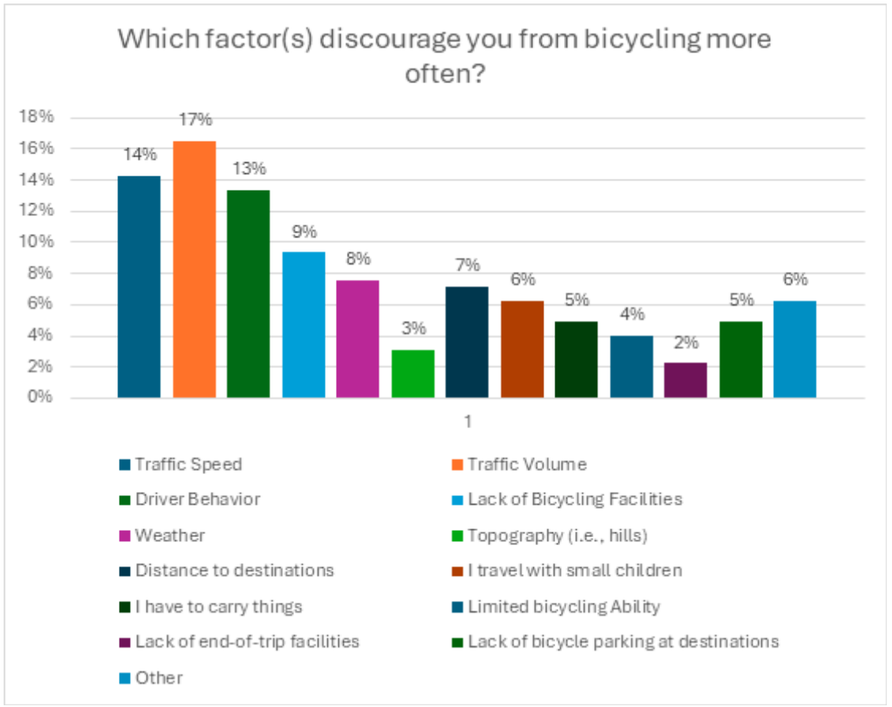
APPENDIX 1: PUBLIC SURVEY #1

PUBLIC SURVEY #1 RESPONSES

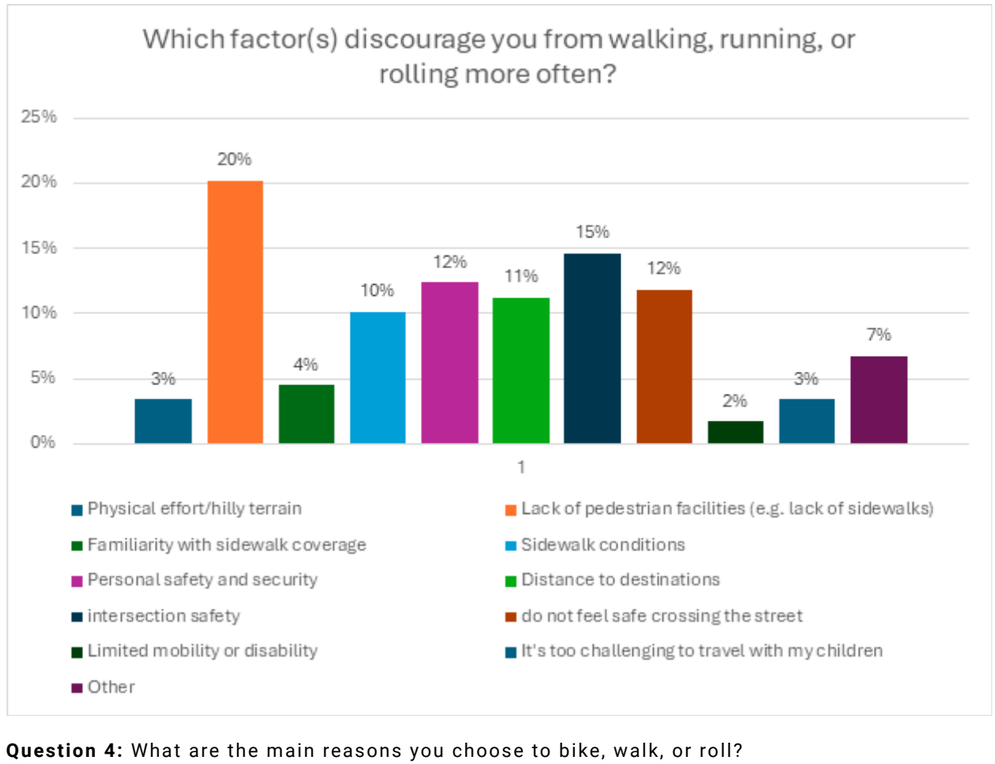
Question 1: How often do you use the following modes of transportation?



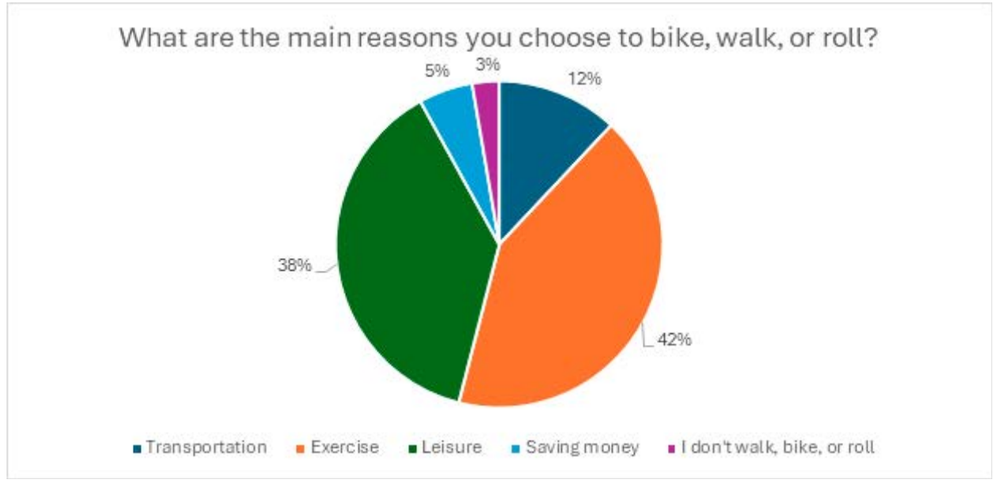
Question 2: Which factor(s) discourage you from bicycling more often?



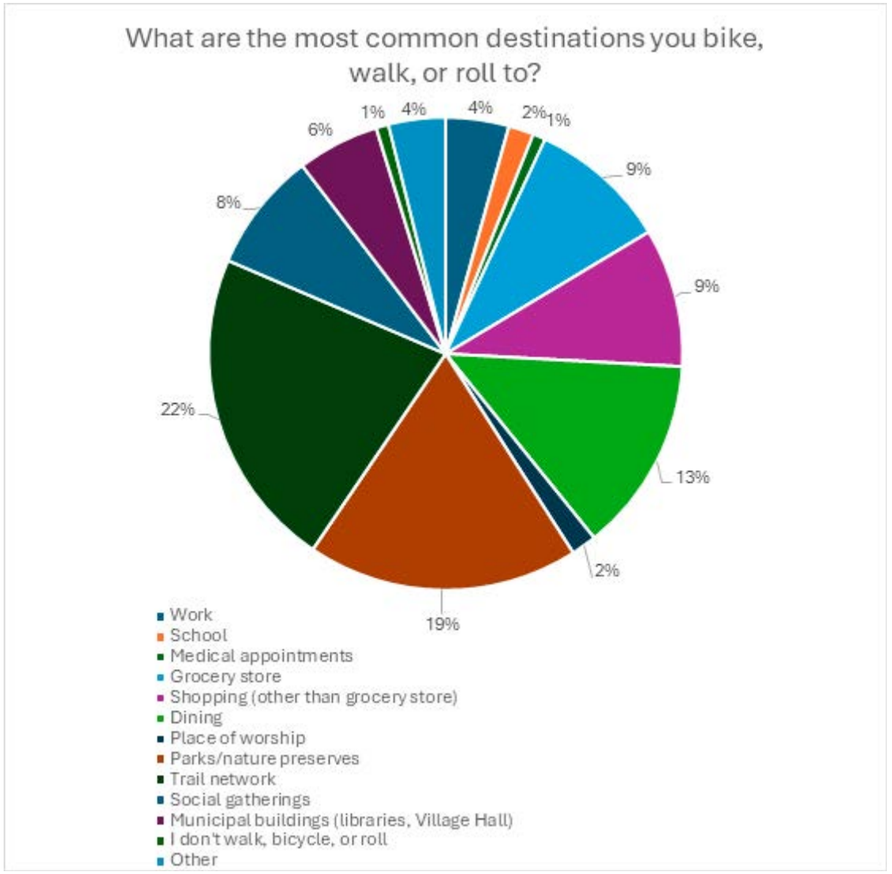
Question 3: Which factor(s) discourage you from walking, running, or rolling more often?



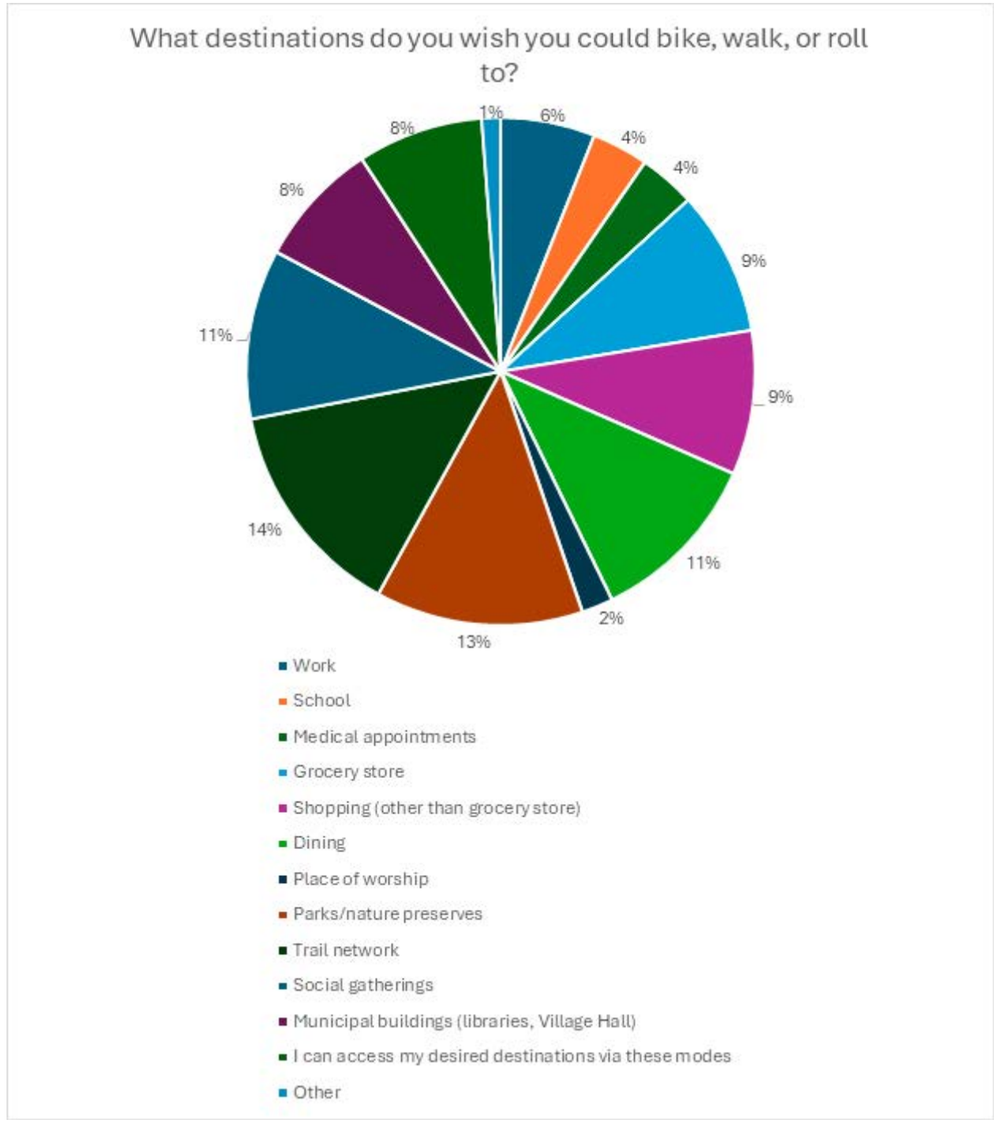
Question 4: What are the main reasons you choose to bike, walk, or roll?



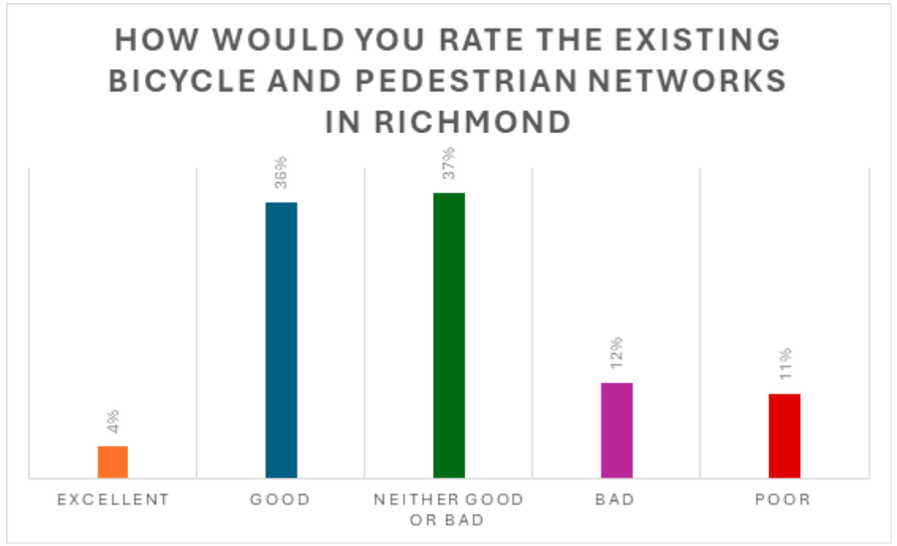
Question 5: What are the most common destinations you bike, walk, or roll to?



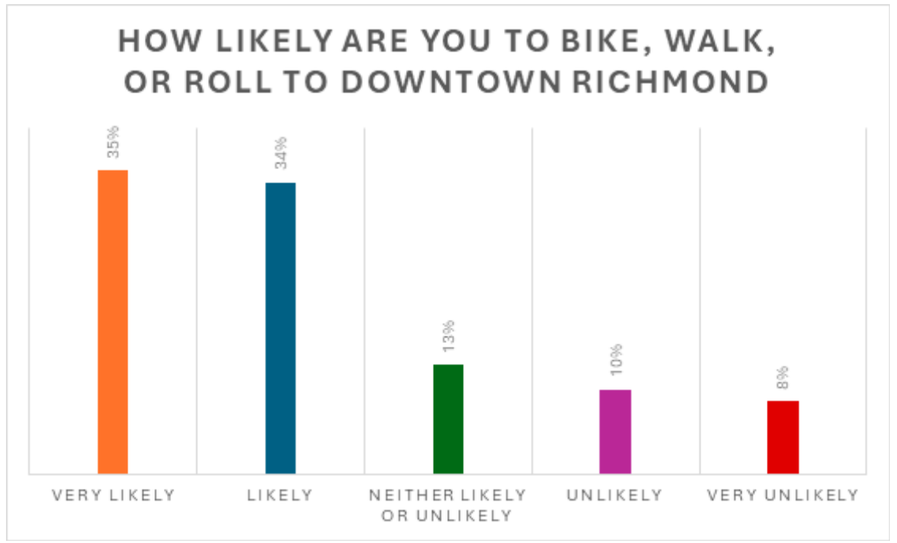
Question 6: What destinations do you wish you could bike, walk, or roll to?



Question 7: How would you rate the existing bicycle and pedestrian networks in Richmond?



Question 8: How likely are you to bike, walk, or roll to downtown Richmond?



Question 9: Explain the reason for your answer. See Table 23.

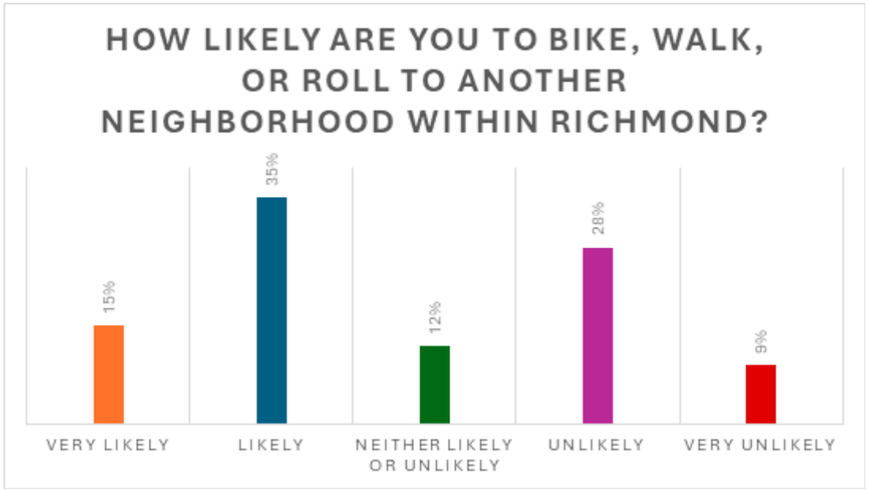
Question 10: How would you improve your ability to bike, walk, or roll to downtown Richmond from your neighborhood? See Table 23.

