

Walk Bike Wilmette



VILLAGE OF WILMETTE MASTER BIKE AND ACTIVE TRANSPORTATION PLAN





PREPARED BY:



2021

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Pedestrian Discussion



Bicycle Discussion

INTRODUCTION

The Village of Wilmette chose to develop this bike and active transportation plan to improve walking and biking both within the Village and regionally, as well as to improve access to destinations such as transit stations, business districts, schools, parks and recreational areas. Wilmette streets have many different elements to balance in creating a context-sensitive pedestrian and bike plan. Uses such as on-street parking, loading zones, driveway access, sidewalk connections, turn lanes, transit stops, bicycle facilities, utilities, and trees all vary from corridor to corridor, and sometimes even block by block. Different communities and groups within the Village have complex needs which influence the availability and equitable distribution of transportation resources.

PLAN PURPOSE

It is clear that a transportation network for all types of road users, based on safety, sustainability, comfort, and efficiency is necessary to support Wilmette's current residents and future growth. In addition to creating a local network for active transportation, the Wilmette Master Bike and Active Transportation Plan will better connect residents to local attractions, jobs and business districts; provide opportunities for improved health and environment; and will simplify the ability to travel outdoors easily, without a car.

Less than a quarter of Americans today meet federal guidelines for exercise recommendations, lending to the rise of chronic diseases that result from inactive lifestyles. The Center for Disease Control and Prevention states that the average adult should aim to engage in at least 30 minutes of physical activity every day. By replacing one short car trip with walking or riding a bike, exercise can be incorporated into daily activities - an attainable goal considering how many short trips are taken in cars every day.

The U.S. Department of Transportation National Household Survey states that 87 percent of all daily trips take place in personal vehicles and more than 50 percent of trips by car cover a distance of four miles or less. Designing and planning for infrastructure that makes it easier to walk and bike can enable users to choose active transportation options when completing shorter trips, increasing daily exercise and reducing vehicular dependency, which, along with improved health and environmental benefits, can save money by reducing overall costs for fuel and vehicular maintenance.

In the United States, approximately one third of the population either cannot drive or does not have reliable access to a car. This population includes children, seniors, people with disabilities, and people with limited means. These groups depend on active transportation in forms of walking, bicycling, or taking transit to move from place to place. Too often, these groups do not have access to a safe and efficient network of sidewalks, bikeways, and transit amenities to reach work, schools, or grocery stores.

Implementing an active transportation plan creates community-wide benefits for all residents and all types of travel. Designs that support walking and biking have positive safety benefits for drivers too, since they can help calm vehicular traffic conditions while reducing traffic speeds and the likelihood and severity of crashes. Walking and biking are affordable ways to travel and have been shown in multiple studies to create positive spending effects on local economies as cyclists and pedestrians make more frequent stops at local stores and shop less often at big-box conglomerates. A 2018 study by Transport for

London quantified how much more local spending pedestrians and cyclists do, confirming that those walking and biking spend up to 40 percent more than people driving, and can increase retail sales by 30 percent.

For all of these reasons, a plan is an important asset to help guide Village decisions in implementing an active transportation network. The Village's last bicycle plan was adopted in 1998. Creating a new plan based on updated design standards and recommendations, as well as Villagers' current motivations and priorities, is a progressive step forward toward achieving a robust on-the-ground network for all types of travel. The Master Bike and Active Transportation plan lays out recommendations for future engineering studies, funding solutions, and infrastructure design from a street-level perspective, but also with a regional lens that considers the overall relationship and connectivity of Wilmette to the greater Chicagoland region.



Go Green Bike Ride 2015 Group; photo by Go Green Wilmette



Wilmette Train Station; Photo by Comfort Keepers

The Wilmette Master Bike and Active Transportation Plan serves to indicate options for safe and accessible walking and biking routes throughout the Village that can be adjusted for flexible implementation strategies. The Plan is proactive in anticipating that designs may need to change to accommodate unforeseen circumstances before construction can be completed. For this purpose, route recommendations are defined at the roadway-level, based on public engagement feedback and existing conditions data, and are flexible enough that if a clear alternative later becomes preferable, that alternative can be implemented as easily as the original recommendation.

The plan will also help the Village in prioritizing funding resources, identifying roadways that are the best candidates for pedestrian and bicycle improvements. The plan will also assist Wilmette in applying for county, state and federal grants. Since the recommendations are planning-level, more information on the design and feasibility would be needed prior to implementation. Additionally, on an annual basis the plan will be revisited with a staff level review as well as a public comment period at a Transportation

Commission meeting. During this time, recommendations will be considered for current relevancy and/or potential updates.

As daily users of the transportation network, Wilmette residents, groups, agencies, and institutions were the necessary experts needed to create the Bike and Active Transportation Plan. By delivering input about where they walk or bike, challenges faced while taking trips, and desired access to destinations, the residents provided crucial information to shape the following recommendations.



Plan of Wilmette; 1922



Wilmette Traincar; 1948

BACKGROUND

HISTORICAL PEDESTRIAN, BICYCLE AND COMPLETE STREET EFFORTS IN THE VILLAGE

Located approximately 16 miles north of downtown Chicago, the Village of Wilmette is situated along just over 2 miles of Lake Michigan's north shore and is home to some 27,000 residents. Officially incorporated on September 19, 1872, the Village of Wilmette was named for early settlers Archange and Antoine Ouilmette after they built a cabin on its reserved land in 1829. Like many settlers in the region, early Villagers worked as farmers and loggers. The establishment of the Chicago and Milwaukee Railroad (later changed to the Chicago and North Western) tracks in 1855 and Sheridan Road in 1900 spurred a defined future for Wilmette, providing regional connections and lending to its growing population.

As the Village grew through the 1900s and 1920s, new train stations and railways were added along with schools, libraries, and even apartment buildings. In 1922, the Village adopted the "Plan of Wilmette", an ambitious document that represented Wilmette's first zoning and development plan, although much of it was never implemented.

Through the Great Depression era, residents struggled to make ends meet and the Village teetered towards bankruptcy. In the mid-1930s, Village President Carbon Petroleum Dubbs, a canny businessman who would forego his own salary to further stretch the Village budget, opened a water plant and began selling water to nearby municipalities, implemented a Works Progress Administration program to resurface Wilmette's brick streets and rehabilitate the Wilmette Pier, and began construction on the Gillson Park amphitheater. By 1938, Wilmette was financially sound and construction slowly resumed.

Throughout the mid-1900s Wilmette continued to grow. Post World War II growth and housing demand in the region led to a 1950s housing boom in the Village. More houses, apartments, churches and synagogues, and schools were built, including the Bahai House of Worship, finished in 1953. The Edens Expressway and subsequent shopping plaza were opened in 1951 and 1956, respectively. By the end of the 1950s, Wilmette's population was more than 28,000 residents.

In 1972, the Village celebrated its 100 year anniversary centennial festival on the Village Hall lawn and Centennial Park was opened in the following year. A new comprehensive plan was adopted in 1973, along with a complementary zoning ordinance in 1974. In 1974, the Wilmette launched a new bus service for residents called the Wilbus in order to support transit around the Village and to and from its only operating CTA train station, Linden, after the CTA closed service at Isabella in 1973.

In 1981, the Green Bay Trail opened and by the early 1990s a new building was constructed for Linden Station, opening in 1993. Pace buses began operating in 1995 within Wilmette, ending the more than 20 years of Wilbus service. Engineering Resource Associates prepared The Village of Wilmette Proposed Bicycle Routes System adopted in 1998, a document outline proposed bike route recommendations. A new comprehensive plan was incorporated in 2000. In 2003, the Illinois Department of Natural Resources awarded the Wilmette Park District a 2 million dollar grant to preserve and revitalize Mallinckrodt College into a community recreation center.

The Village has adopted several walking and biking policies over the years to make transportation safer for all types of road users. In 2008, the Village partnered with Northbrook, Glencoe, Northfield, and Glenview to complete the Skokie Valley Trail Feasibility Study. James J. Benes and Associates prepared a Pedestrian Facilities Study in 2015 for Wilmette and Glenview, detailing existing conditions and providing recommendations for the pedestrian network around schools, the East Lake Corridor, and the northeast area. Also in 2015, the Village adopted a Complete Streets Policy and created a crosswalk policy outlining proper installation of crosswalks and safety enhancements. In 2016, the Village updated its sidewalk request and installation policy.



Centennial Park



Early Downtown Wilmette

Wilmette today is an active town, serviced by both Metra and CTA transit stations and several regional trails including the North Branch Trail, Green Bay Trail, and Skokie Valley Trail. The Village is home to many attractions and destinations, including Gillson Park and Beach, and contains on-street bicycle and pedestrian facility connections to its municipal neighbors of Evanston, Skokie, Glenview, Kenilworth, and Northfield, providing the Village with local and regional connections.



Skokie Valley Study



Casual Cycling; photo by Remote Traveler



Shopping by Bike

PREVIOUS STUDIES AND PROJECTS

As part of the preparation for this project, and to better inform the final recommendations in this plan, the project team conducted a literature review of previous reports, projects, and studies including traffic safety improvements in Wilmette. Each of the following documents were included in the review.

The Village of Wilmette Comprehensive Plan – Village of Wilmette, 2000. Among other land use recommendations for the Village of Wilmette, the Plan emphasizes a need for efficient pedestrian movement and secure, convenient bicycle access, especially in commercial areas. Goals include maintaining a safe and functional sidewalk system, providing safe circulation and environment for bicycle riders, implementing effective street lighting, and considering design approaches that integrate all modes.

Village Center Master Plan – Prepared by the Lakota Group for the Village of Wilmette, January 2011. This plan provides guidance on how the Village of Wilmette can maximize the Village Center's (downtown) transit-oriented development potential by improving traffic, pedestrian and bicycle circulation throughout the district. Additionally, a Downtown Streetscape Plan is underway and is intended to build upon the efforts of the Central Ave Phase 1 Plan and Village Center Master Plan. This plan focuses on improvements to Wilmette Ave and Central Ave within downtown, including improvements to lighting, sidewalks, roadways, plantings and amenities.

Central Avenue Project Development Report – Union Pacific Railroad (Metra UP North Line) to Sheridan Road. Completed March 2018 for the Village of Wilmette by TranSystems. This project focused on Central Avenue near the Union Pacific Railroad and Metra UP North Line to Sheridan Road, and includes analysis of existing conditions, land use, traffic data, bikeway facilities, bus routes, railroads, and utilities. The purpose of the project was to resolve pedestrian safety deficiencies by addressing the condition of the roadway and existing crosswalks. Recommendations include pavement reconstruction, traffic signal modernization at the Central Avenue and Wilmette Avenue intersections, curb extensions, and pedestrian facility improvements.

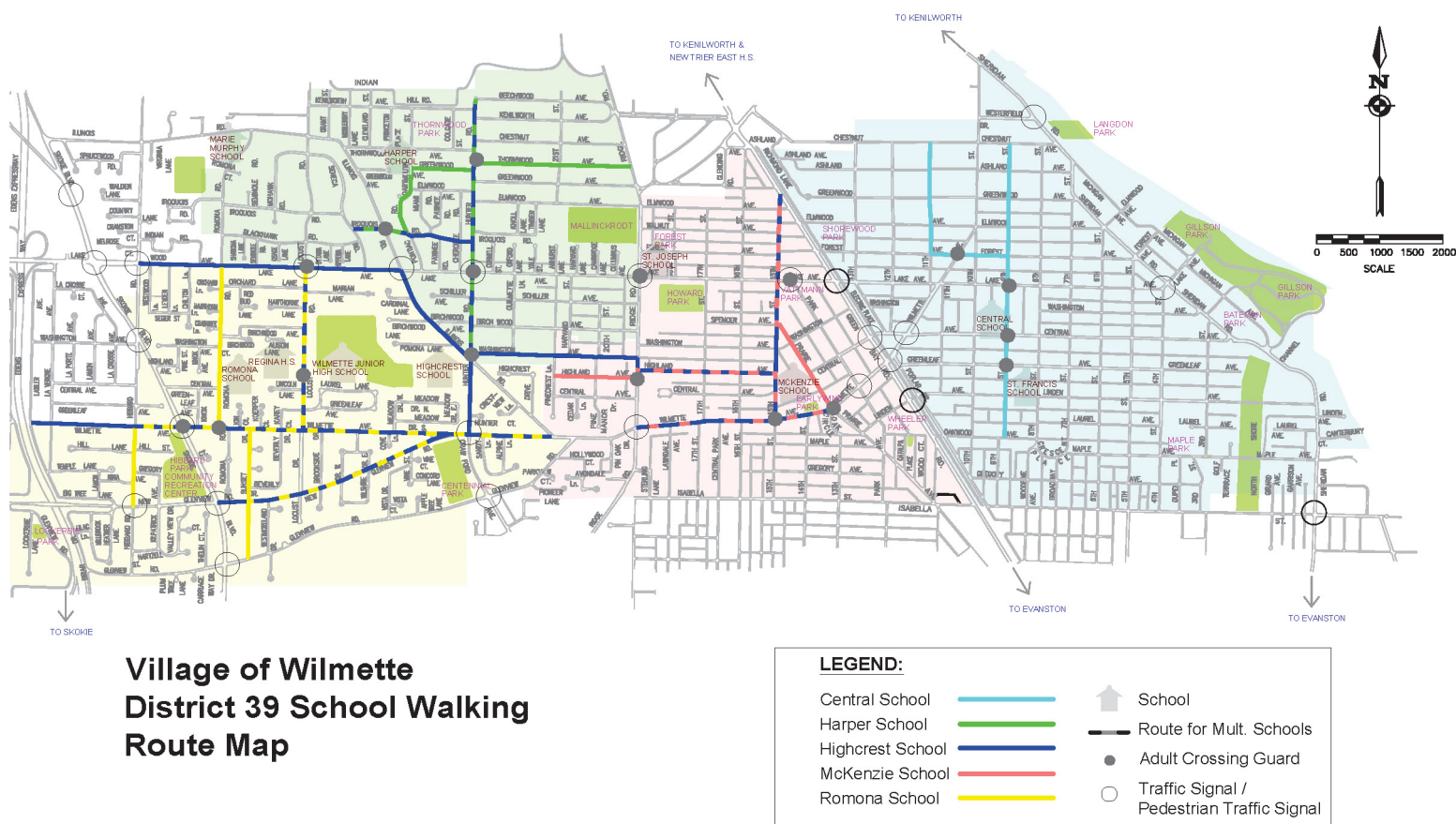
Ecological Restoration Master Plan – Prepared by Planning Resources, Inc. and Canal Shores, in conjunction with the Evanston Wilmette Golf Course Association, 2017. The plan outlines the historical natural resources along Canal Shores and opportunities to restore and enhance the resources.

Complete Streets Policy – Village of Wilmette, February 10, 2015. The Village Complete Streets policy is outlined in this document including Ordinance 2015-O-4, Adopting a Complete Streets Policy.



Wilmette Aerial

Avoca West Report – “2015 Pedestrian Facilities Study” Glenview and Wilmette, Illinois. Completed July 17, 2015 and revised September 4, 2015. Prepared by James J. Benes and Associates, Inc., the report analyzed the area between Glenview and Wilmette, including the Avoca West Elementary school campus and neighborhood, the East Lake corridor from south of Harms Road to north of Hibbard Road, and the Northeast Area from Illinois Road and Hibbard Road to Illinois Highway 41. The main tasks of the study included analysis for the existing pedestrian and traffic patterns, identification of possible traffic pattern improvements, and consideration of potential vehicular traffic changes that could impact pedestrian movements. The summary of findings in the report include recommendations to improve walkability by increasing connectivity and reducing traffic congestion.



District 39 School Walking Route Map – 39th School District and Village of Wilmette, revised September 2018. This map includes locations of schools with individual walking routes, and locations for traffic signals and crossing guards.

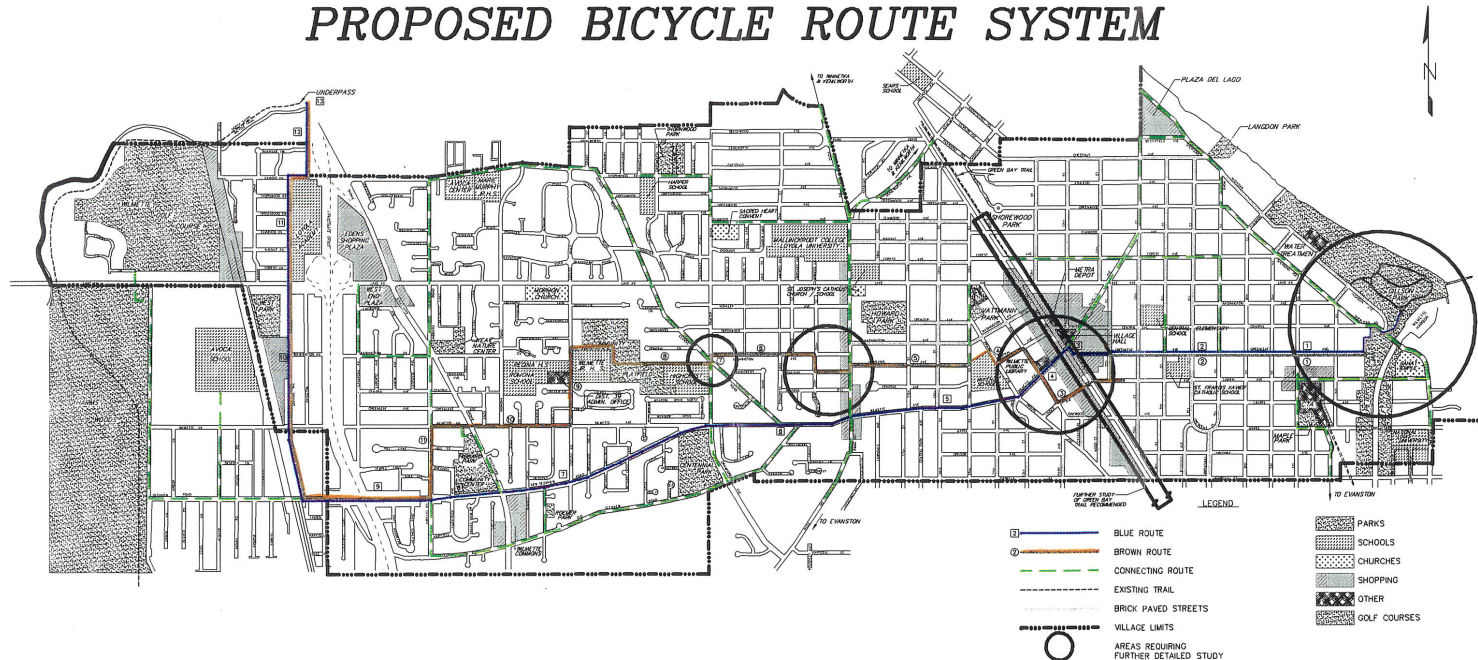
Wilmette Schools Walking Route – Village of Wilmette, 2019. This map includes the location of schools, the location of adult crossing guards, locations for traffic signals and pedestrian signals, and school walking routes for School District 39 in the Village of Wilmette.

Skokie Valley Trail Feasibility Study – Skokie Valley Trail Task Force, May 2008 and prepared by T.Y. Lin International and the Chicagoland Bicycle Federation. This study provides an analysis of the proposed Skokie Valley multi-use trail through Northbrook, Glencoe, Northfield, Glenview, and Wilmette.

Pedestrian Crosswalk Policy – Village of Wilmette, February 10, 2015. This policy outlines the proper use and placement of pedestrian crosswalks in the Village. It includes policy to use crosswalks to improve driver awareness of Illinois law requiring them to stop for pedestrians, enhance safe pedestrian mobility, and increase awareness and safety for all modes.

Sidewalk Request Policy – Village of Wilmette, February 9, 2016. This policy states that requests for new public sidewalks must include 67 percent of stakeholders (defined as those with a property with a front, side, or rear yard directly adjacent but not across the street) in favor of the proposed sidewalk in order for the sidewalk request to be considered by the Municipal Services Committee.

THE VILLAGE OF WILMETTE PROPOSED BICYCLE ROUTE SYSTEM



"Proposed Bicycle Route" from the 1998 Plan (Implemented)

The Village of Wilmette Proposed Bike Route System – Prepared by Engineering Resource Associates, Inc. for the Village of Wilmette, February 1997. The plan outlines existing conditions, recommendations, and design criteria for proposed bike facilities in Wilmette.

Cycling in Wilmette Survey Results – Village of Wilmette Engineering Services, July 2015. This survey on cycling in Wilmette includes 855 respondents. The survey goal was to discover strengths, weaknesses, barriers, and destinations of the Wilmette cycling network, and identify the wants and needs of those biking in the Village.

Lakefront Master Plan – Wilmette Lakefront Parks, Gillson Park Master Plan. Wilmette Park District, 2015. Prepared by Smith Group JJR. This plan includes recommendations for connectivity, pathways, gardens, recreation centers, and a landscaping plan for Gillson Park and the Wilmette lakefront.

Evaluating Needs for School Crossing Assistance – by the Village of Wilmette, date not specified. This updated crossing guard document includes guidelines for crossing guard locations and considerations including roadway, traffic flow, and child/pedestrian characteristics. The report standardizes the Village crossing guard policy and states that the Village of Wilmette and its Transportation Commission will "follow a set of comprehensive, reasonable, and uniform standards for the placement of adult school crossing guards".

Other documents reviewed by the project team include Village parking regulations, engineering reports on various roadway projects, utilities plans, and citizen surveys. The team also reviewed Suggestions for Incremental Village Center Bike Improvements – Prepared by the Wilmette Citizens for Active Transportation, November 2015.

ON-THE-GROUND INFRASTRUCTURE EXAMPLES

While not intended as an exhaustive list, the following bicycle and pedestrian infrastructure already exists in Wilmette:

Sheridan Bike Lane – This conventional bike lane begins north of the Sheridan Road and Isabella Street intersection in Evanston, although Evanston is completing construction to extend the bike lane further south. The bike lane continues north to Sheridan Road and 10th Street, north of where “share the road” signs are installed.

North Branch Trail – The North Branch Trail is a paved multi-use path that spans over 21 miles from Chicago to Northbrook. In Wilmette, the trail enters the Village in the Forest Preserve north of Lake Avenue and extends into Winnetka just before crossing over the Chicago River’s North Branch. In total, less than one mile of the trail is located in Wilmette, but the trail is nonetheless highly accessible to Wilmette residents, as it essentially creates a western border to the north side of the Village.

Curb Extensions – Curb extensions or “bump-outs” are traffic-calming devices, which means they are strategically used on the roadway to either reduce traffic volume, reduce vehicular speeds, shorten the distance between two points at a crosswalk, or all of these things. In 2012, the Village installed bump-outs at Prairie Avenue and Wilmette Avenue and at Wilmette Avenue and 15th Street. Rectangular Rapid Flashing Beacons were also installed at Prairie and Wilmette, noted in the next paragraph.



North Branch Trail; Photo from Reddit

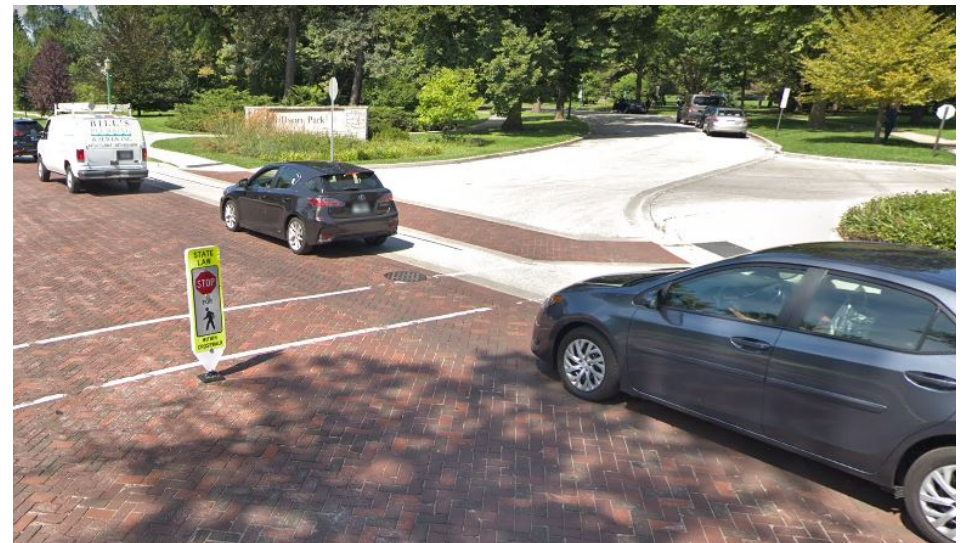
Green Bay Trail - The Green Bay Trail runs 8.9 miles through Cook and Lake Counties from Highland Park to Wilmette. The partially paved/partially crushed limestone trail begins at Greenleaf Avenue and is an easy connection to the North Branch Trail to the west. The trail runs along the former rail line of the Chicago, North Shore, and Milwaukee electric railroad. At Highland Park, the trail connects to the Robert McClory Bike Path.

Illinois State Law "Stop for Pedestrians" Crosswalk Signage - In 2010, the State of Illinois adopted new laws requiring all drivers to come to a complete stop for any pedestrians in a crosswalk, whether or not stop signs or traffic signals are present. Previous law only stated that motorists were to yield at crosswalks and stop when necessary. In the following years, the Village began conducting compliance analysis to predicate installation of "stop here for pedestrian signs". Today the Village has installed several signs near difficult crossings for pedestrians.

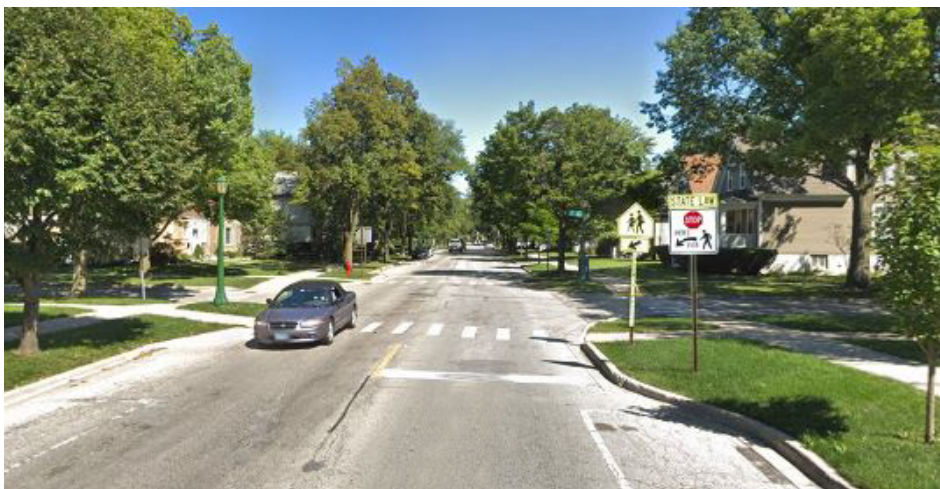
Rectangular Rapid Flashing Beacons: RRFBs are traffic safety enhancements that use flashing LED lights, activated when pedestrians touch a push button at the crosswalk, to alert drivers that pedestrians are in the crosswalk. Prior to this plan, the Village had already installed RRFBs at locations including Wilmette Avenue and Prairie Avenue and the Plaza del Lago crossing.



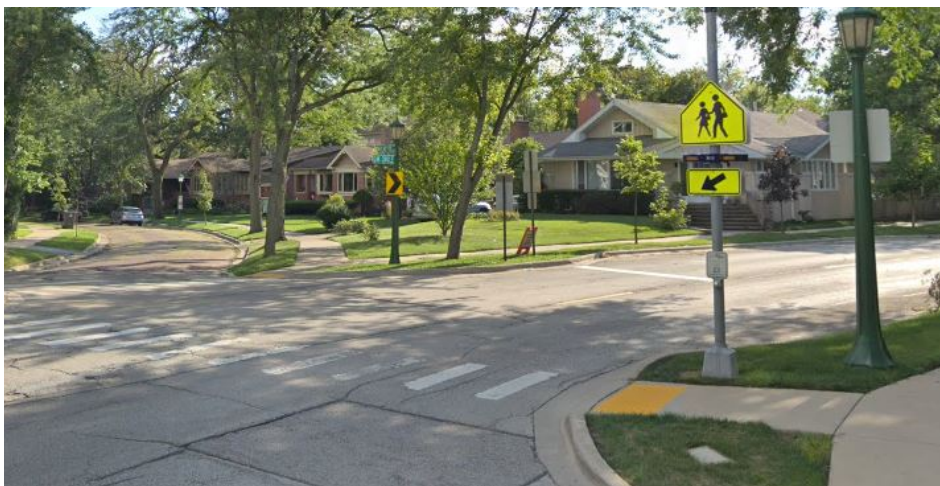
Green Bay Trail; Photo from Yelp



Sheridan and Michigan; Gillson Park Entrance: Photo by Google Maps



Bumpouts at 15th and Wilmette; Photo by Google Maps



Rectangular Rapid Flashing Beacons; Prairie and Wilmette: Photo by Google Maps

LOCAL RESIDENT GROUPS AND INSTITUTIONS

These groups may often work together to pursue individual or joint goals. The project team met with these groups to gather input while creating this plan. Other groups, such as private schools and religious institutions, business institutions, and others, were also included in outreach and consideration for this plan.

Wilmette Public School District 39 – District 39 schools include Central Elementary, Harper Elementary, McKenzie Elementary, Romona Elementary, Highcrest Middle School, and Wilmette Junior High School.

Avoca School District 37 – Avoca District 37 schools include the Avoca Community Preschool, Avoca West Elementary, and Marie Murphy Elementary.

Bike Walk Wilmette – Bike Walk Wilmette, previously called the Wilmette Citizens for Active Transportation, is a community group formed of Wilmette residents who volunteer to create walking, bicycling, and active transportation more accessible in the Village through various advocacy and engagement activities.

Go Green Wilmette – A local ecological member-based organization since 2006 that works to raise environmental awareness, inspire action, and create a more sustainable community in Wilmette.

Wilmette Park District – The Wilmette Park District maintains many facilities in the Village including parks, recreational centers, and community clubs. The Park District facilities list includes the Centennial Recreational Complex and Gardens, the Center Fitness Club and Center for the Arts, the Wilmette Lakefront and Gillson Park, and the Mallinckrodt building and park.

Wilmette Public Library – the Wilmette Public Library enhances the community by supporting the informational, intellectual, cultural and leisure needs of residents and the business community.



"Bike Walk Wilmette"; Photo from Bikewilmette.org

1 <http://fortune.com/2018/06/28/americans-do-not-exercise-enough-cdc/>

2 <https://www.bts.gov/statistical-products/surveys/national-household-travel-survey-daily-travel-quick-facts> and https://nhts.ornl.gov/tables09/fatcat/2009/vt_TRPMILES.html

3 <https://www.treehugger.com/urban-design/study-shows-people-who-walk-and-bike-main-streets-spend-40-percent-more-people-who-drive.html>

COMMUNITY ENGAGEMENT

The Wilmette Bike and Active Transportation Plan provides the Village with a road map for making walking and biking easier and more comfortable on sidewalks, streets, trails, and at intersections. This planning-level study sought to ensure that outreach was conducted thoroughly and mindfully with the goal of clearly outlining, reflecting, and balancing the priorities articulated by the community. With this attentive approach, the outreach process aimed to give all community members – active transportation users, residents, and representatives of local institutions - the opportunity to provide feedback in a convenient format. The following chapter is based on that documented information, which shaped the overall context of the project.

GOALS

- Obtain feedback on community goals and priorities from Wilmette's diverse stakeholders
- Keep an open line of communication with residents and stakeholders about the plan and ensure that questions are answered and concerns are addressed
- Develop and maintain a contact list of people interested in engaging in the plan
- Document issues, challenges, concerns, ideas, and priorities
- Develop a scoring methodology that includes community feedback into considerations that will be used to inform plan recommendations

KEY FINDINGS THAT INFORMED THE RECOMMENDATIONS

Several themes emerged from the focus groups, responses to the online map, the community open house, and the comments submitted to the project website. These included:

- A desire for a multi-modal network that serves all types of road users
- Use context-sensitive solutions
- Preserve the unique qualities of Wilmette's built environment
- Limit negative impacts to primary stakeholders
- Improve safety for pedestrians and cyclists
- Create a network that can be used by people of all ages and abilities
- Connect Wilmette's neighborhoods to one another, neighboring communities and destinations.

HOW PEOPLE ENGAGED IN THE PLAN

To reach a diverse audience of stakeholders, the project team led several types of engagement activities, both in-person and online. These included:

Tables at Summerfest 2018: Members of the project outreach team set up a table at Summerfest to discuss opportunities and challenges to walking and biking in the community. The team had a map for people to mark up.

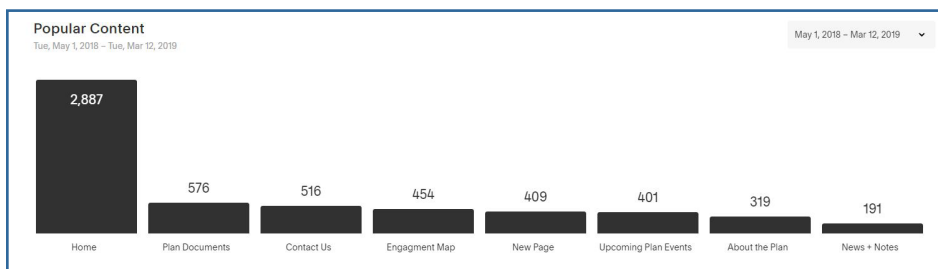
Online, Email, and Other Written Comments: Throughout the project, community members were invited to provide written comments on issues and challenges the project team should explore and on draft recommendations. Community members provided comments via the project website, by email to various members of the team, and by letters sent to the Village.



Second Open House, Feb 2019



Second Open House, Feb 2019



Website Statistics



Open House Sign

HOW RESIDENTS STAYED INFORMED

Several methods were used to notify Wilmette residents and stakeholders about the plan and plan-related activities. These included:

Earned Media: Press releases were sent to area newspapers at the start of the project and prior to each open house. Articles about the project appeared in the Wilmette Beacon and the Chicago Tribune.

Project Website: The project team developed a project website at the URL walkbikewilmette.com. The site was used as a clearinghouse for information related to the plan and as a place for people to provide comments and sign up for the email distribution list.

Project Page on Village Website: The Village developed a webpage that provided an overview of the project and linked to the project website.

Email Updates: People who receive Wilmette Village E-News and/or who signed up for emails on the walkbikewilmette.com website received emailed updates and notices about the plan.

Flyers and Advertising: The project team made event flyers for the two open houses and posted signs around Wilmette in key locations prior to the first open house.

Cross-Promotion: Bike Walk Wilmette, Go Green Wilmette, and other groups cross-promoted official announcements provided by the project team.

Mailing: Prior to the second open house, the Village of Wilmette sent a letter to each household along a proposed bike route to ensure they were aware of the proposed recommendation and had an opportunity to provide feedback on it.

PHASE I COMMUNITY ENGAGEMENT: RESULTS

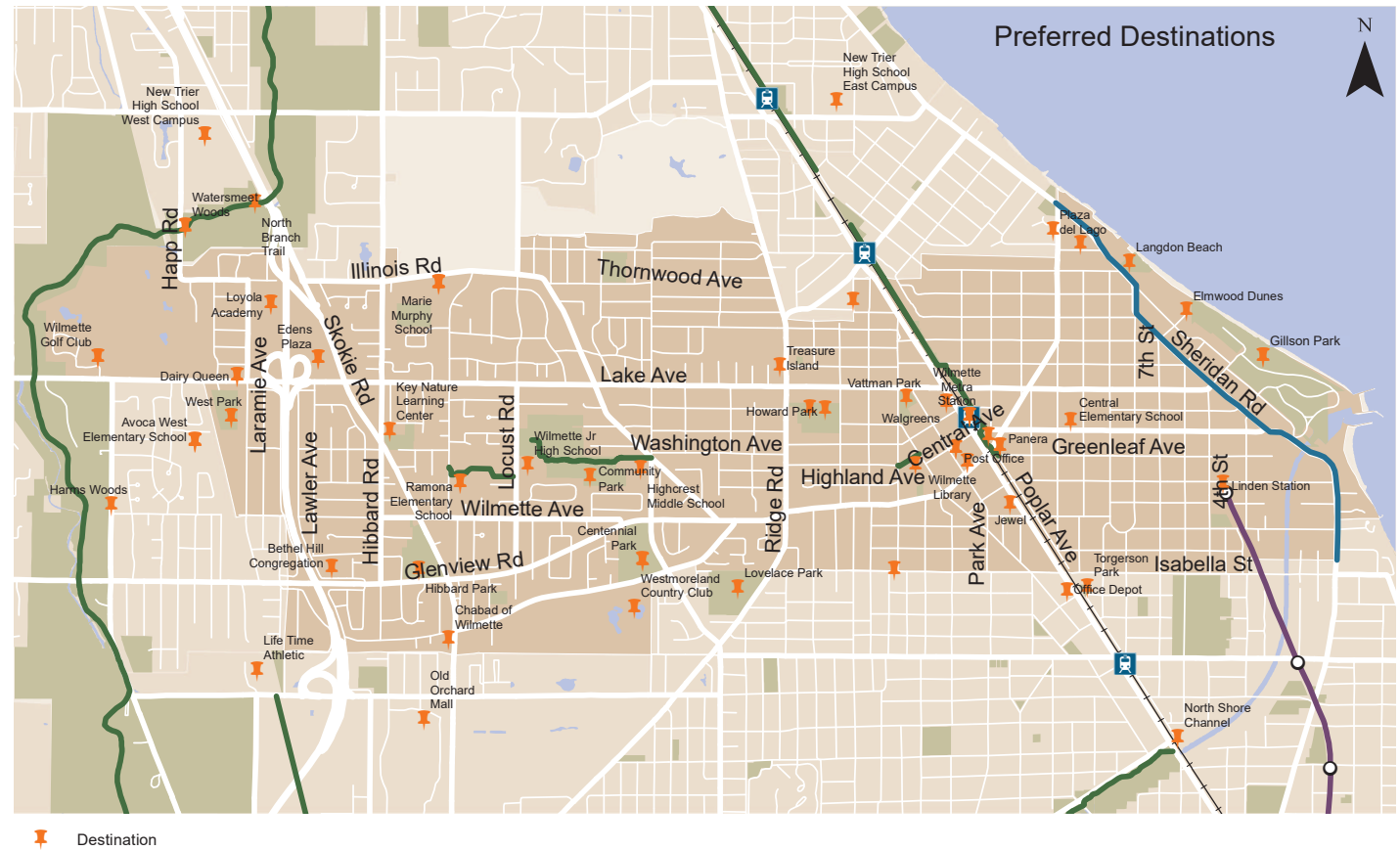
The project team's first phase of community engagement was focused on learning about the barriers and opportunities to active transportation usage in Wilmette. The team asked residents to identify the following:

- Barriers to walking
- Barriers to bicycling
- Challenging intersections
- Key destinations for pedestrians and cyclists
- Other challenges

Maps summarizing the findings from the community are included in the following sections.

DESTINATIONS

71 destinations were plotted by the Wilmette community using the online map or the comment form. In some cases, specific destinations were highlighted by more than one person, including the Wilmette Library, Loyola Academy, New Trier West High School, Gillson Park, West Park and Centennial Park. Specific concerns about challenges to accessing these locations are noted in the Barriers to Walking and Barriers to Biking sections below.

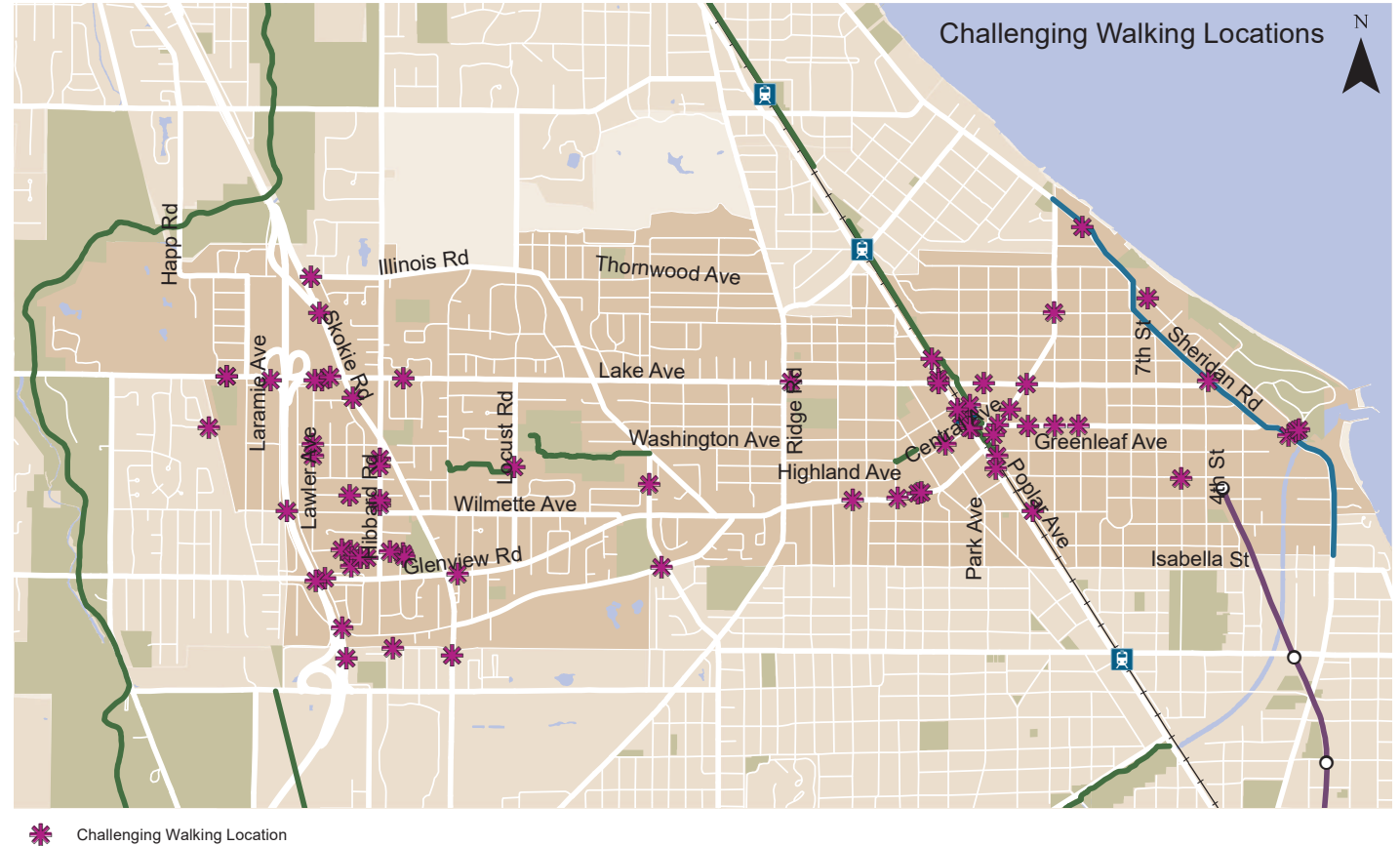


BARRIERS TO WALKING

Community members commented on 72 locations throughout Wilmette they considered to be a challenging walking location. Commonly identified locations include Lake Avenue and the Edens Expressway, Green Bay Road, Green Bay Trail crossings, crossing Wilmette Avenue at 15th Street, access to Avoca West School, and crossing at Lake Avenue and Hibbard.

Additional themes that emerged include:

- No sidewalks on all or parts of Illinois Road, Skokie Road, Hibbard Road, Harbor Drive, Lamon Avenue, Nina Avenue.
- Limited controlled crossings along major streets, including Lake Avenue, Sheridan Road, Wilmette Avenue, and Green Bay Road.
- Lack of a buffer between the sidewalk and road on sections of Glenview Road and Lake Avenue
- Difficult controlled crossings: Lake Avenue and Skokie Boulevard.
- Sidewalk obstructions and encroachments: utility poles in sidewalks, overgrown bushes along sidewalks and at intersections, cars parked on sidewalks, and icy and snowy walkways.

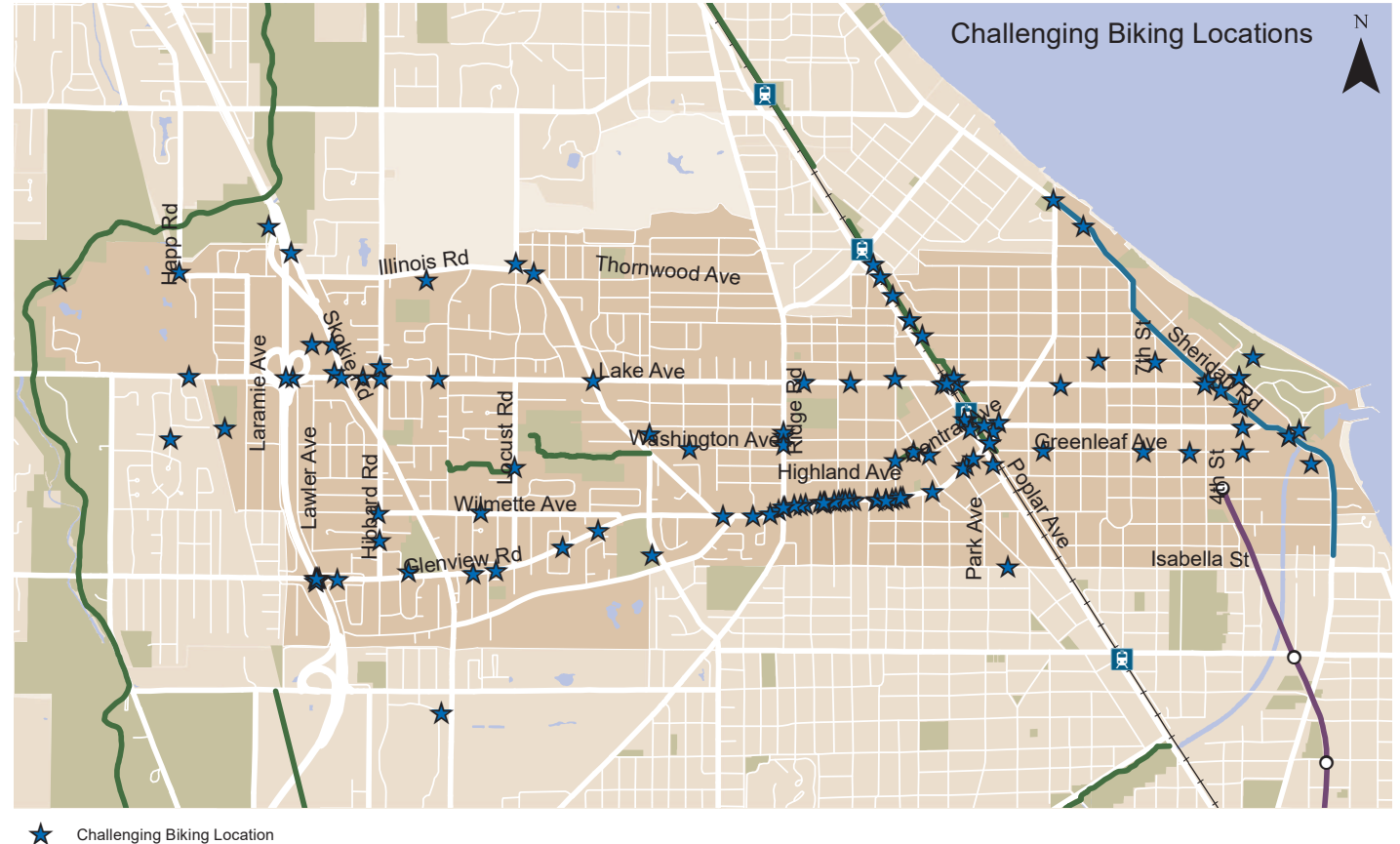


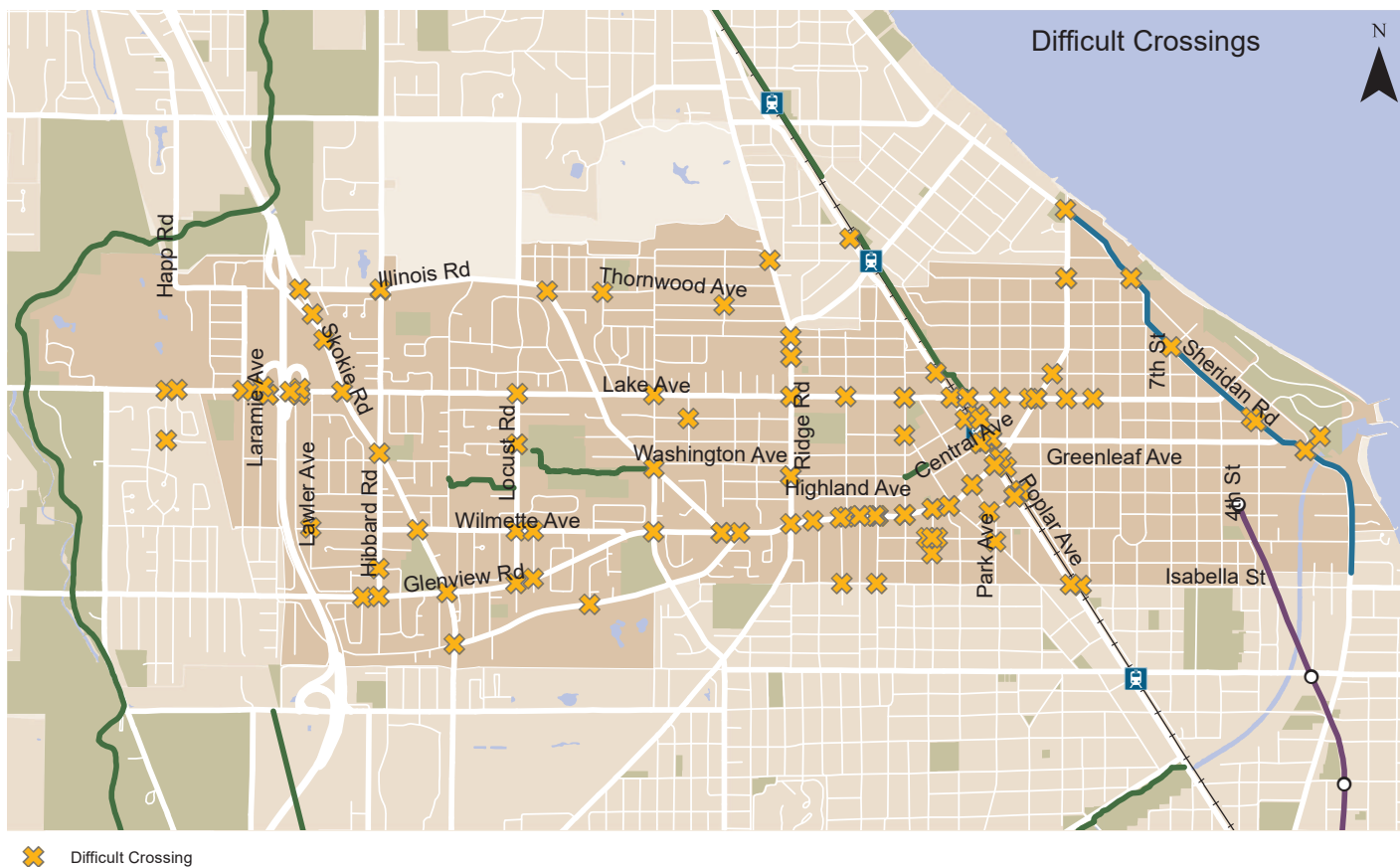
BARRIERS TO BIKING

Community members dropped a virtual pin at 122 spots they considered to be challenging biking locations. Commonly identified routes included Wilmette Avenue (90 pins), Green Bay Trail, Glenview Road, Central Avenue, Greenleaf Avenue, and Lake Avenue. Providing comfortable and connected north/south and east/west routes was a common theme that arose in the comments. However, respondents disagreed on which routes are comfortable or could be comfortable based on their level of confidence when riding. Confident cyclists expressed a need for a more direct east/west route across the Village such as Lake Avenue or Wilmette Avenue, whereas parents and more casual cyclists requested low-stress routes along a quiet residential street, such as Greenleaf or the Community Playfield Trail.

