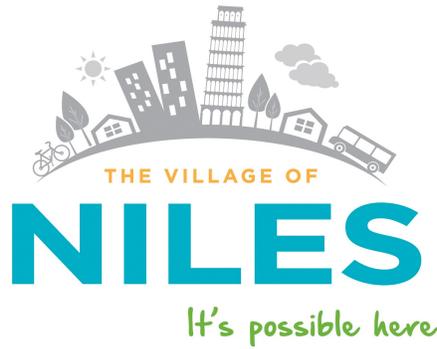


MAYOR
George D. Alpogianis

TRUSTEES
Joe LoVerde
John C. Jekot
Danette O'Donovan Matyas
Craig Niedermaier
Dean Strzelecki



VILLAGE MANAGER
Joseph S. La Margo

VILLAGE CLERK
Marlene J. Victorine

Phone: (847) 588-8000
Fax: (847) 588-8051
www.vniles.com

1000 Civic Center Drive, Niles, Illinois 60714

AGENDA
NILES VILLAGE BOARD OF TRUSTEES MEETING
COUNCIL CHAMBERS
Tuesday, June 28, 2022
6:30 PM

SPECIAL MEETING

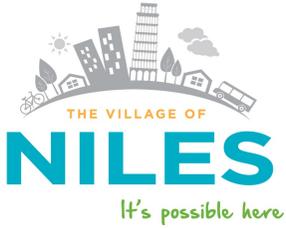
- 1. CALL TO ORDER**
- 2. PLEDGE OF ALLEGIANCE**
- 3. ROLL CALL**
- 4. PRESENTATION**

Item 4.a Village of Niles Bicycle and Pedestrian Plan 2022 Update
Presentation (Tim Gustafson from Epstein)
[Details](#)

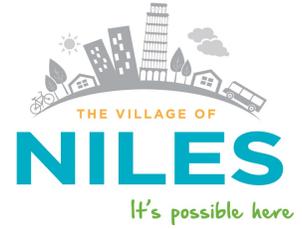
- 5. PUBLIC COMMENTS**

The floor is open for public comments. Please step up to the microphone, state your name and city, and make your comment. You will be allotted three minutes. Please make sure you sign in at the reception desk.

- 6. ADJOURNMENT**



BOARD AGENDA ITEM EXPLANATION FORM



Village of Niles Bicycle and Pedestrian Plan 2022 Update Presentation (Tim Gustafson from Epstein)

Meeting Date: 06/28/2022

Item Number 4.a

Requested By: Community Development Department

Action Requested: Presentation

Prepared By: Nathan Bruemmer, Planning Technican

Assigned to:

ATTACHMENTS:

- 2022-0628-Niles Bike Ped Board Presentation.pdf
Bicycle and Pedestrian Plan Update Final June 2022.pdf

MOTION

REASON FOR REQUEST / BACKGROUND

Tim Gustafson of Epstein, the firm who led the update to the Niles Bicycle and Pedestrian Plan, will be giving a 20 minute presentation on the plan, followed by 10 minutes for Q&A.

Will this action involve an expenditure of funds?

No

If yes, is this a budgeted item?

Impact on future budget(s)

If yes, Projected Cost(s), Projected Fiscal Year, Project Name

Grant Funded Project

Grant Source

ORG#

Total Amount for
Approval

ACCT#

Budget Amount

Line Item Budget
Amount

Variance



←  Bunker Hill
←  Caldwell Woods
 Frank Bobrytze Forest 1/2




VILLAGE OF NILES
BICYCLE AND PEDESTRIAN PLAN
2022 UPDATE

VILLAGE BOARD PRESENTATION | JUNE 28, 2022

AGENDA

1. Plan Overview & Context
2. Public Engagement & BPAG Involvement
3. Municipal Coordination
4. Benefits & Capital Priorities
5. Discussion



OVERVIEW

PLAN CONTENTS

1. Overview
 2. Design Guidelines
 3. Infrastructure Network
 4. Policies & Programs
 5. Funding & Implementation
- Appendix A: Existing Conditions Report



OVERVIEW

PERFORMANCE MEASURES

- 2022 Update to 2014 Plan
- New & updated guidance
- Capital Plan & Funding
- Promote
 - Safety
 - Connectivity
 - Health
 - Quality of Life
 - Growth

SAFETY

Baseline

- Reduce the rate of pedestrian crashes by 50%
- Reduce the rate of bicycle crashes by 50%
- Eliminate pedestrian and bicyclist deaths

82 crashes from 2016-2020
45 crashes from 2016-2020
7 fatal crashes from 2016-2020

CONNECTIVITY

- Eliminate gaps in the sidewalk network
- Provide a signalized crossing on arterials every 1/4 mile and at every bicycle route crossing

~24 miles of sidewalk gaps
16 locations with 1/2 mile or more between signals

HEALTH

- Double the share of Niles residents that walk or bicycle to work
- Establish a walking and bicycling education and encouragement program in Niles schools

1.8% of residents in 2019
N/A

QUALITY OF LIFE

- Double the area in Niles that is accessible within 1/4 mile of a marked bicycle facility (excluding the Forest Preserve the North Branch Trail)
- Host three annual walking and bicycling-related events in Niles

41% of Niles 2021
1 event in 2021

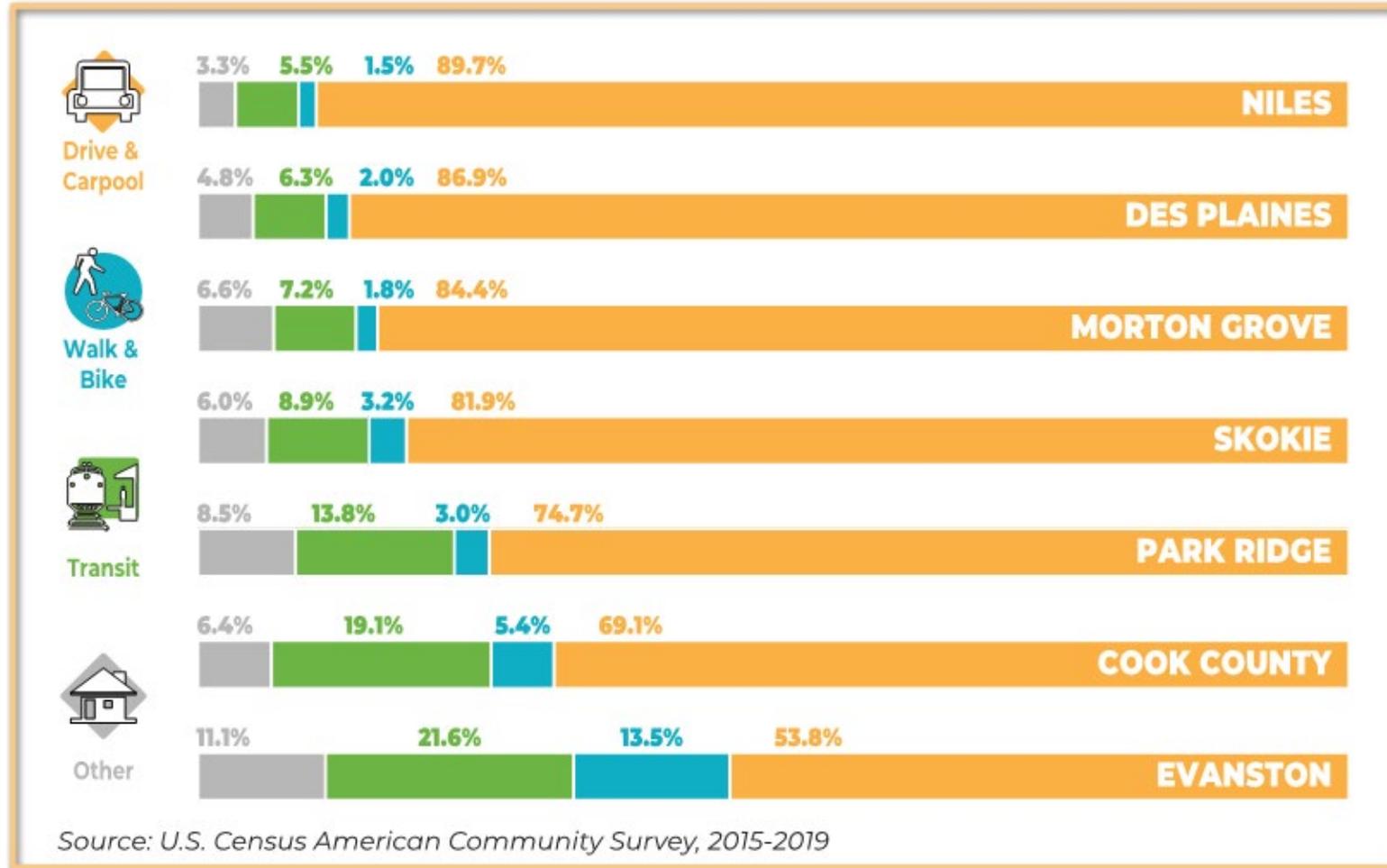
GROWTH

- Establish one new walking or bicycling-focused attraction or business in the Village

N/A

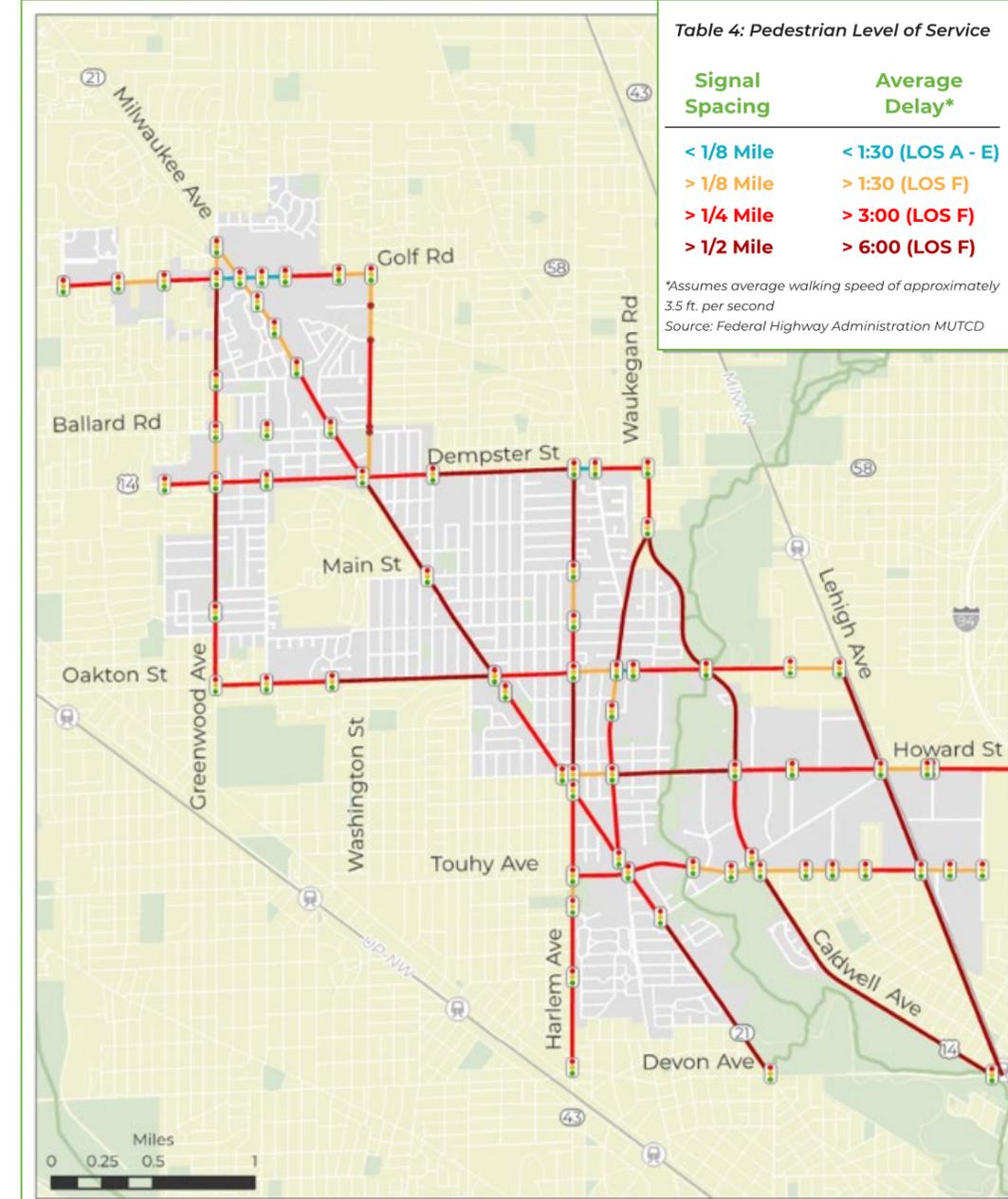
OVERVIEW

PRIMARY MODE OF TRANSPORTATION TO WORK



OVERVIEW

SIGNAL SPACING



OVERVIEW

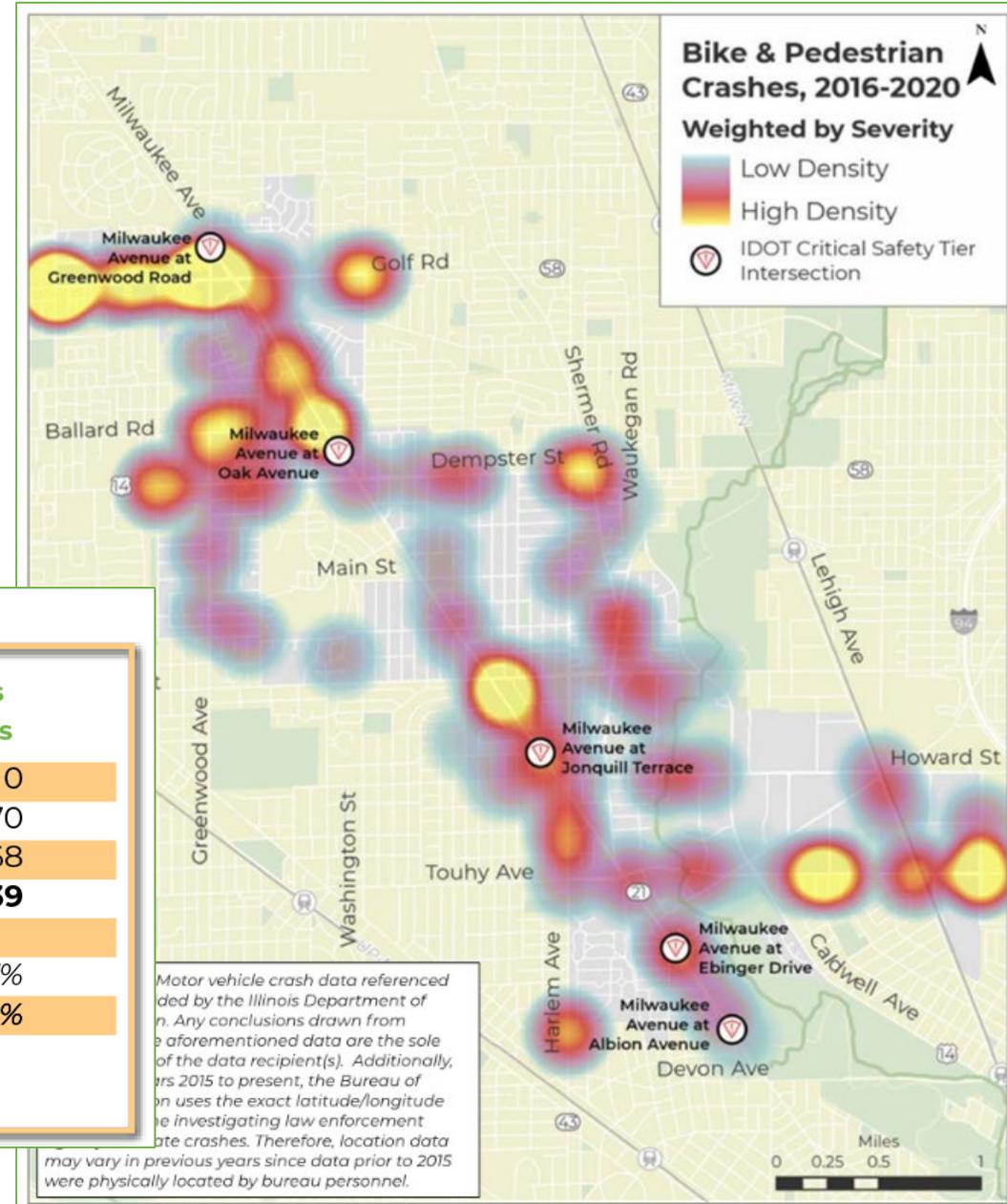
CRASH ANALYSIS

- Crashes on high-speed, high-volume roadways are more common & more severe. Nearly all of these occurred on roads under IDOT jurisdiction.

Niles in Context: Crashes by Roadway Jurisdiction

| | All Roads in Niles | IDOT Roads | Cook County Roads | Niles Roads |
|------------------------|--------------------|--------------|-------------------|-------------|
| Fatal Crashes | 12 | 11 | 1 | 0 |
| Injury Crashes | 849 | 756 | 23 | 70 |
| All Other Crashes | 3,742 | 3,170 | 103 | 468 |
| Total | 4,603 | 3,937 | 127 | 539 |
| Share of All Crashes | 100% | 85.5% | 2.76% | 11.7% |
| Share of Fatal Crashes | 100% | 91.7% | 8.33% | 0.00% |

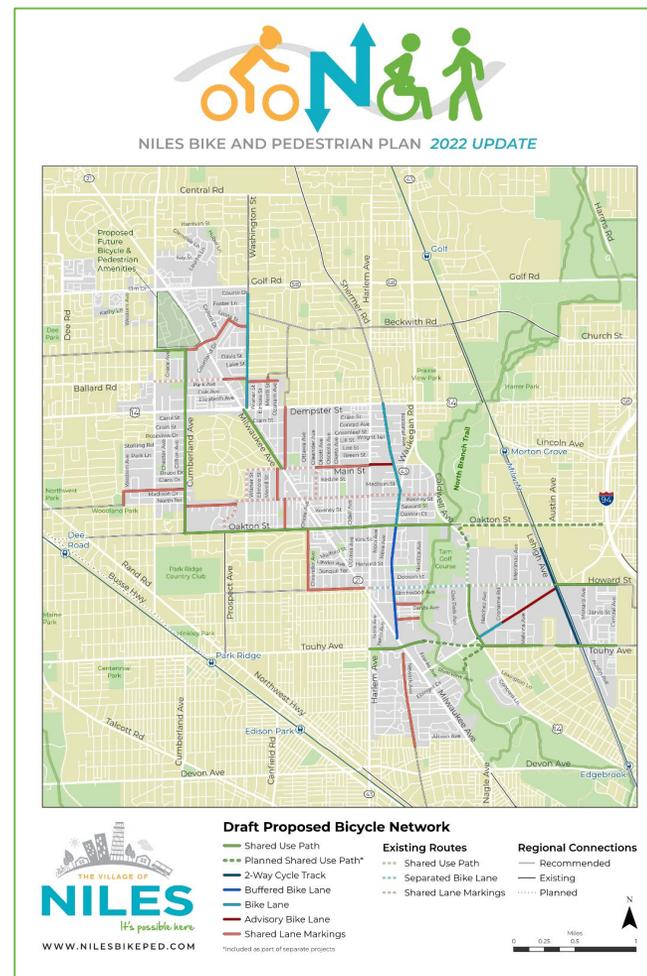
Source: IDOT, 2016-2020



ENGAGEMENT

BPAG, EVENTS, & VIRTUAL

- Monthly BPAG Meetings
- Project Website, Survey, & Comment Cards
- Events
 - Walk & Roll Niles 2021
 - Fourth of July
 - Holly Jolly
 - Breakfast with Bunny
 - Walk & Roll Niles **2022**



Please add your questions and/or comments in the space provided below (please print) and hand the card to a Village of Niles representative. You can also provide comments in the following ways:

Email: info@nilesbikeped.com **Mail:** Nathan Bruemmer
1000 Civic Center Dr.
Niles, IL 60714

Phone: 847-588-8077

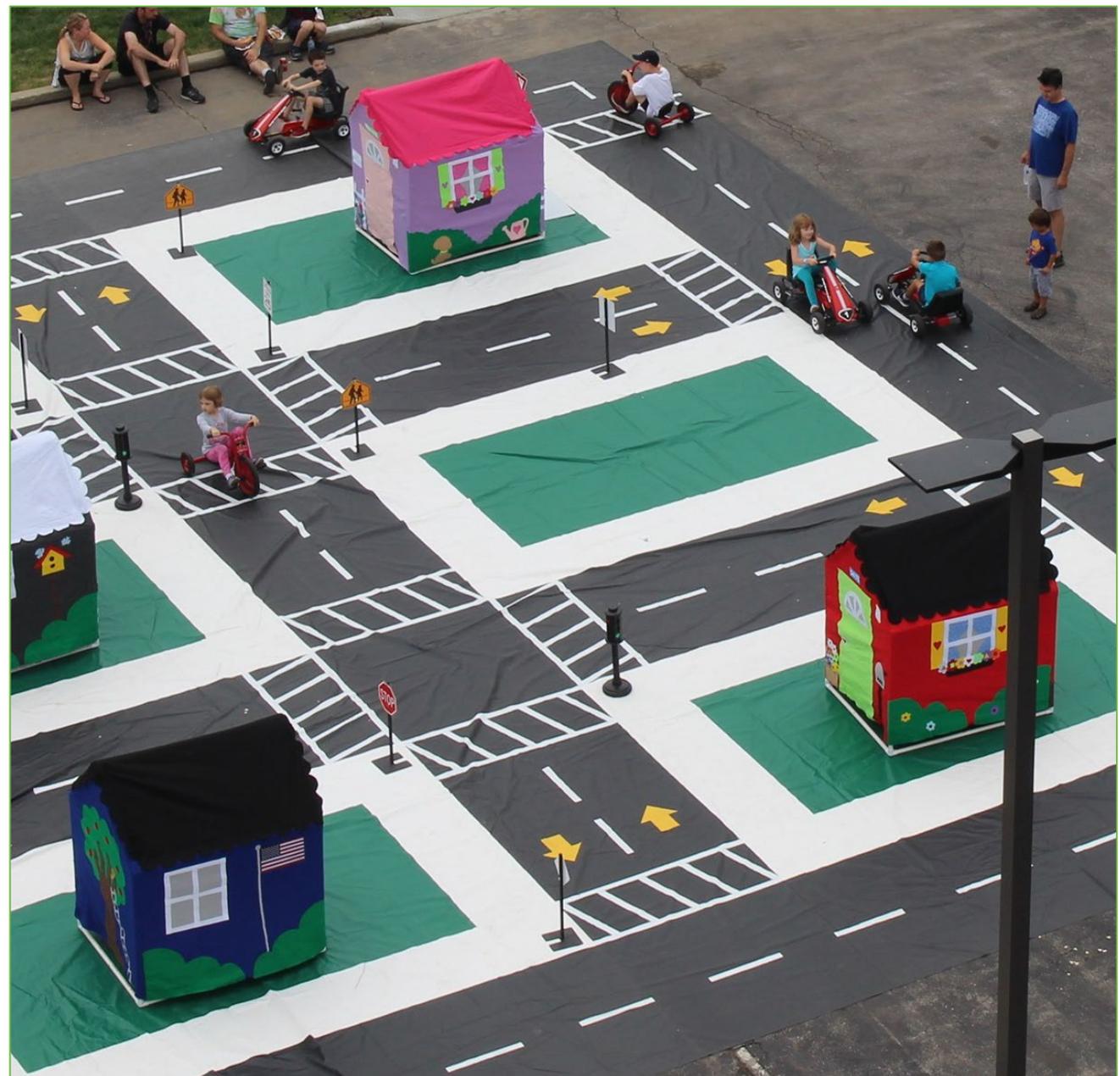
In favor of bike lanes that separate from car traffic, as long as you don't remove vehicle lanes. Need cyclist enforcement



COORDINATION

MUNICIPAL & OTHER AGENCY

- Chicago
- IDOT, Cook County
- Maine Township
- Morton Grove
- Niles Park District
- Pace
- Park Ridge
- Skokie
- VON Departments
 - Community Development
 - Fire, Police, Public Works
 - Deputy Village Manager
 - Districts 63, 64, 71, 207, 219
 - Teen Center

