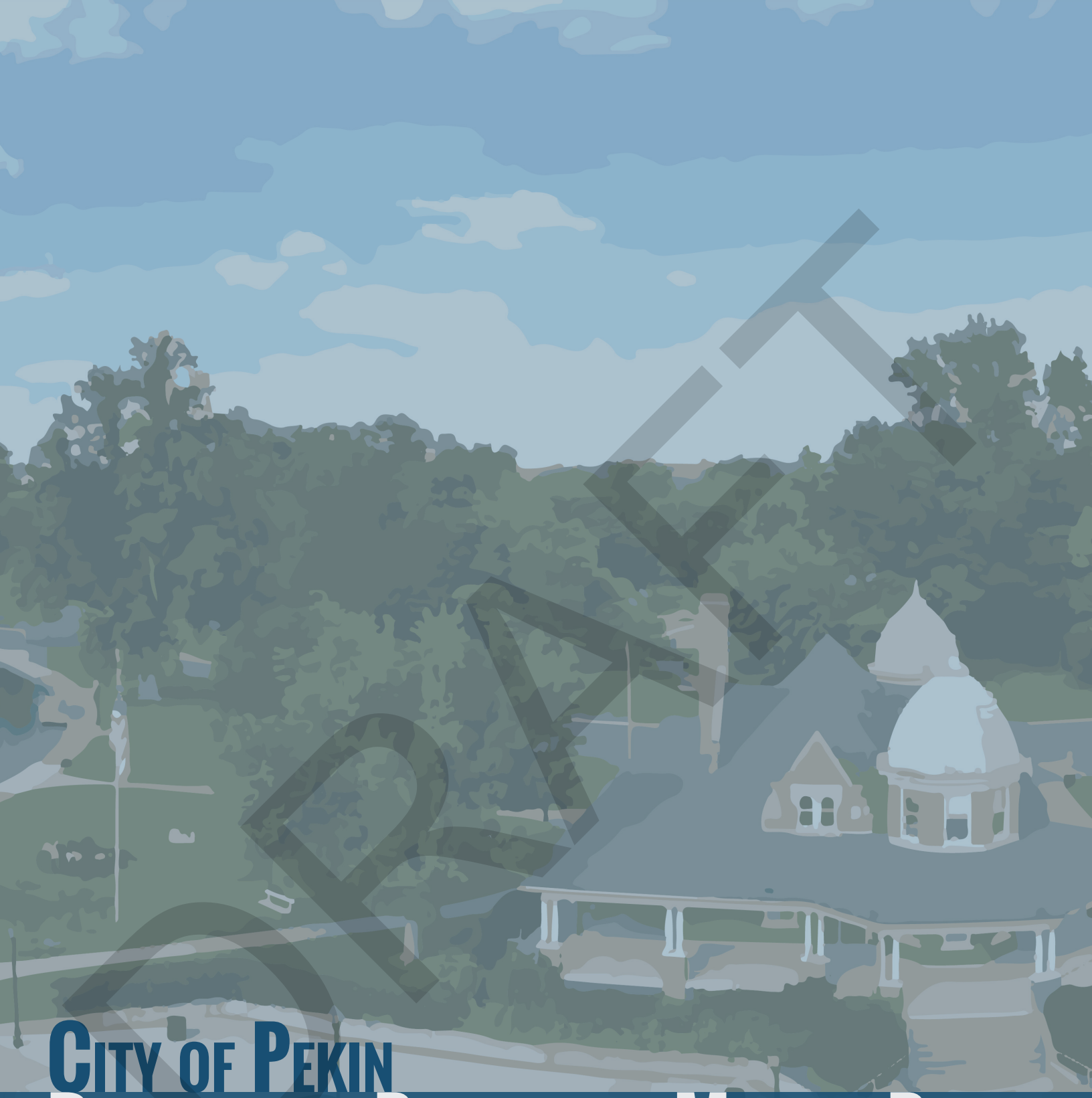

City of Pekin
Bicycle and Pedestrian Master Plan

December 2023 DRAFT

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01

PLAN OVERVIEW

Introduction

Walking, bicycling, and other forms of non-motorized travel are integral components of the City of Pekin's multimodal transportation system. In recent years, Pekin has solidified its commitment to active transportation through continued sidewalk and curb ramp improvements, major roadway construction projects along Derby Street and Court Street that incorporate safe and accessible spaces for walking, and a new shared-use path along Stadium Drive from Court Street to the Pekin Bike Path. Projects like these increase safety, accessibility, and connectivity for people walking, bicycling, and using mobility assistance devices like wheelchairs and walkers.

The Pekin Bicycle and Pedestrian Master Plan zooms out beyond the project-level to look at walking and biking conditions and opportunities citywide. The twelve-month planning process offered the City, its residents, and its community partners the space and time to come together and develop a shared vision for active transportation (walking, bicycling, and other forms of non-motorized travel), recommendations for physical improvements like trails and on-street bikeways, supporting programs and policies, and other strategies to create a safer, more comfortable, and more connected environment for active transportation.

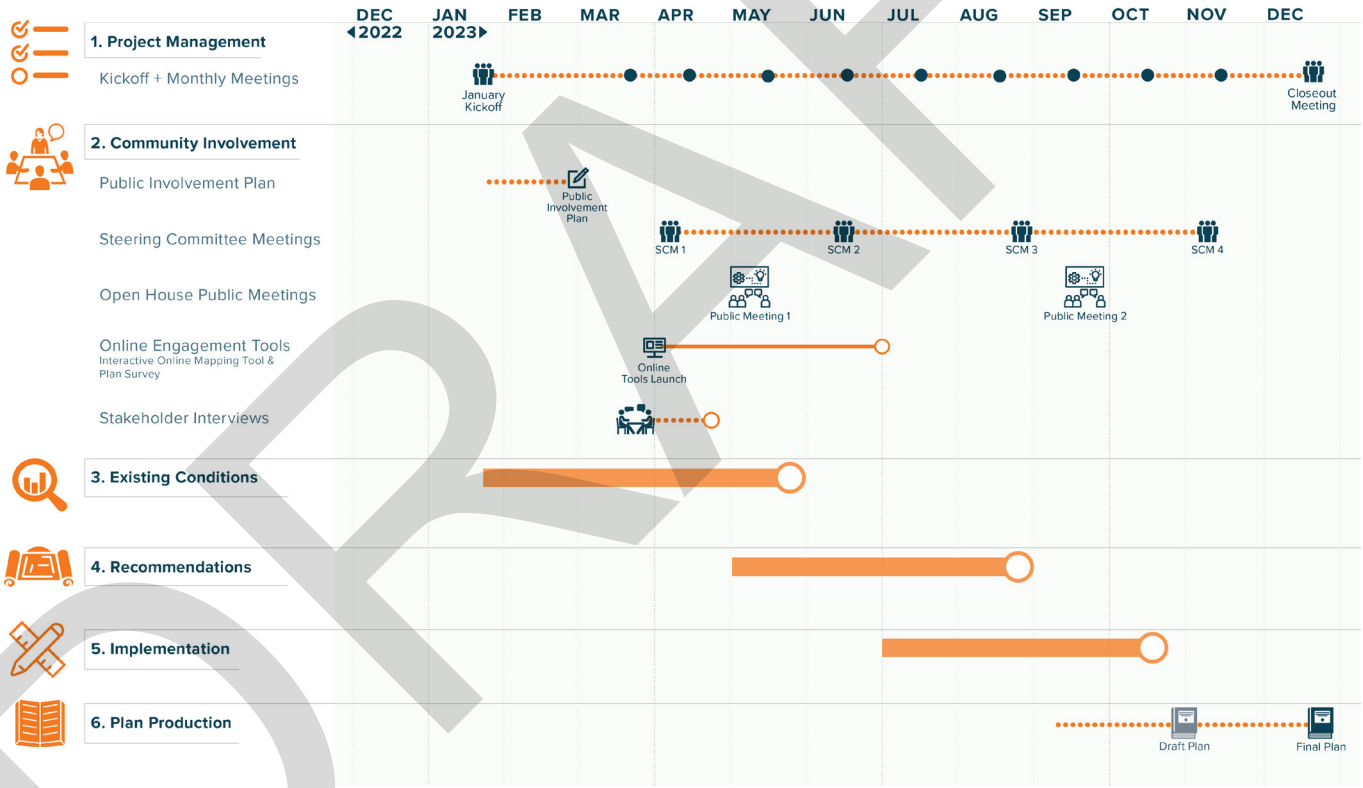
This is a long-range planning document, and the recommendations included in this plan will take years to implement. The plan serves as a guide for City staff and elected officials to invest in transportation infrastructure that supports bicycle and pedestrian safety, connectivity, accessibility, and comfort. In addition to capital projects, the plan's recommendations and implementation strategies also include programs, policies, and other actions to build a culture and environment in which bicycling and walking are valued as viable transportation and recreation options.

This Introduction Chapter provides an overview of the plan contents and highlights key plan elements, including the plan's vision and goals, community engagement process and feedback from residents to guide the planning process, key recommendations, and implementation strategies.

The Planning Process

The twelve-month planning process was initiated in January 2023 and continued through the end of December 2023. As shown in Figure 1 below, community engagement overlapped with each of the four major plan elements: Existing Conditions, Recommendations, Implementation, and Plan Production. This allowed for the public, steering committee members, and other stakeholders to inform the planning team's understanding of current conditions and needs, shape the plan's vision and recommendations, and tailor implementation strategies to align with community aspirations, capacity, and resources.

Figure 1. Project Schedule



Existing Conditions

The Existing Conditions Chapter documents current conditions for walking and bicycling, focusing on the coverage and quality of active transportation facilities, popular destinations and land uses that generate trips, connections to the transit system, current walking and biking activity, crash locations and trends, and current plans and policies that relate to this planning effort.

The chapter's detailed examination of sidewalks, trails, on-street bikeways, and recent bicycle and pedestrian crash history provides the foundation for community dialogue and ultimately the plan's recommendations to better connect people to everyday destinations throughout Pekin.

During this research and analysis phase of the planning process, general themes emerged that would set the stage for discussions among City staff and with the Steering Committee and Pekin residents. Active transportation strengths and assets include the Pekin Bike Path, the established sidewalk system, particularly within Downtown and the surrounding neighborhoods, continued investments in bicycle and pedestrian infrastructure, short distances between neighborhoods and popular community destinations, and utility and other linear corridors that may offer potential for trail development.

Weaknesses and issues to address include sidewalk quality and accessibility, limited sidewalk coverage, the lack of on-street bikeways, minimal access to the Pekin Bike Trail for neighborhoods south of Court Street and north of Sheridan Avenue, challenging intersections and trail crossings at major and minor intersections throughout the City.

Community Engagement

Through numerous engagement activities and communication channels, Pekin residents have helped the City better understand community needs and issues, develop a vision for the future of walking and biking, and identify specific projects and strategies to make active transportation and recreation safer, more comfortable, and more accessible for people of all ages and abilities.

The engagement process included steering committee oversight, an online survey that garnered 114 responses, two open house meetings (one in May and a second in September), a public comment period in December, and numerous stakeholder meetings to expand the plan's understanding and reach.

The Community Engagement Chapter summarizes the plan's engagement process and highlights key themes and ideas that have shaped the direction and content of the plan. The input provided by community residents during the planning process helped to shape the plan, from early stages of identifying key issues and opportunities to later stages of network development and refinement. Through these public engagement and input activities, two key themes emerged.

The first was a community whose existing conditions for walking and biking fall short of community needs. Poor sidewalk conditions, a lack of sidewalks and trails, and concerns about traffic safety were top concerns among residents.

Second, a community whose constituents value walking and biking and aspire to greater things: a complete sidewalk network, an accessible trail system, and on-street bikeways that link neighborhoods to schools, parks, shopping, and other destinations.

Along with the project team's analysis of existing conditions, the input gathered through these engagement activities shaped the plan's vision and led to recommendations that align with community needs and aspirations.

Vision and Goals

Advancing walking and bicycling in Pekin requires a clear direction and framework for organizing and allocating resources, coordinating with community partners, and maintaining progress towards desired plan outcomes. To achieve this, the City has developed a vision for the future of walking and bicycling, with supporting goals and objectives organized into five overarching themes: Safety, Network, Design, Policy, and Programs.

The plan's vision and goals are shown here and described in greater detail, along with supporting objectives for each goal, on page 55 in the Recommendations Chapter.

The Plan Vision

The City of Pekin strives to make walking and bicycling safe, accessible, convenient, and equitable transportation options that connect people to places, foster recreational and economic development opportunities, support healthy and active living, and elevate quality of life.

GOAL #1 - SAFETY

Create a safe travel environment for everyone, especially vulnerable road users like people walking, rolling, and bicycling.

GOAL #2 - NETWORK

Develop a complete, convenient, and interconnected active transportation network.

GOAL #3 - DESIGN

Design active transportation facilities that are accessible and comfortable for people of all ages and abilities.

GOAL #4 - POLICY

Develop policies that integrate active transportation into city decision-making processes.

GOAL #5 - PROGRAMS

Foster an environment that supports and embraces walking and biking through community partnerships and education, encouragement, and awareness programs.

Recommendations

Building on a solid foundation of existing conditions documentation, analysis, and community input, the City of Pekin has developed a comprehensive and holistic array of infrastructure, policy, and program recommendations to bring to life the community's vision for walking and bicycling.

The Recommendations Chapter of the plan presents this vision and supporting goals (as described on the previous page), followed by pedestrian and bicycle facility recommendations and citywide improvements to build a safe, connected, and comfortable active transportation network, and supporting program and policy opportunities to build community and governmental cultures that embrace and support walking and bicycling.

Recommendations for safe, interconnected, low-stress facilities for walking and bicycling are core elements of the City's vision for walking, biking, and active transportation and recreation. From sidewalks and crosswalks to trails and on-street bikeways, physical improvements to the built environment can have direct, measurable impacts on walking and biking activity, safety, and comfort.

As shown below in Table 1, the plan calls for 26.7 miles of new shared use paths (paved trails) and sidepaths, 34.5 miles of on-street bikeways, and 19 intersection and mid-block crossing improvement locations.

In addition, Table 1 lists 44.9 miles of roadways designated as Pedestrian Priority Corridors. These corridors represent important links in the pedestrian network that provide direct access to important community destinations and are often characterized by higher traffic volumes and speeds. Improvements along these corridors in tandem with other roadway improvements can have significant safety, accessibility, and connectivity benefits for people walking and using mobility assistance devices.

The recommended pedestrian and bicycle networks are depicted on the following pages and present complete, interconnected networks to support active transportation mobility for people of all ages and abilities.

Table 1. Recommended Shared-Use and Bicycle Facility Improvements

Facility Type	Project Count	Facility Mileage
Pedestrian Priority Corridors	34	44.9
Signed and Marked Shared Roadway	4	3.9
Bicycle Boulevard	25	18.3
Bike Lane/Buffered Bike Lane	7	9.0
Separated Bike Lane	1	3.3
Sidepath	13	16.3
Shared Use Path	11	10.4
Crossing Improvements	19	N/A
Grand Totals	**85**	**110.4**

Figure 2. Recommended Shared Use Projects, Crossing Improvements, and Pedestrian Priority Corridors

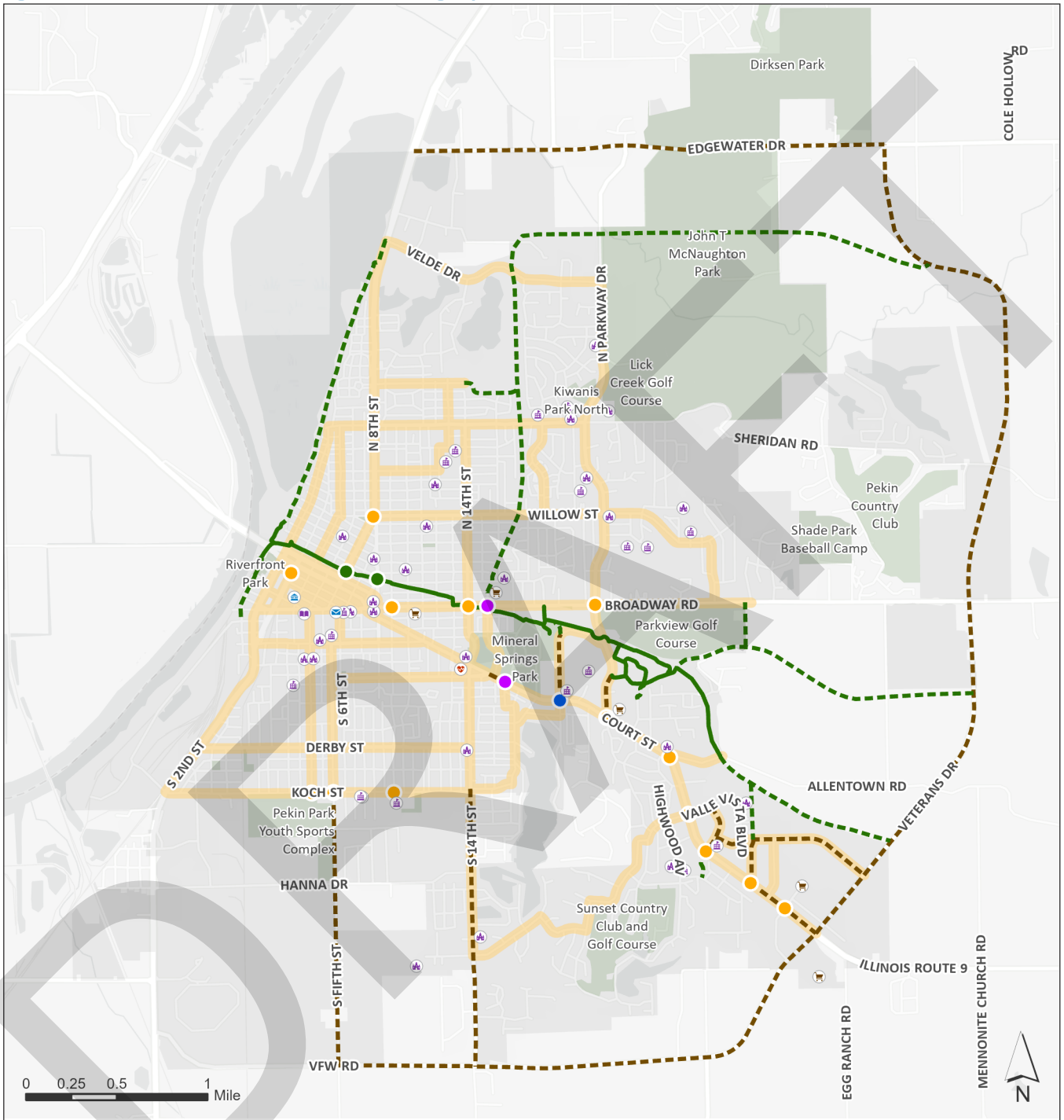
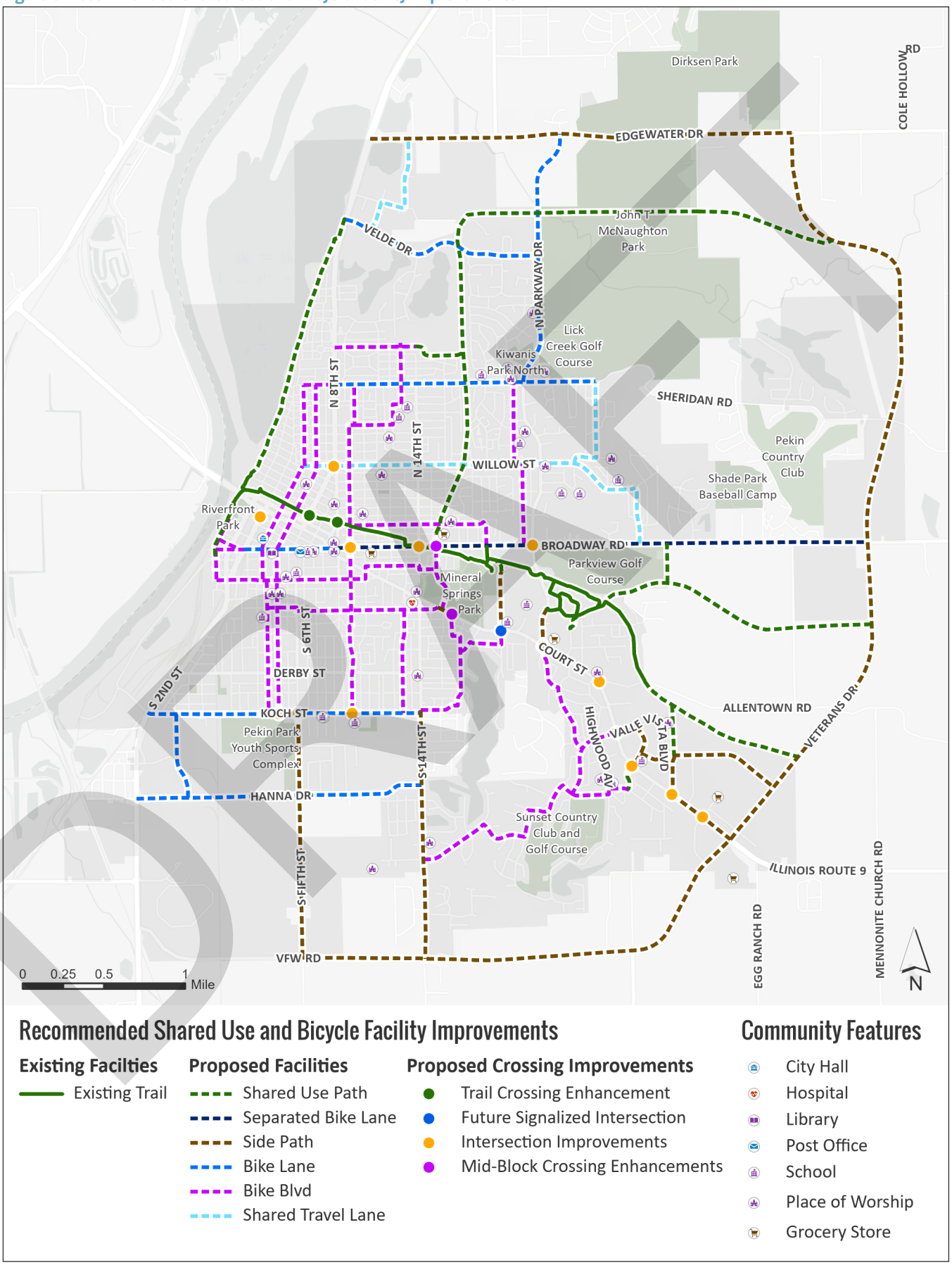


Figure 3. Recommended Shared Use and Bicycle Facility Improvements



Recommended Shared Use and Bicycle Facility Improvements

Existing Facilties

- Existing Trail

Proposed Facilities

- Shared Use Path
- Separated Bike Lane
- Side Path
- Bike Lane
- Bike Blvd
- Shared Travel Lane

Proposed Crossing Improvements

- Trail Crossing Enhancement
- Future Signalized Intersection
- Intersection Improvements
- Mid-Block Crossing Enhancements

Community Features

- City Hall
- Hospital
- Library
- Post Office
- School
- Place of Worship
- Grocery Store

Implementation

The Pekin Bicycle and Pedestrian Master Plan provides a comprehensive set of infrastructure, policy, and programming recommendations designed to make walking and bicycling safe, convenient, and equitable transportation options for people of all ages, abilities, and backgrounds. Implementing the plan will require collective commitment from the City of Pekin and its community partners to pursue the opportunities identified in this plan, as well as those that arise in the coming years.

The Implementation Chapter presents a detailed strategy to put the plan into action and to ultimately achieve the plan's vision and goals. Included in this chapter are immediate actions to sustain and build momentum, capital project prioritization to identify short-term and opportunity projects to construct in the near term, cost estimates for infrastructure projects, funding sources, ongoing maintenance recommendations, and performance monitoring and evaluation activities.

Early Actions

Build the Network

Focus on short-term improvement projects that offer high value at low cost and can be implemented quickly. Start small with crossing improvements and other low-cost spot improvements. Build incrementally, starting with signage and markings and adding traffic calming elements when resources and funding become available. Consider temporary approaches to test effectiveness and public sentiment.

Explore Key Policy Changes

Adopt a Complete Streets Policy to codify the City's current approach to walking and bicycle infrastructure considerations during project development and design. Develop a bicycle parking ordinance to integrate end-of-trip facilities into new developments and redevelopments. Establish an Active Transportation Working Group to support plan implementation.

Improve the Pekin Bike Path

Develop a Pekin Bike Path Improvements Plan to address branding and visibility, trail beautification and amenities, crossing safety improvements, general safety improvements like lighting and call boxes, and trail expansion to the west. Consider renaming the facility to create a more attractive identity around which a comprehensive branding program can be developed to guide aesthetic and wayfinding improvements and attract funding from community institutions and partners.

02

EXISTING CONDITIONS

Introduction

Walking, bicycling, and other forms of non-motorized travel are integral components of the City of Pekin's multimodal transportation system. With the Pekin Bike Trail as the spine of the active transportation network, and many destinations within walking and bicycling distance of neighborhoods, there is great potential to increase walking and bicycling for both recreation and transportation trips.

In recent years, the City of Pekin has solidified its commitment to active transportation through continued sidewalk and curb ramp improvements, new projects like the Stadium Drive multiuse path, and continued coordination with partner agencies to explore opportunities to support walking and bicycling.

The Existing Conditions Chapter provides an overview of the current state of walking and bicycling in Pekin. Included in this chapter are the following elements:

- An inventory of existing facilities for walking and bicycling, including an analysis of level of traffic stress to identify high-stress and uncomfortable streets.
- A needs assessment that examines existing walking and bicycling activity, identifies areas of the City with high demand for active transportation facilities, and reviews pedestrian and bicycle crash data to find crash locations and trends that can be addressed through this plan.
- A scan of relevant plans and policies that shape the active transportation environment.

Facilities for Walking and Biking

Sidewalks, crosswalks, trails, on-street bikeways, and other infrastructure supporting walking, bicycling, and wheelchair use are essential components of a multimodal transportation network. The presence, character, and quality of these facilities vary greatly across the City of Pekin. The documentation of existing facilities for walking and biking described in this section of the plan will help to identify system gaps and deficiencies, and opportunities for improvements to support walking, biking, and access to transit.

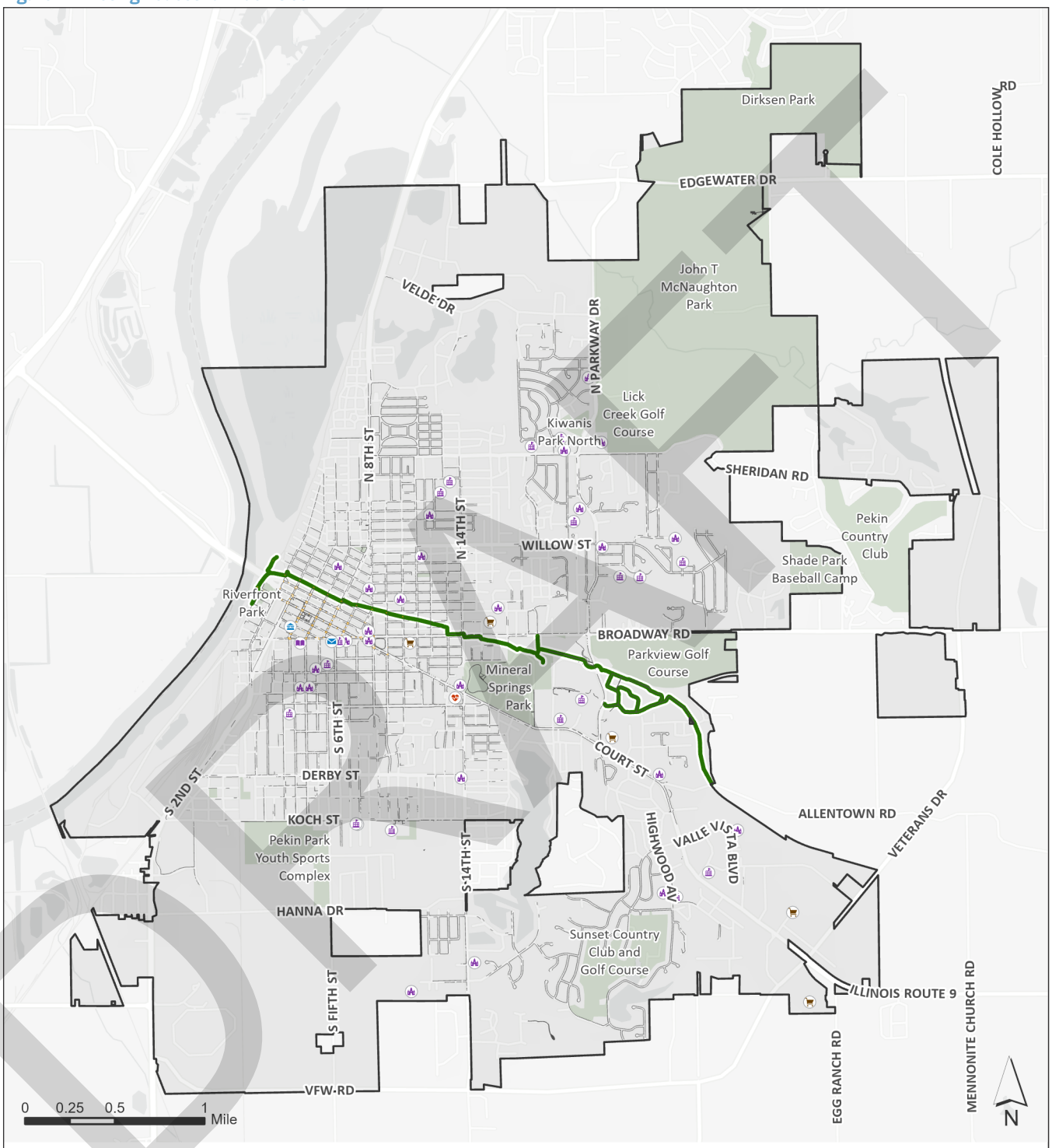
The Pedestrian Network

Whether walking, pushing a stroller, or using a wheelchair or other mobility assistance devices, pedestrians traveling in Pekin rely on the system of sidewalks, crosswalks, curb ramps, shared use paths, and other infrastructure improvements to move about the community. The presence of sidewalks, crosswalks, and other pedestrian infrastructure varies throughout the City, reflecting the different development patterns (and municipal requirements) over decades of growth and development.