Question 11: How would you rate the bikeability and walkability of downtown Richmond?

Question 12: Explain the reason for your answer. See Table 23.

Question 13: How would you improve the bikeability and walkability of downtown Richmond? See Table 23.

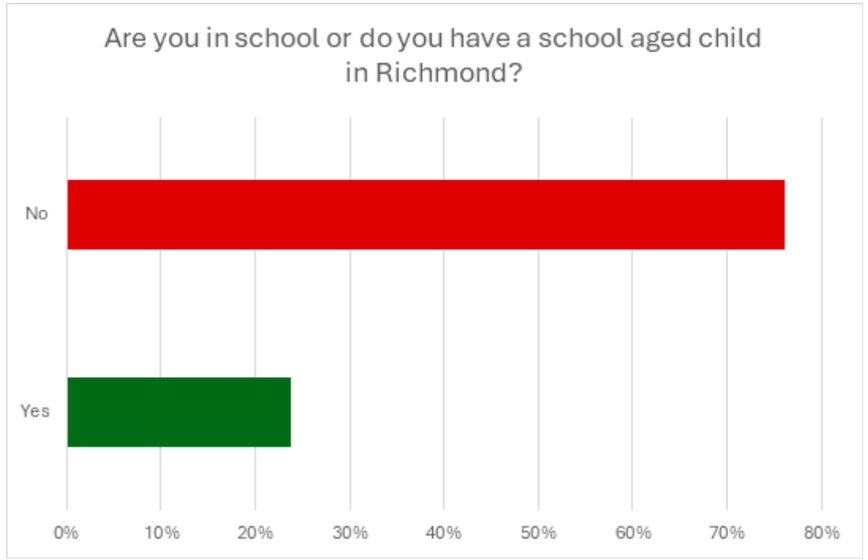
Question 14: How likely are you to bike, walk, or roll to another neighborhood?



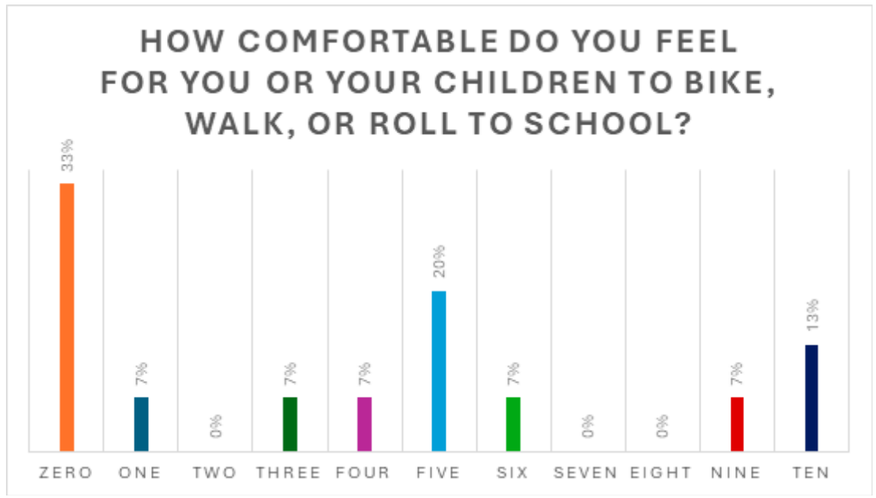
Question 15: Explain the reason for you answer. See .

Question 16: What improvements would you like to see for traveling between neighborhoods in Richmond? See .

Question 17: Are you in school or do you have a school aged child in Richmond?

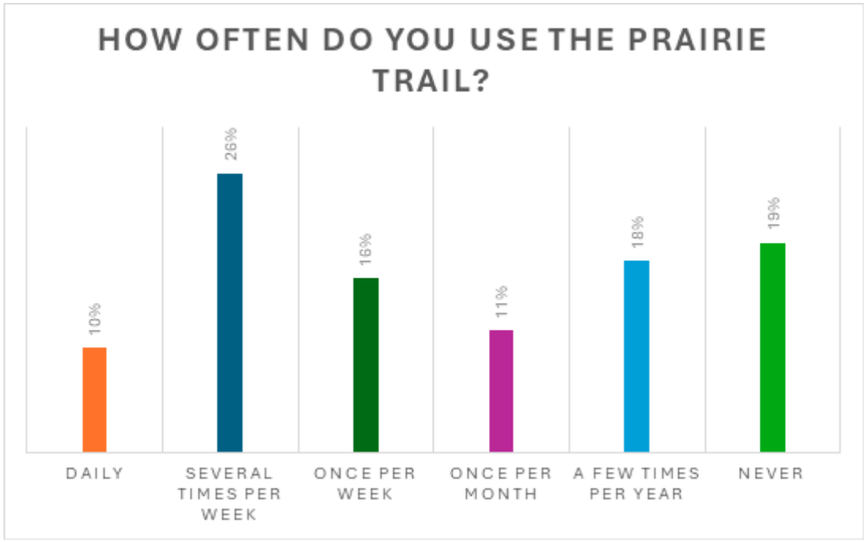


Question 18: How comfortable do you feel for you or your children to bike, walk, or roll to school? (With 0 being the least comfortable and 10 being the most comfortable).

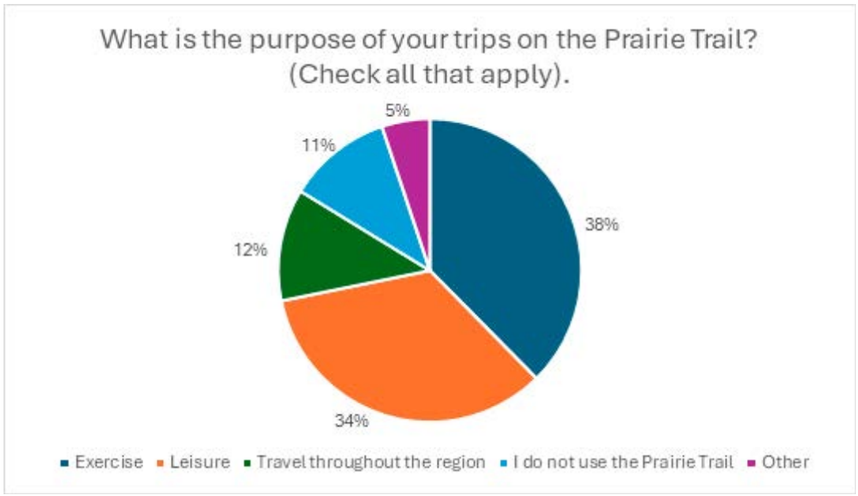


Question 19: What improvements would you want to see before you or your children bike, walk, or roll to school? See .

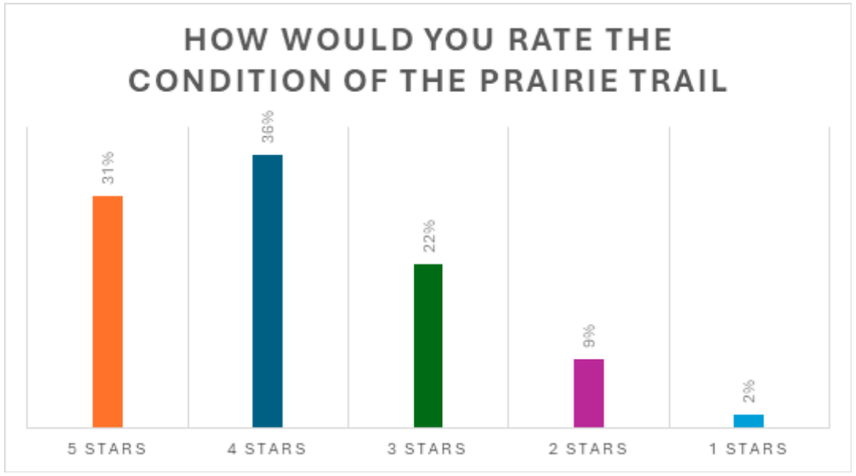
Question 20: How often do you use the Prairie Trail?



Question 21: What is the purpose of your trips on the Prairie Trail?



Question 22: How would you rate the condition of the Prairie Trail?

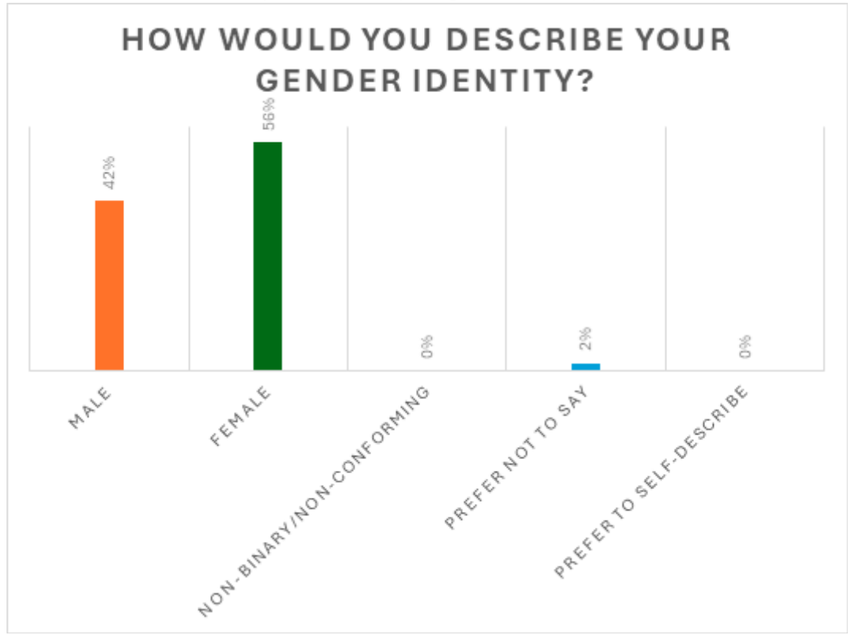


Question 23: What would make you more likely to use the Prairie Trail? See .

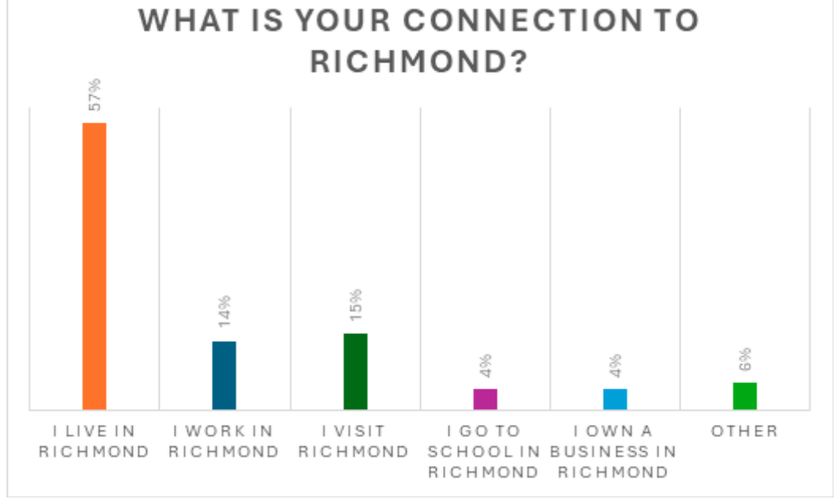
Question 24: Are there any other towns that you think set a good example for biking, walking, and rolling that Richmond should look to? See .

Question 25: What is your age group?

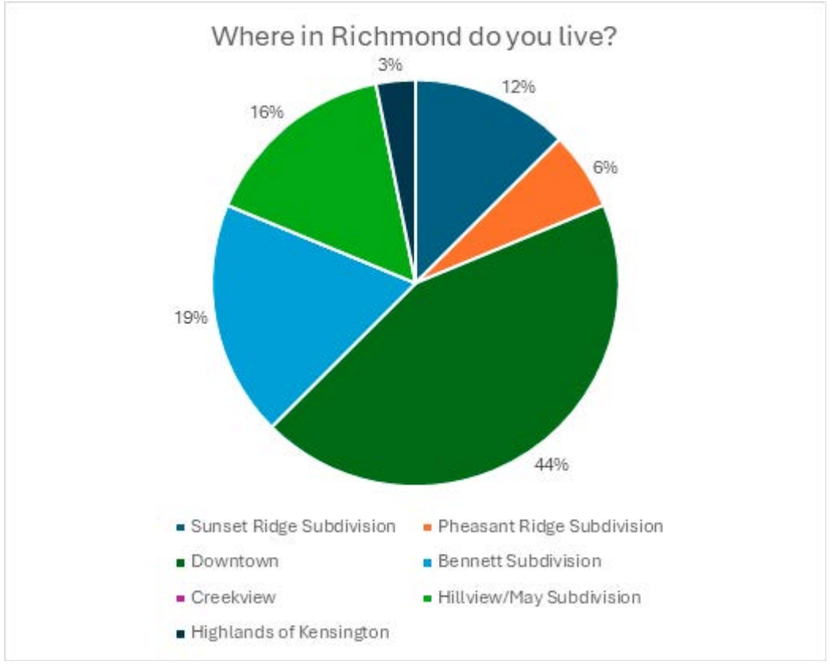
Question 26: How would you describe your gender identity?



Question 27: What is your connection to Richmond?



Question 28: Where in Richmond do you live?



Question 29: What is your gross annual income?

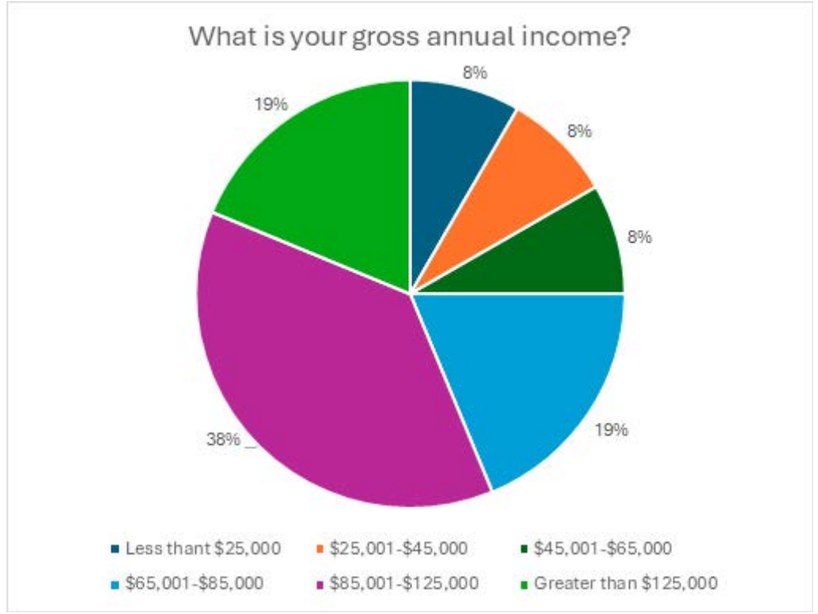


TABLE 23: PUBLIC SURVEY #1 OPEN ENDED QUESTIONS

NO.	QUESTION	ANSWER
2	Which factor(s) discourage you from bicycling more often?	Other: Poor condition of kuhn road. It's a nightmare.
		Other: bad knees
		Other: Don't care for it
		Other: Don't own a bicycle
		Other: If I am by myself riding my bike, I think of personal safety on the trail. I do not ride my bike along Highway 12 without a sidewalk.
		Other: NA, I don't bike
		Other: No bicycle lanes anywhere. Hill rd. Rt 31 etc.
		Other: Lack of connections, sunset ridge is completely disconnected for non-motorized traffic, and the ability to cross 12 anywhere other than on broadway or 173
		Other: We used to bike a lot but grew to not enjoy it.
		Other: Don't have a bike
		Other: Bike seats are uncomfortable
		Other: Lack of paths to get to bike path.
		Other: bike lanes
3	Which factor(s) discourage you from walking, running, or rolling more often?	Other: weather
		Other: When I walk, I do not walk the trail by myself for personal safety and security. I stay in the open areas.
		Other: 12 needs a light on 12 and Broadway
		Other: Time
		Other: NA, I run as much as I want
		Other: Downright dangerous but manage
		Other: I personally love the challenge. The trails are great. Just not ideal crossing busy rt 31 to the bike path from hill rd in Richmond
		Other: there is no sidewalk past Rosati's. also general safety (one should be able to walk to the police station on a sidewalk)
		Other: Weather and time to walk
		Other: Need to fix sidewalks on south side of Broadway and east side of Covell Street. I fell on Mother's Day and scraped my hand and knee. Fix the sidewalk before someone sues the town of Richmond. Yellow spray paint on a sidewalk does not fix the issue.
		Other: area not walkable, no sidewalks, dangerous traffic
5	What are the most common destinations you bike, walk, or roll to?	Other: Bike path
		Other: I walk to the post office at least once a week. Ride my bike to pay water bill at Village Hall by using the back roads. I do not ride my bike on Highway 12 without a sidewalk.
		Other: Around the neighborhood
		Other: Visiting family
		Other: Walking the dogs
		Other: excersice
		Other: just around the neighborhood
		Other: Exercise
		Other: no sidewalks, most town area's not walkable