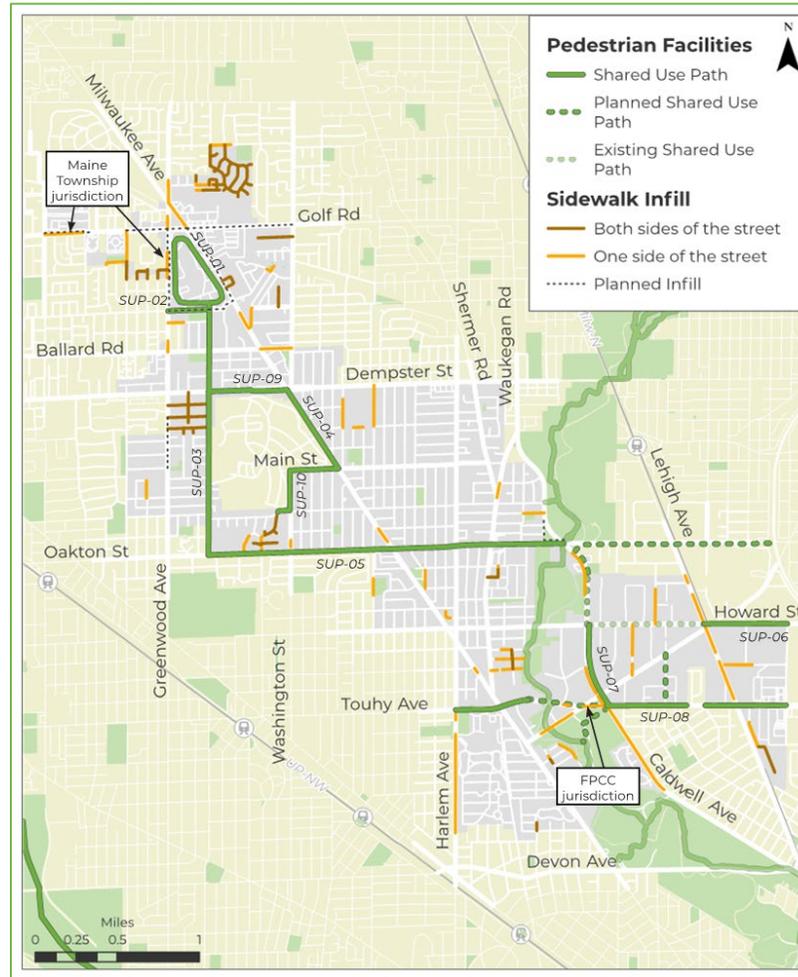


PRIORITIES & BENEFITS

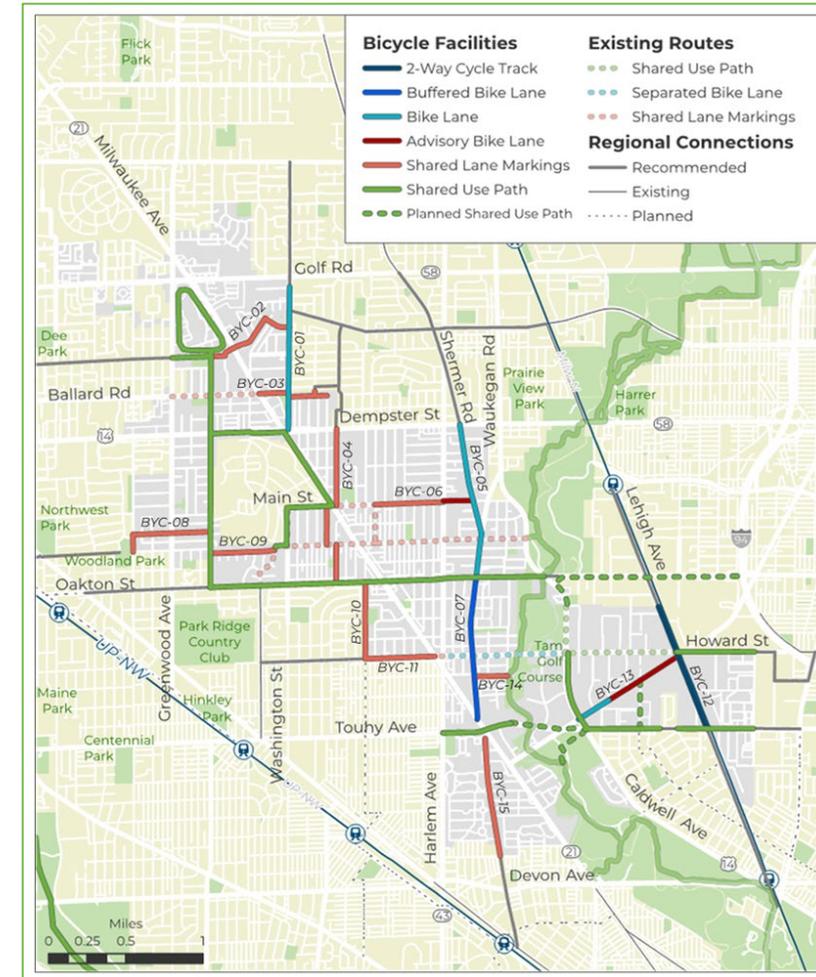
INTERSECTIONS



SIDEWALKS & SIDEPATHS

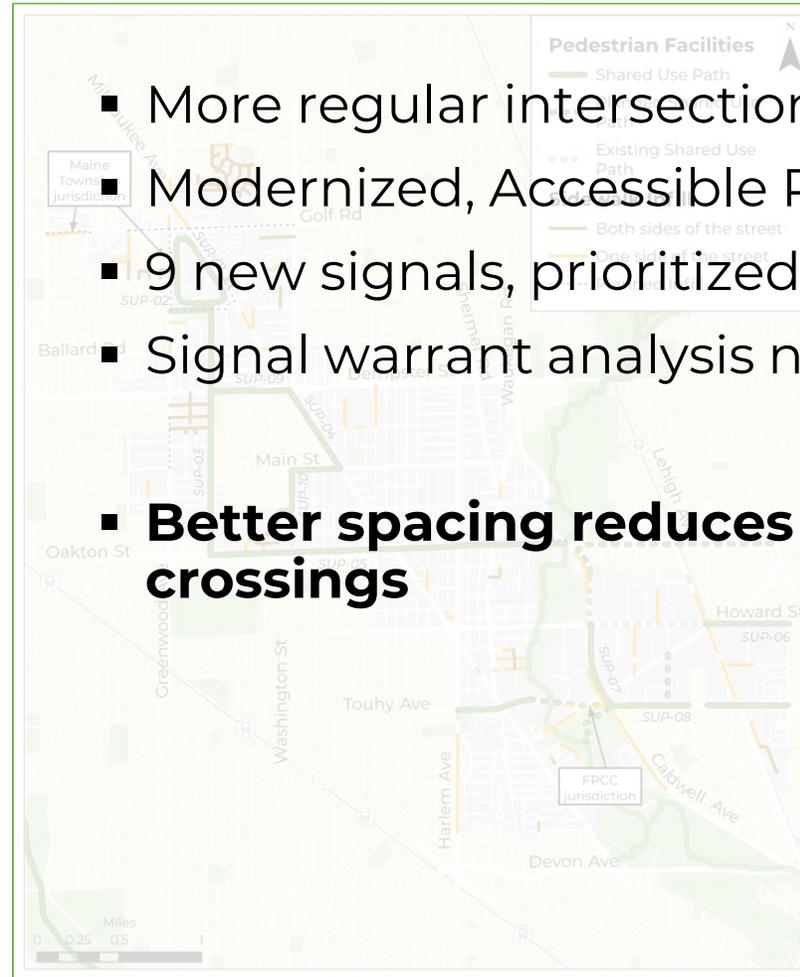
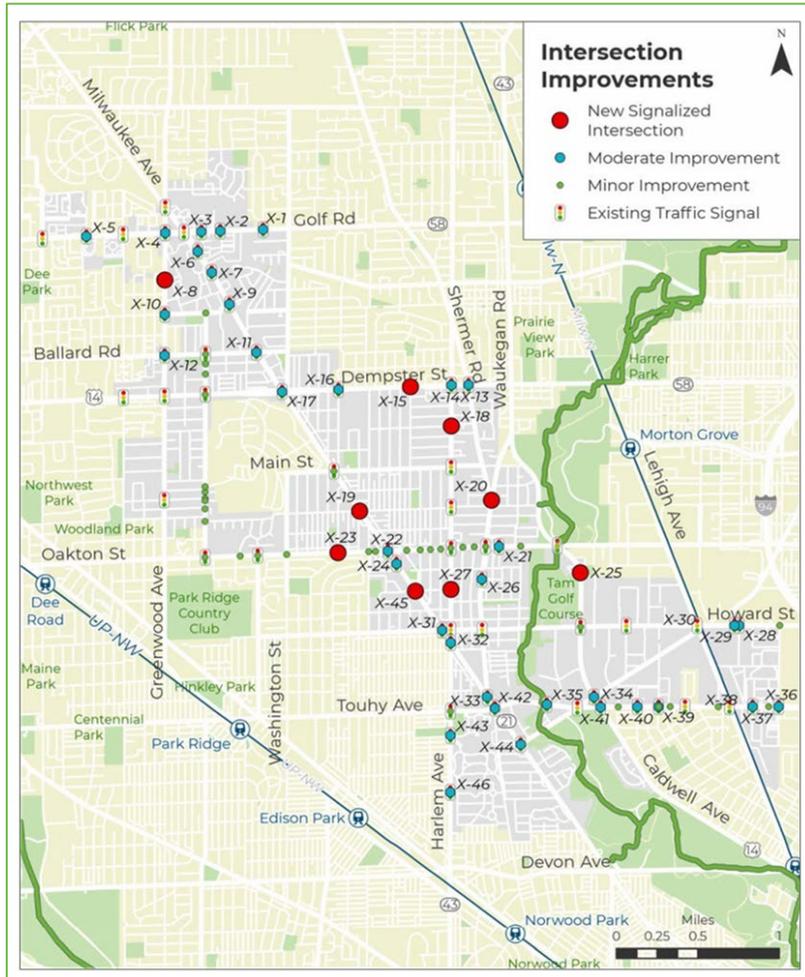


ON-STREET BICYCLING



PRIORITIES & BENEFITS

INTERSECTIONS

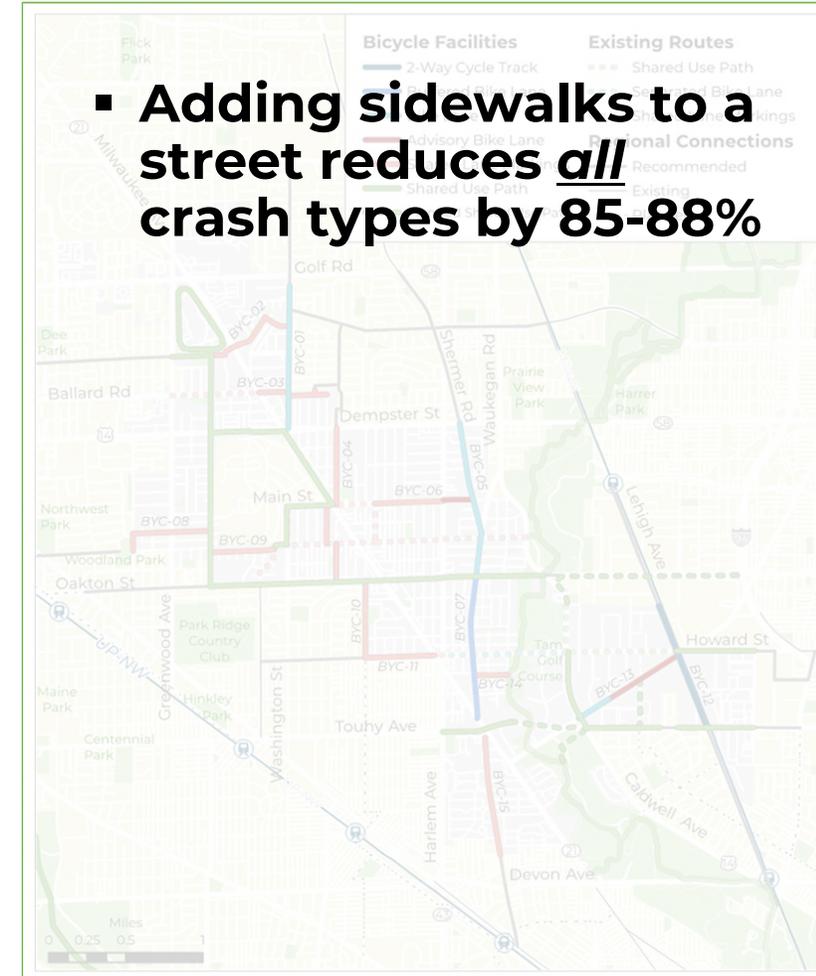
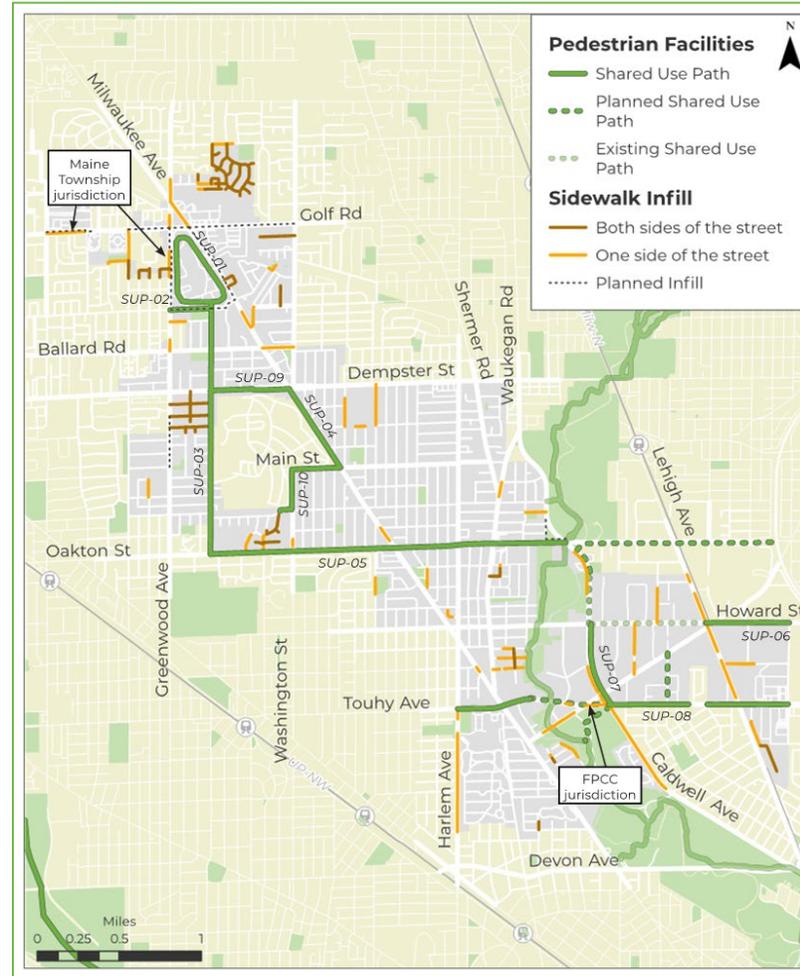
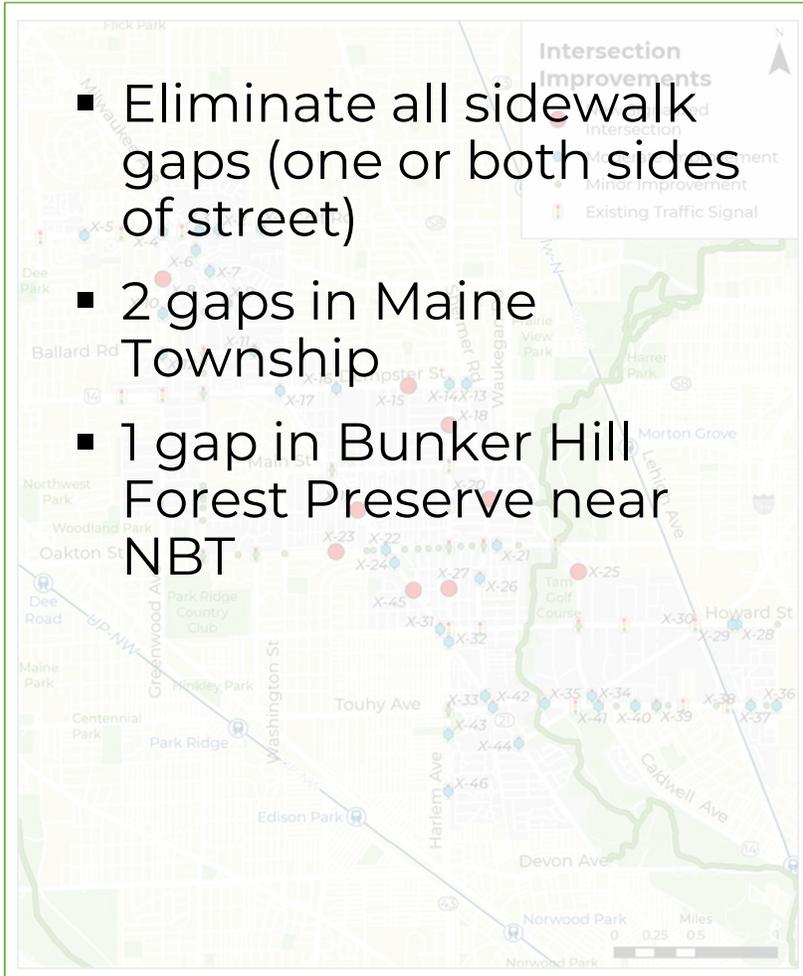


- More regular intersection spacing (approx. 1/4 mile)
- Modernized, Accessible Pedestrian Signals (APS)
- 9 new signals, prioritized (~ 1 every 2 years)
- Signal warrant analysis needed for each
- **Better spacing reduces unwanted midblock crossings**

PRIORITIES & BENEFITS

SIDEWALKS & SIDEPATHS

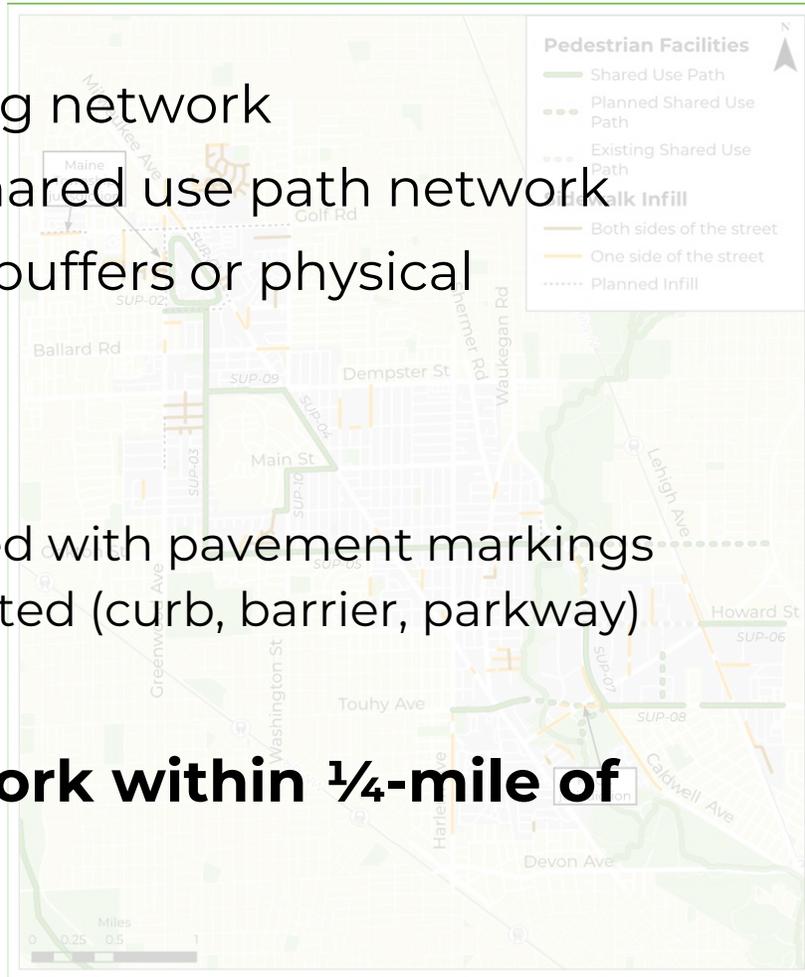
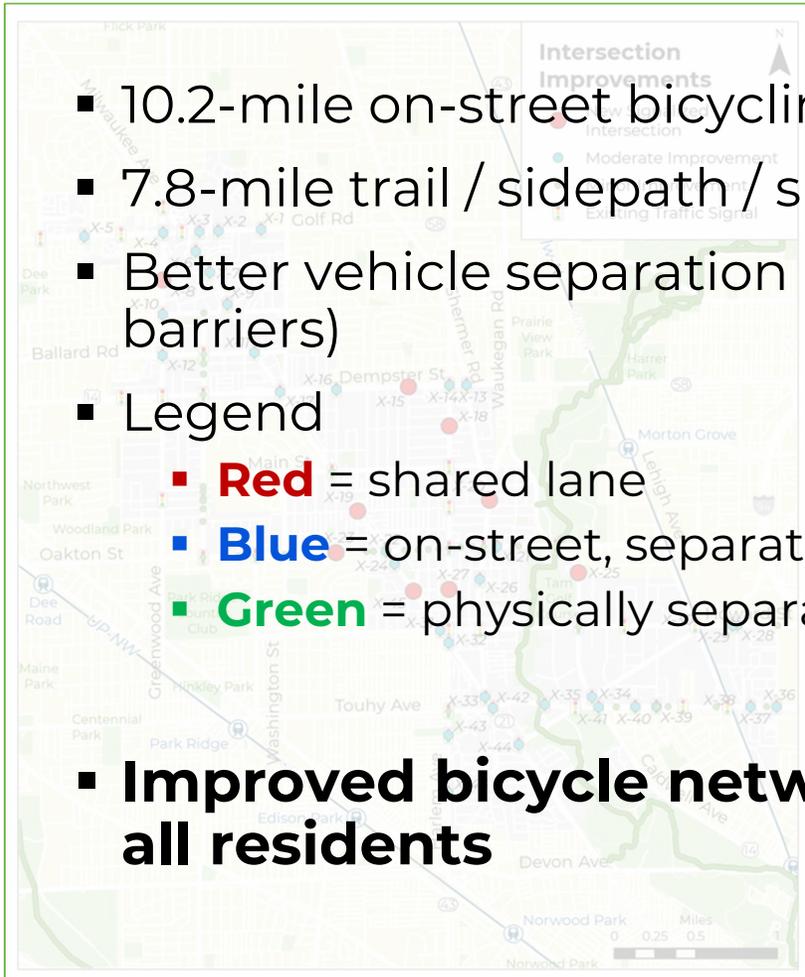
- Eliminate all sidewalk gaps (one or both sides of street)
- 2 gaps in Maine Township
- 1 gap in Bunker Hill Forest Preserve near NBT



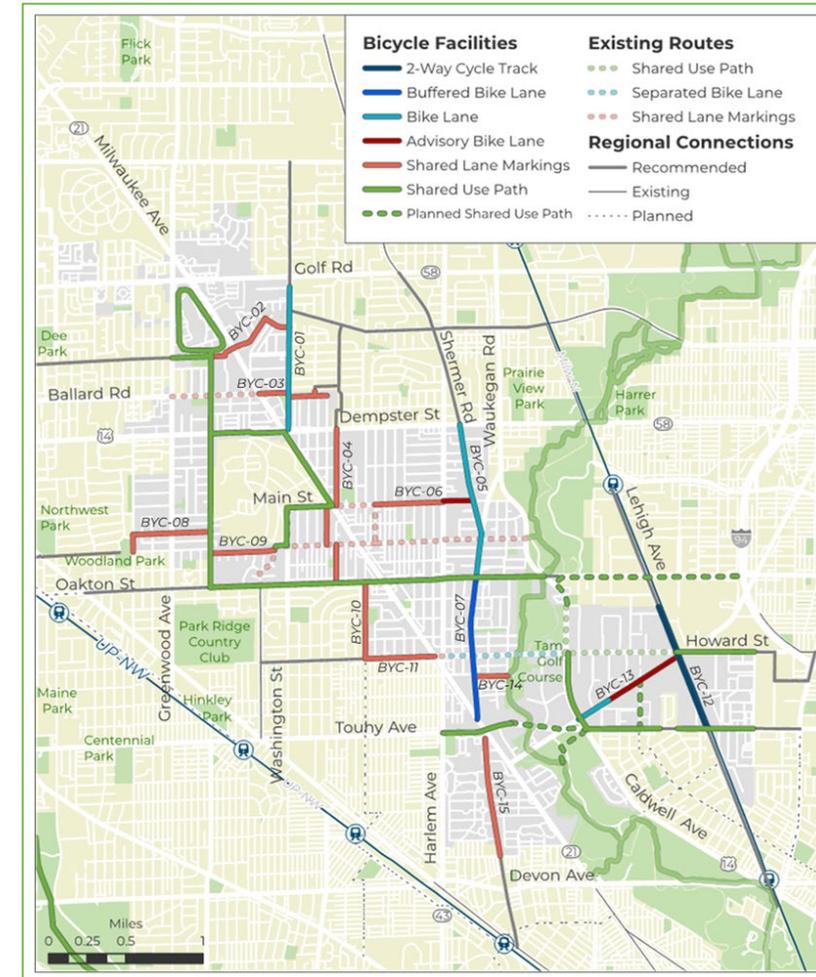
- Adding sidewalks to a street reduces all crash types by 85-88%

PRIORITIES & BENEFITS

- 10.2-mile on-street bicycling network
- 7.8-mile trail / sidepath / shared use path network
- Better vehicle separation (buffers or physical barriers)
- Legend
 - **Red** = shared lane
 - **Blue** = on-street, separated with pavement markings
 - **Green** = physically separated (curb, barrier, parkway)
- **Improved bicycle network within ¼-mile of all residents**



ON-STREET BICYCLING



CAPITAL PRIORITIES

RECOMMENDED CAPITAL PROGRAM

- \$45M program
- 20-year horizon
- \$2.25M /year
- \$450K - \$1.12M approximate annual local share

Context FY23 \$19M CIP:

- \$5.67M Capital Projects Fund
- \$4M ARPA-funded Street Improvement Program
- \$970K MFT
- \$4M other grants

Network Recommendations Summary

| Facility Type | Recommended Improvements | |
|----------------------------|----------------------------|---------------------------------|
| Sidewalk Infill | 18.0 Miles | |
| Shared Use Paths | 7.8 Miles | |
| Bike Lanes | 2.2 Miles | 10.2 Miles On-Street |
| Buffered Bike Lanes | 0.9 Miles | |
| 2-Way Cycle Tracks | 0.9 Miles | |
| Advisory Bike Lanes | 0.7 Miles | |
| Shared Lanes | 5.5 Miles | |
| New Intersection Signals | 9 Signalized Intersections | |
| High-Visibility Crosswalks | 106 Crosswalks | |
| Pedestrian Signals | 39 Signal Pairs | |

PROGRAM PRIORITIES

IMPROVED COORDINATION

Design & Development Review

- Strengthen bicycle and pedestrian access requirements
- Require sidewalk infill for developments subject to site plan review
- Request BPAG review of Niles Park District development plans

Safe Routes to School

- Establish a Safe Routes to School coordinator and school champions
- Attend a Safe Routes to School grant writing training course
- Apply for a Safe Routes to School grant
- Implement Free and Low-Cost Safe Routes to School programs

Culture and Encouragement

- Sponsor additional walking and bicycling annual events
- Entertain proposals for indoor bicycle recreation facilities

Regional Coordination

- Continue regular (annual) meetings with neighboring municipalities

Public Works

- Update the Village sidewalk ordinance
- Adopt crosswalk marking and maintenance policy





VILLAGE OF NILES
BICYCLE AND PEDESTRIAN PLAN
2022 UPDATE

VILLAGE BOARD PRESENTATION | JUNE 28, 2022



VILLAGE OF NILES

BICYCLE AND PEDESTRIAN PLAN

2022 UPDATE

FINAL PLAN | JUNE 2022



Acknowledgments

Prepared For

The Village of Niles

Bicycle and Pedestrian Plan Advisory Committee

Craig Niedermaier, Village Trustee, Committee Chair

Peggy Reins, Niles Resident

Brian Lee, Niles Resident

Ticia Doughty-Ashcroft, Niles Resident

Stephen Sanders, Niles Resident

Agency Coordination Partners

Illinois Department of Transportation

Cook County Department of Transportation and Highways

Pace Suburban Bus

Northwest Municipal Conference

Maine Township

East Maine School District 63

Niles Park Ridge School District 64

Niles School District 71

Maine Township High School District 207

Niles Township High School District 219

Prepared By

Epstein

Plan Adopted

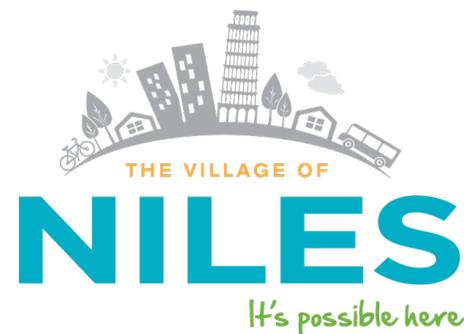
June 2022



NILES BIKE AND PEDESTRIAN PLAN *2022 UPDATE*

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| 1 | Overview | 1 |
| 2 | Design Guidelines | 5 |
| 3 | Proposed Network | 17 |
| 4 | Policies and Programs | 46 |
| 5 | Funding and Implementation | 56 |
| | Appendix | |
| A | Existing Conditions Report | |



OVERVIEW

1

INTRODUCTION

PERFORMANCE MEASURES

RECOMMENDATIONS OVERVIEW

The 2022 Bicycle and Pedestrian Plan

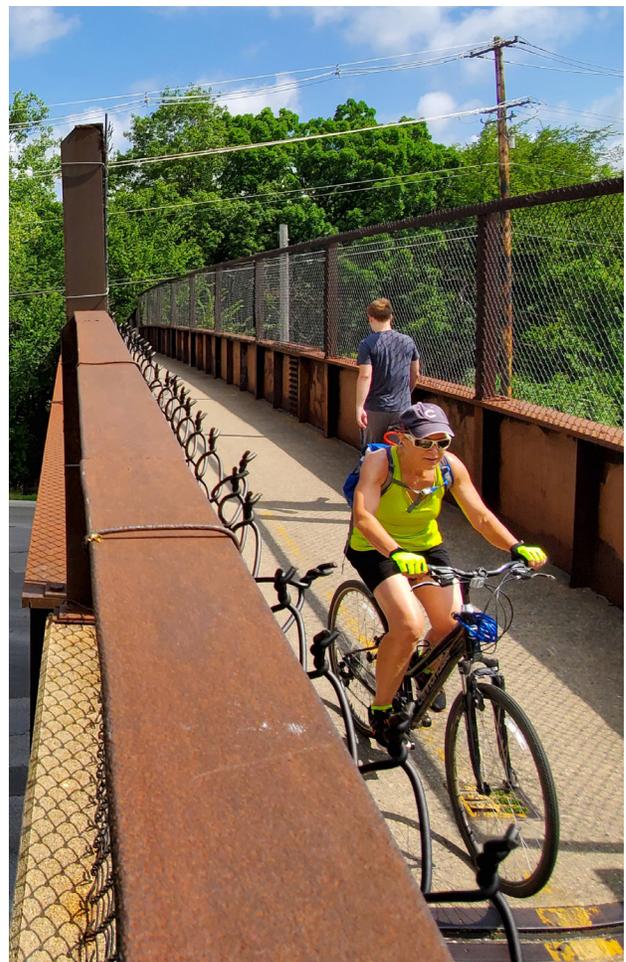
update will help make the Village of Niles a safe place to walk and bike for residents and visitors of all ages and abilities, promote biking and walking as convenient and healthy modes of active transportation, and build upon the reputation of the Village of Niles as a great place to live, work, and raise a family.

