NORTHERN LAKESHORE

TRAIL CONNECTIVITY PLAN

JULY 2020

Public Review Draft

CONNECTING THE COMMUNITIES OF WINTHROP HARBOR, ZION, BEACH PARK, WAUKEGAN, AND NORTH CHICAGO

ACKNOWLEDGEMENTS

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**While Jon and Leisa are no longer with the Village of Beach Park, the project team is extremely grateful for their leadership and support during the development of this plan.*

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Unless otherwise cited, photos shown in this report were taken by the consultant.

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NORTHERN LAKESHORE TRAIL CONNECTIVITY PLAN

1. OVERVIEW

A CONNECTED NORTHERN LAKESHORE OPEN ALL YEAR

As stated in the **Existing Conditions Report**, this plan envisions a connected network of trails for walking and bicycling that is **safe & accessible**, **healthy**, **connected**, and **growing**. This will be realized by the Northern Lakeshore communities in a robust network of infrastructure to support walking and bicycling for people of all ages and abilities.

Supported by a calendar of year-round activities, recommendations contained within this plan establish a network of more than 100 miles of improved walking and bicycling infrastructure. These improvements will further connect the communities of Winthrop Harbor, Zion, Beach Park, Waukegan, and North Chicago and the region's key partner in open space and natural resource conservation: Illinois Beach State Park managed by the Illinois Department of Natural Resources (IDNR).

As the managing agency for the Coastal Management Program, Recreational Trails Program, and Illinois Nature Preserves Commission, and several other programs, IDNR holds the unique position of supporting improved access to open space, the lakefront, and recreational opportunities while also leading conservation and preservation efforts.

Together, IDNR and the Northern Lakeshore communities have established a plan to advance regional trail connectivity goals, track implementation of the plan, and align with the objectives of **ON TO 2050**, the regional comprehensive plan for the Chicago metropolitan region prepared by CMAP.

Figure 1.1 Plan Benchmarks

	Baseline	Target
Safe & Accessible		
• Reduce crashes involving people walking	155 crashes	0 crashes
• Reduce crashes involving people bicycling	238 crashes	0 crashes
• Increase share of population living within 1/4 mile of a trail	52.9%	75.0%
Healthy		
• Increase share of people who walk and bicycle to work	2.0 - 8.0%	10 - 20%
• Increase share of people who walk and bicycle to Metra	4.4 - 9.1 %	20%
• Reduce obesity rates	24 - 35%	10 - 15%
Connected		
• Eliminate sidewalk gaps within 1/4 mile of all schools and parks	88 miles	0 miles
Growing		
• Increase Metra ridership (Weekday / Saturday / Sunday)*	1,365 / 2,120 / 978*	2% annual increase
• Reduce transportation costs as a share of household spending	19.8 - 23.8%	15 - 20%

**Source: Metra Weekend ridership counts 2010, weekday ridership counts 2018)*

Figure 1.1 shows the proposed plan benchmarks to serve as aspirational targets for implementation, and reflect values representative of Walk Friendly Communities and Bicycle Friendly Communities as defined by the League of American Bicyclists.

While these targets may be influenced by changing land use and development patterns over time, two indicators represent outcomes that municipalities have the direct ability to influence through construction: share of population living within a quarter-mile of a trail and the elimination of gaps near parks and schools.

For example, by requiring sidewalks with new construction and closing gaps in key locations, these two factors have a direct impact on creating a more connected network.

Bicyclists consulting a network map.
Source: Active Transportation Alliance.

Figure 1.2 Recommendations at a Glance

2. DESIGN GUIDELINES

PRINCIPLES

Creating a safe, connected, healthy, accessible, and growing network for walking and bicycling is made possible by the latest design guidance. Drawing on nationally-recognized best publications for bicycle, pedestrian, and multimodal facility design, this section provides an overview of design guidance and a review of facility types. The key to a successful project is knowing what design options are available, and how best to implement them.

When presented with a variety of potential design applications, it is important to consider three main principles:

1. User Needs

Who is the user? People of all ages and abilities have different needs. **Families** walking and bicycling together travel at slower speeds and require additional space to navigate. **Adult bicyclists** who are confident commuting by bicycle prefer direct routes with few interruptions or detours. **All users** seek to minimize conflicts with motorized vehicles and prefer facilities that make everyone feel welcome and supported.