NO.	QUESTION	ANSWER
6	What destinations do you wish you bike, walk, or roll to?	Other: A dog park would be nice
		Other: Lack of sidewalk and high speed limits, limit our ability to do so safely.
		Other: can't get there from my home walking or biking
10	How would you improve your ability to bike, walk, or roll to downtown Richmond from your neighborhood?	Adding more dedicated RT 12 crossings to access the bike path from the East side of town.
		Need the existing roads and sidewalks redone as well as more sidewalks throughout town
		Better pedestrian transportation.
		Expand the sidewalks so children can safely walk town
		Fix kuhn road!
		it's fine how it is
		No improvement
		Parking availability
		Better connections / dedicated bike lanes.
		Add Sidewalks
		"Perhaps fixing the level of the sidewalks so they are flat so nobody trips and falls. Perhaps filling in the little holes in the road so nobody falls or get a sprain ankle. My question would be: Who do I ask to fix the sidewalks? The owner or the Village? I could call the Village of Richmond to have the small holes filled in the road."
		Improved road (side streets are in bad shape) traffic signals (would be great for pulling out during busy hours for cars) or a foot/ pedal bridge over 12
		Sidewalks would be nice. A pedestrian light crossing (a stoplight just for pedestrian traffic) so pedestrians can cross safely. Cars ignore the pedestrian light because the lights are easy to miss. Maybe a colored flashing light would help.
		Spend money on the roads and not some dumb ass bike path
		More sidewalks and bike paths.
		Rather than walking along 12 or commercial street to get into town, maybe create a path through the old Hunter Country Club or along it.
		Stop letting the seafood restaurant block the sidewalk with palm trees in the summer.
		More bike racks at destinations
		Reduced speed on Route 12. Roundabouts or 4 way stops on Route 12 - especially @ Broadway. Path from the bicycle trail towards the library with a cross walk and "as needed " stop lights that walkers or bicyclists could trigger when they want to cross. More waste receptacles along the bike path.. Village provided doggie waste bags along the bike path. Visitors will be less likely to use the bike path if there is dog waste along it!
		Trim the trees that overhang sidewalks
		safer crosswalks. more sidewalks
		Make the cross walks safer, maybe add some safer ways to get across parking lots in the front so you don't have to walk on the street.
		Sidewalks, and a crossing guard to keep people safe
		Sidewalks?
		Dedicated bike lanes/wider roads, increased driver aware about bikes. A less steep option to travel on Hill Road :)
		Repair broken sidewalks
		Bike and walk paths or sidewalks. Safety.
		Reroute Rt 12
		better sidewalks

TABLE 23: PUBLIC SURVEY #1 OPEN ENDED QUESTIONS CONTINUED

NO.	QUESTION	ANSWER
6	What destinations do you wish you bike, walk, or roll to?	Other: A dog park would be nice
		Other: Lack of sidewalk and high speed limits, limit our ability to do so safely.
		Other: can't get there from my home walking or biking
10	How would you improve your ability to bike, walk, or roll to downtown Richmond from your neighborhood?	Adding more dedicated RT 12 crossings to access the bike path from the East side of town.
		Need the existing roads and sidewalks redone as well as more sidewalks throughout town
		Better pedestrian transportation.
		Expand the sidewalks so children can safely walk town
		Fix kuhn road!
		it's fine how it is
		No improvement
		Parking availability
		Better connections / dedicated bike lanes.
		Add Sidewalks
		"Perhaps fixing the level of the sidewalks so they are flat so nobody trips and falls. Perhaps filling in the little holes in the road so nobody falls or get a sprain ankle. My question would be: Who do I ask to fix the sidewalks? The owner or the Village? I could call the Village of Richmond to have the small holes filled in the road."
		Improved road (side streets are in bad shape) traffic signals (would be great for pulling out during busy hours for cars) or a foot/ pedal bridge over 12
		Sidewalks would be nice. A pedestrian light crossing (a stoplight just for pedestrian traffic) so pedestrians can cross safely. Cars ignore the pedestrian light because the lights are easy to miss. Maybe a colored flashing light would help.
		Spend money on the roads and not some dumb ass bike path
		More sidewalks and bike paths.
		Rather than walking along 12 or commercial street to get into town, maybe create a path through the old Hunter Country Club or along it.
		Stop letting the seafood restaurant block the sidewalk with palm trees in the summer.
		More bike racks at destinations
		Reduced speed on Route 12. Roundabouts or 4 way stops on Route 12 - especially @ Broadway. Path from the bicycle trail towards the library with a cross walk and "as needed " stop lights that walkers or bicyclists could trigger when they want to cross. More waste receptacles along the bike path.. Village provided doggie waste bags along the bike path. Visitors will be less likely to use the bike path if there is dog waste along it!
		Trim the trees that overhang sidewalks
		safer crosswalks. more sidewalks
		Make the cross walks safer, maybe add some safer ways to get across parking lots in the front so you don't have to walk on the street.
		Sidewalks, and a crossing guard to keep people safe
		Sidewalks?
		Dedicated bike lanes/wider roads, increased driver aware about bikes. A less steep option to travel on Hill Road :)
		Repair broken sidewalks
		Bike and walk paths or sidewalks. Safety.
		Reroute Rt 12
		better sidewalks

NO. QUESTION ANSWER

NO.	QUESTION	ANSWER
10	How would you improve your ability to bike, walk, or roll to downtown Richmond from your neighborhood? (cont.)	not just sidewalks along the road, need back area trails away from the busy roads
		"construct sidewalks to allow access to downtown without exposure to highway traffic.. No sense talking about bike-ability when it is not possible to walk Walk-ability rated 2 on scale of 1-10"
13	How would you improve the bikeability and walkability of downtown Richmond? (cont.)	Add bike lanes.
		Biking lanes. Signage.
		I think the crushed gravel is nice and probably easier to maintain than asphalt on the trail. The big step up on the sidewalk downtown is kind of weird. But I have good mobility so it doesn't impact me. Not having a physical disability- everything is very accessible- but you might ask older people or people with disabilities.
		fix the sidewalks
		There should be another crosswalk similar to the one on Broadway in front of the middle school. Not bikeability but general traffic flow consideration. the city and state should look into developing a condensed roundabout at the 173/12 intersection. maybe even take some inspiration from Europe. i doubt a stoplight is the most efficient option there or the safest. Slow down traffic to 20mph about a 1/4 mile before the intersection and allow traffic to flow. there are low profile options for trucks and busses. these have the potential to make it so traffic never stops all the traffic turning right from 173 to 12 on can do so flawlessly and the highway is uninterrupted. will there be backups of course. but less stop and go than what we have. My military service taught me that there are better answers than just the way we do it here. we should think outdie the box look around the world for answers to our traffic flow problem . appease the state to improve flow so they stop trying to divert the highway and make things safer. a solution exists we just need to fine one or make one. i doubt stoplights are the answer. maybe it cuts into the parkinglot of the subway and Papaseverios a bit but that's what eminent domain is all about. purchasing the land to provide for the public good.
		Somehow get rid of the steps. Or make an alternative to the steps. Make the connections between various sidewalks even and less bumpy.
		Designated bike lanes
		better sidewalks, more sidewalks
		Sidewalks throughout town and enforcement of the pedestrian crossing at Rt. 12 and Broadway.
		Safer intersections for crossing the street and a pedestrian or bike path from downtown to the village hall.
		Some kind of underpass or overpass of RT 12 would help. I assume that in the future something like this would be needed for 173 as well.
		Put protected bike lanes (there are ways to make it a one-way bike lane on Main Street and have the next street over go in the opposite direction...or direct people to the bike path that's not on Main street with improved signage) in the downtown and make sure there are protected intersections to cross the street. It would be nice if the bike lanes went all the way to Angelos so people wouldn't have to drive to get groceries.
		Either making bike paths over/under main roads or add bike lanes to main roads
		Increase areas for walking like parks or other things to see/spend time in.
		Fix sidewalks on south side of Broadway; Fix sidewalks on east side of Covell; Hazardous
		By redoing some of the sidewalks in town.
		need space behind the areas so that we aren't right on the road
		More trail oriented business, advertise your trail, rent bikes on the trail.
		construct sidewalks to enable walking from one end of town to the other. Bold markings for crosswalks; pedestrians have right of way when crossing streets at crosswalks or driveways; Street Lighting should also be added and improved ! "Walk at your own risk"

TABLE 23: PUBLIC SURVEY #1 OPEN ENDED QUESTIONS CONTINUED

NO.	QUESTION	ANSWER
16	What improvements would you like to see for traveling between neighborhoods in Richmond?	Interconnected pathways
		"Need the existing roads and sidewalks redone as well as more sidewalks throughout town Bigger network of bike trails"
		Easier means of crossing 12
		More pedestrian traffic signs so traffic will stop more frequently.
		Fix kuhn road.
		None
		Patrol
		Connected neighborhoods, being able to walk in between each.
		Sidewalks
		More crosswalks to get across Highway 12.
		Same as other answers
		Easier connectivity which could happen with sidewalks or biking/ hiking trails.
		None
		More sidewalks and bike paths.
		Pedestrian Bridge over 12, fix existing bridge on george st
		See previous suggestions
		Trim the sidewalk-adjacent trees between KLM (the one off 12) and Pheasant Ridge
		More paths to the neighborhoods.
		Sidewalks and crossing gaurds
		I don't know. Cars being unfamiliar with cyclists give me the most pause. I don't like the way I've been treated by some drivers.
		Wider roads with dedicated bike lane or more bike paths
		Bigger sidewalks
		"It would be nice to have sidewalks farther west along Broadway to MCCD's McConnell Farmstead and to Hackmatack National Wildlife Refuge. Having a safe way to go west along Broadway for bikers and walkers would be good. Could a bike lane fit along Broadway? Planning for accessibility on Broadway Rd should be coordinated with MCCD, USFWS and Friends of Hackmatack NWR. WAMF is also working with MCCD on stabilization, restoration and utilization plans for McConnell Farmstead with MCCD. Ped/bike improvements to connect parts of town north of Rte 173 to downtown are also needed."
		A safer crosswalk between the shell gas station on Main Street and May Ave. I like waking to the Nippersink park, but the amount of traffic and it's speed often stop me. I feel like I usually walk on the west side of town just because it can be daunting to cross Main Street.
		better sidewalks
		Another crossing of 12 further south than downtown. You can get to the trail and to Angelo's through neighborhoods. But from Canterbury heights / Hill road you really need to cross 31 to get downtown . I'd like my daughter to be able to bike to the middle school when she gets older.
		see previous answers.
		More blinking lights. There really should be speed bumps or other speed control devices to keep cars from speeding through the neighborhood streets. They use the neighborhood as an alternative to 12 when it gets backed up. I regularly see cars going 40+ mph down neighborhood streets. I put out "slow" markers in my own yard to protect the kids.

NO.	QUESTION	ANSWER
16	What improvements would you like to see for traveling between neighborhoods in Richmond? (cont.)	Better paved roads and more bike lanes
		sidewalks
		More bike or multi use trails
		Consistent sidewalks, paths, and safety.
		Bike lanes or sidewalks or side paths
		Protected bike lanes and crosswalks. Ensuring that the sidewalks are continuous and have ADA acceptable curb cuts.
		More monitoring / warning from law enforcement for speeders or violators
		Sidewalks
		Better roads and sidewalks
		Sidewalks and lower speed limits
		again, not on the main roads, have trails in the back somehow
		NA
		Sidewalks, Marked street crossings, Street Lighting
19	What improvements would you want to see before you or your children bike, walk, or roll to school?	easier cross walks
		More sidewalks, bike paths, and better traffic control. Some motorists make very bad decisions on Rt. 12 due to impatience and lack of traffic control.
		Dedicated bike lanes leading to schools, and safer way to cross rt 12
		NA, I live too far from the high school to let my child walk/bike
		Slower cars.
		More crossing gaurds in the early hours and sidewalks
		Sidewalks or designated lanes / trails.
		Dedicated bike lanes (or bike path), stop signs along the route, crossing guards at major intersections
		Trails or a sidewalk or a bike lane.
		More blinking lights at intersections or crossing of major / busy roads. There really should be speed bumps or other speed control devices to keep cars from speeding through the neighborhood streets. They use the neighborhood as an alternative to 12 when it gets backed up. I regularly see cars going 40+ mph down neighborhood streets. I put out "slow" markers in my own yard to protect the kids.
		none
		Sidewalks and lower speed limits
		we are too far, it won't happen, it's not safe
21	What is the purpose of your trips on the Prairie Trail? (Check all that apply).	Other: Listening to different birds.
		Other: Work related
		Other: Walking my dog
		Other: Dog walk!
		Other: Teaching my children the importance of the outdoors
		Other: Not exactly sure where it is, maybe this is what I'm looking for

TABLE 23: PUBLIC SURVEY #1 OPEN ENDED QUESTIONS CONTINUED

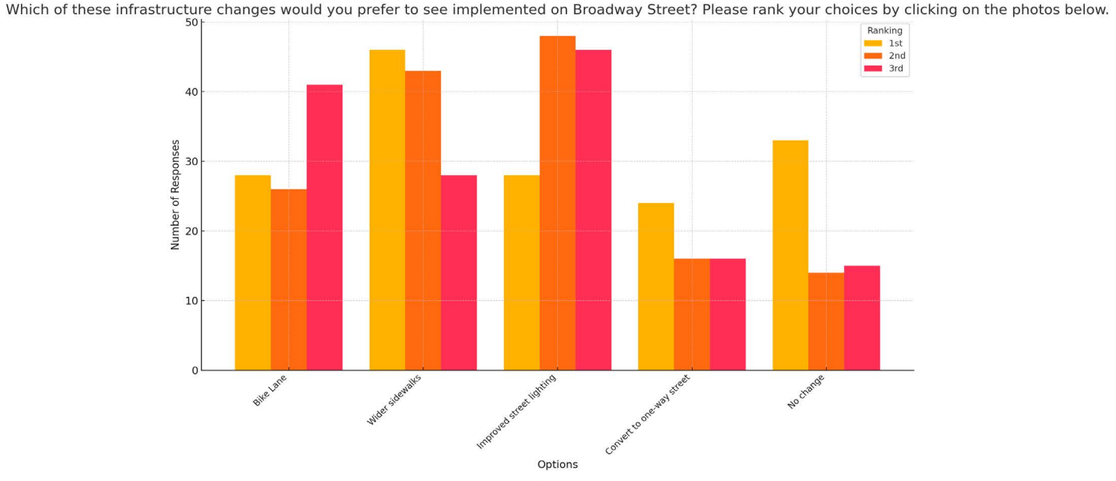
NO.	QUESTION	ANSWER
23	What would make you more likely to use the Prairie Trail?	Lighting, more access points.
		Maintenance and cleanup
		Pavement all the way through the trail, however, we love the scenic wooden bridges
		more benches
		Nothing
		More patrol
		CAMERAS. This trail is dangerous to run on add cameras for security
		Perhaps form a group to meet for walking and bird watching.
		Safer crossing on 12
		If it could branch off onto other trails
		Open for ATV/UTV
		Of it actually lead somewhere. ie local businesses
		Waste receptacles and free dog waste bags. Bicycle parking facilities. Signs reminding bicyclists to be very respectful of horseback riders. Alert riders to the presence of bicyclists from a distance and avoid riding up close behind riders. I love seeing horses on the trail - it adds to the ambiance of the village. At the same time, disrespectful behavior by bicyclists could easily cause severe accidents - and discourage horseback riders from using the trail.
		NA, I love it!! I run daily doing the trail and have zero complaints.
		I don't use it.
		I did not know that existed
		I love it! I don't know if it needs to be paved or not.
		Easier access from our house (Hill road is steep, making the journey there/back difficult and sometimes feels dangerous depending on traffic)
		In Richmond? Nothing, I don't live in Richmond. The McHenry County Conservation District's Prairie Trail is fabulous, well maintained and safe.
		I use it
		Cannot think of any improvements at this time; I usually just go North to Genoa City; so I don't know how the trail is going South from Richmond
		It would be great to have an access point (& some amenities?) at the Richmond Township office to avoid having to walk/bike along Rte 13 up to the crossing at the high school from W Solon Rd.
		I use it everyday and really enjoy the proximity to town of need be. I just wish that there were small trash cans every so often so I can dispose of dog poop bags. Also the amount of litter I see at concerns me at times. I feel like trash cans would alleviate that problem as well.
		I use it almost daily. It's a nice trail.
		The crushed gravel gets a little soft after rain in some areas. The pavement south of Ringwood is uneven in some areas. If the trails are paved- they need to be maintained. Overly cracked pavement is worse than gravel.
		cut some of the trees back and put a few lights up
		Trash receptacles periodically so that people have places to put their trash other than littering.
		It should be lit between South Street and Broadway, for sure. It's a beautiful walk and would be really neat at night.
		More locations. Continue it west. East would be amazing
		More paved areas