Additional themes that emerged from community members' responses include:

- Difficult crossings: along the Green Bay Trail downtown, at the Union Pacific Railroad tracks throughout the Village, over the Edens Expressway, and along the Community Playfield Trail.
- Improved access to destinations: Gillson Park, Edens Plaza, Plaza del Lago, Romona School, and downtown Wilmette.
- Unclear wayfinding and uncomfortable transitions on the Community Playfield Trail
- Removed barriers to bicycling: brick streets, crossings over the Edens Expressway, prohibition on Lake Avenue, lack of bike parking at key destinations, poor pavement conditions, kid-friendly routes, and increased awareness of rights and responsibilities of all users of the road.





DIFFICULT CROSSINGS

Community members dropped a virtual pin at 147 locations to represent difficult crossings. The majority of these noted locations were along Wilmette Avenue between Green Bay Road and Glenview Road. Concerns included fast moving traffic, difficult uncontrolled school crossings, and sight-lines obstructed by parked cars. See the Barriers to Walking and Barriers to Biking sections for more detail.

OTHER CONCERNS

In addition to concerns about walking and biking in Wilmette, community members marked 76 dots on the map as "other concerns." Themes included resident concerns about removing parking on Wilmette Avenue, providing more bike parking at the Metra Station and the need for more bus shelters on Green Bay Road. The comment field was left blank in many instances.



PHASE II COMMUNITY ENGAGEMENT SUMMARY

Following the development of draft recommendations, the project team solicited additional feedback from the community about the proposed network, intersection, and initiative solutions. The goal of this outreach was to further refine the recommendations and uncover any additional challenges that may not have yet been considered when crafting the recommendations. Note: The project team received comments that were outside the boundaries and scope of this study. Those comments are still represented in the following summary, even though actions weren't recommended in the plan. The following is a summary of the community's feedback:

Lake Avenue

- Support for improvements to the Edens Overpass.
- Concerns about loss of resident landscaping, privacy, cost, and need for a sidepath west of the future Skokie Valley Trail.
- Concerns about the recommendation to reduce the number of travel lanes between the Green Bay Trail and Wilmette Avenue, its impact on rush hour traffic, and the potential loss of temporary parking spaces along this segment.
- Desire for additional studies to be conducted prior to action.
- Desire for a bike facility along the entire length of the road.

Wilmette Avenue

- Support for maintaining resident parking between Green Bay Road and Ridge Road.
- Support for the overpass/underpass proposed at the Edens Expressway.
- Concerns about the lack of a bike accommodations between Green Bay Road and Ridge Road.
- Desire for better connectivity to the Wilmette Library.

Illinois Road

- Concerns about the lack of a sidewalk connection to Skokie Boulevard.
- Concerns about the lack of bike infrastructure between Lake Avenue and Wilmette Avenue.

Greenleaf Avenue

- Support for the recommendation.
- Concerns about current pavement condition and street center line
- A desire to remove parking and stripe a bike lane.

Skokie Valley Trail

- Support for the progress made on designing the trail and the connection to Avoca West.

Isabella Street

- Concerns about the impact on traffic and bicycle safety.

Downtown Wilmette

- Concerns about the lack of bicycle facilities on Wilmette Avenue and Central Avenue.

Ridge Road

- Concerns about narrowing north of Elmwood Avenue.

Gillson Park

- Concerns about the lack of facilities recommended in Gillson Park (this park is in the jurisdiction of the Wilmette Park District, not the Village.)

Other Comments

- Include the Village's Complete Streets policy in the plan
- Differing opinions on the value of traffic calming treatments, especially bump-outs. Some people requested more, others feel they obstruct cycling, others feel they negatively impact drivers.
- Concerns about expenditures required to fund the plan.
- Conflicting views on protected bike lanes
- A desire for a bike facility on Central Avenue.
- Requests for a bike share system in Wilmette.
- Concerns about the crossing at Hibbard and Lake

VISION STATEMENT

Wilmette residents and the Transportation Commission worked with the project team to create a vision statement to serve as a foundational guide for creating and implementing the recommendation in these pages. The vision statement describes the community values, aspirations, and shared image of Wilmette's future. The statement embodies the common values of the Village, its unique identity, and the attributes it aspires to or has already developed for its ideal future. It is a forward-thinking affirmation to guide the Village as changes occur. By synthesizing this feedback, the project team created the following vision statement, presented to Wilmette residents during the February 2019 open house meeting:

The Village of Wilmette commits to building a safe, inviting, and context-sensitive transportation network for all users. We visualize Wilmette as an accessible community for people of all ages and abilities where any transportation mode, including walking, biking, and driving, is expected on the transportation network, welcomed through secure, comfortable, and convenient design, and reflected in Village policies and programs.

As project opportunities arise, the above Vision Statement will provide future guidance in considering and implementing recommendations put forward in the Master Bike and Active Transportation Plan as well as other pedestrian and bicycle improvements.

The Wilmette Vision Statement is based around community input and feedback that was gathered during the engagement process while creating this plan. Other documents created by or with Wilmette were also used to craft the statement language. Some of these documents include the Village's Complete Streets Policy ordinance, the 2015 Wilmette Bike Survey, and the 1997 Proposed Bicycle Route System.

The Village Complete Streets ordinance was passed by the Village Board in February 2015. It defines a complete street as "one that provides safe and convenient access for users of the road of all ages and abilities, including pedestrians, bicyclists, transit users, school students, the elderly, commuters, transit vehicles, and vehicular traffic". Similar language and expressions were submitted to the project team by residents during the visioning exercise included in the September 2018 public meeting.



A Vision Zero policy is a formal commitment that a community makes to drastically reduce and eliminate all traffic fatalities and debilitating injuries within a certain timeframe. These commitments are undertaken through policy, program, and infrastructure changes. While Wilmette has not adopted a Vision Zero plan, the Village and residents do prioritize Vision Zero principles in the community, including reducing speeds, equitably dividing resources for various modes of transportation, expanding education opportunities to encourage safe roadway behaviors, and taking a data-driven approach to informing design decisions, as exemplified by this Plan.

During the community outreach process for the Wilmette Master Bike and Active Transportation Plan, hundreds of residents reported the transportation concerns and goals that mattered most to them which were incorporated in the creation of this plan:

- A need for north and south walking/biking connections
- A need for east and west walking/biking connections
- Solutions to barriers and gaps in the walking/biking network
- Safer and more comfortable sidewalks, crosswalks, and streets
- A sense that all users (those walking, biking, and driving) are expected and welcomed on Wilmette roads
- More bike infrastructure, including safer routes and bike parking
- More pedestrian infrastructure, including pedestrian spaces and seating
- Safer traffic, including calmer roads and reduced speeds
- Transit-oriented-development communities
- Prioritizing accessibility for all ages and abilities (ages 8 – 80)
- Ability for “aging in place” in Wilmette
- Convenience for all users



NETWORK RECOMMENDATIONS

This chapter covers the plan's network-wide corridor improvements. The network is designed to create low-stress bicycle and pedestrian routes across the community, connecting residential areas to regional trails, key destinations, the lakefront, Downtown Wilmette, and other community destinations. These include routes that travel both east and west as well as north and south. The recommendations vary based on the size, traffic and land use context of the street. The designs include a mix of treatments, including sidepaths along major roadways, which are like extra wide sidewalks, sufficiently wide enough to accommodate both pedestrians and bicyclists, as well as on-street designs such as marked shared lanes and bike lanes. The recommendations also include a revised bike route wayfinding signage system to guide network users to safe streets that connect to key destinations. The Key Transitions chapter includes intersection recommendations along these routes and near high pedestrian and traffic volume areas as well as more details on pedestrian treatments.

The network recommendations were developed based on a robust community engagement and existing conditions analysis. Additionally, previous studies and plans were referenced when creating network recommendations. As noted in the Community Engagement Chapter, the Village and project team conducted two rounds of community engagement, one prior to developing the network recommendations and one post network recommendation development. The project team surveyed the community on desirable and challenging biking and walking routes, and also looked at data such as functional classification, speed, roadway width, available right-of-way, and traffic. Using this information, the project team developed a network of designs that were appropriate for the various types of streets, connected to key destinations, were desired by the community, avoided brick streets, and avoided impacts such as the removal of parking, increasing traffic congestion, and the removal of trees. More impacts are described in each of the below facility type sections.

This chapter breaks up the recommendations by design type. Each section contains a location map of the design type, a definition of the design, example photos of the design in other places, conceptual designs of how the recommendations could look on Wilmette streets, pedestrian accommodation considerations for the design type, and the impacts of the design.

NETWORK OVERVIEW BY COMFORT LEVEL

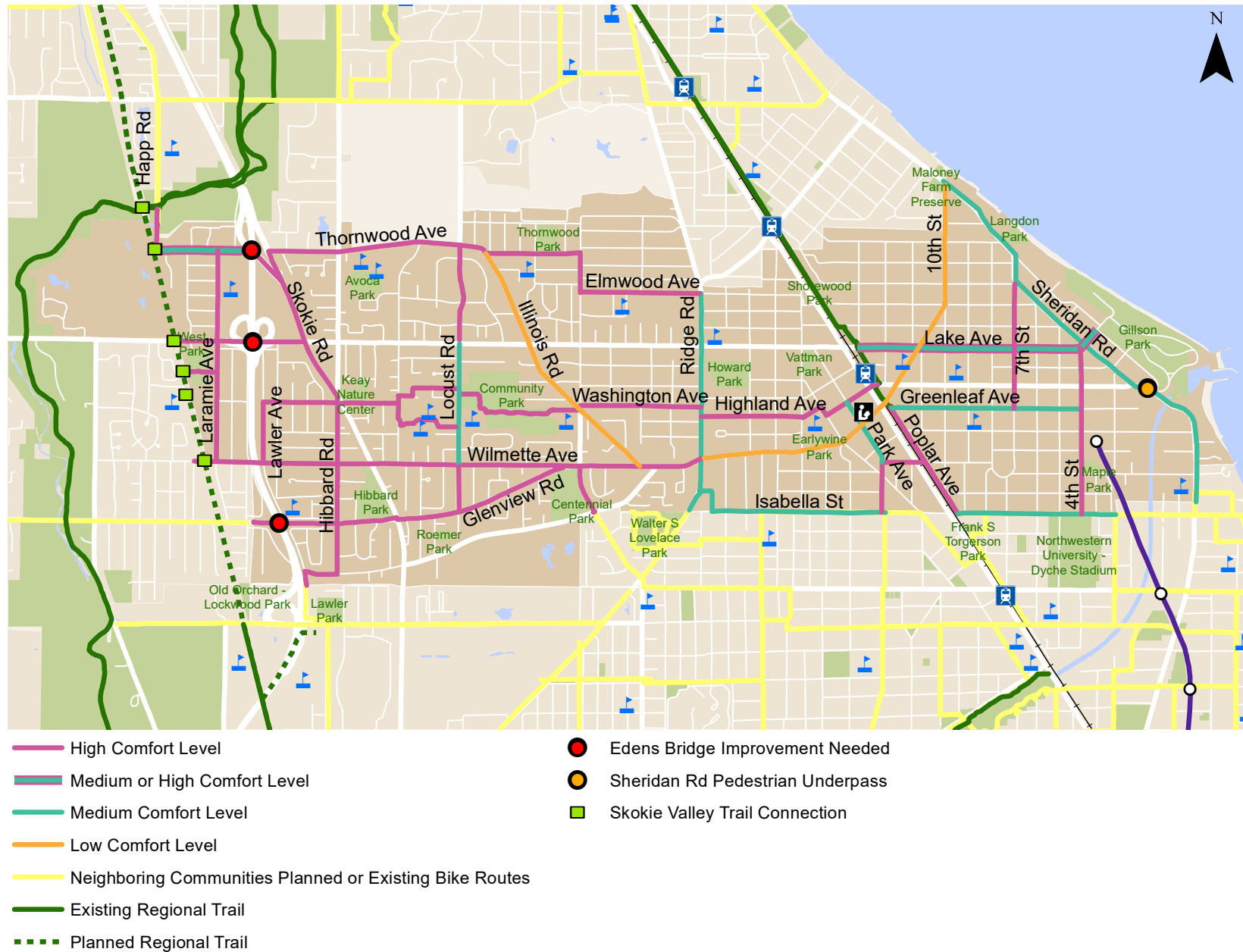
To provide a quick and digestible overview of how bicycle riders of varying ages and abilities will experience the proposed network, the project team considered comfort level of different design recommendations. Comfort is determined based on the level of protection that a recommendation would provide and varying commonly recognized levels of riders. The levels include:

High comfort level: These recommendations include either protected facilities on busier streets (such as buffered bike lanes or sidepaths) or enhanced shared lane facilities with traffic calming measures (such as bike boulevards) on already lower speed and lower traffic neighborhood streets. These are the lowest stress recommendations in the proposed network, suitable for the widest range of ages and abilities. These designs are targeted towards the "interested but concerned" bicycle rider.

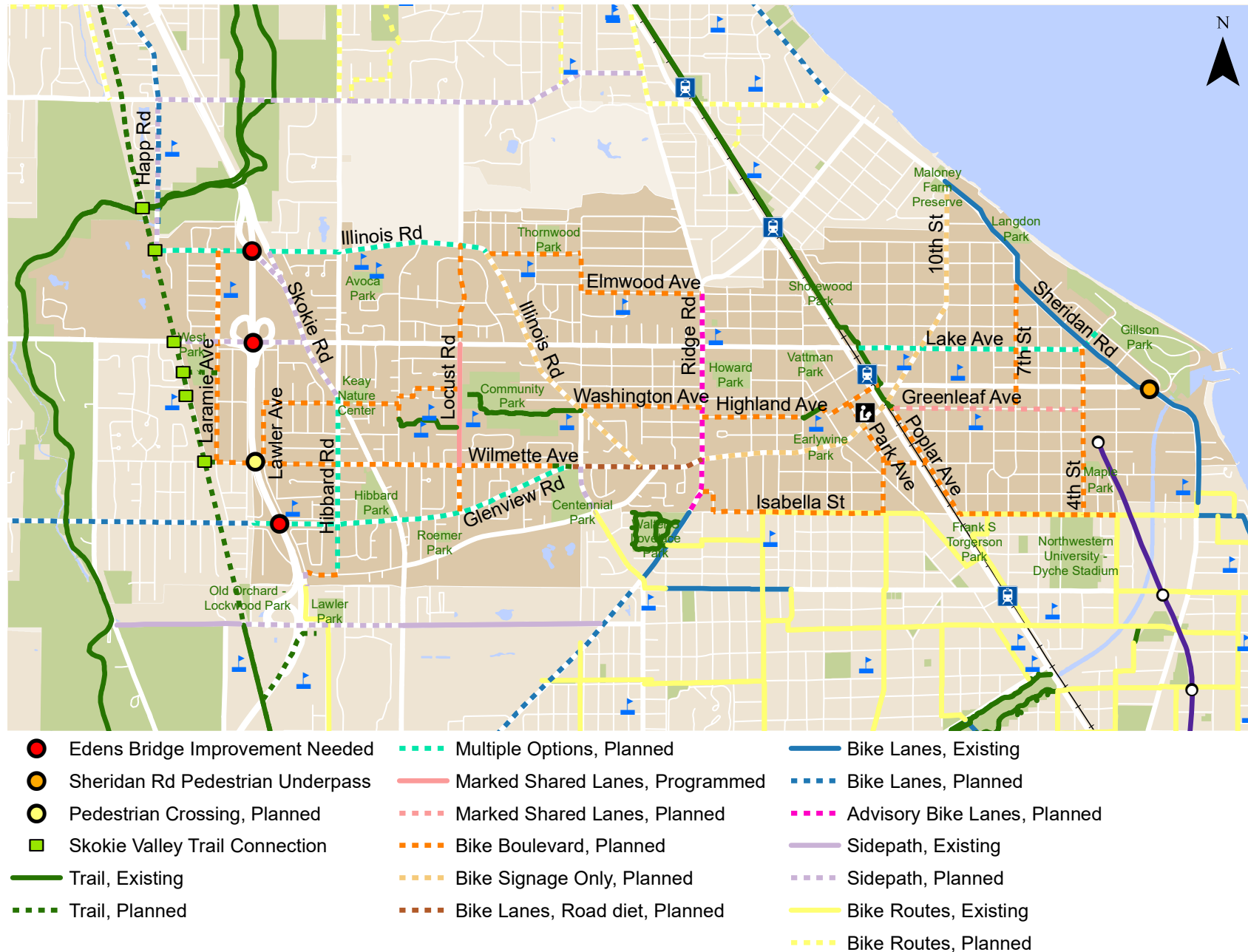
Medium comfort level: These recommendations include enhanced shared lane recommendations on slightly busier streets. Comfort is enhanced by including signage and markings that alert drivers to the presence of bicyclists, but the bike facility is not completely separated from traffic. These routes are moderate stress level, and recommended for the slightly more experienced "enthused and confident" rider.

Low comfort level: These include roadways that are the least comfortable for less confident riders. They are geared towards the "strong and fearless" avid bicyclists and bicycle clubs. These are roadways that during community engagement were identified as being important routes used today by the avid bicycling community. These routes are recommended to receive signage improvements, but due to environmental constraints at this time they are not recommended for more robust design facilities that would be necessitated to make them satisfactory for the "interested but concerned" riders. These are busier roads with faster and more intense traffic. These routes are not recommended for children.

PLANNED BIKE NETWORK BY COMFORT LEVEL MAP



PLANNED BIKE NETWORK RECOMMENDATION MAP





Buffer Protected Bike Lane; Photo from Strong Towns



Strong and Fearless Cyclists; Image from Alta Planning + Design

DESIGN RECOMMENDATIONS

The following maps and sections provide an overview of the more detailed design recommendations included in the planned network.

BIKE BOULEVARDS

The most prevalent recommendation in the network is the bike boulevard design, which is also known in other municipalities (such as the City of Chicago) as “neighborhood greenways.” Many streets in the Village are lower traffic volume, lower speed residential roads that connect to important community destinations. With some minor adjustments, these roadways can be made even safer for biking for a broader range of ages and abilities. Bike boulevards have minimal impact on the surrounding area and involve minimal design changes to the roadway. They are a low cost and “low hanging fruit” solution to complete a bike network. Since there are complications with putting bike facilities on some of the major arterials through the Village, bike boulevards are critical links in creating east/west bike connections across the community.

With the exception of Wilmette Avenue between Hibbard Road and Glenview Road, and Lake Avenue between the Green Bay Trail and Michigan Drive, all of the recommended bike boulevards are on local-classified streets. All are within Wilmette jurisdiction. Most of the streets are at an acceptably low traffic volume for bike boulevards. For other streets where there are questions, such as the segment on Lake Avenue, additional traffic study would be needed.

The recommended bike boulevards are also generally located on low crash history corridors. In some cases, such as Wilmette Ave, there is a history of crashes at major intersections. To provide safe travel for bicyclists along the routes, such as where intersection enhancements should be considered, see Key Transitions Chapter.

What Are Bike Boulevards?

Bike boulevards are designated low-stress routes, often within residential neighborhoods, that direct bicyclists toward streets with low car traffic and speeds. Bike boulevards use signage, pavement markings, striping, and speed

reduction to discourage high driving speeds. They are similar to marked shared lanes, but the sharrow pavement marking is bigger and generally centered in the middle of the travel lane, encouraging bicyclists to “take the lane.” In some cases to make an east/west and north/south connection across the Village, the pavement markings direct bicyclists to turn onto another roadway that continue along the bike boulevard route.

Bike boulevards do not require the removal of parking or reconfiguration of the curb-to-curb roadway width. They are best installed with other design features that slow drivers, manage traffic volume, and also benefit pedestrians such as warning signage and curb extensions.

Pedestrian Considerations

In addition to bicyclists, slower traffic speeds and volumes make travel safer for all users of the roadway, including pedestrians. Where bike boulevards are recommended it is also advisable to have and maintain sidewalks free of obstructions. These can be utilized by younger children for bicycling, as well.

Other bike boulevard features that contribute to pedestrian safety include curb extensions, high visibility crosswalks, raised crosswalks, chicanes, reduced speed limits, speed tables at intersections, mini traffic circles/roundabouts,

and pedestrian and bicycle warning signage. For descriptions and examples of these treatments, refer to the Pedestrian Improvements section later in this chapter.

Impacts

The project team studied the potential impacts of all of the unique segments of bike boulevards. For a table of all of the impact results for each bike boulevard segment, see the Impact Matrix in the appendix.

Bike boulevards have a medium impact on safety because while they provide traffic calming and awareness to the presence of bicyclists on the street, they are not as protective as a separate facility such as a sidepath, trail or protected bike lane. Due to the traffic calming feature, they have a medium impact on traffic volume and speed reduction. There is no impact to parking on any of the roadways in which they are recommended.

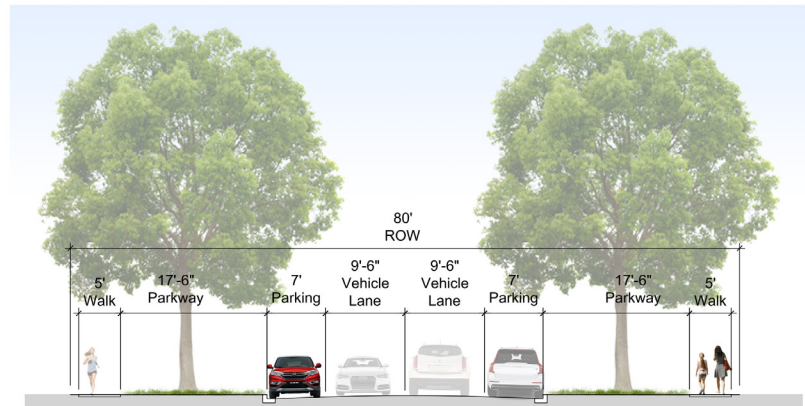
The impact to roadway reconfiguration and redesign is minimal since they can be installed in phases, with the first phase just requiring new pavement markings. Enhancements such as intersection improvements can be made at later phases. Improvements to pedestrian mobility is moderate since fewer bicyclists will be using the sidewalks, and impacts to vehicular mobility is high since there would be speed reduction—drivers are discouraged to use bike boulevards as high speed cut-throughs.

None of the recommended bike boulevards require land acquisition and the municipal maintenance impact is medium. Trees, street furniture and utilities would not be impacted by bike boulevards and the Village cost would be relatively low compared to other design

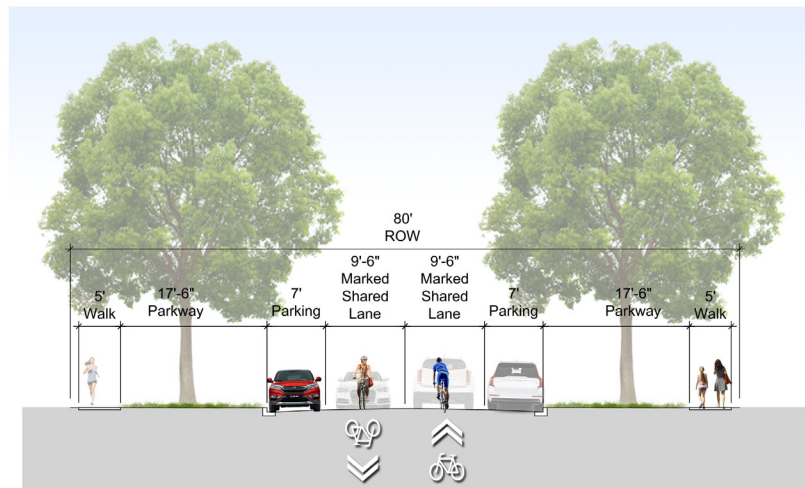


Bike Boulevard; Photo by NACTO

Cross Sections on Wilmette Avenue, from Laramie Avenue to Glenview Road



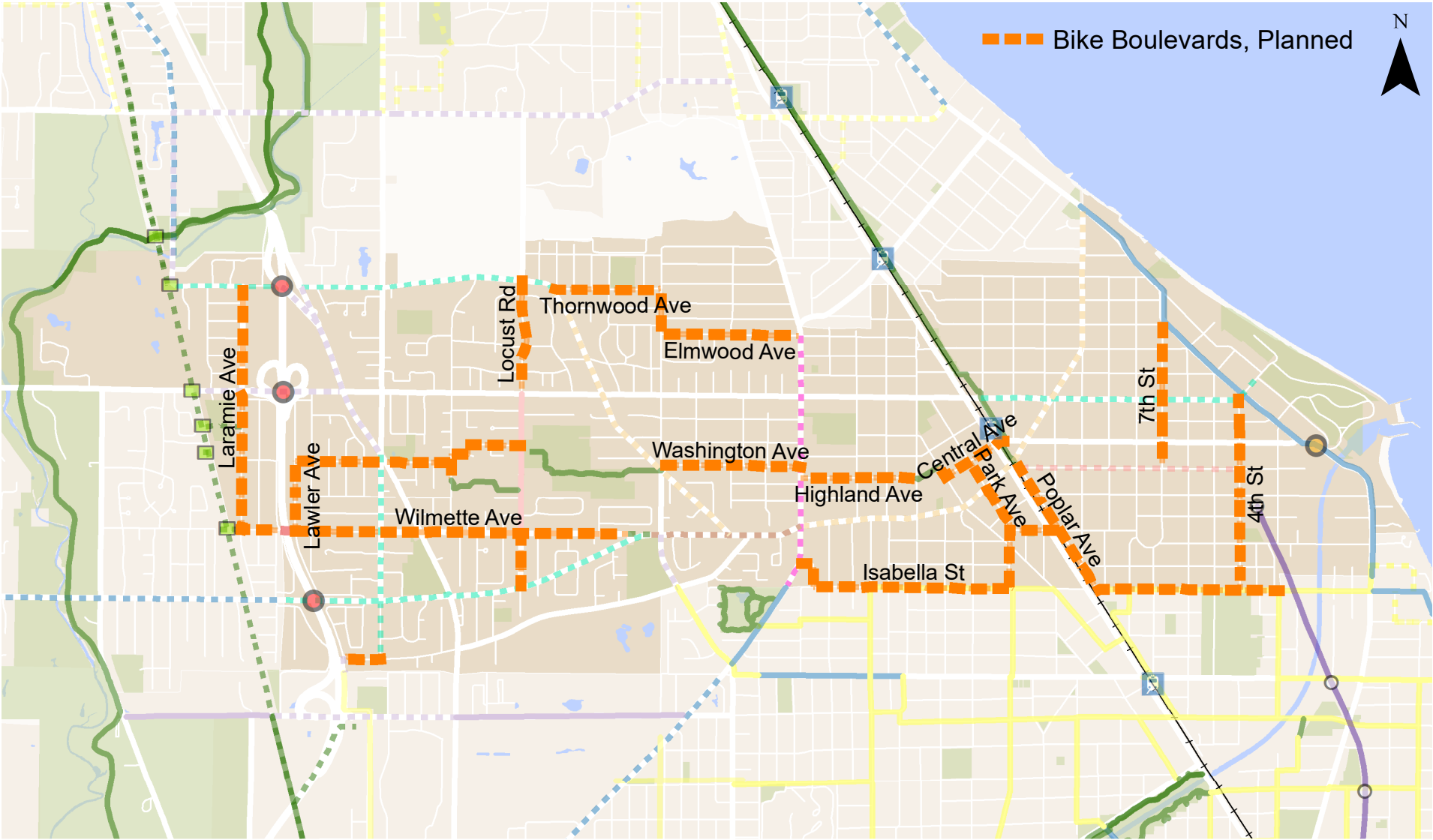
Wilmette Ave - Existing
Laramie Ave to Glenview Rd



Wilmette Ave - Proposed
Laramie Ave to Glenview Rd



BIKE BOULEVARD LOCATION MAP



alternatives and could be coupled with upcoming resurfacing projects.

MARKED SHARED LANES

Marked shared lanes are recommended on a few streets in the Wilmette network as easy-to-implement and “low hanging fruit” options to build out the network. They will be incorporated into near-term roadway resurfacing projects, such as Locust Road and Greenleaf Avenue.

Locust Road is a locally-controlled roadway classified as a collector, which means it is important for carrying vehicular traffic. Greenleaf Avenue is also locally-controlled but classified as a local street. The portion of Lake Avenue

is locally-controlled and classified as an arterial roadway, which generally carry heavy amounts of vehicular traffic. The traffic volume on Lake Avenue is 5,650 Average Annual Daily Traffic, which is much lower than most standard arterials.

Greenleaf Avenue has low crash history. Lake Avenue has moderate crash history between the Green Bay Trail and Wilmette Avenue, most of the crashes being located at crossings. The portion east of Wilmette Avenue has low crash history with a bicycle crash at Sheridan Road. Locust Road is generally low crash history but also has some bike and pedestrian crashes at crossings. To provide safe travel for bicyclists along the routes, intersection enhancements should be considered, see the Key Transitions Chapter.

What are Marked Shared Lanes?

Marked shared lanes are another design that has bicyclists riding on-street in a shared lane with vehicles. Sharrow symbols reinforce the legitimacy of bicycle travel on a street while indicating to drivers that they need to be cautious and share the road with bicyclists. Similar to bike boulevards, they are recommended on low volume, low speed residential streets that are safer for this mixed mode situation, but feature a few minor design variations. Instead of bicyclists being encouraged to “take the lane,” as is the case for narrower bike boulevards, marked shared lanes include sharrows that indicate where bicyclists should position themselves to both stay out of the parking “door zone” and allow space for drivers to safely pass, when appropriate. Marked share lanes typically have wider travel lanes to allow these safe vehicular passing movements, unlike narrower bike boulevards.

Pedestrian Considerations

As is the case with bike boulevards, consistent and maintained sidewalks free of obstructions are also recommended on roadways with marked shared lanes to provide an off-street alternate for children bicyclists as well as a safe place for pedestrians to walk. Additional traffic calming intersection treatments are also recommended with marked shared lanes, such as curb extensions, enhanced high visibility crosswalks, and warning signage, see Greenleaf example. For descriptions and examples of these treatments, see the section on Pedestrian Improvements later in this chapter.

Impacts

The project team studied the potential impacts of all of the unique segments of marked shared lanes. For a table of all of the impact results for each marked shared lane segment, see the Impact Matrix later in the chapter.



Marked Shared Lanes; Photo by NACTO

MARKED SHARED LANE EXAMPLES

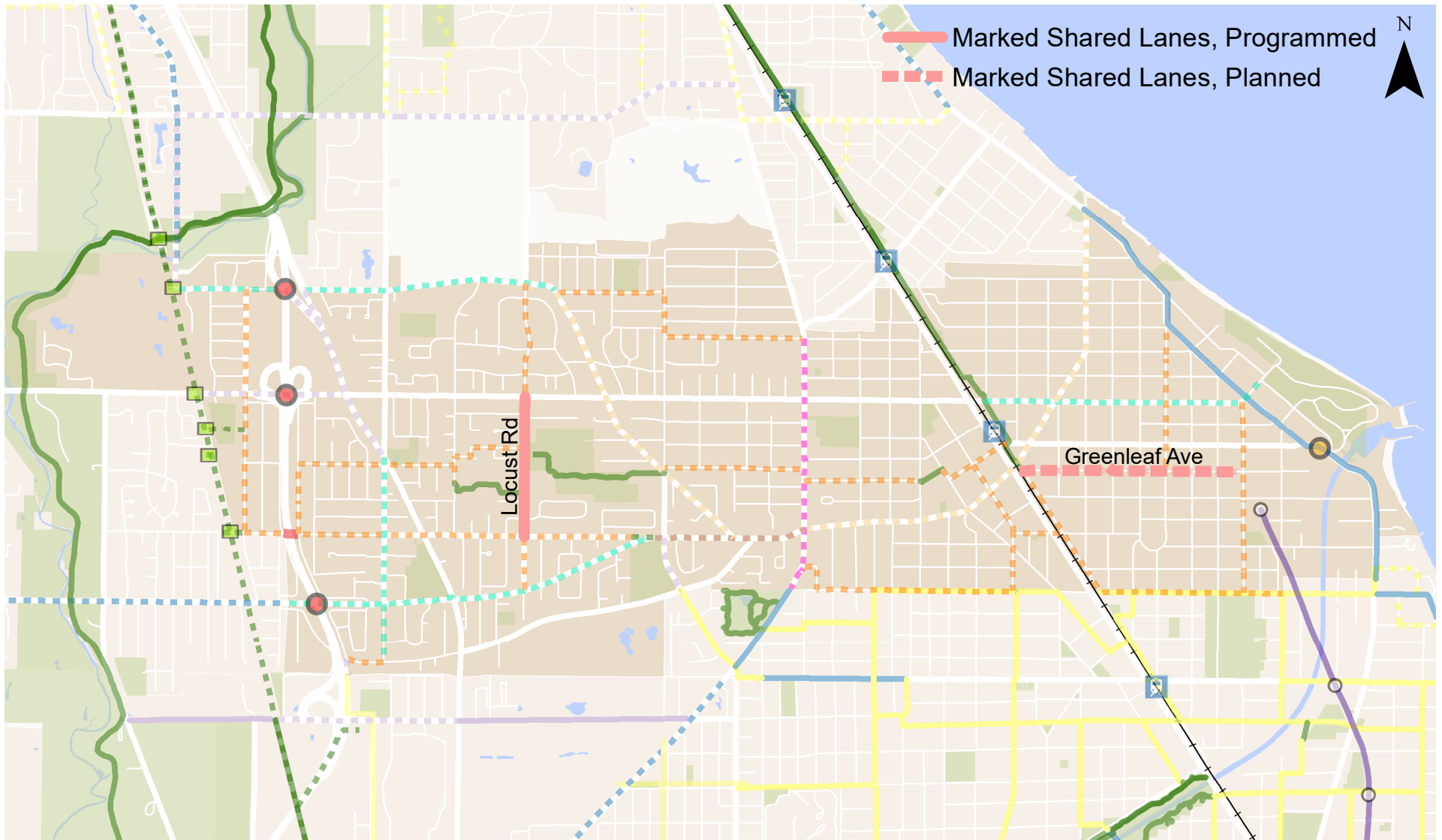


The impacts are fairly similar to those of bike boulevards. They have a medium impact on safety because while they provide traffic calming and awareness to the presence of bicyclists on the street, they are not as protective as a separate facility such as a sidepath, trail, or protected bike lane. Due to the traffic calming feature, they have a medium impact on traffic volume and speed reduction. There is no impact to parking on any of the roadways in which they're recommended.

The impact to roadway reconfiguration and redesign is minimal since marked shared lanes can be installed in phases, with the first phase only requiring new pavement markings. Enhancements such as intersection improvements can be made at later phases. Improvements to pedestrian mobility is moderate since fewer bicyclists will be using the sidewalks, and impacts to vehicular mobility is high since there would be speed reduction—drivers are discouraged to use marked shared lane streets as a high speed cut-through.

None of the recommended marked shared lanes require land acquisition and the municipal maintenance impact is medium. Trees, street furniture and utilities would not be impacted by bike boulevards and the Village cost would be relatively low compared to other design alternatives and could be coupled with upcoming resurfacing projects.

MARKED SHARED LANES LOCATIONS



POTENTIAL DESIGN SOLUTIONS: BEFORE AND AFTER GREENLEAF AVENUE



Images from Google Maps

ADVISORY BIKE LANES

There are a few corridors in Wilmette that are important bike route connections, but due to their size and traffic volume, shared lanes are not an option. Additionally, due to land use contexts, the removal of parking to create room for conventional bike lanes also is not an option. In these situations, advisory bike lanes are recommended to give bicyclists dedicated lanes while also maintaining the other existing functions of the roadway.

An advisory bike lane is recommended on Ridge Avenue between Elmwood Avenue and Isabella Street. Ridge Avenue is classified as a minor arterial and is IDOT-controlled north of Wilmette Avenue and locally-controlled to the south. It has a high crash history, including several bike and pedestrian injury crashes, mostly at intersections and crossings.

What Are Advisory Bike Lanes?

Advisory bike lanes provide a dedicated lane for bicyclists that is mostly separated from the vehicular travel way. They are one foot narrower than the recommended minimum for conventional bike lanes (4' for advisory bike lanes and 5' for conventional bike lanes). Instead of having a solid white line separating the bike lane from vehicular traffic, the line is dashed. In most cases, the majority of vehicles will be able to stay in the 10' vehicle travel lane. However, the advisory bike lane line is dashed for the occasional occurrence in which larger vehicles need to merge into the bike lane, barring yielding to bicyclists.

Pedestrian Considerations

Where advisory bike lanes are recommended it is also advisable to have and maintain sidewalks free of obstructions. These can be utilized by younger children for bicycling, as well. Other features to couple with advisory bike lane corridors to increase pedestrian safety include high visibility crosswalks and pedestrian and bicycle warning signage. For descriptions and examples of these treatments, see the additional Pedestrian Improvements section later in this chapter.

Impacts

The project team studied the potential impacts of the recommended advisory bike lanes. For a table of all of the impact results, see the Impact Matrix later in the chapter.

Advisory bike lanes would have a medium impact on safety by providing bicyclists a dedicated lane and alerting drivers to their presence on the

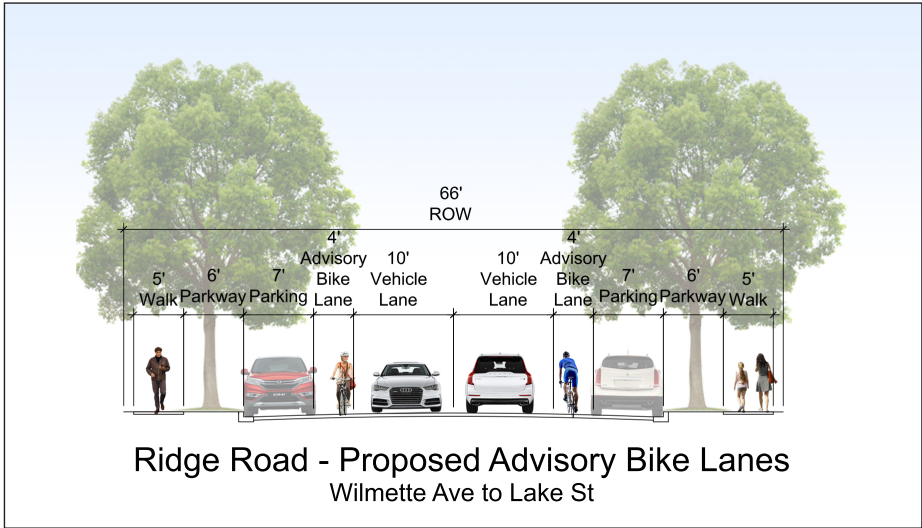
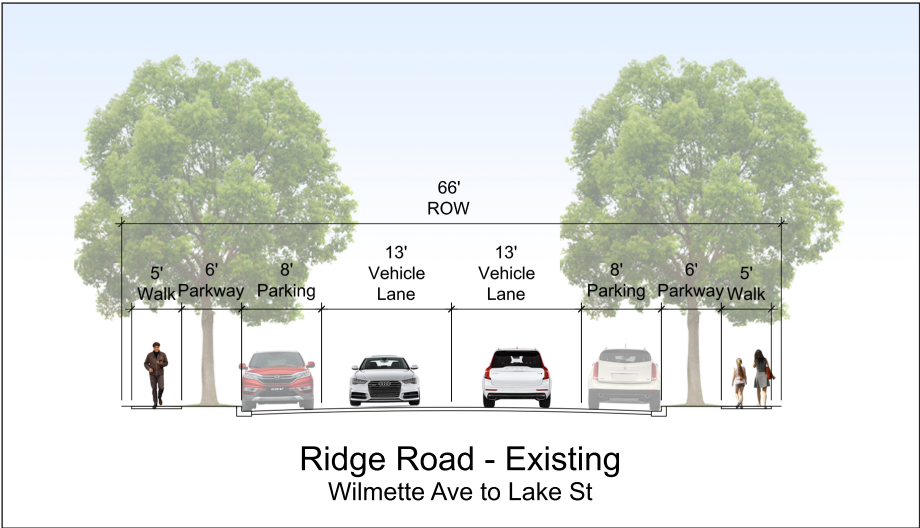
roadway. Typically, they are recommended on low to moderate traffic volume streets. They aren't as protective as a separate facility such as a sidepath, trail or protected bike lane. This recommendation would not require the removal of parking.

The impact to the roadway configuration is medium: the number of vehicle lanes would remain the same but each lane would be reduced by a few feet, which is still acceptable for design standards. The traffic calming and speed reduction impact would be medium. Narrower vehicular lanes discourage motorists from driving above the posted speed limit. There would be no impact to trees, street furniture or utilities since the design change could be made within the existing curb-to-curb right-of-way.



Advisory bike lanes allow adequate space for large vehicles while still accommodating biking

ADVISORY BIKE LANE EXAMPLES

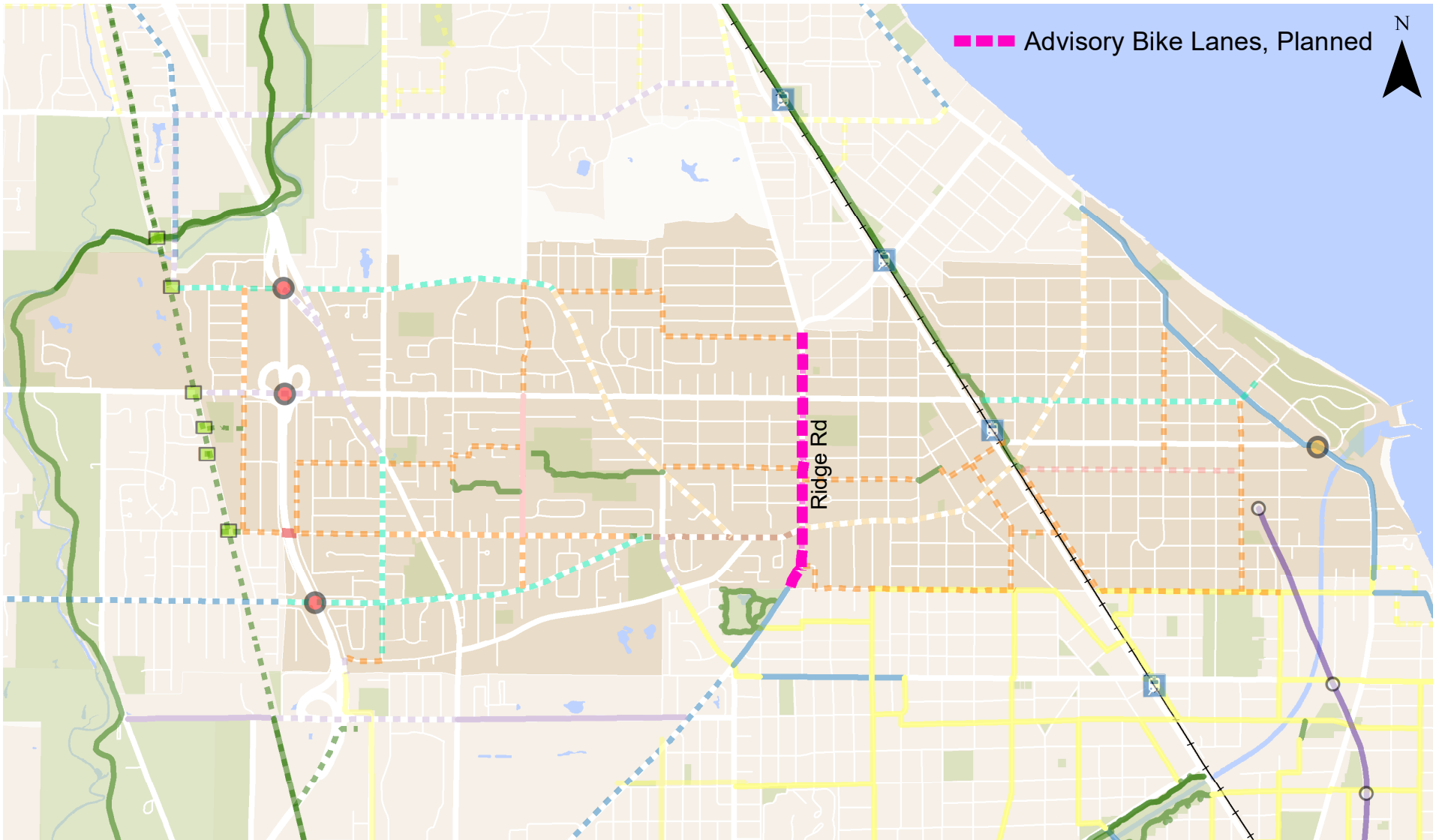


Advisory bike lanes in Alexandria, VA. Advisory Bike Lanes work well on streets with low volumes and low speeds.



Advisory bike lanes on Milwaukee Ave in Chicago's Wicker Park neighborhood. Image From Google Maps

ADVISORY BIKE LANES LOCATIONS



SIDEPATHS

There are some corridors in the Village that are important connectors in creating a complete bike and pedestrian network across the community, but due to higher traffic volumes, vehicle speeds, jurisdictional responsibility, functional classification, wider pavement, and other factors, the mixing of cars and bikes in the curb-to-curb space is either inadvisable or not optimal. In these instances, sidepaths are recommended.

What are sidepaths?

Sidepaths are like multiuse trails alongside the road. They are a completely separated from vehicular lanes and include paved space for both bicyclists and pedestrians. They look like an extra-wide 8 to 10 foot sidewalk. This increased width provides room for the mixing of those on foot and bike. In some locations sidewalks already exist, so the design would involve widening the sidewalk by a few to several feet. In other places, sidewalks do not exist.

Pedestrian Considerations

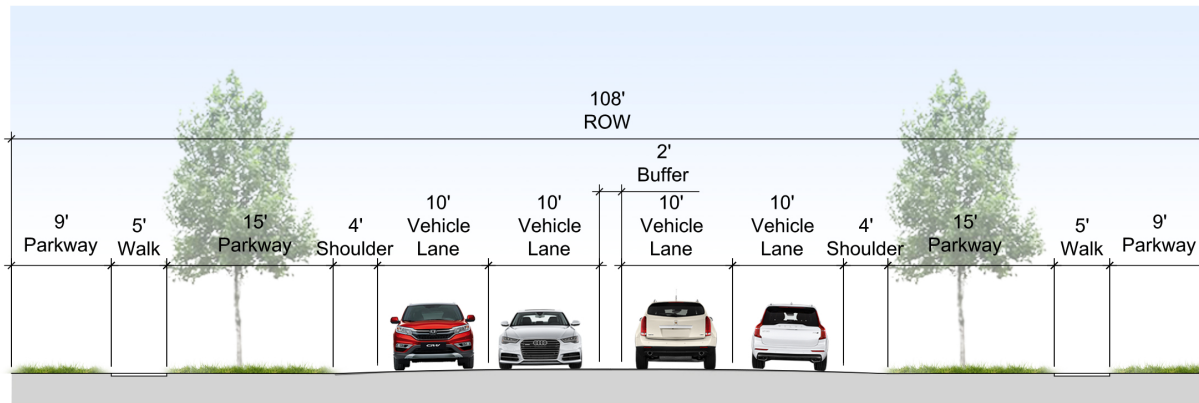
In addition to being a separated-from-traffic space for bicyclists, pedestrians are also encouraged to use sidepaths. The 8 to 10 foot width provides adequate room for both to use the space, similar to a multiuse trail. In some cases, the installation of a sidepath would fill a gap in the sidewalk network. Where there is a high volume of bicycle traffic, “share the path” and “yield to pedestrian” signage can be utilized.

Intersection and crossing improvements for pedestrians and bicyclists should be made wherever sidepaths cross the roadway. These can include high visibility crosswalks that delineate separate space for bicyclists and pedestrians through the intersections, ADA curb ramps, curb extensions, pedestrian refuge islands at wide or challenging crossings, and state law “stop for pedestrian” signs at uncontrolled crossings. For descriptions and examples of these treatments, see the Pedestrian Improvements section later in the chapter.