INTRODUCTION

The 2022 Bicycle and Pedestrian Plan Update aims to promote **safety, connectivity, health, quality of life, and growth** in the Village of Niles.

To help achieve that vision, this plan was developed as a collaborative effort between the Niles Bicycle and Pedestrian Plan Advisory Group (BPAG) and the Village of Niles.

Plan recommendations include more than 35 miles of improved walking and bicycling network infrastructure, intersection improvements, and recommendations for policies and programs that will make walking and bicycling more accessible and enjoyable for residents and visitors of Niles.



Performance Measures

Figure 1 shows performance measures by which the Village of Niles can track implementation of the plan. Most performance measures align with more than one goal: For example, capital improvements such as improving or constructing new pedestrian and bicycle networks contributes to all five measures - but every goal includes at least one primary performance measure. Each includes an implementation target and baseline from existing conditions. As data become available, the Village should consider providing annual status updates to these measures.

| | Baseline |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <h2>SAFETY</h2> <ul style="list-style-type: none"> Reduce the rate of pedestrian crashes by 50% Reduce the rate of bicycle crashes by 50% Eliminate pedestrian and bicyclist deaths | <p>82 crashes from 2016-2020</p> <p>45 crashes from 2016-2020</p> <p>7 fatal crashes from 2016-2020</p> |
| <h2>CONNECTIVITY</h2> <ul style="list-style-type: none"> Eliminate gaps in the sidewalk network Provide a signalized crossing on arterials every 1/4 mile and at every bicycle route crossing | <p>~24 miles of sidewalk gaps</p> <p>16 locations with 1/2 mile or more between signals</p> |
| <h2>HEALTH</h2> <ul style="list-style-type: none"> Double the share of Niles residents that walk or bicycle to work Establish a walking and bicycling education and encouragement program in Niles schools | <p>1.8% of residents in 2019</p> <p>N/A</p> |
| <h2>QUALITY OF LIFE</h2> <ul style="list-style-type: none"> Double the area in Niles that is accessible within 1/4 mile of a marked bicycle facility (excluding the Forest Preserve the North Branch Trail) Host three annual walking and bicycling-related events in Niles | <p>41% of Niles 2021</p> <p>1 event in 2021</p> |
| <h2>GROWTH</h2> <ul style="list-style-type: none"> Establish one new walking or bicycling-focused attraction or business in the Village | <p>N/A</p> |

Figure 1: Performance Measures



Overview of Recommendations

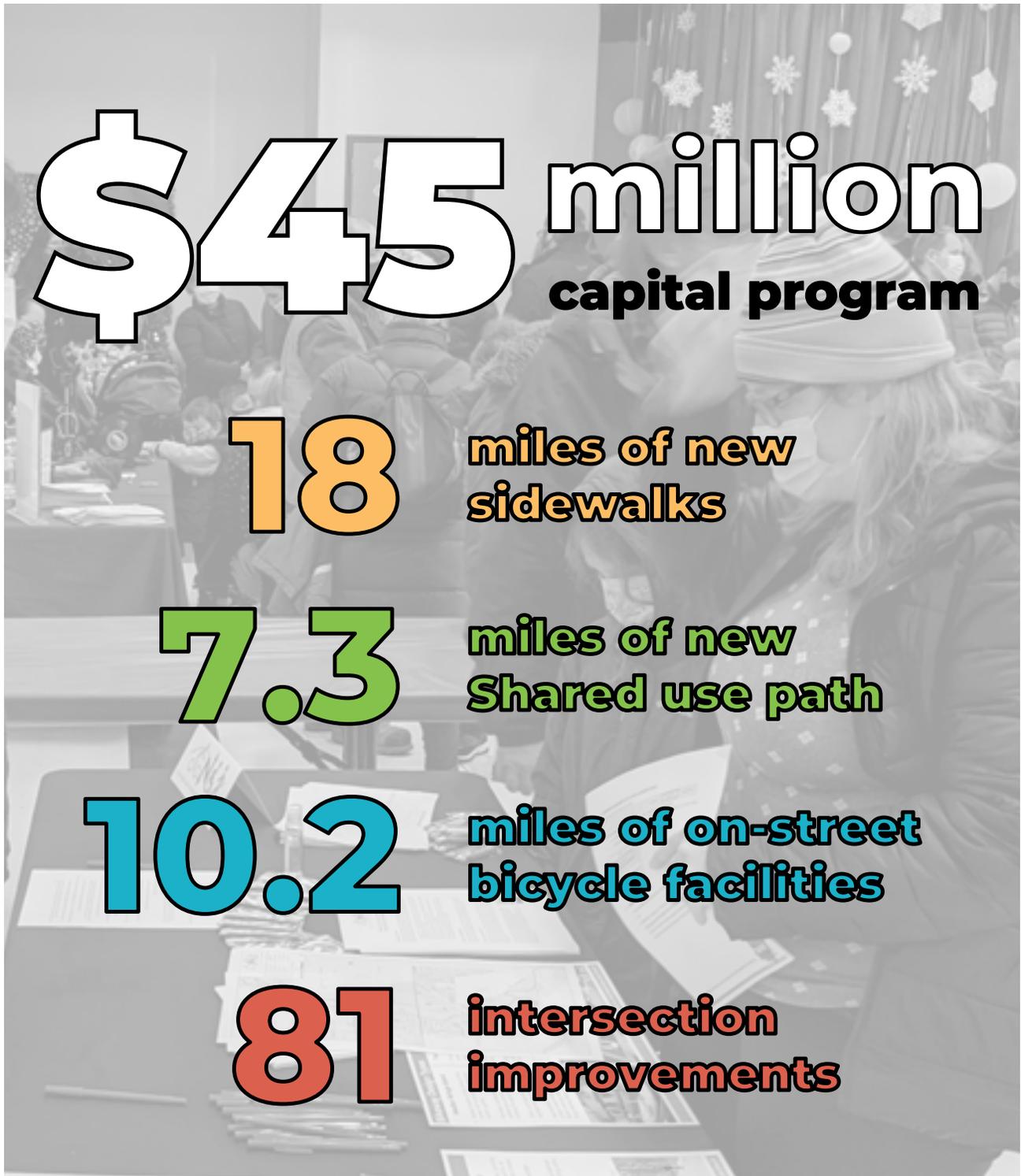


Figure 2: Recommendations Overview

DESIGN GUIDELINES

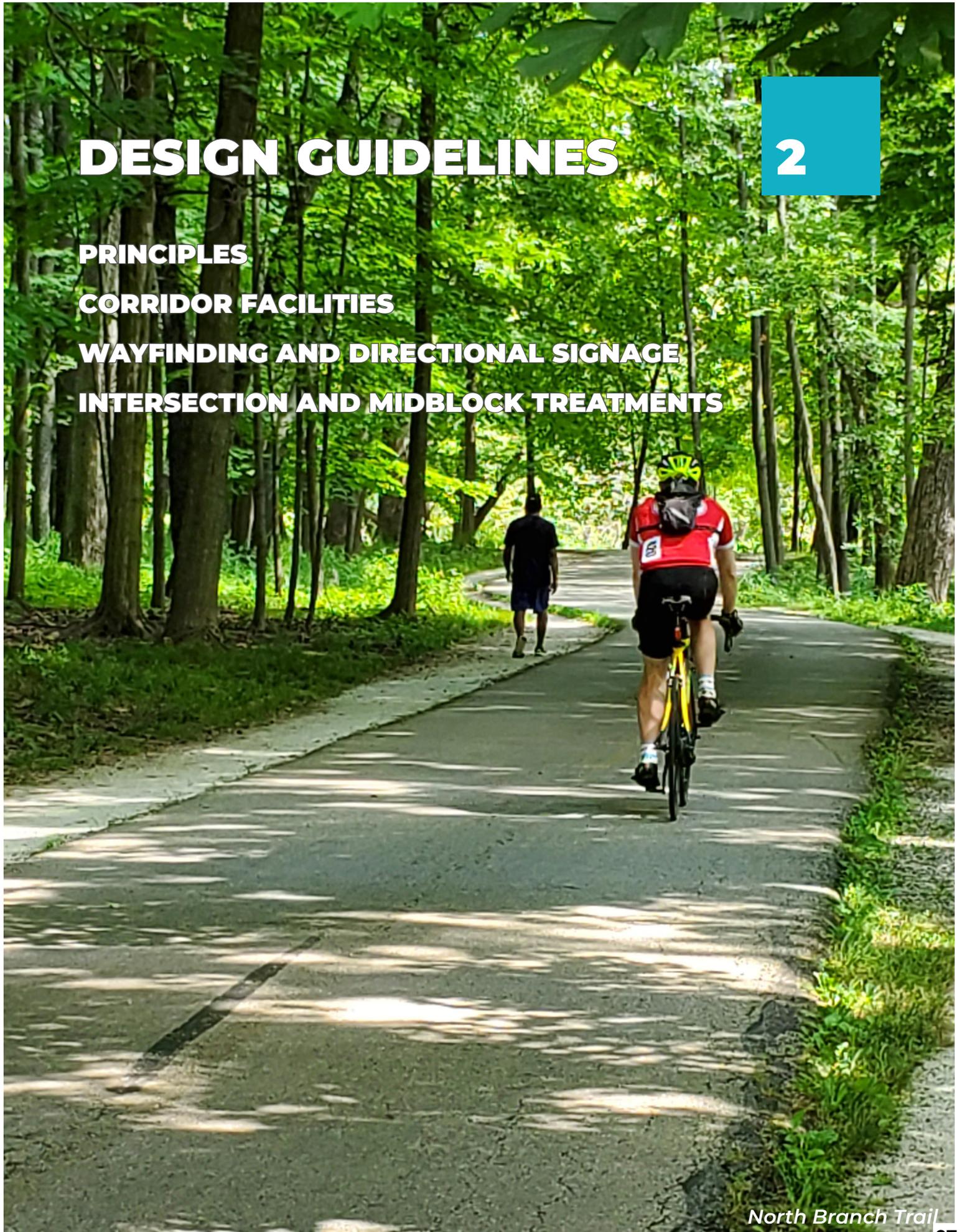
2

PRINCIPLES

CORRIDOR FACILITIES

WAYFINDING AND DIRECTIONAL SIGNAGE

INTERSECTION AND MIDBLOCK TREATMENTS



The latest design guidance and best practices make it possible to create connected and accessible pedestrian and bicycle networks.

PRINCIPLES

The 2022 Bicycle and Pedestrian Plan Update uses the latest design guidance and best practices available. This chapter draws on the following national and state publications for bicycle, pedestrian, and multimodal facility design:

- Illinois Department of Transportation (IDOT) Bureau of Local Roads and Streets (BLRS) and Bureau of Design and Environment (BDE)
- American Association of State Highway Transportation Officials (AASHTO)
- National Association of City Transportation Officials (NACTO)
- Federal Highway Administration (FHWA)

Successful development of bicycle and pedestrian facilities is dependent on knowing what design options are available, and how best to implement them. Three key principles should be considered when selecting from potential design applications:

1. User Needs

People of all ages and abilities have different needs, from families with children, to adults, to people using mobility assistance devices.

2. Context Sensitivity

Roadway context including traffic speed, traffic volume, and adjacent land use is an important factor affecting the comfort and safety of users.

3. Selection & Application

Once a facility is selected, application varies slightly based on context, available space, and other factors such as available right-of-way.

This chapter presents design guidelines for two basic types of infrastructure improvements: corridors and intersections.

CORRIDOR IMPROVEMENTS

Corridor improvements include on and off-street facilities to connect users to destinations throughout the Village. Corridor improvements are presented in two categories:

- **Off-street facilities** include sidewalks and shared use paths or sidepaths. Typically, these are located in the public right-of-way adjacent to a street and physically separated from the roadway. Unless otherwise posted, off-street facilities in Niles can be used by pedestrians and bicyclists. Sidewalks are designed primarily for walking, while shared use paths and sidepaths are designed for both users.
- **On-street facilities** include dedicated bike lanes and shared roadways, which are streets where bicyclists and motorists share the same space. These are installed on existing roadway pavement, and are designed specifically for use by bicyclists. Accommodating pedestrians and bicyclists on the Niles roadway network is of critical importance. Every trip, regardless of purpose, begins or ends on the roadway network.

INTERSECTION IMPROVEMENTS

Intersection improvements are facilities at the intersection of two or more roadways or other linear facilities that help users to navigate the intersection safely. These include crosswalks, signals, design and placement of curbs.



CORRIDOR IMPROVEMENTS | OFF-STREET FACILITIES

SIDEWALKS

Sidewalks are among the most basic yet important pieces of infrastructure in Niles. Sidewalks allow people to walk to businesses, schools, parks, and transit stops, while also being a public space that fosters community between neighbors. It is critical that sidewalks are continuous; gaps can render an entire block or a location inaccessible, especially for people in wheelchairs. Without sidewalks, people may walk in the roadway, on the shoulder, or won't walk at all.

Specific design elements for sidewalks are governed primarily by the Americans with Disabilities Act (ADA) Accessibility Guidelines and the Proposed Public Rights of Way Access Guidelines (PROWAG). These include minimum width, slopes, design of curb ramps, usage of detectable warning tiles, and access to buildings.

Proposed sidewalks should be at least five feet wide and should be constructed of concrete. Wider sidewalks are recommended in areas with a high levels of pedestrian activity. A parkway between the sidewalk and the road provides room for grass, trees, mailboxes, and provides a buffer between traffic and pedestrians. In locations where there is no space for a buffer, sidewalks should be at least seven feet wide.



Sidewalks in Niles

SHARED USE PATHS / SIDEPATHS

Shared use paths and sidepaths are regarded as some of the most comfortable and desirable bicycling facilities, and accommodate walking, running, and bicycling in a shared space. Shared use paths are excellent for recreation and are commonly part of regional trail networks like the North Branch Trail or Des Plaines River Trail. A sidepath is a shared use path adjacent to a roadway where conflicts from driveways and intersecting streets are present.

Various treatments can be used to highlight the presence of bicyclists at conflict points, like green pavement markings and raised crosswalks. Both sidepaths and shared use paths should be a minimum of 10 feet wide with a two-foot shoulder and three-foot clear zone on both sides kept clear of branches, signs, and other obstructions. Sidepaths can be narrowed to eight feet for short sections where space is constrained and/or to avoid tree impacts.

Shared use paths are among the most desirable facilities for their comfort and separation from traffic, but may not be practical along corridors where on-street facilities are better suited (e.g. roads with closely spaced driveways).



The North Branch Trail, a shared use path in Niles

CORRIDOR IMPROVEMENTS | ON-STREET DEDICATED FACILITIES

SEPARATED BIKE LANES

Separated bike lanes are for exclusive use by bicyclists, are located adjacent to the roadway and are separated from other traffic through the use of various physical vertical elements, like a curb, vertical delineators (plastic “flexposts” or bollards), planters, and/or a row of parked vehicles. Separated bike lanes are more comfortable for bicyclists compared to buffered or conventional bike lanes because conflict with automobiles is minimized and automobiles cannot easily park in or otherwise block the bike lane.

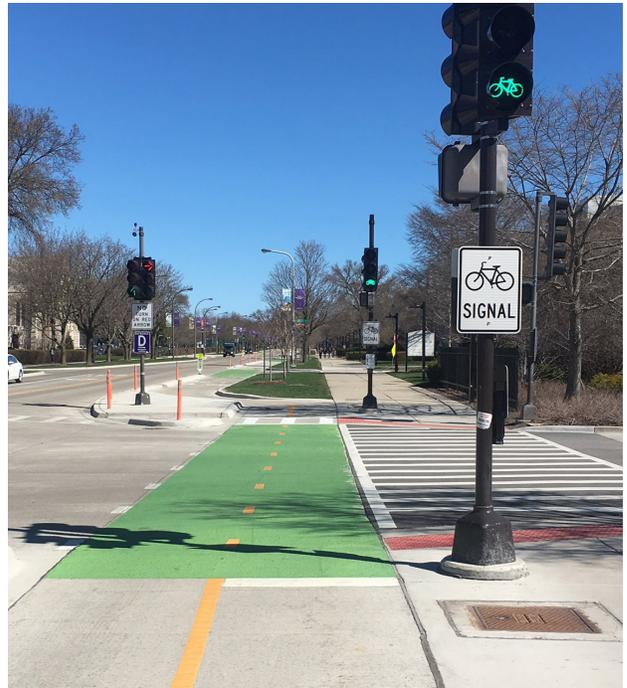
Separated bike lanes are typically built on both sides of the street to allow bicyclists to ride in the direction of traffic. Two-way separated bike lanes place both directions of bicyclists on one side of the roadway, and a single buffer is used to separate both bike lanes from all other traffic lanes. This is commonly done when connecting trails and sidepaths, or when roadway space is limited.

Separated bike lanes require at least five feet of width for each direction of travel and a minimum buffer width of three feet to accommodate physical protection. The total clear width between the curb and vertical barriers shall be a minimum of seven feet to allow for snow removal and maintenance. Four-foot wide bike lanes for each direction are permitted for two-way separated bike lanes.

Extra consideration is required when designing separated bike lanes to ensure bicyclists can be seen by motorists turning into driveways, alleys, or intersecting streets. A minimum of 30 feet of unobstructed distance in approach to conflict points between bicyclists and motorists should be provided.



Howard Street Trail in Niles, an example of a one-way separated bike lane



Sheridan Road in Evanston, an example of a two-way separated bike lane

CORRIDOR IMPROVEMENTS | ON-STREET DEDICATED FACILITIES

CONVENTIONAL BIKE LANES

Conventional bike lanes delineate space on a roadway for the exclusive use by bicyclists. They provide more comfort than shared lanes and are among the most common bicycle facility types.

Conventional bike lanes consist of a lane line separating the bike lane from other travel lanes. The minimum width of a bike lane is five feet. Six feet is recommended on roadways with street parking, where trucks or buses are common, and on roads carrying more than 10,000 vehicles a day.

Roadway space for conventional bike lanes is often created through the narrowing of existing travel lanes or a roadway reconfiguration reducing the number of lanes. Where travel lanes are 15 feet or wider, conventional bike lanes can be added without significantly changing the function of the street.



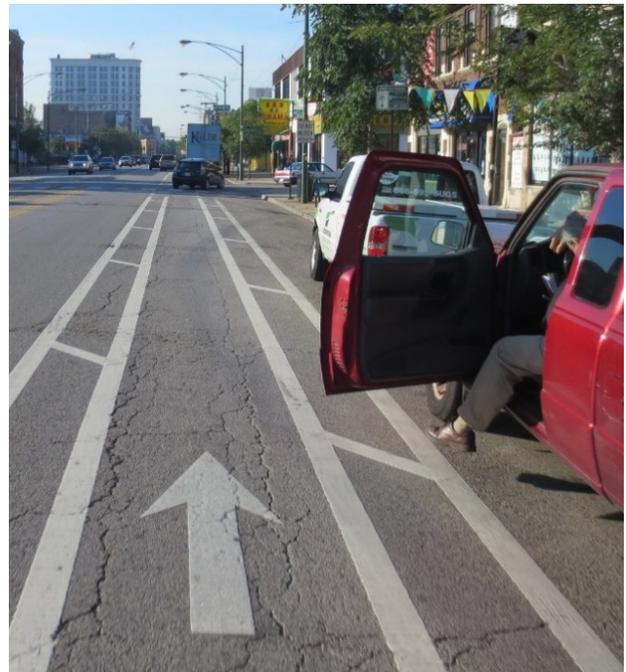
Conventional bike lane in Chicago, IL

BUFFERED BIKE LANES

Buffered bike lanes include a buffer between the bike lane and parked cars and/or travel lanes, depending on which side of the bike lane presents a hazard worth mitigating. When roadway space allows, extra width should be filled with buffers, as this calms traffic and better separates roadway users from each other. Narrowed travel lanes calm traffic and discourage speeding while also still accommodating larger vehicles.

Buffered bike lanes are four to six feet wide, and include buffer that at least two feet wide, resulting in a total width of at least six feet. Buffers should include hatched markings at a 45° angle every 20-40 feet to delineate the space between the bike lane and travel lanes.

Buffered bike lanes wider than eight feet may be used by automobiles as a travel lane and are not recommended. When eight or more feet are available, separated bike lanes are a better option.



Buffered bike lane in Chicago, IL

CORRIDOR IMPROVEMENTS | ON-STREET SHARED FACILITIES

ADVISORY BIKE LANES

An advisory bike lane delineates a shared space at the roadway edge on roadways too narrow for conventional bike lanes. The FHWA refers to these as dashed bike lanes or advisory shoulders, as they can be designed to function as both a shoulder and bike lane in some conditions (i.e. not **just** for bicycling).

Advisory bike lanes are delineated from the rest of the roadway with a dashed line. Motorists may use this space when no bicyclists are present to make way for oncoming traffic. Roadways with advisory bike lanes cannot have a marked centerline as motorists are expected to use the shared space when encountering oncoming traffic and yield when a bicyclist is present. Advisory bike lanes shall be at least four feet wide (six feet preferred) on either side of the roadway. The remaining space in the center of the roadway reserved for two-way vehicle travel shall be between 10 and 16 feet wide.

Advisory bike lanes are a novel treatment and therefore require public education to ensure safe and efficient operation. It is uncommon for motorists to share the center lane for two-way travel. Signage reinforcing the operation of the street is also encouraged.



Advisory bike lanes in Edina, MN
Source: NACTO

SHARED LANE MARKINGS

Many streets in Niles are already appropriate for bicycling with low speeds and traffic volumes. The addition of signage and shared lane markings (also known as “sharrows”) is a low-cost strategy to guide bicyclists to streets where bicycling is suitable. Shared lanes are an important strategy to expand a comfortable bicycle network to directly serve destinations like schools and parks as well as provide alternatives to major streets where biking may be more stressful.

Various signage types should be added on shared streets to communicate traffic laws and remind roadway users of the presence of bicyclists. This includes green directional signage, yellow warning signage, and white regulatory signage.

Shared lane markings should be placed at the beginning of every block and then every 250 feet thereafter. Where on-street parking is permitted, shared lane markings should be 11 feet from the edge of the curb, otherwise where parking is not allowed (or seldom used) the markings should be placed four feet from the curb. On narrow roadways or other locations where it is desirable to give bicyclists priority, shared lane markings can be placed in the center of the travel lane to indicate to bicyclists where to ride in the street and to discourage passing.



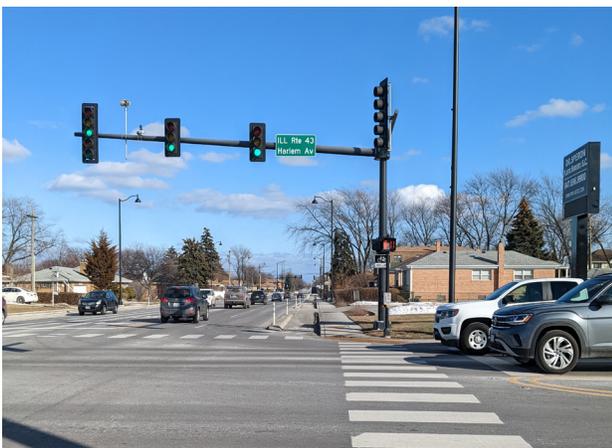
Shared lane marking in Niles

INTERSECTION IMPROVEMENTS

PROPOSED TRAFFIC SIGNALS

Signalized intersections can be more comfortable locations for bicyclists and pedestrians to cross major streets compared to stop signs or uncontrolled intersections. Traffic signals are familiar and well understood by all users, but are expensive to build and maintain. Due to the cost and impact on traffic flow, certain criteria (or “warrants”) must be met for the signal to be constructed. These criteria include existing or projected volumes of automobiles, bicyclists, and pedestrians, a high number of crashes, proximity to schools, consistency of signal spacing, and the presence of railroad tracks near an intersection.