NO.	QUESTION	ANSWER
23	What would make you more likely to use the Prairie Trail? (cont.)	muddy/buggy/weather
		Nothing
		Create better signage so more people know it exists.
		Advertising of the trail on social media
		I think Conservation district keeps them up ok
		Drag the path more often
		Knowing about it and where I can "get on" by car or bike and destinations along that trail...is there a map somewhere?
		Needs tree removal maintenance and better signage/mile markers.
		better surface for walking, riding, better landscaping,
24	Are there any other towns that you think set a good example for biking, walking, and rolling that Richmond should look to?	Stockholm!
		Silver lake park, KEMBA
		St Charles, Barrington, should not implement bike lanes they are unsafe and not useful in our area due to high state road traffic focus on safe pedestrian traffic
		Crystal Lake, Geneva, St. Charles, etc.
		Lake Geneva
		Crystal Lake
		St charles/crystal lake
		McKinney, TX
		Don't know, don't cy
		Durango Co. Chicago, Madison, Milwaukee Wi
		I bicycled across Holland in the past. They have a very strong culture of bicycle travel as well as respect for bicyclists.
		algonquin
		Not really
		Culdesac Tempe, Arizona;
		Bettendorf, Iowa
		I am not aware of other town's walking trails.
		I know Madison WI is a great place to bike. Crystal Lake has signage for bikers. East/West connections to the Prairie Trail would be nice. It would be good to check on what other towns are doing in McHenry County to enhance those routes in their communities.
		None come to mind. I'd like to see Richmond become that example though.
		Algonquin has nice signs on the trail telling visitors where food, entertainment and water are.
		Culdesac Tempe, Arizona
		no
		I was stationed in grand forks North Dakota and their bike ability and parks were amazing there was not a single place in that town you couldnt access via bike or foot. city hall contact info Grand Forks ND (701) 746-4636
		Crystal Lake downtown does decent.
		Illinois Prairie Path running through Du Page County
		not really

APPENDIX 2: PUBLIC SURVEY #2

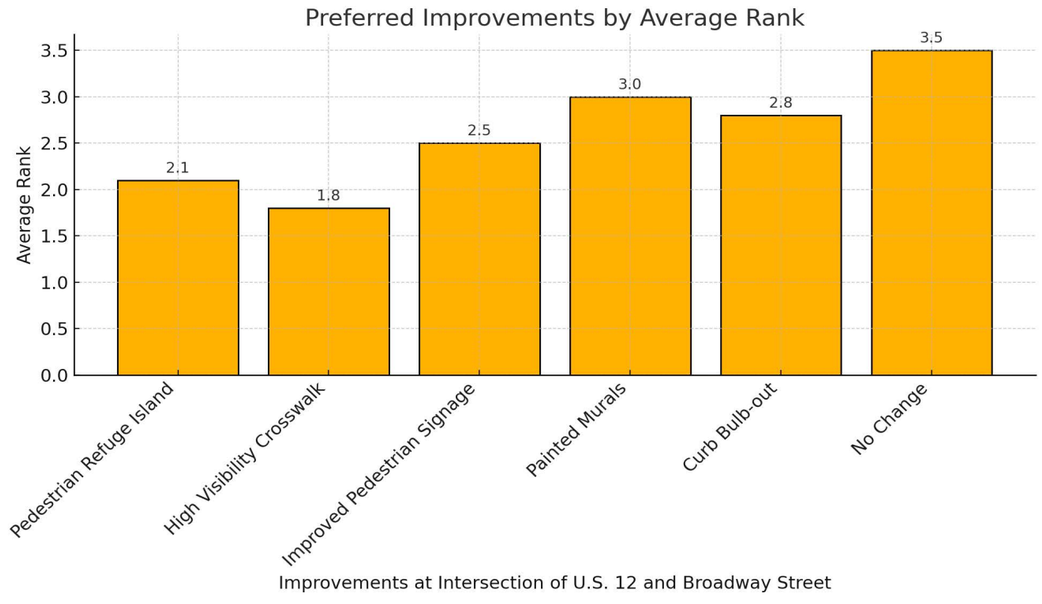
PUBLIC SURVEY #2 RESPONSES

Question 1: Which of these infrastructure changes would you prefer to see implemented on Broadway Street? Please rank your choices by clicking on the photos below.

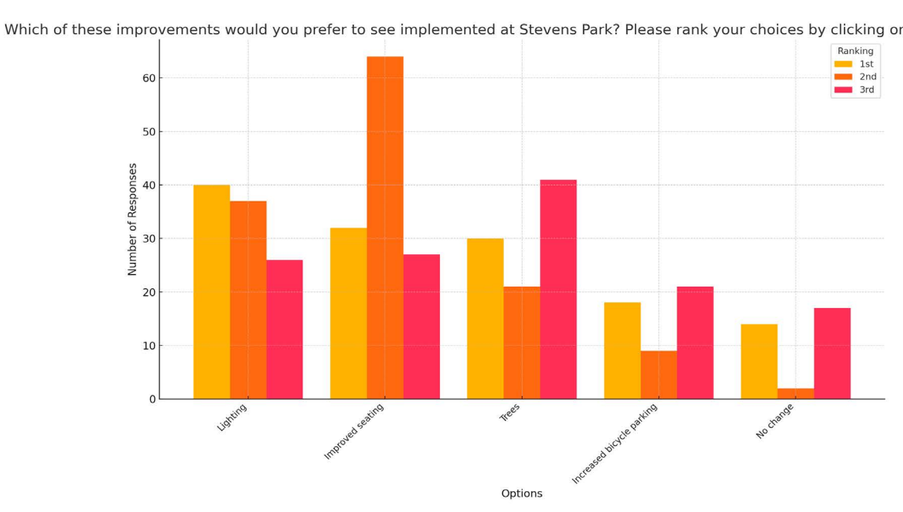


Question 2: Which of these amenities would you prefer to see implemented on Broadway Street? Please rank your choices by clicking on the photos below.

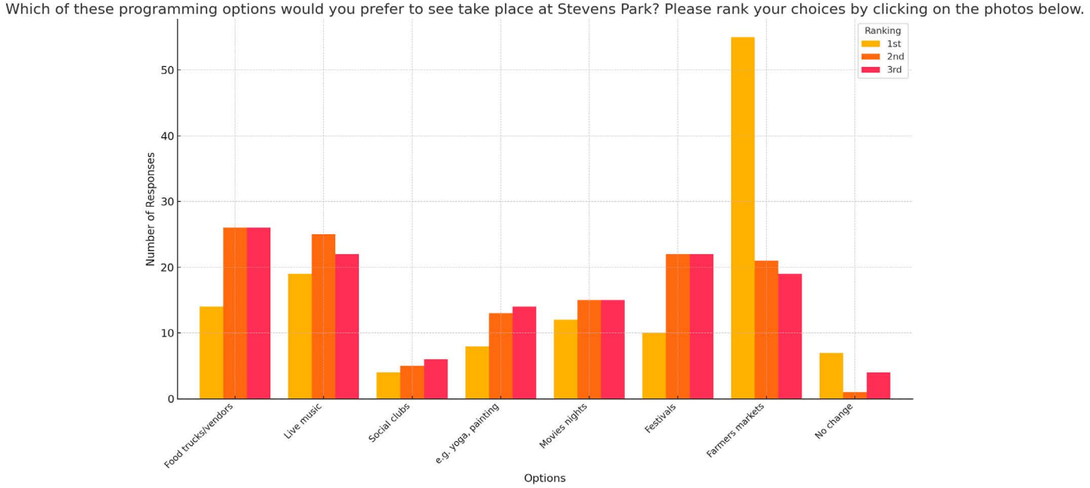
Question 3: What improvements would you prefer to see implemented at the intersection of U.S. 12 and Broadway Street? Please rank your choices by clicking on the photos below.



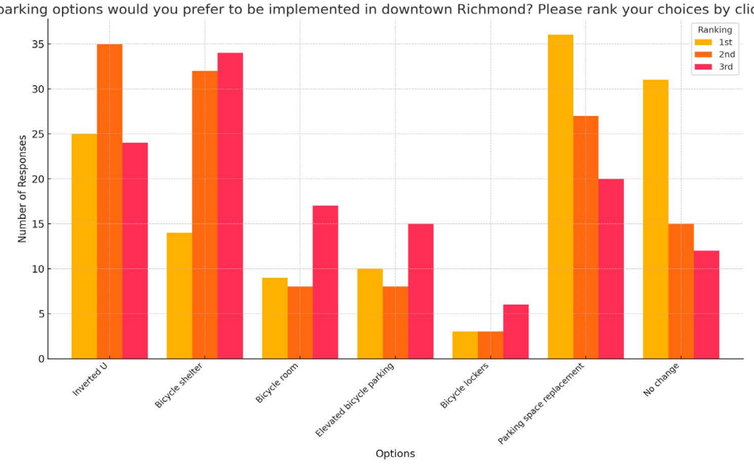
Question 4: Which of these improvements would you prefer to see implemented at Stevens Park? Please rank your choices by clicking on the photos below.



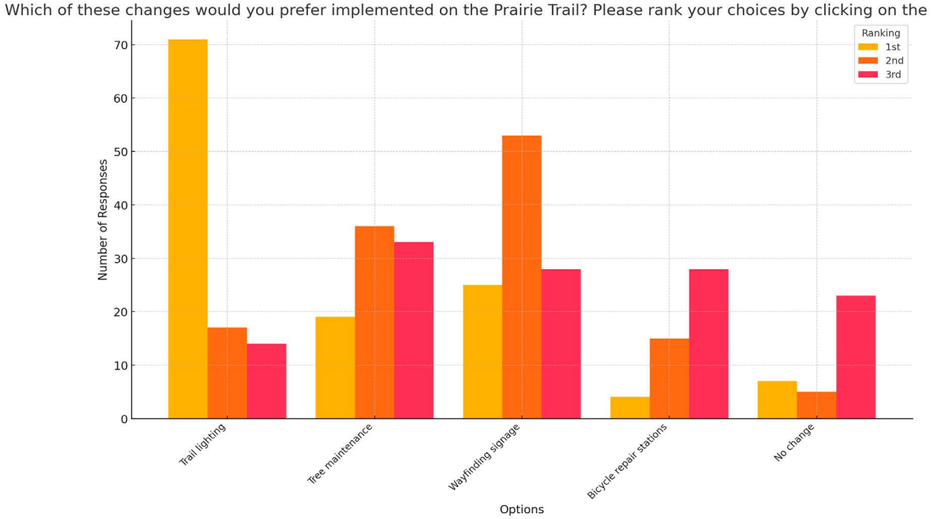
Question 5: Which of these programming options would you prefer to see take place at Stevens Park? Please rank your choices by clicking on the photos below.



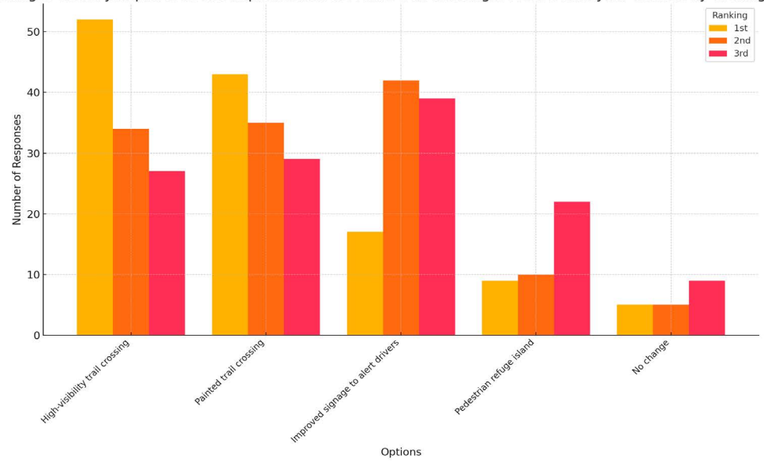
Question 6: Which of these bike parking options would you prefer to be implemented in downtown Richmond? Please rank your choices by clicking on the photos below.



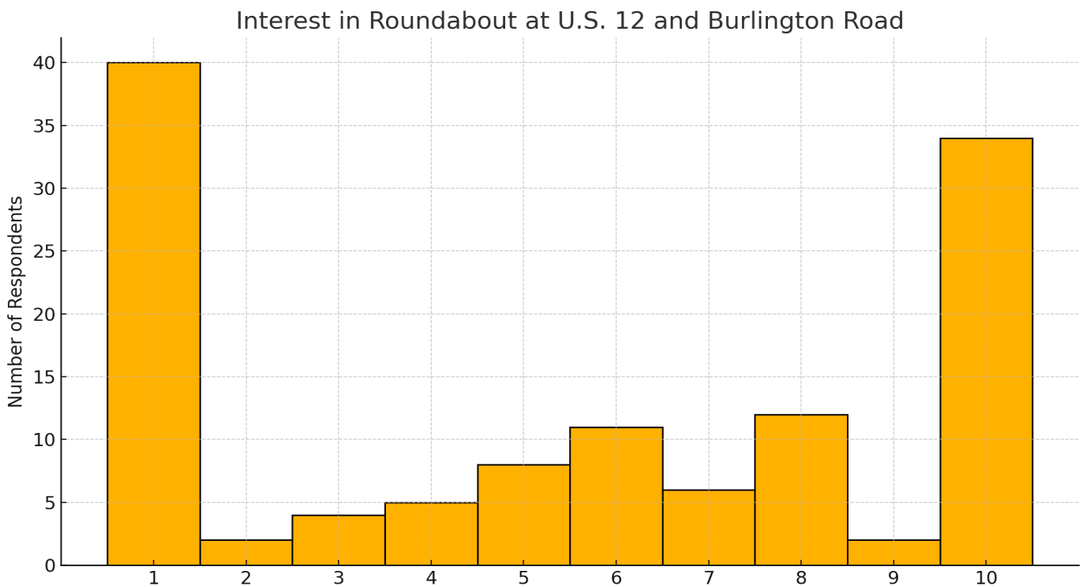
Question 7: Which of these changes would you prefer implemented on the Prairie Trail? Please rank your choices by clicking on the photos below.



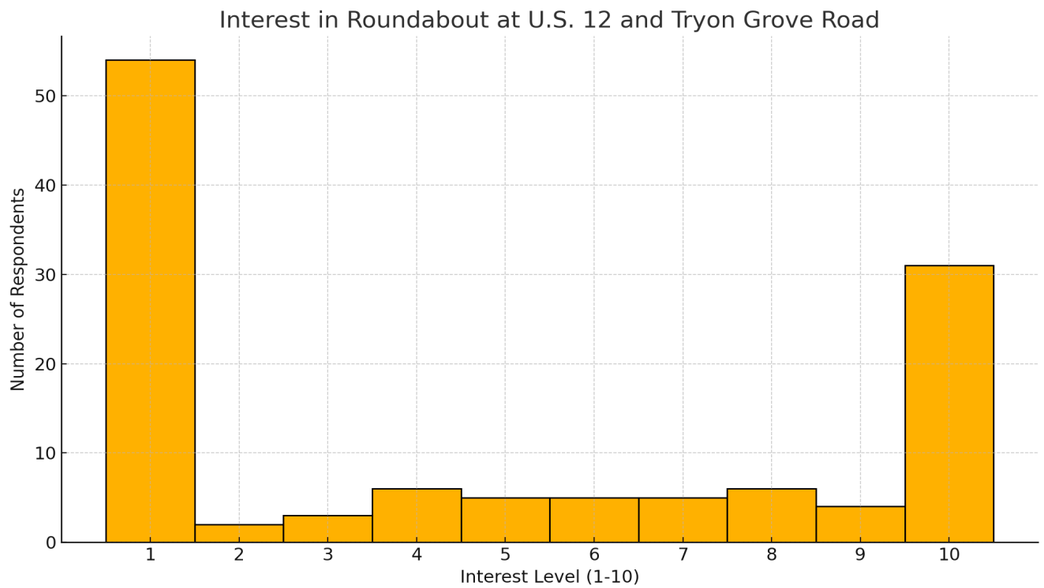
Question 8: Which of these changes would you prefer to see implemented at Prairie Trail crossings? Please rank your choices by clicking on the photos below.