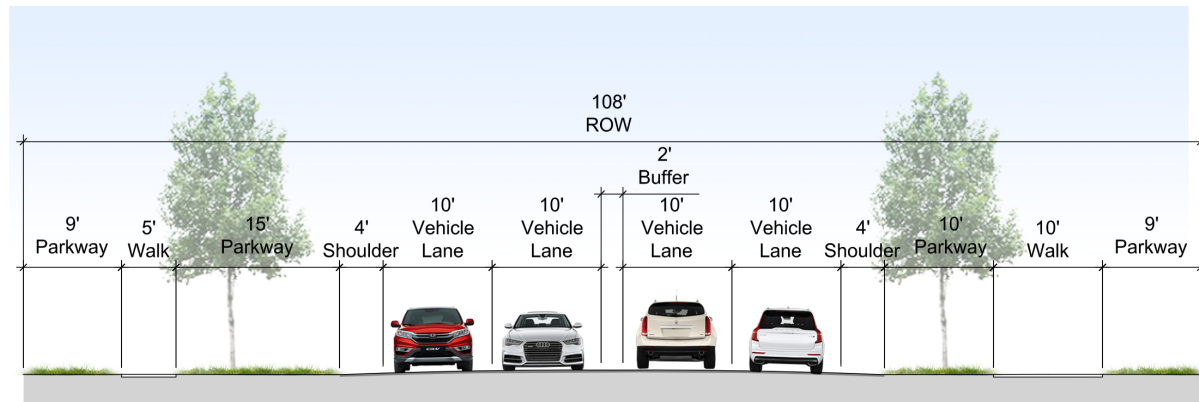


Sidepath; photo from Parkways to Greenways

SIDEPATH EXAMPLES



Skokie Boulevard - Existing
Hibbard Rd to Lake Ave



Skokie Boulevard - Proposed Sidepath
Hibbard Rd to Lake Ave

Impacts

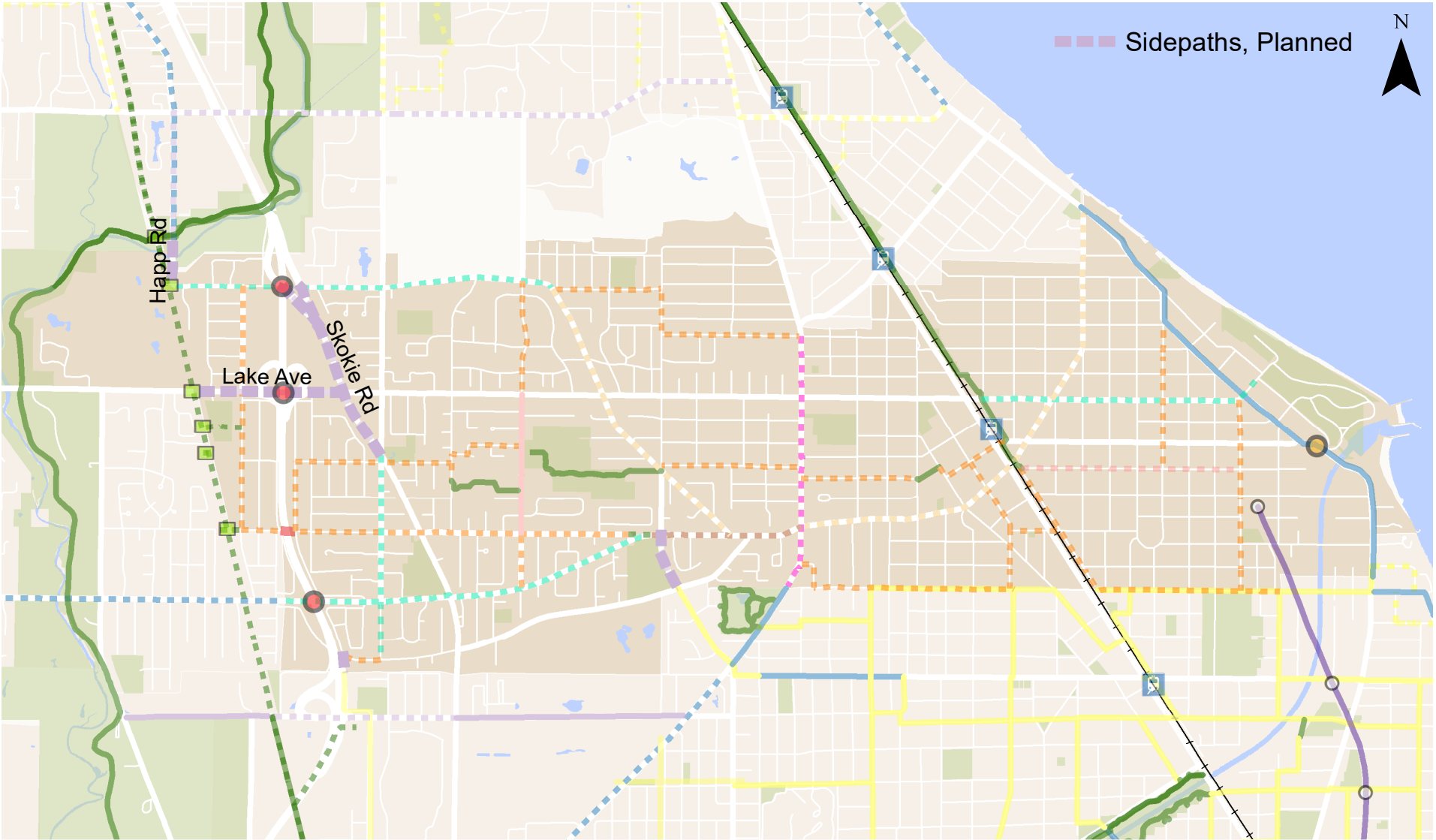
The project team studied the potential impacts of the recommended sidepaths. For a table of all of the impact results, see the Impact Matrix later in the chapter.

In recommending locations for sidepaths, the project team reviewed right-of-way data to minimize impacts to land acquisition. However, in some locations there would be potential easements or land acquisition, such as the sidepath recommended along Illinois Road (listed as one of the corridors recommended for multiple options) from Skokie Road to Thornwood Avenue, Lake Avenue from Romona Road to Seneca Road, and small portions of the Skokie Road sidepath (near the Edens Plaza and Chalet Garden Nursery, depending on which side of the street it is constructed).

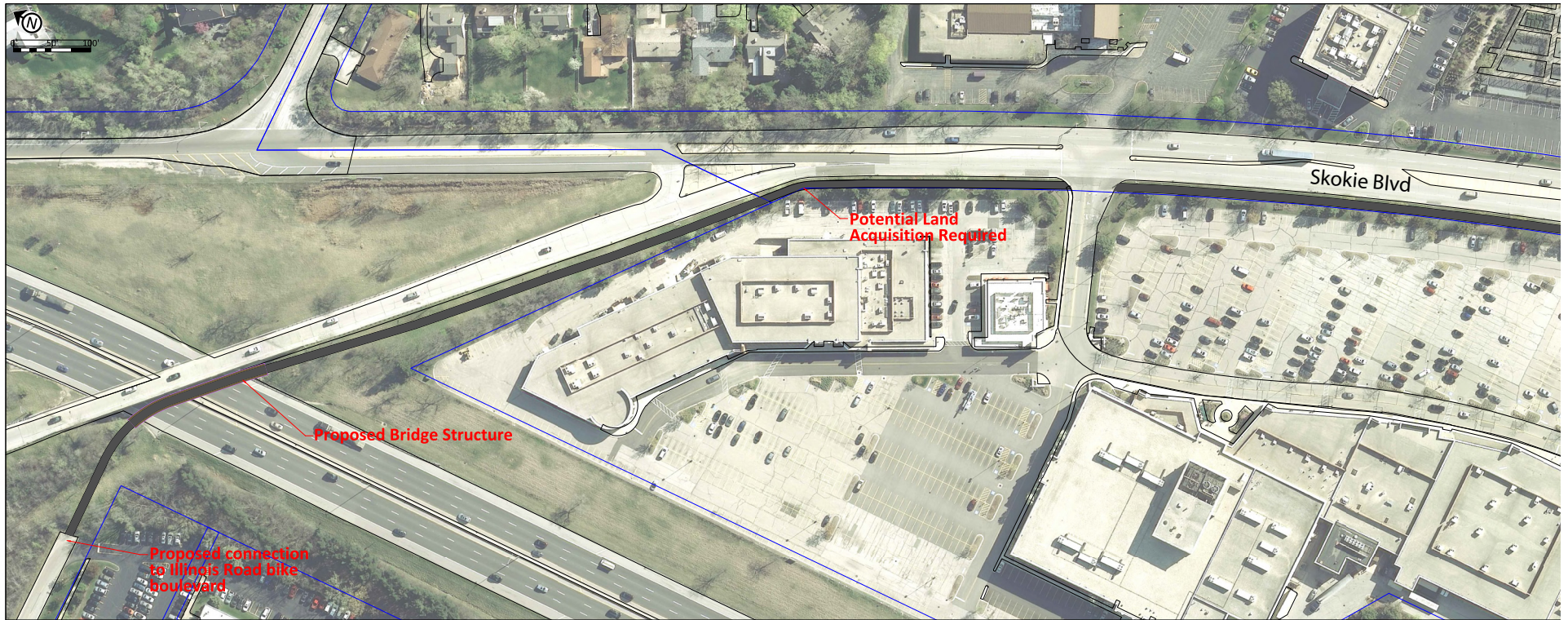
The existing roadway configuration would be minimally impacted since all of the design changes would happen outside the existing curb-to-curb space. For this reason, impacts on traffic volume, traffic calming, and vehicular speed reduction would also be negligible.

The impacts to trees would be medium to high, depending on the location and side of the roadway. During future engineering studies prior to implementing the sidepaths, how to minimize these impacts, as well as how to avoid utilities and driveways, would be more closely studied and balanced. The project team considered the placement of sidepaths on both sides of the roadway, where recommended. The side that has the least challenges and most positive impacts would be determined in future studies and would include community engagement prior to installation. For more details on potential impacts see the Impact Matrix in the Appendix.

SIDEPATH LOCATION MAP



SKOKIE SIDEPATH - EXAMPLE SIDEPATH





BIKE LANES, ROAD DIET

Bike lanes are recommended on Wilmette Avenue between Hunter Road and Ridge Road to create an important link in the east/west bike connectivity across the community. The bike lanes could be installed in the existing curb-to-curb right-of-way without widening the pavement, however some reworking of how the roadway is used would be needed.

What are bike lanes and a road diet?

Bike lanes are similar to advisory bike lanes mentioned earlier in this section, however, instead of a dashed line separating the bicyclists from traffic, the line is solid. The bike lane is also wider. The understanding is that both the vehicular travel lanes as well as bike lanes are provided sufficient width, so both modes will rarely have to merge into the other lanes.

Road diets involve reconfiguring the roadway without widening the pavement. In the case of this portion of Wilmette Avenue between Hunter Road and Ridge Road, the outer lanes act as daytime vehicle lanes and night time parking lanes (7 pm to 2 am). It has been observed that the parking is under-utilized at this location and the traffic volume is an acceptable amount for a road diet, reducing the daytime vehicle lanes from four to two (8,800 AADT observed in 2014). It is recommended that parking is maintained and converted to all hours permanent on one side of the roadway and that the additional space gained from the other parking/vehicle lane be converted to buffered bike lanes. Which side of roadway parking will be maintained should be determined in further study and the feasibility of an overall road diet should be determined during a traffic study.

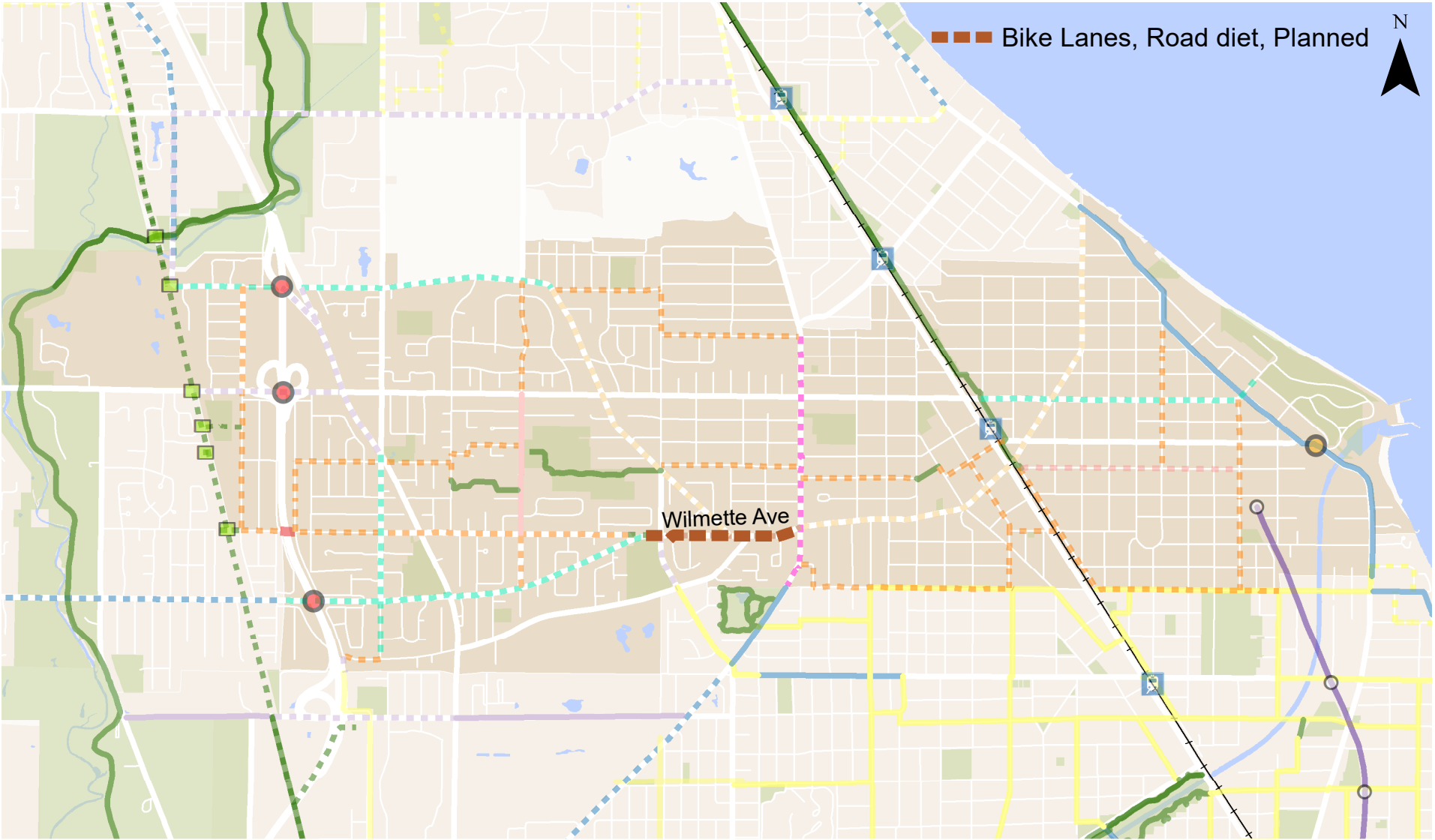
Impacts

In future study, the Village would need to address and coordinate with IDOT on potential left turn lane volumes from Wilmette Avenue onto Old Glenview Road (westbound). It is estimated that the impact to traffic volume would be low due to the functioning of similar cross sections along other portions of Wilmette Avenue. However, a traffic study would be needed to further assess feasibility. Although it would involve the removal of parking, the impact to parking is also deemed as low due to it already being under-utilized and heavily restricted. The recommendation would not require any land acquisition but it would require coordination with IDOT. There would be no foreseen impacts to trees or utilities due to the existing curb-to-curb width remaining the same.

Pedestrian Considerations

In addition to providing a dedicated bike facility, road diets are also beneficial to pedestrians. The reduction of under-utilized roadway width discourages motorists from driving beyond the speed limit. Additionally, the reduction of travel lanes also provides shorter pedestrian crossings and opportunities for installing pedestrian-friendly infrastructure at crossings, such as curb extensions and pedestrian refuge islands.

BIKE LANE ROAD DIET LOCATION MAP



MULTIPLE OPTIONS

On several of the roadways in the Village, it was determined during the planning process that at this level of study, multiple designs could potentially work on the roadway. For the best design to be determined, further engineering and traffic study would need to be conducted at a more granular level. While it is evident that these roadways are key corridors to creating a complete bike network, a clear best design fit is not evident at the planning-study level and several solutions should be further considered.

Glenview Road and Hibbard Road Options

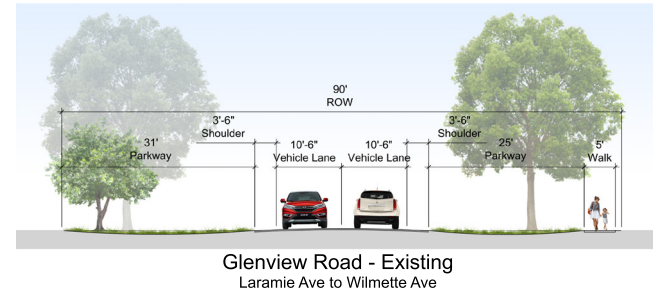
Glenview Road and Hibbard Road are both classified as arterial streets. Glenview Road, however, has a higher number of crashes. Both of these roadways have similar cross sections: one vehicle lane per direction and a several-feet-wide shoulder. There are two proposed options for each, to be considered in further study:

- **Buffered bike lanes:** This would involve widening the pavement and adding curbs so the roadway could become an “urban cross section.” The existing vehicle lanes would remain the same and the pavement would be widened into the existing shoulder and ditch to accommodate 5’ wide bike lanes with a 3’ buffer.
- **Sidepath:** For this recommendation, the existing roadway would remain unchanged. However, a sidepath would be installed on one side of the roadway. This could involve either widening the existing sidewalks or building a completely new path. Further study would be needed to determine the best side of the road to install the sidepath.

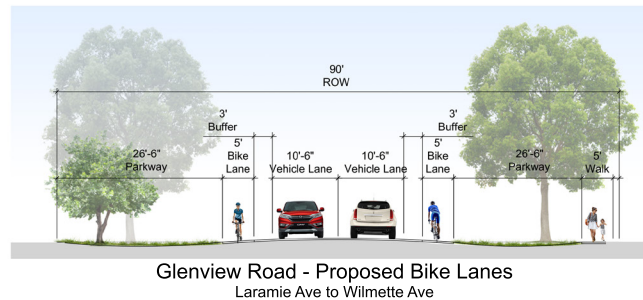
Impacts

A sidepath would have a low impact on traffic volume and high impact on safety. It would result in minimal impacts to the roadway configuration. The biggest impact of the sidepath would potentially be to trees and utilities, however this could be mitigated by further studying which side of the roadway would be the

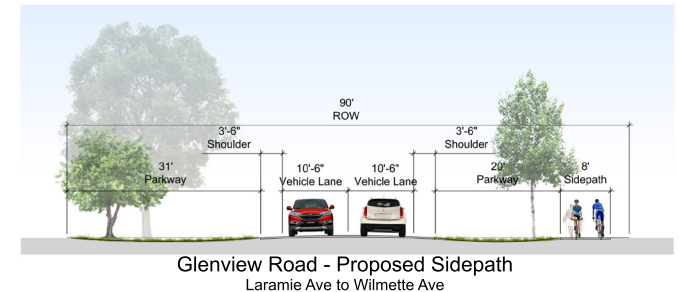
best fit. The buffered bike lanes would involve widening the roadway and hence would be more expensive than sidepath installation. This could be accomplished in the existing right-of-way ditch. It would mostly involve the removal of overgrowth vegetation, however some trees closer to the shoulder may need to be removed.



Existing conditions on Glenview Road include 10’ 6” vehicle lanes and 3’ 6” shoulder, within 90’ right of way.

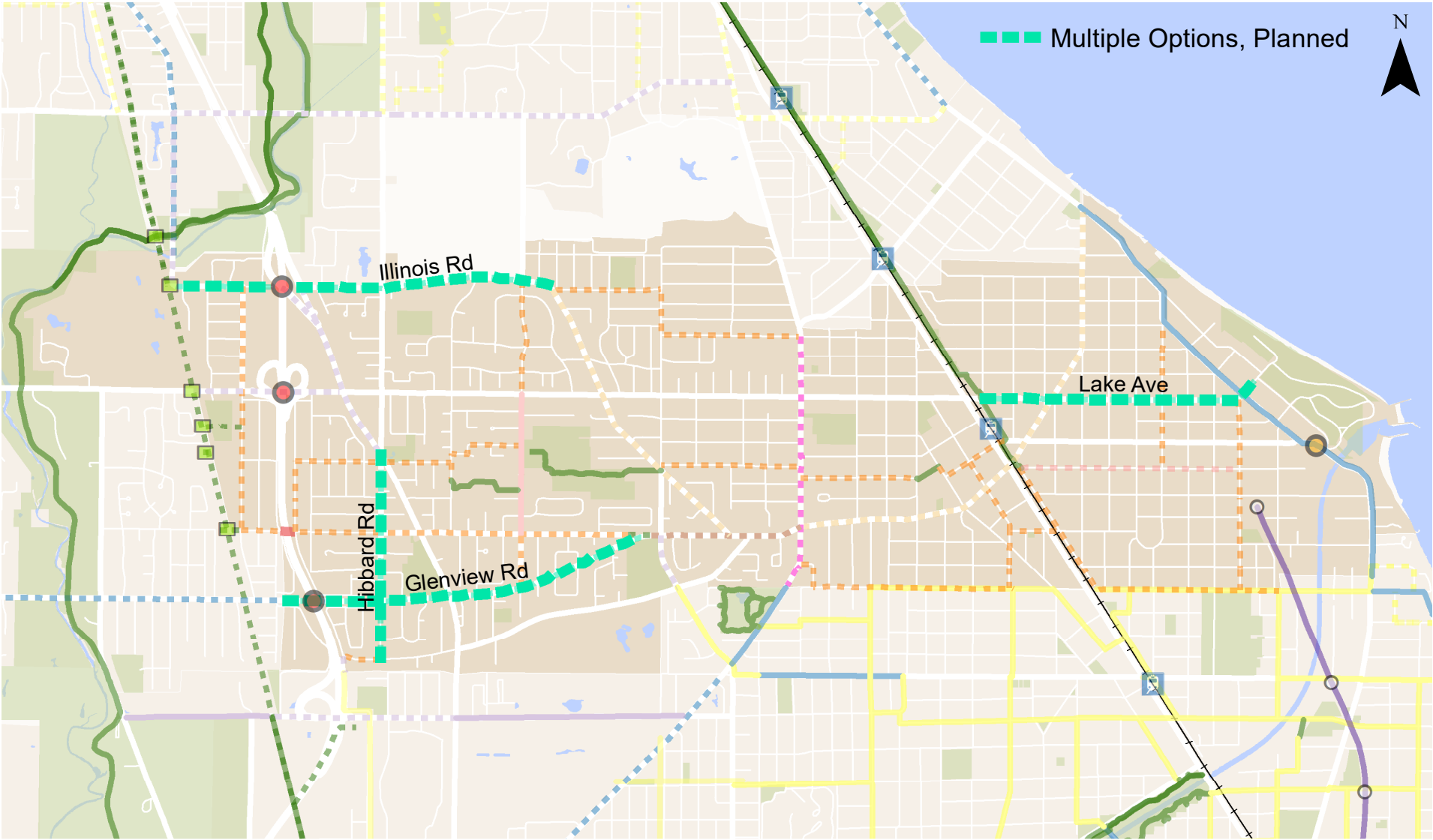


There is available right-of-way to widen the pavement to add buffered bike lanes while maintaining existing vehicular lanes. This would have the lowest impact on trees.



A sidepath for walking and biking beside Glenview Road may include filling gaps on the existing sidewalk and widening it to an 8’ path on the south side of the street.

MULTIPLE OPTIONS LOCATIONS



Lake Avenue, from Green Bay Trail to Wilmette Avenue

- Road diet with conventional bike lanes
- Advisory bike lanes

Impacts

The road diet option has the potential to slow vehicle speeds but it could also negatively impact traffic at peak hours and may cause back-ups around the Union Pacific tracks. The recommendation would require significant changes to striping and roadway geometry. The project team looked at installing a sidepath here as well, which is not recommended due to the impact on residents. Further study would be needed to determine feasibility.

Advisory bike lanes could be considered as a method for installing a bike facility at this location without changing the functional use of the roadway for vehicles. For more descriptions on this design, see the section on Advisory Bike Lanes above.

Lake Avenue, from Wilmette Avenue to Gillson Park

- Bike boulevard
- Marked shared lanes

Impacts

A bike boulevard or marked shared lanes can help calm traffic along this segment, which could have a medium impact on traffic and speed reduction. Either option would provide an improved bike connection to Gillson Park and may also reduce biking on sidewalks, which would positively impact pedestrians.

Illinois Road, from the Edens Expressway/Loyola Academy parking lot to Happ Road/future Skokie Valley Trail

- Marked Shared Lanes
- Bike Boulevard
- Bike Lanes

Illinois from Skokie Boulevard to Thornwood Avenue

- Sidepath
- Bike lanes

Impacts

The installation of bike lanes would involve widening the roadway shoulder, which could require land acquisition and the removal or relocation of utilities and some trees. A sidepath would not require reconfiguring the roadway, but would require land acquisition from Skokie Road to Hibbard Road as well as the removal of a significant number of trees. The parking impacts for all of these Illinois Road proposals would be low.

Frontage Road, from Old Glenview Road to Central Street

- Sidepath
- Bike lanes

Impacts

A sidepath would most likely require land acquisition and the removal of trees and relocation of utilities. To install bike lanes, repurposing one side of the roadway's parking would likely be necessary.

Pedestrian Considerations for all Multiple Option Recommendations

Sidepaths provide the opportunity to fill gaps in the pedestrian sidewalk network. In conjunction with the installation of on-street bike facilities, it is also advisable to have and maintain sidewalks free of obstructions. These can be utilized by younger children for bicycling, as well. Other features to couple with on-street bike facilities to increase pedestrian safety include high visibility crosswalks and pedestrian and bicycle warning signage. For descriptions and examples of these treatments, see Pedestrian Improvements section.



TRAIL CONNECTORS

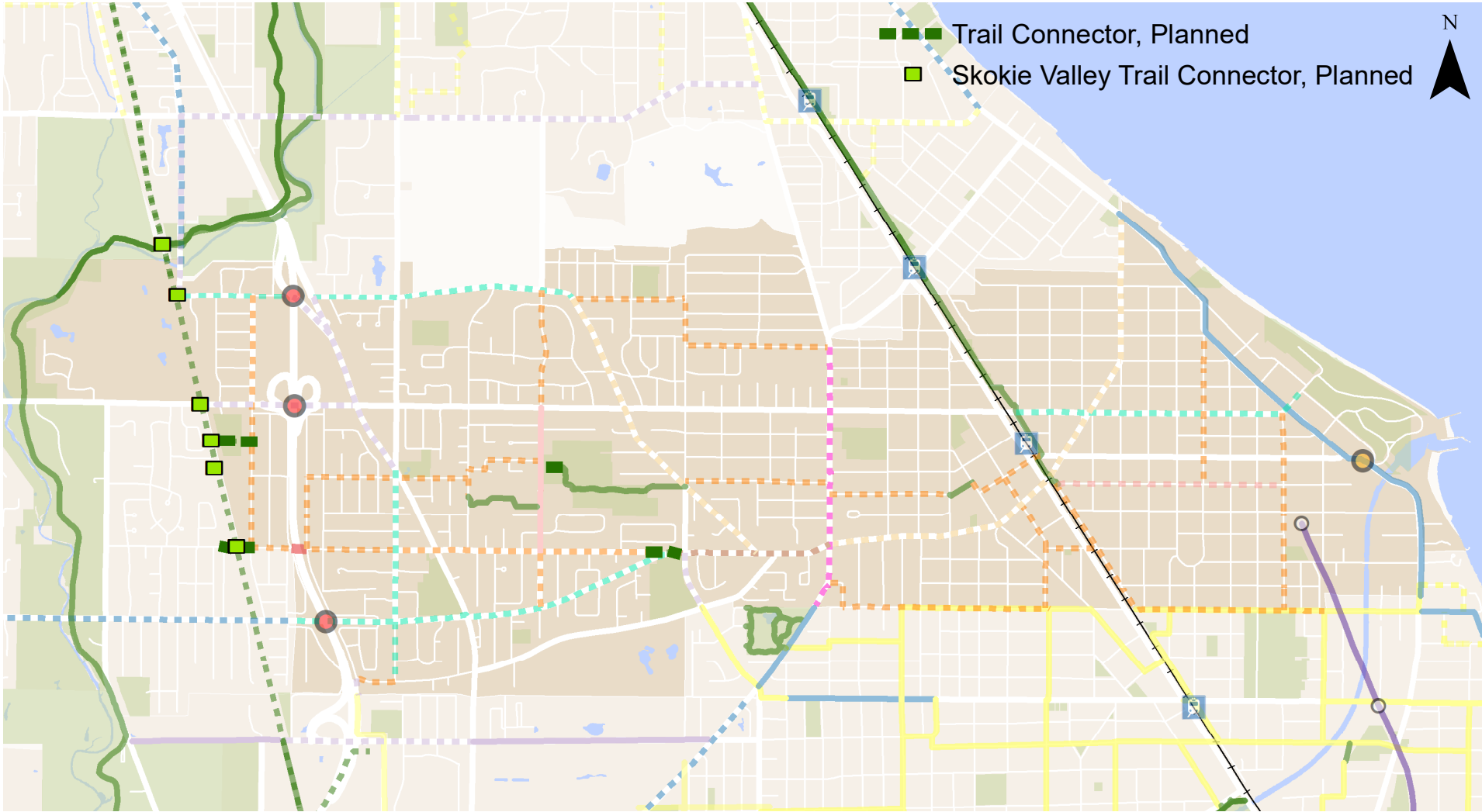
Trail connectors are recommended to enhance connectivity between the existing and programmed walking and biking trails and the recommended network. This recommendation will help maximize utilization of the existing and programmed regional and local trail network in the Village, which is an extensive asset. These connections will help increase bicycle and pedestrian access to recreational facilities for Wilmette.

Several of the trail connections on the western side of Wilmette involve connecting the on-road bike network to the future Skokie Valley Trail. Others will create more direct and evident bike connectivity through local Wilmette parks, such as the trail through Community Park. Another connection would involve coordinating with neighboring Glenview to provide a trail that connects the proposed Wilmette Avenue bike boulevard to Wilmette Avenue in Glenview, which would bolster regional bike and pedestrian network connectivity.



Keay Nature Learning Center trail which could be leveraged in creating a complete bike network

TRAIL CONNECTOR LOCATION MAP



BIKE TREATMENT CONSIDERATIONS AND CRITERIA

The criteria considered by the project team when determining whether or not a roadway is recommended for a bike facility as part of the community-wide network include the following:

- Speed
- Traffic volume
- Roadway width
- Community feedback: is it supported by adjacent land owners?
- Timeline/past studies: Was it recently studied and constructed?
- Agency coordination: locally-controlled roads are preferable
- Connectivity and other lower stress alternatives
- Parking: back-in angled parking is not compatible with marked shared lanes or bike boulevards.

In some cases, despite traffic volume and other design challenges and constraints, a bike facility is recommended due to lack of other alternatives to maintain east/west connectivity. However, if there is a nearby lower-traffic-volume route and lower-stress residential option, that roadway would be recommended in lieu of the other.

SIGNAGE ONLY BIKE ROUTES

There are a few corridors in the community that are commonly used by confident and avid cyclists as well as cycling clubs, however due to environmental constraints of the roadway, it is not recommended that more robust bike facilities, such as a sidepath or bike lanes, are constructed at this time. However, it is still important to recognize the existing and future cyclists using these roadways and alert drivers to their presence. Share the road signage is recommended in these instances. One of the primary signed bike routes that surfaced during the community engagement process included Wilmette Ave. An explanation of the designs considered and proposed signage solution follows.

Wilmette Ave between Ridge Road and 10th Street

While the project team studied this portion of Wilmette Avenue with the intention of finding a bicycle facility recommendation that would fit the needs of all its users, ultimately they chose not to recommend a facility on the corridor, including shared bike lanes or advisory bike lanes (detailed below). The characteristic differences between the roadways recommended to receive these types of facilities and Wilmette Avenue made it apparent that including a bicycle facility on Wilmette Avenue in this plan would not align with current community needs as stated in the Vision Statement and as submitted through the outreach and engagement process. The project team does recommend, however, that Wilmette Avenue receive “share the road” signage, or signs stating the State of Illinois 3-foot passing law, to alert drivers that cyclists will be present at times.

Marked shared lanes feature “sharrows” and indicate to motorists that bicycles may be present on the roadway, while showing cyclists where to appropriately position themselves on the street. Good for roadways with low traffic volumes and crash histories, marked shared lanes work best when coupled with clear and open sidewalks and other traffic calming solutions such as curb extensions and high-visibility crosswalk enhancements. On roadways with higher traffic volumes, marked shared lanes are not recommended due to an increased likelihood of “dooring” incidents, sidewalk riding, or motorists squeezing past cyclists or displaying other types of aggressive behavior. Marked shared lanes are never a replacement to conventional bike lanes, and especially not to protected bike lanes.

On a roadway with parallel on-street parking, like Wilmette Avenue, the Manual on Uniform Traffic Control Devices states that sharrow markings should be placed 11’ from the curb. For Wilmette Avenue, this would be directly between the parking lane and driving lane, a narrow space where cycling is not recommended. Without reallocating space from the parking lanes and travel lanes, the project team does not recommend including marked share lanes on this corridor.

Residents with property both on and adjacent to Wilmette Avenue maintained that retaining parking on the corridor is a crucial concern. Due to these requests and concerns, the project team determined that removing parking here to make space for additional vehicular lanes, including bicycle facilities, is not applicable at this time. Additionally, the project team did not recommend marked shared lanes on the portion of Wilmette Avenue that travels through downtown due to the angled parking. It is inadvisable to have a bike facility directly behind parking spaces.

Advisory bike lanes are a solution for some streets in the Village, but the project team found this type of facility inadvisable for Wilmette Avenue because of the already narrow traffic configuration. Wilmette Avenue features two 11' wide parking lanes and two 11' wide traffic lanes in either direction. The project team recommends that corridors in the Village with advisory lanes be striped at 4' wide, one foot narrower than a conventional bike lane, along with additional 10' traffic lanes. Under these width guidelines, advisory bike lanes would not fit on Wilmette Avenue while both retaining parking (even with 9' reduced-width parking lanes) and providing safe and comfortable conditions for motorists and cyclists alike.

While there are cases of advisory lanes being installed on narrow streets, some even requiring vehicular traffic to merge into the shared space of a 10' wide lane, these configurations are considered pilot designs. Basing their decision on community concerns represented in the Vision Statement, such as convenience for all users and a need for calmer roads, the project team determined that Wilmette Avenue is not an appropriate roadway to host a narrow advisory bike lane pilot design. The team instead looked at other east-west route recommendations that offer connectivity comparable to Wilmette Avenue, resulting in the final recommendations represented in this plan. Wilmette Avenue can be considered in the annual plan revisiting process, which will include a staff review and a public comment period at a Transportation Commission meeting.

Lake Avenue

Multiple design options were considered on Lake Avenue between Skokie Road and Green Bay Road, including a road diet to incorporate buffered bike lanes or a sidepath. It was determined that due to the traffic volume that this corridor carries, a road diet is not feasible. A sidepath was considered between Skokie Road and Hunter Road, Hunter Road and the Green Bay Trail, and between the programmed Skokie Valley Trail and the North Branch Trail. These recommendations would require land acquisition and removal of many trees, which would negatively impact residents along these corridors. Between Hunter Road and the Green Bay Trail there are sites with limited right-of-way, which in addition to significant tree removal would present challenges for designing a sidepath to meet federal standards. A road diet with bike lanes was also considered between Hunter Road and the Green Bay Trail, but it was determined that this option would have negative impacts on cut-throughs, queue lengths, and would negatively impact traffic at peak hours. At this time, these corridors are not recommended for further study.

Other recognized bike routes with “share the road” signage treatments

There are other roadways that, similar to Wilmette Avenue, are commonly recognized and utilized bike routes by the cycling community. However, due to similar right-of-way constraints and limitations and the availability of easier-to-implement options, more robust design alternatives are not recommended for these roadways at this time. However, it is also recommended that these roadways are designated as recognized bike routes with “share the road” signage, as well. These routes include:

- Illinois Road, between Thornwood Avenue and Wilmette Avenue
- 10th Street, between Sheridan Road and Poplar Drive

OTHER NETWORK CONSIDERATIONS

Since the recommendations are planning-level, more information on the design and feasibility would be needed prior to implementation. Additionally, on an annual basis the plan will be revisited with a staff level review as well as a public comment period at a Transportation Commission meeting. During this time, recommendations will be considered for current relevancy and/or potential updates.

Hunter Road

Hunter Road between Wilmette Avenue and Elmwood Avenue was considered for various bicycle facility treatments, but at this time is not part of the recommended network. An on-road treatment was determined to not be a feasible because the roadway is narrow and there are high traffic volumes. A sidepath cannot be installed on Hunter Road due to significant tree impacts. However, since a lot of children use the sidewalks on Hunter, a traffic calming approach will be implemented to improve the pedestrian experience.

Gillson Park

As a next step in building out the network, the Village will coordinate with the Park District on connecting the bike network to Gillson Park.

PEDESTRIAN-SPECIFIC INFRASTRUCTURE IMPROVEMENTS

PRIORITY LOCATIONS FOR PEDESTRIAN IMPROVEMENTS

- School zones
- Parks and playgrounds
- Community centers
- Transit and Metra stations

GENERAL PEDESTRIAN DESIGN RECOMMENDATIONS

Intersection Daylighting

Several community members noted that it is difficult for pedestrians to see around parked cars on Wilmette Avenue and other corridors when crossing the street. While the existing bump-outs help with this, the Village can “daylight” intersections, e.g., prevent cars parking too close to crosswalks, thereby blocking the view of crossing pedestrians. The general guidance recommends the following:

- Prohibit parking at least 20' from crosswalks on roads with posted speed limits of less than 30 mph
- Prohibit parking at least 50' from crosswalks on roads with posted speed limits of less than 35-40mph
- Enhance street lighting for drivers' sight distance and safer pedestrian crossings

Sidewalk Installation Policy

A continuous network of sidewalks should be provided adjacent to all schools, parks, and business districts. Where possible sidewalks should be provided on both sides of the street, if this is not feasible due to grade issues or other concerns, sidewalks should be provided on at least one side of the street.

Per these recommendations, new sidewalks should be considered for the following locations:

- Greenwood Avenue between Illinois Road and Harper School
- Dartmouth Street between Kenilworth Avenue and Elmwood Avenue
- Lake Avenue on the north side between Seneca and Romona
- Glenview between Skokie and Sunset
- Green Bay between Linden and Wilmette
- Hibbard Road
- Frontage Road
- Pathway connecting Avoca West to West Park

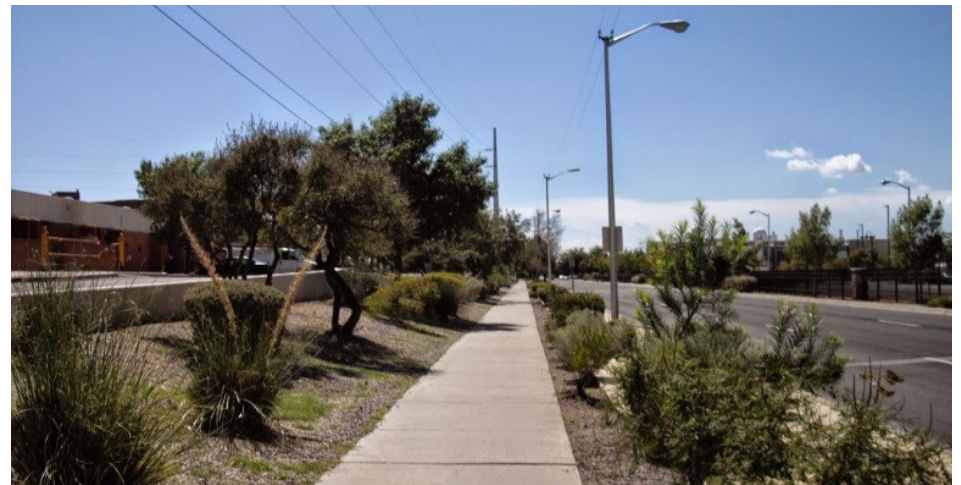


Image courtesy of New Mexico Complete Streets.

Landscaping Barriers

Attractive landscaping components can be installed on sidewalks to serve as barriers between pedestrians and traffic. These barriers can help create a feeling of a boulevard sidewalk on busy roads where sidewalks are directly adjacent to the street.

Utility Issues

In locations along Wilmette Avenue, Green Bay Road, Lake Avenue, utility boxes and poles block sidewalk access. The Village should coordinate with ComEd to move utilities out of the pedestrian right of way, where feasible.

Sidewalk encroachments

Pedestrians, especially those using wheelchairs and pushing strollers, are negatively impacted sidewalk obstructions. The Village should also work with homeowners to trim and maintain landscaping adjacent to sidewalks and at intersections. Construction projects should provide a ADA accessible pedestrian path when using a sidewalk for staging.

Like an anti-gridlock initiative, the Village should educate homeowners and businesses on the impact that cars blocking sidewalks have on pedestrian accessibility and safety.

ADA Detectable Warning Pads

Some metal pads are corroded and become slippery when it is wet or icy and need to be replaced. They should be installed at all crossings where they are absent, in compliance with the Americans with Disabilities Act.

Pedestrian Signal Timing

Use leading pedestrian intervals (LPIs), which give people crossing the street a head start before cars are given a green light, whenever possible at intersections already equipped with pedestrian signals. LPIs cost nothing to implement and allow citizens to move into the crosswalk before drivers, a crucial accommodation when trying to cross in front of turning cars. LPIs also allow for sufficient time for older and younger citizens, who are disproportionately represented in fatal crashes involving pedestrians, to make it all the way across the street at their own pace.

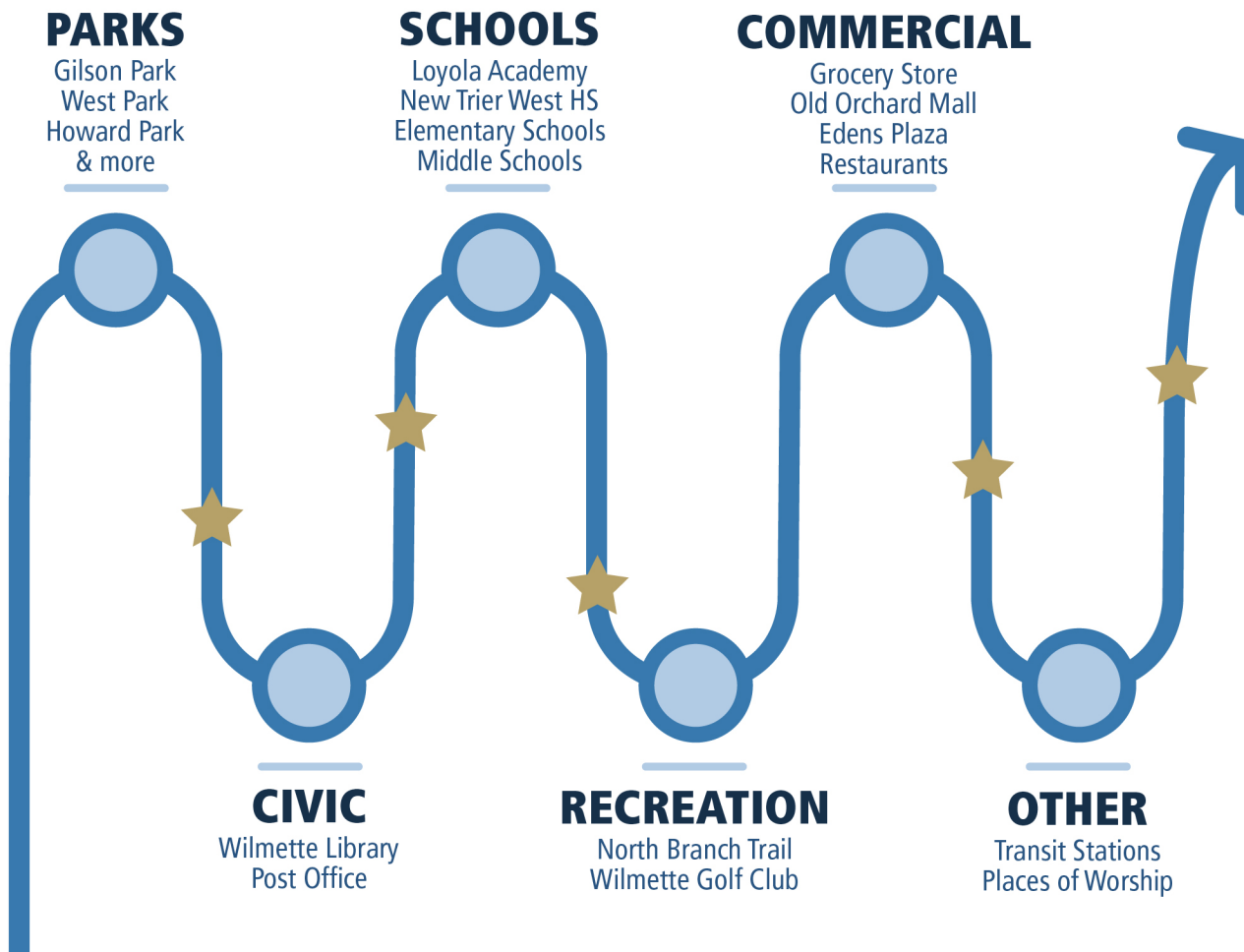


Photo courtesy of NACTO

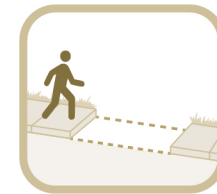
TOP PEDESTRIAN DESTINATIONS & BARRIERS

The below graphic summarizes the top pedestrian destinations and barriers gathered during the community feedback phases of the plan development. Pedestrian recommendations in this section aim to increase connectivity among these popular destinations and reduce common barriers for pedestrian access.

TOP PEDESTRIAN DESTINATIONS



★ BARRIERS



Sidewalk Gaps



Limited or Difficult Controlled Crossings



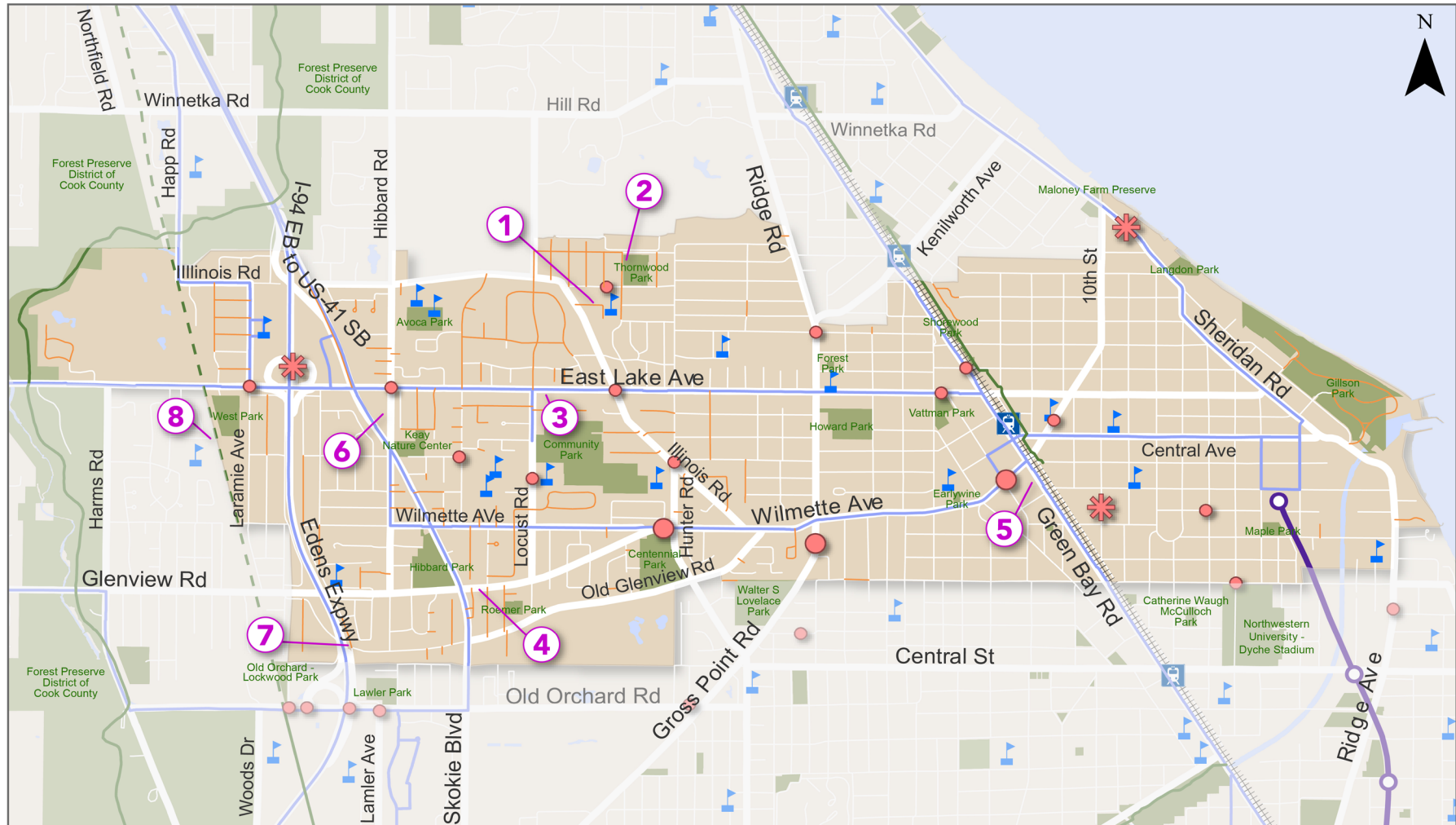
Lack of Buffer between Sidewalk & Roadway



Sidewalk Obstructions & Encroachments

EXISTING PEDESTRIAN CONDITIONS AND PRIORITY SIDEWALK RECOMMENDATIONS

This map highlights existing pedestrian conditions in Wilmette such as sidewalk gaps, locations of interest, transit, and pedestrian-involved crashes. Based on these conditions and other community feedback, several priority locations for new sidewalks were identified for consideration.