Care must be given when determining locations for proposed traffic signals to facilitate bicyclists crossing major streets, in particular on shared streets. The addition of signals on a low-traffic, local street can encourage motorists to use the local street as a collector for through-traffic, increasing traffic speeds and volumes and negating the benefit for bicyclists. This can be mitigated by implementing speed and volume controls on local streets to discourage through traffic, requiring all motorists on the minor street to turn right onto the major street, or by considering a different type of intersection treatment particularly tailored to the needs of bicyclists.



Signalized intersection at Harlem Avenue creates a more comfortable crossing for pedestrians and bicyclists on the Howard Street Trail in Niles

RETROFITTING TRAFFIC SIGNALS

Retrofitting existing traffic signals helps improve bicycle facility crossings at signalized intersections. This includes the installation of pedestrian signal heads, bike signals, vehicle and bicyclist detection.

Bike signals are required when a bicyclist movement must be separate from other vehicle movements, and are common for accommodating contraflow bike lanes and two-way separated bike lanes.

Vehicle detection cameras or in-pavement loop detectors are used to initiate a signal phase change when a motorist or bicyclists approaches an actuated or semi-actuated signal, allowing them to cross. All new or modified signals in Niles should include camera detection, as these can be calibrated to detect the presence of bicyclists, regardless of vehicle size or type. Camera detection is increasingly common, reliable, and cost effective as it does not require pavement cuts or roadway construction to implement.

Changes to signal phasing may be necessary to facilitate bicyclists and pedestrians at signalized intersections. For two-way separated bike lanes, turning or other conflicting movements across the bike lane should be signal separated. Other changes, including prohibiting right turn on red and adding mixing zones can help mitigate conflicts.

Signal clearance phases should be long enough to allow pedestrians to cross the street during the WALK and flashing DON'T WALK phases, especially elderly pedestrians and those using wheelchairs. Lastly, retrofitted intersections should consider curb ramp design and placement are consistent with ADA guidelines, placing users within adequate reach of push buttons and directing them to the crosswalk

INTERSECTION IMPROVEMENTS

PEDESTRIAN SIGNAL HEADS

Pedestrian signal heads direct pedestrians and bicyclists at signalized intersections. The pedestrian WALK phase typically aligns with the automobile green phase in the same direction, and the pedestrian DON'T WALK phase begins prior to automobile yellow, red, and protected turn phases. Countdown timers are standard on all new pedestrian signals, as these display the remaining time in seconds, helping pedestrians estimate available crossing time.

All existing pedestrian signals in Niles are push-button actuated. The pedestrian WALK phase appears only when a button is pressed. Fixed-time signals can provide a pedestrian WALK phase during every signal cycle, regardless of actuation. According to the National Association of City Transportation Officials (NACTO), fixed-time signals “help make pedestrians an equal part of the traffic signal system” compared with actuated signals because they create regular and dependable intervals for pedestrian crossings.

Accessible pedestrian signals (APS) provide information about WALK and DON'T WALK intervals at signalized intersections using audio tones and warnings and/or vibrating surfaces.

Per IDOT updates to the Bureau of Design and Environment (BDE) Manual in 2021, all new and altered pedestrian signals using State or federal funding shall be APS. Per Section 4E of the MUTCD, APS shall have both audible and vibrotactile walk indications. Pedestrian push-buttons are often used to activate APS warnings and should be retained, even if an intersection is being updated to fixed-time signals.



Accessible pedestrian signal with push-button and countdown timers.

Source: Minnesota Department of Transportation

INTERSECTION IMPROVEMENTS

CROSSWALKS

Crosswalks alert motorists to conflict zones with pedestrians and instruct pedestrians where to cross the street. Crosswalks are typically located at intersections, but may be added at midblock locations, especially if the distance between intersections is large. Generally, any distance between intersections greater than 1/8 mile (660') may result in unintended pedestrian crossing activity outside crosswalks.

Crosswalks typically are marked with two solid white lines running parallel to the crossing. High-visibility crosswalks consist of several large white rectangles placed perpendicular to the crossing, as these are visible to motorists from greater distances. High-visibility crosswalks are recommended at unsignalized crossings (i.e. when motorists aren't otherwise controlled by a traffic signal), and should be used near areas of higher pedestrian activity, like schools, parks, libraries, and in commercial areas.

RECTANGULAR RAPID FLASHING BEACONS (RRFB)

RRFBs are a pedestrian-activated device installed at a marked crosswalk to alert drivers to the presence of a pedestrian crossing the street. RRFBs utilize unique flashing yellow LED lights and should be placed on both sides of the crosswalk (or in the center median if a refuge is provided). RRFBs are a lower cost treatment than a HAWK signal or traffic signal, and the warrant requirements to install one are lower.

RRFBs should be considered when crossing higher-speed two- or three-lane roadways where motorists consistently fail to yield to pedestrians. RRFBs are less effective on multi-lane roadways since they do not require motorists to stop at the crosswalk. Motorists on multi-lane roads may pass a vehicle stopped for a pedestrian in an adjacent lane and strike the pedestrian since they were hidden from view. Compliance rates for RRFBs are lower than HAWK signals but are still near 90%



RRFB and high-visibility crosswalk at the North Branch Trail crossing of Howard Street in Niles

INTERSECTION IMPROVEMENTS

HIGH INTENSITY ACTIVATED CROSSWALKS (HAWK)

A HAWK is a type of hybrid beacon used to assist pedestrians crossing a multi-lane roads at unsignalized locations. A HAWK utilizes yellow and red lights to communicate when motorists must stop and allow pedestrians to cross. This is done in four phases:

- Prior to activation, the HAWK signal is dark and traffic flows normally
- A flashing yellow phase upon activation by a pedestrian
- A steady yellow phase prior to the red phase, similar to a standard traffic signal
- A steady red phase during the pedestrian walk interval. All vehicles are required to stop, similar to a standard traffic signal
- An alternating red phase during the pedestrian clearance interval. Motorists are allowed to continue through the crosswalk during this phase after the conflict with pedestrians has passed
- After the pedestrian clearance interval, the signal goes dark until activated.

HAWK beacons were added to the MUTCD in 2009 as an approved traffic control device, standardizing the signal phases, signage, and application of these signals. The warrant to install a HAWK is less

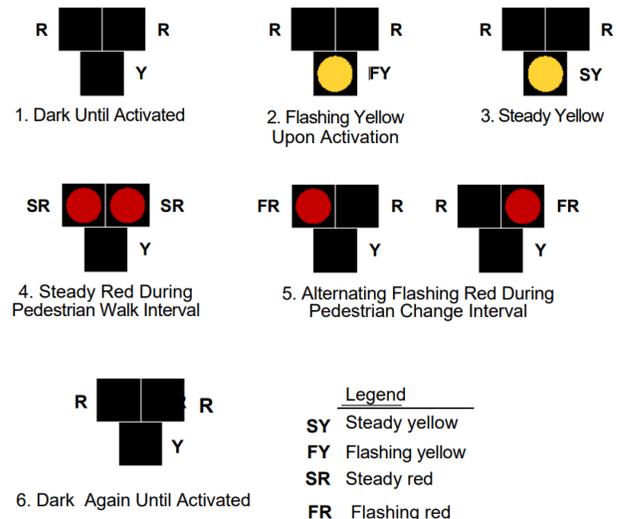


HAWK signal in West Bloomfield Township, MI
Source: NACTO

restrictive than a standard traffic signal. To date, no HAWK beacons have been installed in IDOT District 1, but have been installed in Champaign, Illinois and other locations across the United States. HAWK beacons have been shown to achieve a 97% yielding compliance rate, similar to a standard traffic signal. Since this would be a novel installation in Niles, education efforts will be required to explain how HAWK beacons are intended to be used.

A HAWK controls a single crosswalk, not a whole intersection, and may be modified to accommodate bicyclists and pedestrians. The City of Tucson, AZ installed a HAWK beacon where a two-way separated bike lane approaches an intersection with a local street. When considering placement of a HAWK, a push button should be added that can be reached by bicyclists.

Signage is required on both sides of the crossing and at each roadway approach. This treatment includes uses signage already included in the MUTCD.



Standard signal phasing of a HAWK signal.
Source: MUTCD

WAYFINDING AND DIRECTIONAL SIGNAGE

Wayfinding signage provides helpful information to inform roadway users on the location of key destinations, which roads are most desirable for walking and bicycling, and the recommended pathways to signalized intersections.

Destinations shown on wayfinding signage should be limited to a limited number of well-known and permanent locations, and should identify destinations within or just outside Niles with particular importance for bicyclists. For example nearby Metra stations, the Des Plaines River Trail, the North Branch Trail, schools, libraries, parks, and commercial areas are suitable for inclusion on directional signs.

Wayfinding signage is particularly useful for guiding users through areas involving multiple turns, or areas with which users may be unfamiliar, such as local roads leading to the North Branch Trail and Des Plaines River Trail. Wayfinding signage can help users find local businesses and encourage them to explore Niles.

Wayfinding signage may also be customized, which is a helpful way to increase awareness of the local bicycle network, encourage recreation and tourism, and build a sense of place.



Bicycle wayfinding signage in Chicago



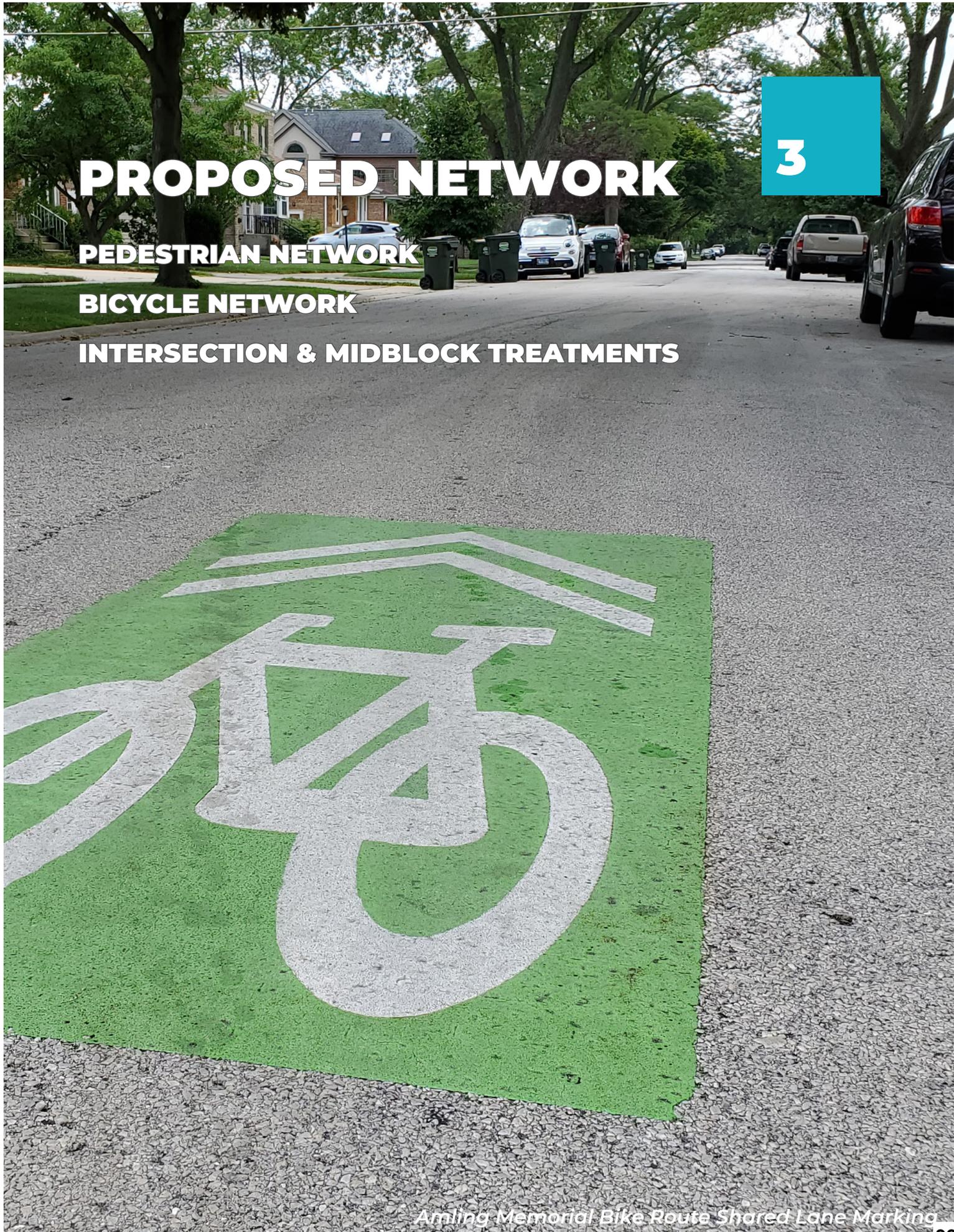
Leaning Tower of Niles (vniles.com)

PROPOSED NETWORK

PEDESTRIAN NETWORK

BICYCLE NETWORK

INTERSECTION & MIDBLOCK TREATMENTS



Amling Memorial Bike Route Shared Lane Marking

The Niles Bicycle and Pedestrian Plan Update recommends adding more than 35 miles of new facilities to the Niles walking and bicycling network.

GROWING THE NETWORK

Proposed improvements to the pedestrian and bicycle network were identified based on BPAG guidance, public feedback, Village of Niles priorities, and best practices from local, state, and national sources. The Niles Bicycle and Pedestrian Plan Update recommends 18 miles of sidewalk infill projects, 7.8 miles of shared use paths, and a network of more than 10 miles of on-street bicycle facilities. In addition, the plan recommends infrastructure improvements at 81 intersections. Table 1 provides a summary of network recommendations.

The proposed network is shown in maps on the following pages. Following each map is a detailed discussion of each recommendation that impacts an adjacent municipality or unincorporated

territory right-of-way, requires increased coordination with IDOT, or requires acquisition of or easement on private property.

HOW TO READ THESE MAPS

Recommendations are shown at three levels: the pedestrian network, the bicycle network, and intersection improvements that connect all corridors. Shared use paths are included on both the pedestrian and bicycle network maps, because they contribute equally to both networks.

Existing bicycle and shared use facilities are displayed as dashed lines on the maps. Proposed corridor improvements are shown as solid lines. Projects that were already in the planning stages during this planning process are included as proposed projects.

Network Recommendations Summary

| Facility Type | Recommended Improvements |
|----------------------------|----------------------------|
| Sidewalk Infill | 18.0 Miles |
| Shared Use Paths | 7.8 Miles |
| Bike Lanes | 2.2 Miles |
| Buffered Bike Lanes | 0.9 Miles |
| 2-Way Cycle Tracks | 0.9 Miles |
| Advisory Bike Lanes | 0.7 Miles |
| Shared Lanes | 5.5 Miles |
| New Intersection Signals | 9 Signalized Intersections |
| High-Visibility Crosswalks | 106 Crosswalks |
| Pedestrian Signals | 39 Signal Pairs |

Table 1: Summary of Network Recommendations



SIDEWALK NETWORK

Figure 3 shows a proposed network of more than 18 miles of proposed infill projects are recommended, in addition to 5.1 miles of already planned infill projects to be completed by the Village through 2024. Prioritization of infill based on location, roadway context, and funding availability is discussed in Chapter 5.

The plan reflects the Village's plan to close remaining sidewalk gaps within the Village's jurisdiction, with a few limited exceptions. For example, a sidewalk is recommended only on the west side of Lehigh Avenue, because the east side is a utility and railroad corridor and there are no destinations for pedestrians and few intersecting roadways.

Recommendations for sidewalks on both sides of the street are shown in brown, and those needing sidewalk on one side are shown in orange. Dotted lines represent projects already programmed for construction and will be completed in the next 1-2 years.

Due to the shape of the Village boundary, there are some locations where sidewalk infill is recommended, but a portion of the block in question is located outside the Niles village boundary. Examples include Knight Avenue, Lincoln Avenue, and Delphia Street west of Golf Mill Center. In these locations, constructing sidewalks within Niles boundaries only will not provide substantial pedestrian mobility improvements.

Coordination with neighboring agencies (Maine Township and the Village of Park Ridge, in the example given) is needed to create a continuous pedestrian facility.

SIDEWALK INFILL OUTSIDE NILES

Eliminating sidewalk gaps outside the Village limits of Niles is key to creating a walkable network, but the Village's ability to affect change in these areas is limited, as Niles has no roadway nor land use jurisdiction outside the Village boundary.

The Village of Niles supports and encourages the construction of three (3) sidewalk projects outside of Village boundaries; two are under the jurisdiction of Maine Township and one is the Forest Preserves of Cook County (FPCC). While the Village supports and encourages these improvements, it lacks the authority to construct or maintain them.

Sidewalks: Maine Township Jurisdiction

This plan recommends the Village support Maine Township to complete two sidewalk infill projects located across the street from the Village of Niles:

1. The south side of Golf Road between Dee Road and Hamlin Avenue
2. The west side of Greenwood Road from south of Golf to Emerson Street

The infill project on Golf Road is recommended because it is located on a high-crash corridor with Pace bus stops, and is across the street from Golf Glen Mart. Sidewalks along Greenwood Road are recommended because it is a short stretch between two areas that are within the Village of Niles, and is across the street from Golf Mill Center. While not within Niles boundaries, the absence of sidewalks in both locations has potential impacts on Niles residents.

The Village should coordinate with Maine Township to pursue a sidewalk infill project. Niles should work with Maine Township to pursue Township Board approval for construction and maintenance.

Sidewalks: FPCC Jurisdiction

This plan recommends the Village encourage FPCC to construct a sidewalk on the south side of Touhy Avenue between Harts / Gross Point Road and Caldwell Avenue. This area is owned by the Forest Preserves of Cook County. The Village should coordinate with the Forest Preserve to construct approximately 700 linear feet of sidewalk to connect the surrounding network on Touhy and Harts Road.

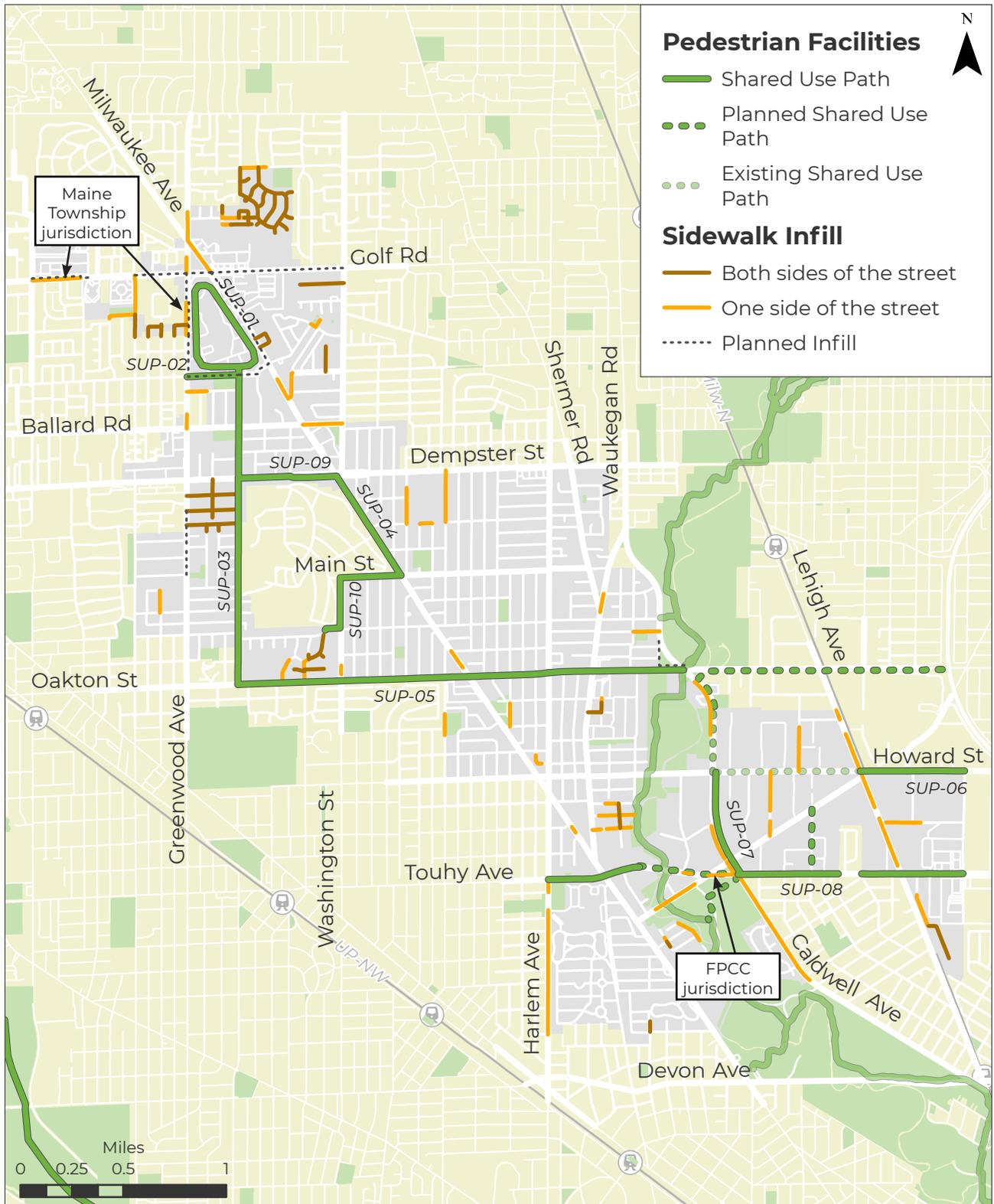


Figure 3: Proposed Sidewalk & Shared Use Path Network

SHARED USE / SIDEPATH NETWORK

The proposed bicycle network consists of shared use paths and on-street bike lanes on major corridors throughout the Village of Niles. These are supplemented by marked shared lanes and advisory bike lanes that provide access within and between neighborhoods.

SHARED USE PATHS

Nine shared use path projects totaling approximately seven miles are proposed for the Village of Niles, also shown in Figure 3 and below in Table 2. They are proposed mainly on arterial and collector routes in order to provide wide, comfortable facilities for both pedestrians and bicyclists.

Each of these proposed improvements requires coordination with outside agencies, right-of-way acquisition, or changes to the existing roadway geometry. These considerations are discussed in detail for each recommendation in the following sections.



Existing sidepath on Howard Street at Lehigh Avenue

| Corridor ID | Street | Limits | Facility Type | Length (mi.) |
|--------------|-------------------|----------------------------|-----------------|--------------|
| SUP-01 | Golf Mill Loop | Golf Mill Center | Shared Use Path | N/A* |
| SUP-02 | Church Street | Greenwood to Cumberland | Shared Use Path | N/A** |
| SUP-03 | Cumberland Avenue | Church to Oakton | Shared Use Path | 1.51 |
| SUP-04 | Milwaukee Avenue | Dempster to Main | Shared Use Path | 0.57 |
| SUP-05 | Oakton Street | Cumberland to Caldwell | Shared Use Path | 2.17 |
| SUP-06 | Howard Street | Lehigh to Central | Shared Use Path | 0.51 |
| SUP-07 | Caldwell Avenue | Howard to Touhy | Shared Use Path | 0.52 |
| SUP-08 | Touhy Avenue | Harlem to Planned Sidepath | Shared Use Path | 1.43 |
| | Touhy Avenue | Caldwell to Central | Shared Use Path | |
| SUP-09 | Dempster Street | Cumberland to Milwaukee | Shared Use Path | 0.46 |
| SUP-10 | Main / Washington | Prospect to Milwaukee | Shared Use Path | 0.59 |
| TOTAL | | | | 7.76 |

*The design of the proposed Golf Mill Loop is contingent on coordination with Golf Mill Center developers.

**The Church Street recommendation involves designating planned sidewalks as a shared use path, and does not include additional path construction.

Table 2: Proposed Shared Use Paths

SUP-01 GOLF MILL LOOP

Golf Mill Center has no bike facilities, and few sidewalks. However, the Pace Golf Mill Station bus stop is the most frequently used bike stop in the Village of Niles. There are no sidewalks connecting this bus stop to the sidewalk network. The shopping center is large enough that it creates a barrier to walking and bicycling, and there are large gaps in the sidewalks around the perimeter.

The Golf Mill Center mixed-use redevelopment project is in the preliminary planning stage. The project would create a Planned Unit Development (PUD) district that includes residential, retail, and entertainment uses. Plans include a pedestrian path in future phases, but do not provide continuous pedestrian or bicycle access to primary entrances to the shopping center off of Milwaukee Avenue.

The Village of Niles requires PUDs to include a traffic circulation plan indicating the proposed movement of vehicles, bicycles, and pedestrians

within the development, and to and from adjacent streets.

Golf Mill Loop Recommendations:

- **Include internal sidewalks and a shared use path** that provides access to Golf Mill Center, Pace's Golf Mill Station, and around the perimeter of the site in a proposed redevelopment plan in coordination with developers.
- **Require a circulation plan** that shows proposed pedestrian and bicyclist pathways connecting the public right of way to the entrances of buildings within the proposed development. The plan should identify the extent to which these pathways are physically separated from vehicle paths and parking lots.

This practice is included in recommendations for the site review process, discussed in Chapter 4: Policies & Programs.



Preliminary plans for Phase I of Golf Mill Center PUD, released January 26, 2022

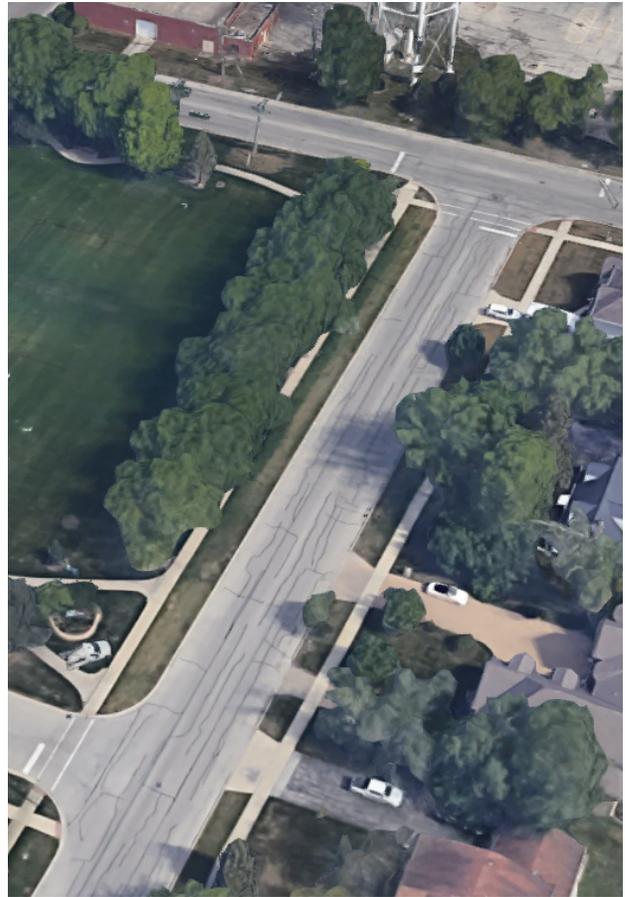
**SUP-02 CHURCH STREET
GREENWOOD TO CUMBERLAND**

Church Street is being redesigned from Greenwood to Cumberland as part of the Greenwood Stormwater Basin – Golf Mill Park redevelopment project. Church Street will include angled on-street parking. Sidewalks will be constructed on the north side, and pedestrian paths of varying widths are planned on the south side of the street in the expanded Golf Mill Park.