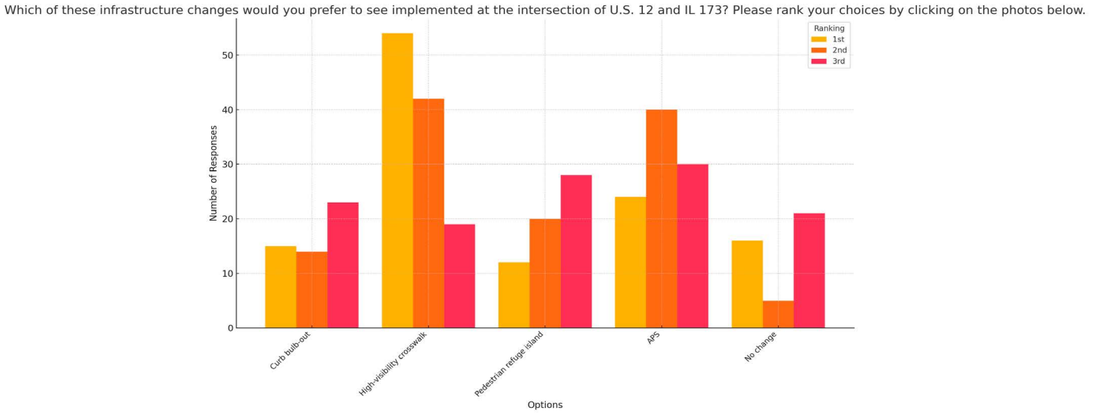
Question 9: How interested would you be in a roundabout being implemented at the intersection of U.S. 12 and Burlington Road? Please pick your answer from a scale of 1-10, with 1 being not interested at all and 10 being extremely interested. Below is an example of a roundabout to give you an idea of what it might look like. Please note that this is not indicative of the final design, if one were to be implemented.



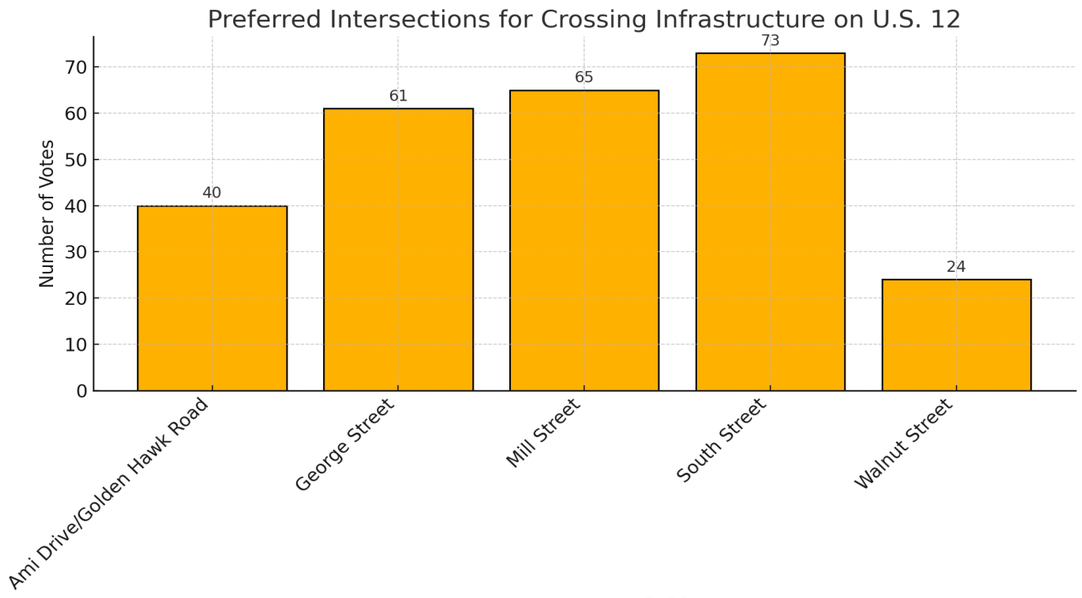
Question 10: How interested would you be in a roundabout being implemented at the intersection of U.S. 12 and Tryon Grove Road? Please pick your answer from a scale of 1-10, with 1 being not interested at all and 10 being extremely interested. Below is an example of a roundabout to give you an idea of what it might look like. Please note that this is not indicative of the final design, if one were to be implemented.



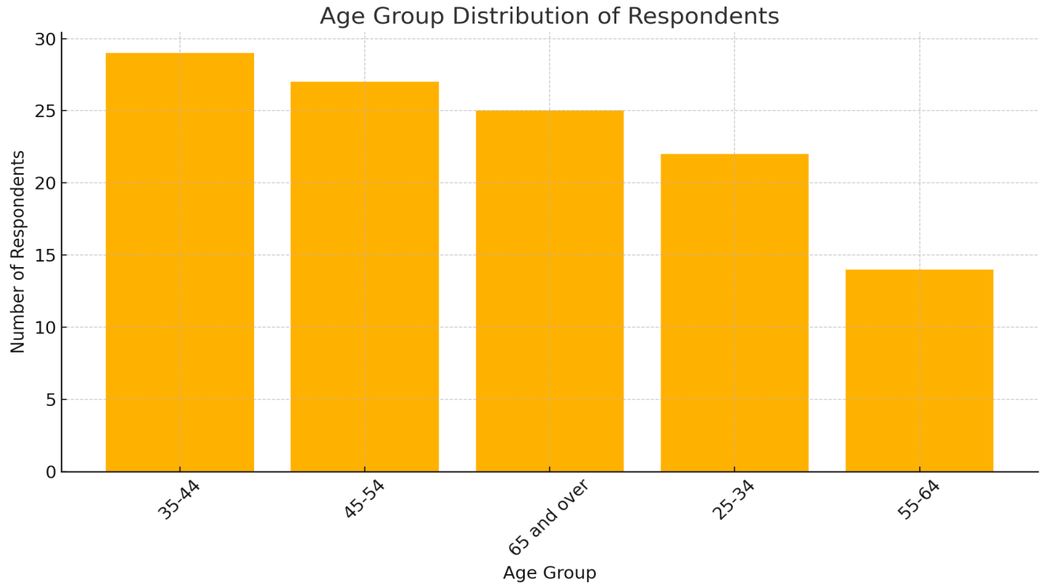
Question 11: Which of these infrastructure changes would you prefer to see implemented at the intersection of U.S. 12 and IL 173? Please rank your choices by clicking on the photos below.



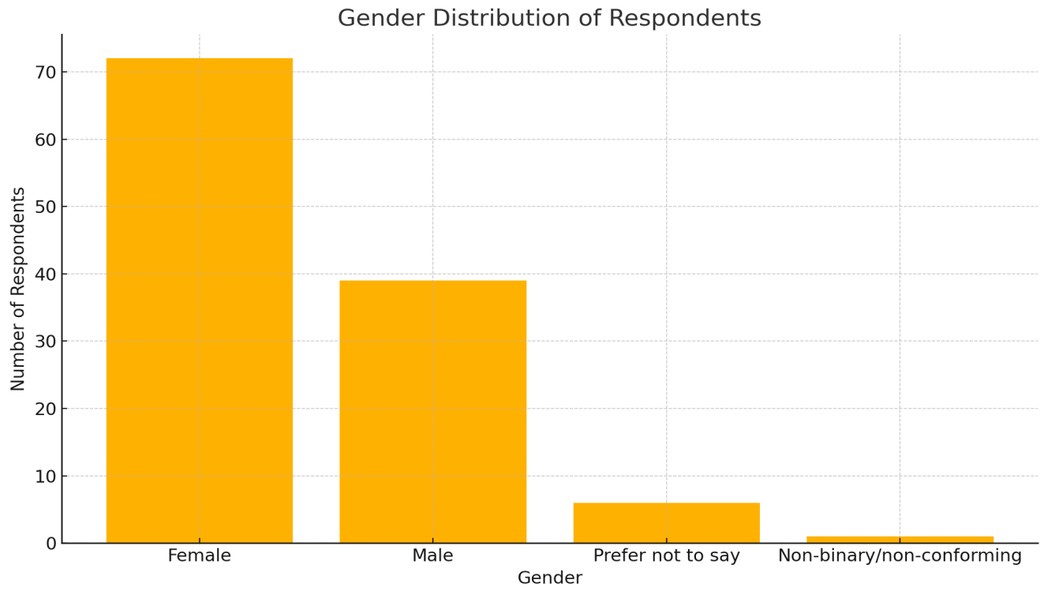
Question 12: At which intersection would you prefer to see crossing infrastructure implemented on U.S. 12? Please select your top three choices



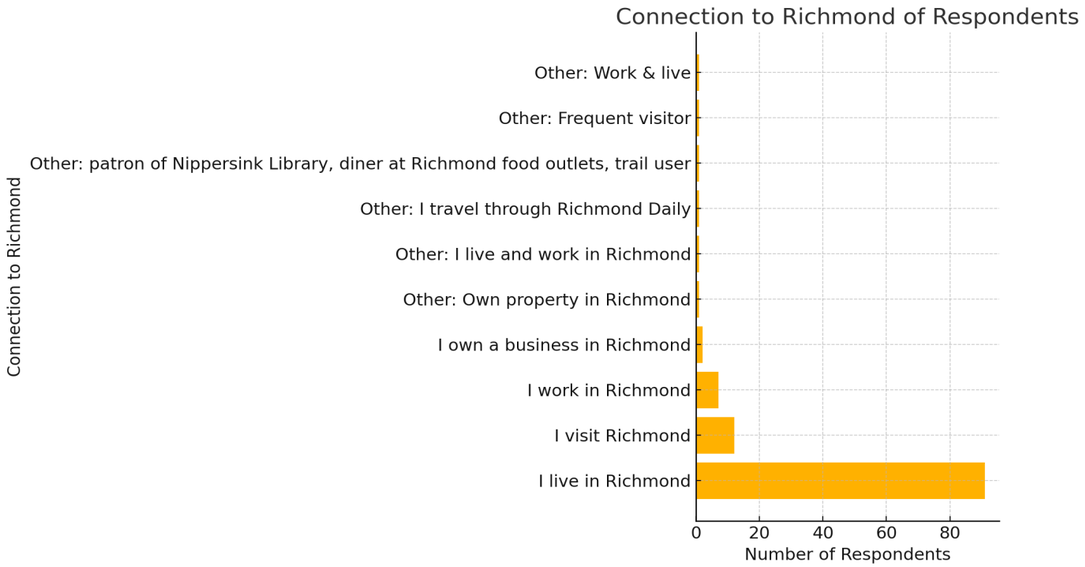
Question 13: What is your age group?



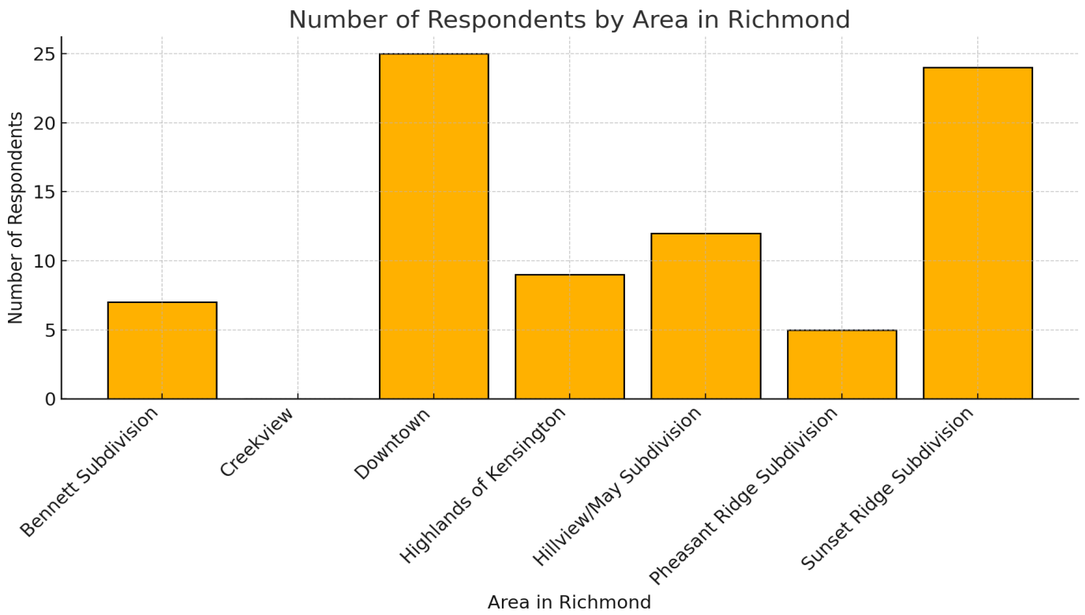
Question 14: How would you describe your gender identity?



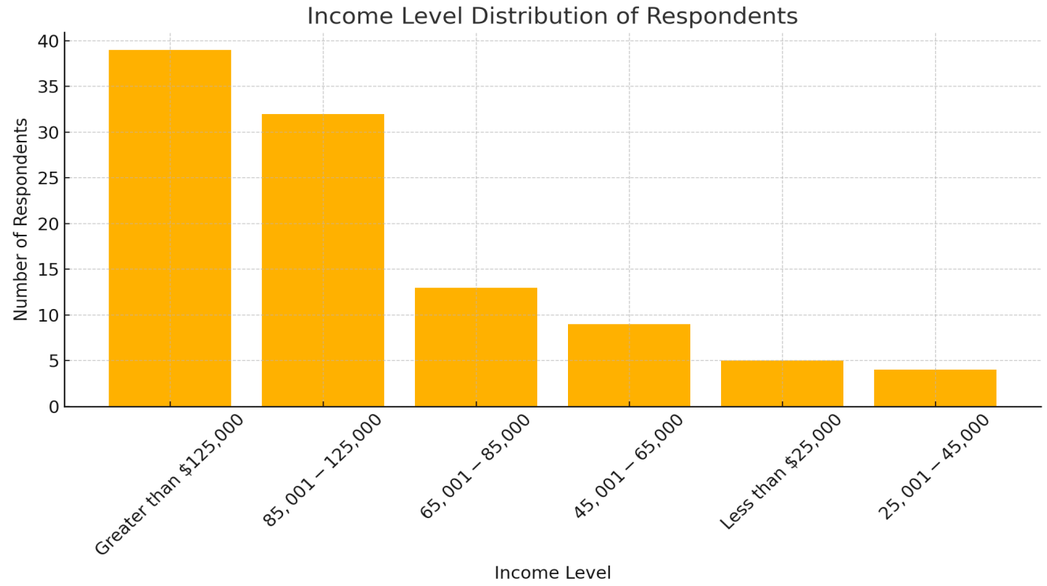
Question 15: What is your connection to Richmond?



Question 16: Where in Richmond do you live?



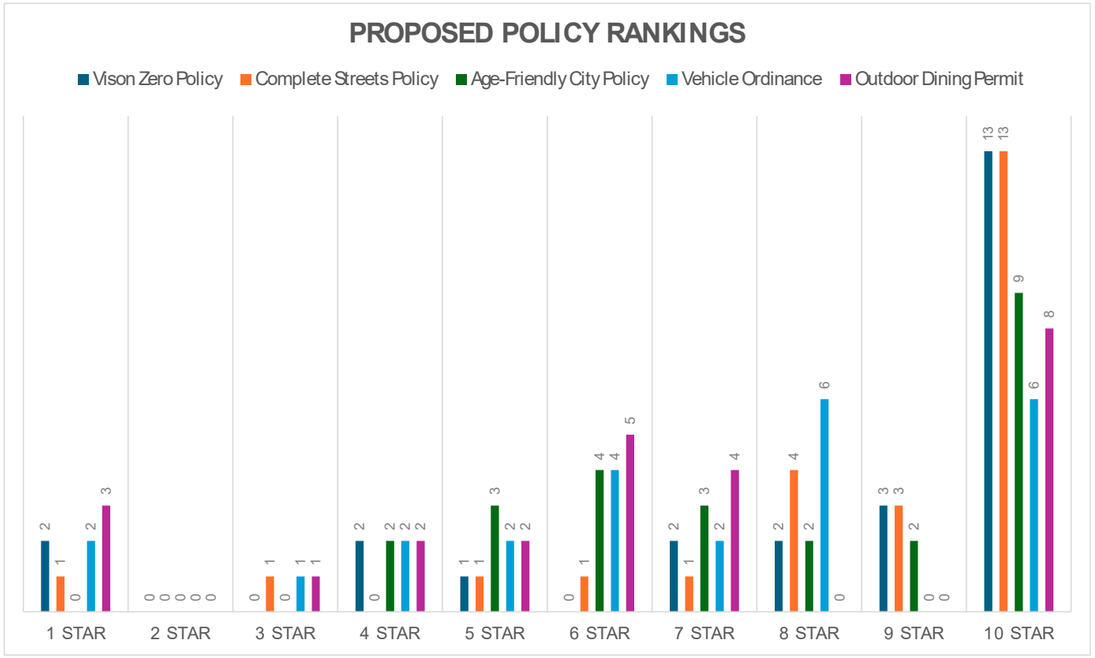
Question 17: What is your gross annual income?