There are an estimated 139 miles of sidewalks in Pekin, in addition to four and a half miles of shared use paths. Almost half of all streets in Pekin (47%) have a sidewalk on at least one side of the road, while 31 percent of streets have sidewalks on both sides of the road. Popular and enjoyable places for walking include Mineral Springs Park, Park Ave, Downtown Pekin, the Pekin Bike Trail, and various neighborhood streets with low volumes of motorized traffic.

As shown in Figure 2, nearly all streets in Downtown Pekin and many surrounding neighborhoods, for example, are characterized by sidewalks on both sides. These neighborhoods emerged at a time when walking was still a very prevalent transportation mode for many Pekin residents. Many neighborhoods further from Downtown that were developed during the Post-World War II housing boom and afterwards were auto oriented and lacked any pedestrian infrastructure. The result is an incomplete and disconnected sidewalk system that presents significant challenges to people walking or using mobility assistance devices like wheelchairs or walkers.

Figure 4. Existing Pedestrian Facilities



Existing Pedestrian Facilities

- Shared Use Path (Paved Trail)
- Sidewalk
- Crosswalk

Community Features

- City Hall
- Hospital
- Library
- Post Office
- School
- Grocery Store
- Place of Worship
- Existing Trail

Pedestrian Level of Service

Introduction

The purpose of the Pedestrian Level of Traffic Stress (PLTS) is to create a high-level inventory and a walkability/connectivity performance rating of pedestrian facilities in a community without needing a significant amount of data. The PLTS methodology classifies roadway segments according to the level of pressure or strain experienced by pedestrians and other sidewalk users. Other users include non-motorized forms of transportation as well as motorized power chairs, scooters, and other wheeled mobility devices which are permitted and assumed to use pedestrian facilities.

PLTS is typically used during the creation of regional or local transportation plans and is intended for use in urban areas. It can be used in rural conditions where pedestrian facilities exist; however, the method will yield a high PLTS where there is higher-speed traffic.

Methodology

The underlying premise of the PLTS is that pedestrian comfort increases with fewer travel lanes, lower vehicle speeds, and greater separation from motor vehicle traffic. PLTS scoring for roadway segments ranges from PLTS 1 (most comfortable) to PLTS 4 (least comfortable), as described in detail in Table 2. These scores were assigned to each block/street segment within the study area. PLTS scores were not calculated for intersections due to the lack of necessary data inputs.

Table 2. Pedestrian Level of Traffic Stress Categories

PLTS	Description
1	Represents little to no traffic stress and requires little attention to the traffic situation. This is suitable for all users including children 10 years or younger, groups of people and people using a wheeled mobility device. The facility is a sidewalk or shared-use path with a buffer between the pedestrian and motor vehicle facility. Pedestrians feel safe and comfortable on the pedestrian facility. Motor vehicles are either far from the pedestrian facility and/or traveling at a low speed and volume. All users are willing to use this facility.
2	Represents little traffic stress but requires more attention to the traffic situation than of which young children may be capable. This would be suitable for children over 10, teens and adults. All users should be able to use the facility but, some factors may limit people using wheeled mobility devices. Sidewalk condition should be good with limited areas of fair condition. Roadways may have higher speeds and/or higher volumes. Most users are willing to use this facility.
3	Represents moderate stress and is suitable for adults. An able-bodied adult would feel uncomfortable but safe using this facility. This includes higher speed roadways with smaller buffers. Small areas in the facility may be impassable for a person using a wheeled mobility device and/or requires the user to travel on the shoulder/bike lane/street. Some users are willing to use this facility.
4	Represents high traffic stress. Only able-bodied adults with limited route choices would use this facility. Traffic speeds are moderate to high with narrow or no pedestrian facilities provided. Typical locations include high speed, multilane roadways with narrow sidewalks and buffers. This also includes facilities with no sidewalk. This could include evident trails next to roads or 'cut through' trails. Only the most confident or trip-purpose driven users will use this facility.

Findings

The results of this PLTS analysis are displayed in the chart to the right (Figure 5) and the map on the following page (Figure 7). As the results suggest, the presence of sidewalks is the primary driver of PLTS scoring in Pekin, with most streets that have sidewalks on both sides receiving a PLTS 2, which represents a comfortable, low-stress environment for pedestrians. Just under 30 percent of roadways in Pekin are low stress (PLTS 1 or PLTS 2). These consist primarily of streets in Downtown Pekin and surrounding neighborhoods, as well as some residential developments to the north, northwest, and southwest of the city that include sidewalks for pedestrian mobility.

High-stress roadways, which represent 71 percent of roadways in Pekin, consist of residential streets without sidewalks and many arterial and collector roads that carry higher volumes of traffic at higher vehicle speeds. When excluding local and neighborhood streets and focusing only on arterial and collector roads (Figure 6), the prevalence of high-stress roads increases to nearly 80 percent. Many of Pekin's commercial, recreation, employment, and education destinations are located along these high-stress corridors. The lack of sidewalks and low-stress environment on many roads in Pekin create a disconnected pedestrian network and limit people's ability to safely and comfortably walk to nearby destinations.

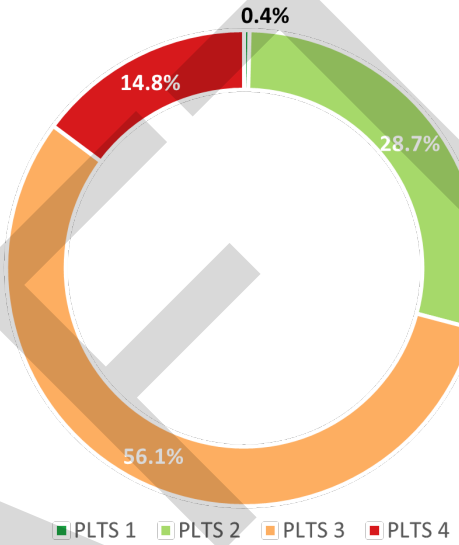


Figure 5. PLTS Scores for All Roads

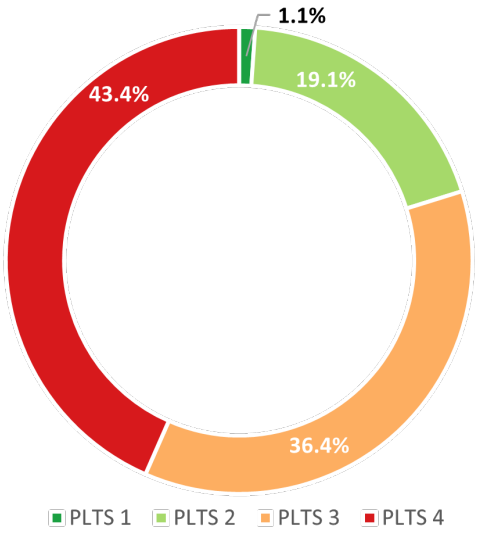
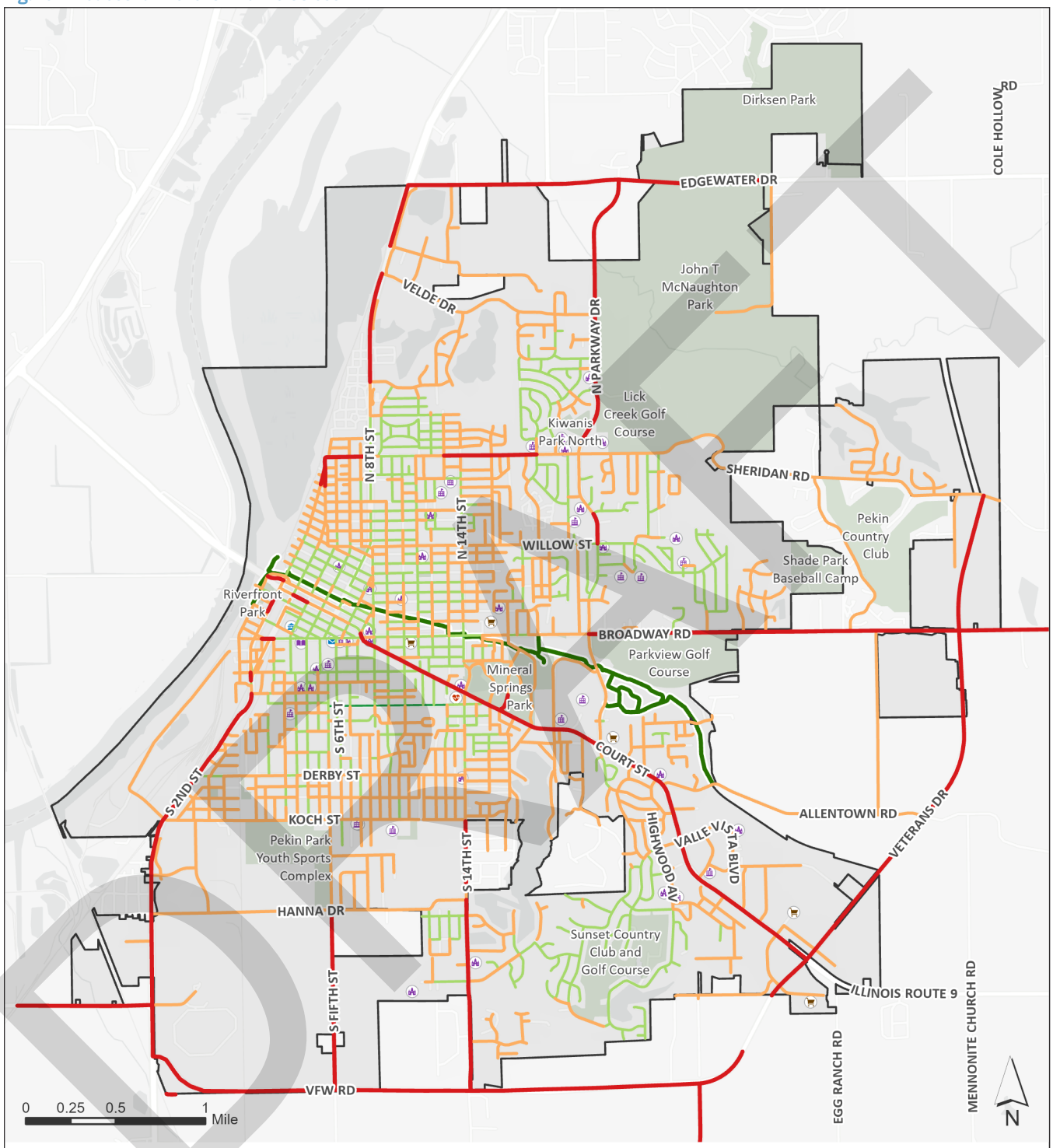


Figure 6. PLTS Scores Excluding Local Roads

Figure 7. Pedestrian Level of Traffic Stress



Pedestrian Level of Traffic Stress

- 1 - Lowest Stress
- 2
- 3
- 4 - Highest Stress

Community Features

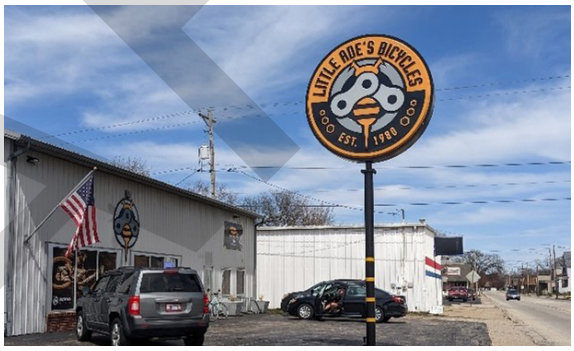
- City Hall
- Hospital
- Library
- Post Office
- School
- Grocery Store
- Place of Worship
- Existing Trail

The Bicycle Network

While bicycling is permitted on all roadways in the City of Pekin, not every roadway offers a safe and comfortable experience for people traveling by bicycle. Many communities support bicycling activity by creating a network of interconnected bicycle facilities, or "bikeways." Common bicycle facility types include shared use paths (often referred to as trails or greenways), sidepaths, dedicated bicycle lanes, and separated bike lanes, shared travel lanes (with signage and/or shared lane markings), calm streets or bicycle boulevards, wayfinding signage, bicycle route designation and wayfinding signage, and end-of-trip facilities like bike racks and bike lockers.

Pekin's bicycle network is still in its infancy. There are currently no designated on-street bicycle routes or dedicated bicycle lanes in Pekin. However, bicyclists are permitted to ride on all streets in Pekin, and many people choose travel by bicycle, particularly along neighborhood streets and other comfortable, low-volume corridors throughout the City. However, bicycling along and across busier, multi-lane arterials like Court Street, Broadway, and North 8th Street can be challenging for most people, creating both real and perceived barriers that limit bicycling's potential as a viable travel option in Pekin.

While bicycling on Pekin streets may be challenging for many people, the 4.5-mile Pekin Park Bike Trail offers a comfortable, low-stress bicycling route for Pekin residents and visitors. The east-west shared use path connects Riverfront Park and Downtown Pekin to Coal Miners' Park and other destinations to the east before ending at Allentown Rd. While the Pekin Bike Trail is heavily utilized for both recreation and utilitarian trips, the lack of connections to other bicycle facilities restricts its potential.



Bicycling Conditions & Destinations in Pekin

Bicycle Level of Traffic Stress

Introduction

Bicycle Level of Traffic Stress (BLTS) provides an intuitive framework to categorize roadways based on the level of stress, or conversely level of comfort, for people bicycling. The analysis provides decision-makers, stakeholders, and the general public with a tool for understanding the suitability of individual street segments and paths for accommodating different types of people traveling by bicycle—from children and casual adult riders to daily commuters and experienced recreational cyclists. It can also be used to explore low-stress network connectivity, identify gaps in the low-stress network, and examine how changes to the system can provide low-stress connectivity and increase access to important community destinations.

Methodology

The BLTS methodology was adapted from the 2012 Mineta Transportation Institute (MTI) Report 11-19: Low-Stress Bicycling and Network Connectivity. The methodology uses geometric and traffic characteristics of a given roadway or intersection to assign a level of traffic stress ranging from 1 to 4, where 1 represents the lowest stress, and 4 represents the highest. These categories are described in Table 3.

Refinements have been made to this methodology to incorporate average annual daily traffic volumes and address common data availability limitations. These refinements were developed by Peter Furth, one of the original authors of the MTI Report 11-19 and have been widely used for BLTS analysis in recent years.

Table 3. Bicycle Level of Traffic Stress Categories

BLTS	Target Bicycle User Type	Description
1	All Ages and Abilities	Presenting little traffic stress and demanding little attention from cyclists, and attractive enough for a relaxing bike ride. Suitable for almost all cyclists, including children trained to safely cross intersections. On links, cyclists are either physically separated from traffic, or are in an exclusive bicycling zone next to a slow traffic stream with no more than one lane per direction or are on a shared road where they interact with only occasional motor vehicles (as opposed to a stream of traffic) with a low speed differential. Where cyclists ride alongside a parking lane, they have ample operating space outside the zone into which car doors are opened. Intersections are easy to approach and cross.
2	Interested but Concerned (Mainstream Adults)	Presenting little traffic stress and therefore suitable for most adult cyclists but demanding more attention than might be expected from children. On links, cyclists are either physically separated from traffic, or are in an exclusive bicycling zone next to a well-confined traffic stream with adequate clearance from a parking lane or are on a shared road where they interact with only occasional motor vehicles (as opposed to a stream of traffic) with a low speed differential. Where a bike lane lies between a through lane and a right turn lane, it is configured to give cyclists unambiguous priority where cars cross the bike lane and to keep car speed in the right-turn lane comparable to bicycling speeds. Crossings are not difficult for most adults.
3	Enthused and Confident (Adult Commuters)	More traffic stress than LTS 2, yet markedly less than the stress of integrating with multilane traffic, and therefore welcome to many people currently riding bikes in American cities. Offering cyclists either an exclusive riding zone (lane) next to moderate-speed traffic or shared lanes on streets that are not multilane and have moderately low speed. Crossings may be longer or across higher-speed roads than allowed by LTS 2 but are still considered acceptably safe to most adult pedestrians.
4	Strong and Fearless (Long-Distance Recreational Bicyclists)	A level of stress beyond LTS3, featuring streets and facilities on which few adults would feel is acceptable to bicycle.

Findings

The results of this BLTS analysis are displayed in the chart to the right (Figure 8) in the map on the following page (Figure 10). The majority of streets in Pekin are categorized as low stress (BLTS 2). These low-stress roads consist primarily of low-volume, low-speed local and neighborhood roads. Despite the lack of dedicated bicycle facilities, these local roads offer a pleasant bicycling experience, though many bicyclists encounter more stressful situations when approaching and crossing busier arterial and collector roads.

High-stress roadways, which represent 30 percent of roadways in Pekin, consist primarily of collector and arterial roads that carry higher volumes of traffic at higher speeds. While these collector and arterial roads represent only one third of the total roadway network in Pekin, they often provide the only means of access to many of Pekin's most prominent destinations. When looking only at these functionally classified roadways (Figure 9), the prevalence of high-stress roads increases to 86 percent, presenting significant barriers to less confident, less experienced, and younger bicyclists that must travel along or across these roadways.

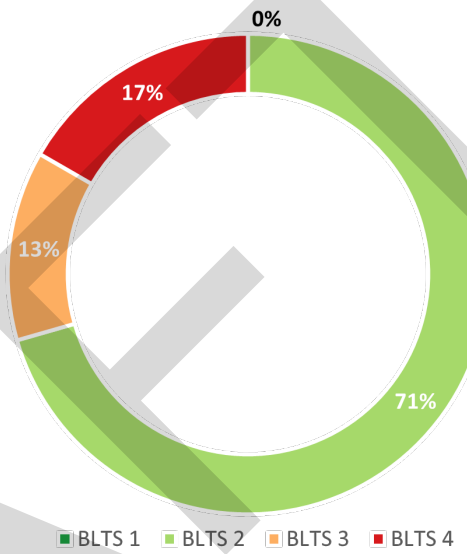


Figure 8. BLTS Scores for All Roads

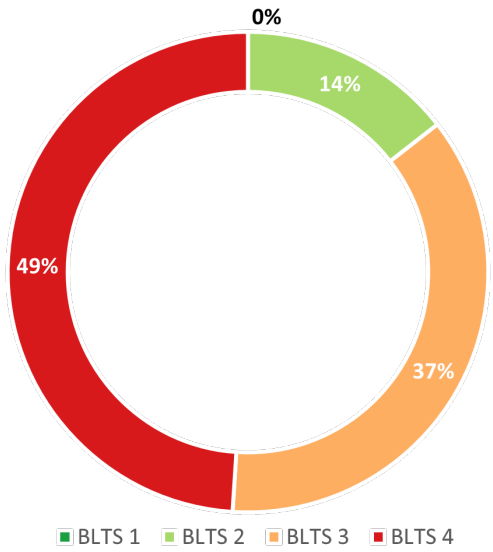
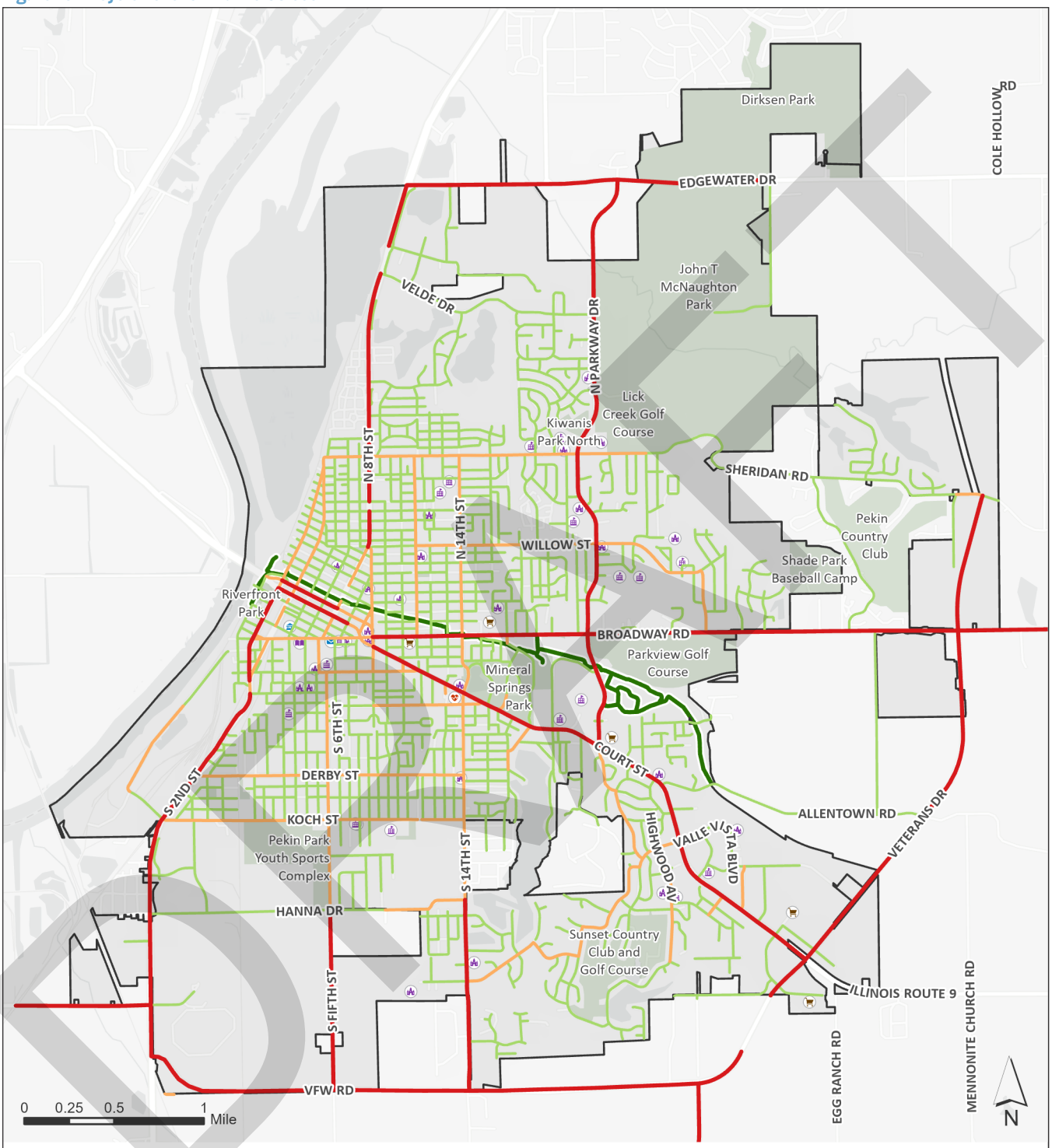


Figure 9. BLTS Scores Excluding Local Roads

Figure 10. Bicycle Level of Traffic Stress



Bicycle Level of Traffic Stress

- 1 - Lowest Stress
- 2
- 3
- 4 - Highest Stress

Community Features

- City Hall
- Hospital
- Library
- Post Office
- School
- Grocery Store
- Place of Worship
- Existing Trail

Needs Assessment

The City of Pekin is a diverse community, and transportation needs and opportunities vary from neighborhood to neighborhood. From land use and development patterns to socio-economic and racial backgrounds to bicycle and pedestrian crash trends, the experience of traveling in Pekin can be very different depending on who you are and where you live.

The needs assessment for the Pekin Bicycle and Pedestrian Master Plan utilizes a variety of data sources and analyses to identify areas in Pekin where investments in active transportation (walking and biking) infrastructure can have the greatest impact. These include:

- an examination of current bicycling and walking activity utilizing data from ReplicaHQ and Strava;
- a latent demand analysis, which examines the density of trip origins and destinations like residences, places of employment, parks, schools, and transit stops to identify areas of the city with high potential to support walking and bicycling trips; and
- an analysis of bicycle and pedestrian-related crash data to identify trends and other key findings to inform plan recommendations.

Pedestrian and Bicycle Activity

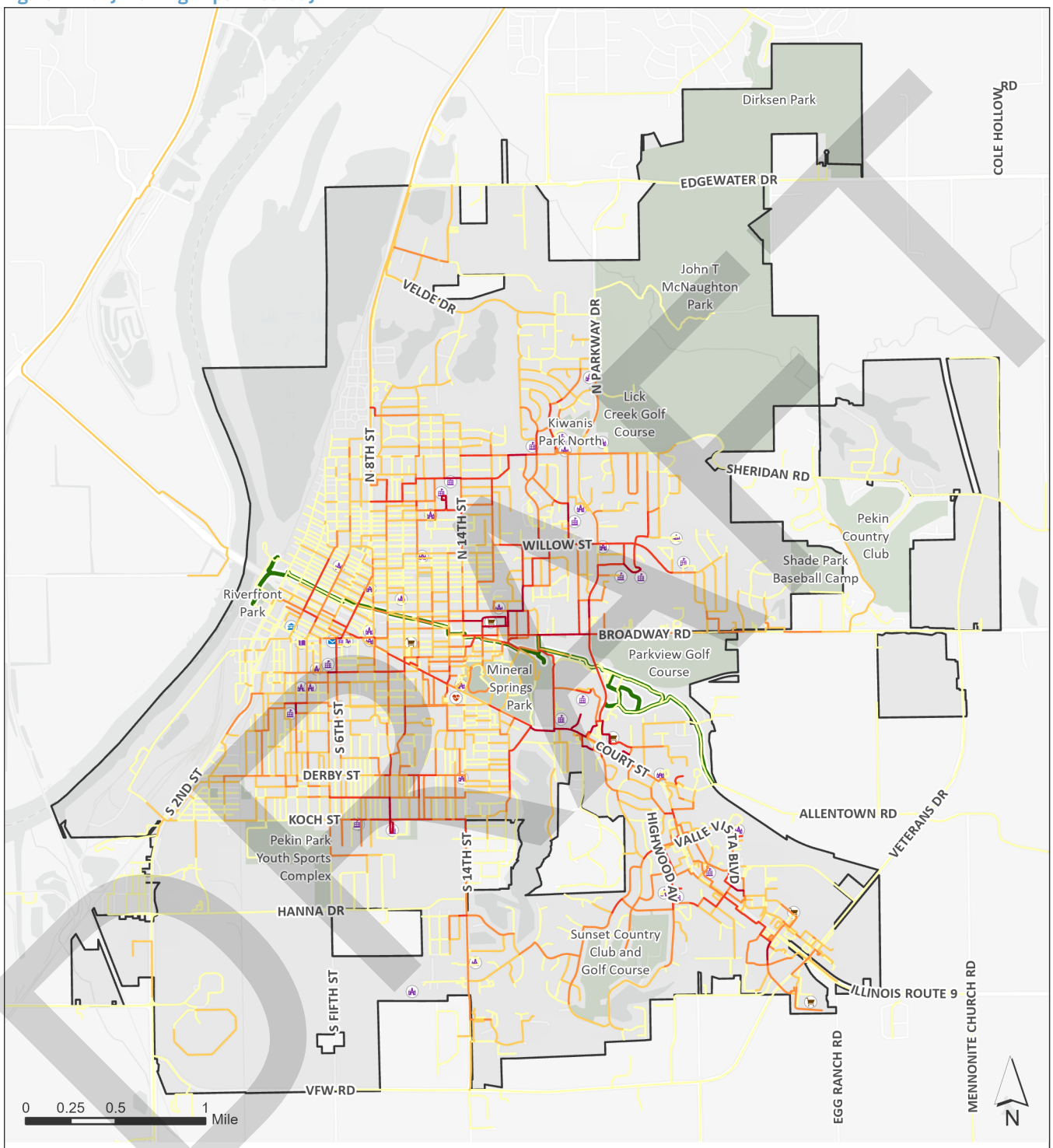
Many people choose to walk and bike in Pekin for both utilitarian and recreational trips. Until recently, data collection efforts to understand travel patterns focused primarily on the movements of motor vehicles. New enterprise data sources like ReplicaHQ and physical activity tracking apps like Strava, Garmin, and MapMyRide help to better understand non-motorized travel patterns and factor these modes into transportation plans and projects.

ReplicaHQ

ReplicaHQ is a planning tool that combines census data and anonymized cell phone data to develop a synthetic travel demand model for regions across the United States. The tool provides valuable information about mode choice, trip purpose, trip origins and destinations, and average daily trips on a given roadway segment. For this plan, ReplicaHQ data was collected to identify where people are typically walking and biking on a given weekday.

Figure 11 on page 24 and Figure 12 on page 25 show the volume of trips on each roadway and trail segment in the city for people walking and biking, respectively. Streets with higher volumes of daily trips are shown in the darker orange and red colors. Walking trips are more common than biking trips, and high volumes of pedestrian activity are notable along major corridors like Broadway St, Court St, Parkway Dr, and Stadium Dr, as well as many collector and neighborhood streets in more residential areas. High-volume corridors for biking trips include 10th St, Arrow St, Derby St, Parkway Dr, Red Bud Memorial Drive, Washington St, and segments of the Pekin Bike Trail. Most notable is the use of neighborhood and collector streets adjacent to Court St as a lower-stress alternative to the busy arterial corridor.