- Sidewalk Gap
- Pace Bus Route
- CTA Purple Line and Station
- Metra Rail Line and Station
- School
- ★ Pedestrian Fatality
- Pedestrian Incapacitating Injury
- Pedestrian Non-Incapacitating Injury

Priority Locations for New Sidewalks

- 1) Greenwood Avenue between Illinois Road and Harper School
- 2) Dartmouth Street between Kenilworth Avenue and Elmwood Avenue
- 3) Lake Avenue on the north side between Seneca and Ramona
- 4) Glenview Road between Skokie and Sunset
- 5) Green Bay Road between Linden and Wilmette
- 6) Hibbard Road
- 7) Frontage Road
- 8) Pathway connecting Avoca West to West Park

RECOMMENDATIONS FOR MAJOR AND MINOR ARTERIALS

Mid-block crossings

Create mid-block crossings where there are places pedestrians want to go but are not serviced by a crosswalk. Midblock crossings can incorporate vertical elements such as signage or trees to help alert drivers. These improvements need to be made in conjunction with the Village mid-block crossing policy.

Pedestrian Crossing Signs

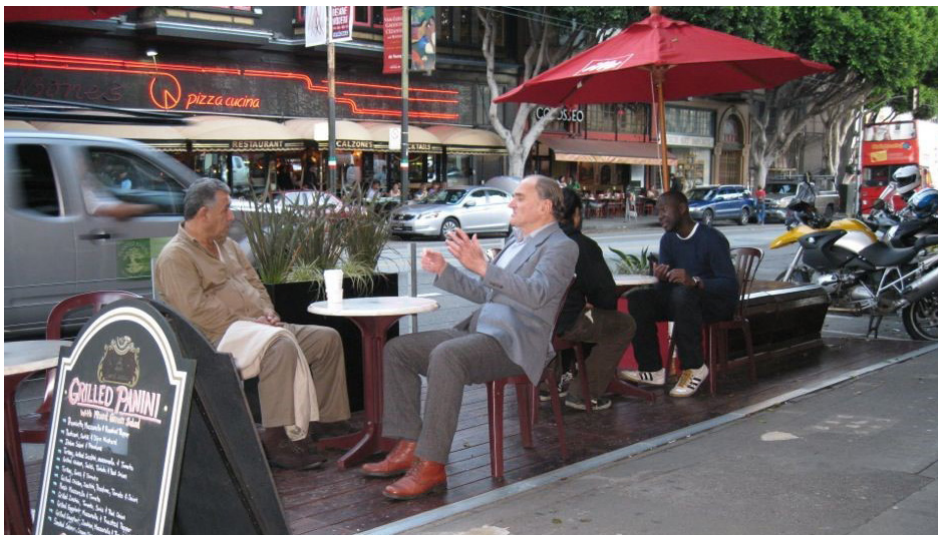
Use Rectangular Rapid Flash Beacons and/or pedestrian crossing signs to warn drivers of upcoming crossings

Green Buffers

Use trees or potted plants to create spaces between pedestrians and traffic

Pocket Parks or Parklets

Provide opportunities for pedestrian-focused areas, enhanced greenery, and public art. Create pocket parks in open or vacant spaces between buildings, or in alleys. Alleys can be converted into public space through paving and lighting, and adding canopies, plants, and street furniture.



Parklet image courtesy of NACTO

Crosswalk Enforcement

Work with the Wilmette Police Department to conduct 5-10 annual crosswalk enforcement and compliance events. Location recommendations include heavily-trafficked crosswalks and high-crash locations



Curb Extension image courtesy of NACTO



Image courtesy of FHWA



Photo from Morgenstern Injury Lawyers.



Raised intersection image courtesy of NACTO

Curb extensions and Bump-Outs

Extends the curb line into the roadway, increasing the visibility of pedestrians and shortening the crossing distance. Curb extensions are best at locations with on-street parking, schools, mid-block crossings, and on arterials and collectors that intersect with bike boulevard treatments.

RECOMMENDATIONS FOR COLLECTOR ROADS

Traffic Calming

Support implementing traffic calming devices such as wider sidewalks, marked crosswalks, and street design to support safer and slower vehicular speeds.

Raised crosswalks

Serve as a marked pedestrian crossing and provide stronger visual clues for drivers. Raised crosswalks can be constructed of brick or other textured material for enhanced visibility.

Street furniture

Enhance pedestrian-oriented spaces and commercial areas and can provide shade, beautification, and safe gathering spaces. Furniture can include benches, art sculptures, banners, trees, and planters. If trees cannot be used consider planters or shrubs.

RECOMMENDATIONS FOR LOCAL STREETS

Designated School Routes

Mark Safe Routes to School with signage. Work with PTA groups to evaluate concerns around schools regarding walking and crossing. Implement facility improvement projects around schools such as RRFBs, pedestrian crossing signs, and crosswalks with diagonally painted lines.

Low-Cost Pedestrian Solutions

Turn restrictions, signal timing adjustments, and creation of one-way streets can lower traffic speeds and volumes on local roads with pedestrian activity.

Neighborhood Traffic Management

Consider speed tables or raised intersections on residential streets, and other solutions. Roadways to be targeted for these improvements should be determined through the process outlined in the Traffic Calming Policy and Procedure.

LOCATION SPECIFIC PEDESTRIAN IMPROVEMENTS

Wilmette Avenue and 15th Street

Students frequently use this crossing to access McKenzie School. Residents indicate that drivers often do not stop for pedestrians at this location. Improvements could include:

- Widening bump-outs to give more visual weight and further calm traffic. Drainage friendly bump-outs could be used to lessen the impact on stormwater management. (See Roscoe and Sheffield in Chicago)
- Add “School Crossing Ahead” pavement markings to blocks east and west of Wilmette and 15th to serve as a visual reminder to drivers to stop for pedestrians
- Consider installing rectangular rapid flashing beacons at the intersection

Wilmette Avenue Between Lake and Elmwood

The angle of the intersections along this segment are difficult for pedestrians to cross. Consider tools that reduce pedestrian crossing distances, such as reduced corner radii. For more examples, see the Intersection Typologies Toolbox within the Key Transitions chapter.

Lake Avenue and Harvard Street

People of all ages use this uncontrolled crossing to access the paths to Mallinckrodt Park. With no existing pedestrian crossing accommodations, drivers may not see pedestrians attempting to make this crossing. Improvements could include:

- Install a refuge island on the east leg with curb ramps on both sides. No residential driveway access would be impacted by a refuge island, and left turns would not be impacted because Harvard is offset at this location.
- Install advance pedestrian crossing warning signs and high visibility crosswalk.

Lake Avenue and Laramie Avenue

Loyola Academy students cross at this intersection to access the school from the West Park parking area and to get to the Pace bus stop on the south side of Lake. Informal observations conducted by members of Bike Walk Wilmette indicate that driver stopping compliance is low, and pedestrians may benefit from additional crossing enhancements. Improvements could include:

- Reposition the north and east crosswalks to make a 90-degree angle
- Install wider waiting areas on the northeast and southeast corners
- Tighten the radii of the corners to reduce the speed of right-turning drivers
- Install a refuge islands on Lake to reduce the crossing distance for pedestrians
- Upgrade signals to countdown signals
- Install a leading pedestrian interval at the signal

Sheridan Road

Install more must stop for pedestrian signage along the corridor. Implement at all designated pedestrian crossings.



EeCa Alley in Hollywood, courtesy of Los Angeles Streetsblog

PEDESTRIAN TOOL DESCRIPTIONS



Vision Zero

Adopt a Vision Zero policy and approach to roadway design as a strategy to increase safe, healthy, and equitable mobility for all residents.



Daylight Intersections

"Daylight" intersections with treatments such as curb extensions and bumpouts to increase pedestrian visibility to motorists and make seeing around parked cars easier when crossing. Enhance cross walks with pedestrian crossing signs.



Raised Median Island

Provides buffer and protection for pedestrians while crossing wide or busy streets. Adds space for plants.



People-Scaled Spaces

Creates inviting pedestrian spaces with street furniture and green spaces. Furniture may include benches, art sculptures, banners, trees, and planters, even parklets. safe, healthy, and equitable mobility for all residents.



Signal Timing

Implement low-cost solutions that increase safety for pedestrians, including turn restrictions, leading pedestrian interval signal timing.



Raised Crosswalks

Directs traffic to go slowly and cautiously through intersections.



Sidewalks

Provides a safe and convenient place to walk separate from cars.



Midblock Crossings

Create mid-block crossings where there are destinations for pedestrians that are not served by a crosswalk. Incorporate vertical elements such as signage and trees to help alert drivers.



Clearing Sidewalks

Work with homeowners and businesses to reduce sidewalk encroachments that make it difficult for pedestrians, especially those using wheelchairs or pushin strollers, to get around. Solutions can include trimming and maintaining.



Sidepaths

Creates a dedicated, shared space for pedestrians and cyclists away from motor vehicles.



Countdown Signal

Indicates amount of time pedestrians have to cross. Helpful for people with disabilities and seniors.



Utility Location

Coordinate with utility providers to relocate utilities, including boxes and poles, out of the pedestrian right-of-way and off of sidewalks.

WAYFINDING SIGNAGE

A comprehensive bicycle wayfinding signage network helps cyclists navigate to key destinations along preferred bicycle routes. When placed on streets, they remind drivers to look out for cyclists and help cyclists stick to designated routes. When placed along trails, they help cyclists connect between two systems and find their way when trails turn or transition from off- to on-street. There are three primary types of wayfinding signs: confirmation signs, decision signs, and navigational or turn signs, each described in more detail below. See Section 9B.01 and 9B.20 of the Manual for Uniform Traffic Control Devices (MUTCD) for placement standards.

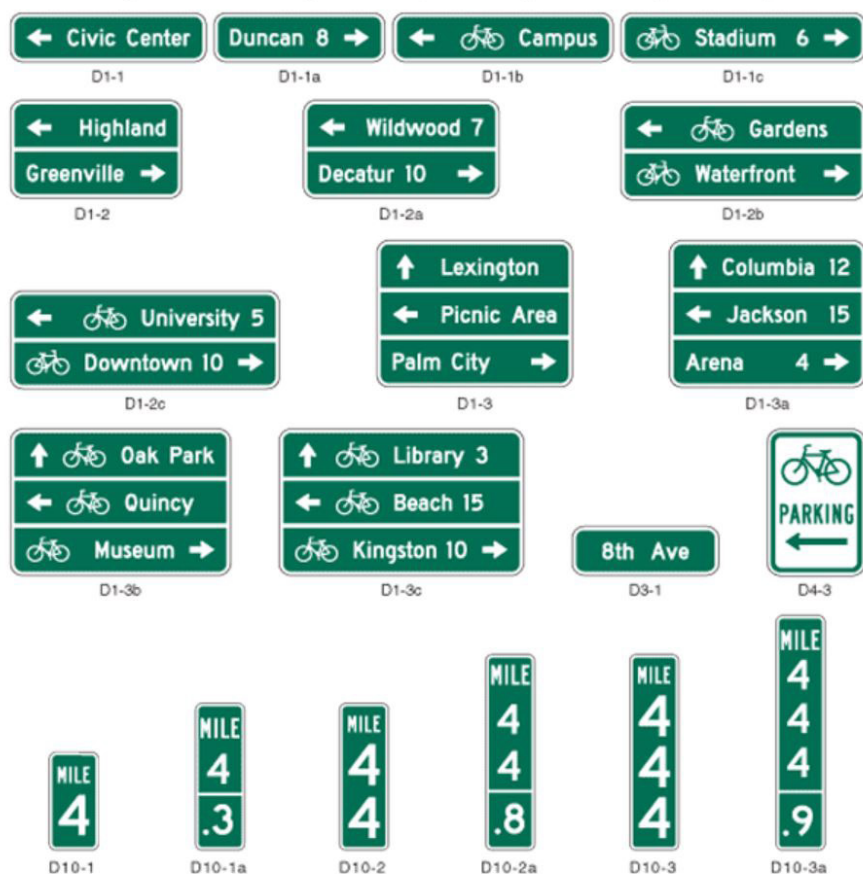


Figure 9B-4; https://mutcd.fhwa.dot.gov/htm/2009/part9/fig9b_04_1_longdesc.htm

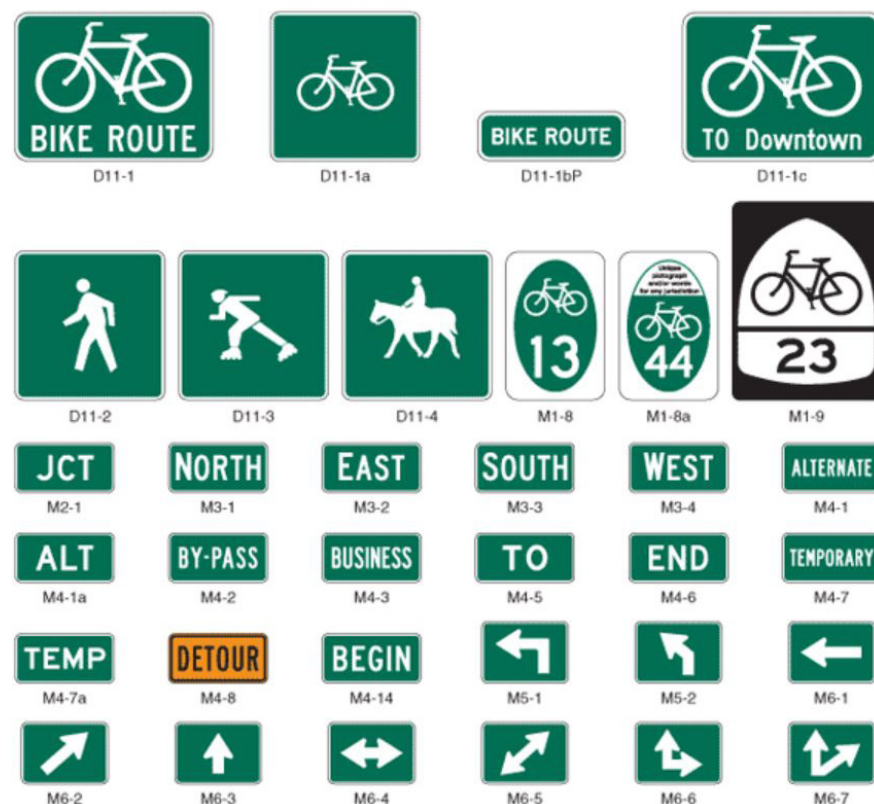


Figure 9B-4; https://mutcd.fhwa.dot.gov/htm/2009/part9/fig9b_04_2_longdesc.htm

Below is an example of how bike route wayfinding signage can be installed along a designated bike boulevard. As demonstrated below, at some points the east-west bike boulevard across the community (as well as other bike boulevard routes) include turns onto new roadways or paths. Directional pavement markings with sharrow indicating turning movements coupled with the above recommended turn and confirmation signs will guide cyclists through these decision points. Signage improvements can help guide cyclists who are less knowledgeable of the various routes in the community (such as the bike path alongside McKenzie Elementary School) to safe east/west and north/south routes.



Confirmation signs (D11-1 in MUTCD): signal to cyclists that they are on the correct street, path, or route to reach their destination. These signs should be placed every ¼ to ½ mile along trails and sidepaths. Along on-street facilities, NACTO recommends placing them every two- to three- blocks with two exceptions:

- Space further apart when a turn or decision sign is used
- Space closer together after a turn to verify cyclists are on the correct route. Pavement markings may be used in lieu of confirmation signs and may be more visible along streets with parked cars or other visual clutter.

Decision Signs (D1-3b in MUTCD): Delineate the junction between two bike routes and point in the direction of multiple destinations. These signs should be placed on the near-side of intersections and on a route to point to a nearby destination. The following priority destinations are recommended for Wilmette:

- Parks: Gillson Park, Centennial Park, Hibbard Park, Howard Park, Community Park, West Park, Malinckrodt Park
- Schools: Avoca School, Marie Murphy, Central School, Wilmette Junior High School, Highcrest School, Harper School, Regina Dominican, New Trier East, New Trier West, Loyola Academy
- Transit Stations: Linden CTA Station, Wilmette Metra Station
- Commercial Areas: Downtown Wilmette, Linden Square, Ridge Road District, Edens Plaza, Plaza del Lago
- Trails and Bikeways: Green Bay Trail, North Branch Trail, Sheridan Road, Community Park Path, Skokie Valley Trail (future)
- Neighboring Municipalities: Glenview, Evanston, Northfield, Winnetka

Turn signs (D11-1C in MUTCD): show cyclists where a bike route turns from a one street or trail to the next. These signs should be labeled with destination names and directional arrows. They can also be aided by pavement markings. These signs should be placed on the near-side of intersections ahead of where the bike route turns. In Wilmette, these signs are also recommended at offset intersections, particularly along the Washington Avenue/Community Bike Park/ Highland Avenue/Central Route and along the Green Bay Trail.

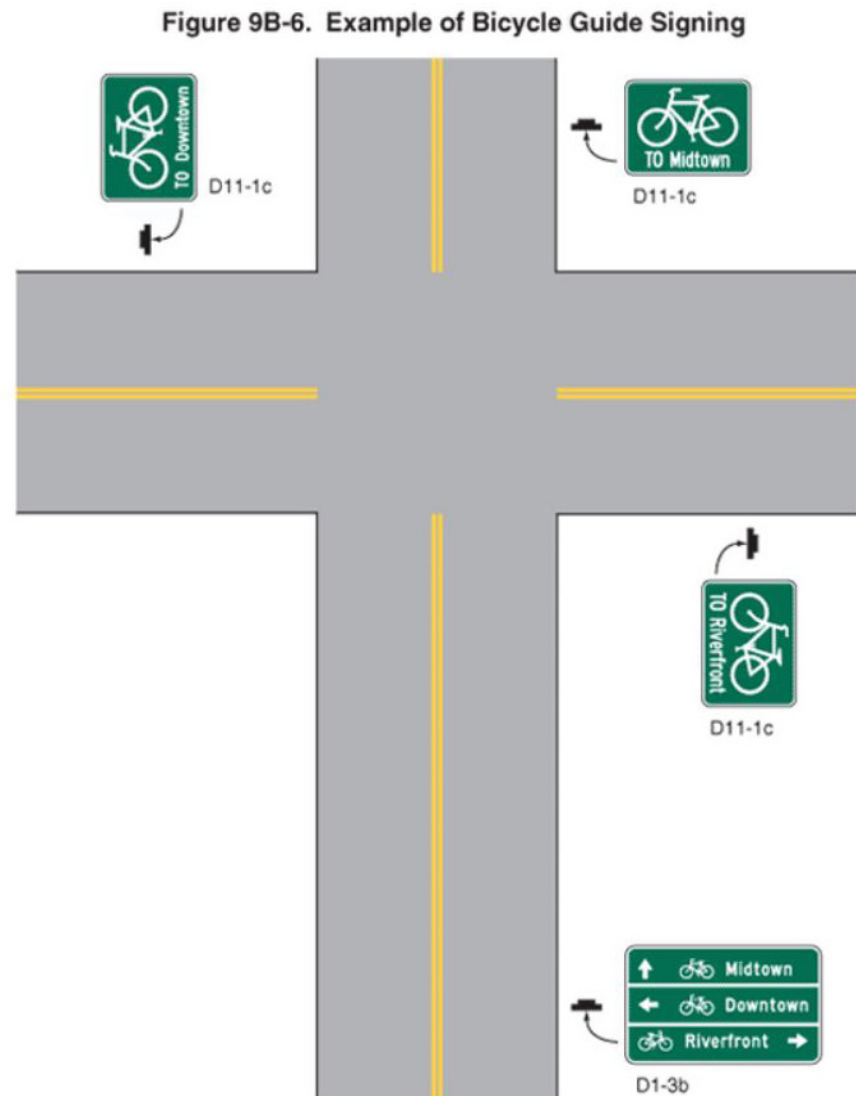


Figure 9B-6; https://mutcd.fhwa.dot.gov/htm/2009/part9/fig9b_06_longdesc.htm

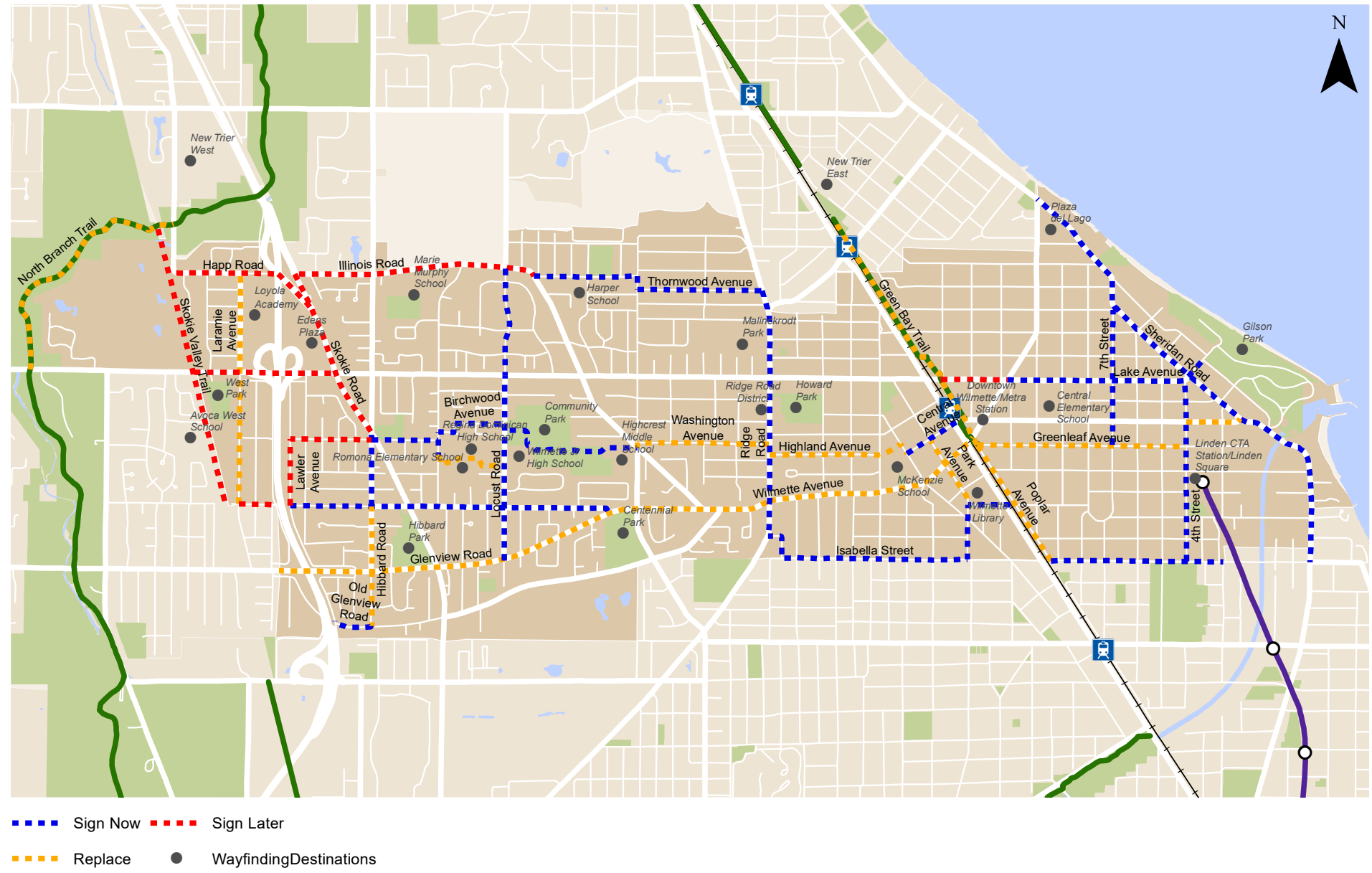


Prairie bike boulevard turning onto McKenzie Elementary School bike path



Prairie Ave to Central Ave bike boulevard transition

RECOMMENDED WAYFINDING SIGNAGE

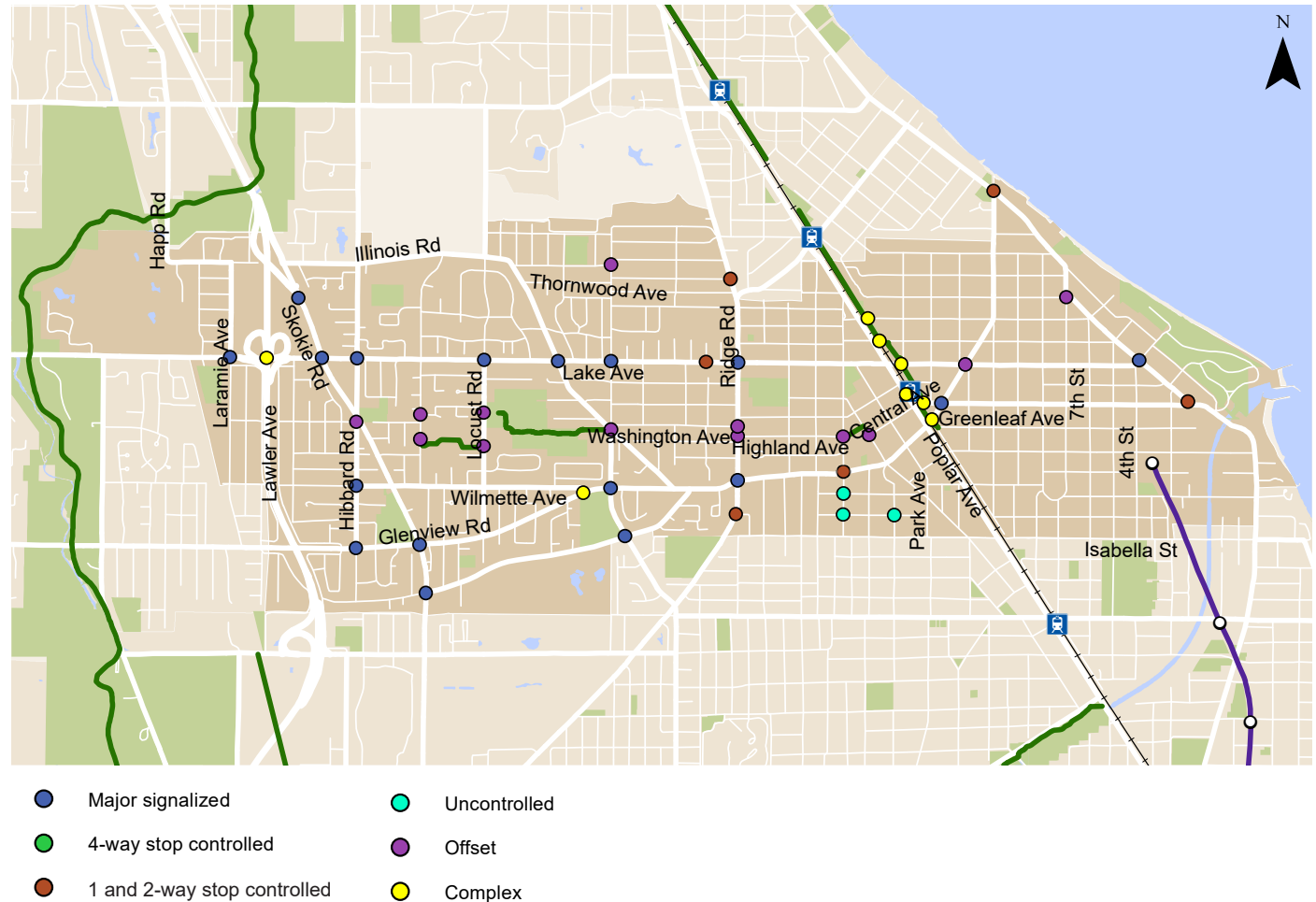


INTERSECTION IMPROVEMENTS

INTERSECTION TYPOLOGIES

This section details which intersections should be considered for improvements based on community engagement findings and existing conditions. The intersections are listed in tables on the following pages. Most improvement recommendations will need further study and may require approval from the Illinois Commerce Commission, Illinois Department of Transportation, or Cook County. The adjacent map shows in more detail the locations for each type of intersection that are recommended for improvements.

Listed in the table and sections below are summaries of each typology, including a list of recommended potential tools and traffic calming devices that can be used to improve safety, user comfort, and visibility at each type of intersection. For all of the recommendations, many tools will require additional traffic studies prior to implementation. All intersection typologies that are located along school crossing routes should include school crossing signage.



OVERVIEW OF INTERSECTION TYPOLOGIES

Typology	Description	Application	Example Intersections	Potential Tools	Considerations
Major Signalized	Intersection of two streets of any classification, each controlled by a traffic signal	Along school walking routes, bike routes, and at intersections connecting to key destinations	Laramie Avenue and Lake Avenue, Ridge Road and Wilmette Avenue	Curb ramps, detectable warning pads, crosswalks, bike crosswalks for off-street bikeways, intersection markings for streets with bike lanes, countdown signals, in pavement loop detection for bicycles, tightened corner radii, median refuge islands, pedestrian crossing signage	Some tools will require a traffic study. Crossings along school routes should include school crossing signage. Signal upgrades may not be feasible under existing conditions.
4-Way Stop Controlled	Intersection of two streets of any classification, each controlled by a stop sign	Along school walking routes, bike routes, and at intersections connecting to key destinations	Lake and Cambridge	Curb ramps, detectable warning pads, crosswalks, bike crosswalks for off-street bikeways, intersection markings for streets with bike lanes, median refuge islands, pedestrian crossing signs, bump-outs	Some tools will require a traffic study. Crossings along school routes should include school crossing signage.
1 and 2-Way Stop Controlled	Intersection of a major and minor street where the major street has no traffic control	Along school walking routes, bike routes, and at intersections connecting to key destinations	Wilmette Avenue and 15th Street,	Curb ramps, detectable warning pads, crosswalks, stop bars, pedestrian crossing signage, intersection markings for streets with bike lanes, bike crosswalks for off-street bikeways, rectangular rapid flashing beacons, bump-outs, daylighting intersections	Some tools will require a traffic study. Crossings along school routes should include school crossing signage.
Uncontrolled	No legs of intersection have traffic controls	Along routes where community requested improvements	Gregory Avenue and 15th Street, Maple Avenue and 15th Street	Curb ramps, detectable warning pads, crosswalks, pedestrian crossing signage, bump-outs, mini roundabouts, stop signs (pending traffic study)	Some tools will require a traffic study. Crossings along school routes should include school crossing signage.
Offset	Intersection where two legs of the same street or trail do not meet	Along school walking routes, bike routes, and at intersections connecting to key destinations	Community Park Path and Washington Avenue	Curb ramps, detectable warning pads, crosswalks, pedestrian crossing signage, intersection markings for streets with bike lanes, bike crosswalks for off-street bikeways, rectangular rapid flashing beacons, bump-outs, daylighting intersection	Treatments may vary based on configuration of intersection. Some tools will require a traffic study. Crossings along school routes should include school crossing signage.
Complex	Intersection with 5 or more legs, or multiple crossings within a small area in downtown Wilmette	Along trails, at railroad tracks, mid-block crossings, and at major signalized crossings in downtown Wilmette	Green Bay Trail and Central Avenue, Green Bay Road and the Metra Station stairs	Tools Vary, diagrams available for most applications.	Many recommendations are pending ICC approval and traffic studies.

CURRENT INTERSECTION TYPOLOGY LIST

Intersection Name	Major Signalized	4-Way Stop	1 and 2-Way Stop	Uncontrolled	Offset	Complex
Birchwood/Romona/Washington					X	
Community Park Path/Birchwood/Locust					X	
Green Bay Trail/Forest						X
Green Bay Trail/Elmwood						X
Green Bay Trail/Central						X
Green Bay Trail/Lake						X
Green Bay Trail/Poplar/Wilmette						X
Green Bay Trail/Oakwood Avenue						X
Hibbard/Washington/Skokie					X	
Highland/McKenzie School					X	
Highland/Ridge/Washington					X	
Lake/11th/Wilmette					X	
Lake/4th/Sheridan	X					
Lake/7th			X			
Lake/Cambridge			X			
Lake/Edens On/Off Ramps						X
Lake/Hibbard	X					
Lake/Laramie	X					
Lake/Locust	X					
Lake/Ridge	X					
Lake/Skokie	X					
McKenzie/Central/Prairie					X	
Regina Dominican and Romona Path/Locust					X	
Regina Dominican and Romona Path/Romona/Washington					X	
Sheridan/Central			X			
Sheridan/Greenwood/7th					X	
Washington/Hunter/Illinois/Community Park Path					X	
Washington/Ridge/Highland					X	
Wilmette/Hibbard		X				

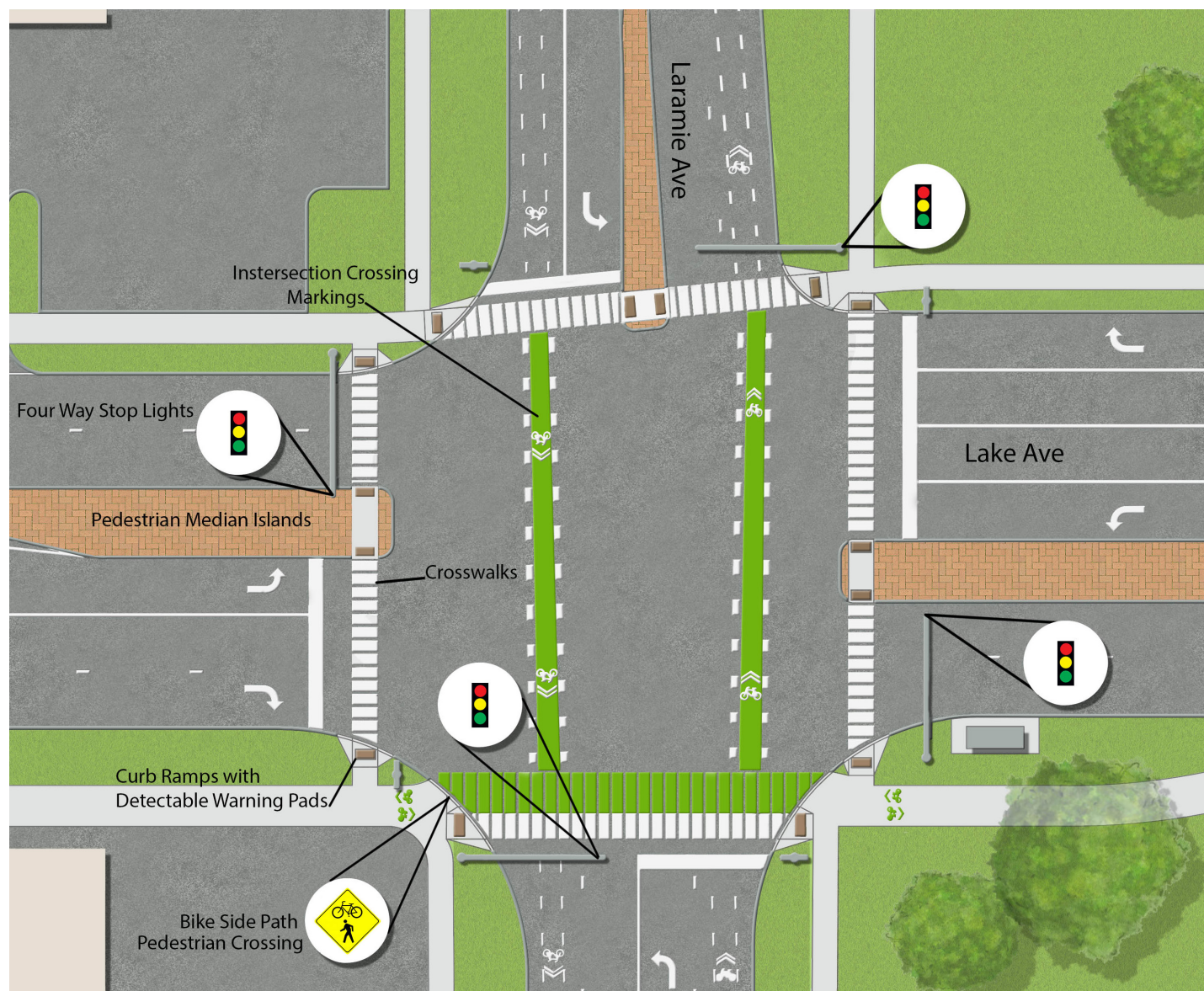
CURRENT INTERSECTION TYPOLOGY LIST CONT.

Intersection Name	Major Signalized	4-Way Stop	1 and 2-Way Stop	Uncontrolled	Offset	Complex
Wilmette/15th			x			
Wilmette/Skokie	x					
Gregory/15th				x		
Gregory/13th				x		
Gregory/Maple				x		
10th/Sheridan			x			
Wilmette/Glenview						x
Wilmette/Hunter	x					
Wilmette/Ridge	x					
Wilmette/Sterling			x			
Illinois/Thornwood					x	
Ridge/Thornwood			x			
Lake/Hunter	x					
Lake/Illinois	x					
Glenview/Skokie	x					
Old Glenview/Skokie	x					
Old Glenview/Crawford	x					
Wilmette/Central	x					
Skokie/Edens	x					
Glenview/Hibbard	x					
Green Bay Road/Metra Station						x

INTERSECTION TYPOLOGIES DESCRIPTIONS

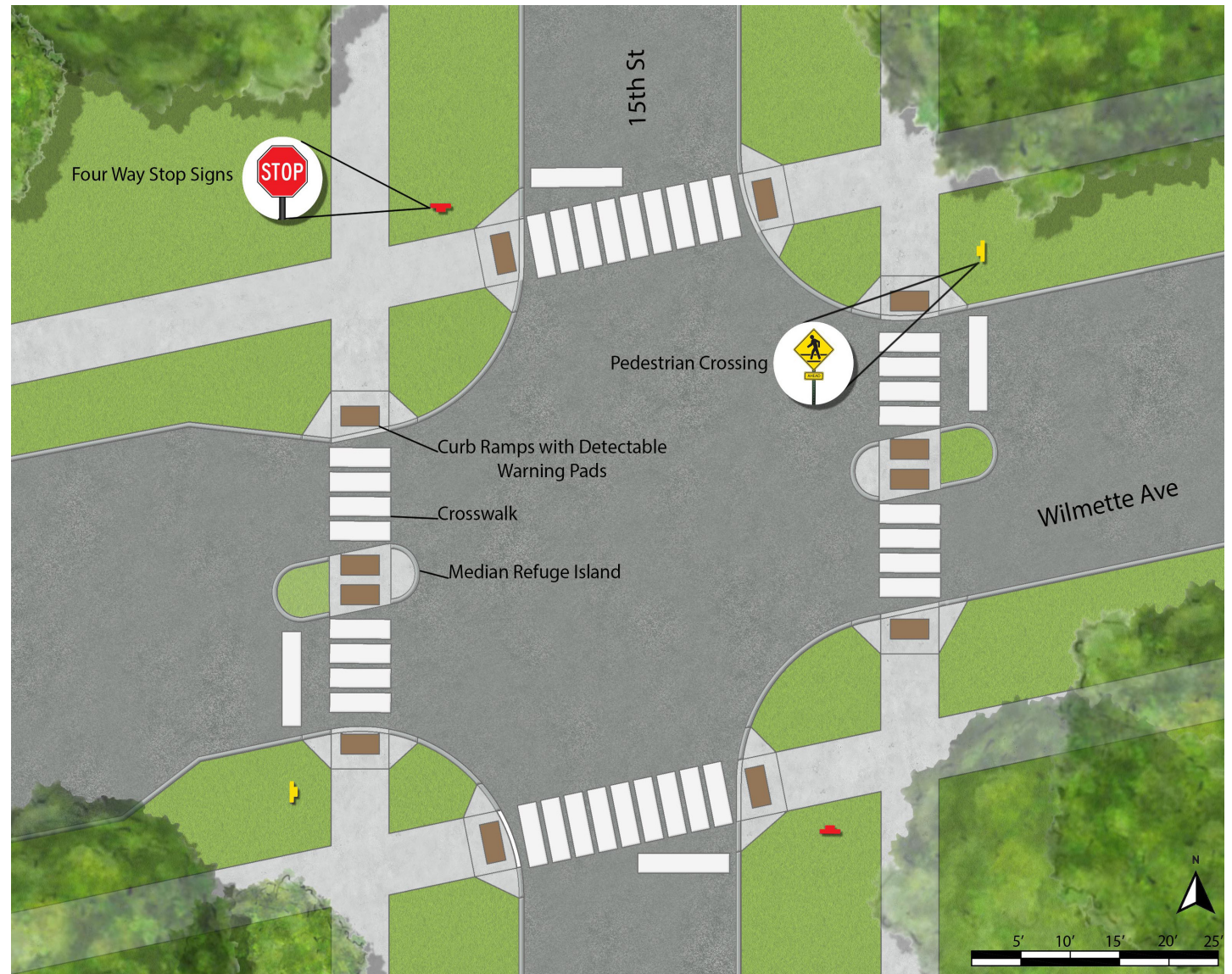
Major Signalized

Major signalized intersections are classified by having two streets of any classification (arterial, collector, or local road) where each are controlled by a traffic signal. These intersection types are often located along school walking routes, bike routes, and at roadways connecting to key community destinations. Potential tools that should be investigated as devices for improving roadway conditions at these locations include curb ramps, detectable warning pads, crosswalks, bike crosswalks for off-street bikeways, intersection markings for streets with bike lanes, countdown signals, in-pavement loop detection for bicycles, tightened corner radii, median refuge islands, and pedestrian crossing signage. Existing conditions should be considered before implementing any recommendations as some signal upgrades may not be feasible with current conditions.



1 and 2-Way Stop-Controlled Intersections

1 and 2-way stop controlled intersections occur at the intersection of a major or minor street where the major street has no traffic control. These intersection types may be located along school walking routes, bike routes, and at intersections connecting to local key destinations. Curb ramps, detectable warning pads, crosswalks, bike crosswalks for off-street bikeways, intersection markings for streets with bike lanes, median refuge islands, pedestrian crossing signs, intersection daylighting, and bump-outs are all potential tools to consider at these intersections.



Unsignalized Intersections

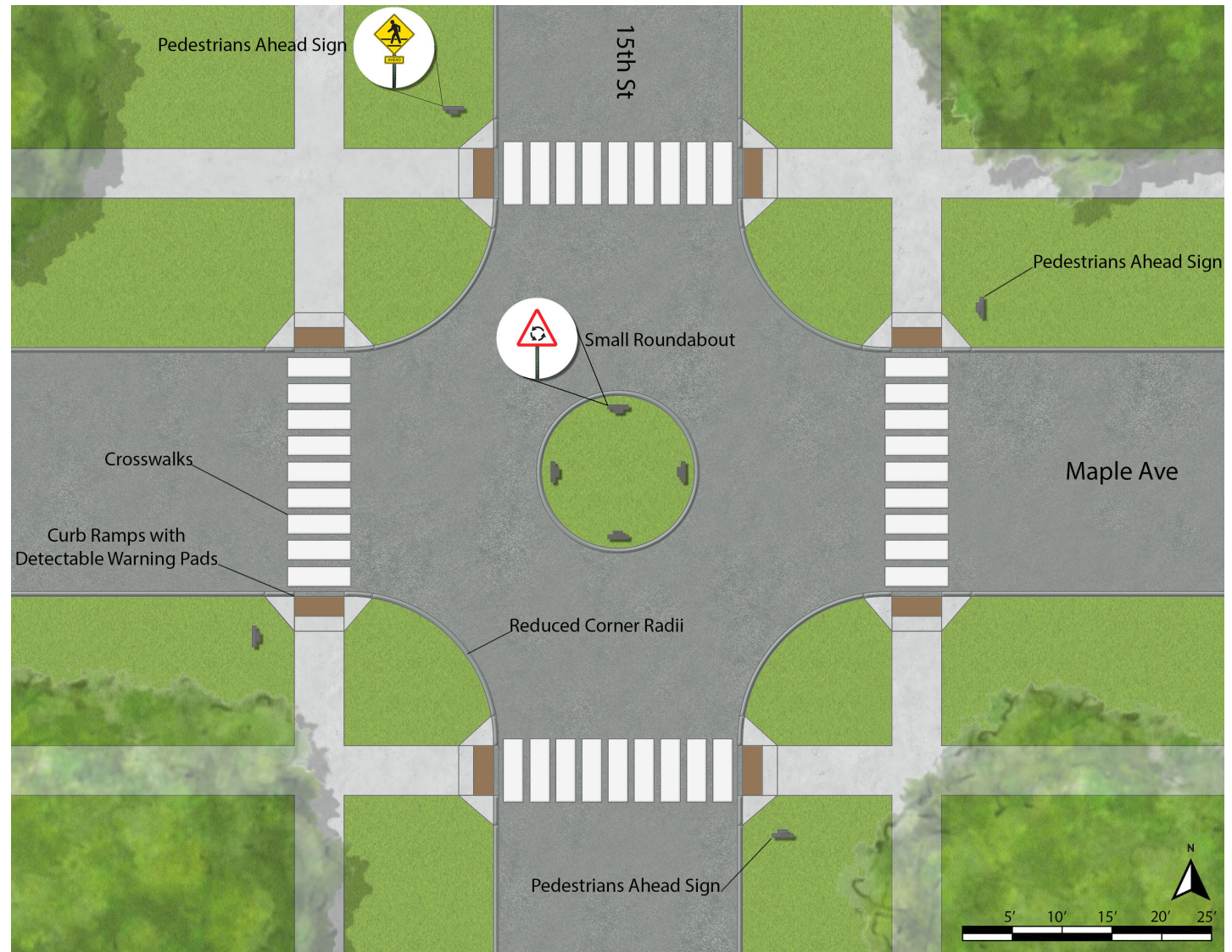
Unsignalized intersections at key destinations are intersections of a major and minor streets where there is no traffic control device. These intersections may be located along school walking routes and bike routes. Recommended tools for potential use at these locations include curb ramps, detectable warning pads, crosswalks, stop bars, pedestrian crossing signage, intersection markings for streets with bike lanes, bike crosswalks for off-streets bikeways, rectangular rapid flashing beacons, bump-outs, and daylighting intersections for increased visibility.



"RRFB" or Rectangular Rapid Flashing Beacons, credit to Michael Frederick

Uncontrolled intersections

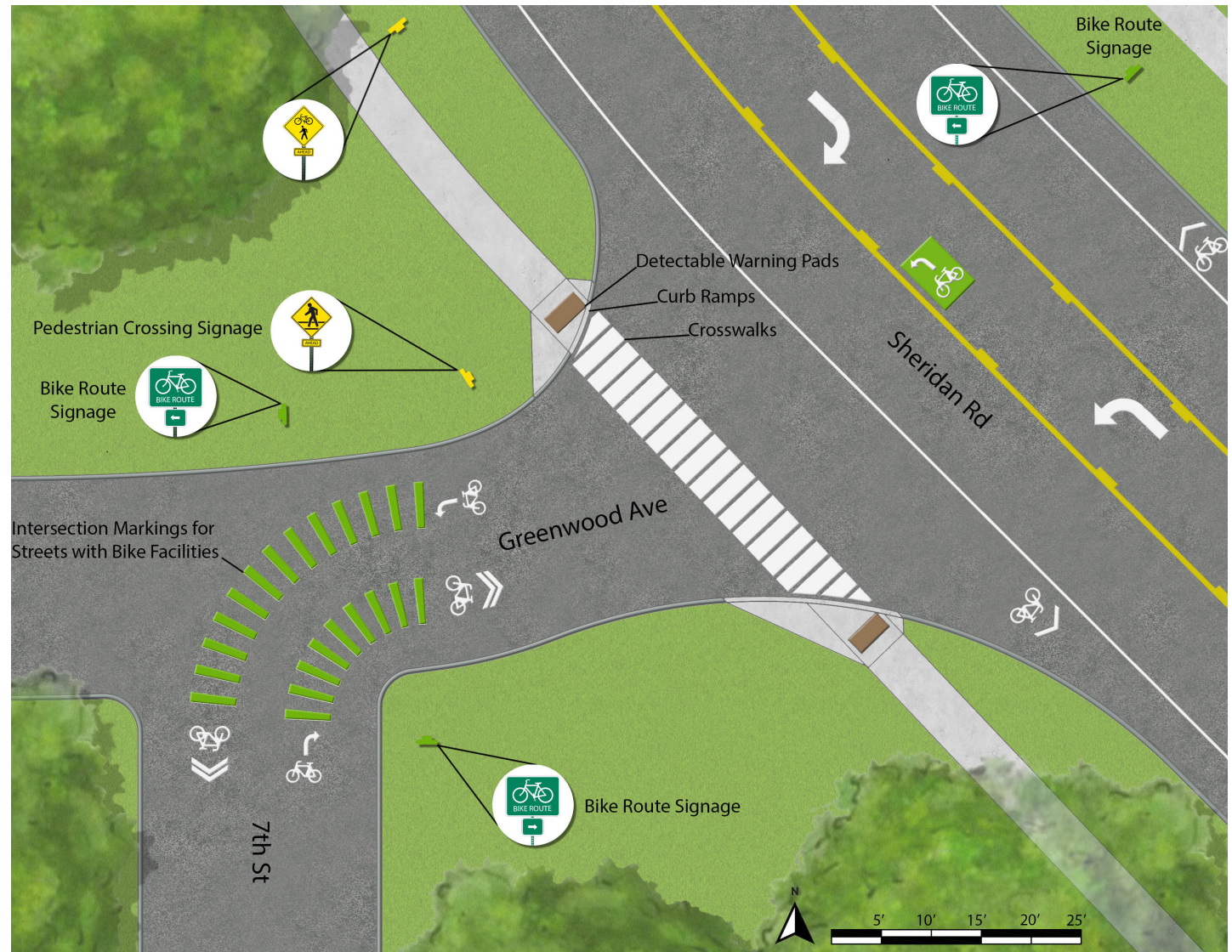
Uncontrolled intersections are those with no traffic control devices on any legs of the intersection. These intersection types are located along routes where community members requested improvements. Potential tools for these intersections include curb ramps, detectable warning pads, crosswalks, pedestrian crossing signage, bump-outs, mini roundabouts, and stop signs (pending further traffic study).