APPENDIX 3: PUBLIC SURVEY #3

PUBLIC SURVEY #3 RESPONSES

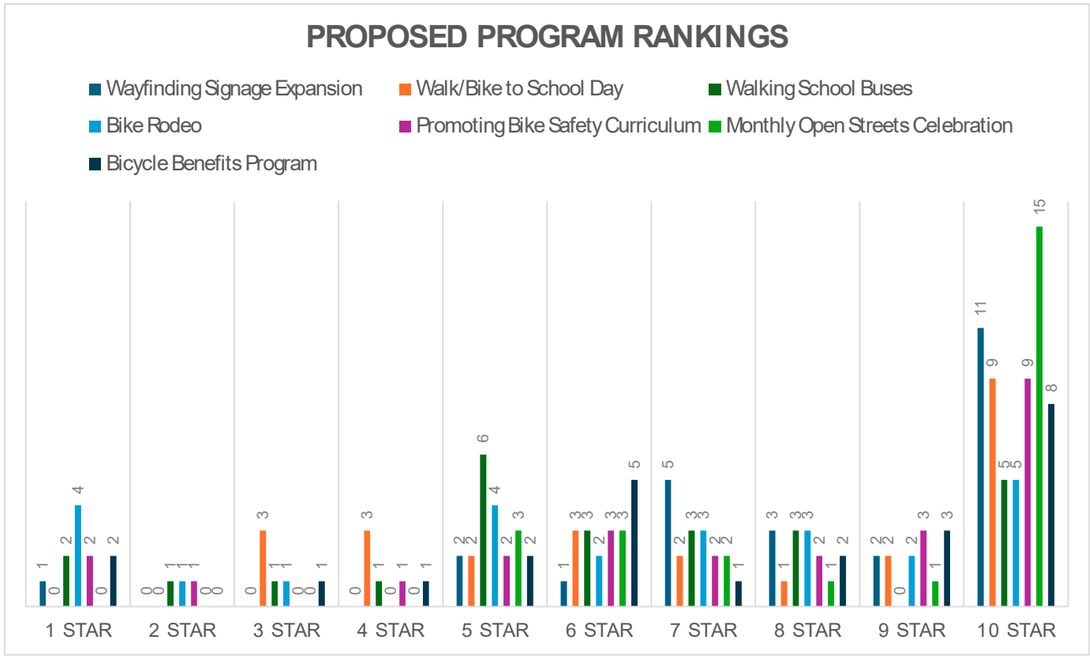
Question 1: Please rank the below policies on a scale of 1 to 10 stars, with 10 stars indicating the most impactful and urgent initiatives you would like to see implemented first. This will help the Village prioritize the most effective actions to improve safety and mobility.



Question 2: Do you have any comments on the proposed list of policies? See Table 24.

Question 3: Are there other policies that the Village should consider that could positively impact walking, bicycling, accessibility, or transportation safety? See Table 24.

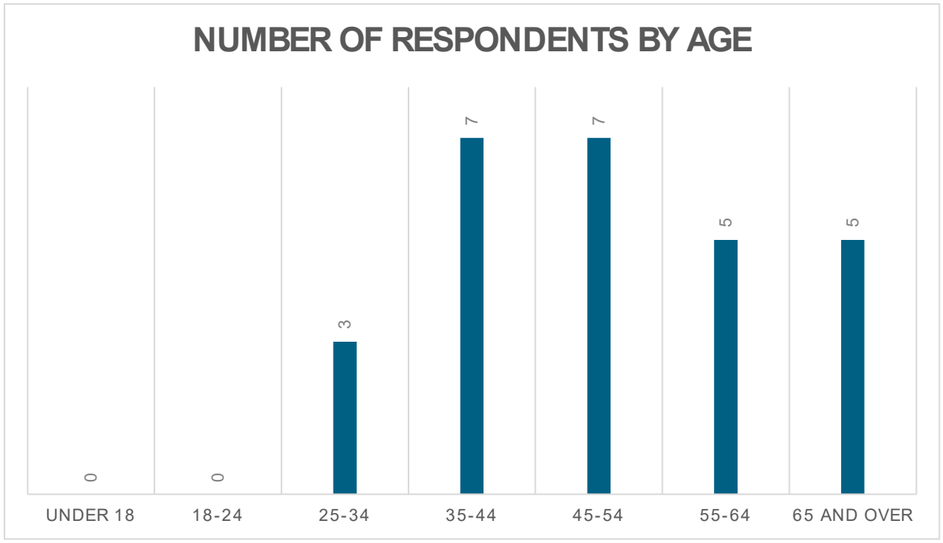
Question 4: Please rank the below policies on a scale of 1 to 10 stars, with 10 stars indicating the most impactful and urgent initiatives you would like to see implemented first. This will help the Village prioritize the most effective actions to improve safety and mobility.



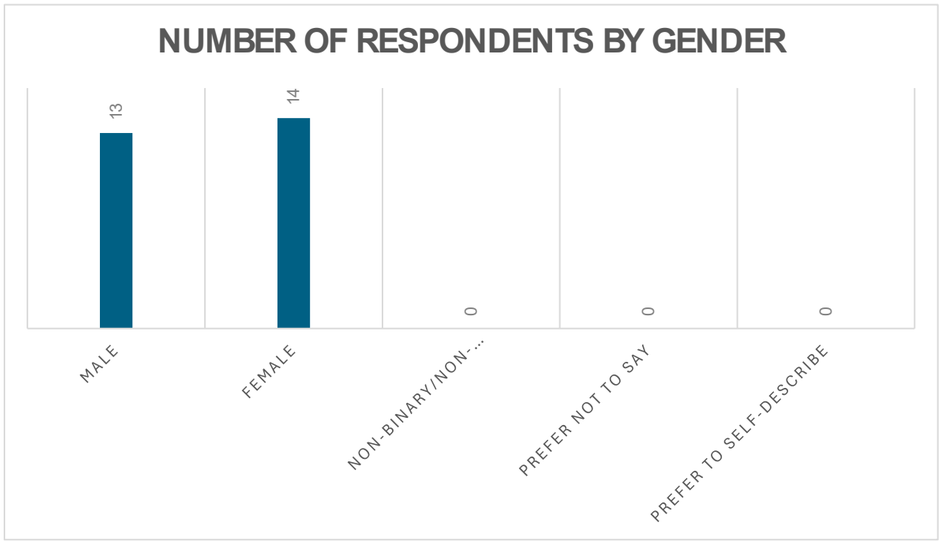
Question 5: Do you have any comments on the proposed list of programs? See Table 24.

Question 6: Are there other programs that the Village should consider that could positively impact walking, bicycling, accessibility, or transportation safety? See Table 24.

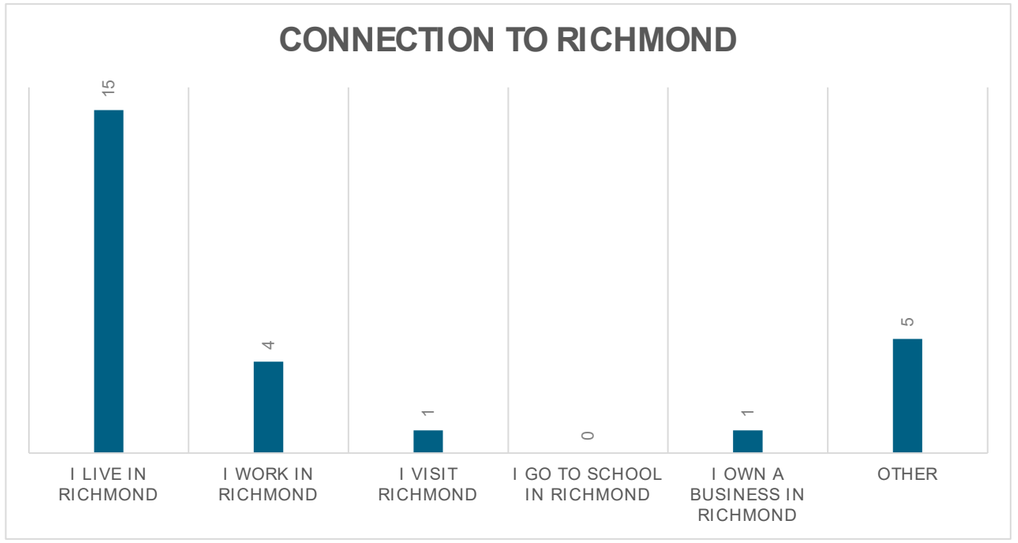
Question 7: What is your age group?



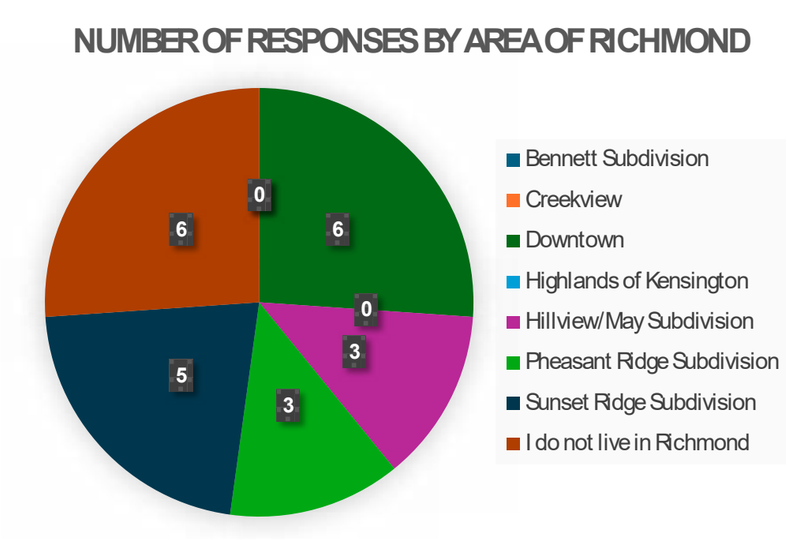
Question 8: How would you describe your gender identity?



Question 9: What is your connection to Richmond?



Question 10: Where in Richmond do you live?



Question 11: What is your gross annual income?

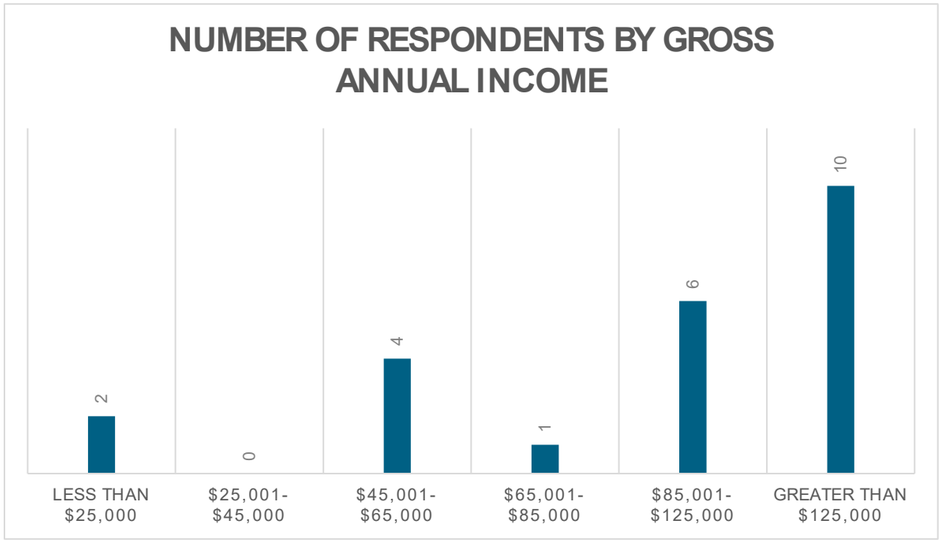


TABLE 24: PUBLIC SURVEY #3 OPEN ENDED QUESTIONS

NO.	QUESTION	ANSWER
2	Do you have any comments on the proposed list of policies?	"-Would love to encourage more restaurant growth downtown with outdoor dining policy. -As a young family moving into Richmond, anything that makes walking in the downtown area easier/safer is a priority"
		Complete lack of sight on actual needs specific to our village
		I think safe infrastructure for a diverse group of civilians (ie: pedestrians, cyclists, runners, motor vehicles, etc.) is absolutely necessary. The peace of mind of dedicated spaces for specific outdoor activities will encourage more of these activities in town.
		As for the vehicle ordinance, using the prairie trail or hackmatack tails with motorized vehicles doesn't go with what the McHenry County Conservation District allows on their pathways. This will create confusion with people to use it for their dirt bikes, atv and utv vehicles. A motorized bicycle is very different than a scooter and that also creates confusion. Are you including the conservation district on these policy change ideas to verify that they will allow the changes.
		"reduce pedestrians from ""jay- walk"" crossing and walking against traffic lights. Very poor street lighting = pedestrians not seen poorly defined crosswalks lead to confusion and accidents"
		In general, I do not support additional regulations/ordinances. These should be kept at a minumum.
		While the engine regulations would be nice, honestly I doubt there will be any enforcement.
		Hopeful "complete streets " might someday allow for crosswalk across 12 by sunset ridge .
		You should provide better examples for policies like Zero Vision policy.
		Regarding e-bikes and vehicle ordinance- the use of e-bikes on the Prairie Trail makes Richmond more accessible to surrounding communities to the south (and north and west).
		None
		In the Vehicle Ordinance section, I would not want the sentence about motorized use in Hackmatack NWR to give readers the impression that motorized ebikes and scooters could be permitted on refuge lands. These lands will be governed by the USFWS and the decision will need to be made by the refuge manager if their use is compatible with with the refuge's statutory purpose.
3	Are there other policies that the Village should consider that could positively impact walking, bicycling, accessibility, or transportation safety?	Sometimes as towns get bigger/more popular laws are put in place to limit where Dogs are allowed. As a responsible pet owner- I would want to discourage any such polices. :)
		Sidewalks installed from subdivisions, such as Sunset Ridge, to access nearest crossing at light.
		Policies do not change the lack a accessible sidewalks and crossings outside of recent developments neglecting areas of town that have been around longest and remain disproportionately serviced
		Safe and obvious entry/exit points to/from town and recreation areas, parks and trails.
		Education about cyclists and pedestrians for vehicle drivers
		In the Vision Zero policy, there should be adding additional traffic lights or other features/ improvements to high traffic and accident intersections.
		"bicycles (and lanes) should not mix with auto traffic. Bicycles should have their own paths for safe ride. Bicyclists do not obey traffic laws."
		Before adding additional programs, I'm recommending improvements be completed to address the congestion at Rt 12 and Rt 173. Because impatient drivers continue to drive through Sunset Ridge at high speeds. (not sure if there's a solution though)

TABLE 24: PUBLIC SURVEY #3 OPEN ENDED QUESTIONS CONTINUED

NO.	QUESTION	ANSWER
2	Do you have any comments on the proposed list of policies?	"-Would love to encourage more restaurant growth downtown with outdoor dining policy. -As a young family moving into Richmond, anything that makes walking in the downtown area easier/safer is a priority"
		Complete lack of sight on actual needs specific to our village
		I think safe infrastructure for a diverse group of civilians (ie: pedestrians, cyclists, runners, motor vehicles, etc.) is absolutely necessary. The peace of mind of dedicated spaces for specific outdoor activities will encourage more of these activities in town.
		As for the vehicle ordinance, using the prairie trail or hackmatack tails with motorized vehicles doesn't go with what the McHenry County Conservation District allows on their pathways. This will create confusion with people to use it for their dirt bikes, atv and utv vehicles. A motorized bicycle is very different than a scooter and that also creates confusion. Are you including the conservation district on these policy change ideas to verify that they will allow the changes.
		"reduce pedestrians from ""jay- walk"" crossing and walking against traffic lights. Very poor street lighting = pedestrians not seen poorly defined crosswalks lead to confusion and accidents"
		In general, I do not support additional regulations/ordinances. These should be kept at a minumum.
		While the engine regulations would be nice, honestly I doubt there will be any enforcement.
		Hopeful "complete streets " might someday allow for crosswalk across 12 by sunset ridge .
		You should provide better examples for policies like Zero Vision policy.
		Regarding e-bikes and vehicle ordinance- the use of e-bikes on the Prairie Trail makes Richmond more accessible to surrounding communities to the south (and north and west).
		None
		In the Vehicle Ordinance section, I would not want the sentence about motorized use in Hackmatack NWR to give readers the impression that motorized ebikes and scooters could be permitted on refuge lands. These lands will be governed by the USFWS and the decision will need to be made by the refuge manager if their use is compatible with with the refuge's statutory purpose.
3	Are there other policies that the Village should consider that could positively impact walking, bicycling, accessibility, or transportation safety?	Sometimes as towns get bigger/more popular laws are put in place to limit where Dogs are allowed. As a responsible pet owner- I would want to discourage any such polices. :)
		Sidewalks installed from subdivisions, such as Sunset Ridge, to access nearest crossing at light.
		Policies do not change the lack a accessible sidewalks and crossings outside of recent developments neglecting areas of town that have been around longest and remain disproportionately serviced
		Safe and obvious entry/exit points to/from town and recreation areas, parks and trails.
		Education about cyclists and pedestrians for vehicle drivers
		In the Vision Zero policy, there should be adding additional traffic lights or other features/ improvements to high traffic and accident intersections.
		"bicycles (and lanes) should not mix with auto traffic. Bicycles should have their own paths for safe ride. Bicyclists do not obey traffic laws."
		Before adding additional programs, I'm recommending improvements be completed to address the congestion at Rt 12 and Rt 173. Because impatient drivers continue to drive through Sunset Ridge at high speeds. (not sure if there's a solution though)