Figure 11. Daily Walking Trips - Weekday



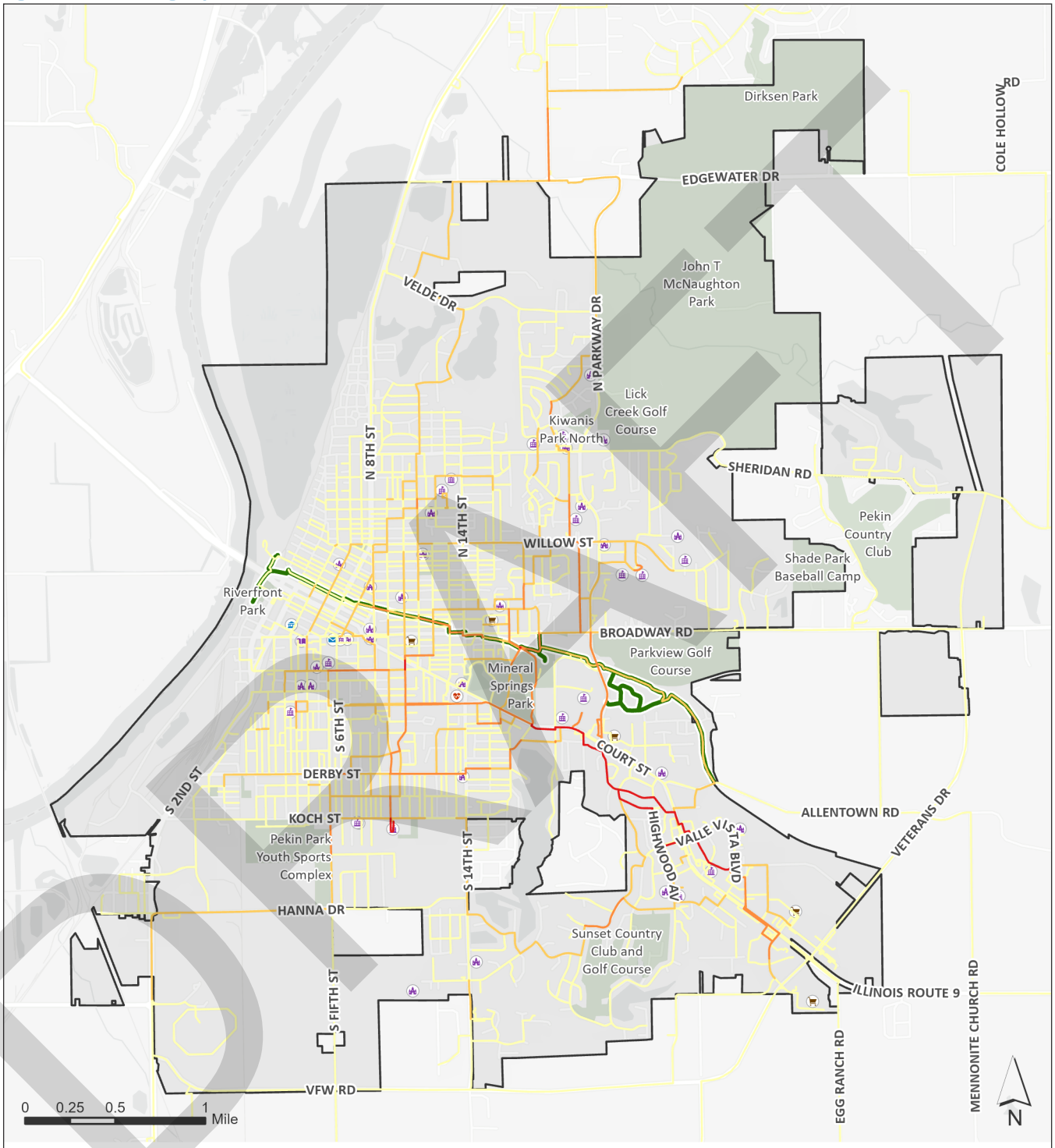
Daily Weekday Walk Trips

- 1 - 10
- 11 - 25
- 26 - 50
- 51 - 100
- 101 and Greater

Community Features

- City Hall
- Hospital
- Library
- Post Office
- School
- Grocery Store
- Place of Worship
- Existing Trail

Figure 12. Daily Biking Trips - Weekday



Daily Weekday Bicycle Trips

- 1 - 10
- 11 - 25
- 26 - 50
- More than 50

Community Features

- City Hall
- Hospital
- Library
- Post Office
- School
- Grocery Store
- Place of Worship
- Existing Trail

Strava

Strava is a physical activity tracking app used by many recreational bicyclists, runners, and joggers to document their exercise details, including route, distance, time, and pace using Global Positioning System (GPS)-enabled mobile devices. Many local agencies have used Strava's heat maps to better understand bicycling and running route preferences, though there are a few limitations to its applicability for planning purposes. First, the vast majority of trips documented by Strava users are recreational in nature, and therefore do not reflect utilitarian trip routing preferences. Second, trips logged on Strava represent a small number of all bicycle and pedestrian activity in Pekin, and therefore may not reflect the travel patterns of the broader community. Nonetheless, understanding where Strava users are walking, biking, and running can provide an additional lens through which to view active travel in Pekin.

The Strava Heat Map for pedestrian activity, including walking, jogging, and running, is displayed in Figure 13 on page 27. The darker purple and red lines indicate less activity, while the "hotter" yellow and white lines indicate higher activity. As the figure shows, high clusters of activity can be found in several areas of Pekin, including McNaughton Park, Mineral Springs Park, Coal Miner's Park, the Pekin Bike Trail, and neighborhood streets surrounding Sunset Hills Golf Course. Other well-used corridors for walking and running include 14th St, Park Ave, Sheridan Rd, Susan Hope Dr, Velde Dr, Washington Ave, and Willow St.

The Strava Heat Map for bicycling activity (Figure 14 on page 28) reveals different patterns of activity and route preferences when compared to the pedestrian activity heat map. The most notable difference is the high concentration of mountain biking on the single-track trails in Everett Dirksen Park north of Pekin. Also notable are the recreational routes leading out of Pekin on corridors like Allentown Rd, Mennonite Church Rd, Towerline Rd, South 14th St, and Veterans Drive. There are still corridors within the City of Pekin that experience higher volumes of bicycling activity by Strava users, including the Pekin Bike Trail, Koch St, 14th St, North 11th St, Willow St, Susan Hope Dr, and Velde Dr. While many of these corridors are likely part of recreational routes shared by the cycling community, they also represent potential corridors for a functional bicycle network connecting destinations across the City.

Figure 13. Strava Pedestrian Heat Map

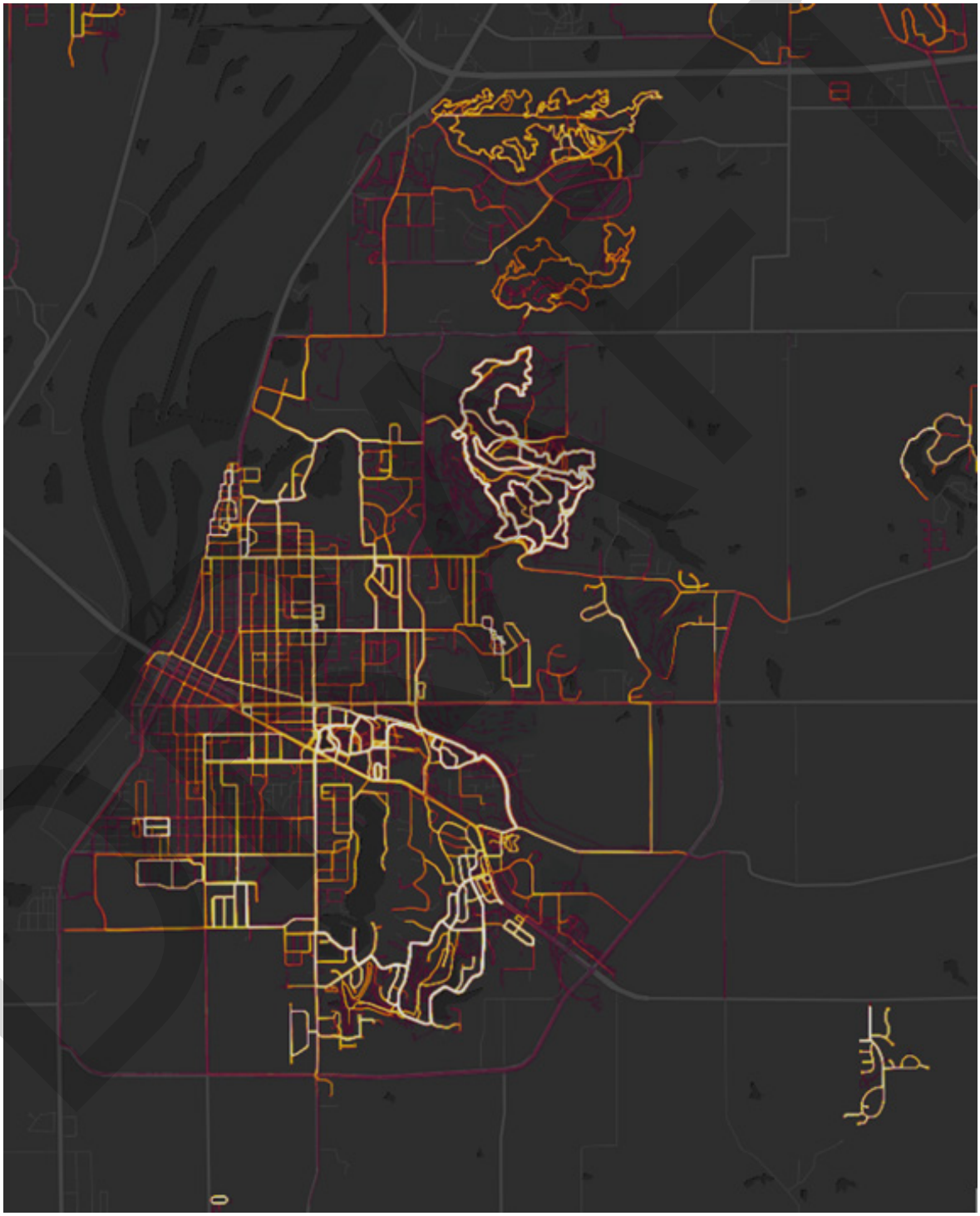
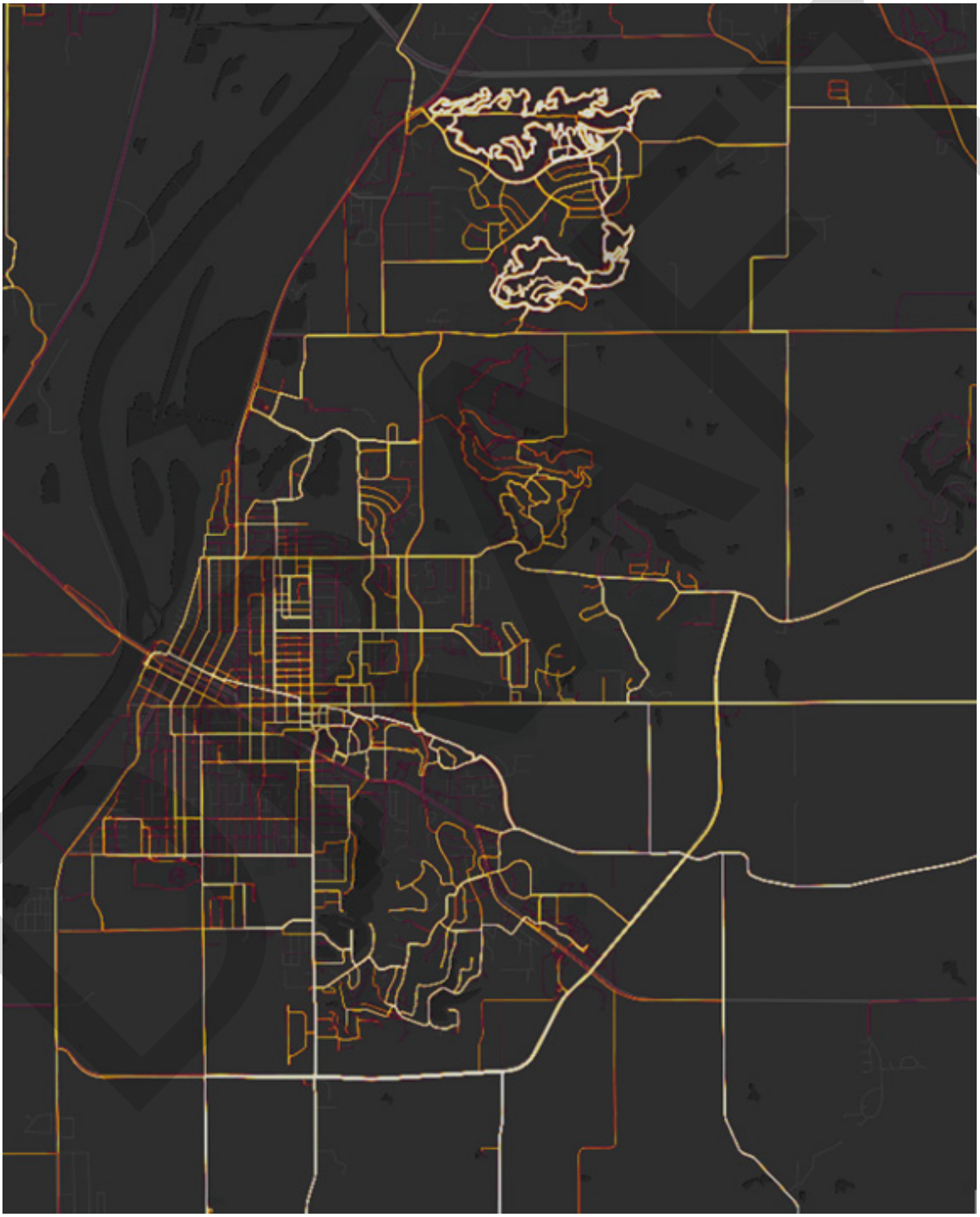


Figure 14. Strava Bicycling Heat Map



Demand for Active Transportation Facilities

The land use and transit-based demand analysis provides a general understanding of expected pedestrian and bicycling activity by combining individual spatial analyses representative of where people live, work, play, shop, access public transit, and go to school into a composite sketch of demand for active transportation facilities in Pekin.

Demand Methodology and Scoring

Categorical data representing each demand factor (e.g., live, work, play) are processed individually. The resulting values for each category are spatially joined to a uniform point grid that is used to develop a visual representation of category density using GIS-based kernel density tools. The result is a model of demand for pedestrian and bicycle facilities accounting for the impacts of destination proximity and density. Each category and its data sources are listed in the table below.

Scores increase for areas that have a high density of destinations that are close together. Scores decrease in areas with lower densities of destinations that are further apart such as fringe strip commercial. Thus, on the demand maps below, the highest density/usage/activity locations do not represent specific physical facilities, but rather represent relative higher use zones or hot spots.

Categories are scored on a scale of one to five based on density and proximity and then combined with equal weighting to develop a composite demand score. Individual and composite representations of demand for walking and bicycling facilities are important factors in the planning process. The findings from this analysis will inform Complete Streets and active transportation recommendations, network development, and project prioritization.

Demand Analysis Results

The results of the demand analysis are presented in the following map series, beginning with the composite demand map.

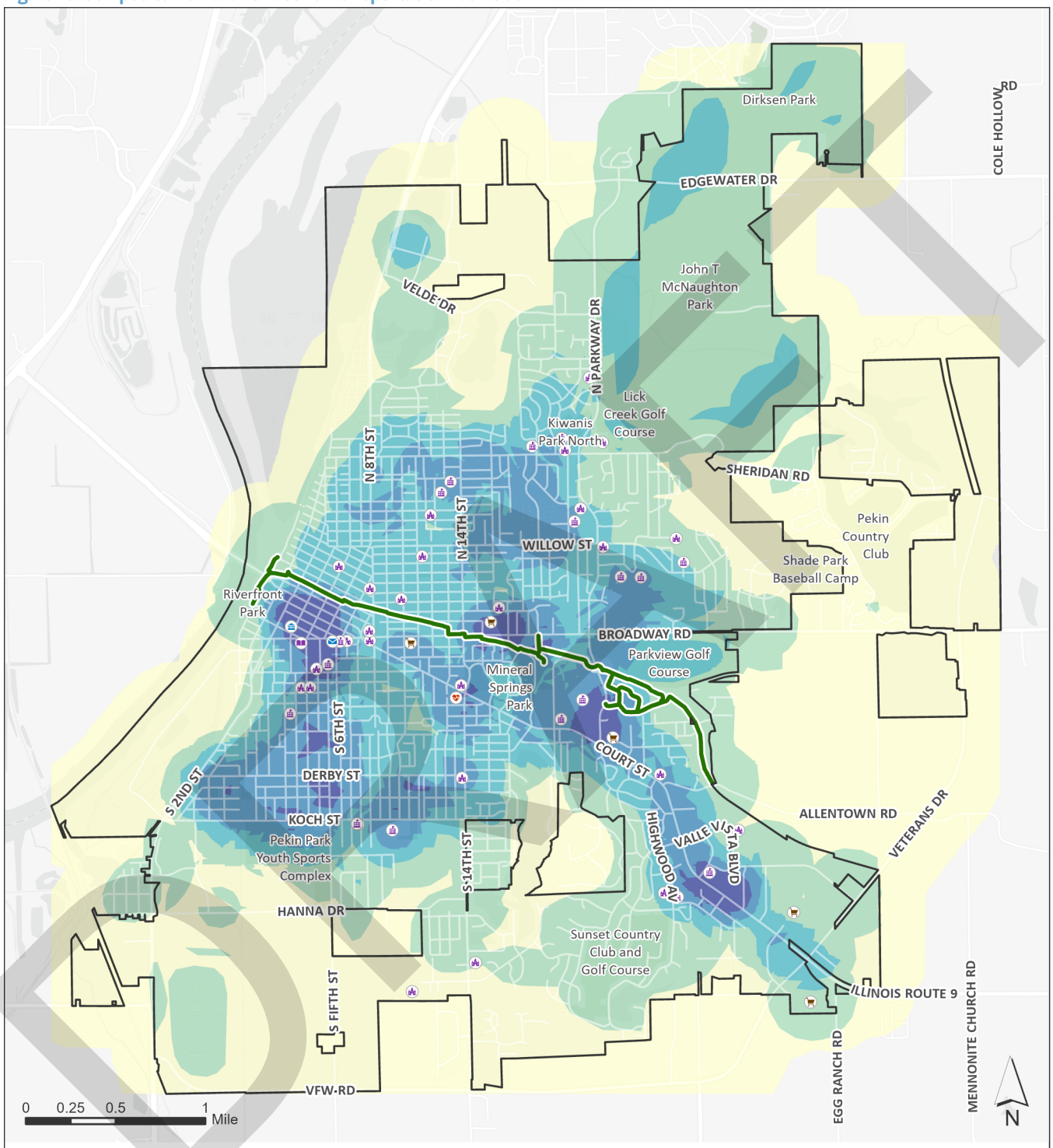
Composite Demand

The composite demand combining all categories is shown in Figure 15 on the following page. Composite Demand represents the combined relative densities of population, employment, retail employment, and trip-generating land uses like schools, parks, trails, and transit stops. Demand for active transportation facilities is higher (shown in darker blue) in the following areas: Downtown Pekin, neighborhoods between Downtown and Koch St, along 14th Street from Broadway to Derby St, along Parkway Dr between Broadway and Court St, and along Court St from Broadway to Commercial St.

Table 4. Demand Model Inputs

Input Category	Data Source
Residential Density	US Census Bureau 2020 block group-level population data (5-year estimate)
Employee Density	US Census Bureau 2020 Longitudinal Employee Household Dynamics (LEHD) block-level total employment
Retail, Dining, & Entertainment Employee Density	US Census Bureau 2020 LEHD block-level employment for retail, dining, and entertainment labor categories
Educational Facilities Density	Location of early childhood centers, elementary schools, middle schools, high schools, private primary and secondary schools, and post-secondary schools provided by the City of Pekin and Tri-County RPC
Recreational Facilities Density	Location of public parks and paved trails provided by the City of Pekin and Tri-County RPC
Transit Route Density	Greater Peoria Mass Transit District CityLink transit stop locations

Figure 15. Composite Demand for Active Transportation Facilities



Demand for Active Transportation Facilities

Composite Demand

- Least Demand
- Moderate Demand
- Greatest Demand

Community Features

- City Hall
- Hospital
- Library
- Post Office
- School
- Grocery Store
- Place of Worship
- Existing Trail

Where People Live

This category examines 2020 census block group-level population data to explore residential density patterns across the City. These locations represent potential trip origin locations, especially when situated in close proximity to nearby destinations like schools, parks, and retail. The results for this category are shown in Figure 16. Pockets of high residential density are dispersed throughout Pekin and concentrated in neighborhoods to the north of Broadway and south of Court Street.

Where People Work

This category represents employment locations for people working in Pekin based on 2020 total employment density by census block group. Depending on the type of job, employment can act as a trip attractor (i.e., retail stores or cafes), trip generator (i.e., office parks and office buildings), or both. Specific employment types, such as retail, are also used in the Where People Shop category.

The results of the employment category are shown below in Figure 17. While businesses and employers are located throughout Pekin, the relative density of employment varies significantly, resulting in a small number of high-density employment areas, including Downtown Pekin, the Carle Health Pekin Hospital, Pekin Insurance, and commercial destinations along Court Street from Valle Vista Blvd to Veterans Drive.

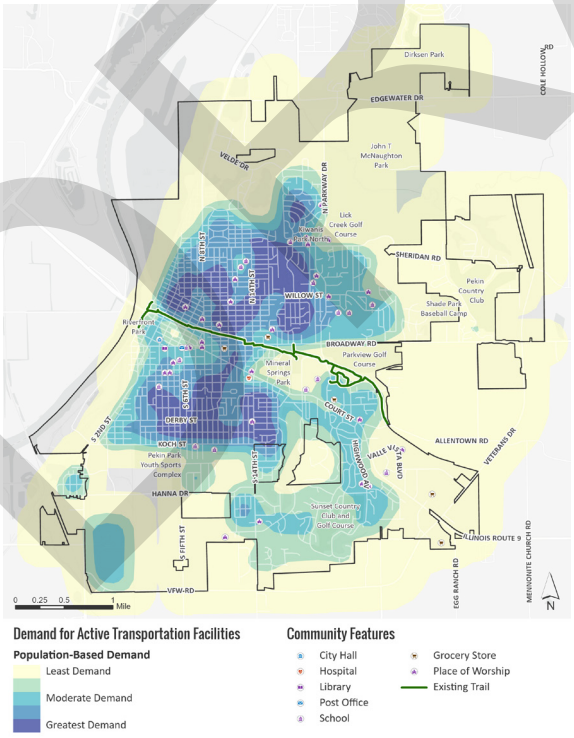


Figure 16. Population-Based Demand

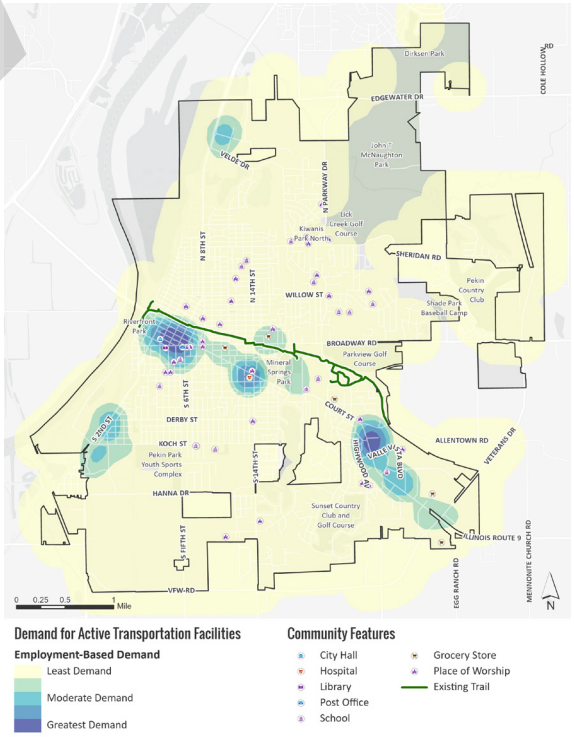


Figure 17. Employment-Based Demand

Where People Learn

This category shows demand for walking and bicycling based on the locations of all public and private elementary, middle, and high schools, as well as post-secondary education institutions like community colleges, colleges, and universities. Shown below in Figure 18, the results for this category show that schools are dispersed throughout the City and generally align with residential development patterns. Higher concentrations of schools are located in more dense residential areas. Investments in walking, bicycling, and Complete Streets infrastructure in these neighborhoods can support more active transportation trips to school and reduce automobile activity during morning and afternoon hours, creating safer conditions for walking and biking school trips.

Where People Play

The Where People Play category examines the density of parks and trails in Pekin. Figure 19 displays the results of this category. Smaller neighborhood parks are dispersed throughout Pekin and represent destinations for short walking and bicycling trips from nearby residences. Larger community parks and recreation areas like Coal Miner's Park, Mineral Springs Park, McNaughton Park, the Sports Complex, and Everett Dirksen Park (north of Pekin) attract users from Pekin and surrounding areas for their natural beauty and diversity of recreation opportunities and programmed events. The Pekin Bike Path connects to nearby parks, schools, neighborhoods, commercial districts, and cultural destinations while also serving as trip attractors for walkers, joggers, cyclists, and other non-motorized users.

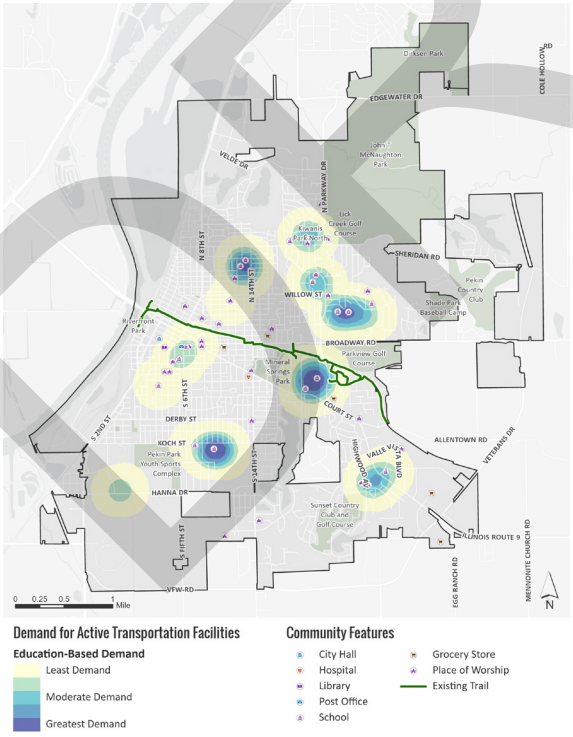


Figure 18. Education-Based Demand

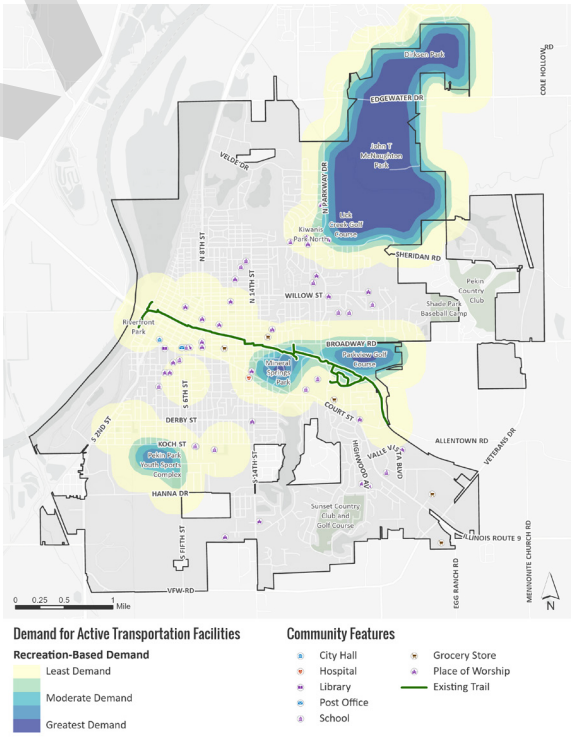


Figure 19. Recreation-Based Demand

Where People Shop

This category examines 2020 census block group-level retail employment data as a proxy for retail, dining, and entertainment destination density. While small retail and commercial nodes can be found throughout the City, there are a small number of high-density commercial nodes along major arterial corridors, as indicated in Figure 20. These include Court St in Downtown, the Douglas Center and surrounding commercial destinations at Court St and 10th St, the Kroger retail center on Broadway St west of 14th St, and Court St from Valle Vista Blvd to Veterans Dr.

Where People Access Transit

CityLink, operated by the Greater Peoria Mass Transit District, serves Pekin with three transit routes, the #17 Pekin North, the #18 Pekin South, and the #23 Pekin Connector. Many people who take the bus to school, work, or other destinations throughout the city begin and end their journeys on foot or bike. The district also operates CityLift, a complementary paratransit service that runs within 3/4-mile of existing CityLink bus routes.

Safe, convenient, and accessible sidewalks, trails, and on-street bikeways can increase access to transit. Figure 21 displays the density of transit stops along these two routes. Transit stop density is generally higher along major arterial corridors, including Broadway St, Court St, Derby St, Koch St, and Parkway Dr. These transit stops provide residents with vital access to jobs, schools, retail and services, and a connection to Downtown Peoria.

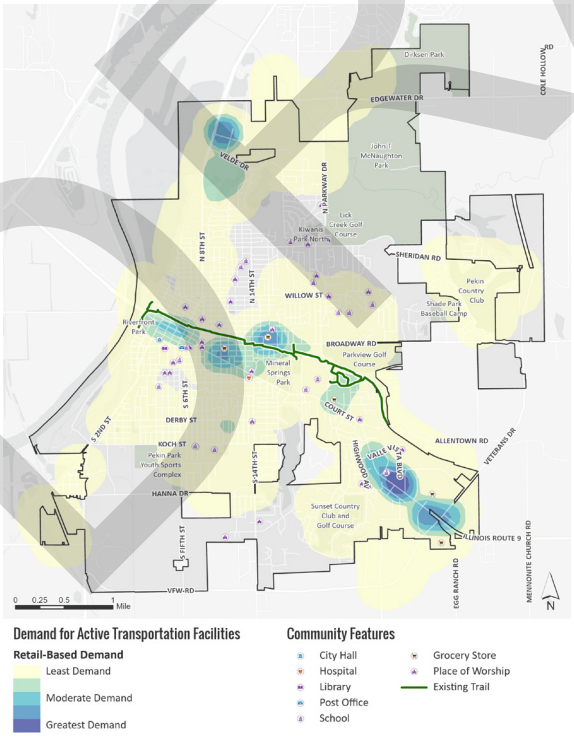


Figure 20. Retail-Based Demand

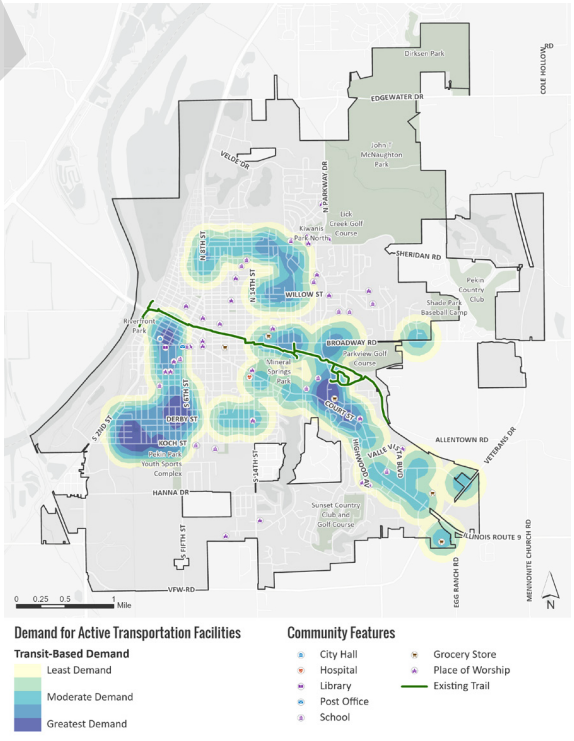


Figure 21. Transit-Based Demand

Bicycle and Pedestrian Crash Analysis

Local crash data are a valuable source of information for identifying safety trends and challenges for people walking and bicycling, which can help inform recommendations for safety improvements and programs. This section of the Plan summarizes reported pedestrian- and bicyclist-involved crashes in the City of Pekin from 2015 to 2019, the most recent 5-year period for which consistent data was available.