"Mini Traffic Circle" - Credit to CDOT

Offset Intersections

Offset intersections are intersections where two legs of the same street or trail do not meet. These types of intersections occur along school walking routes, bike routes, and at intersections connecting to key destinations. Potential tools recommended for use at these types of intersections include curb ramps, detectable warning pads, crosswalks, pedestrian crossing signage, intersection markings for streets with bike lanes, bike crosswalks for off-street bikeways, rectangular rapid flashing beacons, bump-outs, and daylighting intersections for increased visibility. The final treatments may vary based on the particular configuration of each intersection.



Complex Intersections

Complex intersections are those with five or more legs, or multiple crossings occurring within a small area. These types of intersections are located along trails, at railroad tracks, and at major signalized crossings and other special configurations. The potential tools recommended at these intersections vary, and are shown in the diagrams below. Many of the recommendations shown will require Illinois Commerce Commission approval and additional traffic studies before implementation.



Green Bay and Wilmette

OVERVIEW OF INTERSECTION TOOLS

Tool	Major Signalized	4-Way Stop Controlled	1 and 2-Way Stop Controlled	Uncontrolled	Offset
Curb Ramps, Detectable Warning Pads, Crosswalks	x	x	x	x	x
Bicycle/Pedestrian Crossing Signs	x	x	x	x	x
Bike Crosswalks (For Streets with Trails/Sidepaths)	x	x	x		x
Intersection Markings (For Streets with Bike Lanes)	x	x	x		x
Countdown Signals	x				
In Pavement Loop Detectors	x				
Reduced Corner Radii	x				
Median Refuge Islands	x	x			
Bump-Outs		x	x	x	x
Rectangular Rapid Flashing Beacons			x		x
Daylighting Intersections			x		x
Mini Roundabouts				x	

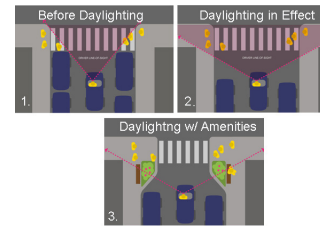
INTERSECTION TOOL DESCRIPTIONS



Curb ramps enable people in wheel chairs to cross streets and detectable warning pads direct people with visual impairments through an intersection at a crosswalk.



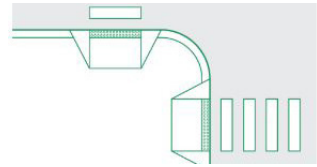
Demand-actuated signals should be designed to detect a normal bike with metal rims, through loop detectors. Pavement markings should show bicyclists where to position themselves to actuate in-pavement detectors.



Daylighting intersections increases pedestrian visibility by prohibiting parking within 15- to 20-feet of the intersection. The policy can be accompanied by no parking signage and may be enhanced with bump-outs.



Pedestrian and/or bicycle crossing signs warn drivers that a school, pedestrian or bicycle crossing is ahead. "Must stop for pedestrians in crosswalk" signage can also be used.



Corner radius relates to the length of a crosswalk and the speed of turning traffic. Reducing curb radii create a shorter crossing distance for pedestrians and encourage drivers to slow down when making right turns.



Bump-outs provide shorter crossing distances for pedestrians and improve sightlines for drivers and pedestrians. They slow the speed of turning traffic. They are most appropriate where local roads intersect arterials and collectors.



Bicycle crosswalks are placed adjacent to pedestrian crosswalks where trails, sidepaths and protected bike lanes intersect streets. They can be highlighted in green to increase visibility.



Median refuge islands buffer and protect pedestrians and cyclists crossing wide or busy streets, enabling them to cross in two stages.



Countdown signals show the amount of time that remains before a signal changes from walk to don't walk. They reduce the number of pedestrians who start crossing when there is not enough time to complete their crossing.



Intersection markings indicate the proper lane position for a cyclist through an intersection. They are useful at large intersection or those with lane position shifts. They can also be used when a bikeway turns from one street to another.



Rectangular rapid flash beacons (RRFBs) are highly visible, using flashing yellow LED lights to supplement standard pedestrian crossing warning signs at mid-block and other unsignalized crossing locations.



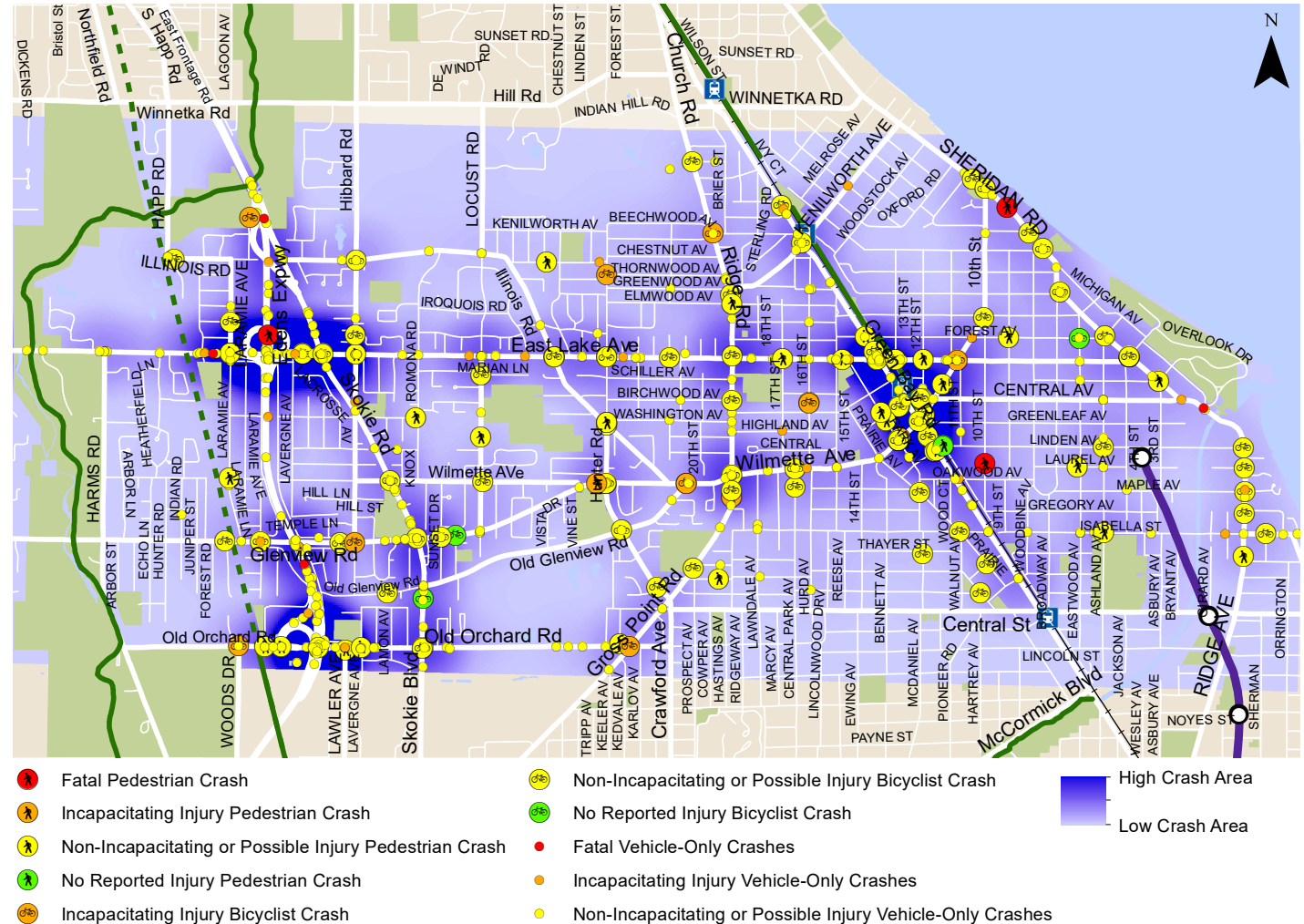
Mini roundabouts direct users through intersections in a predictable manner. They reduce the severity of crashes and calm traffic. They are most effective when grouped in a series of three. They can have mountable curbs to allow for larger vehicles.

KEY INTERSECTIONS

From reviewing crash data as well as community engagement, some challenging intersections rose to the top as concerns for pedestrians and bicyclists. This section provides an overview of design solutions and recommended treatments that will promote safety and mitigate common challenges for a variety of key intersections along corridors with major conflicts between motorists and bicycle or pedestrian traffic. Many of these intersections will benefit from traffic calming devices, ADA-accessible ramps, crosswalk upgrades, and visibility improvements.

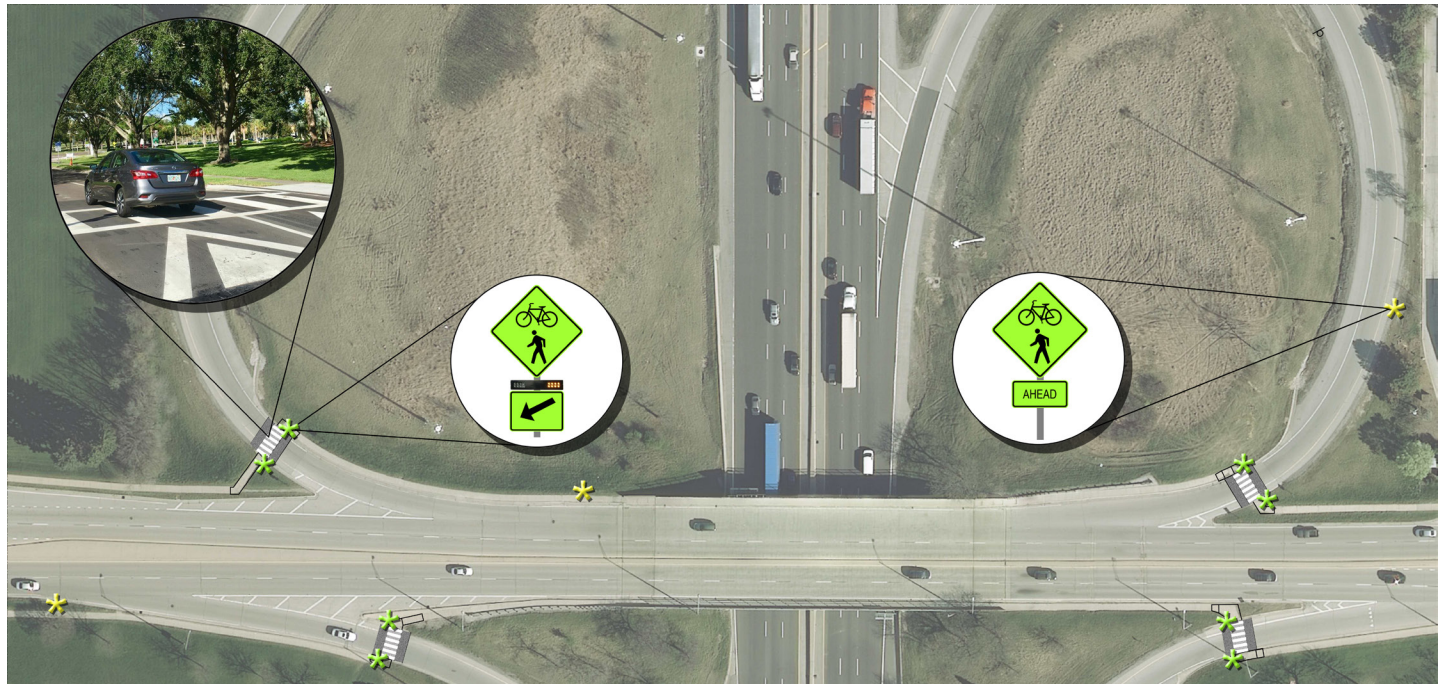
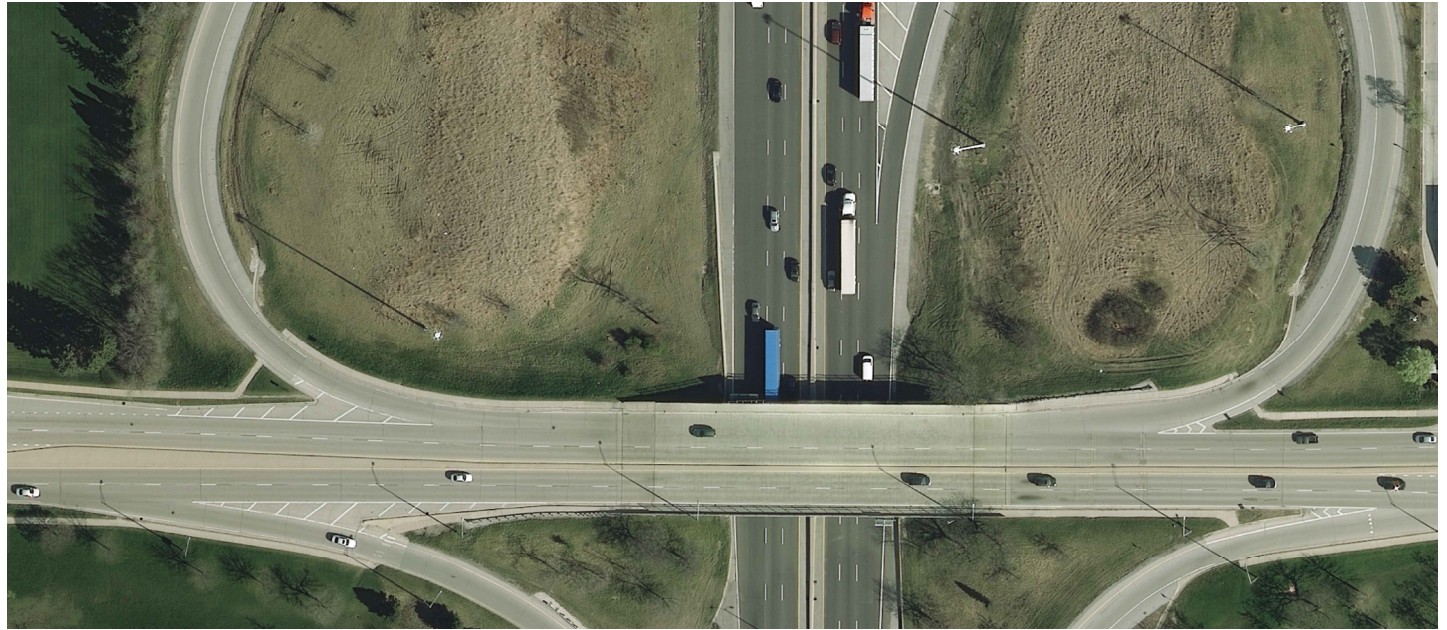
For a closer inspection of the intersection types and recommended improvements near the Wilmette Metra station and the Green Bay Trail, see the section in this chapter on Intersection Typologies.

2012-2016 IL DEPT. OF TRANSPORTATION CRASH DATA WILMETTE



1. EDENS EXPRESSWAY CROSSWALK RAMPS

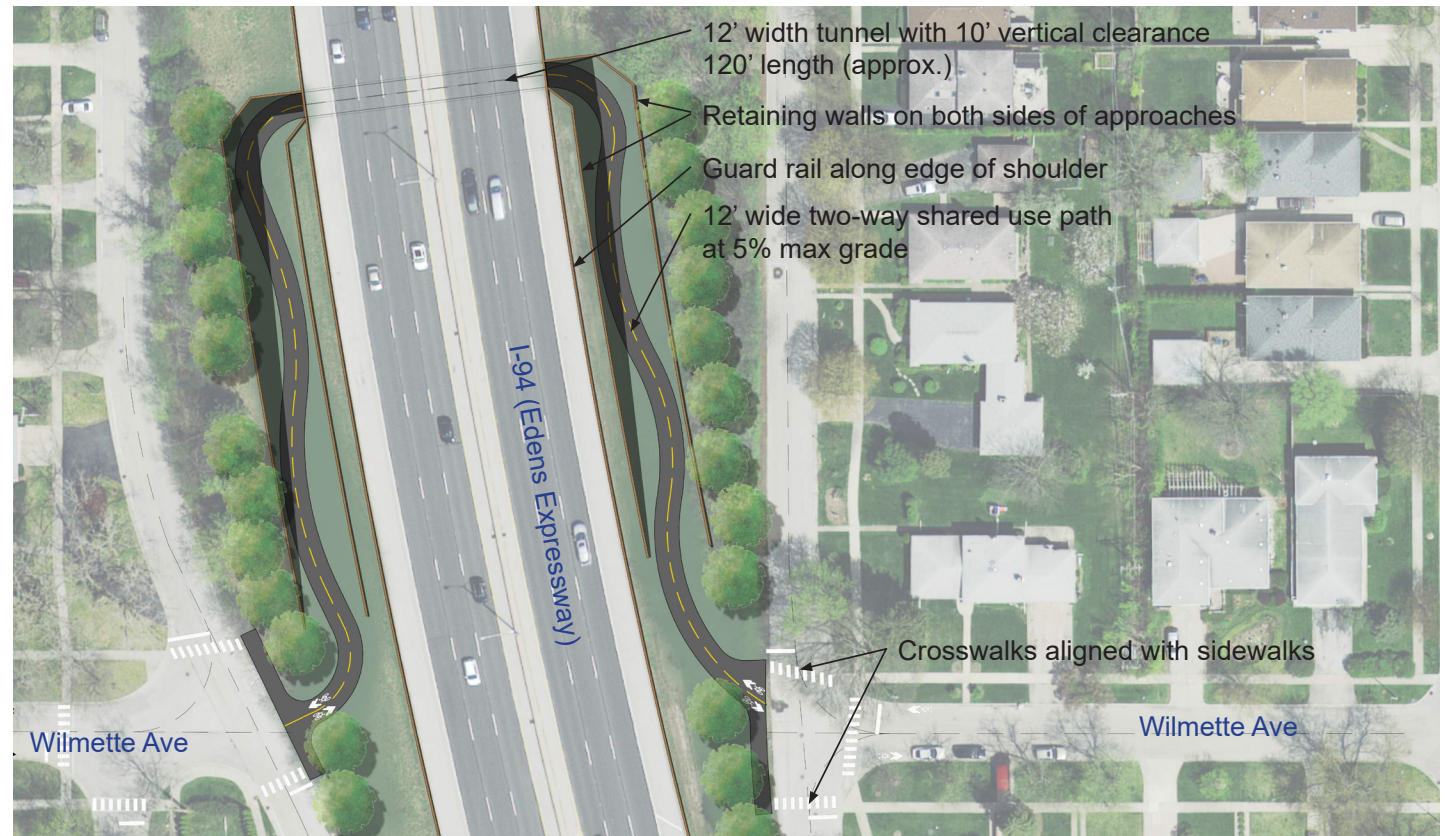
The Edens Expressway crossing at Lake Avenue is one of the most heavily mentioned dangerous crossings for bicyclists and pedestrians, as observed during public engagement and in the crash data. Not surprisingly, crash data show that it is one of the highest crash-location hot spots in the village. Enhanced crosswalks at the Edens Expressway ramps at Lake Avenue will provide safer access for bicycles and pedestrian to destinations at the Edens Plaza, nearby schools, and parks. The treatments will include raised table crosswalks, rectangular rapid flashing beacons, and advanced pedestrian and bicycle warning signage (pictured). These treatments will alert drivers to the presence of those on foot and bike as they are entering and exiting on the Edens Expressway ramps.



2. EDENS EXPRESSWAY PEDESTRIAN OVERPASS/ UNDERPASS

A key development to improve walking and bicycling access in Wilmette is creating a pedestrian crossing at the Edens Expressway south of Lake Avenue.

Pedestrian and bicycle access across the Edens Expressway is difficult. Current crossings exist north at Lake Avenue and south at Glenview Road, but none service the middle of the Village. A Pedestrian and bicyclist crossing at Wilmette Avenue, from Laramie Avenue to Lawler Avenue, would connect residents to nearby Avoca West Elementary School and the future Skokie Valley Trail, currently in Phase 2 design. A pedestrian bridge or tunnel at this location would create a safe, comfortable, low-stress option for residents to access destinations across east and west Wilmette.



Wilmette Ave Bike/Pedestrian
Underpass Concept Plan



Two options show a pedestrian tunnel or bridge to connect Wilmette Avenue across the Edens Expressway at Wilmette Ave.



3. WILMETTE AVENUE AND GLENVIEW ROAD TRANSITION

Closing the westbound right-turn slip lane for westbound traffic continuing on Wilmette Avenue, west of Hunter Road, creates an easy east-west route for safe and comfortable walking and biking, and indicates to drivers that they are moving into a neighborhood environment.

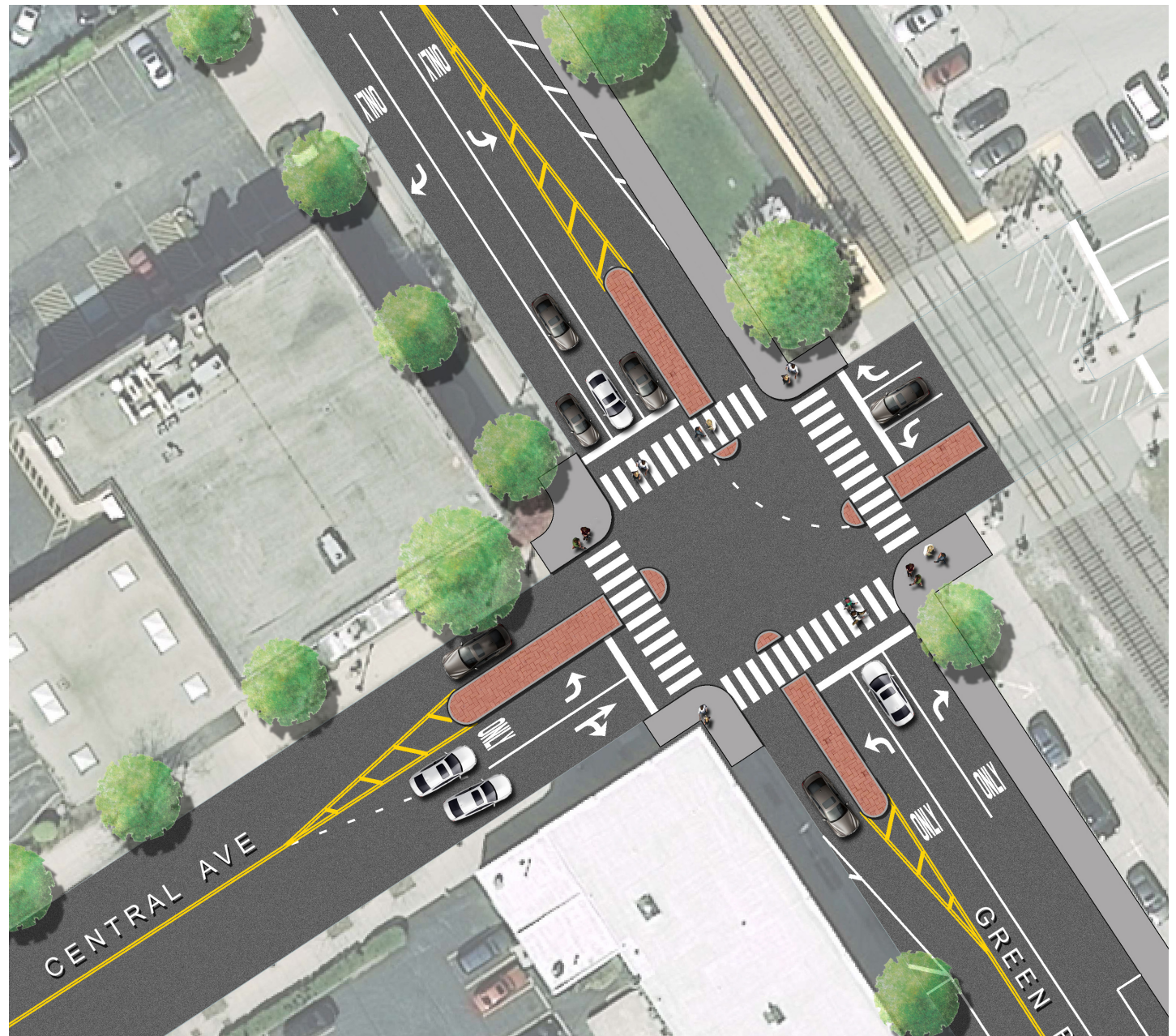
Transitioning between Wilmette Avenue, Hunter Road and Glenview Road is currently difficult and dangerous to navigate for those cycling, and is can also be confusing to drivers. If the recommended bicycle facilities on Glenview Road and Wilmette Avenue are installed (mentioned in the Network Recommendations chapter), improving this transition will be important. The following conceptual design may be considered a solution, pending further traffic and engineering study. The placement of pavement markings, bike and pedestrian warning signage, as well as yield signage should also be considered with this design.



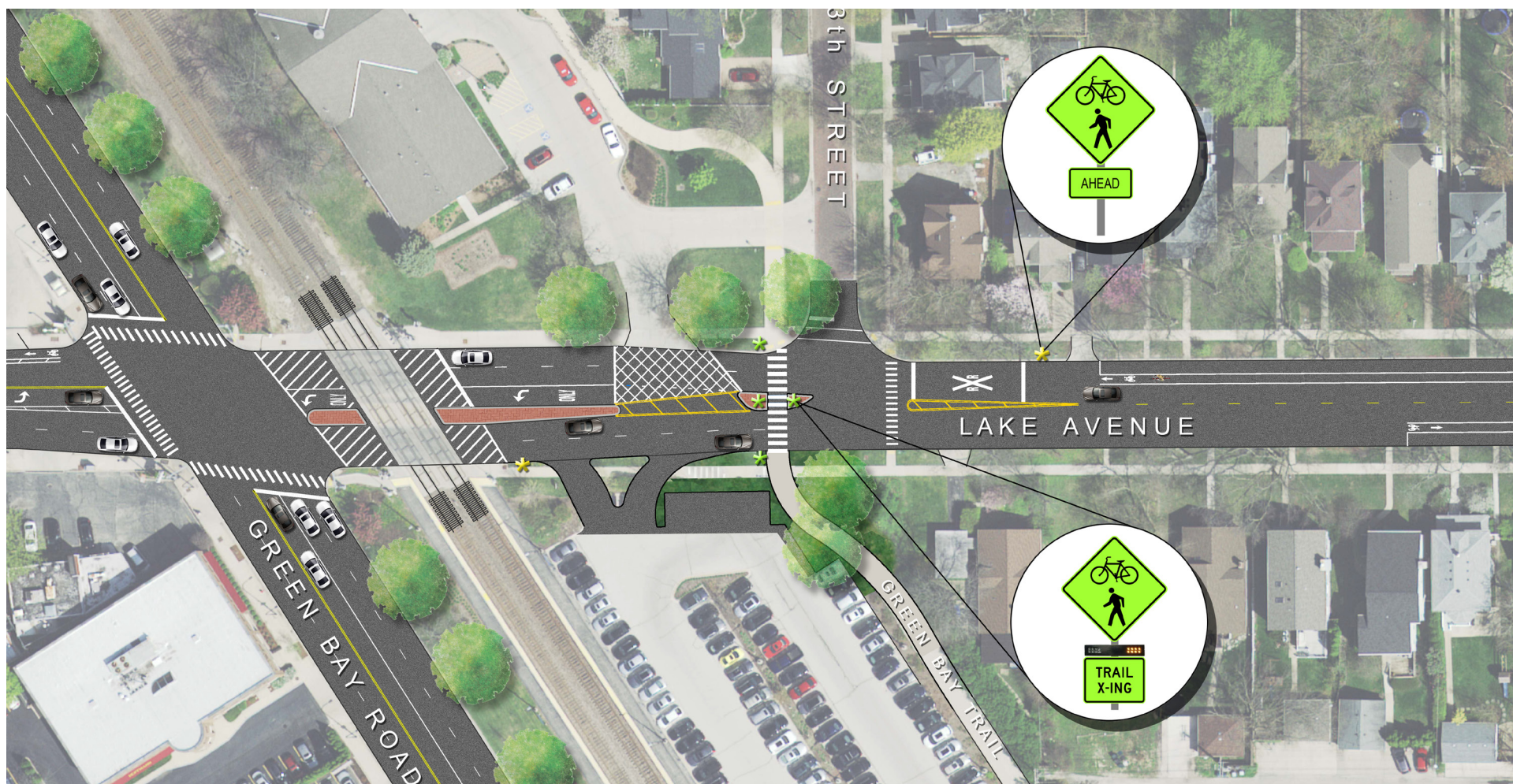
4. INTERSECTIONS NEAR THE METRA STATION AND GREEN BAY TRAIL

Several intersections near the Metra station and the Green Bay Trail are recommended for pedestrian improvements, including high-visibility crosswalk treatments, pedestrian refuge islands, separate turn lanes, and other design elements, such as green bike lane striping to help streamline bicycle traffic through these locations with less confusion and less conflict. These intersections include intersections along Green Bay Road and at trail crossing locations.

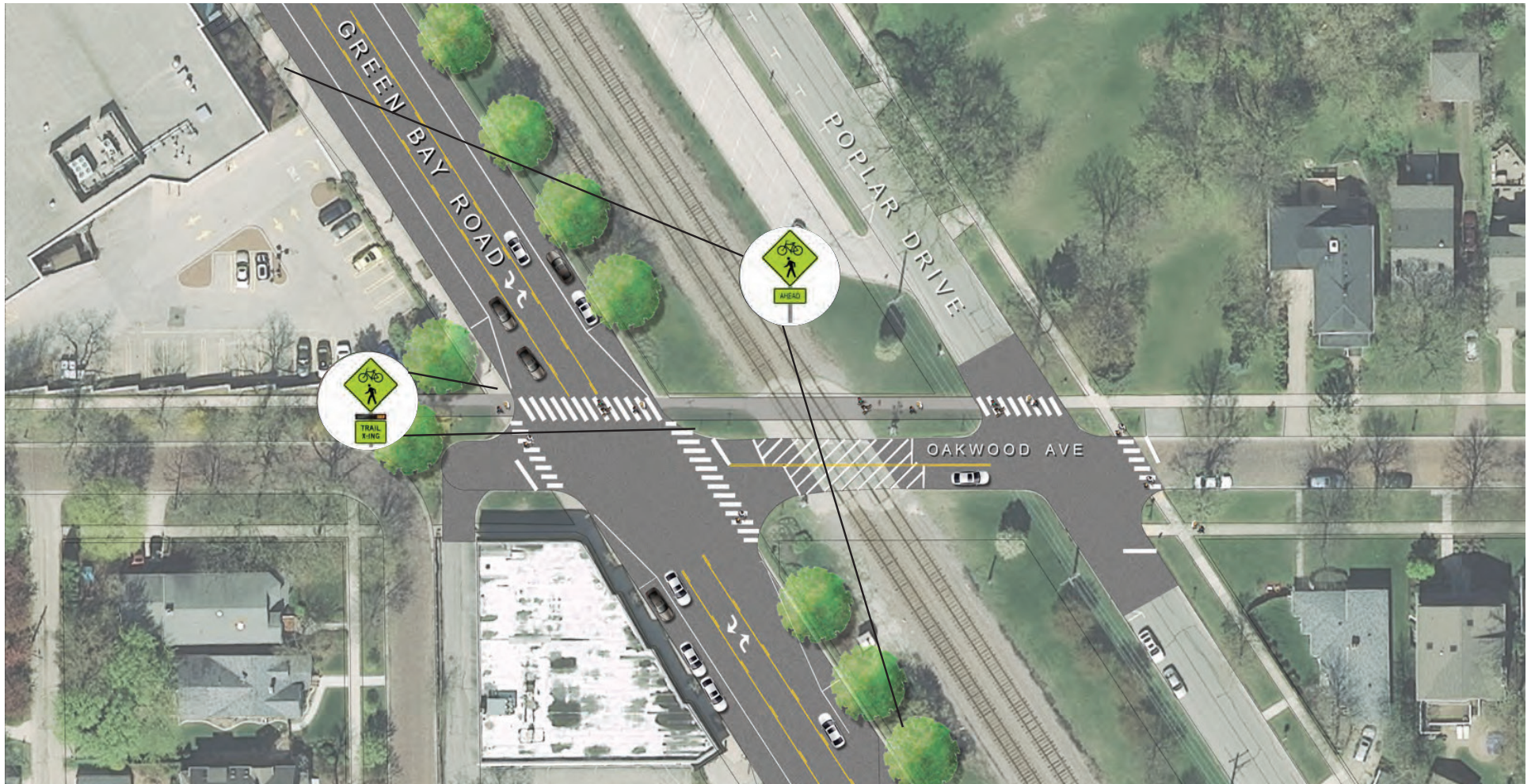
Details about the recommended improvements and the decision-making process for these recommendations can be found in the complex intersection section in this chapter on Intersection Typologies.



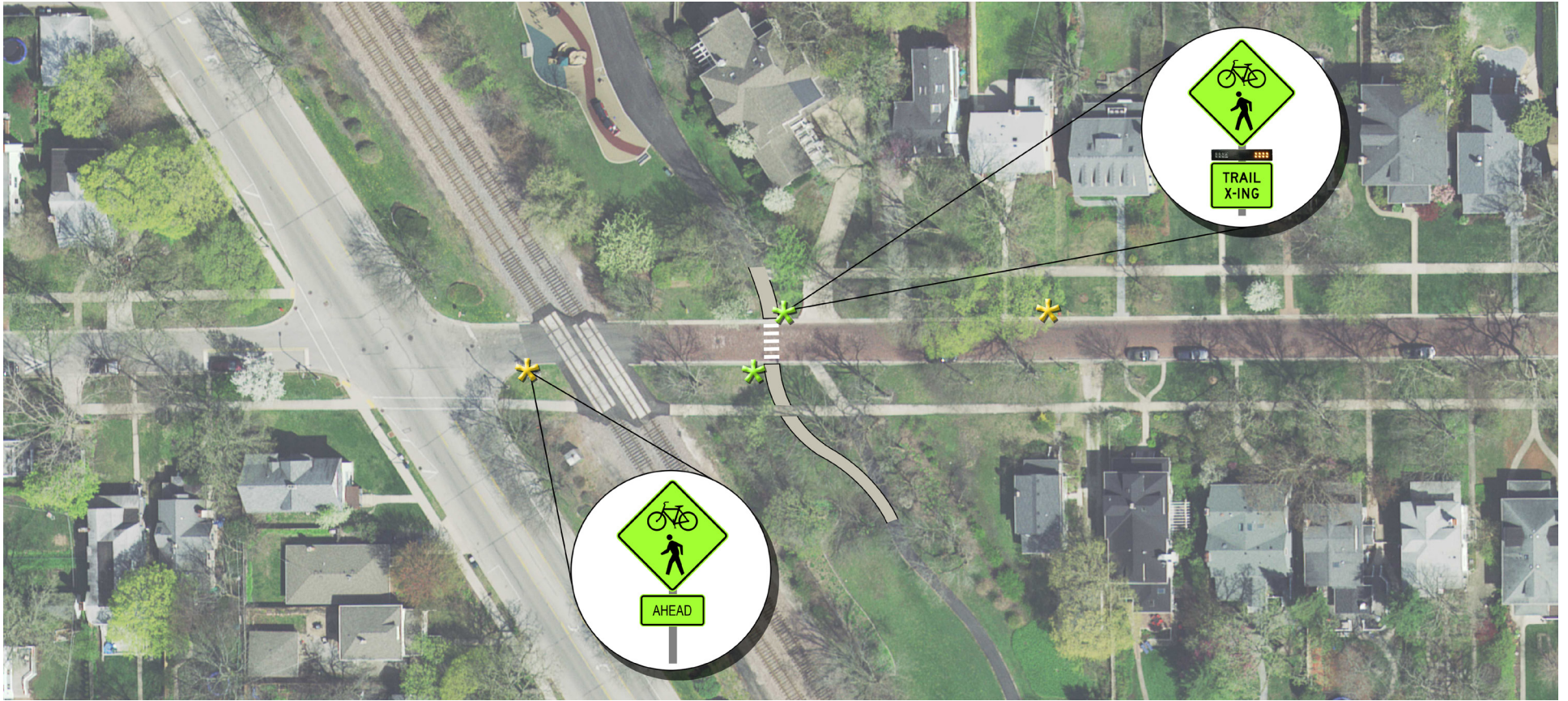
Green Bay and Central



Green Bay and Lake



Green Bay and Oakwood



Green Bay and Elmwood



Green Bay and Wilmette

BIKE PARKING

Bike parking is an important component of a bike network. It is critical that bicyclists have convenient and secure places to park once they arrive at key destinations. It is also crucial that the type and amount of bike parking is balanced with the need. Plentiful bike parking can encourage residents to choose bicycling over driving.

TOP WALKING AND BIKING DESTINATIONS

Top Destinations based on in-person engagement results from WMBATP outreach

*Bold responses were also mentioned as top destinations in 2015 bike survey.

1. **Gillson Beach**
2. **Wilmette Avenue and East Lake Avenue; Wilmette Avenue and Central Avenue (Village Center)**
3. **Green Bay Road at Wilmette Metra Station**
4. Jewel-Osco and Whole Foods shopping area near Oakwood Avenue and Wood Court
5. **Centennial Park**
6. Highcrest Middle School and Community Park
7. **Community Recreation Center**
8. **Edens Plaza**

Top Bike Parking destinations from 2015 bike survey

- | | |
|----------------------------|---------------------------------|
| 1. Gillson Beach | 10. CTA/Linden and 4th Street |
| 2. Village Center | 11. Other Parks |
| 3. Plaza del Lago | 12. Langdon Beach |
| 4. Wilmette Public Library | 13. Community Recreation Center |
| 5. Outside Wilmette | 14. Ridge Road Business Center |
| 6. Friend's house | 15. Edens Plaza |
| 7. Centennial Park | 16. Workplace |
| 8. Schools | 17. Trails |
| 9. Metra | |



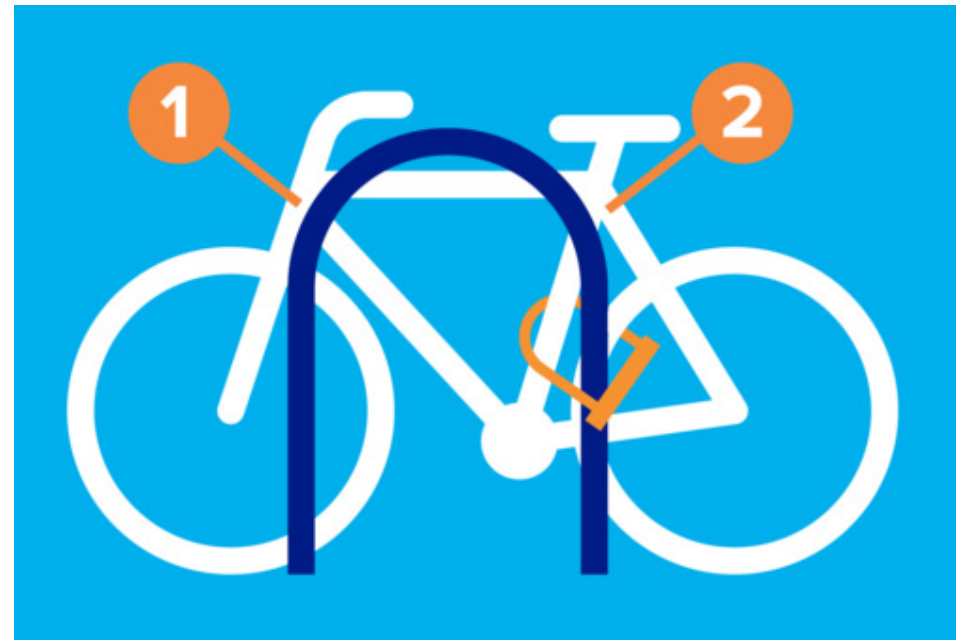
EFFECTIVE BIKE PARKING GUIDELINES AND TIPS

1. **Short-term parking locations:** 50' or less from a visible building entrance. In an area with lighting and foot traffic. Can be identified by sign D4-3 in the Manual on Uniform Traffic Control Devices.
2. **Long-term parking locations:** Should be easy to access with effective signage. Controlled access can include leased lockers or keycode/ attendant-monitored bike room or bike cage.
3. **Security:** Parking locations should be visible to the public. Tamper-proof mounting and sturdy racks increase security. Effective lighting is an additional safeguard.
4. **Parking Capacity:** APBP Bicycle Parking Guidelines offers recommendations.

Durability, ease-of-use, and cost-effectiveness are the most important aspects for effective bike parking.

LOCATION CRITERIA AND INSTALLATION

1. **Installation surface:** A concrete pad is most ideal. Other surfaces can accommodate some in-ground mounting or freestanding racks (mounted to rails). Asphalt is often too soft to hold proper anchors designed for concrete pad parking locations.
2. **Fasteners:** Concrete spikes offer the fastest installation and are most secure technique. Upon removal, spike fasteners can damage concrete or the rack. A concrete wedge anchor allows for removal but is not as tamper-resistant (unless used with additional security nut bolts).
3. **Installation Technique:** Install with a hammer drill. When pouring a new concrete pad, consider embedding the parking fixture into the concrete.



Two points of contact is ideal. Image from Strong Towns, "What Makes a Good Bike Rack", 2016.

PARKING DURATION CONSIDERATIONS

Bike parking facilities fall into two categories: short- and long-term. The majority of bike parking is short-term, and even areas with large volumes of bicycle parking usually have mostly short-term parking facilities. Although long-term parking is superior in terms of security, short-term installations can function safely as long-term facilities when designed with covered shelters and in high volume areas (meaning more passive surveillance through pedestrian foot traffic).

The following table from the APBP Parking Guidelines² describes the differences between short- and long-term bike parking.

Criteria	Short-term	Long-term
Parking duration	Less than two hours	More than two hours
Fixture type	Simple bike racks	Lockers or racks located inside a secure area
Weather protection	Usually unsheltered	Recommended sheltered or enclosed
Security	Unsecured or passive security (foot-traffic)	Unsupervised, including bike lockers or bike cage. Supervised, including valet-attended bike parking or paid area of transit center
Typical land use	Commercial, retail, medical, public spaces	Residential, workplace, transit centers



D4-3

Sign image from the Manual of Traffic Signs <<http://www.traffic-sign.us/>>
This sign image copyright Richard C. Moeur. All rights reserved.

1. <https://www.strongtowns.org/journal/2016/10/17/what-makes-a-good-bike-rack>
2. <http://www.townofchapelhill.org/home/showdocument?id=3361>

RECOMMENDED STYLES FOR SHORT TERM AND LOWER DENSITY PARKINGⁱ

Any installed rack should support bikes as upright, without putting stress on the wheels. Racks should be able to accommodate a variety of bikes and different types of bike attachments, and should allow users to lock the frame at two points of contact (both a wheel and frame together to the rack). Racks with a cross section larger than 2" do not accommodate smaller and often more tamper-resistant locks.¹ For every style of bike parking, racks should be easy and intuitive to use. When properly designed and installed, the following bike racks typically meet performance criteria and usability for almost every application.

1. **Inverted U (also called Staple or Loop):** the Inverted U rack is simple and appropriate for many uses. It offers two points of contact to the ground and can accommodate more than one bike. Galvanized carbon steel is usually the lowest cost and the highest durability, but can be slightly rough to the touch and can sometimes scuff bike paint finishes. Coated racks have varying levels of durability and their appearance can scratch and wear down over time. The finish can be covered with either a powder coat or thermoplastic. The finished coating can help protect bike frames from scuff and wear, but can wear away in patches due to weather and use.
2. **Bike Corrals:** Bike corrals provide an opportunity for high density parking in areas of local business or high-volume destinations. A bike corral transforms a single parking space or unused sidewalk space into bike parking for up to 8-10 bikes per five-foot section. The photo below shows a corral that is located at a corner, effectively serving as an alternative to other traffic-calming devices, like bump outs.
3. **Post and Ring Racks:** Can be used with an attachment to convert old parking meters into bike parking posts. These are common style racks and only have one point of contact to the ground. Post and ring racks take up less space on the sidewalk or street, but offer less points of contact for locking multiple bikes. These racks can also be coated or left with the steel finish.



Image 1 from Cycle Safe.



Image 2 from Bicycle Security Advisors.



Image 3 from City of Berkeley, CA Transportation Division.



Image 4 from Dero Bike Racks.



Image 5 from Los Angeles DOT

i. The following recommended and not-recommended bike racks are sources from performance criteria and style recommendations from the Association of Pedestrian and Bicycles Professionals (ABPB), the leading source for guidance on bike parking. Visit their guideline manual here: https://cdn.ymaws.com/www.apbp.org/resource/resmgr/Bicycle_Parking/EssentialsofBikeParking_FINAL.pdf

1



Image 6 from Madrax Bike Storage Guide.

2



Image 7 from Dero Bike Racks.

3



Image 8 from LockIt-Safe Two Tier Cycle Parking.

3



Image 9 from Town of Chapel Hill Bicycle Parking Guidelines, 2010.

4



Image 10 from Trimet Reserved Bike Lockers.

5



Image 10 from Trimet Reserved Bike Lockers.

RECOMMENDED STYLES FOR LONG TERM OR HIGH DENSITY PARKING

Long-term parking is considered to be two or more hours. Short-term racks can be used for long-term parking as well, especially when located in a gated parking area or covered area. Gated parking can include a bike cage or the paid area of a transit center.

1. **Wheelwell-Secure Racks:** These racks are designed to increase parking density. They can sometimes limit the types of bike and attachments due to their usability and angle, but they can fit more bikes into confined spaces if staggered with bikes on both sides.
2. **Vertical Bike Racks:** Can be used for high-density indoor or covered bike parking. Used in combination with on-ground parking, these can provide parking for a large number of bikes. These are only recommended as a solution to add more parking density in a secure area where vertical space is available. Some users may not be able to lift bikes high enough to use these racks.
3. **Two-tiered Rack:** These racks accommodate more bikes using vertical space. Without assistance, some users may be unable to access the higher level of parking. There are two-tiered bike racks that are outfitted with a sliding arm that helps users to vertically lift their bikes, but these moving parts also require more frequent servicing and upkeep.
4. **Bike lockers:** Bike lockers are some of the most secure long-term parking solutions, and the most costly. These are often available through a paid-membership, and offer less parking density than other solutions. Bike lockers are mostly used at transit locations or where users may need to leave a bike overnight. Because of the pay-to-use design, bike lockers are not a viable parking solution for all users.
5. **Caged bike parking:** Caged parking offers added security to any style of bike rack inside the facility. Users can access the bike room inside the cage through a locking key-code pad or pass card. Some bike cages are monitored by an attendant.

NOT RECOMMENDED STYLES

Due to performance and security concerns, the following racks are not recommended.

1. **Wheelwell Racks:** These racks cradle either the front or rear bike wheel without providing additional security or locking facilities, while also posing a tripping hazard. Some wheelwell racks have a higher profile from the ground than what is pictured, but they still lack the security features and intuitive usability of other more common styles of racks.
2. **Wave Racks:** Wave racks are not as intuitive to use or as user-friendly as other common styles of bike parking. Wave racks support the bike frame at only one location, resulting in lower locking security. Wave racks have been a popular style and are still commonly seen, but are being phased out of new designs with parking updates as they often fall short of user expectations.
3. **Coat-hanger Racks:** Seen more frequently in Europe, coat-hanger racks may allow for two points of contact when locking a bike, but the top bar limits the styles of bikes and attachments these racks can accommodate.
4. **Schoolyard racks:** Also called “wheel-benders”. Schoolyard racks do not allow for locking both the frame and wheel, and they can damage wheels. Schoolyard racks can be appropriate for use at a temporary event with monitored bike parking valet, in a secure area.
5. **Spiral Racks:** While these are sometime more attractive than more typical utilitarian bike parking, they are less functional than other styles of racks. The spiral shape requires users to lift a wheel off the ground in order to park, and does not offer secure locking with two points of contact to the bike frame.
6. **Bollard Rack:** Bollard racks can come in many designs, including a similar design to Post and Ring racks. The difference is that the Bollard is not as wide at the mid-section and does not offer two points of contact when locking.



Image 12 from Madrax Commercial Bike Rack Selection Guide.



Image 13 from Dero Bike Racks.



Image 14 from AS Urban.



Image 15 from 1st State Bikes.



Image 16 from Bike & Walk Montclair.



Image 17 from Forms+Surfaces Bike Racks.

CREATING ATTRACTIVE CUSTOM BIKE PARKINGⁱⁱ

Outdoor bike parking can be an attractive part of local design. Bike racks can be custom built to suit specific needs and can double as public art, adding an eye-catching and creative feature to a building's exterior. Any bike parking facility that is installed on the public right-of-way should follow the following guidelinesⁱⁱⁱ:

Custom Bike Rack Guidelines

Materials	Galvanized steel, industrial grade materials
Finish	Smooth outer surface that will not scratch or damage frames
Locking	Allows for two points of contact between the bicycle and the rack
Space-efficiency	Should allow at least two bicycles to be parked per rack, while allowing adequate space between bicycles
Anchoring	Should have steel base plates of a minimum of 1/4" thickness that can be bolted into a concrete pad in four places
Height	The top of the rack design must 33-36' tall, and shortest sections must be 27' tall, in order to avoid a tripping hazard.
Safety	Should adhere to all ADA standards for protrusions in the right-of-way
Design	Must not include sharp edges. Can be constructed of 1.5" stainless steel pipe, or 2" stainless steel tubing.
Footprint	Requires more space than the rack itself; footprint should take up a 4' x 6' space centered on the rack.

ii. Bike rack dimension specification guidelines sourced from Toronto's Guidelines for the Design and Management of Bicycle Parking Facilities, 2008. <https://www.toronto.ca/legdocs/mmis/2008/pg/bgrd/backgroundfile-13268.pdf>
iii. Streetscapes.biz has a PDF listing covering many styles of custom bike racks, including their dimensions. <https://www.streetscapes.biz/images/pdfs/Bike%20Rack%20Dimensions.pdf>

CUSTOM RACK RECOMMENDED EXAMPLES^{III}

The following examples feature custom bike parking racks that still fit usability and security guidelines. These racks are narrow enough for small locks, and feature two points of locking contact.



Image 18 from City of Vancouver.



Image 20 from LOCO, BC Buy Local.



Image 21 spells "FARGO" in American Sign Language. Image from City of Fargo website.



Image 19 from CycleSafe Secure Bicycle Parking.

CUSTOM RACKS THAT AREN'T RECOMMENDED

The bike parking examples below are not recommended because of a lack of usability, ease of use, or poor design standards.