Shared lane markings are proposed on Church Street east of this segment (refer to recommendation BYC-02), and a shared use path is proposed on Cumberland south of Church (SUP-03).

Recommendation:

- **Designate existing and proposed paths as shared use paths** as part of the planned redevelopment. Paths should be 10 feet wide throughout the park to accommodate walking and bicycling.



Cumberland Avenue sidewalk at Golf Mill Park



Golf Mill Park Conceptual Master Plan



SUP-03 CUMBERLAND AVENUE CHURCH TO OAKTON

Cumberland Avenue is a transit route that connects four schools, two parks, Golf Mill Center, Maryhill Cemetery, and homes. From Dempster Street to Clara Avenue, Cumberland runs alongside the cemetery which is in unincorporated territory, with a 20-foot parkway between the street and the cemetery fence.

Village right-of-way ends at the street centerline.

Recommendations:

- **Construct a shared use path** on the east side of Cumberland from Church to Oakton.
 - **Narrow Cumberland by seven feet** at Northridge Preparatory School (approximately 300 linear feet) to avoid reconstructing the parking lot embankment. This would require the removal of eight on-street parking spaces.
 - **Narrow Cumberland by four feet** from Dempster to Clara Court (3,000 linear feet) to avoid utility relocation and impacts to the Maryhill Cemetery right-of-way.
 - **Coordinate with Catholic Cemeteries** and to install and maintain a sidepath on Cumberland Avenue path from Dempster Street to Clara Court. The Village could propose to maintain the path or establish a maintenance agreement with Catholic Cemeteries.
- An on-street two-way cycle track is a potential alternative treatment that would require widening Cumberland by three feet, which would result in an on-street facility for this segment rather than constructing a sidepath..
- **Narrow Cumberland by six feet** on the east side from Clara Court to Monroe (900 linear feet) to avoid right-of-way acquisition from single-family property owners.
 - **Coordinate with School District 64** to expand the existing sidewalk on Emerson Middle School property to 10 feet wide.



Cumberland Avenue at Maryhill Cemetery

**SUP-04 MILWAUKEE AVENUE
DEMPSTER TO MAIN**

Milwaukee Avenue is an IDOT Strategic Regional Arterial (SRA) and truck route with two travel lanes in each direction, and widens to three lanes with a five-foot raised center median south of Dempster Street. Milwaukee Avenue carries Pace’s Pulse transit service, with stations on the southwest and northeast corners of Milwaukee and Dempster, and the northwest corner of Milwaukee and Main.

Recommendations:

- **Construct a shared use path** on the west side of Milwaukee from Dempster to Main Street.
- **Conduct a capacity analysis for the possible removal of one of the southbound lanes** on Milwaukee Avenue south of Dempster to narrow the roadway by 10 feet, for approximately 1,550 feet, to create space for a shared use path.
- **Narrow the path** to approximately eight feet wide where Milwaukee widens to include a left turn lane approaching Main Street and connect to the Pace Pulse station.



Milwaukee Avenue at Elmore Street

**SUP-05 OAKTON STREET
CUMBERLAND TO CALDWELL**

Oakton Street is an IDOT arterial with two travel lanes in each direction and left turn lanes, and carries Pace bus service. A shared use path is planned on the south side Oakton between Caldwell and Niles West High School in Skokie. Between Oriole Avenue (one block west of Milwaukee) and Prospect Avenue, the south side of Oakton Street is in Park Ridge.

Recommendations:

- **Construct a shared use path** on the south side of Oakton from Caldwell to Prospect, and on the north side from Prospect to Cumberland.
- **Develop an intergovernmental agreement (IGA)** with Park Ridge for the construction and maintenance of the path west of Oriole. The south side is preferred in this location because there are no driveways and only two roadway crossings from Oriole to Prospect.
- **Acquire right-of-way** (approximately 1,000 linear feet) from private owners in the blocks between Harlem and Waukegan.
- **Acquire right-of-way or an easement**, with School District 64 for installation of the path in front of Emerson Middle School. West of Prospect, the north side of Oakton is preferred to connect to Emerson and Jefferson schools



Oakton Street at Ozark Avenue

and the proposed shared use path on Cumberland Avenue (SUP-03).

- **Conduct a signal warrant analysis** for the intersection of Oakton and Ozark Avenue to install a signalized intersection, which would connect to a proposed shared use path on Ozark (BYC-04). A signalized intersection would also provide an improved pedestrian crossing on a long stretch of Oakton without traffic signals. This recommendation is described in the Intersection Improvements section.

SUP-06 HOWARD STREET LEHIGH TO CENTRAL

The Howard Street Trail, constructed in 2021, terminates at the intersection with Lehigh Avenue. East of this intersection is a Milwaukee District North Metra line railroad crossing. Howard Street is a local road with two vehicle traffic lanes in each direction and a center median and left turn lane and an AADT of 14,700 in 2018.

Between Menard Avenue and Central Avenue it narrows to one travel lane in each direction with a left turn lane.

Howard Street is approximately 58 feet wide in the five-lane section west of Menard, and approximately 44 feet wide in the three-lane section east of Menard. The remaining Village of Niles right-of-way in this corridor is approximately 13 feet wide.

Recommendations:

- **Construct a shared use path** on the south side of Howard between Lehigh Avenue and Central Avenue.
- **Narrow the roadway and relocate the curb** by four feet between Lehigh to Menard Avenue to create sufficient width for a 10-foot sidepath and five-foot separation from the face of curb.
- **Restripe travel lanes to and remove the raised center median** to create a typical roadway section consisting of 11-foot travel lanes and a 10-foot left turn lane / painted median.



Howard Street, east of Lehigh

SUP-07 CALDWELL AVENUE HOWARD TO TOUHY

Caldwell Avenue is an IDOT arterial roadway that runs alongside the Cook County Forest Preserve, with the exception of a one-mile stretch between Touhy Avenue and Oakton Street. Caldwell carries a heavy volume of traffic at high speeds.

The Caldwell Multimodal Trail, constructed in 2020, is a shared use path on the east side of Caldwell Avenue from the LoVerde Recreation Center to Howard Street. At its northern limit, the planned Caldwell-Oakton Shared Use Path will connect the trail with Oakton Street and continue east through Morton Grove to Niles West High School in Skokie.

Recommendation:

- **Extend the Caldwell Multimodal Trail** south of Howard Street to Gross Point Road and Touhy Avenue on the east side of Caldwell Avenue. This would connect the existing trail and the Howard Street Trail to planned and proposed routes on Gross Point Road (BYC-13) and Touhy Avenue (SUP-08).



Caldwell Avenue, south of Howard

SUP-08 TOUHY AVENUE HARLEM TO PLANNED SIDEPATH AND CALDWELL TO CENTRAL

Touhy Avenue is another IDOT arterial roadway with high traffic volumes and speeds. East of Caldwell, the south side of Touhy is in the City of Chicago while the north side is in Niles. A small segment approximately 600 feet long at Meade Avenue is entirely within the City of Chicago. For long stretches of Touhy, there is not sufficient existing public right-of-way for a shared use path, and property acquisition or public easements will be required.

The Village of Niles is planning a shared use trail on the north side of Touhy Avenue from west of the North Branch Trail to Caldwell Avenue, in coordination with an IDOT bridge project over the North Branch of the Chicago River.

Recommendations:

- **Construct a shared use path** on the north side of Touhy Avenue from the western terminus of the project to Harlem Avenue, and from Caldwell to Central Avenue.
- **Acquire right-of-way or easements** from private landowners between Caldwell and Melvina and from Harlem to the western end of the planned shared use path.
- **Coordinate with the City of Chicago** to create a 600-foot connection near Meade Avenue.



Touhy Avenue east of Milwaukee Avenue

SUP-09 DEMPSTER STREET CUMBERLAND TO MILWAUKEE

Dempster Street is a key east-west roadway that carries Pace service and crosses major roadways like Cumberland and Milwaukee at signalized intersections. As part of the objective for providing a pathway around Maryhill Cemetery, a sidepath is recommended on the south side of Dempster, to be constructed within the existing right of way.

Recommendations:

- **Construct a shared use path** on the south side of Dempster Street from Cumberland Avenue to Milwaukee Avenue.
- **Additional right-of-way may be needed** east of Prospect Street, where the eastbound right-turn lane on Dempster reduces the amount of available right of way width. This may require the sidepath to be narrower than the recommended 10 feet or include the construction of a barrier between the proposed path and the roadway.

SUP-10 MAIN STREET / WASHINGTON STREET PROSPECT TO MILWAUKEE

Main Street and Washington Street are local streets that form a portion of the southern border of Maryhill Cemetery. As part of the proposed pathway around the cemetery, a sidepath is recommended on the north side of Main Street and the west side of Washington Street that will run along the edge of the cemetery within the existing right-of-way.

Recommendations:

- **Construct a shared use path** on the north side of Main Street and the west side of Washington Street between Milwaukee Avenue and Prospect Street
- **Include considerations for** tree and utility relocations as part of the proposed scope of work.



Eastbound Dempster near Milwaukee Avenue

ON STREET BICYCLE NETWORK

Figure 6 and Table show the proposed on-street bicycle network by facility type. While this section discusses on-street facilities specifically, shared use paths still appear on the map for context.

Regional connections shown on the map extend the proposed network into neighboring communities including Skokie, Morton Grove, Chicago, and Park Ridge.

In addition to existing facilities and routes planned by other municipalities, the map shows recommended connections that the Village has discussed with neighboring communities as part of this planning process, and that should be pursued in coordination with those agencies as the Niles network is installed.

While all corridor recommendations require stakeholder or other coordination, some proposed projects outside of Village boundaries require increased coordination with municipalities, Cook County, or IDOT. Planning-level details for these recommendations are provided below.

Approximately 10 miles of on-street bicycle facilities are recommended in Niles, consisting of marked shared lanes, bike lanes, a buffered bike lane (Waukegan Road between Oakton and Milwaukee), and a two-way, separated bike lane (on Lehigh Avenue between Mulford Street and Touhy Avenue).



Existing bike route signage in Niles. The supplemental "END" plaque can be removed when the designated bicycle facility extends beyond the Village boundary)

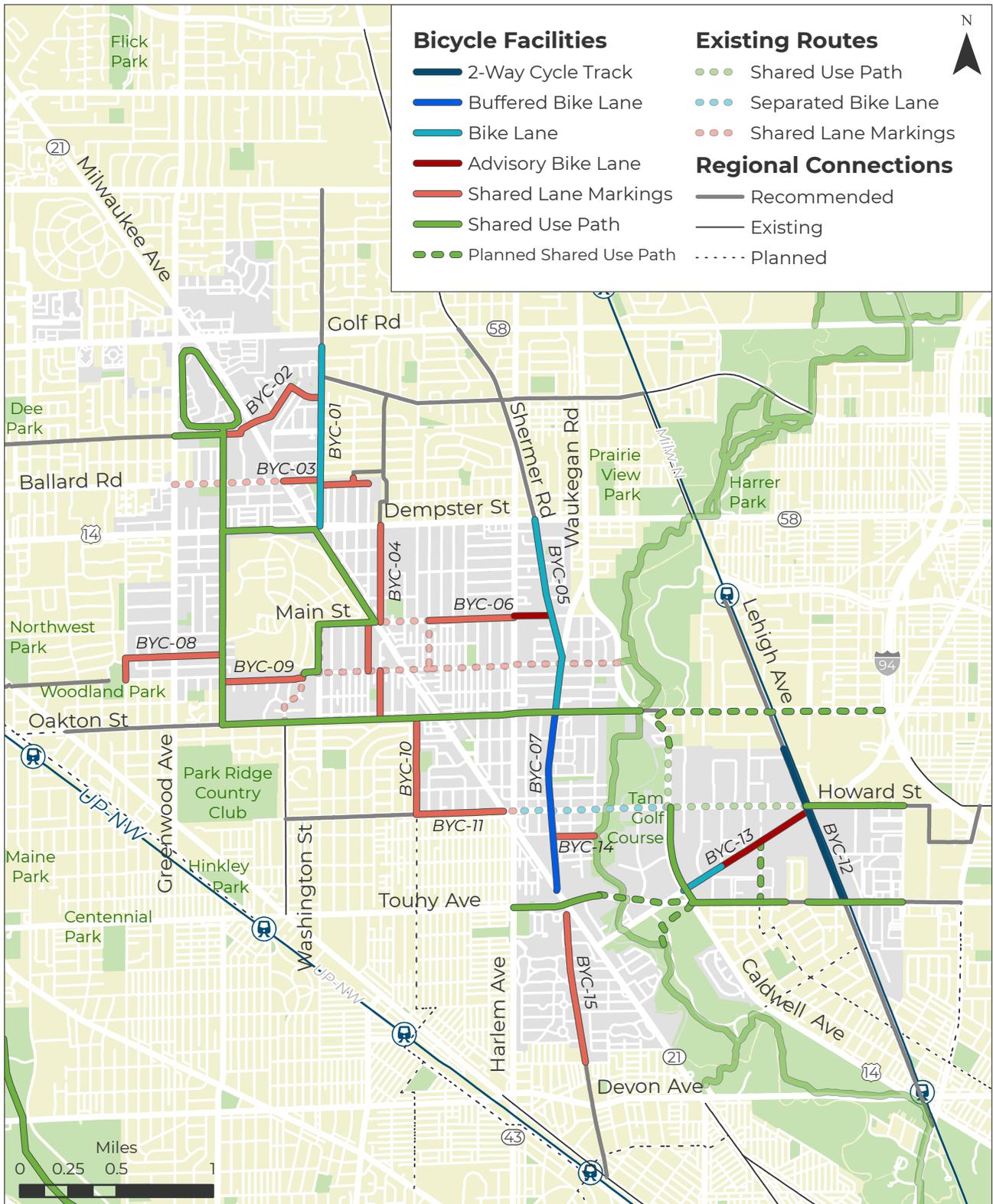


Figure 6: Proposed Bicycle Network



| Corridor ID | Street | Limits | Facility Type | Length (mi.) |
|--------------|------------------|--------------------------|--------------------|--------------|
| BYC-01 | Washington Road | Courte to Dempster | Bike Lane | 0.93 |
| BYC-02 | Church Street | Cumberland to Milwaukee | Shared Lane | 0.64 |
| | Maryland Street | Milwaukee to Lyons | | |
| | Lyons Street | Maryland to Washington | | |
| BYC-03 | Ballard Road | Milwaukee to Washington | Shared Lane | 0.47 |
| | Park Avenue | Washington to Ozanam | | |
| | Merrill Avenue | Park to Village Boundary | | |
| BYC-04 | Ozark Avenue | Dempster to Main | Shared Lane | 1.00 |
| | Ozanam Avenue | Main to Monroe | | |
| | Ozark Avenue | Monroe to Oakton | | |
| BYC-05 | Shermer Road | Dempster to Waukegan | Bike Lane | 0.73 |
| BYC-06 | Main Street | Oleander to Harlem | Shared Lane | 0.44 |
| | Main Street | Harlem to Shermer | Advisory lanes | 0.19 |
| BYC-07 | Waukegan Road | Shermer to Oakton | Bike Lane | 0.29 |
| | Waukegan Road | Oakton to Milwaukee | Buffered Bike Lane | 0.93 |
| BYC-08 | Normal Avenue | Western to Cumberland | Shared Lane | 0.61 |
| | Western Avenue | Normal to North Terrace | | |
| BYC-09 | Monroe Street | Cumberland to Prospect | Shared Lane | 0.42 |
| BYC-10 | Oriole Avenue | Oakton to Howard/Sibley | Shared Lane | 0.50 |
| BYC-11 | Howard Street | Oriole to Milwaukee | Shared Lane | 0.45 |
| BYC-12 | Lehigh Avenue | Mulford to Touhy | 2-way Cycle Track | 0.86 |
| BYC-13 | Gross Point Road | Caldwell to Croname | Bike Lane | 0.23 |
| | Gross Point Road | Croname to Lehigh | Advisory Bike Lane | 0.53 |
| BYC-14 | Fargo Avenue | Waukegan to NBT | Shared Lane | 0.20 |
| BYC-15 | Rusch Drive | Milwaukee to Newark | Shared Lane | 0.77 |
| | Newark Avenue | Rusch to Hayes | | |
| TOTAL | | | | 10.2 |

Table 3: Proposed On-Street Bicycle Facilities

BYC-01 WASHINGTON ROAD BALLARD TO COURTE

Washington Road is a Pace transit route with primarily residential uses and on-street parking. From Dempster Street to Ballard Road, Washington Avenue is within Niles jurisdiction. North of Ballard, the boundary with Morton Grove is on the street centerline. Morton Grove will resurface Washington in approximately 2025. From Beckwith to Lyons, Washington is part of the Golf Road Corridor bike route proposed in the Chicago Metropolitan Agency for Planning (CMAP) Regional Greenways and Trails Plan.

Recommendation:

- **Install conventional bike lanes** from Ballard to Courte. Bike lanes should be installed as part of the next resurfacing project, anticipated around 2025.
- **Coordinate with Morton Grove** on striping the east side of Washington, as well as a continuation of the facility north into Morton Grove.

When implemented, this route would connect to Beckwith Road, a popular unmarked bike route in Morton Grove.

BYC-02 CHURCH, MARYLAND, AND LYONS SHARED LANES CUMBERLAND TO WASHINGTON

Local roadways that provide access to and across Milwaukee Avenue at signalized intersection are good candidates for connecting the Village's local bicycling network. Sections of Church Street, Maryland Street, and Lyons Street provide a connection between Golf Mill Park, Courtland Park, and commercial areas along Milwaukee Avenue. The intersection of Maryland Street and Milwaukee Avenue is signalized.

Recommendation:

- **Install marked shared lanes and directional signs on each of these streets.** No changes to on-street parking are needed..

BYC-03 BALLARD ROAD, PARK AVENUE, AND MERRIL AVENUE, MILWAUKEE TO VILLAGE BOUNDARY

This corridor of local roadways helps to connect existing bicycle facilities on Ballard Road to planned facilities in Morton Grove, crossing Washington Street at an all-way stop.

Recommendation:

- **Install marked shared lanes and directional signs on each of these streets.** No changes to on-street parking are needed..



BYC-04 OZARK AVENUE / OZANAM AVENUE – DEMPSTER TO OAKTON

Discussion: Ozark and Ozanam Avenues are narrow, low-stress neighborhood streets that together can connect bicyclists from Dempster to Oakton, as well as to two parks and Notre Dame High School.

Recommendations:

- **Install shared lane markings** on Ozark from Dempster to Main, on Ozanam from Main to Monroe, and Ozark again from Monroe to Oakton.
- **Install wayfinding signage** to connect the three segments using existing shared lane facilities on Main and Monroe and cross Milwaukee Avenue at an existing signalized intersection at Monroe Street.
- **Prepare a signal warrant analysis** for the intersection of Ozark and Oakton. A traffic signal would create an improved connection to a proposed shared use path on the south side of Oakton (SUP-05). Intersection improvements are discussed further in the next section.

When implemented, this route would provide a north-south connection from Morton Grove to Park Ridge.



Washington Road near Ballard

BYC-05 SHERMER ROAD DEMPSTER TO WAUKEGAN

Description: Shermer Road is a collector and Pace transit route with moderate traffic volumes. A bike route on Shermer would connect the existing Amling Memorial Bike Route north to Dempster. Morton Grove is considering extending this route north to Golf Road, where it would connect with existing conventional bike lanes in Glenview.

Recommendation:

- **Widen Shermer Road** from Waukegan Road to Dempster Street to create sufficient width for bike lanes.
- **Install conventional bike lanes** on Shermer Road from Waukegan Road to Dempster Street. Conceptual designs showing potential alternatives of this recommendation will be included in the final plan document.



Ozark Avenue north of Oakton

BYC-06 MAIN STREET, OLEANDER TO SHERMER

This proposed connection closes a bicycling gap along local roadways. Additional width along Main Street provides an opportunity to install advisory bike lanes, which provide more lane marking guidance than marked shared lanes. In this section, Main Street carries the Pace 410 Niles East Local.

Recommendation:

- **Install marked shared lanes and directional signs on Main Street.** No changes to on-street parking are needed..
- **East of Harlem Avenue, install advisory bike lanes.** No changes to on-street parking are needed.



Shermer Road at Main Street

BYC-07 WAUKEGAN ROAD SHERMER TO NILES TERRACE

Waukegan Road is an IDOT route and Pace transit route North of Oakton Street, it is classified as a Strategic Regional Arterial, a principal arterial, and a Class II truck route. Average annual daily traffic (AADT) on Waukegan was 14,200 north of Oakton and 8,350 south of Oakton in 2018. A potential roadway reconfiguration was discussed with IDOT as a means of reducing the number of travel lanes on Waukegan Road, which would create space to install bike lanes.

Recommendations:

- **Prepare a traffic capacity analysis** to reconfigure Waukegan Road, reduce the number of travel lanes, and install bike lanes. This facility would connect to proposed facilities on Shermer Road (BYC-05), Oakton Street (SUP-05), and existing bike routes on Cleveland Street, Monroe Street, and Howard Street.
- **Install conventional bike lanes** north of Oakton and buffered bike lanes south of Oakton, and reduce automobile travel lanes from four to two with a continuous center left turn lane. IDOT will resurface Waukegan before this project can take place, so it should be planned with the next resurfacing project.



Waukegan Road near Niles Civic Center

BYC-08 NORMAL AVENUE / WESTERN AVENUE – NORTH TERRACE TO CUMBERLAND

Discussion: Normal and Western Avenues are narrow, low-stress neighborhood streets that provide a connection between Woodland Park in the southwest to Maryhill Cemetery via Embers Academy.

Recommendations:

- **Install shared lane markings** on Normal Avenue from Western to Cumberland and on Western Avenue from Normal to North Terrace, where it will connect with an existing shared use path through Woodland Park into Park Ridge. This route will cross Greenwood Avenue via an existing traffic signal on Normal Avenue
- **Install wayfinding signage** to connect the two segments and showing destinations of Woodland Park and Maryhill Cemetery

BYC-09 MONROE STREET CUMBERLAND TO PROSPECT

Description: This section of Monroe Street is a calm neighborhood street with a Pace Bus route. This section will serve as the south end of the Maryhill Cemetery circulatory bicycle route and provide a comfortable east-west route south of the cemetery.

Recommendation:

- **Install shared lane markings** on Monroe Street between Cumberland Avenue and Prospect Street, where a proposed shared use path SUP-10 will connect with the facility

BYC-10 ORIOLE AVENUE OAKTON TO HOWARD / SIBLEY

Discussion: Oriole Avenue is a neighborhood street that serves Jonquil Terrace Park and provides a comfortable connection to Oak Mill Plaza at the corner of Milwaukee and Oakton.

Recommendations:

- **Install shared lane markings** on Oriole Avenue between Howard Street and Oakton Street. Place shared lane markings in the center of the street along Jonquil Terrace park to provide adequate separation between bicyclists and cars parked at a 90° angle with respect to the street.
- **Install wayfinding signage** to connect the two segments and showing destinations of Chicago and Oakton Street

BYC-11 HOWARD STREET ORIOLE TO MILWAUKEE

Description: This section of Howard Street west of Milwaukee Avenue is a local residential street appropriate for sharing with bicyclists. This will provide a calm and intuitive route for bicyclists coming from existing separated bike lanes on Howard to points further west and north.

Recommendation:

- **Install shared lane markings** on Howard Street between Milwaukee Avenue and Oriole Avenue
- **Install wayfinding signage** on Howard Street between Milwaukee Avenue and Oriole Avenue directing bicyclists north on Oriole Avenue or east to the North Branch Trail
- **Consider a gateway treatment** immediately west of Milwaukee Avenue to calm westbound Howard Street traffic entering a residential neighborhood



BYC-12 LEHIGH AVENUE MULFORD TO TOUHY

Lehigh Avenue is an IDOT collector that runs parallel to the Milwaukee North Metra line. South of Touhy Avenue, Lehigh is within the City of Chicago. From Howard Street to Mulford Street, the Village boundary with Skokie is on the street centerline. North of Mulford, Lehigh is entirely within Skokie and Morton Grove. There are limited conflicts on the east side of the street due to the railroad right-of-way and utility corridor immediately east of Lehigh. The west side of Lehigh is lined with large-scale commercial and light industrial uses, parking lots, and loading docks that present frequent potential conflicts for bicyclists.

Long stretches of the shoulder on Lehigh are in poor condition and are not suitable for an on-street bike facility. However, IDOT has included a resurfacing project in its 2023-2027 multi-year plan.

Recommendation:

- **Install a two-way separated cycle track** on the east side of Lehigh from Touhy Avenue to Howard Street. This improvement project should coincide with the next IDOT resurfacing project.
- **Partner with Skokie and Morton Grove** to create a continuous facility north of Howard to the Morton Grove Metra station.
- **Coordinate with the City of Chicago** for the potential to extend the route south to the Edgebrook Metra Station.



Lehigh Avenue north of Touhy, looking north

BYC-13 GROSS POINT ROAD CALDWELL TO LEHIGH

Gross Point Road is a collector road that is maintained by IDOT between Caldwell and Croname Road and maintained by the Village of Niles between Croname Road and Lehigh Avenue. This street sees 6,150 cars a day and serves light industrial uses.

Recommendation:

- **Install a painted conventional bike lane** on both sides of Gross Point Road from Caldwell to Croname. Conventional bike lanes will fit on the existing pavement surface which is 40' wide, including the two-foot gutters.
- **Install advisory bike lanes** on both sides of Gross Point Road from Croname to Lehigh. Advisory bike lanes will not remove existing on-street parking.



Gross Point Road approaching Croname, looking northeast

BYC-14 FARGO AVENUE WAUKEGAN TO NORTH BRANCH TRAIL

Fargo Avenue is a short local residential street that connects to the North Branch Trail to the east and Waukegan Road to the west. This street will provide an improved, direct connection to the trail for local residents.

Recommendations:

- **Install shared lane markings** on Fargo Avenue between Waukegan Road and the North Branch Trail

Install wayfinding signage on the North Branch Trail directing trail users to the Village as well as the proposed buffered bike lanes on Waukegan Road advertising a trail connection



Fargo Avenue connection to the North Branch Trail

BYC-15 RUSCH DRIVE / NEWARK AVENUE - MILWAUKEE TO HAYES

Newark Avenue is a local roadway that travels through St. Adalbert Cemetery, and is one of the few north-south roadways connecting Niles and Chicago that is not an arterial. The northern end of Newark Avenue (known as Rusch Drive) terminates in a cul-de-sac near Milwaukee. The southern end of Newark Avenue terminates at Hayes Avenue in Chicago.