According to national and local surveys, safety concerns are the most common reason people do not bicycle or do not ride more often. Many bicyclists feel that motorists do not see them or are openly hostile to them on roadways, particularly at intersections. National bicycle crash research shows that the most commonly reported bicycle/vehicle crashes occur at major arterial intersections. In addition, national studies show that many bicyclists involved in crashes are younger people who have less experience riding on the road and/or cyclists who are riding the wrong way or on the sidewalk.

Certain caveats are necessary when interpreting crash data. First, bicycle and pedestrian crashes, and in particular incidents that do not result in serious injury, are generally considered to be significantly under-reported. A street or intersection that did not experience a crash during the analysis period is not an indication that people are not bicycling or walking there, nor is it evidence that the area does not present hazards to bicycling. Crash data also do not take into consideration "near misses," which characterize conditions at many high-risk locations without reported incidents.

Second, in the absence of bicycle and vehicle counts, there is no way to measure "exposure" to crashes, defined as crashes per bicycle mile traveled. For example, consider two streets that experienced the same number of crashes but different cyclist volumes. The street with greater bicycle traffic is likely to be less dangerous than the street that saw the same number of crashes despite seeing little bicycle traffic (measured by crashes per bicycle miles traveled). Third, coding of crash data may be inaccurate, incomplete, or biased, which can limit the explanatory power of the data.

Recent pedestrian- and bicyclist-related crash data in Pekin can help paint a picture of safety issues and needs for people walking and bicycling. Through an examination of factors like crash severity, location, and contributing causes, the City can uncover important trends and develop crash countermeasures that aim to improve safety for all road users, especially vulnerable road users like people walking, bicycling, and traveling with mobility assistance devices like walkers, wheelchairs, and canes.

Pedestrian Crashes

Collisions by Severity

Between 2015 and 2019, there were 37 crashes involving pedestrians in Pekin, representing 1.1 percent of all crashes. Two of these crashes (5% of all pedestrian crashes) resulted in a fatality, and another 89 percent resulted in an injury. Figure 22 displays pedestrian crashes by crash severity from 2015 through 2019, and Figure 24 on page 36 maps the locations of these same pedestrian crashes by severity. In both the figure and the map, fatal injuries are displayed in red.

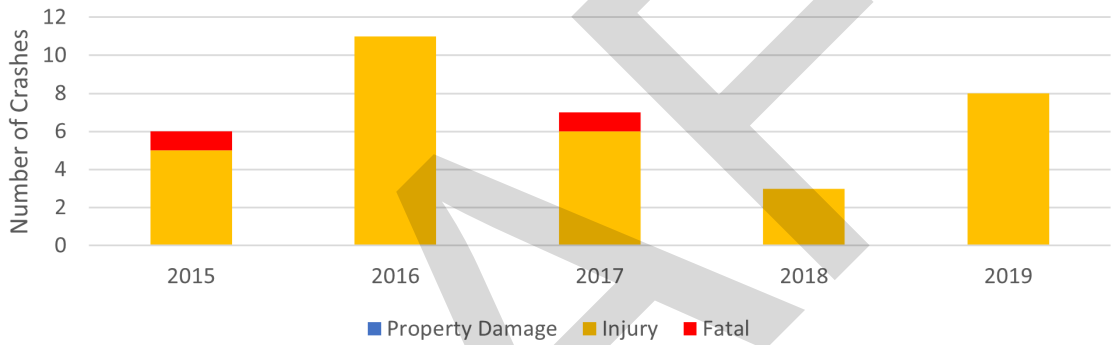


Figure 22. Pedestrian-Involved Crashes By Year and Severity, 2015-2019

Contributing Causes

Contributing causes can provide valuable insight into driver and pedestrian actions prior to a crash, as well as other environmental conditions that may have led to the crash. As shown below in Figure 23, failing to yield right of way was the most common contributing cause for pedestrian crashes (16), followed by obscured vision (4), equipment/vehicle condition (2), distractions from outside vehicle (2), improper lane usage (2), improper backing (2), and disregard for other traffic signs (2).

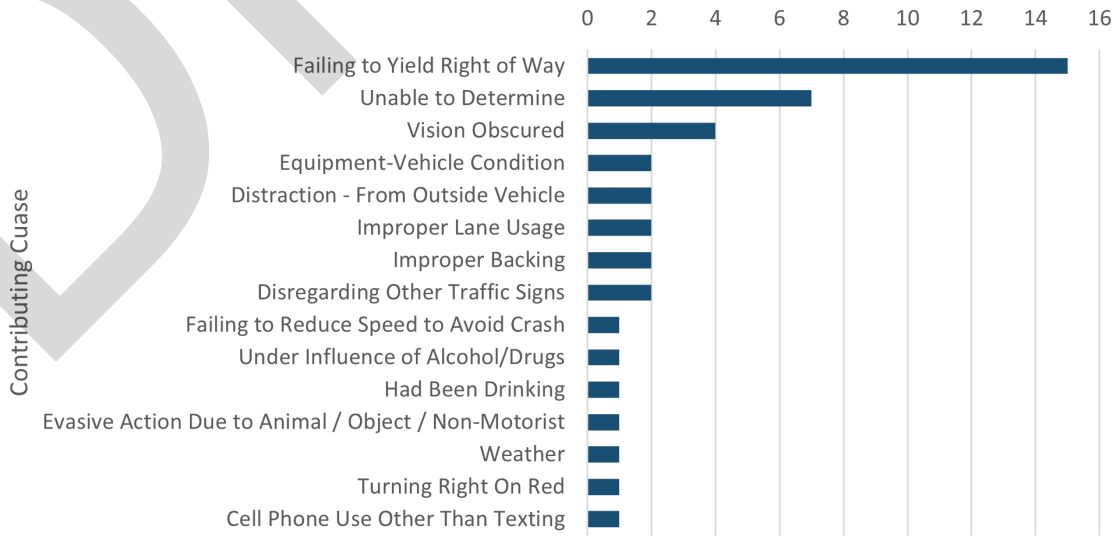
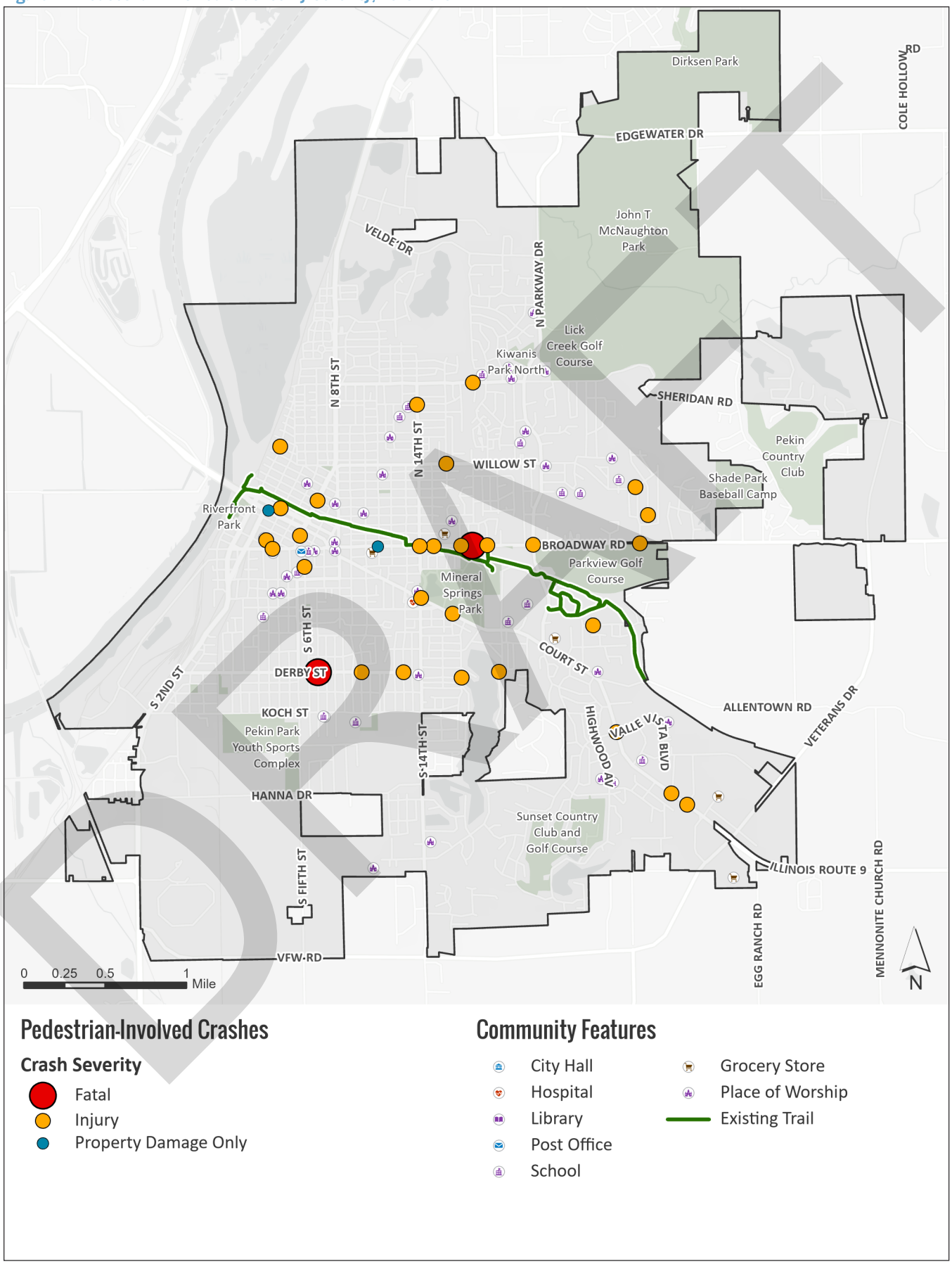


Figure 23. Contributing Causes for Pedestrian-Involved Crashes, 2015 - 2019

Figure 24. Pedestrian-Involved Crashes By Severity, 2015-2019



Bicycle Crashes

Collisions by Severity

Between 2015 and 2019, there were 39 crashes involving people bicycling in Pekin, representing 1.2 percent of all crashes. All but two of these crashes (95% of all bicycle crashes) resulted in an injury. There were no fatal crashes involving a bicyclist during this 5-year period. Figure 25 displays bicycle crashes by crash severity from 2015 through 2019, and Figure 27 on the following page illustrates the locations of these same bicycle crashes by severity.

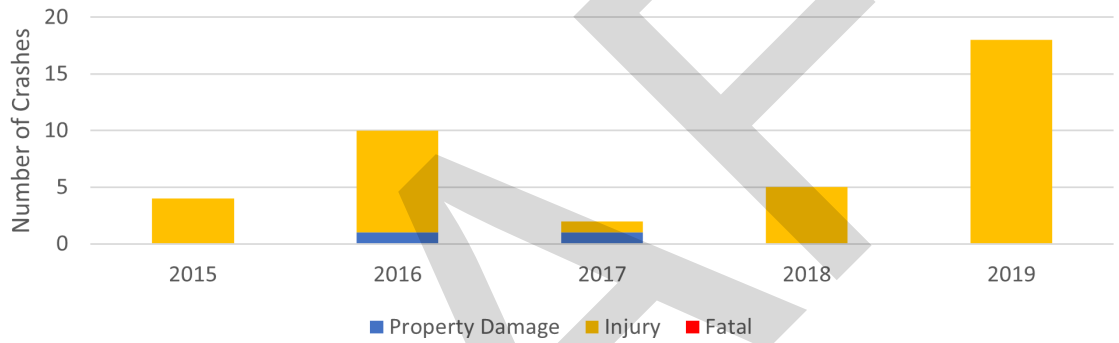


Figure 25. Bicyclist-Involved Crashes By Year and Severity, 2015-2019

Contributing Causes

Contributing causes provide valuable insight into driver and bicyclist actions prior to the crash, as well as other environmental conditions that may have led to the crash. As shown below in Figure 26, failing to yield right of way was the most common contributing cause for pedestrian crashes (18), followed by obscured vision (4), equipment/vehicle condition (2), distractions from outside vehicle (2), improper lane usage (2), improper backing (2), and disregard for other traffic signs (2).

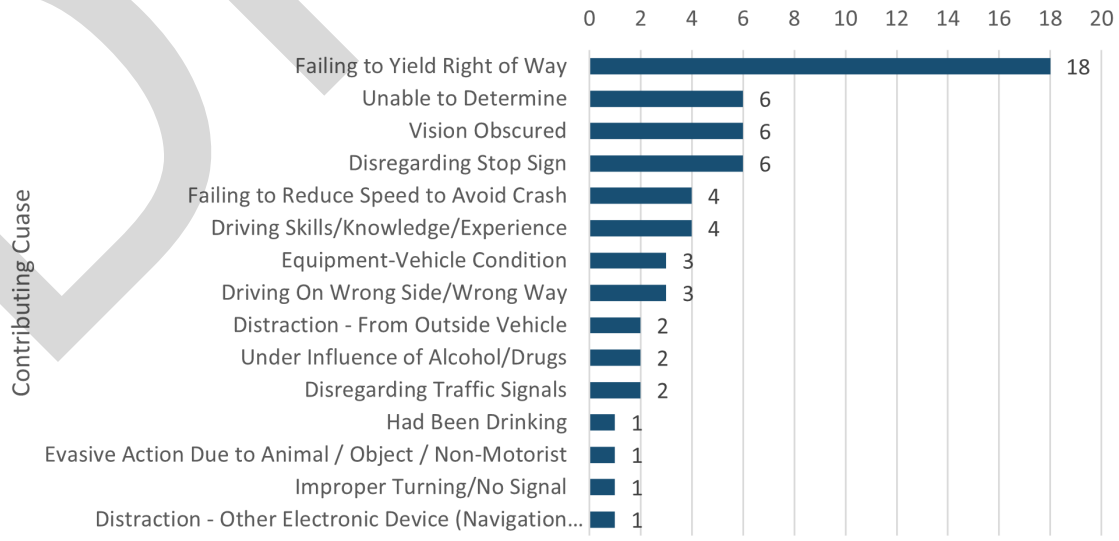
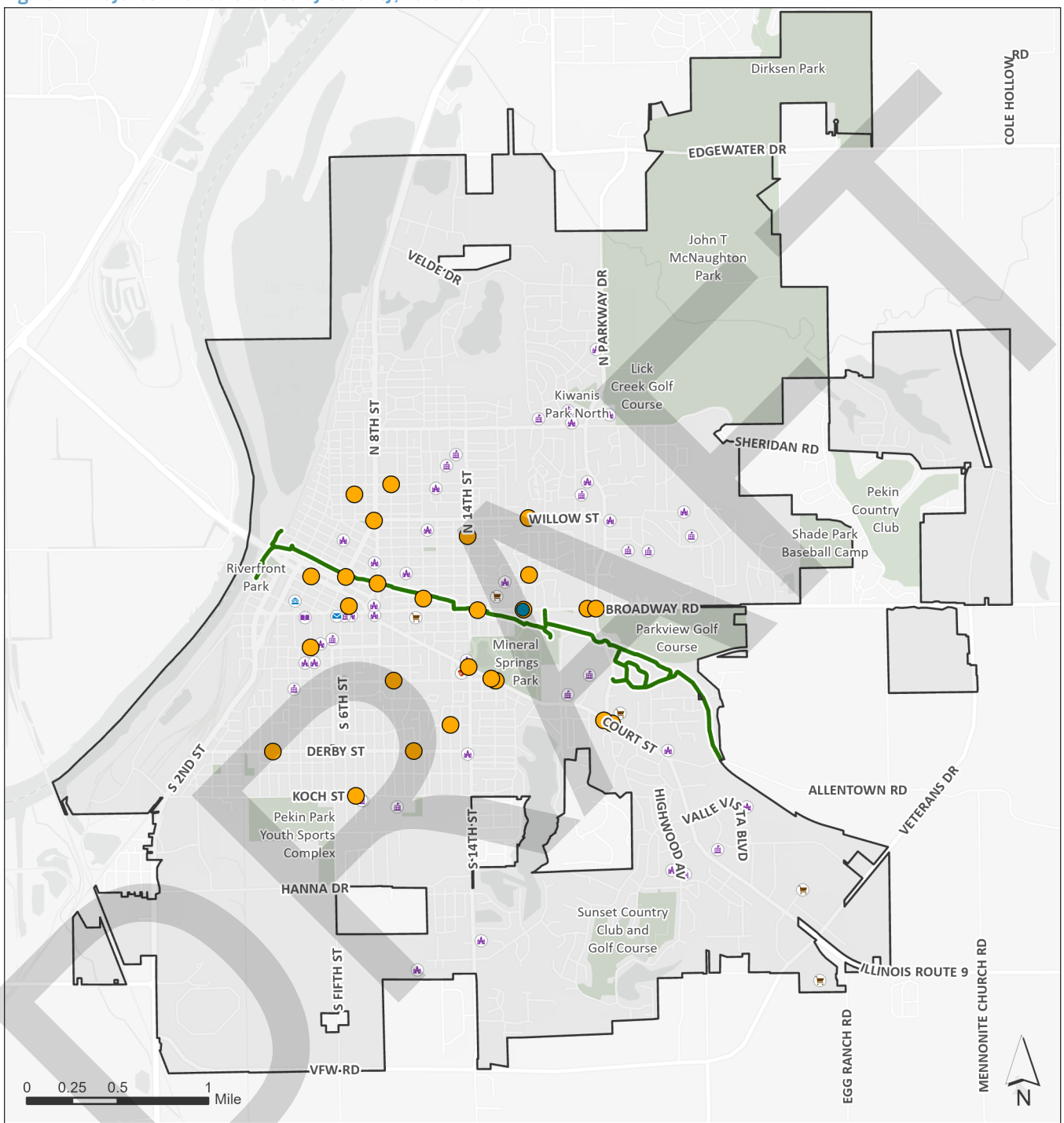


Figure 26. Contributing Causes for Bicyclist-Involved Crashes, 2015 - 2019

Figure 27. Bicyclist-Involved Crashes By Severity, 2015-2019



Bicyclist-Involved Crashes

Crash Severity

- Fatal
- Injury
- Property Damage Only

Community Features

- City Hall
- Hospital
- Library
- Post Office
- School
- Grocery Store
- Place of Worship
- Existing Trail

Plan and Policy Scan

Plans and policies are embodiments of community goals and values and provide a vision and framework for public and private investment. Planning documents are typically high-level in nature and provide direction, strategies, and benchmarks to achieve community-driven goals and vision. These can be comprehensive in nature or focus on a specific topic or theme like housing, transportation, or in this case, bicycle and pedestrian transportation.

Policies are the rules and regulations that dictate agency decision-making and private development. For example, a Complete Streets policy provides guidance for how a public works or transportation department invests in and designs roadways to support all modes of transportation. Other policies like zoning codes and subdivision regulations influence private development and often incorporate elements that support active transportation, such as mixed-use zoning designations, minimum bicycle parking requirements, and short block lengths.

The current planning and policy environment in Pekin consists of multiple plans and studies that directly and indirectly touch on bicycling and walking, as well as municipal codes and regulations that influence transportation conditions. Pertinent plans and policies are summarized below.

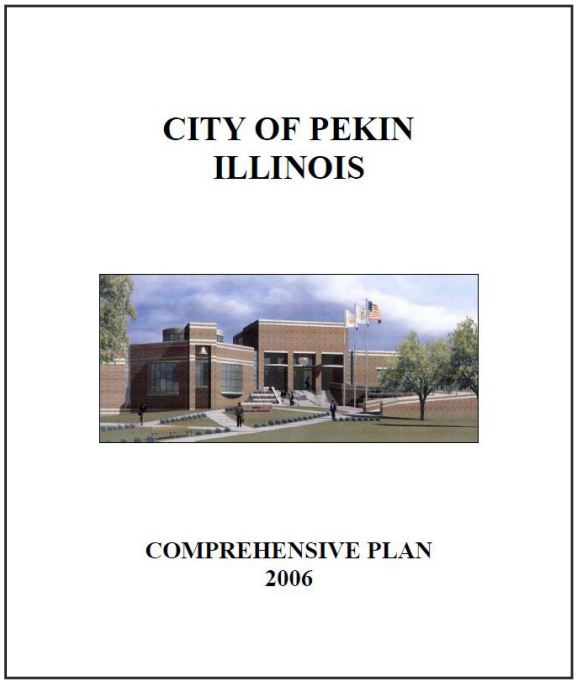
Plans and Studies

Pekin Bicycle/Pedestrian Action Plan (1996)

The Pekin Bicycle/Pedestrian Action Plan completed in May of 1996 provides a blueprint for increasing bicycle and pedestrian transportation. The plan lays out the benefits of these modes of transportation before moving into the goals and strategies that the City will employ to support walking and bicycling. The goals from this document include increased access to all destinations for cyclists and pedestrians, increased percentage of walking and bicycling trips, and a 10 percent reduction in bicycle and pedestrian injuries and deaths. The strategies section highlights how these goals will be met, including the installations of active transportation facilities, land use and development controls, and the final step of implementation.

Pekin Comprehensive Plan (2006)

The 2006 Pekin Comprehensive Plan provides a vision for growth and development to guide public investments in infrastructure and services, changes to city policies and codes, and private development. The dedicated transportation section describes the functional classification for roads within the City and lays out issues and trends. The section also includes mass transit, rail, river, and air transport. Five goals are listed within the section on transportation. These goals include providing a well-planned arterial highway system, providing a well-planned collector street system, promoting the Illinois River as a transportation mode, supporting intermodal transportation for business and industrial use, and supporting non-motorized transportation.



Pekin ADA Transition Plan (2016)

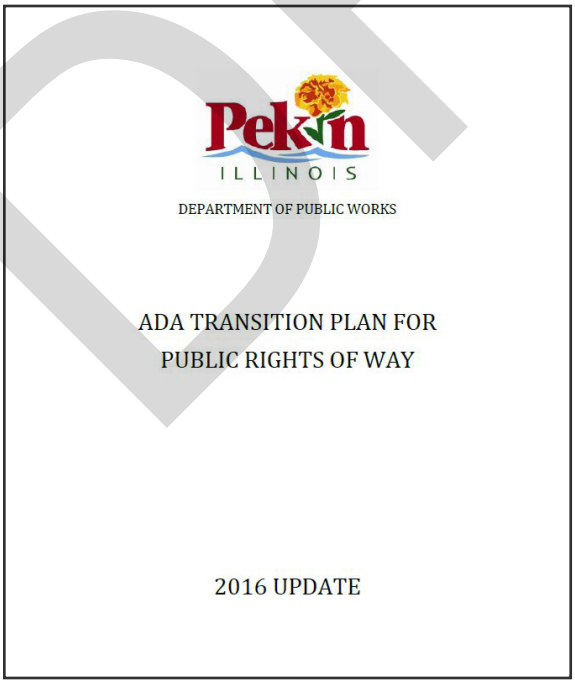
The 2016 Pekin ADA Transition Plan sets forth procedures for updating infrastructure within the City to comply with ADA standards. This document specifically targets pedestrian systems, retail centers, government facilities, and businesses. The purpose of the document is to set forth procedures and policies for managing this transition, including public engagement, standards and guidelines, roles and responsibilities, self-evaluation, scheduling, and monitoring of transition. The document also prioritizes intersections for different areas, including public facilities, collector roads, areas of high concentration of people with disabilities, and others. The inclusion of the priorities and cost estimates within the document, coupled with the broader description of the transition process, gives a clear overview of what and how the city intends to move forward with its ADA transition plan.

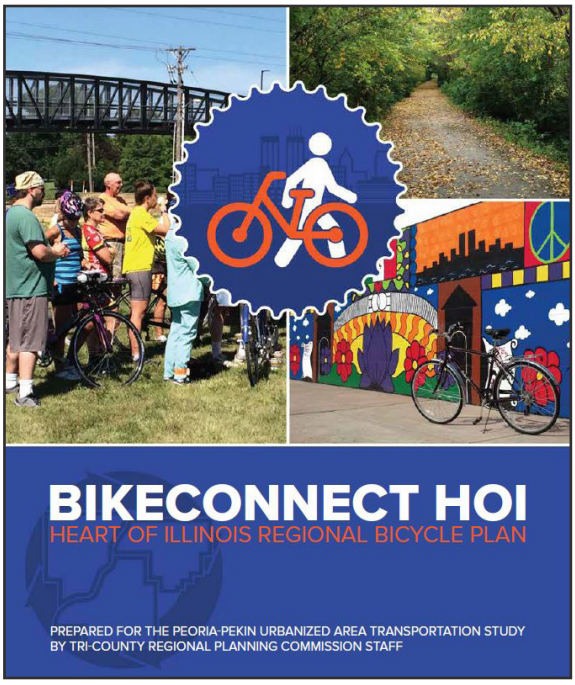
BikeConnect HOI (2017)

BikeConnect HOI is a regional bicycle plan for the Greater Peoria area facilitated by Tri-County Regional Planning Commission. The plan achieves the two primary functions:

- Identifies a proposed regional bicycle network within Peoria, Tazewell, and Woodford counties,
- Identifies strategies and action items for making Greater Peoria a more bicycle-friendly region.

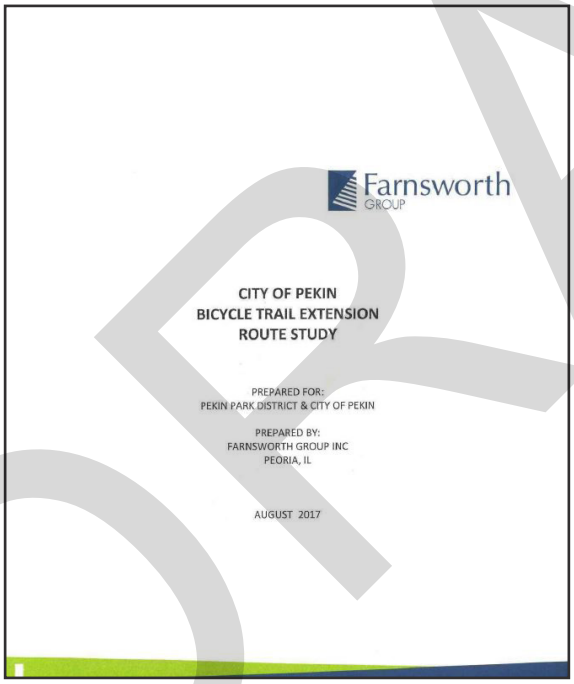
The plan examines bicycle facility design guidance, demographic data, crash history, existing facilities, and other data points to develop a foundation upon which to improve bicycle connectivity throughout the region. The plan acknowledges that, despite its prominence as the second largest community in the region, Pekin has no bicycle connections to any other community in the region. Plan recommendations focus on regional network improvements and include the Allentown Road corridor to connect Pekin to Morton and multiple alignments along Pekin Lake and IL 29 to connect Pekin to North Pekin, Creve Coeur, and East Peoria.





City of Pekin Bicycle Trail Extension Route Study (2017)

The Pekin Bicycle Trail Extension Route Study examines route alternatives to extend the Pekin Bike Trail eastward from its current terminus at Allentown Rd to Veterans Dr. The study identifies three feasible alignments and provides cost estimates and other pertinent considerations for the City to consider in selecting and developing a preferred route. These routes will be factored into the network development process and included in this plan's recommendations.