NO.	QUESTION	ANSWER
3	Are there other policies that the Village should consider that could positively impact walking, bicycling, accessibility, or transportation safety?(cont.)	Sidewalks on side of 12 from sunset ridge to ace, and cross walk across 12 so those of us in Sunset and pheasant ridge don't get killed crossing and can access trail or safely walk to downtown
		It would be great to access federal or state funding for any projects.
		Adding trash bins and pet waste stations (with bags supplied) near the Prairie Trail and around the Village generally!
		"-definitely adding sidewalks where they are missing, especially along Broadway Rd -adding more pedestrian/bike rider actuated Rectangular Rapid Flashing Beacon (RRFB) and crosswalks across Rte 12 in both downtown Richmond and at Hunter Dr, at Golden Hawk Rd, at W Solon Rd on Rte 31, at Broadway crossing of Rte173. -pursue Safe Streets for All grants"
5	Do you have any comments on the proposed list of programs?	Love the idea of promoting health habits with our children at a young age!
		Try integrating programs that are beneficial for our town based on our services available not thing that have worked in larger towns because they have far more services and amenities available also need to stop catering to people that operate bikes on street with added programs as they majority have a complete disregard for others
		Bicycle benefits program implemented after new infrastructure in installed/created.
		I don't have children, so while I am personally less interested in those programs, they are probably more impactful as they are teaching children and their parents about cycling and pedestrian safety.
		The school district already offers a walk/bike to school day. The school sponsors it.
		"feels like most of this depends on schools and police, more parent involvement needed. Reading signage while driving is dangerous unless it is 1 or 2 large words and symbols. Riding bike on street celebrations is dangerous to pedestrians"
		Monthly Open Streets Celebration would be beneficial, however, I'm again concerned about the traffic congestion it would create. We already have too much traffic through downtown.
		"I love the idea of the bike benefits program. The monthly street celebrations would be great. I think parking would still need to be available because Richmond is/will hopefully grow as a destination city."
		The open streets celebration would bring in a ton more people to Richmond even if it means diverting traffic. While people generally love Richmond, they consistently mention feeling uncomfortable/unsafe due to the Route 12 traffic.
		"-Wayfinding is so important to connect users of the Prairie Trail to MCCD sites, Hackmatack NWR, village parks and businesses -I prioritized my rankings towards things that are likely to bring about longer community improvement (open streets celebrations- bring the community together, bike safety curriculum in schools- develop positive biking culture, for example) than one time events."
6	Are there other programs that the Village should consider that could positively impact walking, bicycling, accessibility, or transportation safety?	In addition to Open Street fest- the town could organize a 5k run/walk for charities or holidays. Participants could get certain discounts at the Street fair afterwards.
		Install sidewalks for walking from local subdivisions.
		Infrastructure first
		Monthly bike club sponsored by local businesses?
		"A walk about, biking event in the summer months to promote where new bike access or walking paths will be located. Allowing residents to learn the new offerings. Sort of like a wine walk but for bikes and walking pedestrians. If the village is offering these new options for bikes. Maybe look into the bike rentals similar to the Divy downtown or the ones in Crystal Lake."

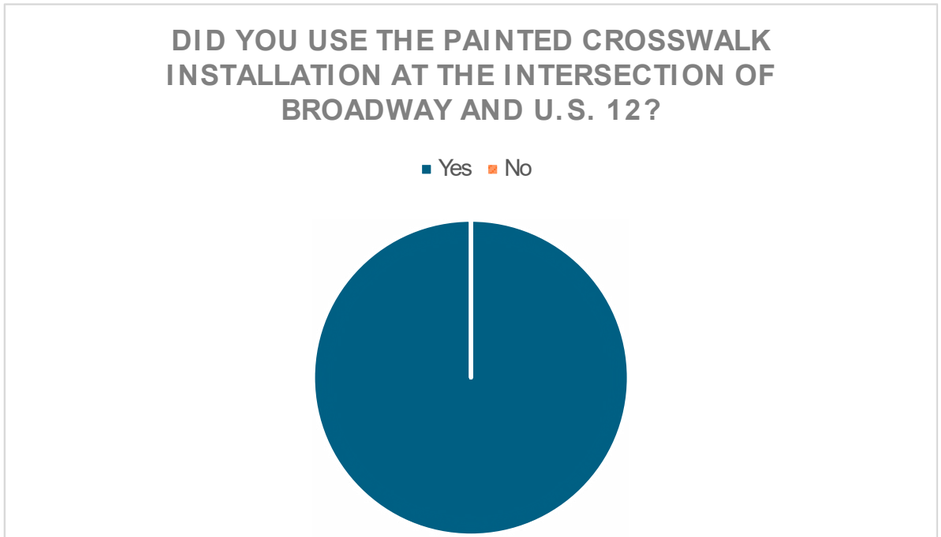
TABLE 24: PUBLIC SURVEY #3 OPEN ENDED QUESTIONS CONTINUED

NO.	QUESTION	ANSWER
		"walking on poor, unleveled sidewalks result in pedestrian injuries, need new smooth sidewalks. Poor street lighting and poorly marked crosswalks lead to confusion/accidents. Bikes, baby strollers, wheel chairs are difficult to see, more at night."
6	Are there other programs that the Village should consider that could positively impact walking, bicycling, accessibility, or transportation safety?	"Village bypass for vehicle traffic? Ambitious, of course. My ideal would be for just the few pertinent blocks in the downtown Richmond business district to become a ""car-free"" zone. That would supercharge our reputation as a recreation, fine dining/music, and tourist destination :-)"
		-The village really needs some public bathrooms. Teaming up with MCCD and Hackmatack NWR is a possibility for such along the Prairie Trail and Broadway Rd.
		Other: I live and work in Richmond
		Other: moving to Richmond in Vista Ridge subdivision
9	What is your connection to Richmond?	Other: I grew up in Richmond. I bicycle the area and am active with the Friends of Hackmatack National Wildlife Refuge.
		Other: live in unincorporated Richmond
		Other: live near Richmond

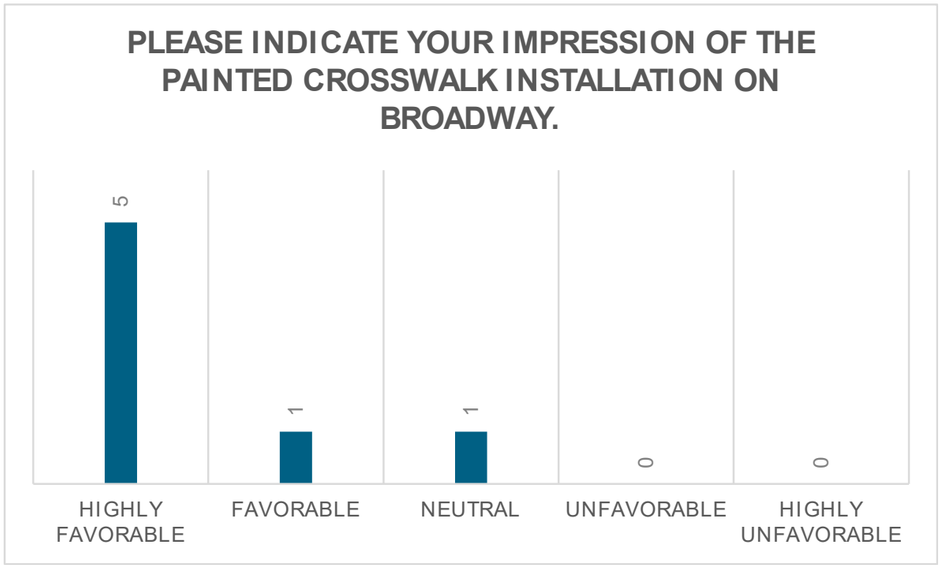
APPENDIX 4: TACTICAL URBANISM SURVEY

TACTICAL URBANISM SURVEY RESPONSES

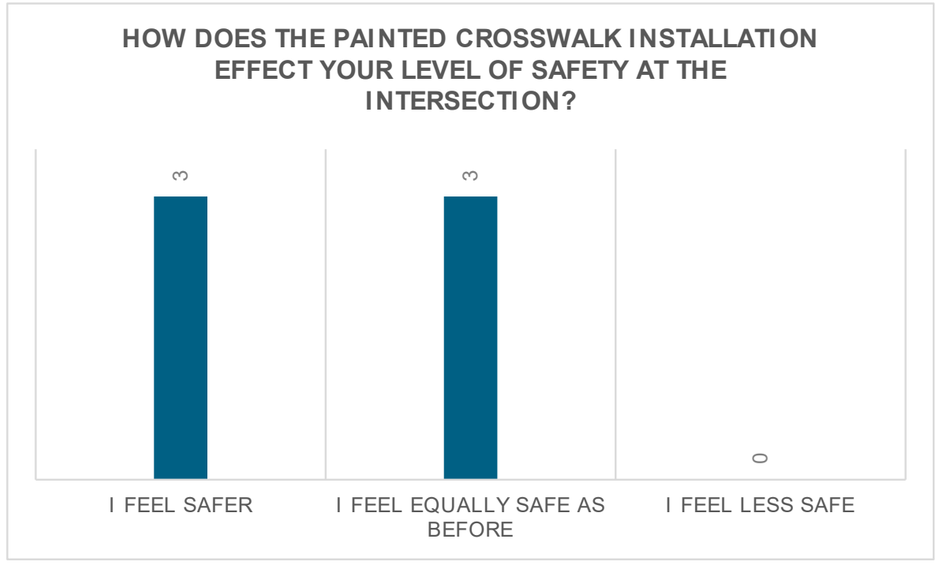
Question 1: Did you use the painted crosswalk installation at the intersection of Broadway and U.S. 12?



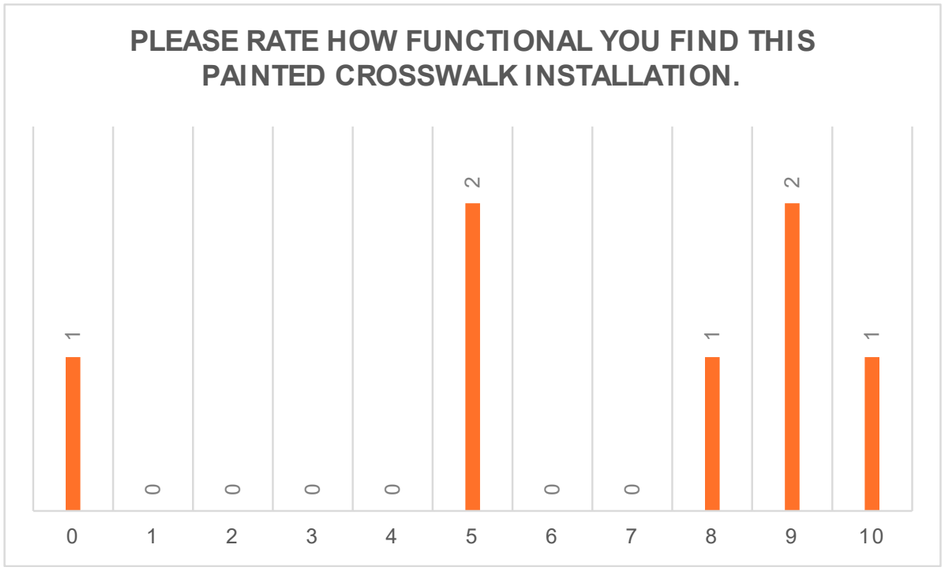
Question 2: Please indicate your impression of the painted crosswalk installation on Broadway.



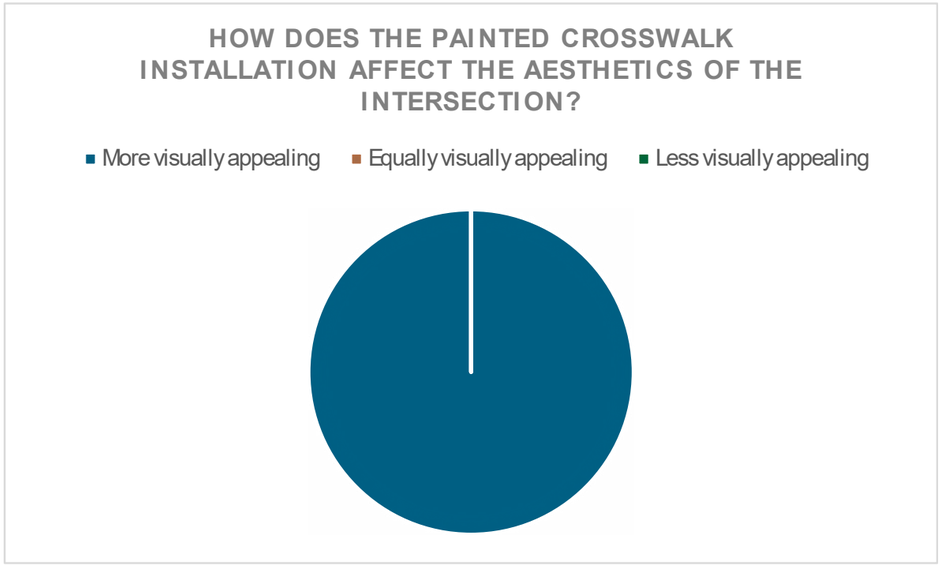
Question 3: How does the painted crosswalk installation effect your level of safety at the intersection?



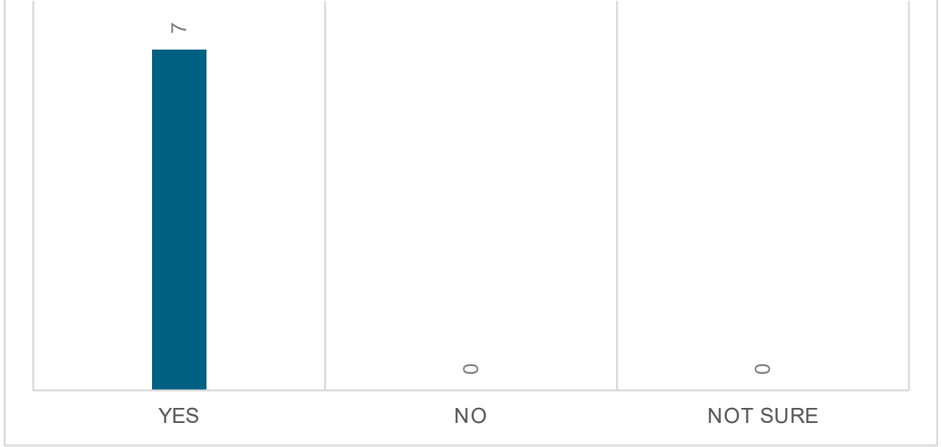
Question 4: Please rate how functional you find this painted crosswalk installation.



Question 5: How does the painted crosswalk installation affect the aesthetics of the intersection?



Question 6: Would you like to see this painted crosswalk installation be made permanent?



Question 7: Would you like to see this painted crosswalk installation elsewhere in the Village?

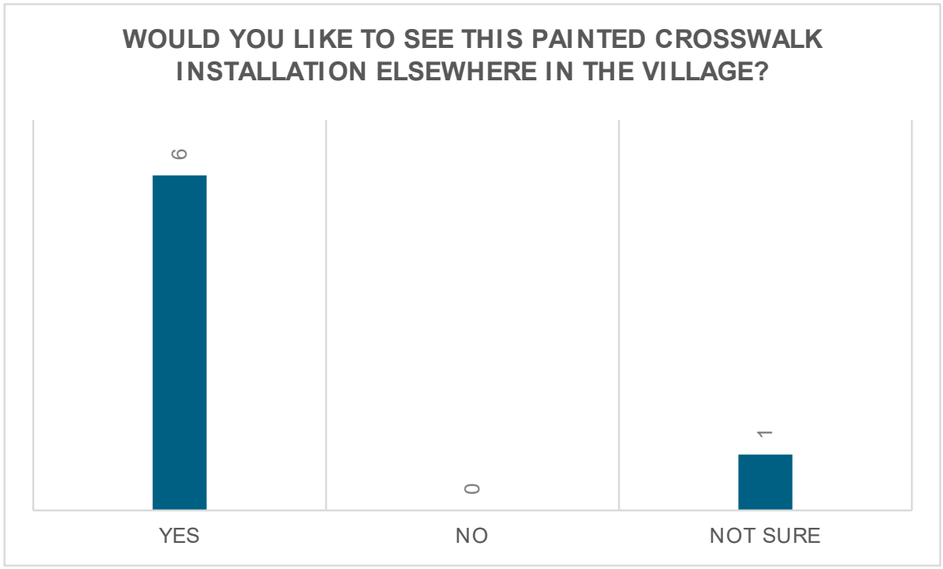


TABLE 25: TACTICAL URBANISM SURVEY OPEN ENDED QUESTIONS

NO.	QUESTION	ANSWER
8	Please provide any additional thoughts about the painted crosswalk installation.	Great idea but a better design and color scheme might look nicer
9	The Village is scheduled to do other tactical urbanism demonstrations in 2024. What would you like to see the Village incorporate in their next demonstration?	Designated outdoor seating areas