Image 24 "Breakdancing Bike Racks" in Hennepin County are wider than 2" and not intuitive to use for parking. Image from Juxtaposition Arts.



Image 23 from Fairbanks Alaska website. Perpendicular parking at this wave rack would not accomodate two points of contact.



Image 22 shows a bike rack that is wider than 2". Image from Nashville.gov Metro Public Art Collection.

PLACEMENT AND SITING GUIDELINES^v

When siting bike parking, keep the locations visible from building entrances, far enough from the edge of street to avoid parked cars hitting bikes with their doors, and set back enough from building walls so that both sides of the rack can be used. Bikes should only be installed on the curb side of the sidewalk, to avoid forcing pedestrians to walk closer to the street.

1. 10' minimum sidewalk width on most sidewalks. Exceptions can be made in areas with low foot traffic. Follow these guidelines:
 - a. If the sidewalk is no greater than 10', side the bike racks parallel to the curb.
 - b. If the sidewalk is greater than 10', bike racks can be sited either parallel or perpendicular to the curb. Perpendicular is preferred because it allows for more racks to be installed in the same location.
2. Maintain at least 6' of clear sidewalk for the walkway.
3. Maintain at least 40' of clear sidewalk back from bus stops.
4. Maintain at least 4' from general utilities.
5. Maintain at least 2' from any curbs, fences, or walls.
6. Maintain at least 2' from the outside edge of tree planter basins.
7. Maintain at least 3' from any news racks or newspaper boxes.
8. Maintain at least 4' from any ramps, curb cuts, or crosswalk flares.
9. For existing sidewalk cafes, site at least 6' outside the edge of the sidewalk café.
10. When siting near intersection corners, racks located on the near corner in direction of travel should be sited 20' from the intersecting curb. On the far side of the corner, racks should be sited 10' away from the intersecting curb.
11. When siting racks together, maintain at least 3' between racks sited perpendicular to the curb, and at least 10' from any racks sited parallel to the curb.

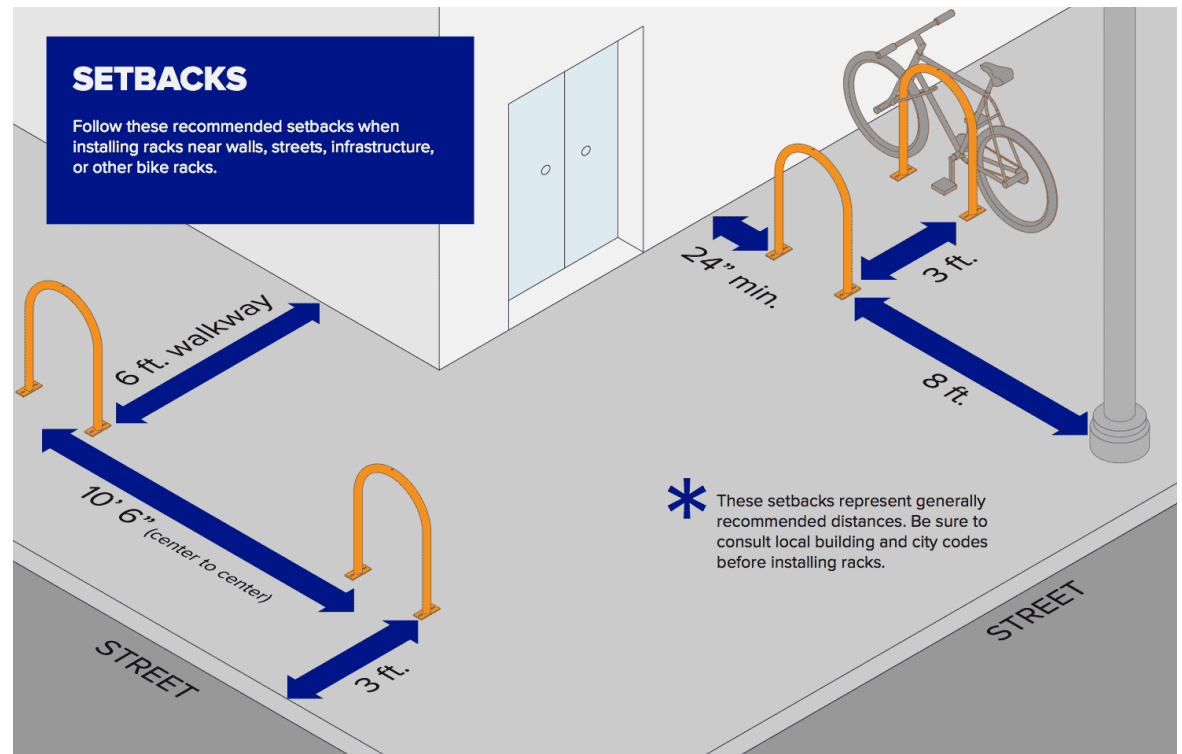
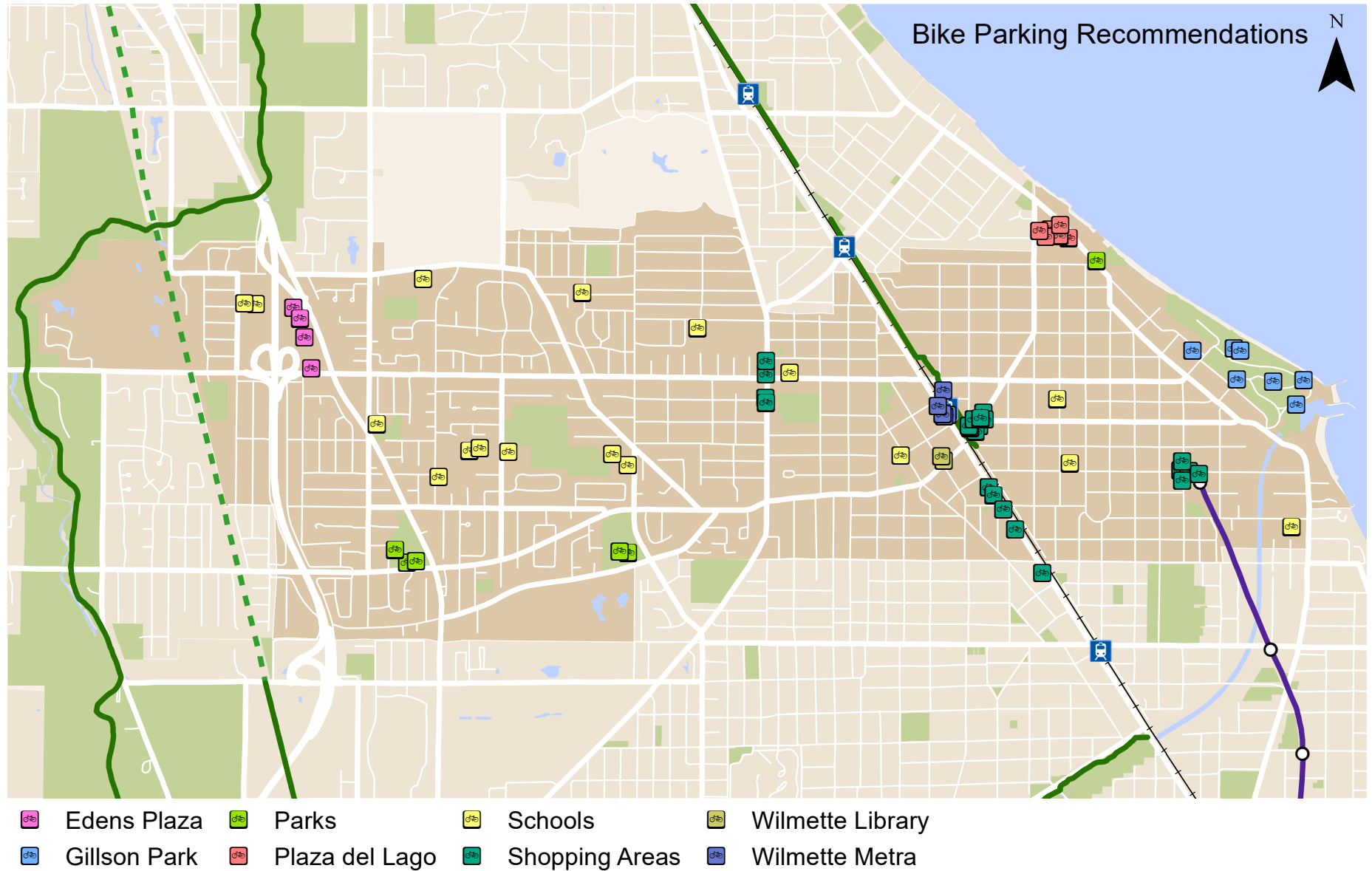


Image 25 shows a placement graphic from Dero Bike Racks.

iv. For more information about Dero Rack placement and parking guideline, view their PDF here: <https://www.dero.com/bike-parking-guide.pdf>
v. Referenced from the City of Chicago Bike Parking Program: http://chicagocompletestreets.org/wp-content/uploads/2014/06/CDOT-Bike-Rack-Siting-Guidelines_061914.pdf.

RECOMMENDATIONS FOR WILMETTE LOCATIONS

Based on stakeholder input, public engagement findings, and a review of bicycle destinations, the following locations are recommended for bicycle parking.



BIKE PARKING RECOMMENDATIONS ON VILLAGE-CONTROLLED PROPERTY OR RIGHT-OF-WAY

Wilmette Ave/East Lake Ave, Wilmette Ave/Central Ave: 10-12 Inverted-U style racks located along Wilmette Avenue from Village Hall to Lake Avenue intersection. Rack siting should follow guidelines above. Approximately 4-6 additional racks along Central Avenue near Wilmette also recommended. Capacity for 28-36 bike parking spaces around the Village center. Custom racks may also be considered, providing an opportunity for community input and locally-sourced design. Fargo, North Dakota demonstrated an original approach for bike rack design with their "Creative Bike Rack Project" contest.

Linden and 4th Street: 2 Inverted-U racks located together at several locations in the shopping area along Linden and 4th Street, approximately 4-5 locations serving capacity for 16-20 bikes.

BIKE PARKING RECOMMENDATIONS CONTROLLED BY OTHER AGENCIES

Green Bay Rd at Metra Station: Additional sheltered bike parking facility with bike corral for high capacity long-term parking, located north of Washington Court in the station parking lot (the sidewalk along trail may be widened to create a larger footprint for the bike parking facility). 20-30 Inverted-U racks are recommended, with capacity for up to 40-60 bikes (approximately the size of three parking spaces). An optional security measure is to include a caged perimeter that restricts access to the parking racks through an electronic key pad or pass card. The wave-style racks currently installed at the existing Metra bike parking are recommended to be replaced with Inverted-U racks.

Wilmette Public Library: 2-3 Inverted-U racks located at two locations near the entrances. Capacity for 8-12 bikes.

Schools: Inverted-U style racks. Middle schools should provide parking for 20 bicycles (10 total racks divided between 2 sites); high schools should provide parking for 30 bicycles (15 racks divided between 2-3 sites). These numbers are a baseline that may be adjusted in accordance with demand. Parking should be located within 50' of school entrances, and within any entrances gates/covered areas when possible for added security. Any racks already located at schools that are not recommended should be replaced with Inverted-U style racks.

Gillson Beach: Inverted-U bike corral with capacity for 10 bikes located within a parking space along the beach, and at least three racks located at the following locations: Wallace Bowl, tennis courts, Gillson Beach House (two locations on each side of entrance), Michigan Shores Club, and Harbor Drive parking area. Village coordination with Park District may be necessary.

Centennial Park: 3-4 Inverted-U style racks located at a minimum of two locations near the entrance to the park house and Centennial Ice Rink.

Community Recreation Center: 2-3 Inverted-U racks located at the front entrance, baseball fields, tennis courts, and 1-2 racks at the playlot park.

CTA Linden Station: Approximately 10 Inverted-U racks located near the entrance. Capacity for 20 bikes. If possible, Village staff may check with CTA for additional bike parking within the paid area of the indoor station, providing additional security and long-term bike parking.

BIKE PARKING RECOMMENDATIONS ON PRIVATE COMMERCIAL PROPERTY

Jewel-Osco/Whole Foods shopping area: 3-4 Inverted-U style racks installed at two locations at the Jewel-Osco (near entrances); 1 rack located near small shopping area just south of Jewel; 2 located between Subway restaurant and Walker Brothers Pancake House; 4-5 located near the entrance of Whole Foods. Capacity in the area for 20-24 bikes.

Edens Plaza: 2-3 Inverted-U racks clustered around the Plaza shops at several locations: Walgreens at Lake Avenue, entrance plaza near Starbucks, at the corner near Corner Bakery and Complete Birkenstock, at the north end of the Plaza near Chicago Home Fitness.

Plaza del Lago: 1 Inverted-U racks at several locations in the Plaza, including CVS, Jewel-Osco, near the sports store or Visitor Center, near shops closest to entrance at 10th Street, by the Starbucks/Fannie May Chocolates, near the entrance at Sheridan Road. Capacity for 12 bikes.

vi. For a highly details pros vs cons comparison of different styles of bike parking, and an expanded placement and facilities description, view APBP Bicycle Parking Guidelines adopted by Chapel Hill. This document includes guidelines for how many bike parking spaces to provide for different types of locations and activities. <http://www.townofchapelhill.org/home/showdocument?id=3361>

RECOMMENDATIONS FOR FUTURE REQUESTS

The Village may create a bike parking request website and/or online form to maintain additional incoming requests and inquiries about bike parking for local businesses, restaurants, parks, and other locations. Some examples of cities and towns with their own bike parking request programs include the following:

- Los Angeles Department of Transportation, LADOT Bike Program: <http://bike.lacity.org/from-request-to-rack/>
- City and County of Denver, Denver Bicycle Parking Program Application: <https://www.denvergov.org/content/dam/denvergov/Portals/708/documents/denver-bike-parking-application-2016.pdf>
- Chicago Department of Transportation, Request Bike Parking: <http://bikeparking.chicagocompletestreets.org/page/about>



BIKE SHARE

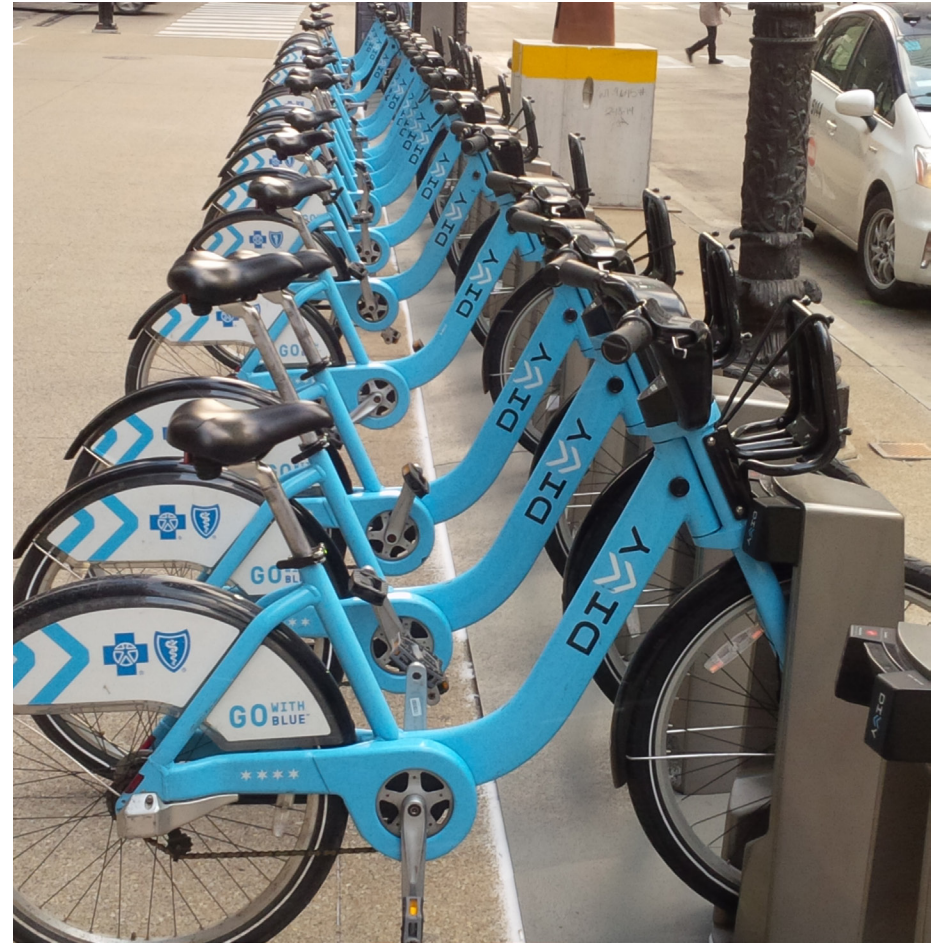
Bike Share systems are being implemented in communities of all sizes throughout the United States. Many benefits are associated with bike sharing including flexibility, economic, health, safety, and quality of life benefits. However, comparing the potential benefits and risks will be important when reassessing the feasibility of implementing a bike share system in the Village of Wilmette.

BIKE SHARE CONSIDERATIONS

Recently, the Village of Wilmette conducted an analysis to determine the feasibility of operating a bike share system and found that it would not be possible at the time due to cost and expected use. In coming years, as mobility patterns change, the Village may revisit bike share feasibility. At that time, the following questions and criteria should be considered:

OPERATIONAL

1. Will the system be required to generate revenue or will it be considered a component of the local public transportation system?
2. Will the system be publicly or privately owned?
 - **Publicly owned:** In this scenario, the municipality owns the equipment and manages operations. Most cities are moving away from this approach due to high capital costs and low demand.
 - **Publicly owned, privately operated:** In this scenario, a municipality owns the equipment and contracts a private company to handle operations and maintenance. The equipment is funded through permitting fees and/or the municipality may receive a portion of revenue collected.
 - **Privately owned:** In this scenario, the municipality neither owns nor operates the system. Instead, it will issue an RFP that specifies the type of system, system coverage area, payment methods allowed, number of bikes allowed, hours of operation, rebalancing requirements, specifications for ensuring access for people with disabilities, types of bikes allowed, where bike lock-up is allowed, time allowed to move or repair bikes, number of operating permits, and open data requirements.



Divvy bike docking station in Evanston, IL. Image from the Evanstonian.

3. Will the system be docked, dockless, or a combination?

DOCKED SYSTEMS

Docked systems have stations where users check-out and return bikes. Stations are typically installed on wider sidewalks, parking spaces, or in public areas. They may be relocated if demand changes. Chicago and Evanston's Divvy System is an example. Below are some criteria to consider for selecting a docked bike share system:

- **Context:** Work best in dense locations, including urban areas, college campuses, and hospitals.
- **Coverage:** Place one-quarter miles apart at a variety of origins and destinations with ten to thirty bikes available to every thousand residents. A larger coverage area will ensure higher rates of use.
- **Access:** Ensure the check-out process is user-friendly and intuitive and coordinate with neighboring municipalities for a seamless system. Bikes will need to be re-balanced to ensure availability in peak times and off-peak times.
- **Quality:** Ensure durable, practical, attractive bikes.
- **Cost:** High cost to implement, may take time to become profitable if that is a goal.



Example of a docked bike share system. Image from the Chicago Reporter.

DOCKLESS SYSTEMS

Dockless systems allow users to check-out and leave bikes in any public location if it doesn't block sidewalk or driveway access. Below are some criteria to consider for selecting a dockless bike share system:

- **Context:** May be better suited to suburban contexts where a high density of bikes is not needed.
- **Coverage:** Allows for a large, flexible coverage area, which is more convenient for users.



Example of a dockless bike share system. Image from Alta Planning.

ACCESS

Since bikes may be left anywhere, establishing rules about where and how bikes should be parked is an important consideration. Lock-to bikes require users to lock a bike to a rack or pole before a return is allowed, other systems require you to take a picture of your bike once parked to show it's not blocking wheelchair access on a sidewalk, and other systems have painted parking spaces in streets where bikes can be deposited.

ADMINISTRATIVE COSTS

While dockless systems are less expensive than docked systems, resources will still need to be deployed to ensure a successful program. It is advised that one full-time person be dedicated to monitoring the system, funded by sales, permits, and administration fees.

ADOPTION

Successful adoption of a bike share system requires continued outreach and education. To understand how a bike share works and the associated benefits, it takes time and a certain level of commitment of a person to want to learn the logistics of how and where the system operates. An active engagement approach allows potential bike share riders to become aware of the bike share system, stay well-informed about how to access the system, and safely use the bike share through the service region. A variety of methods can be used to facilitate education and adoption, some of which are bulleted below:

- Distribute flyers, pamphlets, and posters (multi-language if needed to reach all demographics of the community)
- Host stakeholder focus groups to help identify strategies with the greatest success potential
- Lead local presentations to help spread the word about the system (e.g., at installed stations)
- Form partnerships with local organizations to increase the outreach efforts

Parking Solutions for Dockless Bike Shares



South Bend, IN. Image from South Bend Tribune



Seattle, WA. Image from Better Bike Share.



Austin, TX. Image from Austin Towers.

INITIATIVES

The following initiatives, goals and objectives were developed to provide clear and specific direction for improving and expanding bicycling and walking in Wilmette.

The Wilmette Master Bike and Active Transportation Plan is built around the goals of the plan's Vision Statement, including Safety, Education and Encouragement, Awareness, Convenience, and Community. In the following tables, these five goals create categories for the recommended initiatives. Each goal is followed by actionable **Objectives** that separate the goals into smaller, implementable parts. The objectives can be tracked according to their **Performance Measures**, and potential **Strategies** accompanying each objective to assist implementation. Finally, a list of **Responsible Parties** outlines which entities may have the abilities to accomplish each objective.



GOAL 1: SAFETY

PROVIDE STRATEGIES TO CREATE A BICYCLE AND PEDESTRIAN NETWORK THAT IS SAFE AND ATTRACTIVE FOR ALL AGES.

Objectives	Performance Measures	Current Actions	Strategies	Responsible Parties
1. Adopt a Vision Zero policy and approach to roadway design by 2022 as a strategy to increase safe, healthy, and equitable mobility for all residents.	Number of bicycle and pedestrian fatalities and serious injuries.	The Village has a complete streets policy, passed in 2015.	The Village can collaborate with other departments (e.g. community development and police department), local schools and community organizations in writing, adopting and implementing a Vision Zero policy. Implementation may include education and enforcement.	Village of Wilmette, Wilmette Police Department, local advocacy groups.
2. Develop targeted enforcement campaigns focused on education to reduce unsafe travel behaviors, including: distracted driving, school zone safety, bicycle safety, stopping for pedestrians, 3-foot passing distance, and bikes failing to stop at traffic control devices.	Number of bicycle and pedestrian injuries, driver or bicyclist compliance at crosswalks.	Village Pedestrian Crosswalk Policy states that the Village will consider pedestrian enhancements to improve driver awareness about Illinois law requiring them to stop for pedestrians in the crosswalk, and create awareness among drivers, bicyclists, and pedestrians to increase safety for all modes.	Create an education-focused enforcement program by 2022 with Wilmette Police Department to encourage crosswalk compliance and safe roadway behaviors. Offer regular training for law enforcement officers on the rules, rights, and responsibilities for all modes of transportation. To spread the word and encourage more cyclists to stop, the Village can develop ads to be posted on different social media platforms and ask partners to share them as well.	Wilmette Police Department, Village of Wilmette
3. Enhance crosswalks to make walking safer and to raise driver awareness about crossings.	Number of crosswalks with visibility enhancements.	The Village has used “Must Stop for Pedestrians” signage at intersections. Village policy states that if the sign may be an obstruction to traffic, a roadside “Stop Here for Pedestrians” sign may be used.	Install more “Must Stop for Pedestrians” signage, especially around schools. Determine and assess locations for crossing improvements in conjunction with the Village’s Pedestrian Crosswalks Policy. Consider updating the policy to add strategies to target more locations for improvements. Inventory existing signage in the immediate area to avoid an issue of over-signage. Install advance pedestrian crossing warning signs to alert drivers that they are approaching a crosswalk.	Village of Wilmette, Wilmette Park District, local school organizations.
4. Daylight intersections to increase pedestrian visibility.	Number of crosswalks with parking further than 20 feet away.	It is against Village policy to park a vehicle within 20 feet of a crosswalk at an intersection.	Enforce prohibited parking at least 20 feet from crosswalks on roads with posted speed limits less than 30 MPH. Prohibit parking within 20 feet of unsignalized crosswalks. Prohibit parking at least 50 feet from crosswalk on roads with posted speed limits less than 35-40 MPH.	Village of Wilmette
5. Upgrade crosswalks to be comfortable for the most vulnerable users, including children, older adults, and those with mobility issues.	Number of upgraded ADA detectable warning pads.	Current Village safety enhancements include curb extensions and refuge islands.	Upgrade ADA detectable warning pads that may have become corroded and risk being slippery in wet and icy conditions. Remove pedestrian push-buttons from traffic signals and time intersections to accommodate pedestrian traffic.	Village of Wilmette

GOAL 2: EDUCATION AND ENCOURAGEMENT

PROVIDE BICYCLE, PEDESTRIAN, AND MOTORIST ENCOURAGEMENT AND EDUCATION THAT ENCOURAGES SAFETY AND LEGAL COMPLIANCE FOR ALL USERS.

Objectives	Performance Measures	Current Actions	Strategies	Responsible Parties
1. Partner with local advocacy groups, transportation clubs, and other agencies to implement and provide support for education and encouragement programming.	Number of participants educated, number of traffic crashes.	Bike Walk Wilmette, Go Green Wilmette, and other partners use advocacy and community engagement methods to raise awareness and address local and regional transportation issues. The Wilmette Library encourages active transportation through the Library Book Bike Program.	Offer a People-Friendly Driver Program and Motorist-Friendly Bicyclist Program by 2024 to educate all users on rules of the road, encourage safe roadway behaviors, and increase legal compliance. Use local media outlets such as municipal websites, cable access stations, local newspapers, and online social networks to broadcast videos and publish articles on pedestrian and bicycle safety. Arrange for pedestrian and bicycle information to be reprinted or distributed by the Wilmette Park District, Wilmette Library, Wilmette School District, Bike Walk Wilmette, and the private sector. Work with local doctors and health care providers to distribute information on safe walking, biking, and driving. Give away front and rear lights to cyclists at dusk with educational information on bicycle safety. Lights could be donated by local businesses, police departments, or public health departments.	Local bicycle advocacy groups, League of American Bicyclists, Ride Illinois, other partners.
2. Expand Safe Routes to School programming by 2022, especially in District 37.	Number of schools and classrooms that participate in Safe Routes for School, National Walk and Bike to School Day, and walking schoolbus events.	Wilmette has a map of school walking routes connecting Central, Harper, Highcrest, Mary Murphy, McKenzie, Regina High, Romona, St. Francis, St. Joseph, and Wilmette Jr. High Schools. The Village also has a Crossing Guard Policy and recommends updating the walking routes annually. The Village also participates in Bike to School Days.	Work with Avoca and neighboring municipalities to enhance and develop Safe Routes to School maps. Continue the 6th grade bicycle education program within Wilmette. Celebrate Crossing Guard Appreciation Day.	Wilmette Public Schools District 39, Avoca School District 37, New Trier High School, Safe Routes to School National Partnership.
3. Create new opportunities for bicycling programs for youth and adults.	Demand for courses and number of sign-ups.	The Wilmette Park District offers annual bike-themed events, like the Tour Wilmette Bike Ride, and offers youth sports leagues for soccer, basketball, flag football, and Biking Day Camp. The Park District also offers adult sports leagues.	Work with the local park district or League of American Bicyclists to pilot adult "Learn to Ride a Bike lessons, youth Cyclocross, or BMX mentor programs by 2024. Encourage the Park District to continue providing a biking day camp at Camp Fusion.	Wilmette Park District, League of American Bicyclists, local advocacy groups.

GOAL 3: AWARENESS

USE MEDIA AND COMMUNICATION TO EXPAND AWARENESS OF ACTIVE TRANSPORTATION TO ALL RESIDENTS.

Objectives	Performance Measures	Current Actions	Strategies	Responsible Parties
1. Create a Village website and video library to house transportation policy information, offer safety tips, and expand upon biking in Wilmette.	Number of times videos are watched.	The Village has official Twitter, Facebook, and YouTube accounts.	Create a range of Village social media accounts that are easily accessible from the Village website. Create videos on rules of the road, pedestrian crosswalk entitlements, distracted driving, sharing the road, trail etiquette, and riding on the sidewalk to a Village YouTube account by 2022.	Village of Wilmette
2. Update the local bike map and include safety education panels within the map.	Frequency of map publication and distribution.	The Village has a Wilmette Bike Map identifying routes and safety tips for biking in the Village.	Produce and distribute a regularly updated Wilmette Bike Map, available in paper and online format every three years.	Village of Wilmette, Ride Illinois, local advocacy groups
3. Create a social media campaign to highlight biking and walking.	Number of trips taken either walking or biking.	The Village has official Twitter, Facebook, and YouTube accounts.	Post a weekly biking/walking safety tip or fact to a Twitter account focused on active transportation for 6 weeks over the summer.	Village of Wilmette
4. Encourage commuting to work, Metra Station, Purple Line Station and school by bike	Number of bikes parked at stations. Number of students participating in bike to school events.	Wilmette school districts promote and participate in International Walk/Bike to School Day and Village organizations have participated in bike/walk social events.	Work with local organizations and utilize Active Transportation Alliance materials in promoting Bike to Work Week. Continue encouraging schools to hold Bike to School days and events.	Village of Wilmette and School Districts

GOAL 4: CONVENIENCE

PROVIDE SUPPORT TO MAKE WALKING AND BICYCLING IN WILMETTE EASIER AND MORE CONVENIENT.

Objectives	Performance Measures	Current Actions	Strategies	Responsible Parties
1. Utilize and modify existing and new policies and programming to provide a continuous network of sidewalks adjacent to all schools, parks, transportation hubs, and business centers.	Number of sidewalk gaps and barriers in Wilmette.	Current Village policy states that any resident may request a sidewalk installation on any Village street. 67 percent of adjacent stakeholders to the proposed sidewalk must be in favor of the installation in order to proceed.	Provide sidewalks on bike side of the street whenever possible. At locations where this is not feasible, provide sidewalks on one side of the street. Review current Village sidewalk installation policy to remove barriers for new sidewalk installations on streets.	Village of Wilmette, homeowners, business owners
2. Work with homeowners and businesses to reduce sidewalk encroachments such as overgrown greenery or snow that make it difficult to walk or bike along sidewalks by 2022.	Number of complaints about sidewalk encroachments.	It is against Wilmette village code to encroach upon the sidewalk with any fencing, greenery, bushes, tree limbs, or structures without a permit. It is against Village policy to park vehicles on the sidewalk.	Implement education campaign on Village policy about sidewalk encroachments. During all construction projects, provide an ADA-accessible pedestrian path when using the sidewalk for staging. Educate homeowners and businesses on parking restrictions for blocking sidewalks and impact to pedestrian accessibility and safety.	Village of Wilmette, homeowners, business owners.
3. Coordinate with utility providers to relocate utilities, including boxes and poles, out of the pedestrian right-of-way and off of sidewalks by 2022.	Number of utilities blocking pedestrian right-of-way.	Village policy states that the Village will perform a feasibility review for sidewalk requests, including for conflicts with existing utilities, as procedure for public sidewalk requests.	Coordinate with ComEd to remove utility boxes and poles that block sidewalk access. Work with homeowners and utility providers to identify locations.	Utility providers, Village of Wilmette, homeowners.
4. Create inviting pedestrian spaces with street furniture and greenery by 2024.	Number of pedestrian-friendly public areas.	The Village has benches, public art, and greenery in some locations.	Create an online request form for adding street furniture, public art, and green spaces to additional locations. Furniture can include benches, art sculptures, banners, trees, planters, and parklets.	Village of Wilmette, business owners, local art organizations.
5. Create a snow removal policy and education campaign to clear pedestrian right-of-way during winter.	Sidewalk blocks cleared by residents and business owners during snow events accumulating less than 4 inches.	Wilmette's Snow and Ice Control Program states that business, commuter, and school sidewalk routes are plowed after 2 inches of accumulation. Residential sidewalk routes and bus shelters are plowed after 4 inches of accumulation, within 48-72 hours after the storm has ended.	Encourage residents and business owners to plow snow from sidewalks adjacent to their property in the event of snowstorms with accumulation less than 4 inches. Educate homeowners on how snow and ice can block the pedestrian right-of-way and prohibit movement for people with impaired mobility.	Village of Wilmette, homeowners, business owners.
6. Make it easier to bike to community destinations	Number of bike racks installed	The Village has installed bike racks near destinations but does not have an official bike parking policy.	Work with other local agencies, businesses, and transportation clubs to identify new places to site bike racks. Continue pursuing grant funding for bike racks. Create a systematic approach for requesting and installing new bike racks.	Village of Wilmette, businesses, local advocacy and transportation organizations

GOAL 5: COMMUNITY

PROVIDE SUPPORT AND OPPORTUNITIES WITHIN WILMETTE COMMUNITIES TO INFUSE ACTIVE TRANSPORTATION INTO LOCAL GATHERINGS.

Objectives	Performance Measures	Current Actions	Strategies	Responsible Parties
1. Work with local transportation groups to promote new and on-going events that highlight active transportation.	Number of events, number of attendees.		Participate in annual Bike to Work Week Challenge, offer bike decorating at the 4th of July Parade, offer complimentary bike valet at events. Continue providing support for local transportation clubs to host rides, such as Wilmette Bike Tour.	Local advocacy and transportation organizations, event management groups, Village of Wilmette.
2. Appoint a community-led Bicycle and Pedestrian Advisory Council.	Creation of the council, number of meetings, number of issues raised and solutions created.	The Village does not have a bicycle or pedestrian council.	Appoint 5-7 residents, ranging in experience with walking and biking. 1-2 members should specifically represent pedestrian issues. Hold quarterly meetings with the Village to address community concerns. Members should be willing to volunteer time and research to finding solutions for issues.	Village of Wilmette and constituents.
3. Provide additional Bicycle parking at Wilmette festivals and community events	Amount of bicycle parking at events, number of patrons who bike to events		Work with event organizers to provide additional bike parking	Village of Wilmette, festival and event organizers



IMPLEMENTATION

PROJECT PRIORITIZATION AND PHASING

This section details which of the plan's projects should be chosen to implement first and which projects are of lower priority in terms of accomplishing the goals of the plan. The prioritization analysis includes scores for the following categories, which correspond to the vision statement of the plan:

- Overall Network Connectivity
- Interagency Coordination
- Safety
- Cost
- Destinations

There are category scores for each of the above, ranked low, medium, and high for each project recommended in the plan. Full maps and descriptions of each scoring criteria are given in the appendix along with the prioritization matrix which has every score for each project.

In addition to the guidance on the following pages, the Village will continue to study and consider all recommendations outlined in this plan prior to implementation. Since the recommendations are planning-level, more information on the design and feasibility would be needed prior to implementation. Additionally, on an annual basis the plan will be revisited with a staff level review as well as a public comment period at a Transportation Commission meeting. During this time, recommendations will be considered for current relevancy and/or potential updates.

Category Weighting

The Overall Network Prioritization score is an average of all of the categories -- all of the categories are weighted equally in the overall score. These overall scores are depicted on the map on page 121. Each category within the overall score (e.g. Interagency Coordination, Safety, etc.) is composed of one or more criteria. When a category had more than one criteria, all criteria were weighted equally. For more information on the scoring, please see the Detailed Prioritization Scores section of the Appendix (page 150).



Wayfinding sign in Downtown Wilmette

Notes

Some of the score calculations are maintained in the prioritization spreadsheet in the appendix if the information could be potentially useful for implementation and future grants. An example of this is the number of schools within a half mile of a project (although something interesting to note: every proposed project is within half mile of at least one school). Projects that score higher on schools may be good candidates for the SRTS program. Projects that score higher on crashes may be great candidates for the HSIP program. For more information on grants, see the Project Funding Section.

Every network project that was considered for a treatment was included in the network prioritization analysis (including projects that were determined to not be implemented at this time due to environmental conditions). These projects are not displayed on the map or in the spreadsheet to avoid confusion.

Park was added as a recommended bike boulevard after the completion of the analysis. A predictive calculation was conducted to determine the scores for each of the categories based on surrounding similar recommendations on streets of similar characteristics.

In the analysis, it wasn't practical to compare the costs of a bridge to corridor bike facilities, so the Edens pedestrian tunnel recommendation was listed as high for the cost category.

OVERALL PRIORITIZATION AND PHASING

All of the score categories were combined to create one composite score that can be used to guide the implementation timeline of the recommendations. The overall score is an average of all the categories, which are described briefly below and in more detail in the appendix. The overall scores are displayed in the map to the right.

Projects that rate the highest in the overall score will be on average the easiest to implement and provide the greatest connectivity and safety benefits to the network. The overall score takes into account the cost effectiveness and level of agency coordination needed, how these routes will to key community destinations and the rest of the bike network, and which routes show the most potential to reduce pedestrian and bike crashes and associated injuries and fatalities. High scoring projects are the first recommendations to implement when building out key links in a robust network so the village can make the largest impact to biking and walking in an efficient and cost-effective manner.

COMPONENT SCORE SUMMARIES

Network Connectivity Score

This score indicates the overall connectivity a project would have in filling in the gaps and improving the Village-wide bike network. A higher score would provide greater connectivity and a lower score, less.

This score can also be useful in guiding timeline implementation of the network. The first goal of implementation should be to create vital east-west and north-south connections across the community.

Interagency Coordination Score

Projects indicated as “High” in this score are considered easier to implement in terms of less coordination with multiple agencies is needed. Projects that are completely within the Village of Wilmette jurisdiction will score the highest score and projects that are controlled by other agencies will generally score the lowest.

Safety Score

One of the strongest arguments for installing pedestrian and bike facilities is to improve safety. Significant numbers of pedestrian and bike crashes can be an indication that design and policy improvements are needed. However, the absence of these crash types doesn’t always mean that a roadway is safe for those on foot or bike—it could also mean that it is so unsafe that few people

are choosing not to risk traversing it without a car. For this reason, three analyses were conducted: pedestrian/bike crashes, injury/fatal crashes of all crash types (including crashes only involving cars), as well as a combined score of the former two analyses.

Roadways that score high in safety (e.g. there are a high number of crashes) could be good candidates for HSIP grants. For other safety-related grants, see the Funding Resources section of this chapter.

Cost Score

Some of the recommendations would involve significant and costly reconfigurations to the roadway, such as widening Glenview or Hibbard to accommodate bike lanes. Other recommendations would involve simple paint and signage solutions, such as marked shared lanes on Greenleaf. Estimated planning level cost ranges for each facility type are provided in this chapter in the Cost Estimates section.

Projects that are rated high in cost prioritization are less costly and hence easier to implement from a financial perspective, whereas projects rated lower would involve more coordination of funding sources.

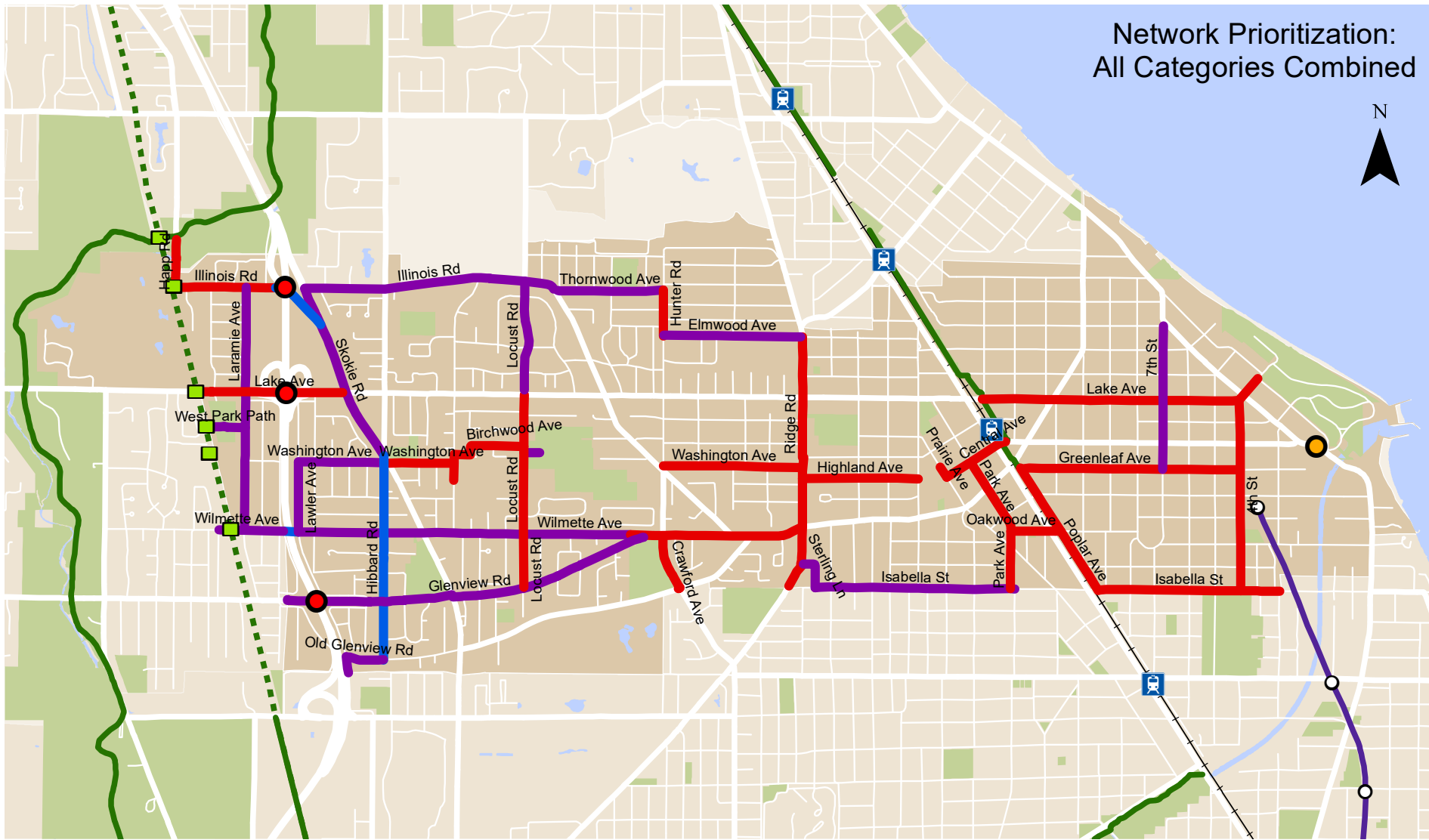
Destination Score

It’s important to create a pedestrian and bike network that isn’t just recreational, but connects people to key destinations that they would like to reach in their day-to-day lives, such as the Metra station to commute downtown or commercial areas for shopping. This helps make active transportation a feasible alternative in replacing errand and commuting trips.

Projects that are rated high in this category connect to the most key destinations such as:

- Schools
- Parks
- Business Districts
- Trails
- The library,
- Places of worship

Network Prioritization: All Categories Combined



Overall Prioritization Rank

- Low
- Medium
- High

FUNDING RESOURCES

There are multiple funding sources for transportation programs in Cook County and the state of Illinois that are applicable to Wilmette. Most programs are both highly competitive and require a local match but provide grant funding opportunities for active transportation projects. Many federal transportation funds can be used for pedestrian and bicycle projects.

This section provides information and guidance on the following funding sources:

- Programs Administered by the Illinois Department of Transportation (IDOT)
- Program Administered by the Illinois Department of Natural Resources (IDNR)
- Programs Administered by the Chicago Metropolitan Agency for Planning (CMAP)
- Program administered by Cook County
- Nonprofit Organization Grants
- Summary chart of larger agency grants

PROGRAMS ADMINISTERED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT)

Most federal funds are controlled by the state DOT and distributed as block grants. IDOT administers these funds for local and regional bicycle and pedestrian projects and safety initiatives. The funds are authorized by the current federal transportation bill passed in December 2015, Fixing America's Surface Transportation Act, or FAST Act. FAST Act maintains a lot of the changes from MAP-21, the previous bill. MAP-21 combined several previously stand-alone pedestrian and bicycle funding programs (including Safe Routes to School, Recreational Trails and Transportation Enhancements) into the Transportation Alternatives Program (TAP). With the passing of FAST Act, the TAP funding was moved within the Surface Transportation Block Grant Program (STBG), as a set-aside. However, the structure, competitive process, and flexibility of the program remains the same as TAP.

IDOT has committed to a new program under FAST Act Section 405 that awards money to states where over 15% of all traffic fatalities in 2013 were

cyclists and pedestrians. This grant funds 80% of the cost for education and enforcement related programs to reduce pedestrian and bicycle fatalities, including training law enforcement about state pedestrian and bicycle laws and campaigns or education for pedestrians, bicyclists and motorists. This program is unique because it is just for pedestrian and bicycle projects.

Illinois Safe Routes to School Program (SRTS)

The SRTS program, administered by the IDOT Bureau of Safety Engineering, uses both infrastructure and non-infrastructure approaches to improve conditions for students who walk or bike to school. The program is designed to enable and inspire children to walk and bike to school through improvements to the local active transportation network within two miles of schools and through programs and initiatives. In the 2018 cycle, there was no local match requirement and the awards could range from \$2,000 to \$200,000 and they had \$5 to 6 million for the total program. In previous years, the local match was typically 20%. Eligible project sponsors include schools, school districts, and governmental entities. The program encourages applicants to form a local coalition of stakeholders. Eligible infrastructure projects include Sidewalk Improvements, Traffic Calming/Speed Reduction Improvements, Traffic Control Devices, Pedestrian and Bicycle Crossing Improvements, On-Street Bicycle Facilities, Off-Street Bicycle Facilities, and Secure Bicycle Parking Facilities. Eligible non-infrastructure projects include events, equipment, and supplies that help to address areas of Education, Enforcement, Encouragement, and Evaluation.

Illinois Transportation Enhancement Program (ITEP)

ITEP was designed to promote and develop non-motorized transportation options and streetscape beautification. Through ITEP, IDOT awards a portion of federal STBG set-aside funds competitively. Any local or state government with taxing authority is eligible to apply. Local governments are required to provide 20% matching funds and work must begin on the projects within three years of receipt of the award. This program is administered by the IDOT Bureau of Programming in the Office of Planning and Programming.

Highway Safety Improvement Program (HSIP)

The goal of HSIP is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads. It requires states to set performance measures and targets for reducing traffic-related fatalities and serious injuries for all modes of transportation. HSIP funds both infrastructure and non-infrastructure solutions (like public safety campaigns) and is administered by IDOT's Bureau of Safety Engineering. The program funds preliminary

engineering, land acquisition, construction, and construction engineering. A minimum 10% local match is required.

Section 402 State and Community Highway Safety Grant Program

The Section 402 program, administered by the IDOT Bureau of Safety Engineering, provides grants to states to improve driver behavior and reduce deaths and injuries from motor vehicle-related crashes. There are several sub- programs in IDOT's program, but the most pertinent to bicycle and pedestrian issues is the Injury Prevention Program. Section 402 funds do not support infrastructure projects. Eligible applicants include local civic organizations, schools and universities, hospitals, health departments, local governmental agencies, and nonprofit groups. 402 funds are considered seed funding and are not for ongoing or sustained support. These funds are considered very limited and no local match is required.

PROGRAMS ADMINISTERED BY THE ILLINOIS DEPARTMENT OF NATURAL RESOURCES (IDNR)

Recreational Trails Program (RTP) and Illinois Bicycle Path (Bike Path) Grant Programs

The Recreational Trails Program provides funding to assist government agencies and trail groups in the rehabilitation, development, maintenance, and acquisition of recreational trails and related facilities. The Illinois Bicycle Path Grant Program provides financial assistance to eligible local units of government to assist them with the acquisition, construction, and rehabilitation of public off-road, non-motorized bicycle paths and directly related support facilities. In the 2019 grant cycle, the program covered 80% of project funding and up to \$200,000 for development projects and no maximum for acquisition grants.

PROGRAMS ADMINISTERED BY THE CHICAGO METROPOLITAN AGENCY FOR PLANNING (CMAP)

CMAP administers federal pass-through money that funds bicycle and pedestrian facilities.

The Congestion Mitigation and Air Quality Improvement Program and the regional allocation of the Surface Transportation Block Grant (STBG) program set-aside (formerly Transportation Alternatives Program or TAP). Additionally, the STBG funds are programmed through the Council of Mayors

(see Programmed by the Subregional Councils of Mayors section). For their allocation, CMAP funds bike facilities that provide regional connections. CMAP will typically only program pedestrian facilities if they provide access to transit. The other allocation of funding is divided amongst the COMs. The COMs will program these funds to more local and granular pedestrian and bike projects.

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

The CMAQ program is a flexible funding source that targets projects and programs to help meet the congestion mitigation and air quality reduction requirements of the federal Clean Air Act. Bicycle and pedestrian facilities, transit improvements, and traffic flow enhancements make up some of the eligible projects. CMAP will give priority to projects that reduce ozone emissions and particulate matter. The local match is 20%.

Surface Transportation Block Grant Program (STBG) (previously Transportation Alternatives Program, TAP)

Under FAST Act, the Transportation Alternatives Program is now a set-aside within the STBG program, however the program structure and competitive process did not change under the new act. CMAP's allocation of this program has focused its funding on bicycle projects. Higher scores are assigned to projects that provide for low-stress bicycle facilities. Some eligible projects include connecting two existing trails, installing multi-use paths or buffered bike lanes, and extending an existing regional trail.

For this competitive program, 50% of the funding is allocated by a formula based on population and the other 50% is discretionary. The local match is 20%. CMAP generally gives priority to projects that are a part of the Regional Greenways and Trails Plan, have a high population density near the trail or facility, and have a facility that is well- designed. Additional points are given to projects that are "shovel ready" and have a local match above the 20% minimum.