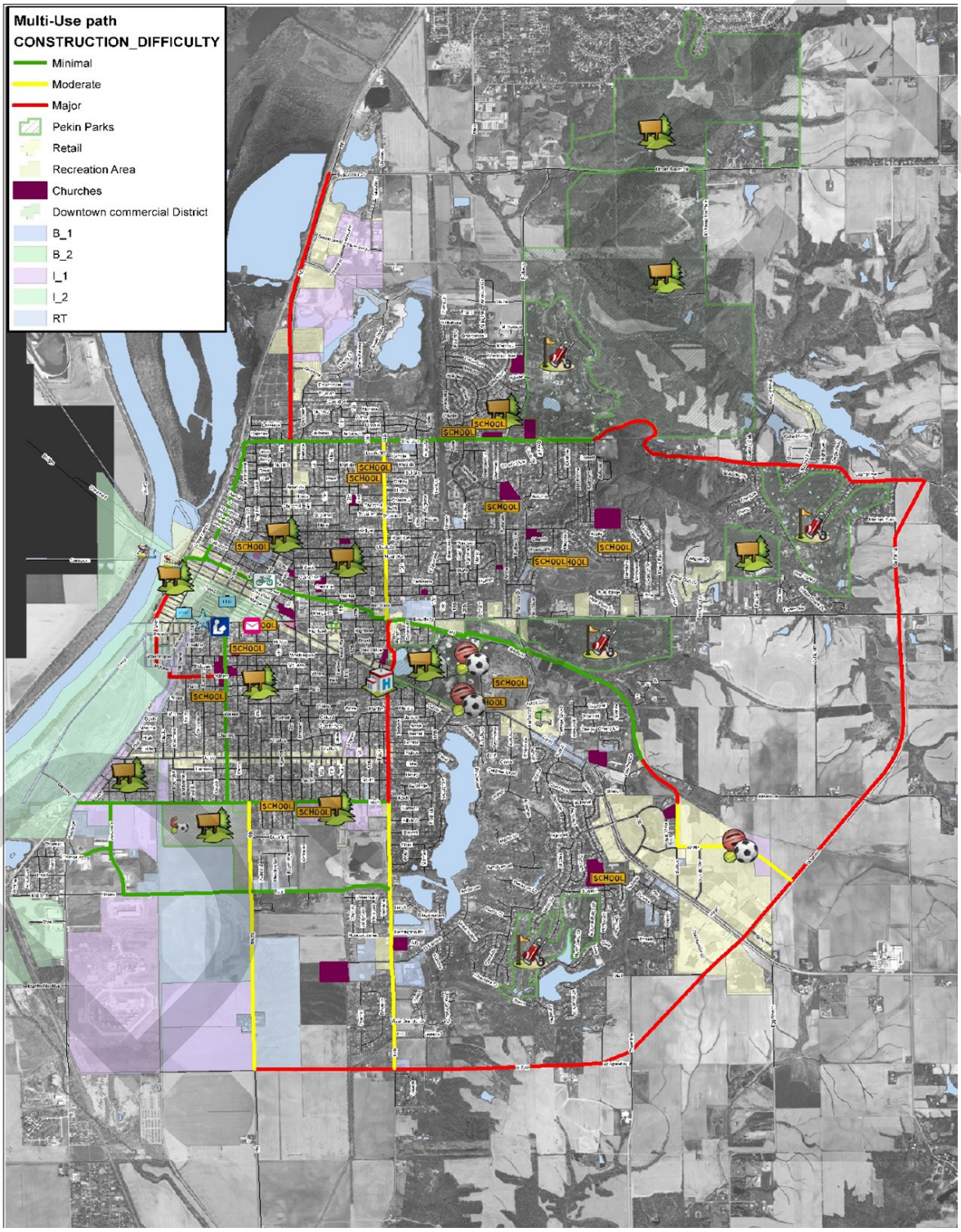
Pekin Multiuse Path Construction Difficulty

The Pekin Multiuse Path Construction Difficulty map identifies corridors for future multiuse (bicycling, walking, using a wheelchair or other non-motorized device, etc.) path development. The map (Figure 28) symbolizes proposed paths by difficulty of constructibility from minimal to moderate to major. The complete network of multiuse paths envisioned in this map constitute a substantial system of bicycling and walking paths that connect many neighborhoods and destinations throughout Pekin.

Key corridors for future multiuse path development that are identified as minimal difficulty include Sheridan Rd, North 2nd St, South 4th St, Koch St, Riverway Dr, Hanna Dr, and Petri Ln. Corridors identified as moderate difficulty include North 14th St (north of Broadway), South 14th Street (south of Koch St), and South 5th St from Koch St to VFW. Corridors identified for major difficulty include the Pekin Bike Trail Extension from Allentown Rd to Veterans Dr, 14th St from Broadway to Koch St, Veterans Dr, Sheridan Rd east of Redwood Dr, and North 8th St north of Sheridan Rd. These proposed multiuse paths and other minor paths in northeastern and southeastern Pekin are shown in Figure 28.

While the construction difficulty information may be out of date, it does offer a glimpse into the challenges facing multi-use trail development with many of the City's existing roadway rights of way.

Figure 28. Pekin Multi-Use Paths



Conclusion

Pekin is on the path towards becoming a walkable and bikeable community, but there is still plenty of work to be done. Addressing poor sidewalk and ADA conditions, integrating new sidewalks into future roadway projects, expanding the trail system to better serve neighborhoods to the north and south, and developing an interconnected bikeway network are among the most critical issues identified during this phase of the planning process.

The existing conditions for walking and bicycling described in this memorandum, combined with input gathered through various public engagement activities, provide a foundation upon which to develop recommendations for facilities, policies, and programs to support active transportation. Metrics identified through various analyses can provide baselines that can be used to prioritize facility recommendations and measure plan implementation progress.

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03

COMMUNITY ENGAGEMENT

Introduction

The participation and input from Pekin residents and community partners have been invaluable to the City's efforts to develop a bicycle and pedestrian master plan that reflects the values and aspirations of the community. Through numerous engagement activities and communication channels, Pekin residents have helped the City better understand community needs and values, develop a vision for the future of active transportation, and identify specific projects and strategies to make walking and bicycling safer, more comfortable, and more accessible for people of all ages and abilities.

The engagement process included steering committee oversight, an online survey that garnered 114 responses, an online interactive mapping tool, an open house meeting in May 2023 to explore existing conditions, a second open house meeting in September 2023 to present plan goals and recommendations, and numerous stakeholder meetings to expand the plan's reach and engage a wide and representative audience. This chapter summarizes the plan's engagement process and highlights key themes and ideas that have shaped the direction and content of the plan.

Engagement Process

Public Engagement Plan

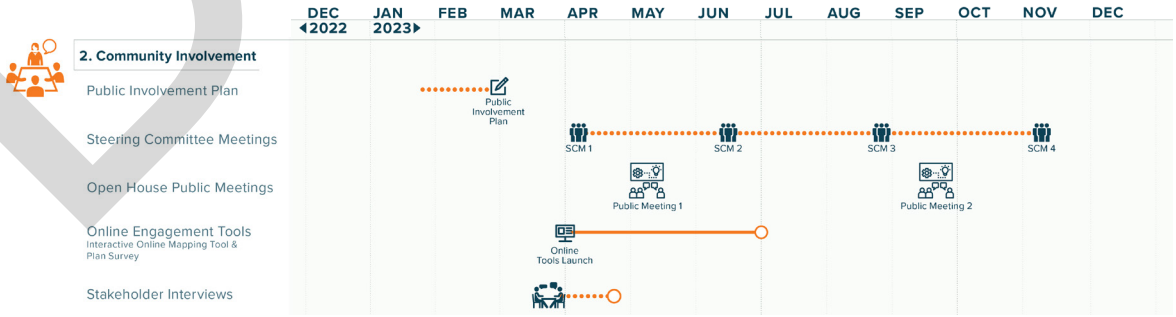
The Public Engagement Plan (PEP) served as the authoritative guide and organizing framework for community engagement efforts throughout the Pekin Bicycle and Pedestrian Master Plan process. Community engagement is critical to a successful planning process and aims to increase transparency, build trust, and promote collaboration among city staff and officials, key stakeholders, and the general public.

Goals of public involvement for the Pekin Bicycle Master Plan were to:

1. Create opportunities for a diverse cross section of the community to participate in the planning process
2. Ask targeted questions at the right time to ensure that plan outcomes are calibrated to the values of the community, are equitable, and can ultimately be implemented
3. Increase awareness of bicycling and walking as important components of a multimodal transportation system and the types of bicycle and pedestrian facilities commonly used to create safe, interconnected active transportation networks.

The PEP identified target audiences and methods to engage each audience throughout the planning process; engagement activities tied to the planning process (as shown below in Figure 29); branding considerations to maintain consistency within the project and complement the City's existing branding guidelines; and outreach and communication methods to increase plan awareness and participation.

Figure 29. Community Engagement Timeline



Steering Committee

The steering committee was responsible for providing input at critical plan milestones and processes, including community engagement efforts, draft deliverables, goals and objectives, infrastructure recommendations, and prioritization inputs. As representatives of influential agencies, organizations, and community groups, the steering committee also served as a conduit between the planning team and the wider community, raising awareness of the plan, distributing plan information via existing communication and social media channels, and encouraging participation in the planning process.

The committee met four times during the course of the planning process as described below:

Meeting 1

The first steering committee meeting was held on April 6, 2023 to orient the committee to the project, provide an overview of the scope and schedule, discuss committee member roles and responsibilities, explore bicycle and pedestrian issues in the community, and discuss community engagement activities and outreach channels.

Meeting 2

The second meeting was held on June 22, 2023 to recap the first open house meeting, provide a summary of the existing conditions report, develop a vision statement to guide the plan recommendations, and explore opportunities to increase engagement through the online survey and mapping tool and increase attendance at the second open house meeting scheduled for September.

Meeting 3

The third meeting was held on August 28, 2023 to review the preliminary survey results, discuss the draft infrastructure and program recommendations, prepare for the second open house meeting, and consider implementation strategies and responsibilities.

Meeting 4

The fourth and final steering committee meeting was held on November 16, 2023 to walk through the draft Recommendations and Implementation chapters of the plan document, refine plan recommendations, consider how key community partners can contribute to the implementation process, and discuss the remaining steps in the planning process.

Online Survey

The online survey offered community residents an easy, quick, and accessible means of participation in the planning process and helped the City of Pekin better understand common issues, needs, and desired improvements. In total, 114 responses were collected between the May 10th and September 18th, 2023. Nearly 70% of respondents completed the entire survey with an estimated completion time of nine minutes.

Survey questions were designed to gain a better understanding of current bicycling and walking activity, issues people face when biking and walking, and the types of improvements that they would like to see in the future. Analysis of these survey responses yielded valuable information to help the City develop and refine recommendations to address common themes and issues for people who currently walk and bike or who would like to walk and bike in Pekin.

Questions consisted of general transportation related questions, pedestrian focused questions, bicyclist focused questions, and demographic questions. All questions and responses except those containing identifying information like email addresses are included in th appendix of the plan.

Key Findings

General Transportation

Access to a Vehicle

- 99% of respondents have access to a vehicle

Mode Choice

- 77% of respondents drive daily, and 95% drive at least once a week
- 25% of respondents walk daily, and 67% walk at least once a week
- 7% of respondents bike daily, and 31% bike at least once a week
- 97% of respondents never take public transportation

Distance to Work/School

- 12% work/attend school from home
- 14% work/attend school less than two miles from home
- 39% work/attend school five or more miles from home

Walking

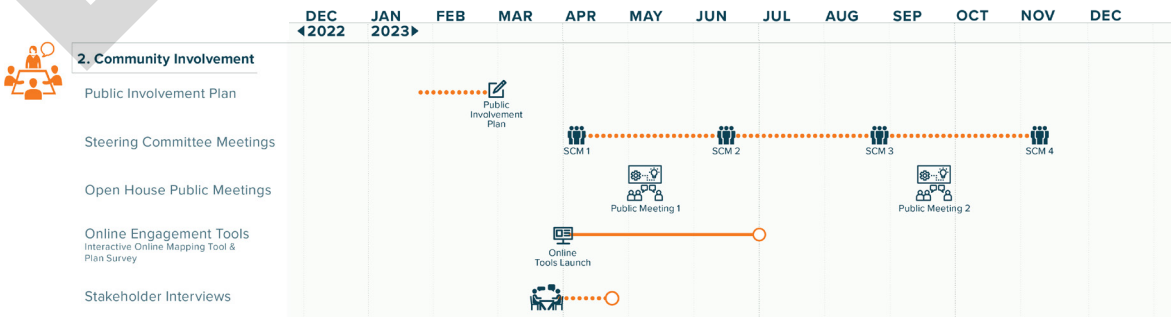
Ease of Walking

- 34% of respondents find it difficult to walk in their neighborhood or to nearby destinations

Trip Distance

- 52% of typical walking trips are two miles or less

Figure 30. Community Engagement Timeline



Interest in Walking More

- 66% of respondents would like to walk more for daily commute, errands, and other activities
- 94% of respondents would like to walk more for fun, exercise, and other recreational activities

Barriers

- The biggest barriers to walking in Pekin include lack of sidewalks (65%), poor sidewalk conditions (58%), traffic safety (55%), and lack of nearby trails (43%)

Destinations

- The destinations respondents would most like to walk to include parks and recreation centers (75%), trails (75%), and local businesses like grocery stores, shops, and restaurants (59%)

Reasons for Walking

- The most popular reasons why people choose to walk are for exercise and health benefits (95%) and for fun and enjoyment (73%)

Biking

Cyclist Types

- Strong and Fearless (16%)
- Enthused and Confident (16%)
- Interested but Concerned (54%)
- Not Interested (14%)

Ease of Biking

- 48% of respondents find it difficult to bike in their neighborhood or to nearby destinations

Trip Distance

- 19% of typical biking trips are two miles or less, and 44% five miles or less

Interest in Biking More

- 62% of respondents would like to bike more for daily commute, errands, and other activities
- 84% of respondents would like to bike more for fun, exercise, and other recreational activities

Barriers

- The biggest barriers to biking in Pekin include lack of bike lanes (69%), lack of nearby trails (58%), and lack of bicycle parking (32%)

Destinations

- The destinations respondents would most like to bike to include trails (84%), parks and recreation centers (77%), and local businesses like grocery stores, shops, and restaurants (55%)

Reasons for Biking

- The most popular reasons why people choose to bike are for exercise and health benefits (92%) and for fun and enjoyment (72%)

Desired Bicycle Facilities

- The most desired bicycle facilities include shared use paths/paved trails (84%), bike lanes (59%), paved shoulders (50%), separated bike lanes (49%), and marked and signed bike routes (49%)

Demographics

Age

- Survey respondents ranged in age from 23 to 75, with the average age of 46

Gender

- 70% of respondents identify as female and 28% as male

Race

- 99% of respondents identify as white, 1% as Native American

Online Interactive Mapping Tool

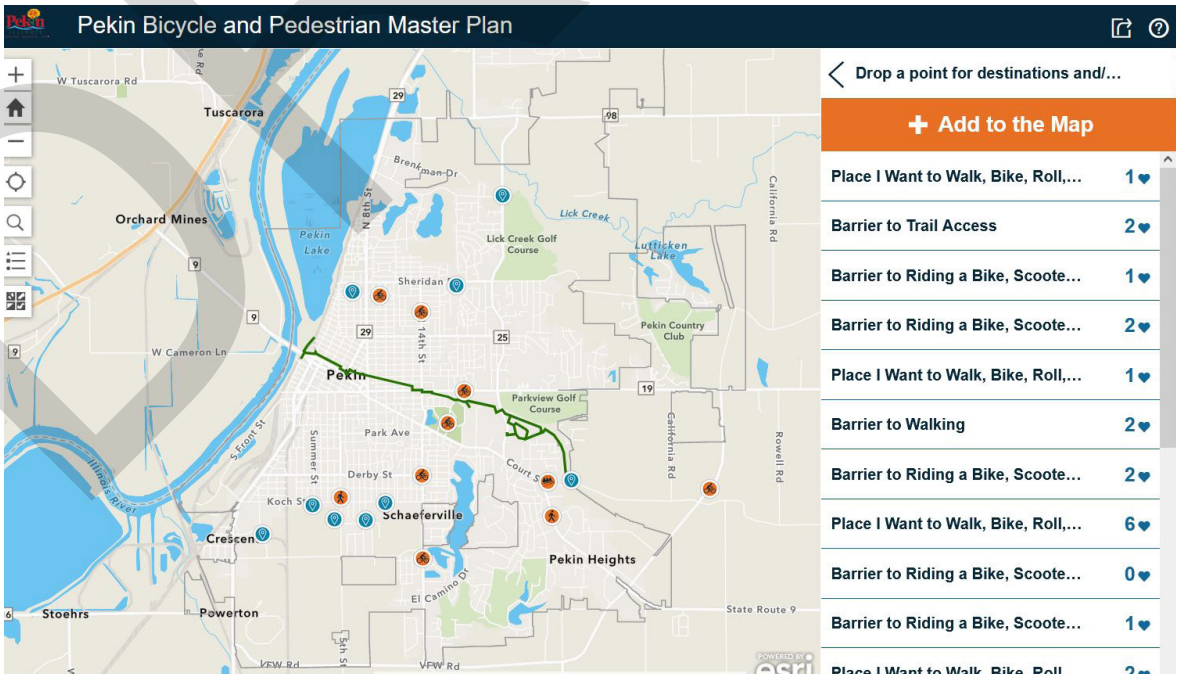
In addition to the online survey, an online mapping tool was deployed to better connect with residents. Residents were asked to drop points for destinations they'd like to access through active transportation or to label barriers that prevent them accessing these destinations. Residents were also asked to place lines on the map indicating where they'd like to see bicycle or walking paths or where there are difficulties with the existing infrastructure.

While residents could voice their opinions through the open houses or online survey, the use of the online mapping tool gives residents a chance to think about their concerns and aspirations spatially. All points and lines placed on the online mapping tool were available for all others to see and those who originally created the point or line were able to leave a comment. Residents were able to vote on the points and lines that others had placed on the map.

A total of 20 lines were drawn on the map, representing suggestions for new sidewalks, on-street bikeways, and paved trails. Six of the lines were referencing paved trails and the other 14 referenced sidewalks. Locations for desired sidewalk improvements included Broadway St, Highwood Ave, Valle Vista Blvd, and Parkway Dr. Locations for new trails included Parkway Dr and Allentown Rd.

Nineteen points were placed on the map by residents. Ten points identified barriers to active transportation, mostly related to a lack of connectivity regarding the infrastructure. The other nine points were indicating locations people would like to access through active transportation but otherwise aren't able to at the moment. The point placed on the Pekin Park District Sports Complex as a desired destination to access received the most votes.

Figure 31: Interactive Mapping Tool



Open House Meetings

Open House 1

On the evening of May 24, 2023, the City hosted an open house at the Miller Center to share information about the Bicycle and Pedestrian Master Plan and learn from residents about their issues and aspirations for walking and biking in Pekin.

The open house consisted of a series of informative display boards providing background information and potential elements of a bicycle and pedestrian plan, a 20-minute presentation covering the basic elements of a bicycle and pedestrian plan, and maps on which people could highlight issues and opportunities to address in the plan.

While attendance at the first open house was less than anticipated, the residents who did attend shared valuable feedback regarding walking and bicycling concerns, opportunities for improvements, and general thoughts about how Pekin can build a culture of walking through programs, infrastructure, and policies.

Open House 2

On the evening of September 28, 2023, the City hosted an open house at City Hall to share information about the planning process and present the draft recommendations for infrastructure, programs, and policies to improve walking and bicycling conditions in Pekin.

The open house consisted of a series of informative and interactive display boards detailing the planning process, the plan vision and goals, results from the online survey, and plan recommendations. There were also maps displaying bicycle and pedestrian recommendations, and the majority of attendees spent most of their time reviewing these maps and discussing recommendations with project staff.

Attendance at the second open house was more than double that of the first open house, but still lighter than desired given the level of effort to publicize the event. Attendees provided valuable feedback regarding the plan recommendations, and discussions focused on trail development, on-street bikeway locations and feasibility, sidewalk improvements, and curb ramp design. The input gathered at this meeting helped the project team refine the plan's recommendations and inform implementation strategies.

04

RECOMMENDATIONS

Introduction

Building on a solid foundation of existing conditions documentation, analysis, and community input, the City of Pekin has developed a comprehensive and holistic array of infrastructure, policy, and program recommendations to bring to life the community's vision for walking and bicycling.

This chapter of the plan presents this vision and supporting goals, followed by pedestrian and bicycle facility recommendations and citywide improvements to build a safe, connected, and comfortable active transportation network, and supporting program and policy opportunities to build community and governmental cultures that embrace and support walking and bicycling.

Vision, Goals, & Objectives

What is a Vision Statement?

In long range planning processes like this, a vision statement presents a desired, ideal future, in this case, for walking and bicycling. The vision statement is crafted based on input from the public, feedback gathered through community surveys, and guidance from the project steering committee. It also serves as a guidepost for recommendations and implementation strategies, ensuring that all improvements identified in the plan contribute to the ultimate plan vision.

The Plan Vision

The City of Pekin strives to make walking and bicycling safe, accessible, convenient, and equitable transportation options that connect people to places, foster recreational and economic development opportunities, support healthy and active living, and elevate quality of life.

Scene from the 2023 Marigold Festival in Mineral Springs Park (source: https://www.facebook.com/PekinMarigoldFestival/)

Goals and Objectives

The goals and objectives presented on the following pages put forth a framework of strategies through which the City of Pekin and its community partners can realize the plan's vision for walking and bicycling.

The goals are overarching paths through which the City can achieve the vision, each associated with one of the six key plan values. Associated with each goal are a series of objectives that represent actionable steps to reach a particular goal. Together, the vision, goals, and objectives provide a comprehensive framework for the development and implementation of plan recommendations. This framework is grounded in the experiences and previous efforts to support walking and bicycling and the values and aspirations of the City of Pekin, its institutions, and its residents.

GOAL #1 - SAFETY

Create a safe travel environment for everyone, especially vulnerable road users like people walking, rolling, and bicycling.

- Objective 1.1. Improve pedestrian and bicycle safety through the installation of sidewalks, trails, dedicated bikeways, and intersection enhancements.
- Objective 1.2. Create a safety action plan to evaluate crash history, identify trends, and develop a high-injury network for future safety investments.
- Objective 1.3. Reduce fatal and serious injury crashes through proven safety countermeasures.
- Objective 1.4. Support safe and responsible travel through education programs and campaigns.

GOAL #2 - NETWORK

Develop a complete, convenient, and interconnected active transportation network.

- Objective 2.1. Expand the Pekin Bike Trail to increase community access to one of the community's most valued recreation and active transportation amenities.
- Objective 2.2. Target sidewalk infill, sidewalk system expansion, and crossing improvements on pedestrian priority corridors.
- Objective 2.3. Develop a low-stress on-street bikeway system to support access to everyday destinations throughout Pekin.
- Objective 2.4. Coordinate with community partners and local, regional, and state agencies to increase regional connectivity and access to destinations in neighboring communities.
- Objective 2.5. Develop a community-wide active transportation wayfinding system to guide people to schools, parks, Downtown Pekin, the Pekin Bike Trail, and other major destinations.
- Objective 2.6. Prioritize and pursue projects in a manner that balances community impact, project feasibility, and available resources and staff capacity.

GOAL #3 - DESIGN

Design active transportation facilities that are accessible and comfortable for people of all ages and abilities.

- Objective 3.1. Apply current standards and best practices for low-stress bicycle and pedestrian facility design.
- Objective 3.2. Prioritize projects that address known ADA deficiencies, align with the recommendations in the ADA Transition Plan, and promote safe and accessible pathways for people with disabilities, children, seniors, and people with limited mobility.
- Objective 3.3. Evaluate Pekin Bike Trail crossings to improve user safety and to increase motorist awareness.

GOAL #4 - POLICY

Develop policies that integrate active transportation into city decision-making processes.

- Objective 4.1. Develop internal procedures to consider and integrate active transportation facilities in capital improvement planning, programming, and project development.
- Objective 4.2. Support active transportation through revisions to the zoning ordinance, subdivision regulations, and street standards.
- Objective 4.3. Establish baseline community outreach and engagement protocols for transportation projects.

The path around Mineral Springs Lagoon is one of Pekin's most popular walking loops, enjoyed by residents and visitors year round

GOAL #5 - PROGRAMS

Foster an environment that supports and embraces walking and biking through community partnerships and education, encouragement, and awareness programs.

- Objective 5.1. Foster collaboration and partnerships with community organizations and agencies throughout the region to identify and implement education, encouragement, and awareness programs and campaigns to increase walking and bicycling activity and safety.
- Objective 5.2. Develop Safe Routes to School program in partnership with Pekin Public Schools to increase walking and bicycling to school.
- Objective 5.3. Create an awareness campaign to raise the profile of active transportation, promote safe travel behaviors, and highlight the benefits of walking and bicycling.

Programs like the Kiwanis Bike Safety Rodeo help build a culture of bicycle safety in Pekin (source: Kiwanis Club of Pekin)

Facility Recommendations

Recommendations for safe, interconnected, low-stress facilities for walking and bicycling are core elements of the City's vision for walking, biking, and active transportation and recreation. From sidewalks and crosswalks to trails and on-street bikeways, physical improvements to the built environment can have direct, measurable impacts on walking and biking activity, safety, and comfort.

This section of the plan presents facility recommendations to create interconnected networks for walking and bicycling.

The Pedestrian Network

The pedestrian network in Pekin is well-established, but targeted improvements are necessary to realize the plan's vision. This section of the plan presents pedestrian-focused projects recommended to eliminate sidewalk gaps, increase pedestrian safety and comfort at roadway crossings, and set the stage for future investments in pedestrian infrastructure.

Pedestrian recommendations build on previous and ongoing planning efforts and capital improvements to support pedestrian activity throughout Pekin. These pedestrian recommendations consist of priority corridors for sidewalk and pedestrian improvements, shared use paths, and sidepaths that support transportation and recreation activity and increase trail system connectivity, and intersection and mid-block crossing improvements to enhance safety for all road users.

Sidewalk and ADA improvements along Court Street will improve conditions for pedestrian safety and mobility

Linear Facilities

Pedestrian Priority Corridors

Priority pedestrian corridors represent the major thoroughfares for pedestrian activity. These include trails, arterial and collector roads, and heavily traveled corridors connecting major destinations throughout the community. For many of these corridors, pedestrian facilities already exist but can be improved to better support mobility, comfort, and safety. Other corridors, like new trail corridors, are only conceptual recommendations for which no existing pedestrian facilities are currently present. While specific projects may not be identified for each pedestrian priority corridor, opportunities will arise in the future to incorporate pedestrian-focused improvements like wider sidewalks, pedestrian-scale lighting, and crossing enhancements into capital projects.

Shared Use Paths

Shared use path projects expand the reach of the Pekin Bike Path into other parts of Pekin via riparian corridors, utility corridors, abandoned railroad alignments, and other off-street, independent rights of way.

Sidepaths

Sidepath projects provide a similar function and level of comfort as shared use paths, but their location adjacent to larger roads can also increase access to popular community destinations.

Intersection and Mid-Block Crossing Improvements

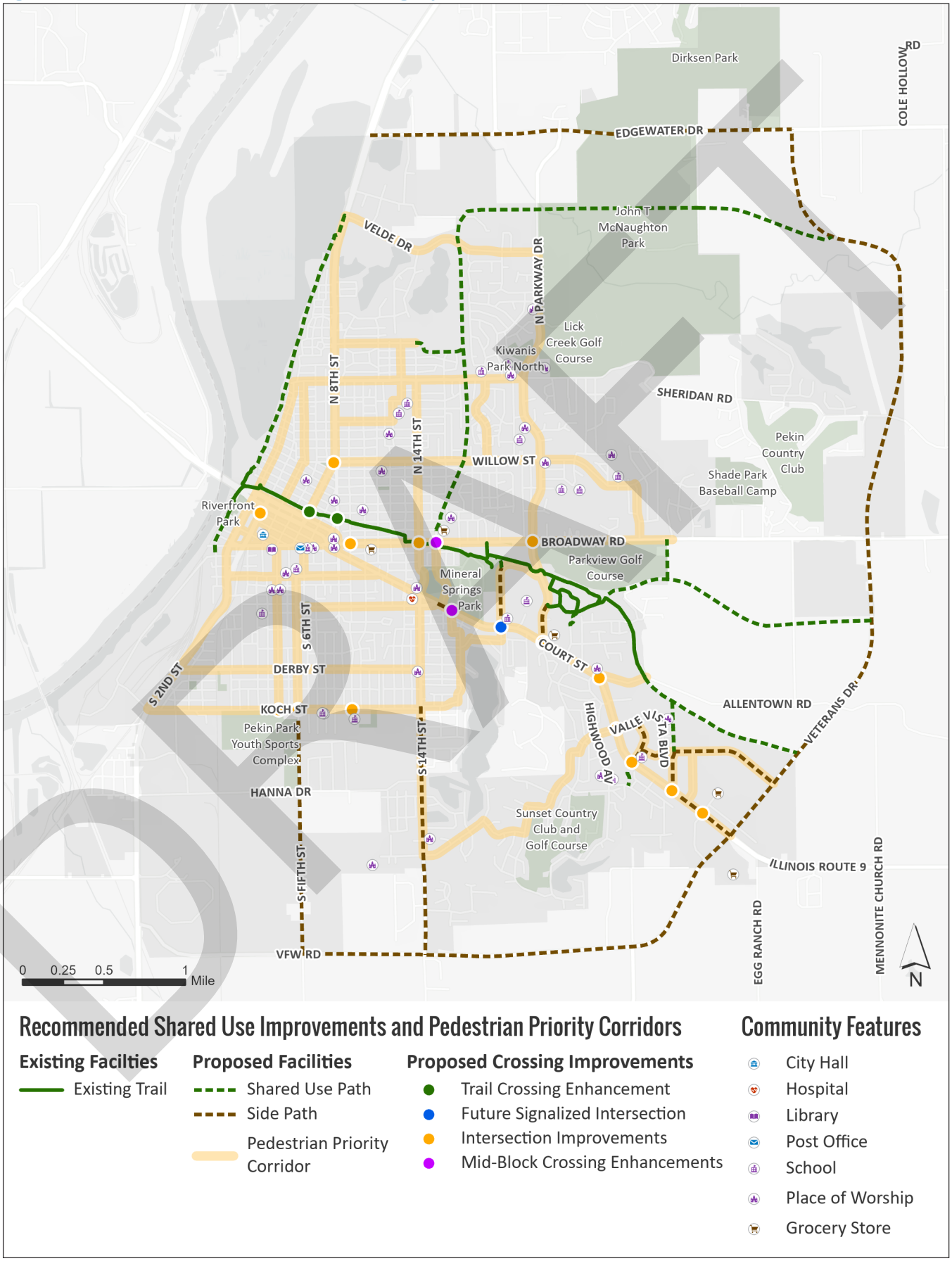
Crossing improvement projects help enhance safety and connectivity at trail/road crossings, mid-block pedestrian crossings, and intersections with high volumes of pedestrian and bicycle activity. These projects can be implemented as stand-alone projects or as components of larger corridor projects.

Table 5 lists the total number of pedestrian projects by improvement type and includes the total mileage for linear projects like sidewalks and shared use paths. These pedestrian facility recommendations are displayed in Figure 32 on page 61.

Table 5. Recommended Shared-Use and Pedestrian Improvements

Facility Type	Project Count	Facility Mileage
Pedestrian Priority Corridors	34	44.9
Sidepath	13	16.3
Shared Use Path	11	10.4
Crossing Improvements	19	N/A
Grand Totals	**77**	**66.8**

Figure 32. Recommended Shared Use Projects, Crossing Improvements, and Pedestrian Priority Corridors



The Bicycle Network

To support a culture in which bicycling is valued as a safe, accessible, and viable mode of transportation and recreation, the City of Pekin must invest in bicycle facilities that create meaningful connections to popular community destinations and support people of all ages and abilities.

Recommendations for bicycle facility development presented in this section of the plan build on the existing bicycle facility network and include on-street bikeways, off-street bikeways, and intersection and crossing improvements. These network improvements support safe and comfortable travel for people of all ages and abilities as envisioned by this plan.