Recommendations:

- **Install shared lane markings** on Rusch Drive and Newark Avenue from the Milwaukee and Touhy intersection to the Village boundary.
- **Widen the existing sidewalk and curb ramp** at the northern end of the corridor behind the Pace station to connect to Milwaukee Avenue.
- **Widen the existing sidewalk and provide a sidewalk connection** at the southern end of the corridor to permit bicyclists to travel through while continuing to restrict automobile traffic.



Newark Avenue in St. Adalbert Cemetery

INTERSECTION IMPROVEMENTS

Intersection improvement recommendations are shown in Figure 7 and Table 4. Recommendations in this section are informed by guidance from IDOT TRA-23 Guidelines for Pedestrian Crossings and Uncontrolled Locations.

This includes nine new signalized intersections, the construction of 106 high-visibility crosswalks, 161 curb ramps, addition of 39 pedestrian signal heads, and the addition of bike signals at two intersections. Recommendations are divided into three categories:

- **New signalized intersection:** Locations that currently do not have a traffic signal, but where there is a need for bicyclists and pedestrians to cross the street. unsignalized and may warrant a signal. New signals
- **Signalized improvement:** Moderate improvements are recommendations at signalized intersections that may include adding high-visibility crosswalks and pedestrian signal upgrades.
- **Signalized or Unsignalized improvement:** Minor improvements are recommended at either signalized or unsignalized intersections and include recommendations to install or replace curb ramps, improve crosswalks, and add bicycle wayfinding signage.



The intersection of Oakton Street and Waukegan Avenue

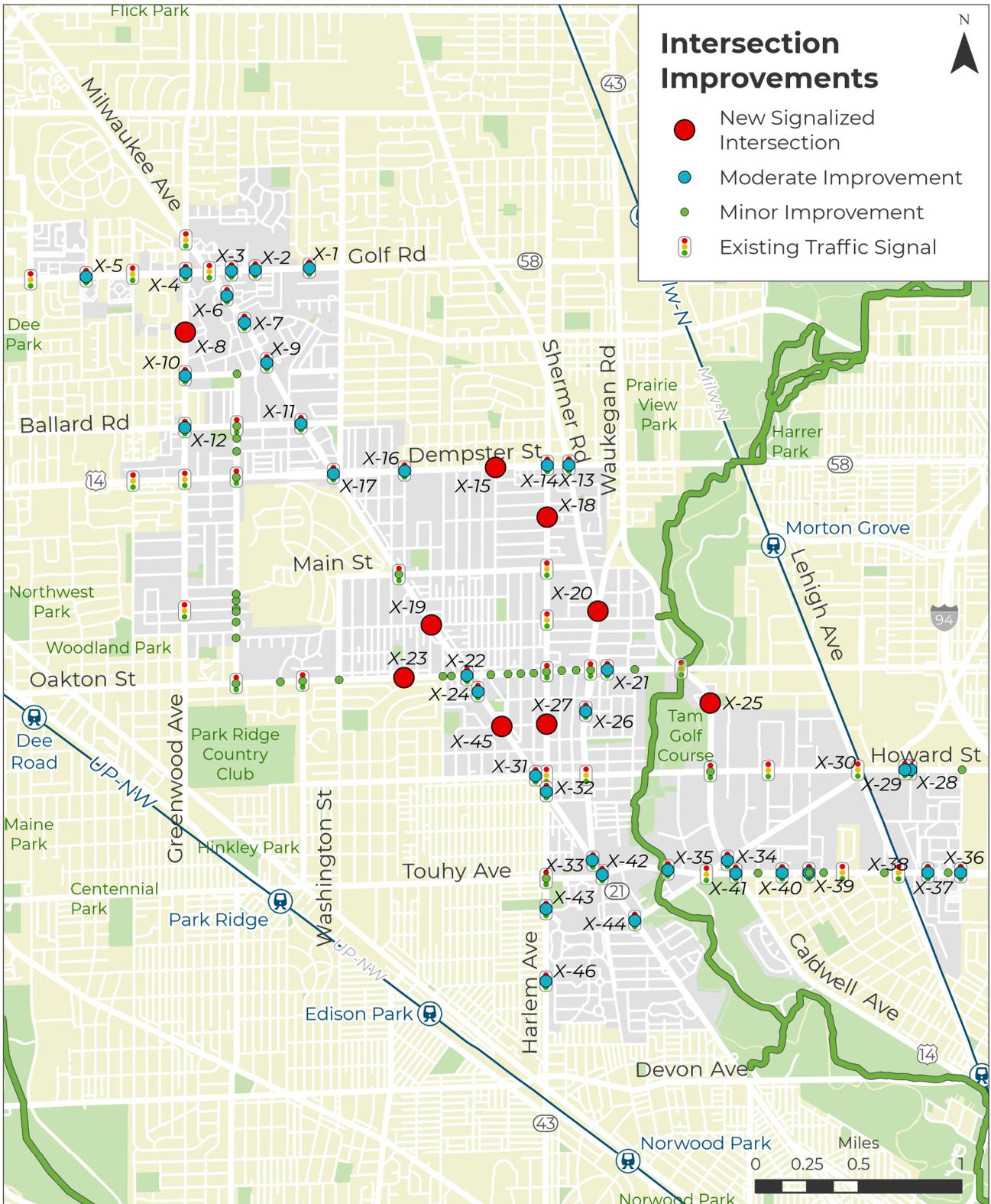


Figure 7: Proposed Intersection Improvements



INSTALL TRAFFIC SIGNALS OR BEACONS AT KEY LOCATIONS TO REDUCE THE DISTANCE BETWEEN SIGNALIZED INTERSECTIONS

There are three projects in the planning process that would add a traffic signal or a rectangular rapid flashing beacon (RRFB) to an arterial in Niles:

- Milwaukee at Monroe (traffic signal)
- Greenwood at Betty Terrace (RRFB)
- Caldwell at Cleveland (RRFB)

In addition to programmed improvements at these three intersections, this plan recommends nine new signals to improve unsignalized crossings of major roadways.

Placement of signalized intersections is an important part of a well-connected pedestrian network. On most major roadways in Niles, traffic signals are spaced more than one half mile apart, increasing a pedestrian trip times by up to six minutes (*Existing Conditions Report, Figure 8*). According to NACTO, pedestrians may attempt to cross an unsignalized location if it takes more than three minutes to travel to the nearest signalized intersection, but the MUTCD does not include this factor when considering where a traffic signal is needed.

For urban suburban strategic regional arterials (SRA), IDOT prefers to install a maximum of four signals per mile. Using this guidance, this plan recommends signalized intersection improvement at nine intersection locations.

Eight of these nine intersections are under the jurisdiction of IDOT, and the ninth is under the jurisdiction of Cook County. Coordination with each agency is required. This is challenging, as a signal warrant analysis requires the intersection meet a combination of traffic volume (automobile, bicycle and/or pedestrian) and reported crash history to warrant the installation of a signal.

For locations that do not meet a signal warrant, the Village should consider whether driveway and intersection spacing allows for the installation of a

beacon, and encourage IDOT to pursue treatments to improve pedestrian and bicyclist crossings at or near these locations. While these are the responsibility of IDOT and Cook County, they are of critical importance to residents and visitors in Niles, and have been prioritized based on the following considerations:

- Findings from the crash analysis from the Existing Conditions Report
- A review of critical safety tier intersection designations from a 2020 report prepared by IDOT.
- A review of signalized intersection spacing from the Existing Conditions Report

Recommended new signals are shown below in order of priority:

- 1. X-19 Milwaukee Avenue at Monroe Street:**
Located midway between Milwaukee/Main and Milwaukee/Dempster, this crossing is along one of the Village's key east-west bike routes and the intersection is served by Pace Routes 270 and 411.
- 2. X-45 Milwaukee Avenue at Mulford Street:**
Located one block from the critical safety tier intersection of Milwaukee/Jonquil, this new signal would fit within recommended signal spacing relative to existing signals.
- 3. X-15 Dempster Street at Oketo Avenue:** This intersection is located approximately halfway between Dempster/Harlem and Dempster/Ozark and would improve crossings and access to transit along Dempster Street, which is served by Pace Route 250.
- 4. X-8 Greenwood Avenue at Golf Mill Center:**
This intersection is located halfway between Greenwood/Church and Greenwood/Golf and along a stretch of Greenwood Avenue with a moderate density of reported crashes.



5. X-18 Harlem Avenue at Greenleaf Street: This intersection proposes a signalized crossing of Harlem Avenue halfway between the nearest signals at Dempster and Main, and is served by Pace bus route 423.

6. X-20 Waukegan Road at Shermer Road/ Cleveland Street: This proposed signal would be installed at the skewed intersection of Waukegan and Shermer near Cleveland Street, and seeks to improve visibility, which currently is limited for all roadway users due to the approach angle.

7. X-23 Oakton Street at Ozark Avenue: This intersection is located between the intersections of Oakton/Milwaukee and Oakton/Washington, both of which showed higher densities of crashes. The Ozark intersection is approximately one quarter mile between these intersections.

8. X-25 Caldwell Avenue at Wood River Drive: A signal is recommended at this intersection because residents living on the west side of Caldwell have no sidewalk leading to the nearest signalized intersections (Oakton or Howard). There is an existing sidepath along the east side of Caldwell between Howard and Oakton that will be extended to Niles West High School. There is a paved area adjacent

to Caldwell Avenue on the west side of the street, but is of insufficient width to meet the definition of a sidewalk and thus is not accessible.

9. X-27 Harlem Avenue at Mulford Street: Located halfway between signalized intersection on Harlem at Howard and Oakton Streets, this intersection improvement is recommended to serve Pace Routes 225, 226, 410, and 423 as well as improved pedestrian access for residents living between the commercial districts along Milwaukee Avenue and Waukegan Road.

Roadway segments with no major destinations along them, or that do not have bus stops were excluded from consideration because there is little need for pedestrians to cross the street in these locations. This includes locations along Lehigh Avenue between Touhy Avenue and Gross Point Road, as the entire east side the street is along the railroad.

INSTALL HIGH-VISIBILITY CROSSWALKS AND CURB RAMPS

Install new high-visibility crosswalks or upgrade existing crosswalks at the following locations:

- Every leg of all signalized intersections that have a sidewalk or shared use path connection on both sides
- Where standard sidewalks already exist at signalized intersections
- Where a shared use path crosses a local street.

Consistent with design guidelines, new crosswalk recommendations include the construction of curb ramps.

Many signalized intersections on Milwaukee Avenue feature decorative paver crosswalks that can fade over time and become less visible to motorists. When resurfacing Milwaukee Avenue, all crosswalks should be upgraded to include high-visibility pavement markings regardless of decorative elements.



High-visibility crosswalk with decorative pavers
Source: CACTX Surfaces

Intersection Improvements

| Intersection ID | Streets | Proposed Treatments | | | | |
|-----------------|-----------------------------------------|---------------------|---------------------------|---------------------------|-------------|-----------|
| | | New Signal | High-Visibility Crosswalk | Pedestrian Signals (pair) | Bike Signal | Curb Ramp |
| X-1 | Golf Rd / Michael Mnr | | 1 | 1 | | 2 |
| X-2 | Golf Rd / Private Road | | 2 | 2 | | 4 |
| X-3 | Golf Rd / Private Road | | 4 | 4 | | 8 |
| X-4 | Golf Rd / Greenwood Ave | | 4 | 4 | | 8 |
| X-5 | Golf Rd / Private Road | | 2 | 1 | | 2 |
| X-6 | Golf Mill Ctr / Milwaukee Ave / Private | | 2 | 1 | | 2 |
| X-7 | Golf Mill Ctr / Milwaukee Ave | | 1 | 1 | | 2 |
| X-8 | Golf Mill Ctr / Greenwood Ave | • | | | | |
| X-9 | Church St / Maryland St / Milwaukee Ave | | 4 | | | |
| X-10 | Church St / Greenwood Ave | | 3 | 3 | | 6 |
| X-11 | Ballard Rd / Milwaukee Ave | | 4 | 1 | | 2 |
| X-12 | Ballard Rd / Greenwood Ave | | | | | |
| X-13 | Dempster St / Shermer Rd | | 4 | | | |
| X-14 | Dempster St / Harlem Ave | | 4 | | | |
| X-15 | Dempster St / Oketo Ave | • | | | | |
| X-16 | Dempster St / Ozark Ave | | 4 | | | |
| X-17 | Dempster St / Milwaukee Ave | | | | | 2 |
| X-18 | Greenleaf St / Harlem Ave | • | | | | |
| X-19 | Monroe St / Milwaukee Ave | • | | | | |
| X-20 | Shermer Rd / Waukegan Rd | • | | | | |
| X-21 | Civic Center Dr / Oakton St | | 1 | 1 | | 4 |
| X-22 | Milwaukee Ave / Oakton St | | 4 | | | 2 |
| X-23 | Michael John Dr / Oakton St / Ozark Ave | • | | | | 2 |
| X-24 | Milwaukee Ave / Private Road | | 4 | | | |
| X-25 | Caldwell Ave / Wood River Dr | • | | | | |
| X-26 | Civic Center Dr / Waukegan Rd | | 3 | 2 | | 2 |

Intersection Recommendation Types

■ New Signalized Intersection
 ■ Signalized Improvement
 ■ Signalized/Unsignalized

Table 4: Intersection Improvement Recommendations (1 of 3)



| Intersection ID | Streets | Proposed Treatments | | | | |
|-----------------|------------------------------------------|---------------------|---------------------------|---------------------------|-------------|-----------|
| | | New Signal | High-Visibility Crosswalk | Pedestrian Signals (pair) | Bike Signal | Curb Ramp |
| X-27 | Harlem Ave / Mulford St | • | | | | |
| X-28 | Howard St / Menard Ave | | 2 | | | 2 |
| X-29 | Howard St / New Gross Point Rd | | 2 | 1 | | 2 |
| X-30 | Howard St / Lehigh Ave | | 3 | 3 | • | 6 |
| X-31 | Howard St / Milwaukee Ave | | 4 | | | |
| X-32 | Harlem Ave / Milwaukee Ave | | 4 | | | |
| X-33 | Milwaukee Ave / Waukegan Rd | | 3 | | | 4 |
| X-34 | Caldwell Ave / Gross Point Rd / Harts Rd | | 4 | 2 | | |
| X-35 | Riverside Dr / Touhy Ave | | 1 | 1 | | 2 |
| X-36 | Central Ave / Touhy Ave | | 4 | | | 1 |
| X-37 | Touhy Ave / Private Road | | 4 | 2 | | 6 |
| X-38 | Lehigh Ave / Touhy Ave | | 4 | 2 | • | 2 |
| X-39 | Melvina Ave / Touhy Ave | | 4 | 1 | | 2 |
| X-40 | Mobile Ave / Private Road / Touhy Ave | | 4 | 1 | | 4 |
| X-41 | Caldwell Ave / Touhy Ave | | 1 | 1 | | 2 |
| X-42 | Milwaukee Ave / Touhy Ave | | 4 | | | 2 |
| X-43 | Harlem Ave / Private Road | | 2 | 2 | | 4 |
| X-44 | Harts Rd / Milwaukee Ave | | 3 | | | |
| X-45 | Milwaukee Ave / Mulford St | • | | | | |
| X-46 | Harlem Ave / Pratt Ave | | 2 | 2 | | 4 |
| X-47 | Ballard Rd / Cumberland Ave | | | | | 2 |
| X-48 | Cumberland Ave / Dempster St | | | | | 2 |
| X-49 | Main St / Milwaukee Ave | | | | | 2 |
| X-50 | Oakton St / Waukegan Rd | | | | | 2 |
| X-51 | Harlem Ave / Oakton St | | | | | 2 |
| X-52 | Oakton St / Prospect Ave | | | | | 2 |
| X-53 | Cumberland Ave / Oakton St | | | | | 2 |
| X-54 | Caldwell Ave / Howard St | | | | | 1 |

Table 4: Intersection Improvement Recommendations (2 of 3)

| Intersection ID | Streets | Proposed Treatments | | | | |
|-----------------|-------------------------------------|---------------------|---------------------------|---------------------------|-------------|-----------|
| | | New Signal | High-Visibility Crosswalk | Pedestrian Signals (pair) | Bike Signal | Curb Ramp |
| X-55 | Harlem Ave / Touhy Ave | | | | | 1 |
| X-56 | Church St / Cumberland Ave | | | | | 2 |
| X-57 | Cumberland Ave / Park Ave | | | | | 2 |
| X-58 | Cumberland Ave / Oak Ave | | | | | 2 |
| X-59 | Cumberland Ave / Mary Hill Cemetery | | | | | 2 |
| X-60 | Clara Ct / Cumberland Ave | | | | | 2 |
| X-61 | Cumberland Ave / Normal Ave | | | | | 1 |
| X-62 | Cumberland Ave / Normal Ct | | | | | 2 |
| X-63 | Cumberland Ave / Madison Ct | | | | | 2 |
| X-64 | Cumberland Ave / Monroe St | | | | | 2 |
| X-65 | Nordica Ave / Oakton St | | | | | 2 |
| X-66 | Neva Ave / Oakton St | | | | | 2 |
| X-67 | Nora Ave / Oakton St | | | | | 2 |
| X-68 | Oakton St / Oconto Ave | | | | | 2 |
| X-69 | Oakton St / Octavia Ave | | | | | 2 |
| X-70 | Oakton St / Odell Ave | | | | | 2 |
| X-71 | Oakton St / Oketo Ave | | | | | 2 |
| X-72 | Oakton St / Private Road | | | | | 2 |
| X-73 | Oakton St / Oriole Ave | | | | | 2 |
| X-74 | Oakton St / Washington St | | | | | 2 |
| X-75 | Greendale Ave / Oakton St | | | | | 2 |
| X-76 | Central Ave / Howard St | | | | | 1 |
| X-77 | Touhy Ave / Private Road | | | | | 2 |
| X-78 | Touhy Ave / Private Road | | | | | 2 |
| X-79 | Touhy Ave / Private Road | | | | | 2 |
| X-80 | Melvina Ave / Touhy Ave | | | | | 2 |
| X-81 | Touhy Ave / Private Road | | | | | 2 |

Table 4: Intersection Improvement Recommendations (3 of 3)





North Branch Trail Crossing at Howard Street

POLICIES & PROGRAMS

4

DEVELOPMENT REVIEW

SAFE ROUTES TO SCHOOL

CULTURE & ENCOURAGEMENT

REGIONAL COORDINATION

PUBLIC WORKS

Policies and programs that support active transportation help create a safe and welcoming environment for pedestrians and bicyclists of all ages and abilities.

Making Niles a better place to walk and bicycle requires more than just infrastructure improvements. Walking and bicycling policies and programs are an important part of a holistic approach to creating a safe, comfortable, and convenient experience for bicyclists and pedestrians. They also provide near-term steps that the Village of Niles can implement in advance of capital improvements.

Each program or policy recommended in this plan contains steps that can be undertaken by one or more stakeholders. The ability to implement these policies is not limited to just the Village Departments of Public Works and Community Development - stakeholders also include the BPAG, the Niles Teen Center, Senior Center and Fitness Center, the Niles Park District, schools and school districts in Niles, and private businesses and residents within the Village.

Policy & Program Recommendations Summary

Design & Development Review

- Strengthen bicycle and pedestrian access requirements
- Require sidewalk infill for developments subject to site plan review
- Request BPAG review of Niles Park District development plans

Safe Routes to School

- Establish a Safe Routes to School coordinator and school champions
- Attend a Safe Routes to School grant writing training course
- Apply for a Safe Routes to School grant
- Implement Free and Low-Cost Safe Routes to School programs

Culture and Encouragement

- Sponsor additional walking and bicycling annual events
- Entertain proposals for indoor bicycle recreation facilities

Regional Coordination

- Continue regular (annual) meetings with neighboring municipalities

Public Works

- Update the Village sidewalk ordinance
- Adopt crosswalk marking and maintenance policy



DESIGN & DEVELOPMENT REVIEW

The Niles Code of Ordinances requires site plan review to be conducted by the Department of Community Development for projects that include one or more of the following:

- All special uses
- New construction with the exception of single-family and two-family dwellings
- Additions to existing townhouse, multi-family, non-residential, and mixed-use that increases the total floor area by 10% or more
- Parking structures and lots of 15 or more spaces
- Decks proposed in the R-3 or R-4 districts
- Reduction in the number of off-street parking spaces through a Shared Parking arrangement

Planned unit developments (PUD) are required to develop a traffic circulation plan showing the

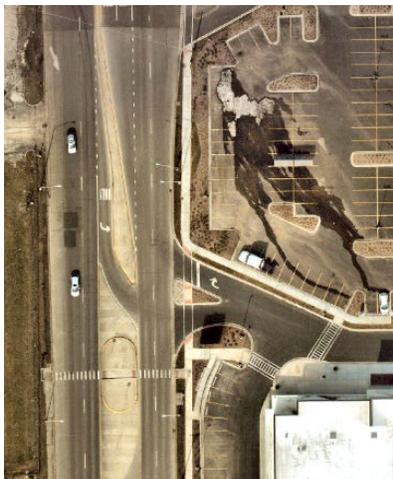
proposed movement of vehicles, bicycles, and pedestrians within the development, and to and from adjacent streets. The plan must also indicate an evaluation of the adequacy of on-site parking facilities, vehicular circulation patterns, and pedestrian and bicycle access and safety.

The Village of Niles can improve the built environment for pedestrians and bicyclists through these recommended updates to the development review process.

STRENGTHEN BICYCLE AND PEDESTRIAN ACCESS REQUIREMENTS

Expand the requirement of a traffic circulation plan, which currently applies to planned unit developments only, to include any new construction or redevelopment project that is subject to site plan review by the Department of Community Development. Require development

Sawmill Station is a private development completed in 2020 that incorporates examples of desired pedestrian connections. The site is located at the southeast corner of Dempster Street and Waukegan Road, just outside Niles in Morton Grove. Sawmill Station includes a network of internal sidewalks and crosswalks that provide direct pedestrian pathways from the shopping center to multiple points on the public right-of-way. Notably, internal development sidewalks stop short of connecting with sidewalks on Dempster Street at the main entrance, indicating a need for further coordination between Morton Grove and the developer.



Internal pedestrian routes connect to the public right-of-way and sidewalks



A network of walks and crosswalks provide direct, uninterrupted pedestrian access to the front door



Internal walks do not extend all the way to public sidewalks on Dempster Street

proposals to clearly identify pedestrian and bicyclist paths of travel from access points on the public right-of-way to the front doors of proposed buildings.

Traffic circulation plans should define a network of physically separated pedestrian pathways within and between parking lots, street sidewalks, open spaces, and structures that is safe, visible, identifiable, and uninterrupted. Crossings of streets and parking lot lanes should be minimized.

REQUIRE SIDEWALK INFILL AS PART OF SITE PLAN REVIEW

Require that sidewalk gaps be infilled as part of any new construction or redevelopment proposal that is subject to site plan review by the Department of Community Development.

The zoning ordinance update in 2016 included a requirement for sidewalk infrastructure improvements and infill for all PUDs and other developments that trigger zoning or subdivision review. The 2020 Complete Streets Policy recommends expanding sidewalk infill requirements for all “significant redevelopment projects” regardless of subdivision or zoning review.

REQUEST BPAG REVIEW OF NILES PARK DISTRICT DEVELOPMENT PLANS

Work with the Niles Park District to establish an intergovernmental agreement (IGA) establishing a process for review by the Niles BPAG of new construction or redevelopment projects that involve roadway access, driveway, and/or sidewalk improvements.

Similar to the site plan review for planned unit developments, Park District proposals should include a pedestrian and bicycle circulation plan that provides direct and uninterrupted pedestrian access from the public right-of-way to the primary entrance of the facility or building and throughout all outdoor amenities included in the park.

CROSSWALK AND CURB RAMP INSTALLATION

IDOT TRA-23 provides contextual guidance for the installation of traffic control devices, signs, and pavement markings at unsignalized crossings. In some cases, existing conditions at unsignalized crossings do not align with the recommended treatment.

The Village supports a transportation network that maintains continuity for all roadway users, including those who are walking or bicycling. This includes supporting the improvement of unsignalized crossings.

The Village should preserve existing curb ramps and crossings (whether marked or unmarked) and seek to encourage all coordinating agencies (e.g., IDOT, Cook County, and neighboring municipalities) to pursue improvements consistent with TRA-23 and/or seek solutions that modernize and preserve these crossings rather than removing them.

SAFE ROUTES TO SCHOOL

Safe Routes to School (SRTS) is a federal program available to school districts to promote walking and bicycling to school through funding for infrastructure improvements, safety enforcement and education, and incentive programs. The program has three main goals:

1. Enable and encourage children, including those with disabilities, to walk and bicycle to school.
2. Make bicycling and walking to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age.
3. Facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of primary and middle schools.



SRTS programs promote student safety and physical health, and can be implemented by a wide range of local entities, from departments of transportation to individual schools. Federal participation for SRTS funding is 80 percent, with a required 20 percent local match. In addition to federal funding, free resources such as an online SRTS guide, survey templates, and programming ideas are available from a variety of sources including the National Center for Safe Routes to School.

In the 2021 funding cycle, only SRTS infrastructure grants were offered. It is anticipated that non-infrastructure grants will be made available in future years.

School districts serving Niles students should be the lead organization for creating and implementing a SRTS Plan. One staff member from the Village should serve as a coordinating member between the Village and each district for items requiring Village approval. The creation of an SRTS plan requires input from many stakeholders, namely parents, teachers, students, school administrators, the Village, and various transportation agencies depending on where projects are proposed.

Niles can implement the Village's first SRTS program via the following steps.

1. ESTABLISH A SAFE ROUTES TO SCHOOL COORDINATOR AND SCHOOL CHAMPIONS

Identify one staff member from each of the Village Department of Community Development, Department of Public Works, and the Niles Teen Center to be the department's SRTS liaison, and assign one to serve as the Niles SRTS Coordinator. This will be a part-time position that can be included in the responsibilities of an existing staff member. As the program grows, a full or one half full-time equivalent (FTE) position may be warranted.

The SRTS Coordinator will work with each public elementary school district in Niles to select a point person within their organizations as well. These SRTS Champions will work with the Coordinator and departmental liaisons to identify opportunities to use federal infrastructure and programming funds in Niles, apply for grants, identify local match funding sources, and implement bicycle and pedestrian education in Niles schools.