PROGRAMMED BY THE SUBREGIONAL COUNCILS OF MAYORS (COMS)

Surface Transportation Block Grant Program (STBG), formerly Surface Transportation Program (STP), has no structural changes from MAP-21 under FAST Act, the Surface Transportation Program funding is now a set-aside within the STBG program. This program provides flexible funding that may

be used by municipalities for projects to preserve or improve conditions and performance on any Federal-aid highway, bridge projects on any public road, facilities for non-motorized transportation, transit capital projects, and public bus terminals and facilities. The program is administered by CMAP. CMAP approves the allocation of this funding to each of the subregional Council of Mayors (COMs).

The six Councils of Mayors in Cook County program these funds. Each of the Councils of Mayors have different project eligibility, application processes, and match requirements. Communities can directly apply through the COMs. This program will fund more granular surface transportation pedestrian projects. The COMs in Cook County fund bicycle and pedestrian projects with a 20-30% local match requirement. A matrix from CMAP summarizing these requirements and guides to the project selection criteria for each of the Councils of Mayors are located at the CMAP website. <http://www.cmap.illinois.gov/about/involvement/committees/advisory-committees/council-of-mayors/surface-transportation-program>.

PROGRAM ADMINISTERED BY COOK COUNTY

Invest in Cook

Administered by the Cook County Department of Transportation Highways, this transportation- focused grant program funds transportation- related initiatives that support Cook County's long-range transportation plan goals. Eligible projects include Phase I engineering, construction, programming, and plans. The local match is dependent on need. Very low and low-need communities require at least a one to one local match, moderate need communities are calculated on a sliding scale, and high and very high need communities may be eligible for no local match.

Community Development Block Grants (CDBG)

Administered by Cook County's Bureau of Economic Development, CDBG grants provide flexible funding for a variety of community development purposes. The program provides capital improvement funding that can be applied to bicycle and pedestrian facilities that benefit low and moderate income residential neighborhoods. The CDBG program offers funds for several project types, including street improvements, sidewalk improvements, and accessibility improvements to public facilities. Projects eligible for funding must serve primarily residential neighborhoods with low to moderate income populations. The application was recently updated to provide additional scoring for projects that consider complete streets principles, provide greater connectivity, and promote walking, biking and transit access. These funds can

be used in creative ways. Skokie uses CDBG to fund the homeowner match in a 50/50 sidewalk repair program for income eligible households.

NONPROFIT ORGANIZATION AND FOUNDATION GRANTS

There are various local and national NPOs and private sector foundations dedicated to improving walking, biking and access to transit. The call for applications can vary year-to-year, however some programs to look out for include:

Community Change Grant Award (America Walks)

In 2018, this foundational-based grant program awarded communities \$1,500 stipends for projects related to creating healthy, active, and engaged places to live, work, and play.

People for Bikes Community Grant

Eligible projects for funding (up to \$10,000, must have at least a 50% match) include bike paths and rail trails, as well as mountain bike trails, bike parks, BMX facilities, and large-scale bicycle advocacy initiatives.

Rails to Trails, Doppelt Family Development Grant

RTC launched a new grant program in 2015 to support organizations and local governments that are implementing projects to build and improve multi-use trails. Under the Doppelt Family Trail Development Fund, RTC will award approximately \$85,000 per year, distributed among several qualifying projects, through a competitive process. No local match required.

ComEd Green Region, in partnership with Openlands

This grant program can be used for the planning, acquisition and improvements to local parks, natural areas, and recreation resources. In the 2019 grant cycle, grants of up to \$10,000 were awarded. Eligible Applicants are municipalities, townships, counties, park districts, conservation districts and forest preserve districts within ComEd's service territory. The grantee must have matching funds either secured or another pending application.

Application Process	Transportation Enhancements (ITEP)	Safe Routes to School (SRTS)	Highway Safety Improvement Program (HSIP)	Section 402- State and Community Highway Safety Grant Program	Recreational Trails Program (RTP)
Program Purpose	To foster cultural, historic, aesthetic and environmental aspects of our transportation infrastructure	To enable and encourage children to walk and bike to school through the 5 Es.	To fund highway infrastructure safety projects aimed at reducing fatalities and serious injuries.	To create safety programs aimed at reducing traffic crashes.	To develop and maintain recreational trails and facilities for both motorized and non- motorized users.
Program Administrator	IDOT	IDOT	IDOT Division of Traffic Safety	IDOT Division of Traffic Safety	IDNR
Eligible Projects	Bike/ped facilities, safety education programs and encouragement incentives.	Bike/ped facilities, safety education programs and encouragement incentives.	Bike lanes, paved shoulders, Trail/Highway intersection improvements, crosswalks, signal improvement, and curb cuts as well as safety education and awareness programs.	Enforcement campaigns to improve bike/ped safety, helmet promotion, educational materials, and training.	Trails, Trail/ Highway intersection improvements, trailheads, educational materials, and training.
Key Project Requirements	Must relate to surface transportation.	Can only be spent within 1 1/2 miles of a school.	Must address goals written in State Highway Safety Plan.	Must address goals written in State Highway Safety Plan.	30% allocated to non- motorized trail project, 30% for motorized, 40% for diversity of trail use.
Application Process	Next anticipated call for projects Spring 2018.	Irregular schedule at call of IDOT.	Generally there is an annual update to the Plan at call of IDOT Division of Traffic Safety.	Generally each spring at call of IDOT Division of Traffic Safety.	Irregular schedules at call of Illinois Department of Natural Resources.
Local Match Required	Typically 20%	No match (2018 cycle)	10%	No match required	Typically 20%
Eligible Applicants	Local governments	Any governmental entity	Any governmental entity or non- profit	Any governmental entity or non- profit	Any governmental entity or non- profit

Application Process	Surface Transportation Block Grant Program (STBG)	Community Development Block Grants (CDBG)	Congestion Mitigation and Air Quality (CMAQ)	STBG Program Set-Aside (formerly TAP)	Invest in Cook
Program Purpose	To fund state and local road and transportation projects.	To fund community development projects in low- and moderate income communities.	To improve air quality and reduce traffic congestion in areas that do not meet air quality standards.	To support non-motorized modes of transportation	To support projects that contribute to the goals of the Cook County Long-Range Transportation Plan.
Program Administrator	North Shore Council of Mayors Councils of Mayors	Cook County Bureau of Economic Development	CMAQ	CMAQ	Cook County Department of Transportation & Highways
Eligible Projects	Bike/ped facilities. Road projects that include sidewalks receive additional points.	Accessibility projects, sidewalk improvements, street improvements, and other neighborhood facilities.	Bike/ped facilities, safety education programs and encouragement incentives, active transportation plans, bike/ped maps, bike/ ped coordinator position.	Bicycle and pedestrian facilities, streetscaping	Programs, Plans, Phase I and Phase II Engineering, right-of-way Construction
Key Project Requirements	1) Must reduce single occupancy vehicle trips and positively impact air quality. 2) Must be applied toward projects on collectors or arterials.	Must be in predominantly residential neighborhoods with populations identified as low- or moderate- income per application criteria.	1) Must be spent in non-attainment and maintenance areas. 2) Will be evaluated on air quality emissions.	1) Phase I engineering must be nearly complete. 2) Project must be included in a local, sub-regional or regional plan that was formally adopted.	Must relate to a goal spelled out in the county's long-range transportation plan.
Application Process	Varies depending upon sub- regional council of government	Varies, depending on funding availability.	Generally, an annual call for proposals.	Generally, an annual call for proposals in tandem with CMAQ announcement.	Generally, an annual call for proposals
Local Match Required	Typically 20-30% for bike/ped projects	No match required	Minimum 20%	20%	For low-need communities, at least 50%
Eligible Applicants	Local governments in Cook County	Local governments	Local or state governmental agencies	Local governments	Local governments, agencies, organizations

COST ESTIMATES

All Categories assume the following:

- No right-of-way or easement acquisition
- Phase I, II, and III Engineering Costs included

Facility and Improvements	Cost Per Mile (\$)
Park Trail	\$400,000 - \$600,000
10' Wide Asphalt Path	
Minor Earthwork and Landscaping/Restoration	
Wayfinding Signage & Pavement Marking	
Minor Drainage Infrastructure - Pipe Culverts	
Sidepath	\$600,000 - \$1,200,000
10' Wide Asphalt Path	
Minor Earthwork and Landscaping/Restoration	
Road and Wayfinding Signage & Pavement Marking	
Minor Drainage Infrastructure - Inlets & Sewer Connections	
ADA Ramp Reconstruction at Intersections	
Utility and Traffic Signal Equipment Relocations	
Bike Boulevard	\$200,000-\$800,000
Pavement Marking - Sharrows every 250'	
Road and Wayfinding Signage	
Speed Humps	
Traffic Islands/Curb Extensions as Desired	
Marked Shared Lanes	\$60,000-\$80,000
Pavement Marking - Sharrows every 250'	
Road and Wayfinding Signage	

Facility and Improvements (cont.)	Cost Per Mile (\$)
Advisory Bike Lanes	\$75,000-\$100,000
Pavement Marking - Bike Lane Markings and Dotted Line	
Road and Wayfinding Signage	
Road Diet for Bike Lanes	\$120,000-\$200,000
Pavement Marking - 3 Lanes with Buffered Bike Lanes	
Road and Wayfinding Signage	
Widening for Bike Lanes with Urban Cross Section	\$3,000,000 - \$5,000,000
Pavement Widening with New Curb and Gutter	
New Closed Storm Drain System	
Driveway & Sidewalk Reconstruction	
Pavement Marking	
Road and Wayfinding Signage	
Traffic Signal Pole Relocation	
Minor Earthwork and Landscaping/Restoration	

Intersection/Crossing Treatment Tools	Estimated Cost
In-Street State Law - Stop for Pedestrian Signs	\$350/sign
Attached curb extensions	\$30,000/curb extension
Pedestrian refuge island	\$60,000/island
Rectangular Rapid Flashing Beacons (RRFBs)	\$10,000/unit (\$20,000 to \$50,000/location)
Raised crosswalk	\$80,000/crosswalk
Detached bump-outs	\$15,000/pair
Residential street mini roundabout	\$15,000/intersection

APPENDIX

WAYFINDING SIGNAGE LOCATIONS

Street Name	From	To	Existing	Proposed	Destinations to Include in Signage	Phase	Notes
North Branch Trail	Lake Avenue	Happ Road	Yes	Yes	Wilmette, Glenview, Northfield, New Trier High School, Loyola Academy, Chicago Botanic Gardens	Replace	
Glenview Road	Harms Road	Wilmette Avenue	Yes	Yes	Hibbard Park, Centennial Park, Downtown Wilmette, Gillson Park, North Branch Trail, Glenview	Replace	
Wilmette Avenue	Glenview Road	Ridge Road	Yes	Yes	Hibbard Park, downtown Wilmette, Gillson Park, Green Bay Trail	Replace	
Wilmette Avenue	Lawler Avenue	Glenview Road	No	Yes	Highcrest School, Romona School, Hibbard Park, downtown Wilmette, Gillson Park, Green Bay Trail	Sign Now	
Hibbard Road	Old Glenview Road	Wilmette Avenue	Yes	Yes	Hibbard Park, Romona School	Replace	
Hibbard Road	Wilmette Avenue	Skokie Road	No	Yes	Romona School, Edens Plaza, Wilmette Jr. High School	Sign Now	
Laramie Avenue	Wilmette Avenue	Illinois Road	Yes	Yes	Edens Plaza, New Trier High School, Loyola Academy, West Park	Replace	Future destinations: Avoca West, Skokie Valley Trail
Wilmette Avenue	Skokie Valley Trail	Lawler Avenue	No	Yes	Avoca West, West Park, downtown Wilmette	Sign Later	Install with Edens Pedestrian Crossing
Skokie Valley Trail	Wilmette Avenue	North Branch Trail	No	Yes	Avoca West, North Branch Trail, Wilmette, Glenview, Northfield	Sign Later	
Illinois Road	Happ Road	North Branch Trail	No	Yes	Loyola Academy, New Trier High School, North Branch Trail	Sign Now	Install with planned sidepath
Illinois Road	Happ Road	Edens Expressway	Partial	Yes	Loyola Academy, New Trier High School, North Branch Trail		Existing route between Laramie Avenue and West Frontage Road. Future destination: Skokie Valley Trail
Illinois Road	Edens Expressway	Skokie Road	No	Yes	Loyola Academy, New Trier High School, North Branch Trail, Edens Plaza	Sign Later	Install with Edens bridge improvements
Illinois Road	Skokie Road	Thornwood Avenue	No	Yes	Marie Murphy School, Harper School, Edens Plaza, North Branch Trail	Sign Later	Future destination: Skokie Valley Trail
Thornwood Avenue	Illinois Road	Hunter Road	No	Yes	Harper School, Malinckrodt Park	Sign Now	
Hunter Road	Thornwood Avenue	Thornwood Avenue	No	Yes	Harper School, Malinckrodt Park	Sign Now	
Thornwood Avenue	Hunter Road	Skokie Road			Harper School, Malinckrodt Park	Sign Now	
Lawler Avenue	Wilmette Avenue	Washington Avenue	No	Yes	Avoca West, West Park	Sign Now	Install with Edens Pedestrian Crossing. Future destination: Skokie Valley Trail

Street Name	From	To	Existing	Proposed	Destinations to Include in Signage	Phase	Notes
Washington Avenue	Lawler Avenue	Hibbard Road	No	Yes	Avoca West, West Park	Sign Now	Install with Edens Pedestrian Crossing. Future destination: Skokie Valley Trail
Washington Avenue	Hibbard Road	Romona Road	No	Yes	Wilmette Jr. High School, downtown Wilmette, Regina Dominican High School	Sign Now	
Romona Road	Romona and Dominican Path	Birchwood Avenue	No	Yes	Wilmette Jr. High School, downtown Wilmette, Regina Dominican High School	Sign Now	
Birchwood Avenue	Romona Road	Locust Road	No	Yes	Wilmette Jr. High School, downtown Wilmette, Regina Dominican High School	Sign Now	Install with Locust Road and Birchwood Road crossing improvements
Romona and Dominican Path	Romona Road	Locust Road	Yes	No	Wilmette Jr. High School, Regina Dominican High School, Romona Elementary School	Replace	
Locust Road	Glenview Road	Lake Avenue	Partial	Yes	Romona School, Wilmette Jr. High School, Highcrest School, Regina Dominican High School	Sign Now	Install with marked shared lanes
Locust Road	Lake Avenue	Illinois Road	No	Yes	Avoca Park, Marie Murphy School	Sign Now	
Community Park Trail	Locust Road	Hunter Road	No	No	Romona School, Highcrest School, Wilmette Junior High School, Regina Dominican High School	Sign Now	Include Romona School?
Hunter Road	Community Park Trail	Washington Avenue	Yes	Yes	Highcrest School, Wilmette Junior High School, Regina Dominican High School	Replace	
Washington Avenue	Hunter Road	Ridge Road	Yes	Yes	Highcrest School, Wilmette Junior High School, Regina Dominican High School	Replace	
Ridge Road	Thornwood Avenue	Isabella Street	No	Yes	Malinckrodt Park, Community Park Trail, Howard Park, McKenzie School, Ridge Road District	Sign Now	
Highland Avenue	Ridge Road	15th Street	Yes	Yes	McKenzie School, downtown Wilmette, Wilmette Metra Station	Replace	
McKenzie Park Trail	15th Street	Prairie Avenue	Yes	Yes	McKenzie School, downtown Wilmette, Wilmette Metra Station	Replace	
Prairie Avenue	McKenzie Park Trail	Central Avenue	Yes	Yes	Wilmette Library	Replace	
Central Avenue	Prairie Avenue	Green Bay Trail	Partial	Yes	Downtown Wilmette, Metra Station, Green Bay Trail	Sign Now	
Sterling Lane	Ridge Road	Isabella Street	No	Yes	Wilmette, Evanston	Sign Now	

Street Name	From	To	Existing	Proposed	Destinations to Include in Signage	Phase	Notes
Isabella Street	Sterling Lane	Park Avenue	No	Yes	Green Bay Trail, downtown Wilmette	Sign Now	
Park Avenue	Isabella Street	Linden Avenue	No	Yes	Green Bay Trail, downtown Wilmette	Sign Now	
Linden Avenue	Park Avenue	Poplar Avenue	No	Yes	Green Bay Trail, downtown Wilmette	Sign Now	
Poplar Avenue	Isabella Street	Greenleaf Avenue	Yes	Yes	Green Bay Trail, downtown Wilmette, Evanston	Replace	
Isabella Street	Poplar Avenue	Asbury Avenue	No	Yes	Green Bay Trail, Linden CTA Station, Gillson Park	Sign Now	
Green Bay Trail	Greenleaf Avenue	Greenwood Avenue	Yes	No	Downtown Wilmette, Metra Station, Evanston, Winnetka	Replace	
Lake Avenue	Skokie Valley Trail	Skokie Rd	No	Yes	Downtown Wilmette, Metra Station, Green Bay Trail, Gillson Park	Sign Later	Install with road diet
Lake Avenue	Wilmette Avenue	Michigan Avenue	No	Yes	Gillson Park, downtown Wilmette, Metra Station, Green Bay Trail	Sign Now	
Greenleaf Avenue	Poplar Avenue	4th Street	Yes	Yes	Green Bay Trail, Linden CTA Station, Gillson Park, downtown Wilmette, Metra Station	Replace	Add Central School and St. Francis School?
4th Street	Isabella Street	Sheridan Road	No	Yes	CTA Linden Station, Linden Square	Sign Now	
7th Street	Greenleaf Avenue	Sheridan Road	No	Yes	Plaza del Lago, Sheridan Road	Sign Now	
Sheridan Road	Isabella Street	Wilmette Avenue	No	No	Plaza del Lago, Gillson Park, B'Hai Temple, Evanston, Winnetka	Sign Now	
Greenwood Avenue	7th Street	Sheridan Road	No	No	Sheridan Road, Gillson Park, Plaza del Lago	Sign Now	
Central Avenue	4th Street	Sheridan Road	Yes	No	Gillson Park underpass, Sheridan Road	Replace	
Park Avenue	Central Avenue	Linden Avenue	Yes	No	Wilmette Library	Replace	
Skokie Road	Illinois Road	Hibbard Road	No	Yes	Edens Plaza Centennial Park, North Branch Trail	Sign Later	
Lake Avenue	North Branch Trail	Skokie Road	No	Yes	North Branch Trail, New Trier High School, Loyola Academy, Avoca West, Edens Plaza	Sign Later	Future sign: Skokie Valley Trail
Old Glenview Road	Hibbard Road	Frontage Road	No	Yes		Sign Now	
West Park Path	Laramie Avenue	Skokie Valley Trail	No	Yes	Skokie Valley Trail, Avoca West	Sign Later	Sign with Skokie Valley Trail construction

IMPACT MATRIX: ENGINEERING SCORING CRITERIA

Routes		Recommendation Details							
Corridor	St/Facility Name	From	To	Facility Type	Status	Notes	Safety	Reducing Traffic Volume	Parking
Illinois/Thornwood	Illinois Rd Option 1	Skokie Rd	Thornwood Ave	Multiple Options: Sidepath (S side)	Planned		High	Low, likely to have the smallest impact on AADT.	Low, not likely to impact parking.
	Illinois Rd Option 2	Skokie Rd	Thornwood Ave	Multiple Options: Bike Lanes	Planned		High	Low, likely to have low impact on AADT. Vehicle lane reduction not needed.	Low, not likely to impact parking.
	Illinois Rd Option 1	Loyola Academy parking lot	Happ Rd	Multiple Options: Bike Boulevard	Planned	Connection to future Skokie Valley Trail	Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
	Illinois Rd Option 2	Loyola Academy parking lot	Happ Rd	Multiple Options: Marked Share Lanes	Planned	Connection to future Skokie Valley Trail	Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
	Illinois Rd Option 3	Loyola Academy parking lot	Happ Rd	Multiple Options: Bike Lanes	Planned	Connection to future Skokie Valley Trail	High	Low, likely to have low impact on AADT. Vehicle lane reduction not needed.	Low, not likely to impact parking.
	Thornwood Ave	Middlebury La	Hunter Rd	Bike Boulevard	Planned		Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
	Hunter Rd	Thornwood Ave	Elmwood Ave	Bike Boulevard	Planned	Quick N/S jog to continue Illinois/Thornwood bike route	Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
Lake Ave	Elmwood Ave	Hunter Rd	Ridge Rd	Bike Boulevard	Planned		Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
	Lake Ave	North Branch Trail	Skokie Rd	Sidepath	Planned	Can be phased with the buildout of Skokie Valley Trail	High	Low, likely to have the smallest impact on AADT.	Low, not likely to impact parking.
						Not recommended at this time. Alternative considered but it would be too impactful until environmental conditions change.			
	Lake Ave	Skokie Rd	Hunter Rd	Sidepath (N. side)	Not recommended at this time	Westbound bicyclists would transition from bike lanes to sidepath at Cornell and eastbound bicyclists would transition from sidepath to bike lanes at Hunter signalized intersection with bike boxes.	High	Low, likely to have the smallest impact on AADT.	Low, not likely to impact parking.
	Lake Ave Option 1	Hunter Rd	Green Bay Rd	Multiple Options: Bike lanes: Road diet	Not recommended at this time	Not recommended at this time. Alternative considered but it would be too impactful until environmental conditions change.	High	High, could have larger impact on traffic volume.	Low, not likely to impact parking.
	Lake Ave Option 2	Hunter Rd	Green Bay Rd	Sidepath	Not recommended at this time	Not recommended at this time. Alternative considered but it would be too impactful until environmental conditions change.	High	Low, likely to have the smallest impact on AADT.	Low, not likely to impact parking.
	Lake Ave Option 1	Green Bay Trail	Wilmette Ave	Multiple options: Bike lanes: Road diet	Contingent upon traffic study		High	High, could have larger impact on traffic volume.	Medium, could moderately impact parking.
	Lake Ave Option 2	Green Bay Trail	Wilmette Ave	Multiple options: Advisory bike lanes	Contingent upon traffic study		Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
	Lake Ave Option 1	Wilmette Ave	S leg of Michigan Ave	Multiple options: Marked Shared Lanes	Planned		Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
	Lake Ave Option 2	Wilmette Ave	S leg of Michigan Ave	Multiple options: Bike Boulevard	Planned		Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.

Engineering Scoring Criteria					
Traffic Calming	Vehicular Speed Reduction	Roadway Reconfiguration/Design	Pedestrian Mobility	Bike Mobility	Vehicular Mobility
Low, minimal traffic calming.	Low, likely no impact.	Low, would result in minimal impacts.	High, would provide highly increased pedestrian benefits.	High, would greatly benefit bicycle mobility.	Low, would have minimal impacts to vehicular mobility.
Medium, has potential to calm traffic.	Medium, could affect speed.	High, will require additional pavement and design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	Low, would have minimal impacts to vehicular mobility.
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	High, likely to result in lower vehicular speeds.
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	High, likely to result in lower vehicular speeds.
Medium, has potential to calm traffic.	Medium, could affect speed.	High, will require additional pavement and design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	Low, would have minimal impacts to vehicular mobility.
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	High, likely to result in lower vehicular speeds.
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	High, likely to result in lower vehicular speeds.
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	High, likely to result in lower vehicular speeds.
Low, minimal traffic calming.	Low, likely no impact.	Low, would result in minimal impacts.	High, would provide highly increased pedestrian benefits.	High, would greatly benefit bicycle mobility.	Low, would have minimal impacts to vehicular mobility.
		Low, would result in minimal impacts.	High, would provide highly increased pedestrian benefits.	High, would greatly benefit bicycle mobility.	Low, would have minimal impacts to vehicular mobility.
Low, minimal traffic calming.	Low, likely no impact.			High, would greatly benefit bicycle mobility.	
High, likely to have traffic calming effects.	High, likely to reduce speed.	High, will require additional pavement and design.	Medium, would enhance existing pedestrian facilities.		High, likely to result in lower vehicular speeds.
		Low, would result in minimal impacts.		High, would greatly benefit bicycle mobility.	Low, would have minimal impacts to vehicular mobility.
Low, minimal traffic calming.	Low, likely no impact.		Medium, would enhance existing pedestrian facilities.		
				High, would greatly benefit bicycle mobility.	
High, likely to have traffic calming effects.	High, likely to reduce speed.	High, will require additional pavement and design.	Medium, would enhance existing pedestrian facilities.		High, likely to result in lower vehicular speeds.
				High, would greatly benefit bicycle mobility.	Medium, may result in lowered vehicular speeds.
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.		
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	High, likely to result in lower vehicular speeds.
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	High, likely to result in lower vehicular speeds.

Routes				Recommendation Details					
Corridor	St/Facility Name	From	To	Facility Type	Status	Notes	Safety	Reducing Traffic Volume	Parking
Wilmette Ave	Edens Pedestrian Overpass/ Underpass	Leclaire Ave	Lawler Ave	Pedestrian Tunnel	Planned	<p>At 20' diameter the total cost is just under 10M as a ballpark and if it's a 12' diameter it would be easier to push and probably half the cost (6M). 12' is okay because the volume would be low and traffic would probably be directional. There won't be opposing traffic often.</p> <p>Future explorations: is there enough room for jacking pits on either side? There probably is room, but it could be tight on one side. Generally speaking the biggest issue or concern from a structural standpoint for this type of design is settlement since the tunnel is not very deep. Not that it can't be done, just things to consider with the design.</p>	High	n/a	n/a
	Wilmette Ave	Laramie Ave	Leclaire Ave	Bike Boulevard	Planned		Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
	Wilmette Ave	Lawler Ave	Glenview Rd	Bike Boulevard	Planned		Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
	Wilmette Ave Trail Connector	Wilmette Ave	Glenview Rd	Trail	Planned	Close Wilmette Ave access street and build trail.	High	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
	Wilmette Ave	Glenview Rd	Ridge Rd	Road diet: bike lanes	Planned	Will need to address and coordinate with IDOT on left turn lane volumes from Wilmette onto Old Glenview Rd	High	Low, likely to have the smallest impact on AADT.	Low, not likely to impact parking.
	West Park Path: Skokie Valley Trail Connector	Laramie Ave	Skokie Valley Trail	Trail	Planned	Will require an easement from Park District.	High	n/a	n/a
	Sterling Ln	Gross Point Rd	Isabella St	Bike Boulevard	Planned		Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
	Isabella St	Sterling Ln	Park Ave	Bike Boulevard	Planned		Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
	Park Ave	Isabella St	Oakwood Ave	Bike Boulevard	Planned	Will include turn markings.	Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
	Oakwood Ave	Park Ave	Poplar Dr	Bike Boulevard	Planned	Will use curb cut-through.	Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
	Isabella St	Poplar Ave	Sheridan Rd	Bike Boulevard	Planned		Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
	Glenview Rd Option 1	Wilmette Ave	Long Rd	Multiple Options: Sidepath	Planned		High	Low, likely to have the smallest impact on AADT.	Low, not likely to impact parking.
	Glenview Rd Option 2	Wilmette Ave	Long Rd	Multiple Options: Bike lanes	Planned		Medium	Low, likely to have low impact on AADT. Vehicle lane reduction not needed.	n/a
	Washington Ave	Romona Rd	Skokie Rd	Bike Boulevard	Planned	Connects to Skokie Rd via sidewalk (widened to sidepath).	Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
	Washington Ave	Skokie Rd	Lawler Ave	Bike Boulevard	Planned		Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.

Engineering Scoring Criteria					
Traffic Calming	Vehicular Speed Reduction	Roadway Reconfiguration/Design	Pedestrian Mobility	Bike Mobility	Vehicular Mobility
			High, would provide highly increased pedestrian benefits.	High, would greatly benefit bicycle mobility.	Low, would have minimal impacts to vehicular mobility.
n/a	n/a	High, will require additional pavement and design.			
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	High, likely to result in lower vehicular speeds.
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	High, likely to result in lower vehicular speeds.
High, likely to have traffic calming effects.	Medium, could affect speed.	Low, would result in minimal impacts.	High, would provide highly increased pedestrian benefits.	High, would greatly benefit bicycle mobility.	Low, would have minimal impacts to vehicular mobility.
High, likely to have traffic calming effects.	High, likely to reduce speed.	High, will require additional pavement and design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	Medium, may result in lowered vehicular speeds.
Low, minimal traffic calming.	n/a	Low, would result in minimal impacts.	High, would provide highly increased pedestrian benefits.	High, would greatly benefit bicycle mobility.	Low, would have minimal impacts to vehicular mobility.
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	High, likely to result in lower vehicular speeds.
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	High, likely to result in lower vehicular speeds.
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	High, likely to result in lower vehicular speeds.
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Low, minimal traffic calming.	Low, likely no impact.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	Low, would have minimal impacts to vehicular mobility.
Medium, has potential to calm traffic.	Medium, could affect speed.	High, will require additional pavement and design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	Low, would have minimal impacts to vehicular mobility.
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	High, likely to result in lower vehicular speeds.
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	High, likely to result in lower vehicular speeds.

Routes		Recommendation Details							
Corridor	St/Facility Name	From	To	Facility Type	Status	Notes	Safety	Reducing Traffic Volume	Parking
	Washington Ave	Hunter Rd	Ridge Rd	Bike Boulevard	Planned		Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
	Highland Ave	Ridge Rd	15th St	Bike Boulevard	Planned		Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
	Avoca West ES: Skokie Valley Trail Connector	Skokie Valley Trail	Avoca West ES parking lot	Trail	Planned		High	n/a	n/a
	Greenleaf Ave	Poplar Ave	4th St	Marked Shared Lanes	Planned		Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
	Birchwood Ave	Locust Rd	Romona Rd	Bike Boulevard	Planned		Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
	Romona Rd	Birchwood Ave	Washington Ave	Bike Boulevard	Planned		Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
	Lawler Ave	Washington Ave	Wilmette Ave	Bike Boulevard	Planned		Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
	Prairie Ave	McKenzie Elementary School	Central Ave	Bike Boulevard	Planned	Includes bike boulevard pavement markings with directional sharrows that indicate turning movements to continue	Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
	Central Ave	Prairie Ave	Green Bay Trail	Bike Boulevard	Planned		Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
	Community Park Trail	Wilmette Junior High parking lot	Highcrest Middle School parking lot	Trail	Existing		High	n/a	n/a
	Community Park	Wilmette Junior High	tennis courts	Trail	Existing		High	n/a	n/a
	Community Park	tennis courts	Locust Rd	Trail	Planned		High	n/a	n/a
Old Glenview Rd	Old Glenview Rd	Frontage Rd	Hibbard Rd	Bike Boulevard	Planned		Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
Ridge Rd	Ridge Rd	Elmwood Ave	Isabella St	Advisory Bike Lanes	Planned		Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
Skokie Rd	Skokie Rd Option 1	Illinois Rd	Hibbard Rd	Sidepath (E side)	Planned		High	Low, likely to have the smallest impact on AADT.	Medium, could moderately impact parking.
	Skokie Rd Option 2	Illinois Rd	Hibbard Rd	Sidepath (W side)	Planned		High	Low, likely to have the smallest impact on AADT.	Medium, could moderately impact parking.
	I-94 EB to US-41 SB ramp	Skokie Rd	Illinois Rd	Cantilevered sidepath	Planned	Sidepath structure next to or cantilevered to ramp bridge.	High	n/a	n/a
Hibbard Rd	Hibbard Rd Option 1	Skokie Rd	Old Glenview Rd	Multiple Options: Sidepath (W side)	Planned		High	Low, likely to have the smallest impact on AADT.	Low, not likely to impact parking.
	Hibbard Rd Option 2	Skokie Rd	Old Glenview Rd	Multiple Options: Sidepath (E side)	Planned		High	Low, likely to have the smallest impact on AADT.	Medium, could moderately impact parking.
	Hibbard Rd Option 3	Skokie Rd	Old Glenview Rd	Multiple Options: Bike lanes	Planned		Medium	Low, likely to have low impact on AADT. Vehicle lane reduction not needed.	n/a

Engineering Scoring Criteria					
Traffic Calming	Vehicular Speed Reduction	Roadway Reconfiguration/Design	Pedestrian Mobility	Bike Mobility	Vehicular Mobility
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	High, likely to result in lower vehicular speeds.
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	High, likely to result in lower vehicular speeds.
Low, minimal traffic calming.	n/a	Low, would result in minimal impacts.	High, would provide highly increased pedestrian benefits.	High, would greatly benefit bicycle mobility.	Low, would have minimal impacts to vehicular mobility.
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	High, likely to result in lower vehicular speeds.
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Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	High, likely to result in lower vehicular speeds.
Low, minimal traffic calming.	Low, likely no impact.	Low, would result in minimal impacts.	Medium, would enhance existing pedestrian facilities.	Medium, would enhance pre-existing facilities.	Low, would have minimal impacts to vehicular mobility.
Low, minimal traffic calming.	Low, likely no impact.	Low, would result in minimal impacts.	Medium, would enhance existing pedestrian facilities.	Medium, would enhance pre-existing facilities.	Low, would have minimal impacts to vehicular mobility.
Low, minimal traffic calming.	Low, likely no impact.	Low, would result in minimal impacts.	Medium, would enhance existing pedestrian facilities.	Medium, would enhance pre-existing facilities.	Low, would have minimal impacts to vehicular mobility.
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	High, likely to result in lower vehicular speeds.
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	Medium, may result in lowered vehicular speeds.
Low, minimal traffic calming.	Low, likely no impact.	Low, would result in minimal impacts.	High, would provide highly increased pedestrian benefits.	High, would greatly benefit bicycle mobility.	Low, would have minimal impacts to vehicular mobility.
Low, minimal traffic calming.	Low, likely no impact.	Low, would result in minimal impacts.	High, would provide highly increased pedestrian benefits.	High, would greatly benefit bicycle mobility.	Low, would have minimal impacts to vehicular mobility.
n/a	n/a	n/a	High, would provide highly increased pedestrian benefits.	High, would greatly benefit bicycle mobility.	n/a
Low, minimal traffic calming.	Low, likely no impact.	Low, would result in minimal impacts.	High, would provide highly increased pedestrian benefits.	High, would greatly benefit bicycle mobility.	Low, would have minimal impacts to vehicular mobility.
Low, minimal traffic calming.	Low, likely no impact.	Low, would result in minimal impacts.	Medium, would enhance existing pedestrian facilities.	Medium, would enhance pre-existing facilities.	Low, would have minimal impacts to vehicular mobility.
Medium, has potential to calm traffic.	Medium, could affect speed.	High, will require additional pavement and design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	Low, would have minimal impacts to vehicular mobility.

Routes		Recommendation Details							
Corridor	St/Facility Name	From	To	Facility Type	Status	Notes	Safety	Reducing Traffic Volume	Parking
Laramie Ave	Laramie Ave	Illinois Rd	Wilmette Ave	Bike Boulevard	Planned		Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
Happ Rd	Happ Rd	Illinois Rd	North Branch Trail	Sidepath	Planned	Connects to planned sidepath on Happ in Northfield.	High	Low, likely to have the smallest impact on AADT.	Low, not likely to impact parking.
Illinois Rd	Illinois Rd	Thornwood Ave	Washington Ave	Sidepath (SW side)	Planned		High	Low, likely to have the smallest impact on AADT.	Low, not likely to impact parking.
Crawford Ave	Crawford Ave	Wilmette Ave	Old Glenview Rd	Sidepath (SW side)	Planned		High	Low, likely to have the smallest impact on AADT.	Low, not likely to impact parking.
Green Bay Trail Connection	Poplar Ave	Greenleaf Ave	Isabella St	Bike Boulevard	Planned	Elephant's feet marking lines on either side of shared lane marking.	Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
Locust Rd	Locust Rd	Glenview Rd	Illinois Rd	Bike Boulevard	Planned		Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
Park Ave		Central Ave	Oakwood Ave	Bike Boulevard	Planned		Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
4th St	4th St	Lake Ave	Isabella St	Bike Boulevard	Planned		Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.
7th St	7th St	Greenwood Ave	Greenleaf Ave	Bike Boulevard	Planned		Medium	Medium, has potential to reduce traffic.	Low, not likely to impact parking.

Engineering Scoring Criteria					
Traffic Calming	Vehicular Speed Reduction	Roadway Reconfiguration/Design	Pedestrian Mobility	Bike Mobility	Vehicular Mobility
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design. Low, would result in minimal impacts.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	High, likely to result in lower vehicular speeds.
Low, minimal traffic calming.	Low, likely no impact.	Low, would result in minimal impacts.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	Low, would have minimal impacts to vehicular mobility.
Low, minimal traffic calming.	Low, likely no impact.	Low, would result in minimal impacts.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	Low, would have minimal impacts to vehicular mobility.
Low, minimal traffic calming.	Low, likely no impact.	Low, would result in minimal impacts.	High, would provide highly increased pedestrian benefits.	High, would greatly benefit bicycle mobility.	Low, would have minimal impacts to vehicular mobility.
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	High, likely to result in lower vehicular speeds.
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	High, likely to result in lower vehicular speeds.
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	High, likely to result in lower vehicular speeds.
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	High, likely to result in lower vehicular speeds.
Medium, has potential to calm traffic.	Medium, could affect speed.	Medium, will require additional markings or design.	Medium, would enhance existing pedestrian facilities.	High, would greatly benefit bicycle mobility.	High, likely to result in lower vehicular speeds.

IMPACT MATRIX: COORDINATION SCORING CRITERIA

Routes		Recommendation Details				
Corridor	St/Facility Name	From	To	Facility Type	Status	Notes
Illinois/Thornwood	Illinois Rd Option 1	Skokie Rd	Thornwood Ave	Multiple Options: Sidepath (S side)	Planned	
	Illinois Rd Option 2	Skokie Rd	Thornwood Ave	Multiple Options: Bike Lanes	Planned	
	Illinois Rd Option 1	Loyola Academy parking lot	Happ Rd	Multiple Options: Bike Boulevard	Planned	Connection to future Skokie Valley Trail
	Illinois Rd Option 2	Loyola Academy parking lot	Happ Rd	Multiple Options: Marked Share Lanes	Planned	Connection to future Skokie Valley Trail
	Illinois Rd Option 3	Loyola Academy parking lot	Happ Rd	Multiple Options: Bike Lanes	Planned	Connection to future Skokie Valley Trail
	Thornwood Ave	Middlebury La	Hunter Rd	Bike Boulevard	Planned	
	Hunter Rd	Thornwood Ave	Elmwood Ave	Bike Boulevard	Planned	Quick N/S jog to continue Illinois/Thornwood bike route
	Elmwood Ave	Hunter Rd	Ridge Rd	Bike Boulevard	Planned	
	Lake Ave	Lake Ave	North Branch Trail	Sidepath	Planned	Can be phased with the buildout of Skokie Valley Trail
	Lake Ave	Skokie Rd	Hunter Rd	Sidepath (N. side)	Not recommended at this time	Not recommended at this time. Alternative considered but it would be too impactful until environmental conditions change.
Lake Ave	Lake Ave Option 1	Hunter Rd	Green Bay Rd	Multiple Options: Bike lanes: Road diet	Not recommended at this time	Westbound bicyclists would transition from bike lanes to sidepath at Cornell and eastbound bicyclists would transition from sidepath to bike lanes at Hunter signalized intersection with bike boxes.
	Lake Ave Option 2	Hunter Rd	Green Bay Rd	Sidepath	Not recommended at this time	Not recommended at this time. Alternative considered but it would be too impactful until environmental conditions change.
	Lake Ave Option 3	Hunter Rd	Green Bay Rd	Sidepath	Not recommended at this time	Not recommended at this time. Alternative considered but it would be too impactful until environmental conditions change.

Coordination Scoring Criteria					
Land Acquisition	Jurisdiction	Maintenance	Trees	Furniture	Utilities
Medium, potential easements may be required.	Cook County	Medium, routine repairs and shoveling.	High, more than 30 trees potentially impacted.	Low, minimal street furniture or utility poles.	Medium
Medium, potential easements may be required.	Municipal/ Cook County	Medium, routine repairs and shoveling.	High, more than 30 trees potentially impacted.	Low, minimal street furniture or utility poles.	Medium
n/a	Municipal/ Cook County	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal/ Cook County	Medium, routine repairs and shoveling.	n/a	n/a	n/a
Medium, potential easements may be required.	Municipal/ Cook County	Medium, routine repairs and shoveling.	Medium, near 15 trees could be impacted.	n/a	Medium
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
Medium, potential easements may be required.	Cook County	Medium, routine repairs and shoveling.	Medium, near 15 trees could be impacted.	n/a	Medium
Medium, potential easements may be required.	Cook County	Medium, routine repairs and shoveling.	High, more than 30 trees potentially impacted.	n/a	Medium
n/a	Cook County	Medium, routine repairs and shoveling.	n/a	Low, minimal street furniture or utility poles.	Low
Medium, potential easements may be required.	Cook County	Medium, routine repairs and shoveling.	High, more than 30 trees potentially impacted.	Medium, likely to impact some utility poles.	Medium

Routes		Recommendation Details				
Corridor	St/Facility Name	From	To	Facility Type	Status	Notes
	Lake Ave Option 1	Green Bay Trail	Wilmette Ave	Multiple options: Bike lanes: Road diet	Contingent upon traffic study	
	Lake Ave Option 2	Green Bay Trail	Wilmette Ave	Multiple options: Advisory bike lanes	Contingent upon traffic study	
	Lake Ave Option 1	Wilmette Ave	S leg of Michigan Ave	Multiple options: Marked Shared Lanes	Planned	
	Lake Ave Option 2	Wilmette Ave	S leg of Michigan Ave	Multiple options: Bike Boulevard	Planned	
						At 20' diameter the total cost is just under 10M as a ballpark and if it's a 12' diameter it would be easier to push and probably half the cost (6M). 12' is okay because the volume would be low and traffic would probably be directional. There won't be opposing traffic often.
						Future explorations: is there enough room for jacking pits on either side? There probably is room, but it could be tight on one side. Generally speaking the biggest issue or concern from a structural standpoint for this type of design is settlement since the tunnel is not very deep. Not that it can't be done, just things to consider with the design.
Wilmette Ave	Edens Pedestrian Overpass/Underpass	Leclaire Ave	Lawler Ave	Pedestrian Tunnel	Planned	
	Wilmette Ave	Laramie Ave	Leclaire Ave	Bike Boulevard	Planned	
	Wilmette Ave	Lawler Ave	Glenview Rd	Bike Boulevard	Planned	
	Wilmette Ave Trail Connector	Wilmette Ave	Glenview Rd	Trail	Planned	Close Wilmette Ave access street and build trail.
	Wilmette Ave	Glenview Rd	Ridge Rd	Road diet: bike lanes	Planned	Will need to address and coordinate with IDOT on left turn lane volumes from Wilmette onto Old Glenview Rd
	West Park Path: Skokie Valley Trail Connector	Laramie Ave	Skokie Valley Trail	Trail	Planned	Will require an easement from Park District.

Coordination Scoring Criteria					
Land Acquisition	Jurisdiction	Maintenance	Trees	Furniture	Utilities
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal	Medium, routine repairs and shoveling.	Medium, near 15 trees could be impacted.	n/a	Low
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal/ Cook County	Medium, routine repairs and shoveling.	n/a	n/a	n/a
High, will require land acquisition.	Cook County/ Lake County	High, additional matinenance would be required.	Low, not likely to impact trees.	n/a	n/a
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
Medium, potential easements may be required.	Municipal/ IDOT	Medium, routine repairs and shoveling.	Low, not likely to impact trees.	n/a	n/a
n/a	IDOT	Medium, routine repairs and shoveling.	Low, not likely to impact trees.	n/a	Medium
High. will require land acquisition.	Municipal/ ComEd	Medium, routine repairs and shoveling.	n/a	n/a	n/a

Routes		Recommendation Details				
Corridor	St/Facility Name	From	To	Facility Type	Status	Notes
	Sterling Ln	Gross Point Rd	Isabella St	Bike Boulevard	Planned	
	Isabella St	Sterling Ln	Park Ave	Bike Boulevard	Planned	
	Park Ave	Isabella St	Oakwood Ave	Bike Boulevard	Planned	Will include turn markings.
	Oakwood Ave	Park Ave	Poplar Dr	Bike Boulevard	Planned	Will use curb cut-through.
	Isabella St	Poplar Ave	Sheridan Rd	Bike Boulevard	Planned	
Glenview Rd	Glenview Rd Option 1	Wilmette Ave	Long Rd	Multiple Options: Sidepath	Planned	
	Glenview Rd Option 2	Wilmette Ave	Long Rd	Multiple Options: Bike lanes	Planned	
Washington Ave	Washington Ave	Romona Rd	Skokie Rd	Bike Boulevard	Planned	Connects to Skokie Rd via sidewalk (widened to sidepath).
	Washington Ave	Skokie Rd	Lawler Ave	Bike Boulevard	Planned	
	Washington Ave	Hunter Rd	Ridge Rd	Bike Boulevard	Planned	
	Highland Ave	Ridge Rd	15th St	Bike Boulevard	Planned	
	Avoca West ES: Skokie Valley Trail Connector	Skokie Valley Trail	Avoca West ES parking lot	Trail	Planned	
	Greenleaf Ave	Poplar Ave	4th St	Marked Shared Lanes	Planned	

Coordination Scoring Criteria					
Land Acquisition	Jurisdiction	Maintenance	Trees	Furniture	Utilities
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal/ Township	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	IDOT/ Municipal	Medium, routine repairs and shoveling.	High, more than 30 trees potentially impacted.	n/a	Medium
n/a	IDOT/ Municipal	Medium, routine repairs and shoveling.	Medium, near 15 trees could be impacted.	n/a	Medium
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
High, will require land acquisition.	Municipal/ Avoca West ES	Medium, routine repairs and shoveling.	Low, not likely to impact trees.	n/a	n/a
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a

Routes		Recommendation Details				
Corridor	St/Facility Name	From	To	Facility Type	Status	Notes
	Birchwood Ave	Locust Rd	Romona Rd	Bike Boulevard	Planned	Includes bike boulevard pavement markings with directional sharrows that indicate turning movements to continue
	Romona Rd	Birchwood Ave	Washington Ave	Bike Boulevard	Planned	
	Lawler Ave	Washington Ave	Wilmette Ave	Bike Boulevard	Planned	
	Prairie Ave	McKenzie Elementary School	Central Ave	Bike Boulevard	Planned	
	Central Ave	Prairie Ave	Green Bay Trail	Bike Boulevard	Planned	
	Community Park Trail	Wilmette Junior High parking lot	Highcrest Middle School parking lot	Trail	Existing	
	Community Park	Wilmette Junior High	tennis courts	Trail	Existing	
	Community Park	tennis courts	Locust Rd	Trail	Planned	
	Old Glenview Rd	Old Glenview Rd	Frontage Rd	Hibbard Rd	Bike Boulevard	Planned
	Ridge Rd	Ridge Rd	Elmwood Ave	Isabella St	Advisory Bike Lanes	Planned
Skokie Rd	Skokie Rd Option 1	Illinois Rd	Hibbard Rd	Sidepath (E side)	Planned	Sidepath structure next to or cantilevered to ramp bridge.
	Skokie Rd Option 2	Illinois Rd	Hibbard Rd	Sidepath (W side)	Planned	
	I-94 EB to US-41 SB ramp	Skokie Rd	Illinois Rd	Cantilevered sidepath	Planned	
Hibbard Rd	Hibbard Rd Option 1	Skokie Rd	Old Glenview Rd	Multiple Options: Sidepath (W side)	Planned	
	Hibbard Rd Option 2	Skokie Rd	Old Glenview Rd	Multiple Options: Sidepath (E side)	Planned	
	Hibbard Rd Option 3	Skokie Rd	Old Glenview Rd	Multiple Options: Bike lanes	Planned	

Coordination Scoring Criteria					
Land Acquisition	Jurisdiction	Maintenance	Trees	Furniture	Utilities
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal/ Schools	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal/ Wilmette Junior High	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal/ Wilmette Junior High	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	IDOT/ Municipal IDOT	Medium, routine repairs and shoveling.	Medium, near 15 trees could be impacted.	n/a	Low
Medium, potential easements may be required.	IDOT	Medium, routine repairs and shoveling.	High, more than 30 trees potentially impacted.	n/a	High
Medium, potential easements may be required.	IDOT	Medium, routine repairs and shoveling.	High, more than 30 trees potentially impacted.	n/a	High
Low	IDOT	High, additional matinenance would be required.	n/a	n/a	n/a
n/a	Cook County	Medium, routine repairs and shoveling.	High, more than 30 trees potentially impacted.	n/a	Medium
n/a	Cook County	Medium, routine repairs and shoveling.	Medium, near 15 trees could be impacted.	n/a	Medium
n/a	IDOT/ Municipal	Medium, routine repairs and shoveling.	Medium, near 15 trees could be impacted.	n/a	Medium
		Medium, routine			

Routes		Recommendation Details				
Corridor	St/Facility Name	From	To	Facility Type	Status	Notes
Laramie Ave	Laramie Ave	Illinois Rd	Wilmette Ave	Bike Boulevard	Planned	
Happ Rd	Happ Rd	Illinois Rd	North Branch Trail	Sidepath	Planned	Connects to planned sidepath on Happ in Northfield.
Illinois Rd	Illinois Rd	Thornwood Ave	Washington Ave	Sidepath (SW side)	Planned	
Crawford Ave	Crawford Ave	Wilmette Ave	Old Glenview Rd	Sidepath (SW side)	Planned	
Green Bay Trail Connection	Poplar Ave	Greenleaf Ave	Isabella St	Bike Boulevard	Planned	Elephant's feet marking lines on either side of shared lane marking.
Locust Rd	Locust Rd	Glenview Rd	Illinois Rd	Bike Boulevard	Planned	
Park Ave		Central Ave	Oakwood Ave	Bike Boulevard	Planned	
4th St	4th St	Lake Ave	Isabella St	Bike Boulevard	Planned	
7th St	7th St	Greenwood Ave	Greenleaf Ave	Bike Boulevard	Planned	

Coordination Scoring Criteria					
Land Acquisition	Jurisdiction	Maintenance	Trees	Furniture	Utilities
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
Medium, potential easements may be required.	Cook County/ Cook County Forest Preserve	Medium, routine repairs and shoveling.	Medium, near 15 trees could be impacted.	n/a	Medium
n/a	Municipal	Medium, routine repairs and shoveling.	High, more than 30 trees potentially impacted.	n/a	High
n/a	IDOT	Medium, routine repairs and shoveling.	Medium, near 15 trees could be impacted.	n/a	Low
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a
n/a	Municipal	Medium, routine repairs and shoveling.	n/a	n/a	n/a

DETAILED PRIORITIZATION SCORES

NETWORK CONNECTIVITY SCORE

This score indicates the overall connectivity a project would have in filling in the gaps and improving the Village-wide bike network. A higher score would provide greater connectivity and a lower score, less.