It should be noted that these recommended facility types represent the ultimate desired facility type for that corridor. Right of way acquisition, project cost, and other factors may limit the City's ability to pursue a given project. These limiting factors should not prevent the City from developing a different bicycle facility that can serve a valuable purpose and represent an incremental step in achieving the desired outcome for bicycle transportation on that corridor.

A cyclist traveling along Royal Avenue between McDonald's and the Schnucks parking lot

Linear Facilities

On-Street Bikeways

The on-street bikeway projects recommended in this plan consist of a variety of facility types carefully selected to address each corridor's opportunities, constraints, and other relevant characteristics. These facilities, described earlier in this chapter of the plan, range from signed and marked shared roadways to buffered and separated bike lanes on collector and arterial streets.

Off-Street Bikeways

Shared Use Paths

Shared use path projects expand the reach of the Pekin Bike Path into other parts of Pekin via riparian corridors, utility corridors, abandoned railroad alignments, and other off-street, independent rights of way.

Sidepaths

Sidepath projects provide a similar function and level of comfort as shared use paths, but their location adjacent to larger roads can also increase access to popular community destinations.

Intersection and Mid-Block Crossing Improvements

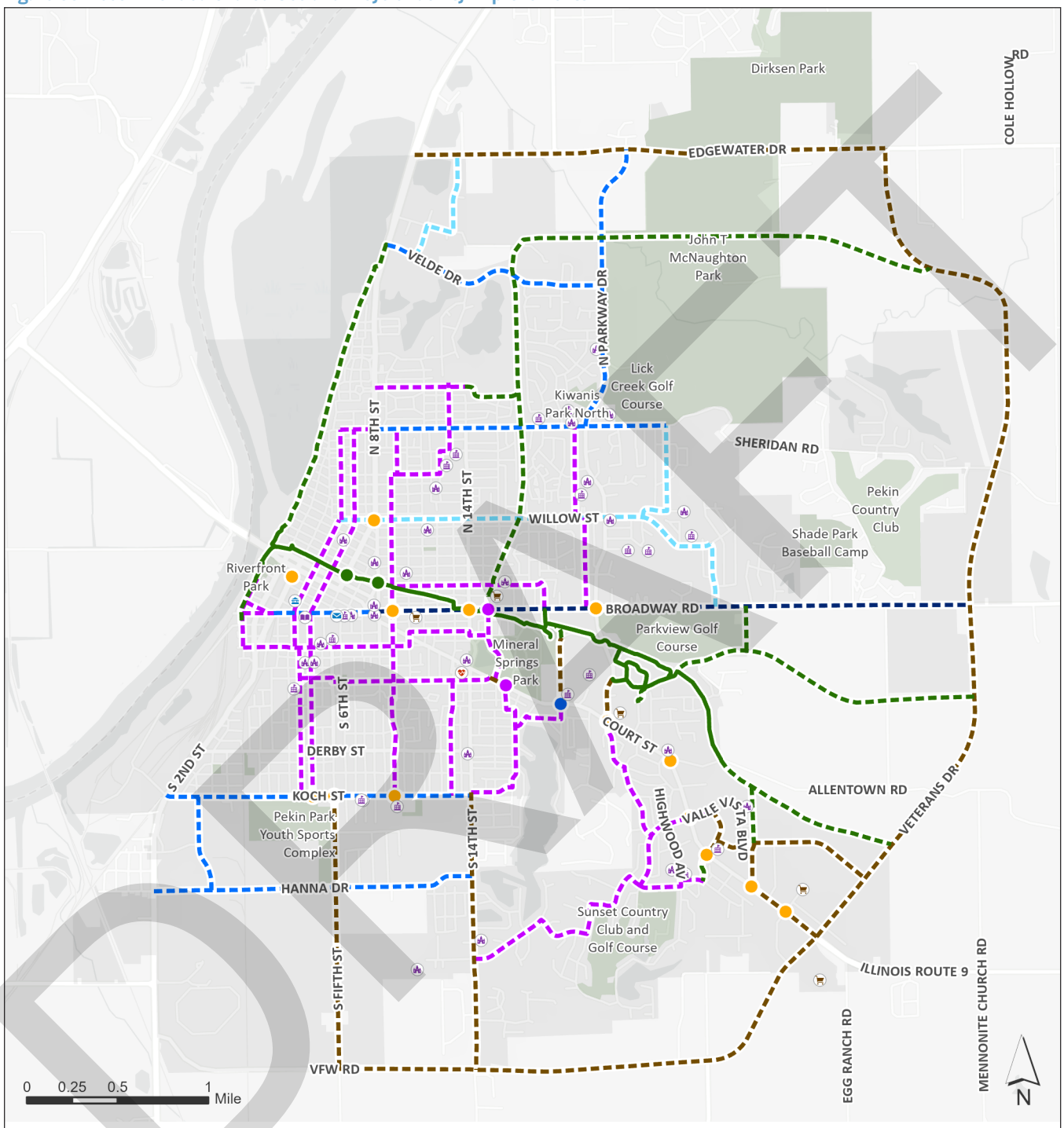
Crossing improvement projects help enhance safety and connectivity at trail/road crossings, mid-block pedestrian crossings, and intersections with high volumes of pedestrian and bicycle activity. These projects can be implemented as stand-alone projects or as components of larger corridor projects.

Table 6 lists the total number of bicycle projects by improvement type and includes the total mileage for linear projects like bike lanes and shared use paths. These bicycle and shared-use facility recommendations are displayed in Figure 33 on page 64.

Table 6. Recommended Shared-Use and Bicycle Facility Improvements

Facility Type	Project Count	Facility Mileage
Signed and Marked Shared Roadway	4	3.9
Bicycle Boulevard	25	18.3
Bike Lane/Buffered Bike Lane	7	9.0
Separated Bike Lane	1	3.3
Sidepath	13	16.3
Shared Use Path	11	10.4
Crossing Improvements	19	N/A
Grand Totals	**85**	**65.5**

Figure 33. Recommended Shared Use and Bicycle Facility Improvements



Recommended Shared Use and Bicycle Facility Improvements

Existing Facilties
- Existing Trail

Proposed Facilities
- Shared Use Path
- Separated Bike Lane
- Side Path
- Bike Lane
- Bike Blvd
- Shared Travel Lane

Proposed Crossing Improvements
- Trail Crossing Enhancement
- Future Signalized Intersection
- Intersection Improvements
- Mid-Block Crossing Enhancements

Community Features
- City Hall
- Hospital
- Library
- Post Office
- School
- Place of Worship
- Grocery Store

Citywide Improvements

In addition to the recommended facility improvements described earlier in this chapter, there are a variety of more general, citywide strategies to enhance walking and bicycling. These strategies can be pursued independently of facility development or integrated into the scoping and development of individual projects.

Wayfinding

Landmarks, destinations, neighborhood business districts, natural features, and other visual cues help residents and visitors travel through Pekin. However, many of the recommended bicycle boulevards utilize lower-volume neighborhood streets that may not be as familiar to many people, who may typically use an alternate route when traveling by bus or car.

The City of Pekin should develop a bicycle and pedestrian wayfinding system plan to support the growing active transportation network. Such a plan should take into account the current state of the active transportation network, as well as scheduled improvements that will serve as part of the formal network for biking and walking.

The placement of wayfinding signs throughout Pekin will indicate to bicyclists their direction of travel, the location of popular destinations, and the distance (and travel time by bike) to those destinations. This will in turn increase the comfort, convenience, and utility of the bicycle network. Wayfinding signs can also provide a branding element to raise the visibility of Pekin's active transportation network.

Signage can serve both wayfinding and safety purposes, including:

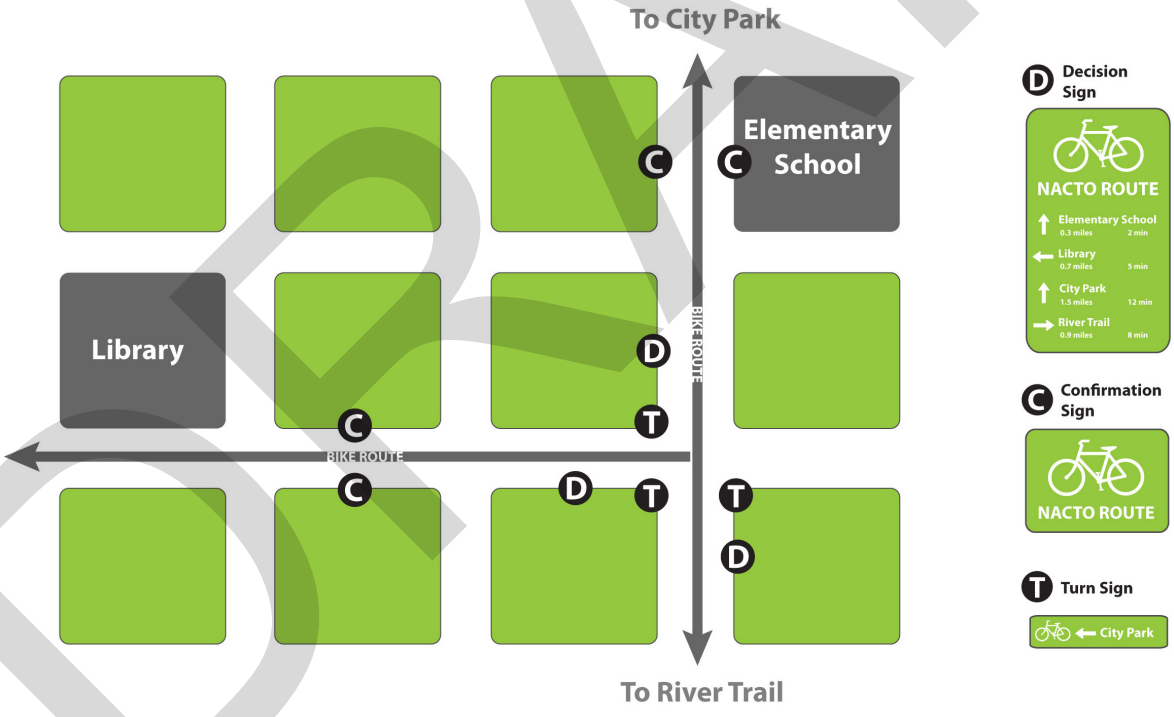
- Helping to familiarize users with the bikeway system
- Helping users identify the best routes to destinations
- Helping to address commonly held perceptions about travel time and distance
- Creating seamless transitions between on-street and off-street bikeways
- Helping overcome a “barrier to entry” for people who do not bicycle often and who fear becoming lost
- Alerting motorists that they are driving along a bicycle route and should use caution

Bicycle wayfinding sign in Bellingham, WA (source: City of Bellingham, https://cob.org)

Signs are typically placed at key locations leading to and along bicycle routes, including the intersection of multiple routes. The City of Pekin should develop a community-wide Bicycle Wayfinding Signage Plan that identifies:

- Sign locations along existing and planned bicycle routes
- Sign type, including sign design and what information should be included
- Destinations to be highlighted on each sign, particularly key destinations for bicyclists
- Approximate distance and riding time to each destination

General cost estimates for wayfinding signage range from standard Manual of Uniform Traffic Control Devices (MUTCD) signage to customized signage with branded elements and posts. Costs of wayfinding signage will depend on the type of signing and materials chosen for fabrication of the signs.



Bike route signing location diagram (source: https://nacto.org/wp-content/uploads/2011/03/NACTO_DesignGuide_AnnotatedPlans.pdf)

Traffic Calming

Motor vehicle traffic speeds and volumes have a direct impact on real and perceived safety of road users, especially people walking and bicycling. Traffic calming is an effective strategy to reduce motor vehicle speeds and/or volumes through roadway design that positively influence motor vehicle travel behavior and reaffirm the primacy of pedestrian and bicycle travel modes.

Typical traffic-calming design elements to reduce motor vehicle speeds and deter motor vehicle through-traffic include vertical and horizontal features. Vertical features include design elements like speed humps, speed tables, raised pedestrian crossings, and raised intersections. Horizontal features include design elements like curb extensions, chicanes, and lane narrowing.

Additional traffic-calming measures intended to restrict motor vehicle access include median diverters, diagonal diverters, and even full street closures.

The City of Pekin should consider traffic-calming design elements with the implementation of transportation improvements, including complete streets projects, and to address specific safety issues.

Traffic calming examples, clockwise from top left:
Curb extension, Denver CO (source: Denver Streets Partnership)
Mini roundabout, Boston, MA (source: NACTO)
Pedestrian refuge island (source: Scott Baston)
Temporary curb extensions, St. Louis, MO (source: Bloomberg Philanthropies)

Pekin Bike Path Improvements

The Pekin Bike Path is the backbone of the active transportation and recreation network in Pekin; however, Its popularity as a valued community asset is limited by its lack of identity, poor crossing conditions at major and minor streets, and lack of supporting amenities like trailheads, lighting, seating, and emergency call boxes. The following improvements are recommended to improve trail user safety, develop a unique identity, and create a more welcoming and positive experience for trail users.

User Safety

Roadway Crossing Improvements

There are numerous trail crossings at both signalized and non-signalized locations that can benefit from safety enhancements. Potential crossing enhancements include high-visibility crosswalk markings, rectangular rapid flashing beacons (RRFBs), raised medians and pedestrian refuge islands, raised crosswalks, and signal improvements.

General Safety Features

Other design features can increase user safety along the trail corridor. Physical enhancements like lighting increase visibility, especially during winter months, and emergency call boxes increase access to emergency and medical services. Mile markers, wayfinding kiosks, and wayfinding signs increase user knowledge and familiarity with the trail system. Other less obvious design elements like sight lines, landscaping, and maintenance fall under the broad umbrella of Crime Prevention Through Environmental Design (CPTED). CPTED principles deter criminal activity by increasing "eyes on the trail," creating a sense of place, and encouraging more desired recreation and transportation activities along the trail.

Branding and Visibility

While many Pekin residents who live close to the trail use it regularly, there are many who do not, and even some who are unaware of its presence. The City of Pekin and the Pekin Park District should develop a branding and signage package to elevate the brand identity of the trail and increase visibility, both in-person and through digital media. An important element of this branding effort should be the exploration of a new name for the Pekin Bike Path that will inspire and attract more interest from potential users.

Trail Beautification and Amenities

In tandem with branding and visibility improvements, the physical trail and its immediate surroundings could benefit from landscaping, wayfinding, trails, trash receptacles, information kiosks, gateway features, designated trailheads, and other amenities. The City of Pekin and the Pekin Park District should identify locations for new amenities or consider a more comprehensive trail improvement plan.

Bike Path Expansion

One limitation to the existing path is its relatively short distance and lack of connectivity to commercial destinations along Court Street in eastern Pekin. The City of Pekin should secure funding to design the Pekin Bike Path Extension from Allentown Road east to Veterans Drive. This would increase the utilitarian functionality of the trail and provide many Pekin residents with a more direct and comfortable path to commercial and employment opportunities in eastern Pekin.

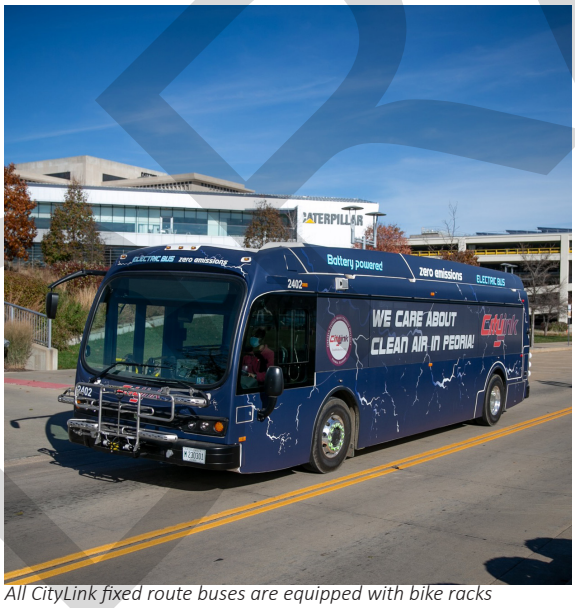
Transit Integration

Transit, walking, and biking are integral components of Pekin's multimodal transportation system. CityLink relies on the street network to provide transit services throughout the region, and its riders rely on sidewalks, trails, and bikeways to access transit stops.

Through bicycle parking at transit stops, the installation of bicycle racks on all CityLink buses, and improved connections from the sidewalk system to transit stops, the City of Pekin and CityLink have worked to link these transportation modes and increase first-mile/last-mile connections to destinations along and near transit routes.

As the City of Pekin continues to invest in bicycle and pedestrian infrastructure, it will be critical that transit considerations are taken into account. These include:

- Pedestrian circulation and access to transit stops
- Bus shelters and other amenities at higher-volume stops
- Secure bicycle parking, including short-term parking at transit stops, and more secure, long-term parking at transit hubs and major transfer centers
- Roadway and bicycle facility design that reduces conflict between bicyclists and transit vehicles at transit stops



All CityLink fixed route buses are equipped with bike racks (source: CityLink)

Example of a floating bus stop island and separated bike lane channel that reduces conflicts between bicyclists and buses (source: Dongho Chan)

Mobility Hubs

The growth of active transportation, shared mobility, micromobility, and other emerging transportation solutions are changing the way people move about the community. Communities too must adapt to these new technologies and modes by transforming public spaces to better accommodate and support the diversity of transportation options available. Mobility hubs provide a central location for a variety of transport-related services and amenities and strategic vehicle storage spaces to make it more convenient to combine modes within one trip.

Mobility hubs can be designed to meet specific objectives, cater to a range of targeted user groups (like students, employees, or trail users), and support adjacent land use and development. For example, a mobility hub located along the Pekin Bike Trail could serve as a multimodal hub and gathering space for trail users, commuters, and Pekin visitors. A mobility hub location at a transit stop with multiple routes like at the Tazewell County Courthouse could serve as a multimodal connection point for transit users and improve their wait time and mode transition experience with amenities like wifi, vending machines, long-term bicycle storage, real-time transit information, and wayfinding maps.

Mobility hub signage (source: City of Minneapolis / Flickr)

Regional Connectivity

From linear trails like the Rock Island Greenway and the River Trail of Illinois to planning efforts like Walk, Bike, Ride Greater Peoria: Paving the Way to Just Transportation; BikeConnect HOI; and the non-motorized wayfinding study, the regional active transportation network is taking shape in the Tri-County Region.

Although there are no dedicated facilities connecting Pekin to adjacent communities in the region, many recreational and touring cyclists take advantage of low-volume rural roads surrounding Pekin as part of meandering, long-distance circuits and routes.

There are also abandoned railroad corridors between Pekin and Tremont and Pekin and Morton that offer potential for regional trail connections, and the City of Pekin should coordinate with these nearby municipalities, Tazewell County, and other county partners to explore these opportunities in greater detail.

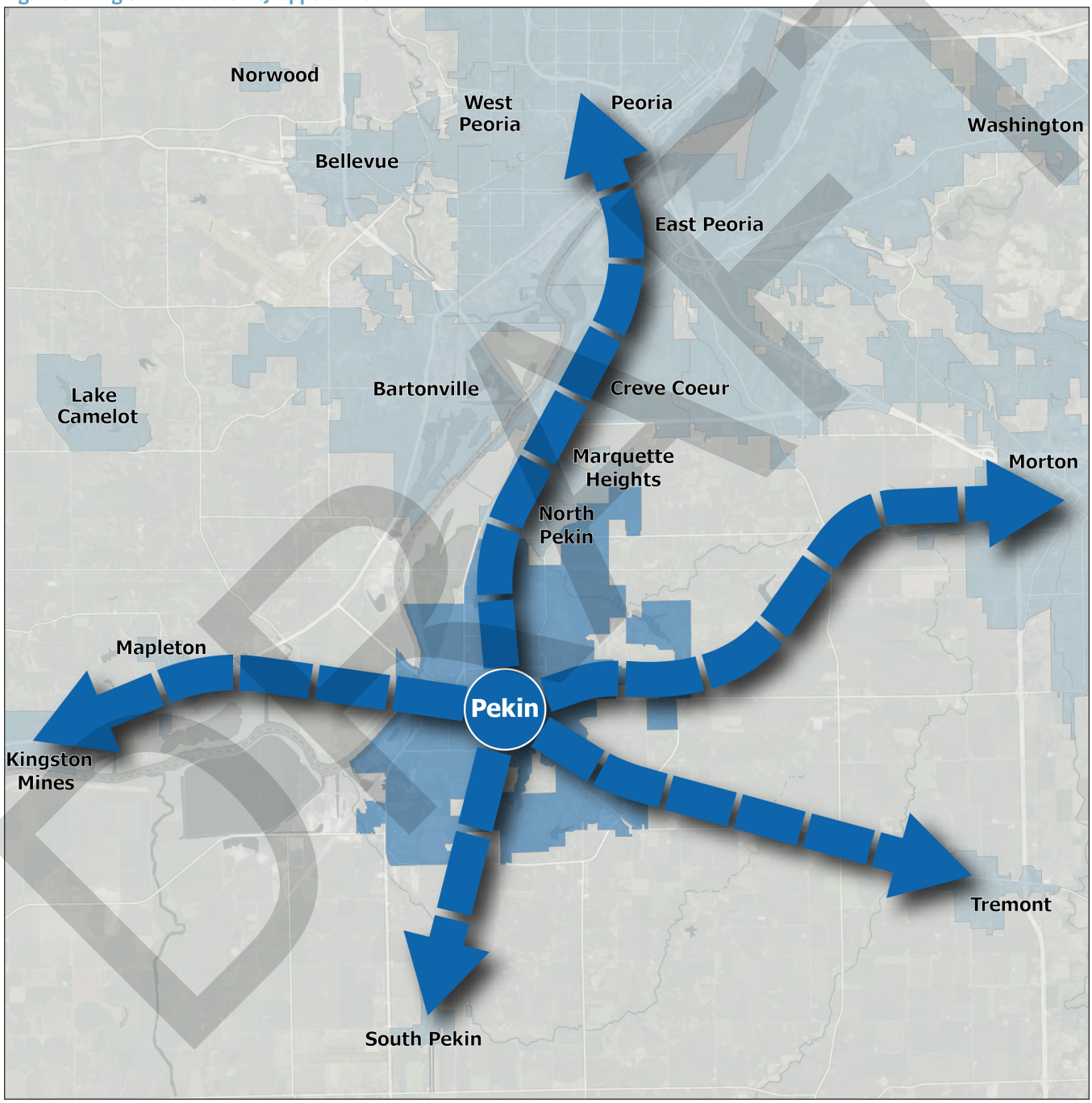
BikeConnect HOI identifies a connection north to East Peoria. Planning for Walk, Bike, Ride Greater Peoria is still underway and presents an immediate opportunity for the City of Pekin to advocate for regional trail connections to the north and east.

The City of Pekin should actively engage in the Walk, Bike, Ride Greater Peoria planning process to ensure that recommendations for regional connections between Pekin and nearby communities are identified in the plan. Where possible, these regional connections should come in the form of shared use paths that offer a comfortable, low-stress user experience and can better support transportation and recreation needs.

Cyclist on Mennonite Church Road southeast of Pekin

Rock Island Greenway (Source: Peoria Park District)

Figure 34. Regional Connectivity Opportunities



Programs and Policies

Creating a walkable and bikeable community takes more than trails, sidewalks, and bikeways. The City of Pekin's comprehensive approach also includes education and encouragement programs to build an active culture in which walking and bicycling are valued modes of transportation and recreation, and internal policies and procedures that integrate active transportation into the City's daily practices and operations.

This section presents recommendations for programs and policies to support active transportation based on input from the community, innovative best practices, and guidance from national experts like the League of American Bicyclists, the National Center for Safe Routes to School, the Safe Routes Partnership, the National Complete Streets Coalition, and the Vision Zero Network.

The Six E's of a Walkable and Bikeable Community

Originally pioneered by the Safe Routes Partnership nearly 20 years ago, the Six E's are a framework for organizing programs, policies, engineering solutions, and other activities to create a supportive environment for walking and bicycling. These six focus areas, which have changed slightly in recent years to incorporate equity and engagement, are the pillars of a successful and comprehensive approach to increasing active transportation, and the Pekin Bicycle and Pedestrian Plan program and policy recommendations follow this Six E's framework to present actionable strategies for the City of Pekin and its community partners to create lasting, sustainable changes to make walking and bicycling valued transportation options for people of all ages and abilities.

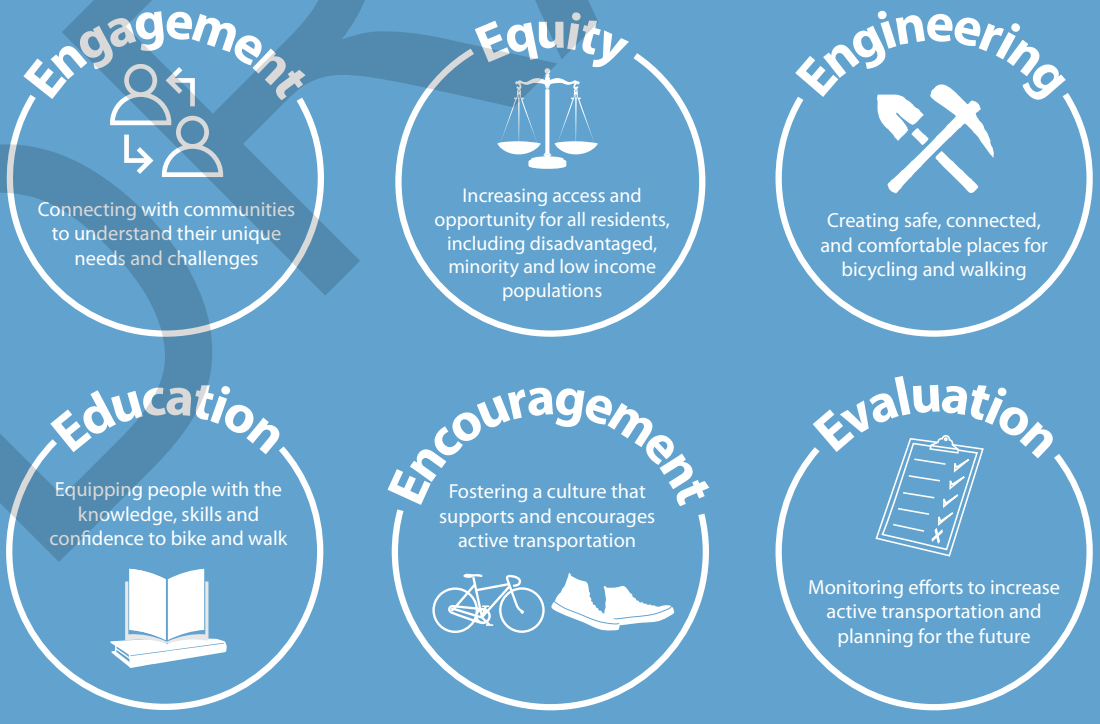


Table 7. Programming and Policy Opportunities and Potential Partners

Program	Related Six E's	Potential Program Partners
Earn-A-Bike Program		Pekin Park District, Bike Peoria, Local Bike Shops
Trail User Etiquette Campaign		Pekin Park District
Happy Trails to Healthy Foods		Pekin Chamber of Commerce, local businesses
Car-Free Street Events		Pekin Park District, Pekin Chamber of Commerce
Family Biking Programs		Pekin Park District, Bike Peoria
Safe Routes to School Program		Pekin Public School Districts
Silver Sneakers Seniors Program		Tazewell County Health Department, AARP Illinois
Outdoor Public Art		Pekin Park District, Pekin Chamber of Commerce
Interpretive Signage		Pekin Park District, Pekin Chamber of Commerce
Bicycle & Pedestrian Safety Campaign		Tri-County RPC, Pekin Park District, Tazewell County Health Department, Bike Peoria
Bicycle Friendly Business Program		Pekin Park District, Pekin Chamber of Commerce
Bike Month Events		Pekin Park District, Bike Peoria, Local Bike Shops, Tri-County RPC
Themed Walks and Rides		Pekin Park District, Bike Peoria
Personal Travel Encouragement		Pekin Park District, Bike Peoria
Bicycle Count Program		Tri-County RPC
Targeted Traffic Enforcement		Pekin Police Department
Themes Walking/Biking Maps & Guides		Pekin Park District, Pekin Chamber of Commerce
Traffic Ticket Diversion Class		Pekin Police Department, Tazewell County
Create-A-Commuter Program		Pekin Park District, Bike Peoria, Local Bike Shops
Bicycle & Pedestrian Resource Website		Pekin Park District
Bicycle Parking Program		Pekin Park District, Pekin Chamber of Commerce
Launch Parties for New Bikeways		Pekin Park District, Bike Peoria
Design Manual Updates		
Bicycle Parking Ordinance		
Engagement Procedures for Project Development		Tri-County RPC

Program Recommendations

Earn-A-Bike Program

Earn-a-Bike programs offer students the opportunity to learn basic bike maintenance and bicycling skills, as well as route selection and mapping. Students who participate in these programs typically learn to build a bicycle from the ground up, and upon completion of the program receive a refurbished bike (usually the one they build), along with a helmet, bike lock, and bike lights.

Trail User Etiquette Campaign

Shared-use greenways and trails are available for use by bicyclists, walkers, runners, skateboarders, inline skaters, parents with strollers, dogs, children, and, in some cases, equestrians, as well as other modes. A campaign for trail user etiquette works to ensure that all users safely and responsibly share the trail. The campaign may include media advertisements, trail signage, brochures, an "ambassador" program, etc.

Happy Trails to Healthy Foods

Many communities are recognizing the role that both physical activity and healthy eating play in improving overall public health and wellness. This important link can be highlighted in a fun and interactive manner through promoting healthy food outlets along the bicycle, pedestrian, trail, and transit networks and partnering with health food providers to identify safe routes for active transportation to their locations.

Car-Free Street Events

Car-free street events involve periodic street "openings" that create a temporary park that is open to the public for walking, bicycling, dancing, etc. The purpose of the event is to encourage biking and other forms of physical activity to the general public by providing a fun, welcoming environment for activity. Car-free street events have been very successful internationally and are rapidly becoming popular in the U.S.

Family Biking Programs

Family bicycling programs help parents figure out how to safely transport children by bicycle and help children learn bicycling skills. Activities may include bicycle safety checks, a group ride or parade, "freedom from training wheels" clinics, and opportunities to try out different ways to transport children (e.g., trailers, cargo bicycles, kid seats, etc.).