Walking School Bus

Source: www.ChangeX.org

2. ATTEND A SAFE ROUTES TO SCHOOL GRANT WRITING TRAINING COURSE

The Illinois Department of Transportation and Active Transportation Alliance, a walking, biking, and transit advocacy and planning organization based in Chicago, host a Safe Routes to School Funding Informational Training and Question and Answer session every year at the beginning of the SRTS funding cycle. The SRTS Coordinator from the Village of Niles should attend these sessions in 2022 (typically held in August) to learn how to write SRTS grant applications, in preparation for a funding application in 2023.

3. APPLY FOR A SAFE ROUTES TO SCHOOL GRANT

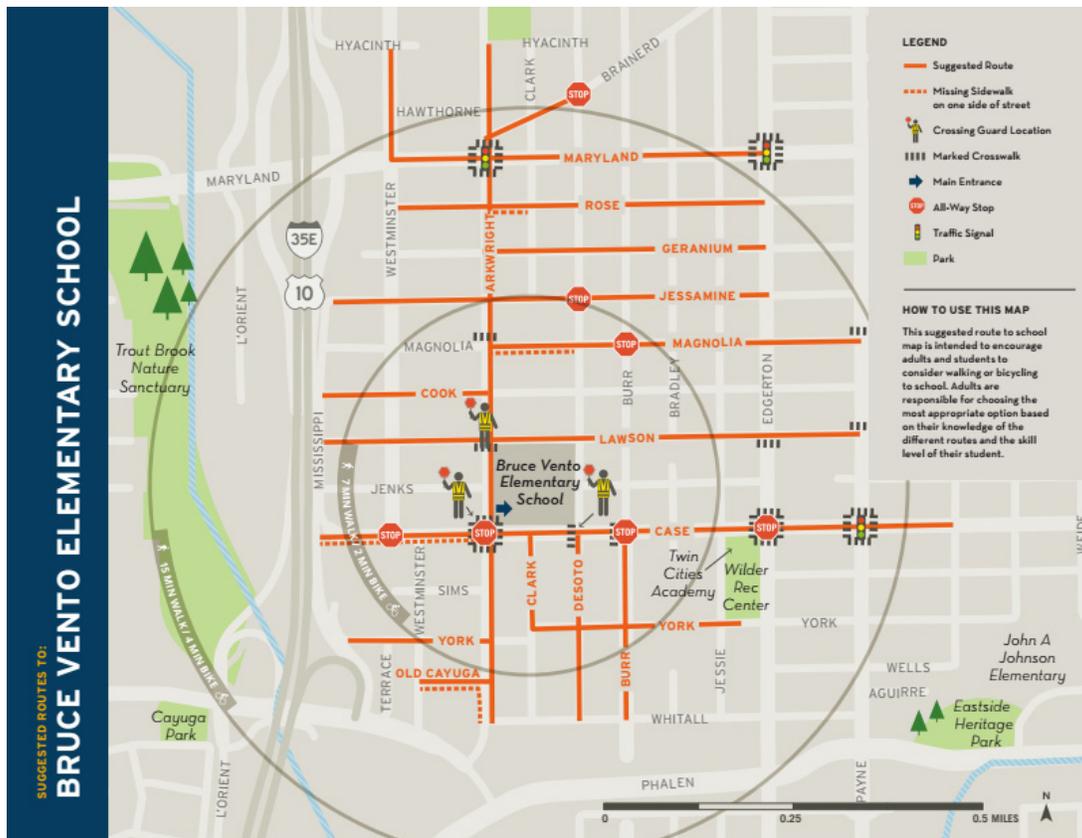
Identify an eligible project and apply for SRTS infrastructure or non-infrastructure funding (pending availability) during the 2023 funding

cycle. The funding cycle is typically in Quarter 3 each year, so project identification and grant preparation should begin in early 2023. Depending on project type, materials to be included with the application may include documentation of a public input process, location maps, and a cost estimate.

4. IMPLEMENT THE PROGRAM INCREMENTALLY

Begin implementation of the SRTS program with one school (e.g., Culver School, since nearly all students are Niles residents) to serve as a template, and expand the program to add more schools as SRTS coordinators at each school are identified.

Ideally, one or two school may be added to the program each year until the program reaches all schools serving Niles students.



School Route Map
Source: Saint Paul Public Schools





Participants at a Chicago Bike to Work Day Rally
 Source: Chicago Bicycle Program

IMPLEMENT FREE AND LOW-COST SAFE ROUTES TO SCHOOL PROGRAMS

Create programming or events at one or more schools in Niles that can be done without a dedicated funding source through the use of parent, faculty, and staff volunteer organizations such as Parent Teacher Associations. These programs can be coordinated through the SRTS Coordinator and school or district Champions. The National Center for Safe Routes to School provides free resources to help implement the following strategies:

- **Parent Surveys:** Poll parents about whether they allow their children walk or bike to school, what factors influence that decision, safety conditions along the route to school, and related background information. Responses can be used to guide how SRTS funding and programming efforts can best be utilized.
- **Walking School Bus:** Coordinate adult volunteers to chaperone groups of students walking to school together. School bus “routes” are based on small neighborhood areas, and

can be as informal as parents taking turns walking neighborhood children to school.

- **Walk and Bike Audits:** Gather data about the environmental conditions that affect walking and bicycling around a school. Data points can include street and sidewalk conditions, gaps in the sidewalk network, the quality of intersection and midblock crossings, and the feelings of comfort and safety along a route.
- **School Route Maps:** Using parent surveys, walk and bike audits, and staff knowledge of the surrounding area, develop and share walking and bicycling route maps to guide parents and students in choosing the best route to school.

CULTURE AND ENCOURAGEMENT

Through the creation and promotion of events and programs, the Village of Niles can promote a culture of walking and bicycling and encourage the use of active transportation modes.

SPONSOR ADDITIONAL WALKING AND BICYCLING ANNUAL EVENTS

Establish two or more annual walking and/or bicycling events hosted by the Village of Niles, in addition to the Niles Police Department's Walk and Roll Niles event. Potential events include:

- **Niles Bike to Work Day/Week:** Encourage residents to bicycle to work and encourage employers to provide incentives and support to their employees. Host a Bike to Work Day rally at the Niles Civic Center or another central location. Bike to Work Day can take place on a single day each year, or over the course of a week to two weeks. National Bike to Work Day is typically on a Friday in late May, while Chicago Bike Week takes place over two weeks in June and July.



Indoor Pump Track

Source: www.pumptrack.com

- **Niles Walk and Bike to School Day:** Coordinate with public and private schools to establish a Village-wide day in which all Niles students are encouraged to walk or ride bicycles to school. National Walk and Bike to School Day is typically on the first Wednesday in October. This can be coordinated through the SRTS Coordinator and Champions.
- **Host a Marquee Bicycling Event:** Prior to the 2020 COVID-19 pandemic Niles hosted the Intelligentsia Cup, an annual bike race that draws elite bicyclists from across the country and the globe. There is interest in hosting events such as the Intelligentsia Cup or similar events again in the future.

CONSIDER PROPOSALS FOR INDOOR BICYCLE RECREATION FACILITIES

The Village of Niles is home to a number of high-quality indoor recreation facilities located between Howard Street and Oakton Street, and east of Caldwell Avenue. The Park District's LoVerde Center and private developments such as Energy Sports Complex, Sky High Sports, and Jump Zone make Niles a regional destination for indoor sporting activities.

The Village can leverage these facilities, build on its existing strength in the market, and promote the culture of bicycling in Niles by considering adding the following uses in development proposals:

- **Indoor Pump Track:** A series of small hills ("rollers"), banked turns, and other features that bicyclists of all skill levels can ride and enjoy.
- **Indoor Mountain Bike Park:** A course for more advanced riders with longer runs featuring jumps and other technical features.

An indoor facility could be developed as a Park District facility, as part of a future phase of the Golf Mill Center redevelopment and adaptive reuse of vacant mall space, or as a stand-alone private development near the other existing indoor sports facilities listed above.

REGIONAL COORDINATION

The Village of Niles is bordered by the Villages of Morton Grove and Skokie to the east, the Village of Glenview to the north, the City of Park Ridge to the west, and the City of Chicago to the south. There are also portions of unincorporated Maine Township that are land locked within Village boundaries and bordering to the north and west.

Due to the irregular shape of Village boundaries, pedestrian and bicycle corridors in Niles are often shared with neighboring agencies, and at times it can be difficult to tell when one has left Niles and entered another jurisdiction. Coordination is needed to develop continuous bike routes that cross municipal boundaries and pedestrian facilities that are continuous and uniformly safe and comfortable.

CONTINUE HOLDING ANNUAL MEETINGS WITH NEIGHBORING MUNICIPALITIES

The Village should continue to meet annually with the Villages of Morton Grove, Skokie, and Glenview, the Cities of Park Ridge and Chicago, and Maine Township to coordinate on shared corridors and potential joint pedestrian and bicycle infrastructure projects.

Meetings should be held at least two months prior to the development of the Village's Capital Improvement Program to aid in incorporating capital improvement recommendations into the budget, which allows for the Village to consider the local share for potential interagency projects. Where geographically appropriate, consider meeting with more than two entities at once, such as a combined meeting with staff from Niles, Morton Grove, and Skokie.

PUBLIC WORKS

In addition to the location-specific improvements detailed in Chapter 3, infrastructure policies apply to the entire Village of Niles. Pedestrian and bicycle-specific policies can help the Niles Department of Public Works address safety issues for people walking and bicycling by standardizing infrastructure improvements that apply broadly to all Village rights-of-way.

UPDATE THE VILLAGE SIDEWALK ORDINANCE

Amend the existing sidewalk ordinance to establish a preferred sidewalk width of six feet or wider and a minimum width of five feet, to be determined at the discretion of the director of Public Works.

The Village of Niles is in the process of updating its sidewalk ordinance. The existing ordinance states that "Sidewalks shall be a uniform width of five feet, unless connecting sidewalks are wider, in which case new sidewalks shall be of the same width as existing and connecting walks."

The Village should adopt a preferred typical section that includes an eight-foot sidewalk, separated from the roadway with a five to 10-foot parkway, and the edge of public right-of-way one foot behind the back of walk.

ADOPT A CROSSWALK MARKING AND MAINTENANCE POLICY

The Village should adopt a policy for marking and maintenance of crosswalks at all intersections within Niles where stop bars are placed, or where additional visibility is needed. The policy may consider a need-based approach based on posted speed, functional classification, or other factors. Common methods may include:

High-visibility crosswalk markings:

- All legs of signalized intersections where a sidewalk or shared use path connection connects to two or more of the following: bus stop, school, park, or senior center
- Mid-block crossing locations, along with pedestrian crossing signage
- Shared use path crossing locations, along with pedestrian and bicycle crossing signage

Standard crosswalks should be installed at:

- Collector roadway crossings or signalized intersections containing one of the items from above.

Timing

Whenever an improvement is being made on the public right-of-way near an intersection:

- Install crosswalks that are missing or of the incorrect type according to guidance above
- Refresh crosswalks as needed based on field determination
- Coordinate with IDOT and Cook County to implement the policy on roadways under their jurisdiction



FUNDING & IMPLEMENTATION

5

PROJECT PRIORITIZATION

ESTIMATED COSTS

FUNDING SOURCES



Howard Street Trail and North Branch Trail Crossing

Implementation of this plan will occur in three phases and will maximize local funds with state and local grants whenever feasible.

This chapter includes recommended prioritization of projects, estimated costs, and potential external funding sources that can be used to support the design and construction of walking and bicycling infrastructure, programming, and marketing initiatives.

PROJECT PRIORITIZATION

Prioritizing projects is a way to provide a framework for implementation and to help the Village of Niles forecast capital expenditures and prepare grant applications for upcoming projects.

Projects are divided into three priority phases. Prioritization is based on community input, feasibility, and impact. Phase 1 projects are anticipated to be implemented in the first five years following plan adoption. They include the highest priority projects to address critical safety issues, as well as those that build the backbone, or foundation, of the proposed pedestrian and bicycle networks.

Phase 2 projects are anticipated to be implemented in the second five-year period following plan adoption. These include corridors that have anticipated opportunities to be included in mid-term planned projects, such as roadway resurfacing in 2027 or later, as well as those that require extensive agency coordination or right-of-way acquisition to implement.

Phase 3 includes longer term projects that are anticipated to take place in the next 20 years. However, if an opportunity arises to complete a project before its indicated phase, the recommended phasing schedule should not prevent its implementation.

Recommendations by Phase

| Phase | New Sidewalks | Shared Use Paths | On-Street Bike Facilities |
|-----------------------------|---------------|--------------------------|---------------------------|
| Phase 1 2023-2027 | 1.1 Miles | 5 Projects 1.9 Miles* | 9 Projects 6.1 Miles |
| Phase 2 2028-2031 | 3.8 Miles | 2 Projects 2.7 Miles | 5 Projects 3.5 Miles |
| Phase 3 2032-2041 | 12.0 Miles | 3 Projects 3.5 Miles | 1 Project 0.6 Miles |

Table 5: Summary of Recommendations by Phase



SIDEWALK INFILL PRIORITIZATION

This plan recommends that the Village of Niles complete all sidewalk infill in the next 20 years. The recommended prioritization strategy for sidewalk infill is based on three primary factors: location, roadway context, and external funding availability. Projects are assigned to Phase 1 if they satisfy all three criteria, Phase 2 if they meet two criteria, and Phase 3 if they meet one or no criteria.

Phase 1 recommendations total 1.6 miles of infill, in addition to those projects that are already planned. Phase 2 includes 4.2 miles of infill, and Phase 3 includes 12.4 miles. Sidewalk infill project priority by phase is shown in Figure 8.

1. Location

The need for sidewalk infill is demonstrated by proximity to high-use transit stops, proximity to schools, and locations of high pedestrian crash rates. Infill locations within one to two blocks of a school or in a location of high pedestrian and bicycle crash rates, as analyzed in the Existing Conditions Report, should be prioritized.

Infill projects adjacent to Pace transit stops should be prioritized according to existing ridership. The presence of high ridership even in the absence of connected sidewalks suggests that ridership could increase with improved infrastructure.

Transit priority was assessed using combined boardings and alightings at each location, which may include up to four stops at an intersection. The top eight infill project locations by ridership are shown in Table 6. Two locations are not included in the phasing plan because they are fulfilled by either a planned project or a recommended shared use path. Infill is planned near three additional locations, but they are included because gaps will still exist after project completion.

2. Roadway Context

Sidewalks along arterials should be prioritized because they tend to have higher traffic volumes and speeds, which necessitate separated pedestrian spaces, but also tend to attract the most pedestrian traffic due to adjacent land uses. Arterials also have implications for regional pedestrian mobility and may be eligible for state-administered funding sources.

| Pace Stop | Boardings + Alightings | Include in Phasing Plan? |
|----------------------------|------------------------|--------------------------------------------|
| Golf Mill Pulse Station | 2,206 | No (<i>see Recommendation SUP-01</i>) |
| Milwaukee & Dempster | 434 | Yes |
| Milwaukee/Greenwood & Golf | 121 | Yes* |
| Golf and Hamlin | 109 | Yes* |
| Milwaukee & Main | 108 | Yes |
| Milwaukee & Greenwood | 103 | Yes* |
| Touhy & Mobile | 85 | Yes* |
| 8330 W. Golf (Four Flaggs) | 55 | No (<i>satisfied by planned project</i>) |

**Infill is planned at these locations but not all gaps will be filled*

Table 6: Sidewalk Gaps Near Transit by Ridership

Source: Pace ridership estimates, 2018

3. External Funding

The Village should focus on addressing infill projects that can be accomplished primarily with existing state and federal funding sources to maximize local investment. The following funding programs can be used for sidewalk infill projects and align with criteria 1 and 2:

- Illinois Transportation Enhancement (ITEP)
- Highway Safety Improvement (HSIP)
- Regional Transit Authority Access to Transit
- Safe Routes to School (SRTS)

Funding sources are discussed in greater detail at the end of this chapter.

SHARED USE PATH PRIORITIZATION

Shared use paths were prioritized using a two-step system. First, they were assessed using the same strategy used for sidewalks in locations where sidewalks are not present. Second, they were prioritized based on their function within the proposed bicycle network. Prioritization of the bicycle network is discussed in the next section, and shared use paths are included in Figures 9, 10, and 11.

ON-STREET BICYCLE FACILITY PRIORITIZATION

The prioritized bicycle network prioritization is shown in Figure 9 (Phase 1), Figure 10 (Phase 2), and Figure 11 (Phase 3).

Phase 1 consists of projects that will form the backbone of the bicycle network in Niles, projects that should be undertaken in coordination with near-term resurfacing or other projects, and those that are relatively easy to implement such as shared lane markings. A list of projects in Phase 1 and the reason each is prioritized is shown in Table 7.

| Corridor ID | Project Description | Prioritization Notes |
|-------------|------------------------------------|-------------------------------------------------------|
| SUP-01 | Golf Mill Loop | Golf Mill Center redevelopment project is underway |
| SUP-02 | Church Street Shared Use Path | Golf Mill Park redevelopment project is underway |
| SUP-04 | Milwaukee Shared Use Path | Meets criteria for pedestrian priority |
| SUP-09 | Dempster Street Shared Use Path | Forms northern portion of Maryhill Cemetery Loop |
| SUP-10 | Washington/Main Shared Use Path | Forms southern portion of Maryhill Cemetery Loop |
| BYC-01 | Washington Bike Lane | Washington resurfacing in approximately 2025 |
| BYC-02 | Church/Maryland/Lyons Shared Lanes | Resurfacing project in 2023 |
| BYC-03 | Ballard/Park/Merrill Shared Lanes | Easy to implement, connects existing routes |
| BYC-04 | Ozark/Ozanam Shared Lanes | North-south connection, Ozark resurfacing in 2023 |
| BYC-05 | Shermer Bike Lane | Resurfacing in 2025, grant application pending |
| BYC-06 | Main Street Shared Lane | Completes east-west connection, resurfacing in 2023 |
| BYC-09 | Monroe Street Shared Lane | Easy to implement, connects existing routes |
| BYC-11 | Howard Street Shared Lane | Extends Howard Street Trail, part of network backbone |
| BYC-12 | Lehigh Avenue Cycle Track | Connects to transit, IDOT resurfacing 2023-2027 |