APPENDIX 5: INTERACTIVE MAP

TABLE 26: INTERACTIVE MAP RESPONSES

LOCATION	CATEGORY	TITLE	DESCRIPTION
5607 Mill Street, Richmond, IL, USA	I have an idea for this location	Bicycle Shop	Any party interested in a Bicycle Shop in the old barn. .Map doesn't show location correctly. It is right next to the bike parh.
42.47372877459737, -88.30914874670155	I have other safety concerns	Cars too fast	Cars use West Street to avoid backups on Route 12. They go 40+MPH down this street. Put speed bumps, please!!
42.46525457256789, -88.30291062093332	I have other safety concerns	Library	I think we should have a better way to walk to the library. Maybe something from the Prairie Trail crossing 12 to walk up Hill. Currently, there is no real way to do this, except at own risk.
42.474217093920565, -88.3074507336161	I have an idea for this location	Lights!	Light this part of the path
Prairie Trail & Broadway Road, Richmond, IL, USA	I have other safety concerns	no way to get from downtown/parking lot to neighborhood/trail on sidewalk	
42.47989923085274, -88.30625410465699	I feel unsafe walking here	North Businesses	There really is no safe or comfortable way to get to the businesses on the North side of town. Prairie Path is okay, but only get you to McDonalds and the strip on 173.
42.47262644326462, -88.30630021736133	I feel unsafe walking here	South and 12	Need more signage or flashing lights so pedestrians can cross.
42.47579173483284, -88.30626334664902	I have other safety concerns	Steps	Steps are hard to navigate with stroller or wheelchair
42.47650384875162, -88.30622736522578	I have other safety concerns	Steps	Too many steps here.
42.47455295945761, -88.30762769154292	I have other safety concerns		
42.47574221694583, -88.30683170488778	I have other safety concerns		
42.48875455024745, -88.3058475401999	I feel unsafe walking here		
East Kuhn Road, Richmond, IL, USA	I feel unsafe bicycling here		
Hill Rd, Richmond, IL, USA	I feel unsafe bicycling here		
Kenosha Street, Richmond, IL, USA	I feel unsafe bicycling here		
North North Solon Road, Richmond, IL, USA	I feel unsafe bicycling here		

APPENDIX 6: WEBSITE PUBLIC COMMENT

TABLE 27: WEBSITE PUBLIC COMMENT

SUBMISSION TIME	PUBLIC COMMENT
2024-03-03T02:36:27Z	Any chance you can connect N North Solon Rd to the bike path in Richmond through E Kuhn Rd or Hill Rd?
2024-10-02T07:53:21Z	
2024-10-04T17:05:33Z	"Bicylists to/from Lake Geneva bike east on Broadway. First they encounter VERY dangerous intersection at Broadway and Rte 173. This should be a roundabout on the IDOT ROW, but a shorter term solution may be using the (cow) tunnel that runs underneath Rte 173. After that they ride east on Broadway to the Village, where they gather for coffee etc. This route should be part of the County's Scenic Roadways program so that these ""tourists"" could understand what they are seeing on this 1830's route (this could become an App). Further, we are happy to make appointments with these bicyclists to tour our gardens on this route...which the Village should work with Township and erect a sign saying, ""Welcome to Richmond, home of Hackmatack National Wildlife Refuge, established 2012.""""
2024-05-25T17:14:28Z	"Thank you for taking the time to try and improve the trail. Although I don't live in Richmond, I use the trail a lot. It is a nice trail, and is easy to ride on. The only improvements I could suggest would be bike lanes to the downtown with spots to lockup a bike."
2024-08-19T16:08:45Z	I use the trail to walk out to the high school for exercise quite often. Working together with a school district. I think straightforward improvement for convenience and safety would be to install a sidewalk on the west side of Trion Grove Road from the trail to Holian Drive, which is the north entrance of the high school. A sidewalk from Trion Grove Road next to Holian Drive would also be welcomed.
2024-05-31T22:13:30Z	"There really should be speed bumps or other speed control devices to keep cars from speeding through the neighborhood streets. They use the neighborhood as an alternative to 12 when it gets backed up. I regularly see cars going 40+ mph down neighborhood streets. I put out “slow” markers in my own yard to protect the kids. The flashing lights at 12 and Broadway work well. Consider another set at South and 12, so we can cross the kids to the middle school or get down to the grocery store. Light the Prairie Trail from South to Broadway. It would be beautiful and a great place to walk after dinner downtown."

APPENDIX 7: BLOS

OBJECTIVE

The primary goal of the BLOS is to categorize roadways into four distinct levels of service for bicyclists. This classification aids in identifying routes that are conducive to cycling for all ages and skill levels, and those that require improvements to enhance safety. It serves as a guide for infrastructure development, aiming to reduce traffic-related stress for bicyclists and encourage cycling as a safe, viable mode of transportation.

FORMULA

The BLOS score is calculated using a formula that considers several critical factors impacting cyclist safety and comfort:

BLOS = MAX (0, 10 – Speed Penalty – Traffic Penalty + Road Width Benefit + Shoulder Width Benefit – Parking Penalty)

FORMULA COMPONENETS

- **Speed Penalty:** Applies a stress increment for speeds over 30 mph, acknowledging that higher speeds increase risk and stress for bicyclists.
- **Traffic Penalty:** Increases stress for AADT (Annual Average Daily Traffic) above 3,000 vehicles, as heavier traffic poses greater danger.
- **Road Width Benefit:** Awards points for roads narrower than 25 feet, which typically have slower traffic and are perceived as safer by bicyclists.
- **Shoulder Width Benefit:** Adds points for each foot of shoulder width beyond 2 feet, providing a buffer zone that enhances cyclist safety.
- **Parking Penalty:** Deducts points for parking on either side of the road, accounting for potential hazards like dooring and reduced effective lane width.

CATEGORIES

The BLOS score categorizes roadways into five levels of traffic stress:

- **Excellent:** Routes in this category are ideal for all bicyclists, including children, families, and those who are inexperienced. They typically feature dedicated bike lanes or paths, low traffic volumes, slow vehicle speeds, and strong safety measures, making the cycling experience safe and enjoyable.
- **Good:** These routes are suitable for the majority of adult bicyclists. They may have some vehicle traffic but include adequate bike infrastructure, such as bike lanes or wide shoulders, and moderate traffic speeds. Most bicyclists will find these routes comfortable and manageable.
- **Fair:** Routes in this category are more appropriate for confident adult bicyclists who are comfortable with some challenges. These routes may involve riding alongside moderate traffic with limited bike infrastructure, requiring more vigilance and skill to navigate safely.
- **Poor:** These routes are only advisable for experienced bicyclists who are accustomed to navigating heavy traffic, higher vehicle speeds, and minimal bike infrastructure. They present significant challenges and are stressful for less experienced riders.
- **Very Poor:** This category represents routes with the highest level of risk and difficulty. They often lack any bike infrastructure and feature heavy, fast-moving traffic, making them generally unsafe for cycling. These routes are only suitable for the most experienced and confident bicyclists.

APPENDIX 8: ILTS

OBJECTIVE

The main goal of the Intersection LTS is to classify intersections into distinct stress levels, from low stress that is suitable for all bicyclists, including children and inexperienced riders, to high stress that only the most experienced should navigate. This classification assists in pinpointing critical areas where interventions can make cycling safer and more accessible, thereby promoting cycling as a safe and practical mode of transportation across urban environments.

FORMULA

The Intersection LTS is calculated using a formula that incorporates various elements that influence how stressful an intersection is for bicyclists:

LTS = Base Score – Traffic Control Adjustment + Traffic Volume Adjustment – Crossing Distance Adjustment + Visibility Adjustment

FORMULA COMPONENTS

- **Base Score:** A starting point that reflects an average intersection's level of stress.
- **Traffic Control Adjustment:** Modifies the score based on the type of traffic control present (e.g., traffic lights, stop signs, roundabouts), with more predictable, cyclist-friendly controls contributing to a lower stress score.
- **Traffic Volume Adjustment:** Increases stress for higher traffic volumes, as more vehicles can make intersections more hazardous for bicyclists.
- **Crossing Distance Adjustment:** Deducts points for wider intersections, as longer crossing distances increase exposure to traffic and risk.
- **Visibility Adjustment:** Adds points for good visibility at intersections, decreasing stress when bicyclists and drivers can easily see each other.

CATEGORIES

The LTS scores classify intersections into four levels of traffic stress:

- **LTS 1 - Low Stress:** Represents intersections that pose minimal stress, suitable for bicyclists of all skill levels, including children.
- **LTS 2 - Moderate Stress:** Appropriate for most adult bicyclists, these intersections may have more complex layouts or higher traffic volumes but still maintain manageable stress levels.
- **LTS 3 - High Stress:** Suitable for experienced adult bicyclists who are comfortable navigating complex traffic situations and busier intersections.
- **LTS 4 - Very High Stress:** Advised only for very experienced bicyclists, these intersections typically involve multiple traffic lanes, high vehicle speeds, or poor visibility.

APPENDIX 9: POLICY TEMPLATES

COMPLETE STREETS

As envisioned, Complete Streets are designed and operated to provide safety and accessibility for all users of our roadways and trail systems, including pedestrians, bicyclists, transit users, motorists, emergency vehicles, freight and commercial vehicles, and people of all ages and abilities. Furthermore, Complete Streets principles contribute toward the safety, health, equity, economic viability, and quality of life in a community by providing accessible and efficient connections between home, school, work, recreation, and retail destinations by improving the transportation environments throughout the Village of Richmond. It is the intent of the Village of Richmond 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.

The purpose of The Village of Richmond's Complete Streets ordinance is to accommodate all road users by creating a road and trail network that meets the needs of individuals by utilizing a variety of transportation needs. Furthermore, this ordinance directs decision makers to consistently plan, design, construct, and maintain streets to accommodate all road users, including, but not limited to, pedestrians, bicyclists, transit users, motorists, first responders, and users of freight and commercial vehicles.

Diverse Users

The Village of Richmond 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, [insert municipality here] shall develop plans and set goals to prioritize and ensure successful implementation of Complete Streets in neighborhoods with historic disinvestment, poor health outcomes, and neighborhoods where fewer than 75% of households have access to a car.

Full Commitment

The Village of Richmond recognizes that all projects, new, maintenance, or reconstruction, are opportunities to apply Complete Streets design principles. Furthermore, the Village of Richmond 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, the Village of Richmond shall ensure that appropriate accommodations are provided to support the safe, reliable movement of all road users within the project area, regardless of their preferred mode of transportation.

Clear Exceptions

Transportation infrastructure may only be excluded, upon approval of the Village Board of the Village of Richmond, where documentation and data indicate that the costs or impacts of accommodation are excessively disproportionate to the need or probable use or future use. Further, 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.

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 Village of Richmond as well as projects funded by the State and/or Federal government

shall adhere to the Village of Richmond's Complete Streets ordinance. The Village of Richmond's Complete Streets ordinance 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, the Village of Richmond shall work to incorporate native plant species and sustainable landscaping elements into Complete Streets projects.

BIKE MONTH PROCLAMATION

A RESOLUTION OF THE VILLAGE OF RICHMOND, DECLARING THE MONTH OF [MONTH, YEAR] AS "BIKE MONTH"

WHEREAS, bicycling is an environmentally friendly, cost-effective, and healthful means of transportation and recreation; and

WHEREAS, the Village of Richmond recognizes the need for alternative transportation options to reduce traffic congestion, improve air quality, and enhance the overall quality of life for its residents and visitors; and

WHEREAS, the Village of Richmond is committed to increasing opportunities for bicycling through the development of bike-friendly infrastructure, policies, and programs; and

WHEREAS, the Village of Richmond acknowledges the efforts of local bicycling clubs, community organizations, and schools in promoting bicycle safety and bicycling as a means of transportation and recreation; and

WHEREAS, Bike Month aims to celebrate the unique power of the bicycle and the many reasons we ride, from commuting, fitness, to simply exploring the community; and

WHEREAS, the Village of Richmond encourages all its residents and visitors to ride their bicycles during Bike Month as a way to foster a more active and sustainable community;

NOW, THEREFORE, BE IT RESOLVED, by the Village Board of the Village of Richmond:

SECTION 1. That the month of [MONTH, YEAR] is hereby declared as "Bike Month" in the Village of Richmond.

SECTION 2. That the Village Board urges all residents to participate in Bike Month activities and to consider using bicycles for daily transportation needs, not just during Bike Month but all year round.

SECTION 3. That the Village of Richmond continues to support and enhance its bicycling infrastructure, programs, and policies, making the city a leading bicycle-friendly community.

SECTION 4. That this resolution be effective immediately upon its passage and approval.

AGE-FRIENDLY CITY RESOLUTION

A RESOLUTION OF THE VILLAGE OF RICHMOND, DECLARING A COMMITMENT TO BECOMING AN AGE-FRIENDLY CITY

WHEREAS, the global population is aging, with a significant increase in the number of older adults expected in the coming decades; and

WHEREAS, the Village of Richmond recognizes the value and contribution of its older residents and the importance of creating an environment that supports an aging population; and

WHEREAS, an Age-Friendly City is one that encourages active aging by optimizing opportunities for health, participation, and security in order to enhance the quality of life as people age; and

WHEREAS, the World Health Organization (WHO) has outlined key features of Age-Friendly Cities that include: walkable streets, accessible housing and transportation options, opportunities for seniors to participate in community activities, and access to key services; and

WHEREAS, the Village of Richmond acknowledges the benefits of an Age-Friendly initiative that will support all ages, from young to old, and enhance the well-being, health, and engagement of all residents; and

WHEREAS, by committing to become an Age-Friendly City, the Village of Richmond will engage in a continuous improvement process to make the city more inclusive for its older residents while also benefiting residents of all ages;

NOW, THEREFORE, BE IT RESOLVED, by the Village Board of the Village of Richmond:

SECTION 1. That the Village of Richmond hereby declares its commitment to becoming an Age-Friendly City.

SECTION 2. That the Village Board directs city departments to consider and incorporate age-friendly principles in their planning, programs, and policies.

SECTION 3. That the Village of Richmond seeks to collaborate with local organizations, businesses, community groups, and residents to promote and implement age-friendly initiatives throughout the community.

SECTION 4. That the Village commits to pursuing the World Health Organization's Age-Friendly Cities designation and will undertake necessary steps to achieve this recognition.

SECTION 5. That this resolution be effective immediately upon its passage and approval.

VEHICLE ORDINANCE

Vehicle Definitions

The following words, terms and phrases, when used in this Section, shall have the meanings ascribed to them in this Subsection, except where the context clearly indicates a different meaning:

- LOW-SPEED ELECTRIC BICYCLES: A bicycle equipped with an electric motor of less than 750 watts that meets the requirements of the following classes:
  - Class 1 low-speed electric bicycle means a low speed electric bicycle that weighs less than 125 pounds and is equipped with a motor that provides assistance only when the rider is pedaling and that is not capable of providing assistance when the bicycle reaches a speed of 20 miles per hour.
  - Class 2 low-speed electric bicycle means a low speed electric bicycle that weighs less than 125 pounds and is equipped with a motor that can be used as the sole means to propel the bicycle and that is not capable of providing assistance when the bicycle reaches a speed of 20 miles per hour.
  - Class 3 low-speed electric bicycle means a low speed electric bicycle equipped with a motor that provides assistance only when the rider is pedaling and that ceases to provide assistance when the bicycle reaches a speed of 28 miles per hour, or is a Class 1 or Class 2 low-speed electric bicycle that weighs 125 pounds or more. A "low-speed electric bicycle" is not a moped, a motor assisted bicycle or a motor assisted pedicycle.
- MOPED: A moped is a motor-driven cycle, with or without optional power derived from manually operated pedals, whose speed attainable in one mile is at least 20 mph but not greater than 30 mph, and is equipped with a motor that produces two-brake horsepower or less. If an internal combustion engine is used, the displacement shall not exceed 50 cubic centimeter displacement and the power drive system shall not require the operator to shift gears.
- MOTOR ASSISTED BICYCLE: A device capable of being propelled by both human and non-electric motorized power upon which any person may ride, having two (2) tandem wheels.
- MOTOR ASSISTED PEDICYCLE: A pedal driven device capable of being propelled by human and non-electric motorized power upon which any person may ride, having two (2) tandem wheels.
- VEHICLE: Every device in, upon or by which any person or property is or may be transported or drawn upon a street, except motorized wheelchairs, low-speed electric bicycles, devices moved solely by human power, devices used exclusively upon stationary rails or tracks.

Allowable Travel

A person may operate a low-speed electric bicycle upon any highway, street, or roadway authorized for use by bicycles, including, but not limited to, bicycle lanes. A person may operate a low-speed electric bicycle upon any bicycle path within the municipality unless the municipality, county, or local authority with jurisdiction prohibits.

Vehicle Definitions

Every person riding a low-speed electric or gas bicycle upon a roadway within [insert municipality here] shall be subject to all of the provisions of this Chapter, as well as the laws of this State applicable to low-

speed electric bicycles or low-speed gas bicycles.

Exemptions.

The following shall be exempt from the prohibitions contained previous sections:

- Any police vehicle, fire vehicle, municipal vehicle, special district vehicle, county vehicle, forest preserve vehicle, United States postal vehicle, driven by an employee in the course of his/her duties.
- Motorized wheelchairs. For purposes of this Section, a “motorized wheelchair” means any motorized vehicle designed for and used by a person with disabilities.
- Electric personal assistance mobility devices, as defined in Section 5/1-117.7 of the Illinois Vehicle Code.
- Any vehicle authorized by the municipality to participate in a municipality-authorized parade, while participating in said parades.