Safe Routes to School Program

The City of Pekin can benefit from a comprehensive Safe Routes to School program that combines local facility, safety, and route planning with more frequent organized travel events, like walking school buses or bike trains. Both of these strategies require a commitment and support from school leadership and staff, the City of Pekin, and families with school-aged children.

Silver Sneakers Seniors Program

Interested agencies, nonprofits, health departments and senior centers can partner to develop an active lifestyles program for senior citizens utilizing the bicycle, pedestrian, and greenways network. Activities could include adult tricycle or bicycle rides, nature walks, walks to lunch, and safety education.

Outdoor Public Art

Public art along a bicycle, pedestrian, and trail network can bring attention to the network and attract newcomers to bicycling and walking, both from within and outside Pekin. By combining art and greenway facilities, the community is creating a unique interactive amenity for both residents and visitors. Such programs can also attract new partners, promoters, and sponsors of the active transportation network.

Interpretive Signage

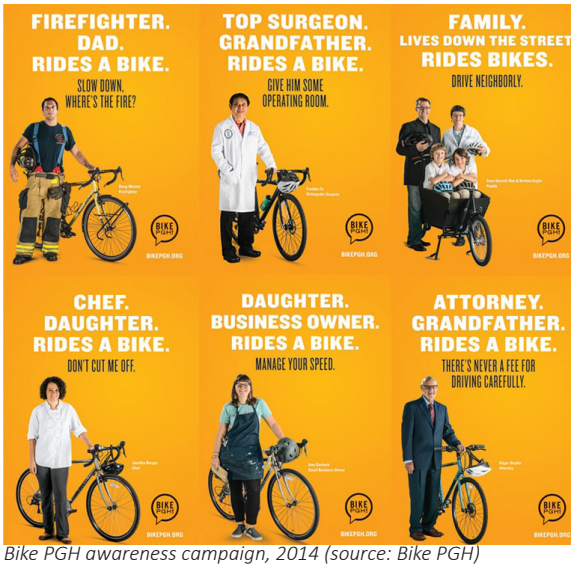
Interpretive signage along a trail and greenway network serves as an education tool. Information related to the history of an area, its cultural significance, or natural features is provided on a graphically appealing sign. Topics could range from native species of plants to river currents to famous historical figures.

Bicycle & Pedestrian Safety Campaign

A high-profile marketing campaign is an effective strategy for highlighting the importance of respect and shared responsibility on the road between bicyclists, motorists, and pedestrians. This type of campaign is particularly effective when launched in conjunction with other events such as Walk to School Day or National Bike Month.

St. Louis BWorks Earn-A-Bike Program (Source: BWorks)

Safe Routes to School (source: Safe Routes Partnership)



Bike PGH awareness campaign, 2014 (source: Bike PGH)

Bicycle Friendly Business Program

Businesses in Pekin have an important role to play in fostering a bicycle friendly community. From supporting employees with secure bicycle storage facilities, showers, and lockers to incentivizing customers that arrive on bike with discounts or other promotions, there are many ways businesses can promote bicycling. The League of American Bicyclists' Bicycle Friendly Business program will be a valuable resource, and businesses should strive to achieve recognition as a Bicycle Friendly Business.

Bike Month Events

Cities and towns across the country participate in National Bike Month annually, during May. The League of American Bicyclists (LAB) hosts a website for event organizers. The website contains information on nationwide and local events, an organizing handbook, and promotional materials. Bike month activities include Bike to Work Day events like morning-commute energizer stations and an end-of-day rally or celebration, a group ride with the mayor, discounts at local businesses for bicycle commuters, short, themed community bicycle rides, mountain bike skills clinics, and commuter courses for adults.

Themed Walks and Rides

Organized walks and bicycle rides offer people a comfortable and fun way to explore Pekin's streets and trails in a group setting. Organized walks and bike rides serve the valuable purpose of building many participants' confidence and knowledge of the walking and bicycling network, giving them the tools necessary to choose walking and bicycling for short daily trips.

Traffic Ticket Diversion Class

A diversion class is offered to first-time offenders of certain bicycle related traffic violations, such as running a stop sign on a bike. It can be aimed just at bicyclists or at bicyclists, motorists, and pedestrians. In lieu of a citation and/or fine, individuals can take a one-time, free or inexpensive class.

Personal Travel Encouragement

PTE programs are proven to reduce drive-alone trips by approximately 10% and increase bicycling, walking and transit use within a target area. The program delivers customized travel information packets; hosts fun events such as guided rides, walks, and classes; and sends trained outreach staff to farmers' markets and other community events.

Bicycle Count Program

By utilizing both automatic and manual counting practices, Pekin can better measure and understand how people travel in the community, which corridors are being heavily utilized, and where to invest in future transportation improvements. The Pedestrian and Bicycle Information Center (PBIC) has a wealth of information and resources to help the City develop a comprehensive counting program.

Targeted Traffic Enforcement

By focusing enforcement activities to encourage safe travel around schools, senior centers, business districts, and high-crash locations, the Pekin Police Department can support bicycle and pedestrian safety, especially for the most vulnerable road users in our community.

Themes Walking/Biking Maps & Guides

Walking, biking, and transit guides can capitalize on and promote Pekin's rich history, unique character, and beautiful parks. The guides would be targeted to a variety of ages and abilities, offering varying routes for families, touring cyclists, and others. Themes can include history, architecture, parks, and culture, and suited for both Pekin residents and visitors.

Bicycle & Pedestrian Resource Website

The City should create a website that serves as a one-stop resource for bicyclists, pedestrians, and trail users of all types. Information could include tips for commuters, route planning services, community events, message boards, and more.

Create-A-Commuter Program

Create-A-Commuter programs equip people with the tools to overcome common barriers to bicycling to work, school, and other everyday destinations. A successful program often includes bicycle skills and maintenance courses, mentorship pairing with experienced cyclists, and a Guaranteed Ride Home (GRH) element to provide participants with taxi, rideshare, or transit service if an unexpected need arises.

Bicycle Parking Program

People traveling by bicycle rely on safe and secure bicycle parking facilities to support their trips. To incentivize bicycle parking installation, the City of Pekin should consider the development of a bicycle parking program that provides reduced-cost bicycle racks for local businesses and community destinations.

Launch Parties for New Bikeway

The area's cities and counties should partner with local advocacy groups to generate media attention and engage local citizens in each incremental expansion of the bikeway network. Popular launch parties in other jurisdictions have included bicycle-handling workshops, free bike mechanic services, live music, bicycle giveaways, and other activities.

Bike Month event in Shasta, CA (source: Visit Redding)

Bicycle count program (source: Northeast Ohio ACA)

Midtown bike lanes ribbon cutting ceremony in Sacramento, CA (source: Mayor's Office of Community Engagement, Sacramento, CA)

Policy Recommendations

Policies and procedures provide a framework for consistent and transparent processes and decision-making. The policy recommendations presented in this section of the plan align department practices with the vision and goals in this plan.

Review and Update Design Standards

The City of Pekin's Design Manual provides standards and guidance to staff and consultants for the design of public improvements within Pekin. The document's transportation-related standards and guidance ensure that streets, sidewalks, and bikeways are designed to create a safe, efficient, and consistent travel experience. The City of Pekin should conduct a thorough review of the manual to identify opportunities to update the manual to align with the vision and goals of this plan. The following elements should be considered:

- Reference design guidance and best practices from the North American City Transportation Officials (NACTO), American Association of State Highway Transportation Officials (AASHTO), and Federal Highway Administration (FHWA)
- Standard widths and cross sections for roadways that include space for on-street bicycle facilities
- Sidewalk widths based on roadway functional classification and pedestrian priority corridors, with increased minimum widths to better support existing and future pedestrian volumes
- Traffic calming elements to support bicycle boulevard project development and other traffic calming projects
- Minimum standards for mid-block pedestrian and trail crossings varying by street width, number of travel lanes, or functional classification

Review and Update Subdivision Regulations

Providing clearly stated requirements for bicycle and pedestrian facilities within subdivision ordinances can encourage new developments to be bicycle and pedestrian friendly. The City of Pekin should conduct a thorough review of its subdivision ordinances to ensure development sites will support walking and biking by requiring continuous sidewalk connections between public sidewalks and building entries, as well as connections to trails or subdivisions. The ordinances should set design and infrastructure best practice standards for subdivision and private developments as well as trail connection requirements where applicable.

Develop a Bicycle Parking Ordinance

The City of Pekin should develop off-street bicycle parking requirements to integrate end-of-trip facilities into new developments and redevelopments. Often incorporated as an element of a local agency's off-street parking and loading requirements of the zoning code, bicycle parking regulations provide clear guidance for the number, design, and placement of bicycle racks or other bicycle storage facilities consistent with land use, scale, and design of development.

Public Health Law & Policy has developed a model bicycle parking ordinance for Illinois communities that can serve as a starting point for the City of Pekin in the creation of requirements that address local need and context. The model ordinance is available through ChangeLab Solutions, a national organization working to promote equitable laws and policies that promote public health. The Association of Pedestrian and Bicycle Professionals' recent publications for bicycle parking guidelines provide additional detail and specifications for rack planning, design, siting, and installation.

Expand Engagement for Project Development

As projects move from long-range planning into project development and construction, it is important that the City of Pekin continue to include community residents and stakeholders in decision-making processes. The City already has a practice of community engagement on major roadway planning.

The City of Pekin should continue to develop communications and outreach protocols to create opportunities for meaningful dialogue with and input from community residents during project design and construction phases of major projects and high-impact neighborhood projects. This creates opportunities for the City to convey the importance of pedestrian and bicycle improvements, connect individual projects to larger long-range plans, and to educate residents about new and potentially unfamiliar bicycle and pedestrian facility designs.

Advocate for Pekin through Regional Active Transportation and Safety Planning Initiatives

The City of Pekin is an integral part of the Tri-County Region, which is home to more than 350,000 residents spread across 28 communities. Local agencies in the region coordinate services, share (and often compete for) funding and resources, and work together to plan for transportation investments that have both regional and local implications.

Regional planning efforts like the Walk, Bike, Ride Greater Peoria: Paving the Way to Just Transportation and the Tri-County Safety Action Plan will offer opportunities for Pekin to benefit from regional active transportation networks and multimodal safety improvements.

The City should actively participate in these and other regional planning initiatives to advocate on behalf of Pekin residents and advance recommendations from the Bicycle and Pedestrian Master Plan and ADA Transition Plan.

Adopt a Complete Streets Policy

Complete Streets policies codify a commitment to making local roadways safe for all users, including pedestrians, bicyclists, and public transit users. Having a Complete Streets policy is useful for promoting improvements to existing streets as well as ensuring that any new streets are built to Complete Streets standards. The City of Pekin should consider the adoption of a Complete Streets policy that aligns national best practices and resources with local needs and context.

Establish an Active Transportation Working Group

The implementation of the Pekin Bicycle and Pedestrian Master Plan will require regular communication and coordination with community partners whose support and participation will be critical to the plan's success. The City of Pekin should establish an Active Transportation Working Group with partner agencies and community organizations and hold regular meetings to provide updates on implementation activities, share resources, coordinate activities, and work together to bring to life the plan's vision for walking and biking.

Increase Funding for Active Transportation

The City of Pekin should consider increasing funding for active transportation projects to support implementation of the Bicycle and Pedestrian Master Plan and the ADA Transition Plan. These two guiding documents provide clear and actionable strategies to improve public rights of way to better support pedestrian and bicycle connectivity, safety, and ADA compliance. This can be accomplished through an increase to bicycle and pedestrian funding as a set-aside within the Capital Improvement Plan, the pursuit of external funding sources, or the integration of bicycle and pedestrian improvements within larger programmed transportation projects.

05

IMPLEMENTATION

Introduction

The Pekin Bicycle and Pedestrian Master Plan provides a comprehensive set of infrastructure, policy, and programming recommendations designed to make walking and bicycling safe, convenient, and equitable transportation options for people of all ages, abilities, and backgrounds. Implementing the plan will require collective commitment from the City of Pekin and its community partners to pursue the opportunities identified in this plan, as well as those that arise in the coming years.

This chapter of the plan presents a detailed strategy to implement these recommendations and to ultimately achieve the plan's vision and goals. Included in this chapter are immediate actions to sustain and build momentum, capital project prioritization, cost estimates for infrastructure projects, funding sources, ongoing maintenance recommendations, and performance monitoring and evaluation activities.

Early Actions & Catalyst Projects

The following early action steps are designed to initiate implementation, sustain momentum generated during the planning process, and set the foundation for future progress. Five early action items, which represent a mix of policy, procedures, capital projects, and programs, provide early opportunities to engage community partners and establish strong and lasting relationships on which successful implementation efforts will depend.

Build the Network

The facility recommendations in the previous chapter will take years to implement, limited in large part by resource availability and staff capacity. There are, however, a number of recommendations that emerged from the prioritization as Short-Term Improvement Projects, as described in greater detail later in this chapter. Depicted in Figure 35 on the following page, these projects are high-value, low-cost opportunities to expand the bicycle network, focusing first on connections to the Pekin Bike Path, which will serve as the spine of the future active transportation network.

Many of these projects can be developed incrementally. Bicycle boulevard projects, for example, consist of pavement markings, wayfinding signage, and traffic calming improvements to slow or deter motor vehicle traffic and reinforce the street as a priority corridor for bicycle transportation. The City of Pekin can initiate many of these projects with pavement markings and wayfinding signage, then revisit bicycle boulevard corridors at a later date as funding and resources are available to install traffic calming improvements.

Undertaken together, the 10.13 miles of bicycle boulevard Short-Term Improvement Projects can serve as the first phase of network development, linking residents and visitors to Downtown Pekin, the Pekin Bike Path, neighborhoods, parks, schools, and other key community assets.

QUICK BUILD CHECKLIST

Focus on Short-Term Improvement Projects

Short-Term Improvement Projects add the greatest value in terms of community benefits and network growth and can be implemented more quickly than higher-effort, higher-cost trail and sidepath projects.

Start Small

While linear bikeways and trail projects add important links to the active transportation network, smaller location-specific projects like pedestrian and trail crossings can be implemented quickly and have a big impact on safety and connectivity. Improve key crossings with pavement markings, signage, and the clearance of shrubs and other visual obstructions.

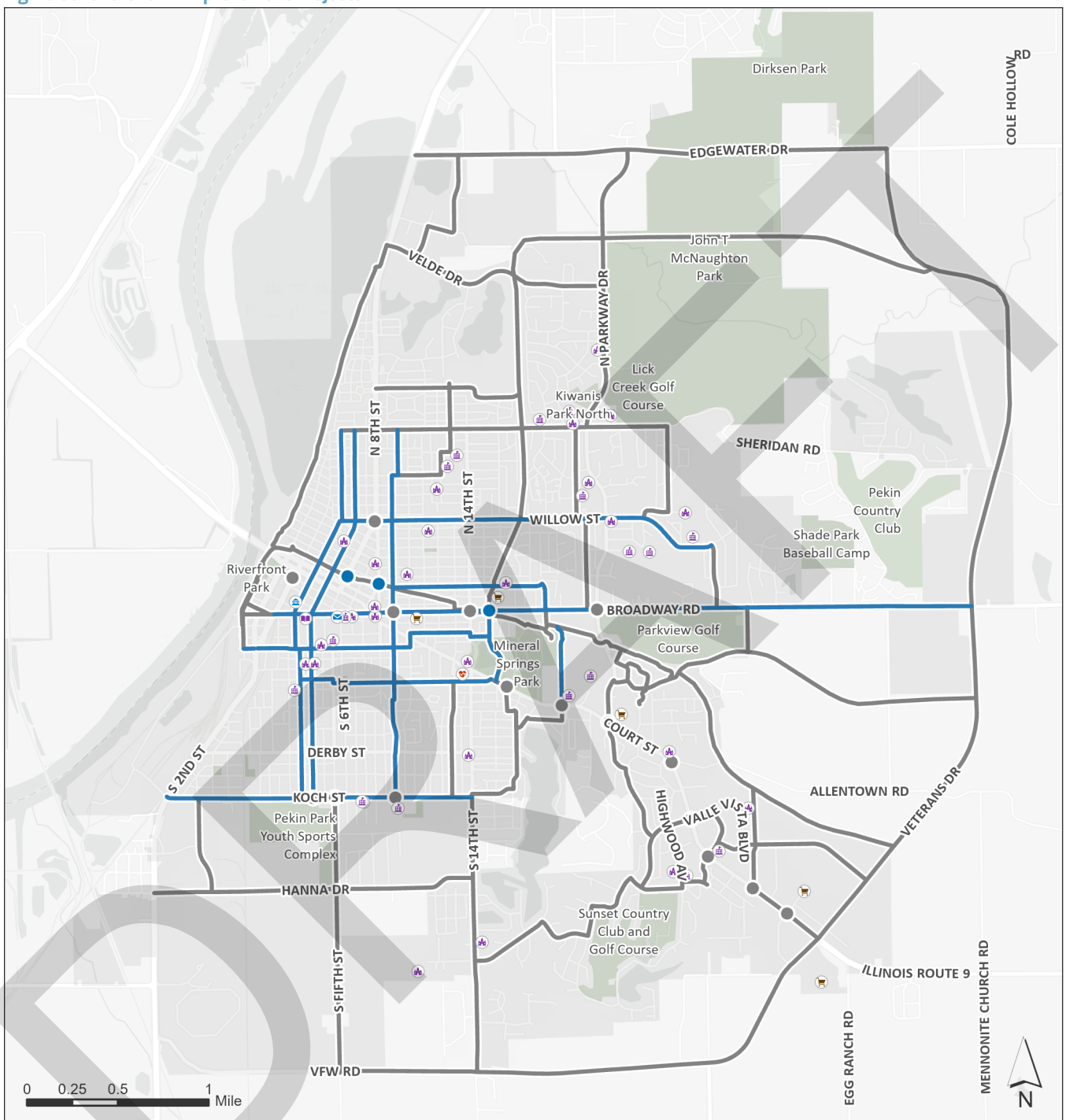
Build Incrementally

For bicycle boulevards and crossing improvements, start with pavement markings and signage, then explore traffic calming and other design elements when resources and funding become available.

Consider Temporary Approaches

Demonstration projects that use temporary materials give an opportunity to test design solutions and gauge public reception before investing in more costly permanent improvements. Employ temporary projects for crossing improvements and traffic calming projects.

Figure 35. Short-Term Improvement Projects



Short-Term Improvement Projects

Linear Shared Use and Bikeway Projects

- Short-Term Improvement
- Other Prioritization Categories

Crossing Improvement Projects

- Short-Term Improvement
- Other Prioritization Categories

Community Features

- City Hall
- Hospital
- Library
- Post Office
- School
- Place of Worship
- Grocery Store

Explore Key Policy Changes

Long-term, lasting change often begins with self-reflection and the evaluation of policies, procedures, and processes that determine if, how, and when things get done. Through this process, an agency or organization can identify opportunities for improvement and set the course for more efficient, more effective practices that align with desired goals and outcomes.

Through this planning process, the City of Pekin has established goals and objectives to guide investments in active transportation. Moving forward, the City should explore changes to existing policies and new policies that can support the implementation of this plan. From the many policy recommendations presented in the previous chapter on page 79, the City should prioritize the following recommendations for early implementation:

- Adopt a Complete Streets Policy
- Develop a Bicycle Parking Ordinance
- Increase minimum sidewalk widths for new subdivisions from four feet to six feet.
- Advocate for Pekin through Regional Active Transportation and Safety Planning Initiatives
- Establish an Active Transportation Working Group

These policies present actionable items to explore and pursue in the short term and span the spectrum of influence from internal procedures to development regulations to regional coordination.

The National Complete Streets Coalition provides a multitude of resources and templates like the Complete Streets Policy Framework to help local agencies develop their own policies and procedures

Improve the Pekin Bike Path

The Pekin Bike Path is the City of Pekin's only shared use path and will serve as the spine of the future active transportation network. While the Pekin Bike Path is highly valued by community residents, it is far from reaching its full potential. High-quality trails and greenways have the potential to provide safe connections to nearby destinations, support healthy and active lifestyles, improve residential property values, spark trail-oriented development, attract recreational tourism, and improve overall quality of life for residents.

As identified on page 68, there are numerous opportunities for improvement to elevate the path to an attractive, safe, and comfortable shared use path, one that will serve the needs of community residents and draw visitors from throughout the region and beyond.

Targeted improvements include branding and visibility, trail beautification and amenities, trail crossing safety improvements, general safety enhancements like lighting and call boxes, and trail expansion further westward.

The Pekin Park District, which maintains the path, should partner with the City of Pekin to develop a Pekin Bike Path Improvements Plan to explore trail enhancements and develop a singular, consolidated document to guide investments in the path, attract support and funding from community partners, and pursue external funding sources from state and federal programs.

The Indianapolis Cultural Trail has spurred millions in private development and has become a destination in and of itself for both Indianapolis residents and visitors from across the country (source: https://indyculturaltrail.org)

Facility Prioritization

The City of Pekin is responsible for the efficient, effective, and values-driven expenditure of taxpayer dollars. Active transportation infrastructure projects and programs must compete with other capital improvements and municipal services, as well as with one another, for limited internal and external resources.

In order to maximize investment in active transportation projects and provide the greatest benefit to the community, the City of Pekin should use a prioritized approach to invest in active transportation infrastructure and plan implementation.

This section of the plan scores recommended shared-use facilities, on-street bikeways, and crossing improvements based on ten criteria that reflect community priorities and project feasibility. The prioritization methodology and results are described below. It is important to note that sidewalks and crosswalks are not prioritized in this section in deference to the recommendations and prioritization of pedestrian improvements in the ADA Transition Plan.

Methodology

The prioritization of proposed bicycle, trail, and crossing improvements uses a scoring system that groups projects into one of four categories based on their priority, which reflects the value they offer based on metrics like proximity to parks and schools, level of traffic stress, and connections to existing facilities, and feasibility, which reflects the level of effort they require to implement based on factors like cost, complexity, and alignment with programmed improvements. These criteria and corresponding scoring strategies are shown in Table 8 below.

Table 8. Prioritization Criteria

Prioritization Criteria	Description
Priority (Value) Criteria	
Proximity to Schools	Within 250 ft of a school = 10 points; within 1,320 ft = 5 points
Proximity to Transit	Within 100 ft of a bus stop = 10 points; within 1,320 ft = 5 points
Proximity to Employment/ Commercial Destinations	Within 100 ft of high-demand area based on employment = 10 points; within 1,320 ft = 5 points
Proximity to Parks	Within 250 ft of a park = 10 points; within 1,320 ft = 5 points
Level of Traffic Stress (approximated by facility type)	Separated bike lanes, sidepath, shared use path = 10 points; bike boulevard, bike lane = 5 points; shared travel lane = 0 points
Connections to Existing Facilities	Direct connection to existing facility = 10 points; within 1,320 ft = 5 points
Traffic Safety	Two or more crashes along the corridor or at intersection = 10 points; one crash along corridor or at intersection = 5 points
Feasibility (Effort) Criteria	
Cost	Corridors: < $100,000 per mile = 10 points; < $500,000 per mile = 5 points; >$500,000 = 0 points
Complexity	Projects involving signing and striping only = 10 points; projects requiring minimal ROW acquisition, some engineering & design services, some construction= 5 points; projects requiring considerable ROW acquisition, engineering & design services, substantial construction, on IDOT or county ROW= 0 points
Coordination with Programmed Improvements	Recommended improvement already programmed = 10 points; aligns with programmed improvements = 5 points; does not align with programmed improvements = 0 points

Prioritization Categories

Based on the results of the scoring process, each project is assigned to one of the four prioritization categories shown in the matrix to the right: short-term improvement, long-term improvement, opportunity improvement, and low priority.

Short-Term Improvement

Short-Term Improvement Projects consist of high-priority projects that are relatively easy to implement and should be considered for implementation within the first five years of implementation.

Long-Term Improvement Projects

Long-Term Improvement Projects consist of high-priority projects that have a lower feasibility due to project costs and complexities. These projects should be pursued as long-term improvements that will require years to program, fund, design, and construct.

Opportunity Improvement Projects

Opportunity Improvements Projects consist of low-priority projects that have a higher degree of feasibility. If funding or the right partnership presents itself, these lower-priority projects may become opportunities in the near-term.

Low-Priority Projects

Low-Priority Projects consist of recommended improvements that offer lower value *and* lower feasibility. These projects may be pursued in the long term, but are not a priority at this time.

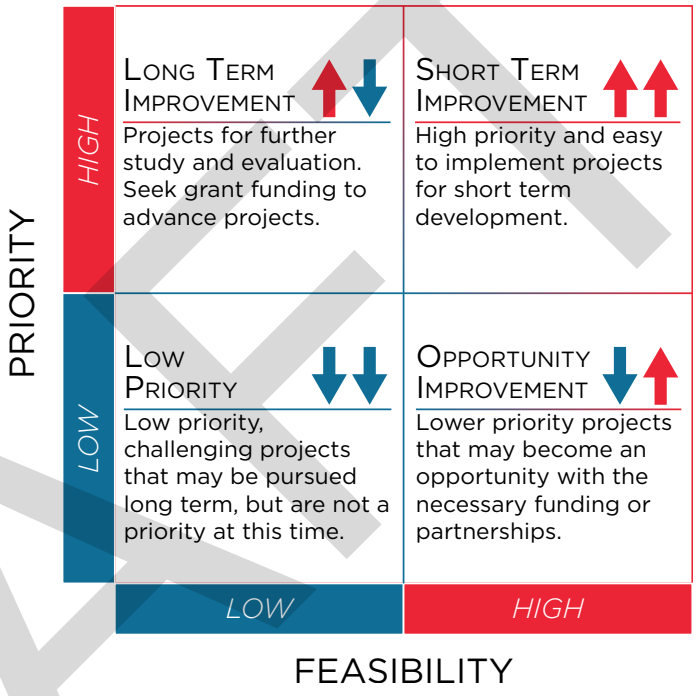


Figure 36. Prioritization Categories

Prioritization Results

The results of this prioritization process demonstrate the value and feasibility of proposed trails, on-street bikeways, and crossing improvements recommended in this plan. Figure 38 on page 90 displays the prioritization of proposed shared use facilities, on-street bikeways, and crossing improvements. The tables beginning on page 91 list projects within each of the four prioritization categories.

Short-Term Improvement Projects

Nearly one quarter of recommended projects are grouped into the Short-Term Improvement prioritization category and should be considered for implementation within the first five years of plan adoption. Short-Term projects include the Broadway Rd bike lanes (west of 8th St) and separated bike lanes (east of 8th St), the Stadium Dr sidepath (currently in design), most bike boulevard projects in the heart of the city, two trail crossing enhancements along the Pekin Bike Path, and a mid-block crossing on Broadway Rd at Sycamore St.

Long-Term Improvement Projects

High-priority, complex projects categorized as long-term improvements represent 15% of recommended projects and include numerous sidepaths and shared use paths like the Pekin Bike Path Extension and the Utility Corridor Trail. While more costly and challenging to advance, these projects offer great potential to impact walking and bicycling in Pekin.

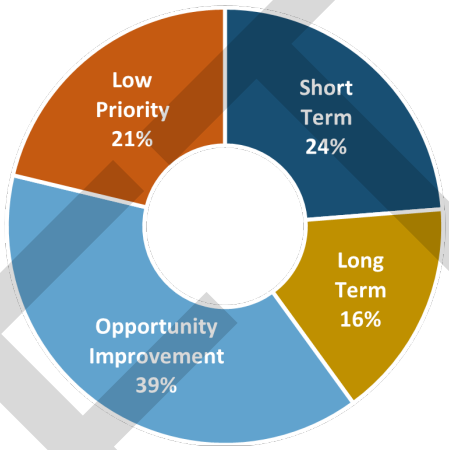


Figure 37. Percent of Projects by Prioritization Category

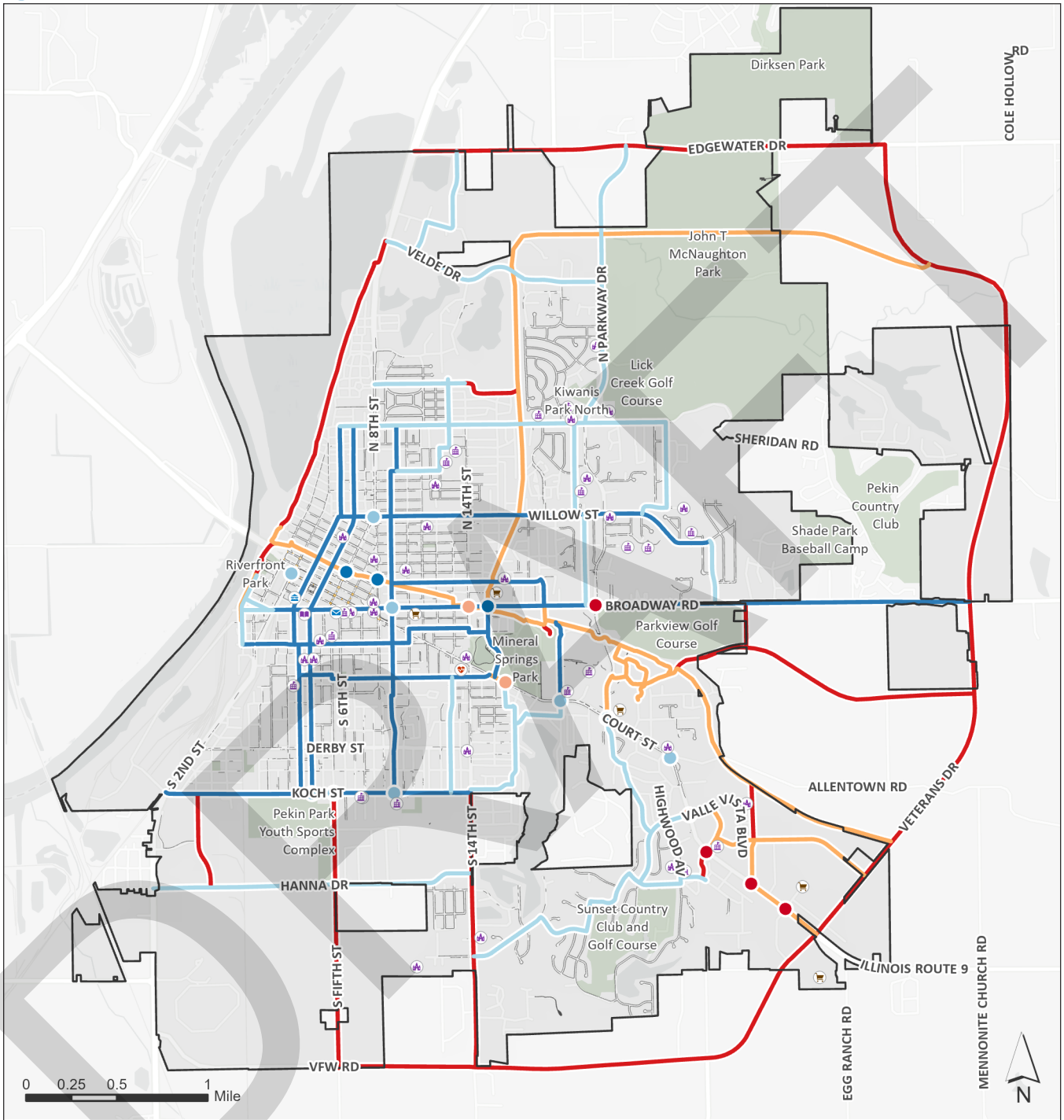
Opportunity Improvement Projects

Nearly 40% of all projects are categorized as Opportunity Improvement Projects. While these recommended bikeways and crossing improvements do not provide the same level of community benefit and impact as Short-Term Improvement Projects, their high level of feasibility make them attractive projects to pursue if the opportunity arises.