Table 7: Bicycle Network Prioritization, Phase 1



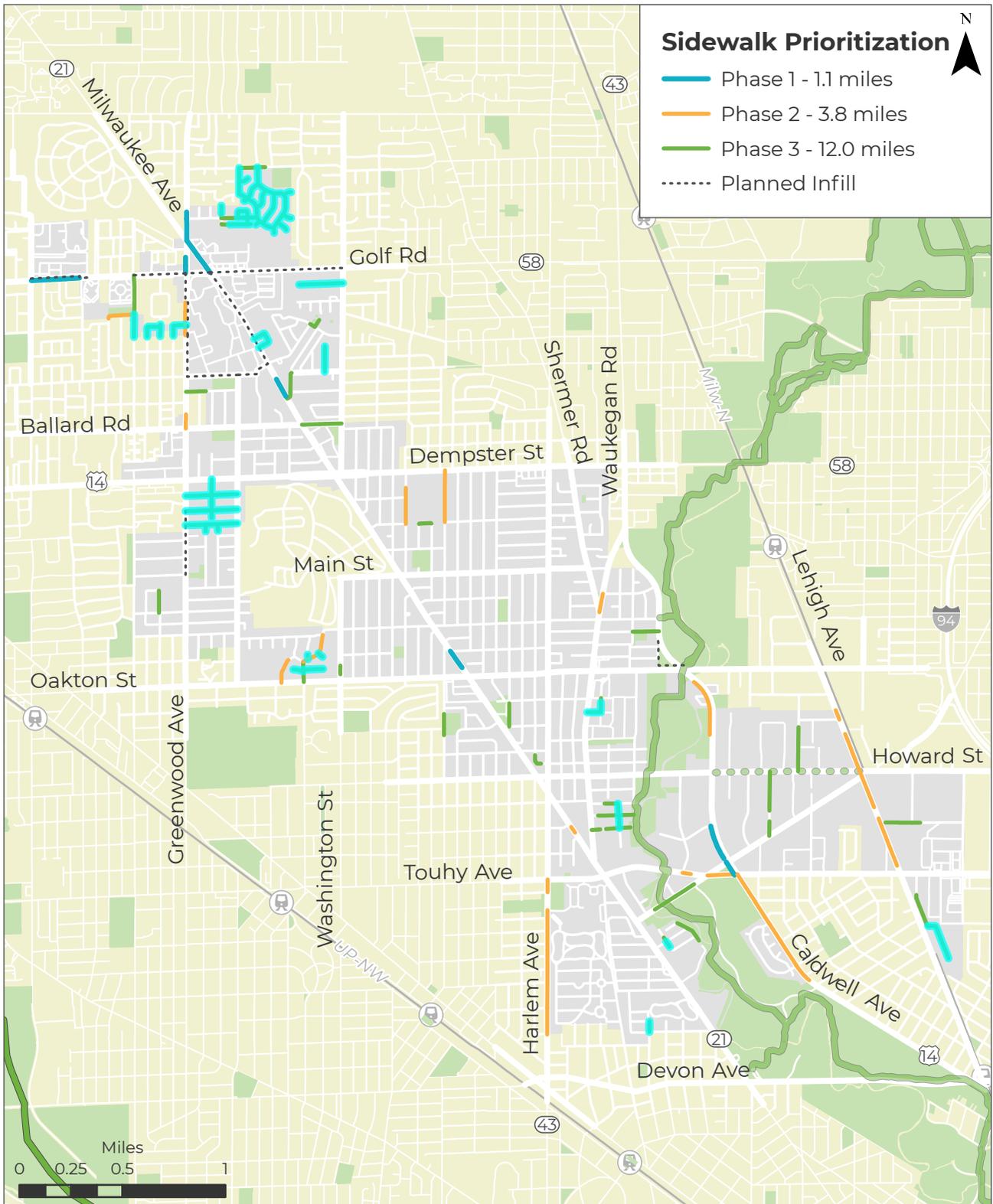


Figure 8: Pedestrian Network Prioritization

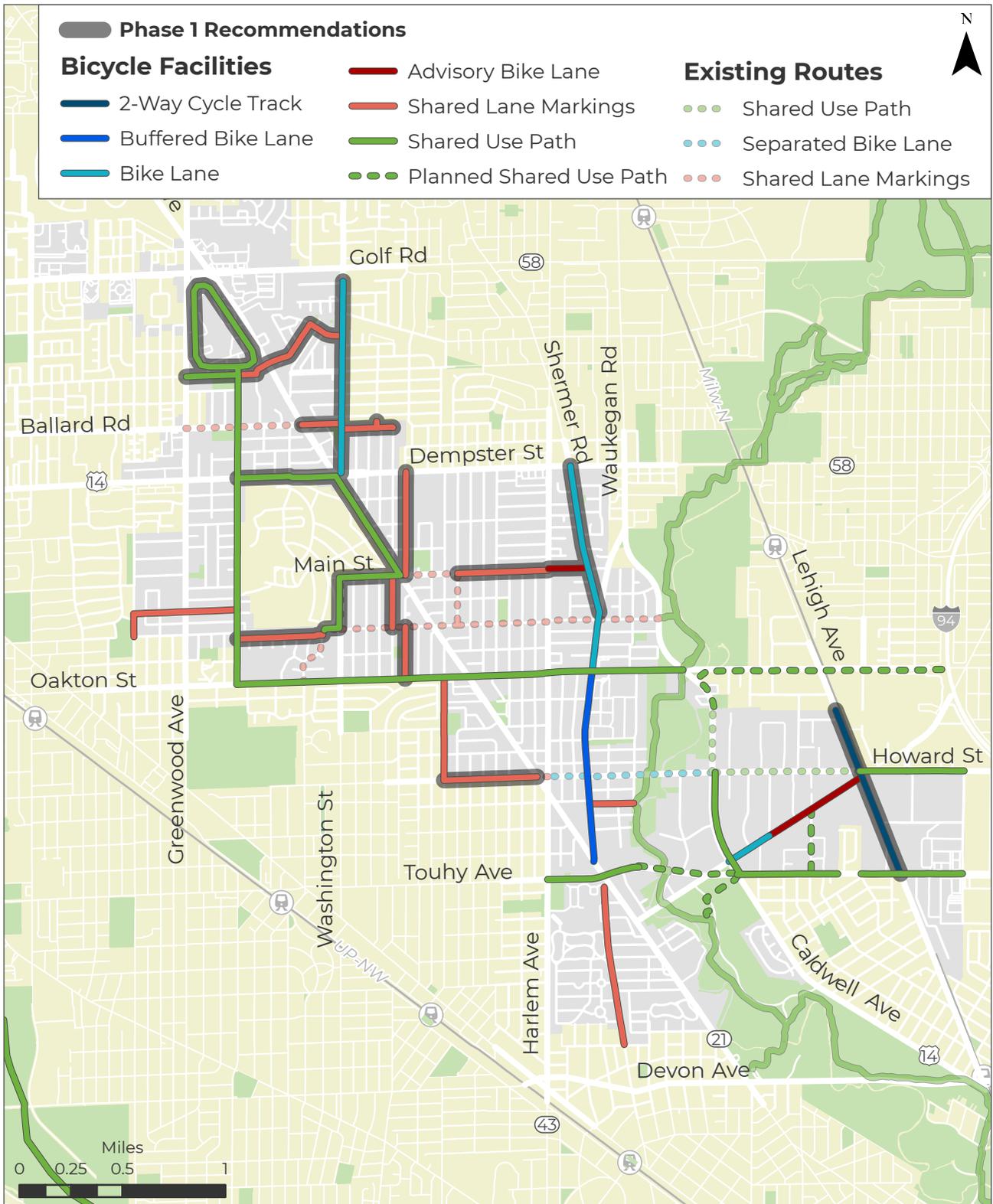


Figure 9: Bicycle Network Prioritization - Phase 1

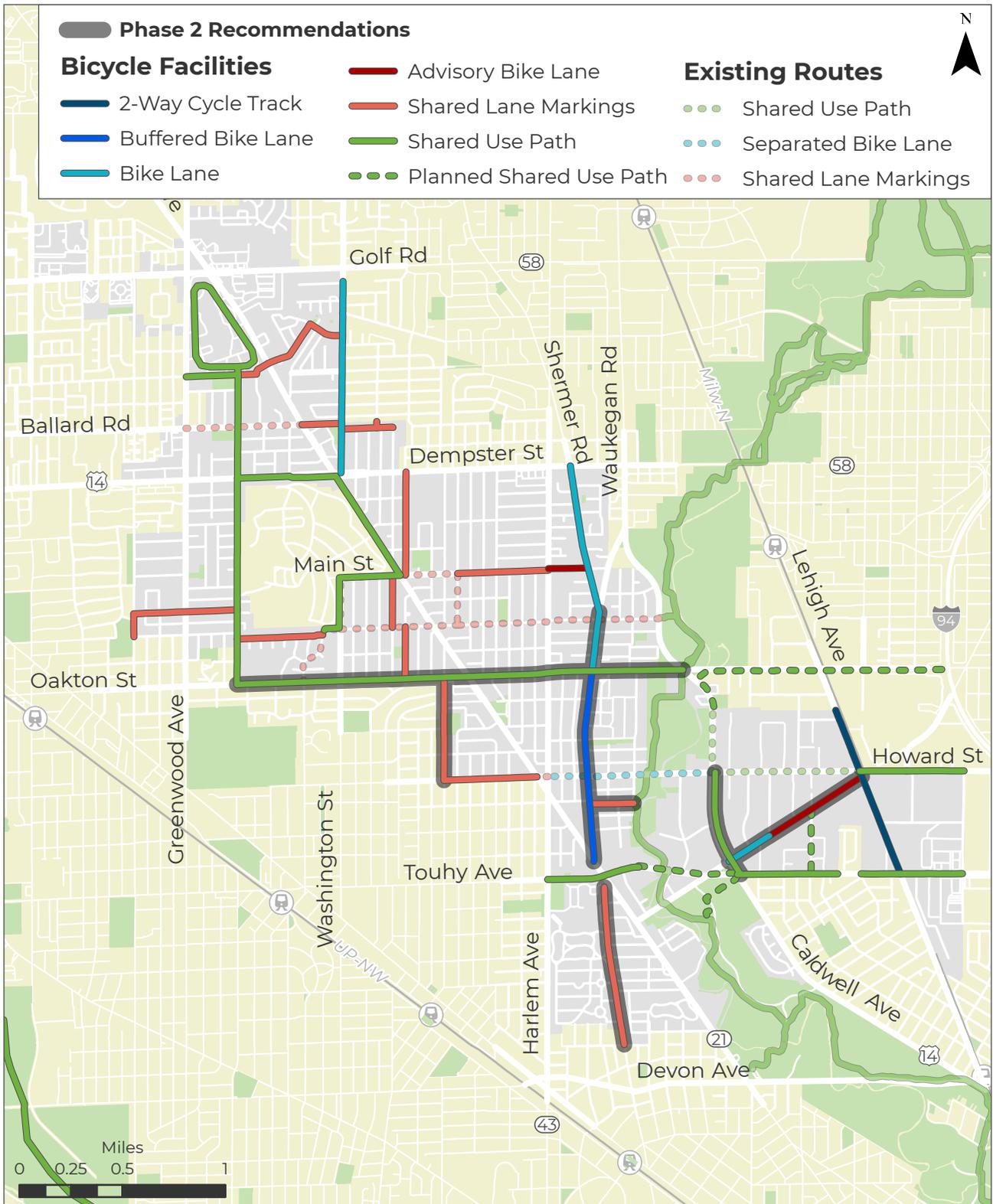


Figure 10: Bicycle Network Prioritization - Phase 2

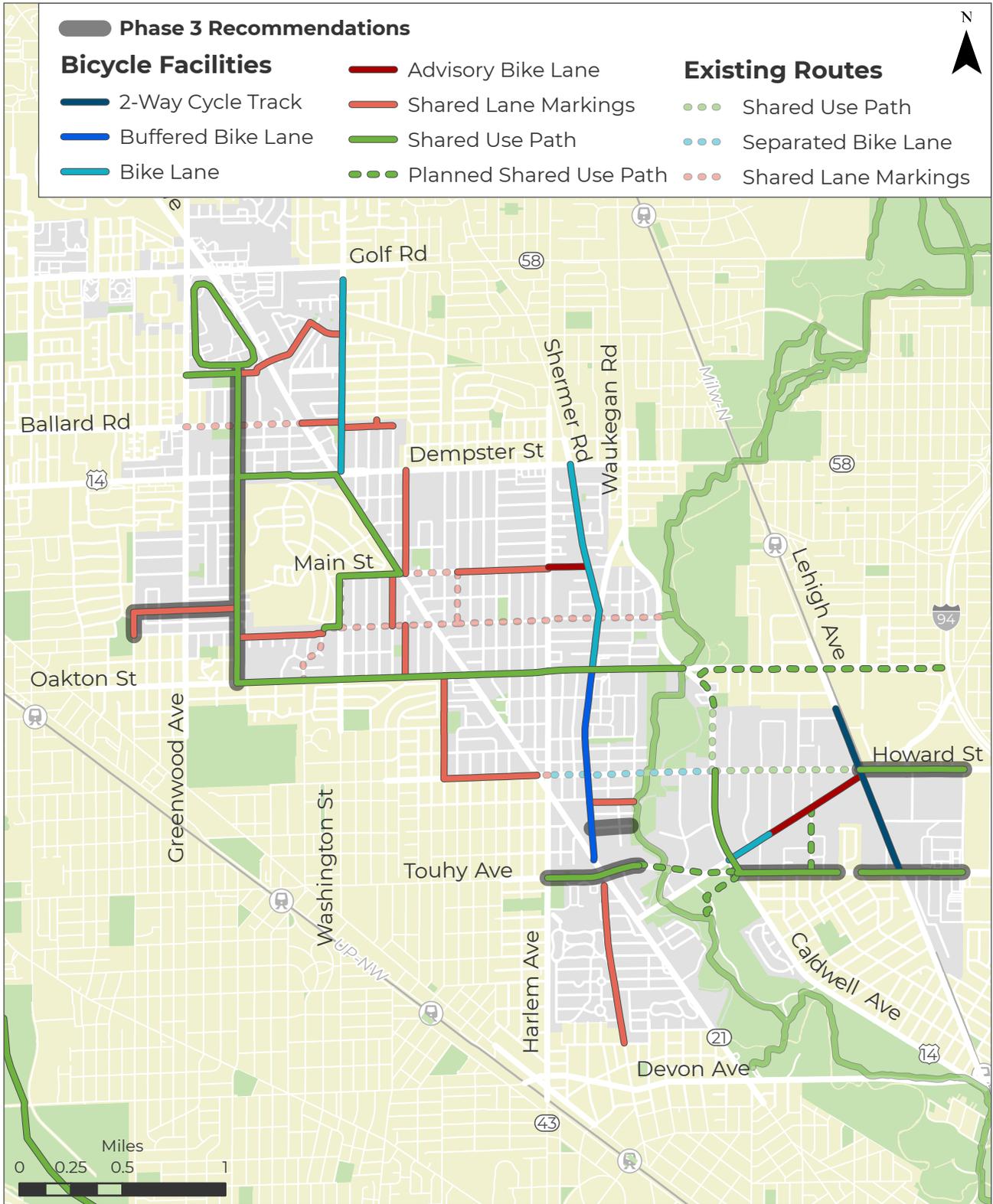


Figure 11: Bicycle Network Prioritization - Phase 3

ESTIMATED COSTS

The following tables provide an estimate of probable cost for all recommended pedestrian and bicycle network facilities and intersection improvements. Costs provided are planning-level estimates, which provide a per-mile or per-unit estimate of the cost of construction or installation. Unit cost numbers are based on IDOT published coded pay items resources and Chicago Department of Transportation Bicycle Program cost estimates.

In addition to the base network subtotal, engineering and contingency costs are applied to each project as a proportion of the estimated construction cost. Phase I, Phase II, and Construction Engineering are anticipated to add a total of 32 percent to the total construction cost. Additional unallocated contingency of 30 percent is applied to account for unexpected changes to the project scopes, including unknown site conditions.

Estimates include planning and construction costs only, and do not include potential right-of-way acquisition.

SIDEWALK INFILL

The Village of Niles Sidewalk Infill Program uses the remainder of the annual sidewalk budget, after critical repairs are completed, for infill projects. The amount available each year varies, typically up to \$50,000 per year. Because infill is completed as funds are available and multiple corridors are often combined into a single “project,” estimates of sidewalk infill cost are provided by phase in Table 6 instead of by distinct project.

Sidewalk cost estimates are based on a linear unit cost of a 6.5-foot sidewalk. Eight feet is the preferred width where space allows, and five feet is the minimum width. This estimate does not include the cost of any curb or roadway work that may be required.

SHARED USE PATHS

Cost estimates for shared use paths are provided on a per-project basis in Table 9. Estimates are not provided for SUP-01 Golf Mill Loop because this recommendation is included as part of a private development. Only wayfinding signage costs are included for SUP-02 Church Street because it is part of an in-progress public project.

Cost Estimate Components

Included in Cost Estimates:

- New PCC sidewalks and curb ramps, and asphalt shared use paths
- New on-street bicycle pavement markings and bollards
- Bicycle regulatory, directional, and wayfinding signage
- Curb, median, and pavement reconstruction associated with street widening or narrowing
- New traffic signals, poles, and associated equipment and installation
- Utility relocation
- Addition of bicycle and pedestrian signal head and push-button to existing signal infrastructure
- Phase I, Phase II, and Construction Engineering
- Unallocated Contingency

Not Included in Cost Estimates:

- Modernization of existing signals, except for addition of bike or pedestrian signals (included)
- Right-of-way acquisition and tree removal
- Traffic-calming devices such as speed humps and mini traffic circles
- Repair and resurfacing of roadways, sidewalks, and associated pavement markings

| Category | Network Recommendation | Length (mi) / Count | Cost |
|---------------------------------------|-----------------------------------|-------------------------|---------------------|
| Off-Street Facilities | Sidewalk Infill | 17.0 | \$5,835,000 |
| | Shared Use Path | 7.8 | \$17,182,000 |
| | Total | 24.8 | \$23,017,000 |
| On-Street Facilities | Conventional Bike Lane | 2.2 | \$2,252,000 |
| | Buffered Bike Lane | 0.9 | \$56,000 |
| | Two-Way Separated Cycle Track | 0.9 | \$103,000 |
| | Advisory Bike Lane | 0.7 | \$7,000 |
| | Marked Shared Lane | 5.5 | \$63,000 |
| | Total | 10.2 | \$2,481,000 |
| Intersection Treatments | High-Visibility Crosswalk | 106 | \$106,000 |
| | Curb Ramp* | 68 | \$340,000 |
| | Pedestrian Signal and Push-Button | 39 | \$176,000 |
| | New Signalized Intersection** | 9 | \$2,250,000 |
| | Signal Reprogramming | 6 | \$5,000 |
| | Total | 81 Intersections | \$2,877,000 |
| Network Subtotal | | | \$28,375,000 |
| Phase I Engineering (8%) | | | \$2,270,000 |
| Phase II Engineering (12%) | | | \$3,405,000 |
| Construction Engineering (12%) | | | \$3,405,000 |
| Contingency (30%) | | | \$8,513,000 |
| NETWORK TOTAL | | | \$45,968,000 |

*Curb ramps associated with new crosswalks are included in intersection treatments; curb ramps associated with shared use paths are included in off-street facilities

**Assumes a typical signalized intersection; actual treatment and cost dependent on warrant analyses

COST BY PHASE

| Phase | Cost Subtotal | Total Cost (incl. contingency and engineering) |
|----------------------|---------------------|---------------------------------------------------|
| Phase 1* | \$7,227,000 | \$11,708,000 |
| Phase 2* | \$8,832,000 | \$14,308,000 |
| Phase 3 | \$12,317,000 | \$19,954,000 |
| NETWORK TOTAL | \$28,375,000 | \$45,968,000 |

*Intersection costs are divided evenly between phases 1 and 2

Table 8: Estimated Costs for the Entire Network



Shared use path cost estimates are based on a linear unit cost of a 10-foot path with regular route marking signage. Curb ramps at all intersections and wayfinding and directional signage at the intersection of other bike routes are included in the corridor cost on a per-unit basis.

ON-STREET BICYCLE FACILITIES

Cost estimates for on-street bicycle facilities are provided on a per-project basis in Table 10 and are based on a linear unit cost including pavement markings, route signage, and physical separation as applicable. Wayfinding and directional signage at the intersection of other bike routes and bike signal installation is included in the corridor cost on a per-unit basis.

INTERSECTION IMPROVEMENTS

Cost estimates for intersection improvements are provided for each improvement type based on unit costs. The cost of curb ramps at signalized intersections with new crosswalks is included in intersection improvements. The estimated cost of new signalized intersections assumes a typical four-way intersection with signal control. However, the recommended treatment and its associated cost will be determined by a warrant analysis for each project.

Intersection improvements were not assigned a specific priority phase. Some improvements may be addressed according to current conditions, such as crosswalk installation. In other instances, intersection improvements may be undertaken in coordination with street resurfacing or other capital projects. As such, intersection costs are split evenly between Phases 2 and 3.

| Corridor ID | Street | Limits | Facility Type | Length (mi.) | Phase | Cost |
|--------------|-------------------|----------------------------|-----------------|--------------|-------|---------------------|
| SUP-01 | Golf Mill Loop | Golf Mill Center | Shared Use Path | N/A | 1 | N/A |
| SUP-02 | Church Street | Greenwood to Cumberland | Shared Use Path | 0.25 | 1 | \$1,800 |
| SUP-03 | Cumberland Avenue | Church to Oakton | Shared Use Path | 1.51 | 3 | \$2,600,000 |
| SUP-04 | Milwaukee Avenue | Dempster to Main | Shared Use Path | 0.57 | 1 | \$1,060,000 |
| SUP-05 | Oakton Street | Cumberland to Caldwell | Shared Use Path | 2.17 | 2 | \$4,090,000 |
| SUP-06 | Howard Street | Lehigh to Central | Shared Use Path | 0.51 | 3 | \$1,000,000 |
| SUP-07 | Caldwell Avenue | Howard to Touhy | Shared Use Path | 0.52 | 2 | \$1,900,000 |
| SUP-08 | Touhy Avenue | Harlem to Planned Sidepath | Shared Use Path | 1.43 | 3 | \$4,560,000 |
| SUP-09 | Dempster Street | Cumberland to Milwaukee | Shared Use Path | 0.48 | 1 | \$1,270,000 |
| SUP-10 | Main/Washington | Prospect to Milwaukee | Shared Use Path | 0.62 | 1 | \$700,000 |
| Total | | | | 7.81 | | \$17,182,000 |

Included in shared use path cost estimates:

- New asphalt shared use paths and PCC curb ramps
- Bicycle regulatory, directional, and wayfinding signage
- Curb, median, and pavement reconstruction associated with street widening or narrowing
- Utility relocation

Table 9: Estimated Costs of Shared Use Paths



| Corridor ID | Street | Limits | Facility Type | Length (mi.) | Phase | Cost |
|--------------|------------------|--------------------------|--------------------|--------------|-------|--------------------|
| BYC-01 | Washington Road | Courte to Dempster | Bike Lane | 0.93 | 1 | \$23,588 |
| BYC-02 | Church Street | Cumberland to Milwaukee | Shared Lane | 0.64 | 1 | \$7,303 |
| | Maryland Street | Milwaukee to Lyons | | | | |
| | Lyons Street | Maryland to Washington | | | | |
| BYC-03 | Ballard Road | Milwaukee to Washington | Shared Lane | 0.47 | 1 | \$6,345 |
| | Park Avenue | Washington to Ozanam | | | | |
| | Merrill Avenue | Park to Village Boundary | | | | |
| BYC-04 | Ozark Avenue | Dempster to Main | Shared Lane | 1.00 | 1 | \$16,636 |
| | Ozanam Avenue | Main to Monroe | | | | |
| | Ozark Avenue | Monroe to Oakton | | | | |
| BYC-05 | Shermer Road | Dempster to Waukegan | Bike Lane | 0.73 | 1 | \$2,212,000 |
| BYC-06 | Main Street | Oleander to Harlem | Shared Lane | 0.44 | 1 | \$4,361 |
| | Main Street | Harlem to Shermer | Advisory lanes | 0.19 | | \$2,123 |
| BYC-07 | Waukegan Road | Shermer to Oakton | Bike Lane | 0.29 | 2 | \$10,138 |
| | Waukegan Road | Oakton to Milwaukee | Buffered Bike Lane | 0.93 | | \$55,361 |
| BYC-08 | Normal Avenue | Western to Cumberland | Shared Lane | 0.61 | 3 | \$5,368 |
| | Western Avenue | Normal to North Terrace | | | | |
| BYC-09 | Monroe Street | Cumberland to Prospect | Shared Lane | 0.42 | 1 | \$5,117 |
| BYC-10 | Oriole Avenue | Oakton to Howard/Sibley | Shared Lane | 0.50 | 2 | \$4,707 |
| BYC-11 | Howard Street | Oriole to Milwaukee | Shared Lane | 0.45 | 1 | \$3,522 |
| BYC-12 | Lehigh Avenue | Mulford to Touhy | 2-way cycle track | 0.86 | 1 | \$102,895 |
| BYC-13 | Gross Point Road | Caldwell to Croname | Bike Lane | 0.23 | 2 | \$5,420 |
| | Gross Point Road | Croname to Lehigh | Advisory lanes | 0.53 | | \$4,282 |
| BYC-14 | Fargo Avenue | Waukegan to NBT | Shared Lane | 0.20 | 2 | \$2,241 |
| BYC-15 | Rusch Drive | Milwaukee to Newark | Shared Lane | 0.77 | 2 | \$7,183 |
| | Newark Avenue | Rusch to Hayes | | | | |
| TOTAL | | | | 10.4 | | \$2,481,000 |

Included in bicycle network cost estimates:

- New on-street bicycle pavement markings and bollards
- Bicycle regulatory, directional, and wayfinding signage
- Addition of bicycle and pedestrian signal head and push-button to existing signal infrastructure
- Curb, median, and pavement reconstruction associated with street widening or narrowing

Table 10: Estimated Costs of On-Street Bicycle Facilities



FUNDING SOURCES

Pedestrian and bicycle infrastructure and non-infrastructure programming is available from a variety of sources. In the Chicago region, the majority of such funding comes from federal programs administered by IDOT and the Chicago Metropolitan Agency for Planning (CMAP). Most require that a local entity take on a share of 20 percent or more of total project costs, referred to as the “local match.”

Grant programs that fund infrastructure improvements are the most common. Some programs, such as Safe Routes to School, commonly fund both infrastructure and non-infrastructure projects. A handful are reserved for transportation-related programming only.

INFRASTRUCTURE FUNDING

Congestion Mitigation and Air Quality Program (CMAQ)

Agency: CMAP
Typical Award: \$16- 30 million
Website: www.cmap.illinois.gov

Purpose: Projects that help CMAP meet the National Ambient Air Quality Standards of the Clean Air Act. This includes projects that help to reduce congestion, and encourage a shift to more sustainable modes of transportation including walking, bicycling, and the use of transit.

Eligibility: Local governments with projects that are included in the state’s Transportation Improvement Program (TIP).

Local Match: The grant covers 80% of a project and requires a 20% local match. Projects must be programmed into the region’s Transportation Improvement Program (TIP). High-need local communities have no local match requirement. Phase I Engineering should be substantially complete to be considered.

Candidate Projects: Regional trail connections, new bicycling and walking facilities, improving

transit, or adding multimodal improvements along regional corridors. Joint agency projects that involve multiple jurisdictions, access to transit projects, implementation of regional transit transfers, and connectivity improvements.

Surface Transportation Program (STP-L)

Agency: CMAP
Typical Award: \$150,000 to no more than \$4 million
Website: www.cmap.illinois.gov

Purpose: Shared fund of surface transportation to support the implementation of large-scale regional projects to improve local transportation and support regional objectives of ON TO 2050. Major projects including bridge construction, grade-separated crossings, transit station rehabilitation, and transit speed and reliability improvements. Funding is competitive among municipalities within the same council of mayors.

Eligibility: Government entities

Local Match: The grant covers 80% of a project and requires a local match on a need-based sliding scale. High-need local communities have no local match requirement. Phase I Engineering should be substantially complete to be considered.

Candidate Projects: Trail overpasses, grade separations, regional trails, transit infrastructure.

Transportation Alternatives Program (TAP-L)

Agency: CMAP
Typical Award: \$100,00 - \$1 million
Website: www.cmap.illinois.gov

Purpose: Projects that help CMAP implement the Regional Greenways and Trails Plan.

Eligibility: Local governments, non-profit organizations.

Local Match: The grant covers 80% of a project and requires a 20% local match. High-need local communities have no local match requirement. Phase I Engineering should be substantially



complete for a project to be considered eligible for TAP funding.

Candidate Projects: Regional trail connections, connecting two ends of a trail network, builds new segments of regionally-significant trails.

Illinois Bicycle Path Grant Program

Agency: IDNR
Typical Award: \$100,000 - \$200,000
Website: www.dnr.illinois.gov/

Purpose: To assist local government agencies in the acquisition, rehabilitation, and construction of public non-motorized bicycle facilities.

Eligibility: Government organizations (must be able to purchase and own property, school districts not eligible).

Local Match: The grant covers 50% of the capital cost of a project, requiring a 50% local match.

Candidate Projects: Sidepath or trail projects on property owned by the local agency (not on IDOT or Cook County right of way).

Recreational Trails Program (RTP)

Agency: IDNR
Typical Award: \$200,000
Website: www.illinois.gov

Purpose: To provide funding for acquisition, development, construction, and maintenance of motorized and non-motorized trails. Must be open to the public.

Eligibility: Government entities (municipalities, park districts), non-profit organizations, for-profit organizations, businesses, and individuals.

Local Match: The grant covers 80% of a project and requires a 20% local match. 30% of the program is committed to non-motorized trails, 30% to motorized trails, and 40% to trails that accommodate both.

Candidate Projects: Trail projects that have a motorized and non-motorized component, public/private partnerships.

Illinois Transportation Enhancements Program (ITEP)

Agency: IDOT
Typical Award: \$2 million (maximum allowable)
Website: idot.illinois.gov

Purpose: Projects that enhance the existing transportation system to support and encouraged walking and bicycling.

Eligibility: Local governments, regional transportation agencies, transit agencies, natural resource and public land agencies, school districts, non-profits responsible for transportation safety programs.

Local Match: Federal funds provide up to 50% for acquisition of right-of-way or easements. Local match requirements for engineering and construction are based on a sliding scale of 20%, 10%, or 0% determined by poverty level, community size, median income, and total property tax base. The grant sets aside 25% of funds for high-need communities. Phase 1 Engineering is eligible to receive funds.

Candidate Projects: Pedestrian, bicycle, and trail projects that enhance the transportation network. Roadway resurfacing projects and parking lots are not eligible.

Local Highway Safety Improvement Program (HSIP)

Agency: IDOT
Typical Award: \$2 - 5 million
Website: idot.illinois.gov

Purpose: Projects that are intended to produce a measurable reduction in fatal and serious injury crashes on public roads. A data-driven program seeking to reduce the frequency and occurrence of these types of crashes.



Eligibility: Government entities.

Local Match: The grant covers 90% of a project and requires a 10% local match.

Candidate Projects: Corridor improvement projects with a documented safety concern, may include signal coordination and timing improvements, and projects to reduce roadway deficiencies such as inadequate sight distance, guardrail issues, and projects to improve pedestrian safety. Projects must be able to calculate a benefit/cost ratio to compare effectiveness against other projects in this category.

Access to Transit Program for Small-Scale Capital Projects (RTA)

Agency: RTA

Typical Award: \$150,000 to no more than \$1 million

Website: www.rtachicago.org

Purpose: Projects that help to improve access to transit by: (1) increasing transit ridership, (2) improving first-and-last mile connections to transit infrastructure, which includes making it easier to walk and bicycle to transit, (3) reducing demand for parking, (4) promoting pedestrian-friendly neighborhoods to be better served by transit, and/or (5) supporting the development of transit oriented development (TOD).

Eligibility: Government entities who have completed or are in the process of completing a project funded in part by the RTA Community Planning Program, CMAP LTA Program, or other relevant planning effort that aligns with ON TO 2050. Projects may cover the cost for projects costing less than \$1 million for which Phase I engineering has already been completed or may pay for the cost of preparing preliminary (Phase I) engineering up to \$50,000.

Local Match: The grant covers 80% of a project and requires a 20% local match.

Candidate Projects: Mobility Improvement Area (MIA) projects, bicycle parking, sidewalk connections that are missing, Phase I engineering

for a larger trail (so long as Phase I doesn't cost more than \$50,000).

INFRASTRUCTURE OR NON-INFRASTRUCTURE FUNDING

Safe Routes to School Grant (SRTS)

Agency: IDOT

Typical Award: \$25,000 to \$200,000 for infrastructure and \$2,500 to \$50,000 for non-infrastructure applications

Website: www.idot.illinois.gov

Purpose: Promote student safety and public health. SRTS provides both infrastructure and non-infrastructure grants to enable and encourage children to walk and bicycle to school, make walking and bicycling to school a safer and more appealing alternative, and facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of primary and middle schools.

In the 2021 funding cycle, SRTS offered infrastructure grants only. It is anticipated that non-infrastructure grants will be re-introduced in the future.

Eligibility: Government agencies, transit agencies, school districts.

Local Match: At least 20% local match required.

Candidate Projects: Sidewalk improvements, traffic calming and speed reduction improvements, pedestrian and bicycle crossing improvements, on-street bicycle facilities, off-street bicycle and pedestrian facilities, secure bike parking, and traffic diversion improvements in the vicinity of schools (within approximately two miles).

PeopleForBikes Community Grant Program

Agency: PeopleForBikes

Typical Award: Up to \$10,000

Website: www.peopleforbikes.org

Purpose: To build momentum for bicycling.
Eligibility: Non-profits; city or county agencies or departments; state or federal agencies working locally.

Local Match: Covers no more than 50% of project budget.

Candidate Projects: Bicycle paths, bike lanes, bike racks, rail trails, mountain bike trails, bike parks, and large-scale bicycle advocacy initiatives.

AARP Community Challenge Grant

Agency: AARP
Typical Award: \$500 - \$30,000
Website: www.aarp.org

Purpose: Help communities make immediate improvements and jump-start long-term progress in support of residents of all ages.

Eligibility: Non-profits; government agencies; and other organizations.

Local Match: None

Candidate Projects: Permanent physical improvements, temporary demonstrations that lead to long-term change, new and innovative programming or services that increase connectivity, walkability, bikeability, wayfinding, access to transportation options, and roadway improvements.

Game On Grant & Parents for Healthy Kids Grants

Agency: Action for Healthy Kids
Typical Award: \$1,000 to \$2,500
Website: www.actionforhealthykids.org

Purpose: Provide funding for schools and parent-led groups to improve or introduce new nutrition and physical activity programs.

Eligibility: Elementary schools (K-8), school districts, municipalities, counties, townships, police departments, health department, non-profits

Local Match: The grant covers 80% of a project and requires a 20% local match.

Candidate Projects: Sidewalk improvements, traffic calming, pedestrian/bicycle crossing improvements, bicycle facilities, bicycle parking, educational and encouragement programs

NON-INFRASTRUCTURE FUNDING

America Walks Community Change Grant

Agency: America Walks
Typical Award: \$1,500
Website: www.americawalks.org

Purpose: Creating healthy, active, and engaged places to live, work, and play.

Eligibility: Advocates, organizations, and agencies

Local Match: None

Candidate Projects: Programming and event ideas that engage communities in increased physical activity and active transportation.