This score can also be useful in guiding timeline implementation of the network. The first goal of implementation should be to create vital east-west and north-south connections across the community.

How the scores were calculated

East-West Connectivity

Providing east-west bike connections across the Village was identified as a top priority during community engagement. Projects that are part of these east-west bike routes were given a score of 1 (for yes) or 0 (for no).

Pedestrian Connectivity

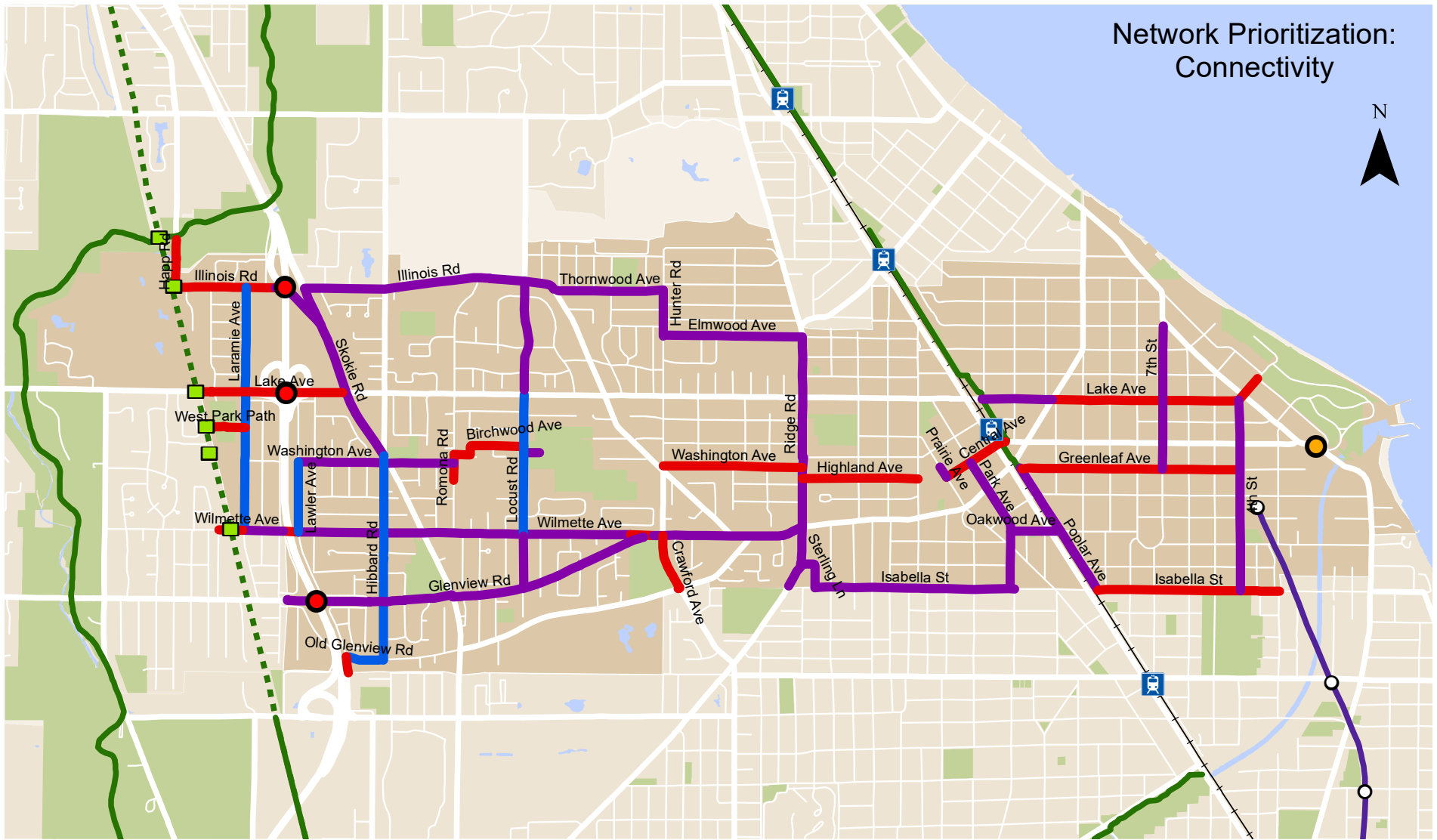
Projects that provide a connection for pedestrians, in addition to bicyclists, received a 1 (for yes) or 0 (for no). These generally include sidepaths and trail connectors.

Existing and Planned Network Scores

If a project connects to an existing facility (e.g. Green Bay Trail) it would receive a 1 (for yes) or 0 (for no). Same is the case for connecting to a planned network (e.g. planned route in Evanston).

Overall Connectivity Score

The above category scores were summed for each project. Then, the projects were divided into low, medium, and high (1-3) based on three classes of natural breaks (Jenks) in GIS.



Overall Connectivity in Existing and Planned Network

- Low
- Medium
- High

INTERAGENCY COORDINATION SCORE

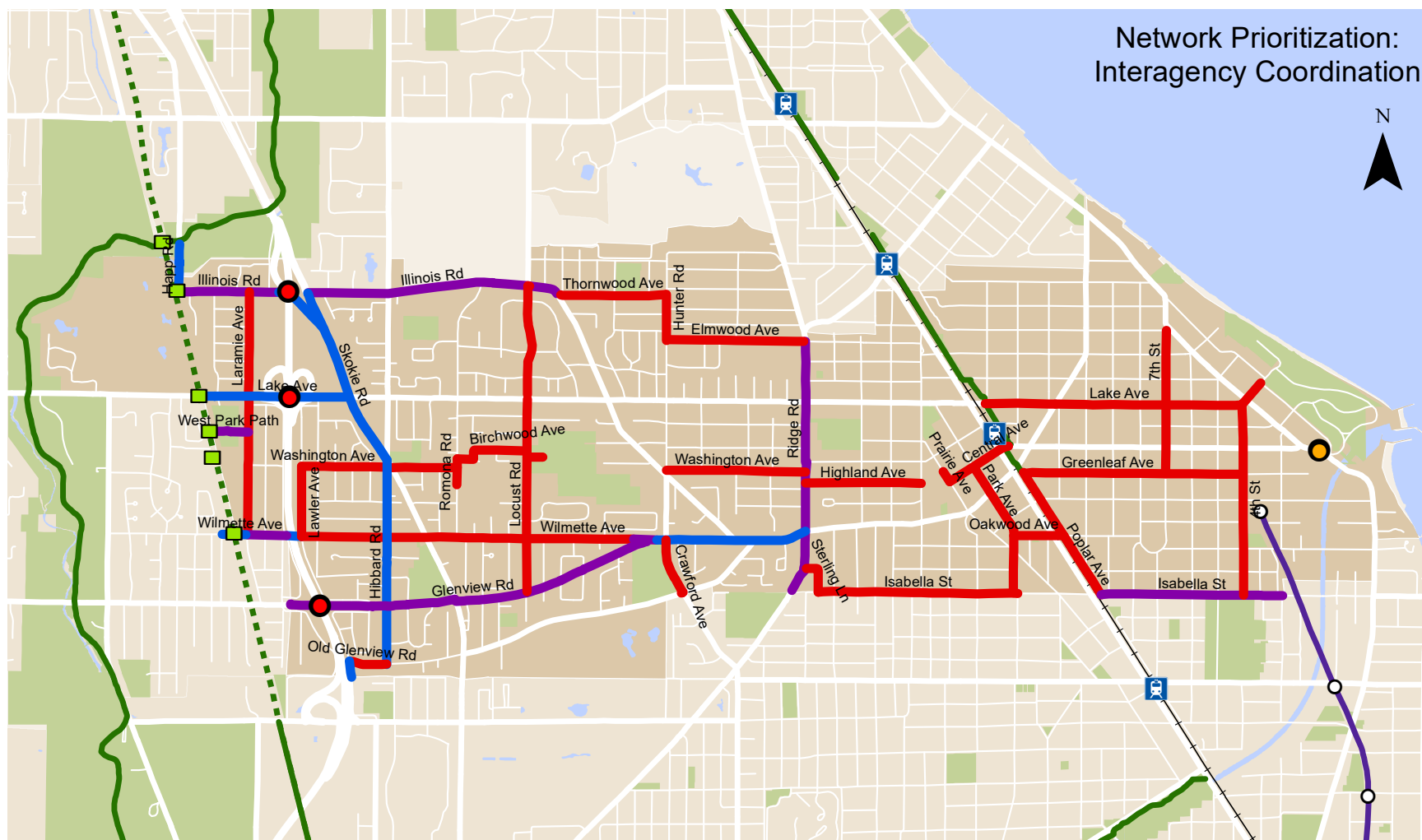
Projects indicated as “High” in this score are considered easier to implement in terms of less coordination with multiple agencies is needed. Projects that are completely within the Village of Wilmette jurisdiction will score the highest score and projects that are controlled by other agencies will generally score the lowest.

How the scores were calculated

Projects were scored on a 1-3 range, with the lowest score of 1 given to projects with the most agency coordination needed, and the highest score of 3 given to those with the least agency coordination required. The scoring followed the criteria below:

1. Most Agency Coordination needed: Project is completely within IDOT, County, or neighboring municipality jurisdiction
2. Moderate Agency Coordination needed: Project is partially within IDOT, County, or neighboring municipality jurisdiction and also Wilmette
3. Least Agency Coordination needed: Project is completely within Village of Wilmette jurisdiction

Each project was given a score and then the projects were divided into low, medium, and high (1-3).



Agency Coordination Prioritization

- Low (more coordination involved)
- Medium (some coordination involved)
- High (less coordination involved)

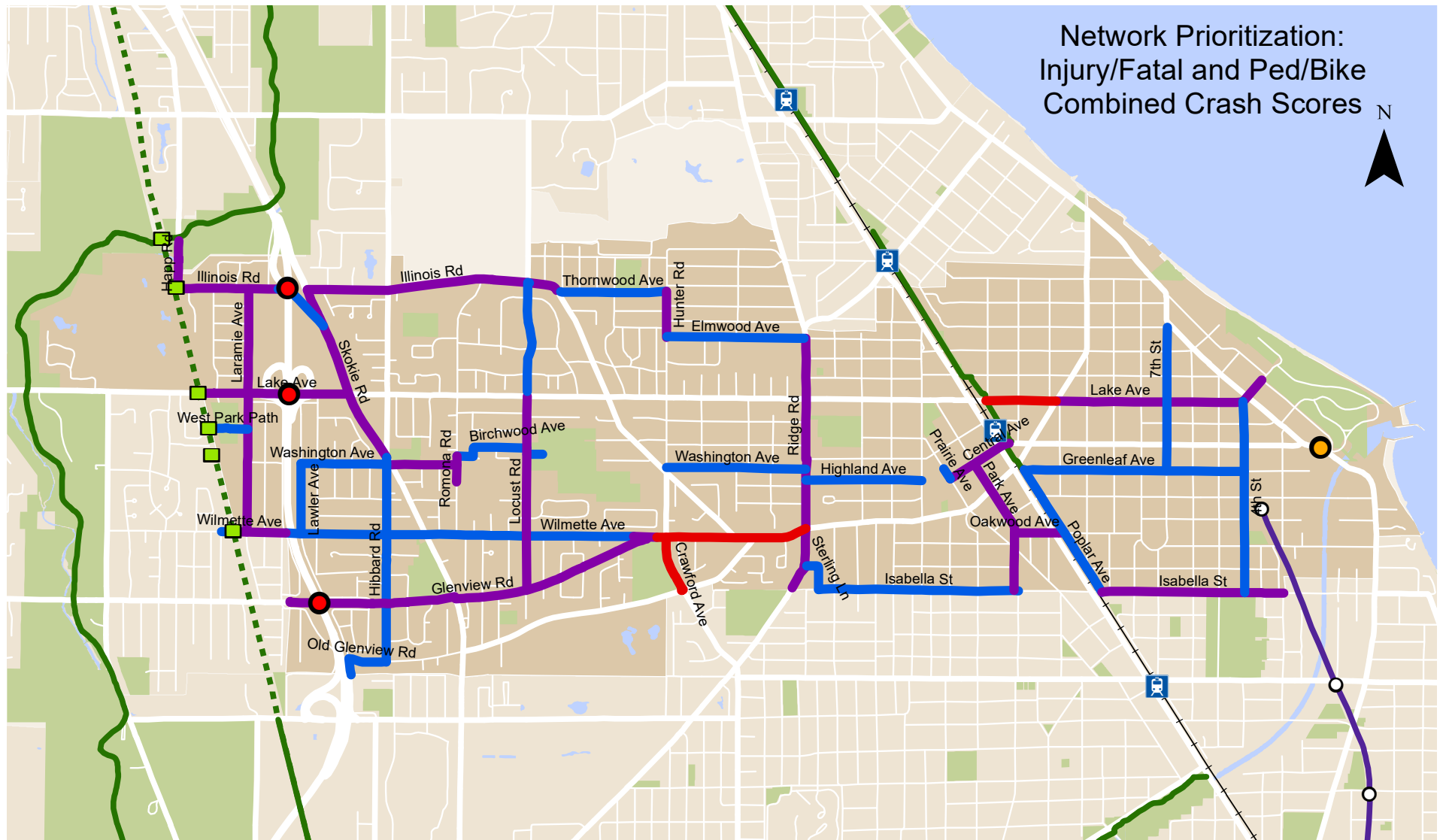
SAFETY SCORE

One of the strongest arguments for installing pedestrian and bike facilities is to improve safety. Significant numbers of pedestrian and bike crashes can be an indication that design and policy improvements are needed. However, the absence of these crash types doesn't always mean that a roadway is safe for those on foot or bike—it could also mean that it is so unsafe that few people are choosing not to risk traversing it without a car. For this reason, three analyses were conducted: pedestrian/bike crashes, injury/fatal crashes of all crash types (including crashes only involving cars), as well as a combined score of the former two analyses.

Roadways that score high in safety (e.g. there are a high number of crashes) could be good candidates for HSIP grants. For other safety-related grants, see the Funding Resources section of this chapter.

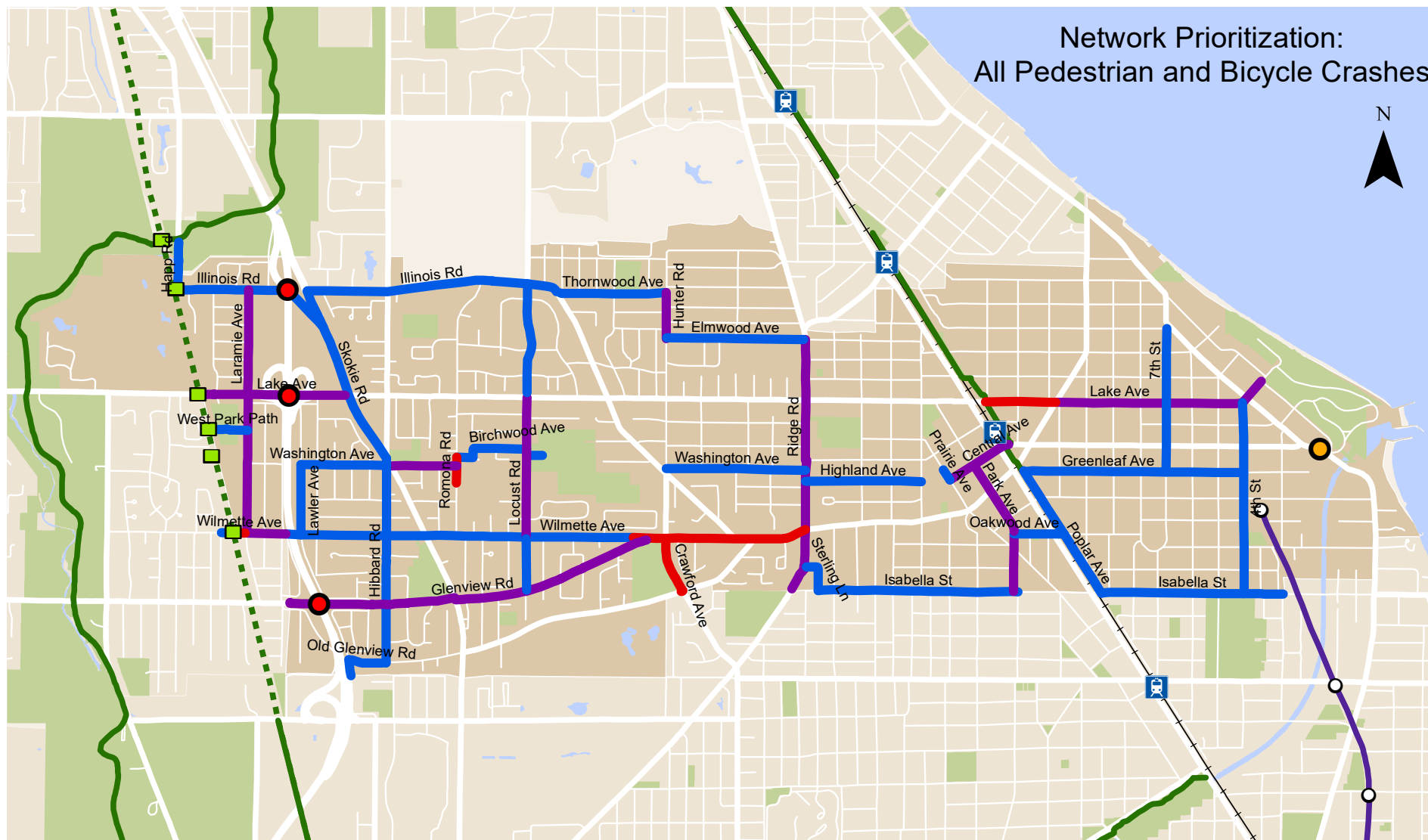
How the scores were calculated

Crashes within 50' of a project were joined to that respective project in GIS. This included 2012 through 2016 crash data provided by IDOT. A crash count was determined for the pedestrian/bicycle category and the injury/fatality of all crash types category. The crash counts were then normalized by the length of the roadway. This calculation provided the number of crashes per mile of roadway along the project length. Based on these crash rate scores, the projects were divided into low, medium, and high (1-3) based on three classes of natural breaks (Jenks) in GIS. These scores were then averaged to provide the overall combined scores for crashes, the third analysis.



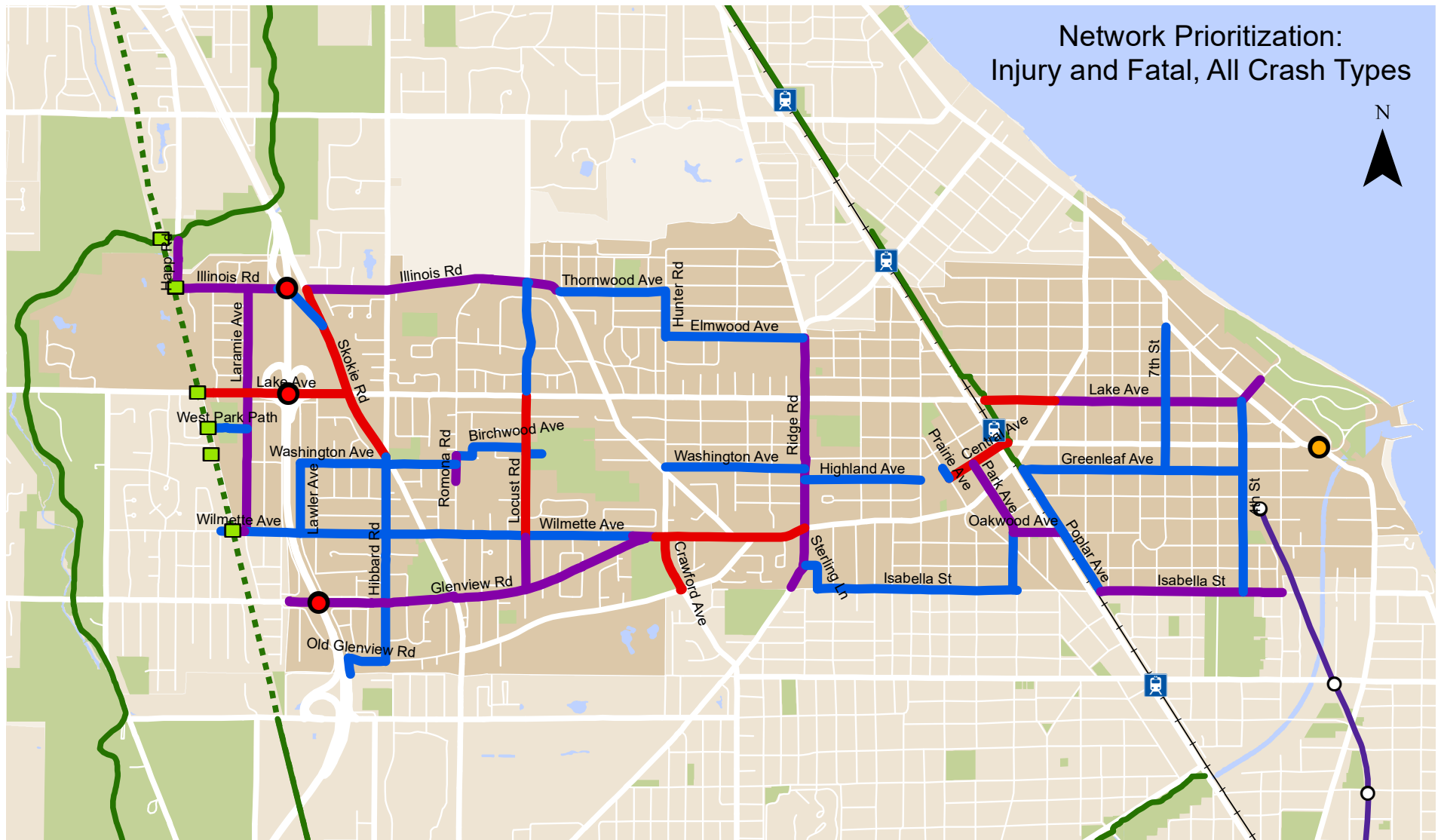
Combined Serious and Ped/Bike Crash Safety Prioritization Scores

- Low Crash
- Medium Crash
- High Crash



Pedestrian and Bicycle Crash Safety Prioritization Scores

- Low Crash
- Medium Crash
- High Crash



Serious Crash Safety Prioritization Scores

- Low Crash
- Medium Crash
- High Crash

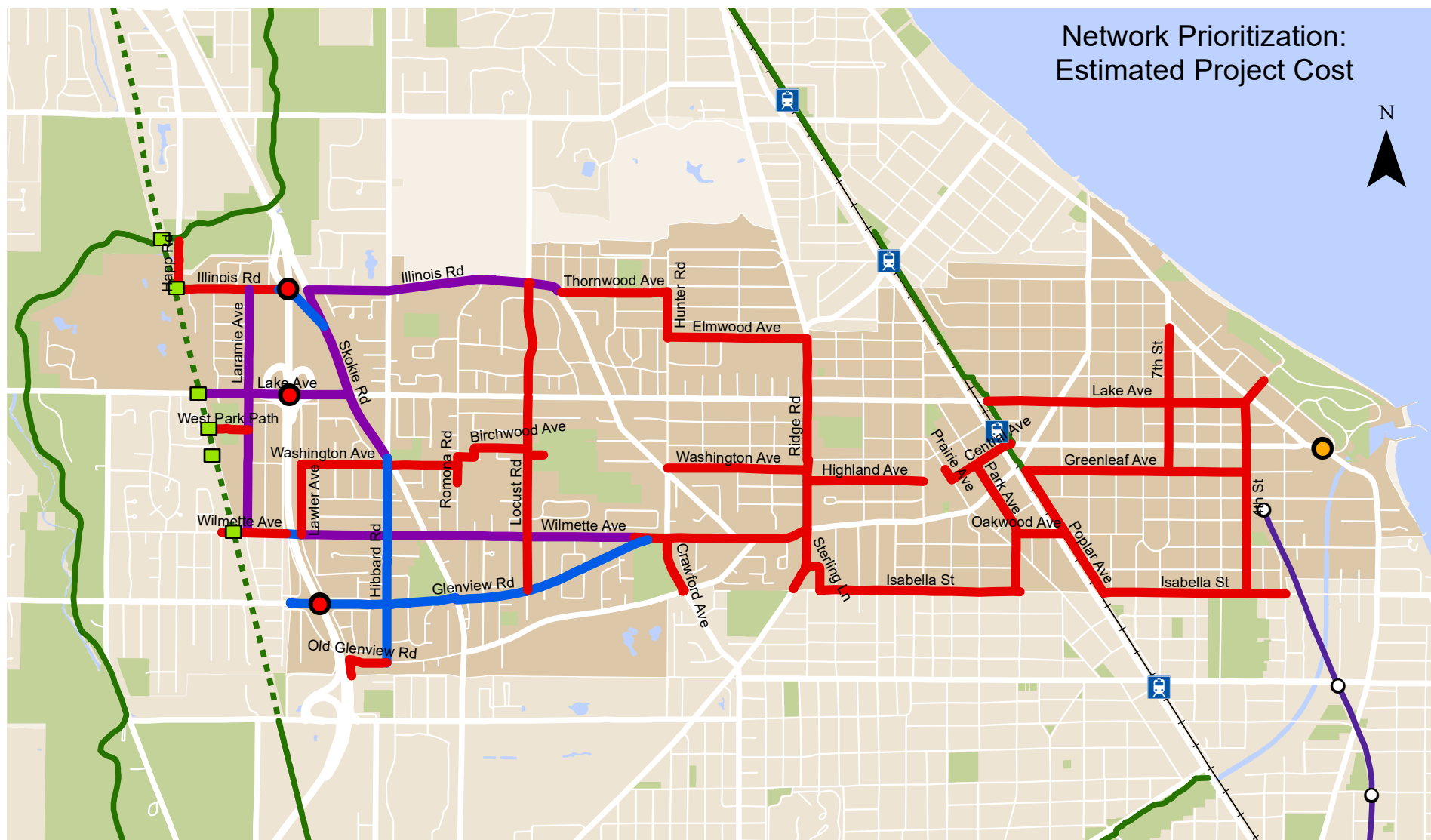
COST SCORE

Some of the recommendations would involve significant and costly reconfigurations to the roadway, such as widening Glenview or Hibbard to accommodate bike lanes. Other recommendations would involve simple paint and signage solutions, such as marked shared lanes on Greenleaf. Estimated planning level cost ranges for each facility type are provided in this chapter in the Cost Estimates section.

Projects that are rated high in cost prioritization are less costly and hence easier to implement from a financial perspective, whereas projects rated lower would involve more coordination of funding sources.

How the scores were calculated

An average from the cost range for each facility type was calculated from the Planning Level Cost Estimates spreadsheet. This was used to calculate the cost for each project based on mileage. Based on these cost per mile calculations, the projects were divided into low, medium, and high (1-3) based on three classes of natural breaks (Jenks) in GIS.



Relative Project Cost Estimate Prioritization Scores

- Low (Higher Cost)
- Medium (Moderate Cost)
- High (Lower Cost)

DESTINATION SCORE

It's important to create a pedestrian and bike network that isn't just recreational, but connects people to key destinations that they would like to reach in their day-to-day lives, such as the Metra station to commute downtown or commercial areas for shopping. This helps make active transportation a feasible alternative in replacing errand and commuting trips.

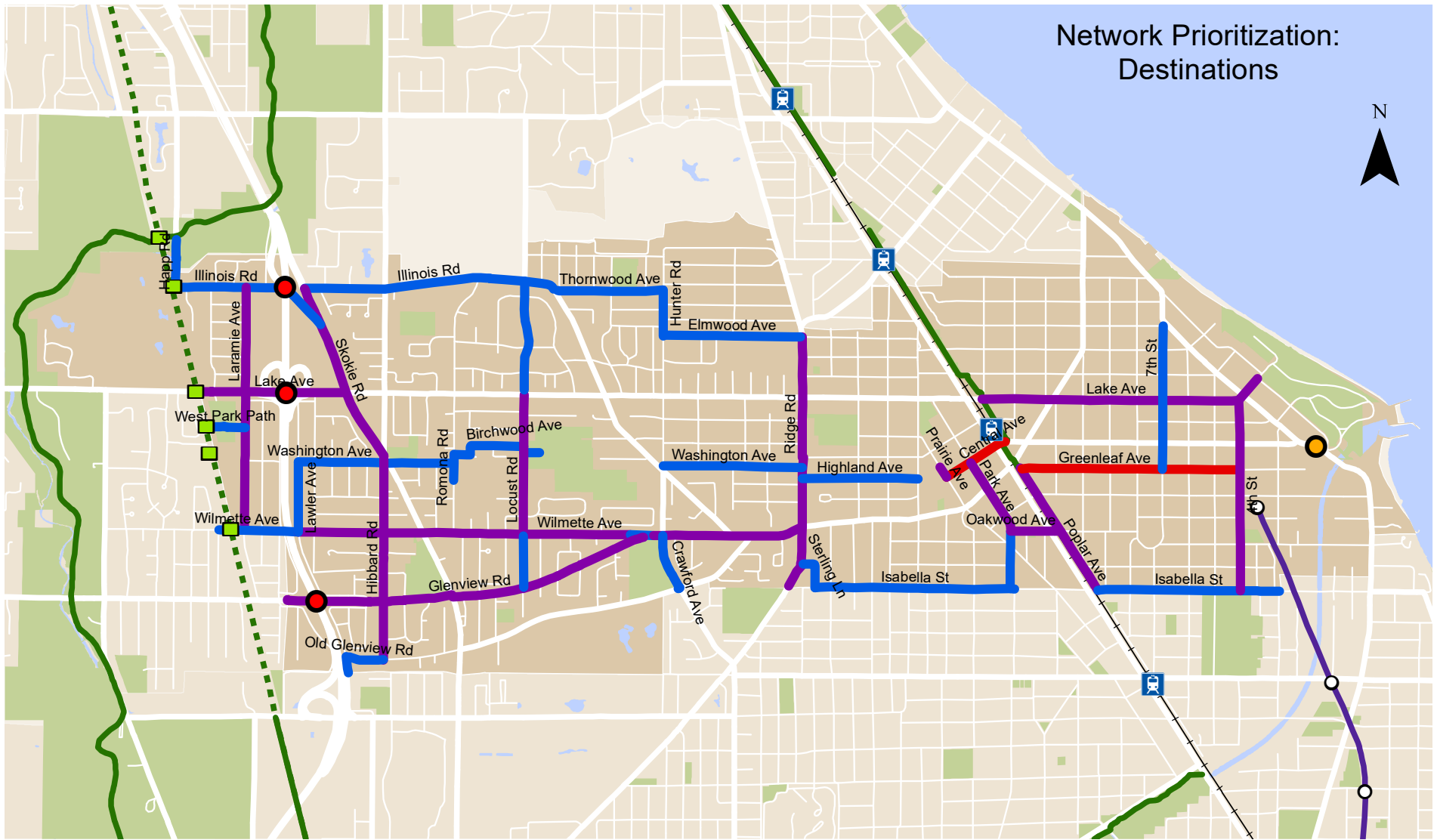
Projects that are rated high in this category connect to the most key destinations.

How the score was calculated

Numerous destination-related datasets were spatially joined to the project network in GIS. These datasets include:

- Schools: count within a half mile of the project
- Parks: count within a quarter mile of the project
- Business Districts: count of business districts that the project passes through
- Trails: number of times the project intersects an existing trail
- Important places: this is a Village-maintained dataset of important places in the community, such as schools, shopping areas, the library, places of worship, etc. A count of important places that the project passes through was determined
- Pace bus stops: count along project
- Metra station: within a quarter mile of project, 1 (for yes), 0 (for no)
- CTA Purple line station: within a quarter mile of project, 1 (for yes), 0 (for no)

First, each project was given a Pace score by dividing the Pace counts into low, medium, and high (1-3) for each project. Then, the CTA, Metra and Pace counts were combined to create one score for transit. Next all of the categories were converted in the low, medium, high (1-3) scale and then averaged to get an overall Destinations score.



Connectivity to Destinations Prioritization

- Low
- Medium
- High

PRIORITIZATION MATRIX: CATEGORY SCORES

Facility Details						
Street Name	From_	To_	Facility Type	Status	Agency 1	Agency 2
4th St	Lake Ave	Isabella St	Bike Boulevard	Planned	Municipal	
7th St	Greenwood Ave	Greenleaf Ave	Bike Boulevard	Planned	Municipal	
Avoca West ES	Skokie Valley Trail	Avoca West ES parking lot	Trail	Planned	Municipal	Avoca West ES
Birchwood Ave	Locust Rd	Romona Rd	Bike Boulevard	Planned	Municipal	
Central Ave	Prairie Ave	Green Bay Trail	Bike Boulevard	Planned	Municipal	
Community Park	tennis courts	Locust Rd	Trail	Planned	Municipal	Wilmette Junior High
Crawford Ave	Wilmette Ave	Old Glenview Rd	Sidepath	Planned	Municipal	
Elmwood Ave	Hunter Rd	Ridge Rd	Bike Boulevard	Planned	Municipal	
Frontage Rd	Old Glenview Rd	Village border	Sidepath	Planned	IDOT	
Glenview Rd	Wilmette Ave	Harms Rd	Multiple Options	Planned	IDOT	Municipal
Greenleaf Ave	Poplar Ave	4th St	Marked Shared Lanes	Planned	Municipal	
Happ Rd	Illinois Rd	North Branch Trail	Sidepath	Planned	County	
Hibbard Rd	Skokie Rd	Glenview Rd	Multiple Options	Planned	IDOT	Cook County
Highland Ave	Ridge Rd	15th St	Bike Boulevard	Planned	Municipal	
Hunter Rd	Thornwood Ave	Elmwood Ave	Bike Boulevard	Planned	Municipal	
I-94 EV to US-41 SB ramp	Skokie Rd	Illinois Rd	Sidepath	Planned	IDOT	
Illinois Rd	Skokie Rd	Thornwood Ave	Multiple Options	Planned	Cook County	Municipal
Illinois Rd	Loyola Academy parking lot	Happ Rd	Multiple Options	Planned	Cook County	Municipal
Isabella St	Sterling Ln	Park Ave	Bike Boulevard	Planned	Municipal	
Isabella St	Poplar Ave	Sheridan Rd	Bike Boulevard	Planned	Municipal	Evanston
Lake Ave	Green Bay Rd	Wilmette Ave	Multiple Options	Contingent upon traffic study	Municipal	
Lake Ave	Wilmette Ave	Overlook Dr	Multiple Options	Planned	Municipal	
Lake Ave	North Branch Trail	Skokie Rd	Sidepath	Planned	Cook County	
Laramie Ave	Illinois Rd	Wilmette Ave	Bike Boulevard	Planned	Municipal	
Lawler Ave	Washington Ave	Wilmette Ave	Bike Boulevard	Planned	Municipal	
Locust Rd	Lake Ave	Wilmette Ave	Marked Shared Lanes	Programmed	Municipal	
Locust Rd	Lake Ave	Illinois Rd	Bike Boulevard	Planned	Municipal	
Locust Rd	Wilmette Ave	Glenview Rd	Bike Boulevard	Planned	Municipal	
Oakwood Ave	Park Ave	Poplar Dr	Bike Boulevard	Planned	Municipal	

Overall Prioritization Score	Category Prioritization Scores						
Overall Prioritization Score	Agency Rank	Network Rank	Pedestrian/ Bike Crash Rank	Serious Crash Rank	Ped/Bike and Injury/Serious Crash Combined Rank	Cost Rank	Destinations Rank
High	High	Low	Low	Low	Low	High	Medium
Medium	High	Low	Low	Low	Low	High	Low
Medium	High	Low	Low	Low	Low	High	Low
High	High	Medium	Low	Low	Low	High	Low
High	High	Medium	Medium	High	Medium	High	High
Medium	High	Low	Low	Low	Low	High	Low
High	High	Medium	High	High	High	High	Low
Medium	High	Low	Low	Low	Low	High	Low
Medium	Low	Medium	Low	Low	Low	High	Low
Medium	Medium	Low	Medium	Medium	Medium	Low	Medium
High	High	Medium	Low	Low	Low	High	High
High	Low	High	Low	Medium	Medium	High	Low
Low	Low	Low	Low	Low	Low	Low	Medium
High	High	Medium	Low	Low	Low	High	Low
High	High	Low	Medium	Low	Medium	High	Low
Low	Low	Low	Low	Low	Low	Low	Low
Medium	Medium	Low	Low	Medium	Medium	Medium	Low
High	Medium	Medium	Low	Medium	Medium	High	Low
Medium	High	Low	Low	Low	Low	High	Low
High	Medium	Medium	Low	Medium	Medium	High	Low
High	High	Low	High	High	High	High	Medium
High	High	Medium	Medium	Medium	Medium	High	Medium
High	Low	High	Medium	High	Medium	Medium	Medium
Medium	High	Low	Medium	Medium	Medium	Medium	Medium
Medium	High	Low	Low	Low	Low	High	Low
High	High	Low	Medium	High	Medium	High	Medium
Medium	High	Low	Low	Low	Low	High	Low
High	High	Low	Low	Medium	Medium	High	Low
High	High	Low	Low	Medium	Medium	High	Medium

Facility Details						
Street Name	From_	To_	Facility Type	Status	Agency 1	Agency 2
Old Glenview Rd	Hibbard Rd	Frontage Rd	Bike Boulevard	Planned	Municipal	
Park Ave	Isabella St	Oakwood Ave	Bike Boulevard	Planned	Municipal	
Park Ave	Central Ave	Oakwood Ave	Bike Boulevard	Planned	Municipal	
Poplar Ave	Greenleaf Ave	Isabella St	Bike Boulevard	Planned	Municipal	
Prairie Ave	McKenzie Elementary School	Central Ave	Bike Boulevard	Planned	Municipal	
Ridge Rd	Thornwood Ave	Isabella St	Advisory Bike Lanes	Planned	IDOT	Municipal
Romona Rd	Birchwood Ave	Romona and Regina Path	Bike Boulevard	Planned	Municipal	
Skokie Rd	Illinois Rd	Hibbard Rd	Sidepath	Planned	IDOT	
Sterling Ln	Gross Point Rd	Isabella St	Bike Boulevard	Planned	Municipal	
Thornwood Ave	Middlebury La	Ridge Rd	Bike Boulevard	Planned	Municipal	
Washington Ave	Romona Rd	Skokie Rd	Bike Boulevard	Planned	Municipal	
Washington Ave	Skokie Rd	Lawler Ave	Bike Boulevard	Planned	Municipal	
Washington Ave	Hunter Rd	Ridge Rd	Bike Boulevard	Planned	Municipal	
West Park Path	Laramie Ave	Skokie Valley Trail	Trail	Planned	Park District	ComEd
Wilmette Ave	Laramie Ave	Leclair Ave	Bike Boulevard	Planned	Municipal	Glenview
Wilmette Ave	Lawler Ave	Glenview Rd	Bike Boulevard	Planned	Municipal	
Wilmette Ave	Glenview Rd	Ridge Rd	Bike lanes	Planned	IDOT	
Wilmette Ave	Leclair Ave	Lawler Ave	Pedestrian Tunnel	Planned	IDOT	Glenview
Wilmette Ave	Wilmette Ave	Glenview Rd	Trail	Planned	Municipal	IDOT
Wilmette Ave	Wilmette Ave	Skokie Valley Trail	Trail	Planned	Glenview	
Wilmette Ave	Skokie Valley Trail	Wilmette Ave	Trail	Planned	Glenview	

Overall Prioritization Score	Category Prioritization Scores						
	Agency Rank	Network Rank	Pedestrian/ Bike Crash Rank	Serious Crash Rank	Ped/Bike and Injury/Serious Crash Combined Rank	Cost Rank	Destinations Rank
Medium	High	Low	Low	Low	Low	High	Low
High	High	Low	Medium	Low	Medium	High	Low
High	High	Low	Medium	Medium	Medium	High	Medium
High	High	Low	Low	Low	Low	High	Medium
High	High	Low	Low	Low	Low	High	Medium
High	Medium	Low	Medium	Medium	Medium	High	Medium
High	High	Medium	High	Medium	Medium	High	Low
Medium	Low	Low	Low	High	Medium	Medium	Medium
Medium	High	Low	Low	Low	Low	High	Low
Medium	High	Low	Low	Low	Low	High	Low
High	High	Low	Medium	Low	Medium	High	Low
Medium	High	Low	Low	Low	Low	High	Low
High	High	Medium	Low	Low	Low	High	Low
Medium	Medium	Medium	Low	Low	Low	High	Low
Medium	Medium	Low	Medium	Low	Medium	High	Low
Medium	High	Low	Low	Low	Low	Medium	Medium
High	Low	Low	High	High	High	High	Medium
Low	Low	Medium	Low	Low	Low	Low	Low
High	Medium	Medium	High	Medium	Medium	High	Low
Medium	Low	Medium	High	Medium	Medium	High	Low
Medium	Low	Medium	Low	Low	Low	High	Low

PRIORITIZATION MATRIX: CRASHES AND DESTINATIONS

Facility Details						
Street Name	From_	To_	Facility Type	Status	Agency 1	Agency 2
4th St	Lake Ave	Isabella St	Bike Boulevard	Planned	Municipal	
7th St	Greenwood Ave	Greenleaf Ave	Bike Boulevard	Planned	Municipal	
Avoca West ES	Skokie Valley Trail	Avoca West ES parking lot	Trail	Planned	Municipal	Avoca West ES
Birchwood Ave	Locust Rd	Romona Rd	Bike Boulevard	Planned	Municipal	
Central Ave	Prairie Ave	Green Bay Trail	Bike Boulevard	Planned	Municipal	
Community Park	tennis courts	Locust Rd	Trail	Planned	Municipal	Wilmette Junior High
Crawford Ave	Wilmette Ave	Old Glenview Rd	Sidepath	Planned	Municipal	
Elmwood Ave	Hunter Rd	Ridge Rd	Bike Boulevard	Planned	Municipal	
Frontage Rd	Old Glenview Rd	Village border	Sidepath	Planned	IDOT	
Glenview Rd	Wilmette Ave	Harms Rd	Multiple Options	Planned	IDOT	Municipal
Greenleaf Ave	Poplar Ave	4th St	Marked Shared Lanes	Planned	Municipal	
Happ Rd	Illinois Rd	North Branch Trail	Sidepath	Planned	County	
Hibbard Rd	Skokie Rd	Glenview Rd	Multiple Options	Planned	IDOT	Cook County
Highland Ave	Ridge Rd	15th St	Bike Boulevard	Planned	Municipal	
Hunter Rd	Thornwood Ave	Elmwood Ave	Bike Boulevard	Planned	Municipal	
I-94 EV to US-41 SB ramp	Skokie Rd	Illinois Rd	Sidepath	Planned	IDOT	
Illinois Rd	Skokie Rd	Thornwood Ave	Multiple Options	Planned	Cook County	Municipal
Illinois Rd	Loyola Academy parking lot	Happ Rd	Multiple Options	Planned	Cook County	Municipal
Isabella St	Sterling Ln	Park Ave	Bike Boulevard	Planned	Municipal	
Isabella St	Poplar Ave	Sheridan Rd	Bike Boulevard	Planned	Municipal	Evanston
Lake Ave	Green Bay Rd	Wilmette Ave	Multiple Options	Contingent upon traffic study	Municipal	
Lake Ave	Wilmette Ave	Overlook Dr	Multiple Options	Planned	Municipal	
Lake Ave	North Branch Trail	Skokie Rd	Sidepath	Planned	Cook County	
Laramie Ave	Illinois Rd	Wilmette Ave	Bike Boulevard	Planned	Municipal	
Lawler Ave	Washington Ave	Wilmette Ave	Bike Boulevard	Planned	Municipal	
Locust Rd	Lake Ave	Wilmette Ave	Marked Shared Lanes	Programmed	Municipal	
Locust Rd	Lake Ave	Illinois Rd	Bike Boulevard	Planned	Municipal	
Locust Rd	Wilmette Ave	Glenview Rd	Bike Boulevard	Planned	Municipal	
Oakwood Ave	Park Ave	Poplar Dr	Bike Boulevard	Planned	Municipal	
Old Glenview Rd	Hibbard Rd	Frontage Rd	Bike Boulevard	Planned	Municipal	
Park Ave	Isabella St	Oakwood Ave	Bike Boulevard	Planned	Municipal	

2012-2016 Crash Counts		Destinations										
Pedestrian and Bike	Serious/Fatal, All Types	Cost Per Mile	Cost Estimate	Schools Count	Parks Count	Trails Count	Important Places Count	Business Districts Count	Pace Stops Count	Metra	CTA	
0	1	500000	342927	3	4	0	2	1	4	0	1	
0	0	500000	257444	3	2	0	0	0	4	0	0	
0	0	500000	9197	2	1	0	1	0	0	0	0	
0	0	500000	140930	4	2	0	2	0	0	0	0	
2	10	500000	123936	4	2	4	3	1	5	1	0	
0	0	500000	28864	4	1	0	2	0	0	0	0	
3	14	900000	192753	3	3	0	1	0	1	0	0	
1	1	500000	245975	3	2	0	3	0	0	0	0	
0	0	900000	51805	3	2	0	0	0	0	0	0	
5	33	4000000	5377742	5	4	0	4	0	7	0	0	
0	0	70000	54876	4	2	1	3	1	1	1	1	
0	3	900000	149646	2	0	1	1	0	2	0	0	
1	3	4000000	2943215	4	3	0	1	0	6	0	0	
0	2	500000	208632	3	3	0	2	0	0	0	0	
1	1	500000	83474	2	1	0	0	0	0	0	0	
0	1	900000	196042	3	0	0	3	1	0	0	0	
1	15	900000	815492	4	2	0	3	0	0	0	0	
1	4	500000	174572	3	0	0	2	0	10	0	0	
0	1	500000	358514	3	3	0	0	0	0	0	0	
1	9	500000	326405	3	5	0	0	0	0	0	0	
4	14	160000	40296	4	2	2	3	0	0	1	0	
5	11	500000	387544	3	1	0	4	0	2	1	0	
4	33	900000	479045	4	2	0	3	2	5	0	0	
5	15	500000	437059	4	1	0	3	1	16	0	0	
0	0	500000	126314	3	1	0	0	0	0	0	0	
2	19	70000	35126	6	1	0	4	0	4	0	0	
0	2	500000	201276	6	1	0	1	0	1	0	0	
0	5	500000	92739	4	2	0	0	0	2	0	0	
0	3	500000	89657	4	2	0	1	1	2	0	0	
0	0	500000	63994	3	3	0	0	0	0	0	0	
1	1	500000	103430	5	3	0	0	0	0	0	0	

Facility Details						
Street Name	From_	To_	Facility Type	Status	Agency 1	Agency 2
Park Ave	Central Ave	Oakwood Ave	Bike Boulevard	Planned	Municipal	
Poplar Ave	Greenleaf Ave	Isabella St	Bike Boulevard	Planned	Municipal	
Prairie Ave	McKenzie Elementary School	Central Ave	Bike Boulevard	Planned	Municipal	
Ridge Rd	Thornwood Ave	Isabella St	Advisory Bike Lanes	Planned	IDOT	Municipal
Romona Rd	Birchwood Ave	Romona and Regina Path	Bike Boulevard	Planned	Municipal	
Skokie Rd	Illinois Rd	Hibbard Rd	Sidepath	Planned	IDOT	
Sterling Ln	Gross Point Rd	Isabella St	Bike Boulevard	Planned	Municipal	
Thornwood Ave	Middlebury La	Ridge Rd	Bike Boulevard	Planned	Municipal	
Washington Ave	Romona Rd	Skokie Rd	Bike Boulevard	Planned	Municipal	
Washington Ave	Skokie Rd	Lawler Ave	Bike Boulevard	Planned	Municipal	
Washington Ave	Hunter Rd	Ridge Rd	Bike Boulevard	Planned	Municipal	
West Park Path	Laramie Ave	Skokie Valley Trail	Trail	Planned	Park District	ComEd
Wilmette Ave	Laramie Ave	Leclair Ave	Bike Boulevard	Planned	Municipal	Glenview
Wilmette Ave	Lawler Ave	Glenview Rd	Bike Boulevard	Planned	Municipal	
Wilmette Ave	Glenview Rd	Ridge Rd	Bike lanes	Planned	IDOT	
Wilmette Ave	Leclair Ave	Lawler Ave	Pedestrian Tunnel	Planned	IDOT	Glenview
Wilmette Ave	Wilmette Ave	Glenview Rd	Trail	Planned	Municipal	IDOT
Wilmette Ave	Wilmette Ave	Skokie Valley Trail	Trail	Planned	Glenview	
Wilmette Ave	Skokie Valley Trail	Wilmette Ave	Trail	Planned	Glenview	

2012-2016 Crash Counts		Destinations										
Pedestrian and Bike	Serious/Fatal, All Types	Cost Per Mile	Cost Estimate	Schools Count	Parks Count	Trails Count	Important Places Count	Business Districts Count	Pace Stops Count	Metra	CTA	
		500000	145000									
1	0	500000	260261	4	3	1	0	1	0	1	0	
0	0	500000	21287	2	2	0	1	0	0	1	0	
6	32	87500	81051	5	3	0	6	2	1	0	0	
1	1	500000	46774	3	3	0	2	0	0	0	0	
1	40	900000	602144	6	2	0	3	1	7	0	0	
0	0	500000	62309	2	1	0	0	0	0	0	0	
1	2	500000	189754	3	1	0	2	0	0	0	0	
1	1	500000	117206	4	2	0	2	0	1	0	0	
0	0	500000	154403	5	2	0	1	0	0	0	0	
1	3	500000	250367	5	2	0	2	0	0	0	0	
0	0	500000	71729	2	1	0	1	0	0	0	0	
1	1	500000	69956	2	0	0	0	0	0	0	0	
2	6	500000	597852	6	3	0	2	0	14	0	0	
6	26	160000	86751	4	3	0	2	1	8	0	0	
0	0	0	0	2	0	0	0	0	0	0	0	
1	1	500000	41233	2	2	0	1	0	1	0	0	
1	1	500000	21594	2	0	0	0	0	0	0	0	
0	0	500000	21035	2	0	0	0	0	0	0	0	