Low-Priority Projects

Twenty-two percent of recommended projects are Low-Priority Projects, which offer less value and are less feasible to construct when compared to other recommended projects. While their feasibility is unlikely to change, their value may increase as the bicycle and trail network grows and development continues in other areas of Pekin.

Figure 38. Prioritization Results



Network Prioritization

Linear Shared Use and Bikeway Projects

- Short-Term Improvement
- Opportunity Improvement
- Long-Term Improvement
- Low Priority

Crossing Improvement Projects

- Short-Term Improvement
- Opportunity Improvement
- Long-Term Improvement
- Low Priority

Community Features

- City Hall
- Hospital
- Library
- Post Office
- School
- Place of Worship
- Grocery Store

Table 9. Short-Term Improvement Projects

Project Name/Corridor	Facility Type	Project Limits/Location	Length (Miles)	Cost
4th St	Bike Blvd	Koch St to Broadway Rd	1.01	$197,060
4th St	Bike Blvd	Broadway Rd to Sheridan Rd	1.07	$208,497
9th St	Bike Blvd	Koch St to Broadway Rd	1.03	$201,145
9th St	Bike Blvd	Broadway Rd to Sheridan Rd	1.04	$202,303
Capitol St	Bike Blvd	Koch St to Broadway Rd	1.00	$195,565
Capitol St	Bike Blvd	Broadway Rd to Sheridan Rd	1.07	$208,256
Market St and 20th St	Bike Blvd	9th St to Broadway Rd	0.97	$190,057
Park Ave	Bike Blvd	Capitol St to Court St	1.07	$209,435
Pavilion Rd and Sycamore St	Bike Blvd	Court St to Broadway Rd	0.42	$81,409
Washington St, 10th St, and Royal Ave	Bike Blvd	Main St to Pavilion Rd	1.44	$281,148
Broadway Rd	Bike Lane	3rd St to 8th St	0.58	$47,991
Koch St	Bike Lane	2nd St to 14th St	1.68	$139,590
Broadway Rd	Separated Bike Lane	8th St to Veterans Dr	3.26	$1,221,779
Willow St	Shared Travel Lane	Capitol St to Schramm Dr	2.11	$33,805
Stadium- Bike Path Connector	Shared Use Path	Stadium Drive to Pekin Bike Path	0.08	$102,557
Stadium Dr	Side Path	Court St to Stadium- Bike Path Connector	0.37	$211,498
Broadway Rd at Sycamore St	Mid-Block Crossing Enhancements		N/A	TBD
Pekin Bike Path at 7th St and 8th St	Trail Crossing Enhancement		N/A	TBD
Pekin Bike Path at 5th St	Trail Crossing Enhancement		N/A	TBD
Grand Totals	**19 Projects**		**18.21**	**$3,732,094**

Table 10. Long-Term Improvement Projects

Project Name/Corridor	Facility Type	Project Limits/Location	Length (Miles)	Cost
Cottage Grove- Coal Miner's Connector	Shared Use Path	Cottage Grove Ave to Coal Miner's Park Trail	0.11	$143,252
Pekin Bike Path Extension	Shared Use Path	Allentown Rd to Veterans Dr	1.07	$1,358,067
Riverfront Trail Extension South	Shared Use Path	Fayette St to St. Mary St	0.27	$348,595
Utility Corridor Trail	Shared Use Path	Pekin Bike Path at Broadway St to Veterans Dr Extension	4.37	$5,575,484
Barney Ave	Side Path	Court St to Griffin Dr	0.24	$139,612
Court St	Side Path	Park Ave to 17th St	0.10	$261,834
Court St	Side Path	Barney Ave to Veterans Dr	0.46	$55,543
Griffin Dr	Side Path	Olt Ave to Veterans Dr	0.90	$515,764
Olt Ave	Side Path	Court St to Valle Vista Blvd	0.28	$162,206
Parkway Dr	Side Path	Court St to Coal Miner's Park Trail	0.24	$138,747
Broadway Rd and 14th St	Intersection Improvements		N/A	TBD
Broadway Rd at 17th St	Mid-Block Crossing Enhancements		N/A	TBD
Court St and Valle Vista Blvd	Intersection Improvements		N/A	TBD
Grand Totals	**13 Projects**		**8.04**	**$8,699,104**

Table 11. Opportunity Improvement Projects

Project Name/Corridor	Facility Type	Project Limits/Location	Length (Miles)	Cost
13th St	Bike Blvd	Koch St to Park Ave	0.64	$124,298
Amanda, Earl, Matilda, and 13th	Bike Blvd	9th St to Coolidge Ave	0.79	$154,491
Arrow St	Bike Blvd	Broadway Rd to Willow St	0.50	$97,753
Broadway Rd	Bike Blvd	Main St to 3rd St	0.17	$33,828
Coolidge Ave	Bike Blvd	8th St to Coolidge Connector Trail	0.50	$97,118
Cynthiana St	Bike Blvd	Main St to Broadway Rd	0.14	$27,957
El Camino, Quail Hollow, Sierra, St. Clair, and Summit	Bike Blvd	14th St to Valle Vista Blvd	1.29	$251,795
Koch St, 18th St, James Rd, and 17th St	Bike Blvd	14th St to Court St	0.85	$166,195
Main St	Bike Blvd	Washington Ave to Riverfront Park	0.40	$77,949
Sheridan Rd	Bike Blvd	Capitol St to 8th St	0.19	$37,487
Summit Dr and Powers Ave	Bike Blvd	Valle Vista Blvd to Powers Ave-Court St Connector	0.41	$79,257
Sunset Dr and Glendale Ave	Bike Blvd	Valle Vista Blvd to Court St	0.71	$138,248
Valle Vista Blvd	Bike Blvd	Summit Dr to Olt Ave	0.66	$128,644
Veerman Ave	Bike Blvd	Willow St to Sheridan Rd	0.50	$97,990
West Shore Dr, North Shore Dr, and East Shore Dr	Bike Blvd	18th St to Court St	0.36	$70,940
Hanna Dr	Bike Lane	2nd St to 14th St	1.77	$146,913
Parkway Dr	Bike Lane	Sheridan Rd to Edgewater Dr	1.60	$132,837
Sheridan Rd	Bike Lane	8th St to Redwood Dr	1.60	$133,031
Velde Dr	Bike Lane	8th St to Parkway Dr	1.28	$105,897
Lake Crest St, Brenkman Dr, and Lakeshore Dr	Shared Travel Lane	Velde Dr to Edgewater Dr	0.76	$12,133
Maywood Ave and Redwood Dr	Shared Travel Lane	Willow St to Sheridan Rd	0.64	$10,205
Schramm Dr	Shared Travel Lane	Broadway Rd to Willow St	0.35	$5,586
Broadway Rd and 9th St	Intersection Improvements		N/A	TBD
Court St and 3rd St	Intersection Improvements		N/A	TBD
Court St and Allentown Rd	Intersection Improvements		N/A	TBD
Court St and Parkway Dr	Intersection Improvements		N/A	TBD
Court St and Stadium Dr	Future Signalized Intersection		N/A	TBD
Koch St and 4th St	Intersection Improvements		N/A	TBD
Koch St and 5th St	Intersection Improvements		N/A	TBD
Koch St and 9th St	Intersection Improvements		N/A	TBD
Willow St and 5th St	Intersection Improvements		N/A	TBD
Grand Totals	**31 Projects**		**16.12**	**$2,130,551**

Table 12. Low-Priority Projects

Project Name/Corridor	Facility Type	Project Limits/Location	Length (Miles)	Cost
Riverway Dr	Bike Lane	Hanna Dr to Koch St	0.53	$43,969
Coolidge Connector Trail	Shared Use Path	Coolidge Ave to	0.33	$425,346
Pekin Bike Path- Griffin Connector	Shared Use Path	Griffin Dr to Pekin Bike Path Extension	0.31	$396,076
Pekin Bike Path Northwest Extension	Shared Use Path	Coal Miner's Park to Veterans Dr	1.74	$2,221,737
Pekin Bike Trail- Broadway Connector West	Shared Use Path	Pekin Bike Path to Broadway Rd	0.25	$315,526
Powers Ave- Court St Connector	Shared Use Path	Powers Ave to Court St	0.16	$202,009
Riverfront Trail Extension North	Shared Use Path	Pekin Bike Path to Velde Dr	1.71	$2,181,381
14th St	Side Path	Veterans Dr to Koch St	1.53	$880,150
5th St	Side Path	Veterans Dr to Koch St	1.51	$870,924
Edgewater Dr	Side Path	8th St to Veterans Dr Extension	2.60	$1,492,995
Veterans Dr	Side Path	Court St to Sheridan Rd	2.90	$1,665,831
Veterans Dr	Side Path	5th St to Court St	2.98	$1,714,855
Veterans Dr Extension	Side Path	Sheridan Rd to Edgewater Dr	2.15	$1,237,066
Broadway Rd and Parkway Dr	Intersection Improvements		N/A	TBD
Court St and Barney Ave	Intersection Improvements		N/A	TBD
Court St and Commercial St / Vogel Dr	Intersection Improvements		N/A	TBD
Court St and Olt Ave	Intersection Improvements		N/A	TBD
Grand Totals	**17 Projects**		**18.71**	**$13,647,865**

Cost Estimates

Cost estimates are an essential planning tool used for programming capital improvements and drafting applications for external funding sources. Cost estimates have been developed for each linear project based on initial planning-level examples of similar constructed projects and industry averages. All facility designs and associated cost estimates proposed in this plan are conceptual in nature and must undergo final engineering design and review through coordination among all concerned departments in order to arrive at detailed project costs. These costs are provided in 2023 dollars and include a 20 percent contingency. Inflation should be included in costs in future years when bikeway improvements are programmed.

The cost estimates do not include costs for corridor planning, public engagement, surveying, engineering design, right-of-way acquisition, and other work required to implement a project, since these are planning-level costs. These elements can and should be added as these projects are programmed into the CIP.

Depending on the type of improvement, additional costs can generally be estimated at up to 25 percent of the facility construction cost in the case of a shared use path design or a two-way separated bike lane. Construction costs will vary based on the ultimate project scope (i.e., combination with other projects) and economic conditions at the time of construction. When combined with larger roadway projects, the City can achieve economies of scale and maximize the value of every dollar spent on transportation infrastructure.

In addition, some facility types like bike boulevards and separated bike lanes can be implemented incrementally, first with lower-cost project components like striping, markings, and signage, and later with more substantial components like traffic calming for bike boulevards and physical separation elements for separated bike lanes.

Cost estimates for each type of recommended linear facility are listed in Table 13 below, and cost estimates for individual projects are listed in the prioritization tables on page 91 through page 94 in the previous section.

Table 13. Cost Estimates for Linear Project Recommendations

Facility Type	Number of Projects	Total Miles	Cost Per Mile	Total Cost
Shared Use Path	11	10.4	$1,275,000	$13,270,030
Sidepath	13	16.3	$575,000	$9,347,025
Separated Bike Lane	1	3.3	$375,000	$1,221,779
Conventional/Buffered Bike Lane	7	9.0	$83,000	$750,228
Bike Boulevard	25	18.3	$195,000	$3,558,823
Signed and Marked Shared Roadway	4	3.9	$16,000	$61,728
Grand Total	**66**	**65.5**		**$28,209,614**

Funding Sources

Funding bicycle and pedestrian infrastructure projects and supporting programs requires a diversified strategy and a creative approach. Local funding in particular will be critical to the implementation of the plan, whether used as local match for external funding sources or for projects and ongoing maintenance for locally funded projects.

The City of Pekin should determine an annual budget commitment to the implementation of active transportation projects based on the needs identified in this plan. When possible, this budget line item should be leveraged as local match for external funding in order to maximize the City's return on investment. In addition, the City of Pekin must be flexible and spontaneous enough to capitalize on partnerships, in-kind matches, and other non-traditional funding opportunities when possible. The following section of this chapter provides an overview of funding sources that can be utilized to make the plan vision a reality.

Local

Because external funding sources for bicycle and pedestrian projects and programs continue to be in short supply and high demand, local funding streams are often the most reliable source for infrastructure projects and supporting programs. In addition, local funding is often required as a match for external funding sources. With this in mind, it is imperative that the City of Pekin explore, identify, and pursue one or more of these local funding strategies as a means of implementing the plan.

Capital Improvements Set-Aside

As with most communities, Pekin has limited funds with which to implement active transportation projects and programs. By creating a dedicated set-aside in the Capital Improvement Program, the City can prioritize and plan for capital expenditures for trails, on-street bikeways, sidewalks, and other projects that improve conditions for walking and bicycling. This set-aside may also be used as a local match for external funding sources or as a contribution towards bicycle and pedestrian elements of larger projects. It should be noted that if a set-aside is created for active transportation projects, it should not serve as the only source of funding for the plan. Other line items are and can continue to be used to advance bicycle and pedestrian transportation, particularly as components of larger roadway projects.

Local Option Sales Tax

A local option sales tax is a special-purpose tax implemented and levied at the city or county level. A local option sales tax is often used as a means of raising funds for specific local or area projects, such as improving area streets and roads or refurbishing a community's downtown area. Special Improvement Districts are often created to define a sales tax area and administer the collection and expenditures of generated tax.

General Obligation Bond

General obligation bonds offer local agencies the opportunity to acquire necessary finances for capital improvements and remit payment over time. These general obligation bonds are among the most common form of capital project financing and can cover everything from stormwater and sanitary sewers to streets, sidewalks, and trails.

Federal & State

The federal government has numerous programs and funding mechanisms to support bicycle and pedestrian projects, most of which are allocated by the US Department of Transportation to state, regional, and local entities. In many cases, state and regional entities administer these funds to local agencies through competitive grant programs.

Bipartisan Infrastructure Law (BIL)

In 2021, congress passed a new transportation bill, the Infrastructure Investment and Jobs Act of 2021, also known as the Bipartisan Infrastructure Law. It provides $550 billion over fiscal years 2022 through 2026 in new federal investment in infrastructure, including in roads, bridges, and mass transit, water infrastructure, resilience, and broadband. Multiple programs have been carried over from the previous transportation bill, Fixing America's Surface Transportation (FAST) Act, and new discretionary programs have been added that expand funding opportunities for multimodal and active transportation planning and infrastructure projects. Funding for many BIL formula programs available to the City of Pekin is allocated to the Tri-County Regional Planning Commission based on apportionment formulas determined at the federal and state levels. The following BIL programs commonly used to fund bicycle and pedestrian projects are described in this section.

Tri-County-Administered Programs

Surface Transportation Block Grant (STBG)

The STBG provides funding that may be used by states and localities for projects to preserve and improve the conditions on any federal-aid highway, bridge and tunnel projects, public road projects, pedestrian and bicycle infrastructure, and transit capital projects. Bicycle and pedestrian infrastructure projects, including ADA sidewalk modification, recreational trails, bicycle transportation, on- and off-road trail facilities for non-motorized transportation, are eligible activities under the program.

Transportation Alternatives (TA)

The TA was authorized by MAP-21 in 2012 and is still available through and has been continued by the FAST Act through federal fiscal year 2020. Eligible project activities for TA funding include a variety of smaller-scale transportation projects such as pedestrian and bicycle facilities, recreational trails, safe routes to school projects, and community improvements such as historic preservation, vegetation management, and some environmental mitigation related to storm water and habitat connectivity. The TA program replaced multiple programs available prior to MAP-21, including the Transportation Enhancement Program, the Safe Routes to School Program, and the National Scenic Byways Program.

Special Transportation Studies

Tri-County has set aside MPO funds annually to be programmed for local jurisdictions in the Metropolitan Planning Area (MPA) to undertake consultant-led special transportation planning projects. Examples of eligible projects include traffic operations studies, corridor plans and feasibility studies, bicycle/pedestrian plans, and data collection and analysis. The City of Pekin was awarded funding through the Special Transportation Studies Program to undertake this bicycle and pedestrian master plan.

State-Administered Programs

Highway Safety Improvement Program (HSIP)

The HSIP is intended to achieve a significant reduction in traffic fatalities and serious injuries on all public roads by funding projects, strategies and activities consistent with a state's Strategic Highway Safety Plan (SHSP). Bicycle and pedestrian safety improvements and traffic calming measures are eligible project activities through the HSIP.

Section 402 State and Community Highway Safety Grant Program

Section 402 funds can be used to develop education, enforcement and research programs designed to reduce traffic crashes, deaths, severity of crashes, and property damage. Eligible program areas include reducing impaired driving, reducing speeding, encouraging the use of occupant protection, improving motorcycle safety, and improving bicycle and pedestrian safety. Examples of bicycle and pedestrian safety programs funded by Section 402 are comprehensive school-based pedestrian and bike safety education programs, helmet distribution programs, pedestrian safety programs for older adults, and general community information and awareness programs.

Federal Recreational Trails Program (RTP)

The Illinois Department of Natural Resources (IDNR) maintains and awards federal funding through the Federal Recreational Trails Program (RTP). The program was originally established as part of the Inter-modal Surface Transportation Efficiency Act (ISTEA) in 1991 and has been incorporated into all subsequent transportation bills, even if under different titles. Trail projects can include hiking and walking, bicycling, cross country skiing, snowmobiling, horseback riding, canoeing, and off-highway vehicles. The program provides up to 80 percent funding for approved projects.

Land and Water Conservation Fund (LWCF)

The purpose of the LWCF is the creation and maintenance of high-quality recreation resources through the acquisition and development of public outdoor recreation areas and facilities. The program, operated by IDNR, requires a 50 percent match from the project sponsor. After the funding is awarded and the project is completed, the local agency receives a reimbursement of 50 percent of the actual project costs.

Open Space Lands Acquisition and Development Grant (OSLAD)

The OSLAD program is a state-funded grant program administered by IDNR to provide funding assistance for local governments to acquire and develop land for open space and parks. The program has similar objectives to the LWCF and also requires a minimum 50 percent match from the project sponsor.

Illinois Bicycle Path Grant Program

The Illinois Bicycle Path Program was established in 1990 to assist local governments in land acquisition, construction, and rehabilitation of bicycle paths and related support facilities. Grant awards are capped at $200,000.

Safe Routes to School (SRTS)

SRTS is an IDOT program that provides TA set-aside funds for projects to enable and encourage children to walk and bicycle to school, improve safety, and reduce traffic and air pollution in the vicinity of schools. For the 2023 cycle, the SRTS program was 100% fully funded, with 80% through the TA Set-Aside under the BIL of 2021, and 20% local match through the HSIP.

Illinois Transportation Enhancement Program (ITEP)

ITEP provides funding for community-based projects that expand travel choices and enhance the transportation experience by improving the cultural, historic, aesthetic and environmental aspects of our transportation infrastructure.

Statewide Planning and Research Funds (SPR)

SPR is funded by the DOT and are federal funds for States' statewide planning and research activities. The funds are used to establish a cooperative, continuous, and comprehensive framework for making transportation investment decisions and to carry out transportation research activities throughout the State.

BIL Discretionary Grant Programs

RAISE Discretionary Grant Program

The Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Discretionary Grant Program provides a unique opportunity for communities to invest in road, rail, transit, and port projects that promise to achieve national objectives. Previously known as the Better Utilizing Investments to Leverage Development (BUILD) and Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grants, Congress has dedicated nearly $14.3 billion for fifteen rounds of National Infrastructure Investments to fund projects that have a significant local or regional impact. Eligible activities include Complete Streets network improvements, trail systems, and similar active transportation projects.

Reconnecting Communities and Neighborhoods (RCN) Grant Program

The Reconnecting Communities and Neighborhoods Grant Program (RCN) combines the 2023 call for projects for the Reconnecting Communities Pilot Program (RCP), created under the Bipartisan Infrastructure Law, with the Neighborhood Access and Equity Program (NAE), which was authorized under the Inflation Reduction Act. Though there is a combined NOFO with the same application and similar award characteristics, the two programs (RCP and NAE) will still award funding separately under each program. Due to the similar characteristics of RCP and NAE, it is possible for projects to be eligible for both funding sources. Trails and active transportation are eligible for funding, which is available to support planning and construction grants, as well as regional partnership grants. Grant types are defined below.

Safe Streets and Roads for All (SS4A) Program

Established by the Bipartisan Infrastructure Law (BIL), the new Safe Streets and Roads for All (SS4A) discretionary grant program will provide $5 billion between 2022-2026 to support local initiatives aimed at preventing serious injuries and fatalities that occur on our nation's roadways. The program supports the U.S. Department of Transportation (USDOT)'s National Roadway Safety Strategy (NRSS) and uses a Safe System Approach as a guiding principle to advance roadway safety and the Department's goal of zero deaths and serious traffic related injuries for all users.

Action Plans, such as Vision Zero plans, are the backbone of the SS4A grant program and can incorporate a variety of strategies and projects which include but are not limited to:

- The implementation of improvements that expand multimodal networks with separated bicycle lanes and improved pedestrian crossing safety features
- Installing safety enhancements like sidewalks and safer crossings for people walking, biking, or using mobility assistive devices
- Creating safe routes to school and public transit services

Active Transportation Infrastructure Investment Program

The Active Transportation Infrastructure Investment Program (ATIIP) provides direct competitive grants to local and state governments or organizations to construct projects that provide safe and connected active transportation facilities as part of an active transportation network or active transportation spine. The Fiscal Year (FY) 2023 Omnibus Appropriations bill that passed on December 23, 2022, includes funding to kick-start the ATIIP; however, the US Department of Transportation has not yet released information on the application timeline or directions on how to apply.

Other Funding Opportunities

People for Bikes Community Grants Program

People for Bikes, formerly known as Bikes Belong, is a national organization working to make bicycling better throughout the United States through programs and advocacy work. Eligible projects and activities include the following:

- Bike paths, lanes, trails, and bridges
- Mountain bike facilities
- Bike parks and pump tracks
- BMX facilities
- Bicycle parking, repair stations, and bike storage
- Ciclovías and open streets events
- Campaigns to increase investments in bike infrastructure

People for Bikes has funded more than 400 infrastructure projects and education and encouragement programs since it first launched in 1999, and the $3.5 million in grants have leveraged $775 million in public and private funding for bike-related projects across the country.

Foundation Grants and Donations

Community and corporate foundations can play an important role in funding bicycle and pedestrian infrastructure and programs. With a growing evidence base highlighting the connection between the built environment and community health outcomes, health foundations throughout the country have joined environmental foundations to support infrastructure projects that increase opportunities for walking, bicycling, and physical activity. Foundations like the Surdna Foundation, Robert Wood Johnson Foundation, and the Conservation Fund have provided funding for greenways, trails, and related infrastructure projects, as well as education and outreach programming.

Major employers in Pekin and the region may also have private foundations to support local initiatives that improve health, safety, and quality of life, or community service days through which employees donate their time and resources to support local causes.

Private Donations

Private individual donations can come in the form of liquid investments (e.g., cash, stock, bonds) or land. Municipalities typically create funds to facilitate and simplify a transaction from an individual's donation to the given municipality. Donations are mainly received when a widely supported capital improvement program is implemented. Such donations can improve capital budgets and/or projects.

Public-Private Partnerships

Public infrastructure is vital to the success of private development. Investments in utilities, transportation, and other infrastructure are needed for development to succeed. In cases where a funding gap for needed infrastructure exists, it is becoming more common for the private sector to intervene through funding, construction, maintenance, or other agreements with a public agency or agencies. These agreements, known as public-private partnerships (PPPs or P3s), leverage the strengths and resources of both partners to achieve common goals.

One shining example of a public-private partnership focused on active transportation and recreation is the Indianapolis Cultural Trail, an eight-mile trail through Downtown Indianapolis and surrounding cultural districts. The planning, design, and funding of the Cultural Trail were led by a public-private partnership between the City of Indianapolis and local foundations and philanthropists committed to the revitalization of the urban core. Initial investments and pilot projects soon led to the securing of a TIGER Grant (now called BUILD Grant) from the US Department of Transportation, which allowed

the project partners to complete the trail as a vital amenity and attraction for the city. Public investment in the trail has served as a catalyst for economic development, re-energizing Downtown Indianapolis and changing the region's perception of and relationship to the urban core.

Another example is the Virginia Capital Trail Foundation (VCTF), whose mission is to support and promote the construction, public use and enhancement of the Virginia Capital Trail. The VCTF works closely with the Virginia Department of Transportation to fulfill this mission.

Volunteer Work

Volunteer support and labor should not be underestimated as valuable resources for a variety of implementation activities. Volunteers can be used for fundraising, maintenance, landscaping, programming needs, and even data collection, like manual bicycle and pedestrian counts, walk audits, and facility inventories. Pekin should begin assembling a network of engaged and dedicated volunteers consisting of individuals, advocacy and non-profit organizations, the business community, school and university faculty and student groups, and other interested parties to support the City in advancing active transportation.

Volunteers on the River des Peres Greenway, St Louis, MO (source: Great Rivers Greenway)

Network Maintenance & Stewardship

Facility maintenance is important to the overall quality and condition of the bicycle and pedestrian network and supports safe and comfortable travel. Different facility types require different maintenance activities, from trail sweeping and snow clearing to bike lane restriping and sign replacement. While the City of Pekin and the Pekin Park District already allocate resources to the maintenance of trails, sidewalks, and on street bikeways, the expansion of the bicycle and pedestrian network will require increased investments in maintenance activities to provide high-quality active transportation and recreation experiences for Pekin residents and visitors. A comprehensive maintenance schedule and program should be developed to delegate maintenance roles and responsibilities, create maintenance funding projections, and budget for long-term sustainability of the system. Maintenance can be generally divided into two overarching categories: routine and remedial maintenance.

Routine Maintenance

Routine maintenance refers to the regularly scheduled and day-to-day activities to keep the greenways, trails, sidewalks, and on-street bikeways in a functional and orderly condition. These activities, which can be incorporated in normal routine maintenance by operations staff, include trash and debris removal, landscaping, weed and dust control, trail and street sweeping, snow removal, shoulder mowing, and tree and shrub trimming. Spot maintenance such as sealing cracks, spot replacement of small sections of sidewalk, filling potholes, and replacing damaged or worn signs also fall under this category.

Remedial Maintenance

Remedial maintenance refers to the correcting of significant facility defects and the repairing, replacing and restoring of major facility components. Remedial maintenance activities include periodic repairs like crack sealing or micro surfacing asphalt pavement; restriping of bike lanes; replacement of wayfinding and other signs; repainting and/or replacement of trail amenities and furnishings (benches, bike racks, lighting, etc.); and more substantial projects like hillside stabilization, bridge replacement, trail or street surface repaving, and trail repairs due to washout and flooding. Pavement markings and striping maintenance will depend on anticipated and actual product life cycle, which can range from one to ten years, depending on material type. Minor remedial maintenance for trails and greenways can be completed on a five- to ten-year cycle, while larger projects should be budgeted on an as-needed or anticipated basis.

Maintenance Costs

Maintenance costs vary depending on the quality and durability of materials, expected life cycle, use and wear, climate, weather, and other external factors. Conservative planning level maintenance cost estimates are provided below in Table 14 to assist in the development of maintenance budgets and resource allocation. These are conservative estimates based upon the best information available at the time of this plan. These cost estimates should be used as a guide for allocation of resources and should be refined based on previous experience with trail maintenance and lessons learned with on-street bikeway maintenance as recommended bikeways are installed.

Table 14. Planning-Level Routine Maintenance Costs

Facility Type	Annualized Cost Per Mile	Typical Maintenance Tasks
Signed Connection, Shared Lane, Bicycle Boulevard	$2,000	Sign and shared lane marking stencil replacement as needed.
Bike Lane, Buffered Bike Lane	$5,000	Repainting stripes and stencils, debris removal/ sweeping, snow removal, signage replacement as needed.
Separated Bike Lane	$7,500	Debris removal/sweeping, repainting stripes and stencils, sign replacement, replacing damaged barriers.
Sidepath	$5,000	Sweeping, trash removal, mowing, weed abatement, snow removal, crack seal, sign repair.
Shared Use Path	$15,000	Sweeping, trash removal, mowing, weed abatement, snow removal, crack seal, sign repair.

Network Stewardship and Enhancement

Stewardship is an important component of ongoing maintenance activities. Stewardship refers to the long-term care and oversight of the trail and active transportation network as a resource that adds value to the community and enhances the quality of life for Pekin residents. The network will require active stewardship by those who operate the facilities (and those who benefit from it) to ensure this valuable recreation and transportation infrastructure can provide a high level of service and a quality user experience for Pekin residents and visitors.

Stewardship requires coordination among relevant agencies involved in the care and maintenance of the trails, bikeways, sidewalks, and their surroundings; protection of these resources from external factors that may reduce their value and utility; and encouragement of community participation in the upkeep and enhancement of the network as a valuable community asset. Community participation through Adopt-A-Trail and Adopt-A-Street programs, annual trash cleanup events, and educational programming activities along trails and greenways can heighten community awareness of walking and bicycling facilities as valuable community assets.

The City of Pekin and the Pekin Park District should explore opportunities for additional partnerships and coalition-building with the Pekin Park District and other government agencies and community organizations to actively manage the trail and active transportation system as a valued community asset.

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