Stakeholders implementing this plan should consider for whom the facility is intended and seek to maximize the comfort and safety of the most vulnerable user.

2. Context Sensitivity

Many walking and bicycling corridors are located along roadways, and the comfort and safety of everyone depends on how these corridors operate. Roadway context is a function of traffic **speed**, amount of traffic **volume**, adjacent **land use**, and the number and width of **travel lanes.** These are the primary inputs used to calculate Levels of Traffic Stress in the Existing Conditions Report.

In the presence of higher speeds and higher volumes of traffic, people walking and bicycling need greater separation from moving traffic to feel comfortable and to mitigate potential conflicts. People driving and operating transit vehicles also benefit, as this provides space for everyone to operate in a way that is visible and predictable.

3. Selection + Application

User needs and context sensitivity help identify how much space different users need and thus, which type of facility to select. Whenever possible, networks should be designed to accommodate users of all ages and abilities. While not every roadway or corridor can be navigated by children, adults, and seniors alike, the selection of facilities should consider all of these groups as potential users and select facilities accordingly.

Once a facility is selected, application varies slightly based on context, available space, and other factors such as available width (e.g. building a sidewalk along a roadway with open drainage may involve relocating the drainage swale or installing a storm sewer to create space).

Guidance Structure

The design guidelines in this section present a brief introduction to each potential treatment with general guidance on design and application.

Design guidance draws upon best practices in facility planning and design developed by the American Association of State Highway and Transportation Officials (**AASHTO**) and the Federal Highway Administration (**FHWA**), the agency responsible for the publication of the Manual on Uniform Traffic Control Devices (**MUTCD**).

Supplemental guidance that promotes flexibility and provides support for innovation comes from the National Association of City Transportation Officials (**NACTO**) and the Institute of Transportation Engineers (**ITE**).

Additional guidance is taken into context for specific application within Illinois. IDOT manuals include the Bureau of Design and Environment (**BDE**) for state highway and IDOT-managed projects, and Bureau of Local Roads and Streets (**BLRS**) manual for locally-managed projects.

While the BDE and BLRS are similar in most areas, minor differences apply in terms of bicycle and pedestrian facility design based on the agency having jurisdiction over the roadway.

Stakeholders responsible for implementing this plan should use these guidelines as a starting point for considering potential treatments to improve walking and bicycling.

Crossing markings for a bike lane through an intersection. Source: NACTO.

Corridor Facilities

Corridor facility recommendations consist of facilities designed to accommodate walking and bicycling based on the speed, volume, travel lanes, and land use described in the context sensitivity overview. Feelings of comfort and safety are significantly impacted by how much space users are given, particularly when traveling at different speeds. Facilities fall into one of three categories:

- **Shared roadway** environments consisting only of pavement markings and signs;
- **Visually separated facilities**, where pavement markings and physical distance are used to separate roadway users;
- **Physical separation**, where a physical buffer, curb, parkway, streetscape, or other barrier separates motorized traffic from all other users.

Recommendations include:

1. Sidewalk
2. Trail + Sidepath
3. Signed Bike Route
4. Marked Shared Lane
5. Bike Lane
6. Buffered Bike Lane
7. Separated Bike Lane
8. Advisory Bike Lane, Advisory Shoulder
9. Bike Boulevard
10. Custom Roadway Reconfiguration

Application of corridor facilities may vary based on roadway posted speed and average daily traffic. This in turn impacts how comfortable each facility may be. General considerations for facility applications are summarized in **Figure 2.1 Facility Selection Index** on the following page.

Intersection + Midblock Treatments

Intersection, midblock, and spot treatments include a variety of treatments aimed at improving conditions where trails and sidewalks intersect roadways, railroads, network gaps, or other barriers.

Mobility Improvement Areas

Mobility Improvement Areas (MIA) include more site-specific recommendations around key destinations, including Metra stations, areas with concentrations of Pace bus ridership activity, and other areas based on discussions with project stakeholders.

MIA recommendations include bike parking, wayfinding signage, and intersection improvements to improve comfort, safety, and to encourage walking and bicycling. MIA recommendations are:

1. Bike Parking
2. Bus Stop Pad + Shelter Improvements
3. Intersection Curb Radius or Ramp Improvements
4. Marked Crosswalk
5. Midblock Crossing
6. Traffic Signal Improvements
7. Wayfinding / Directional Signage
8. New Bridge or Railroad Overpass

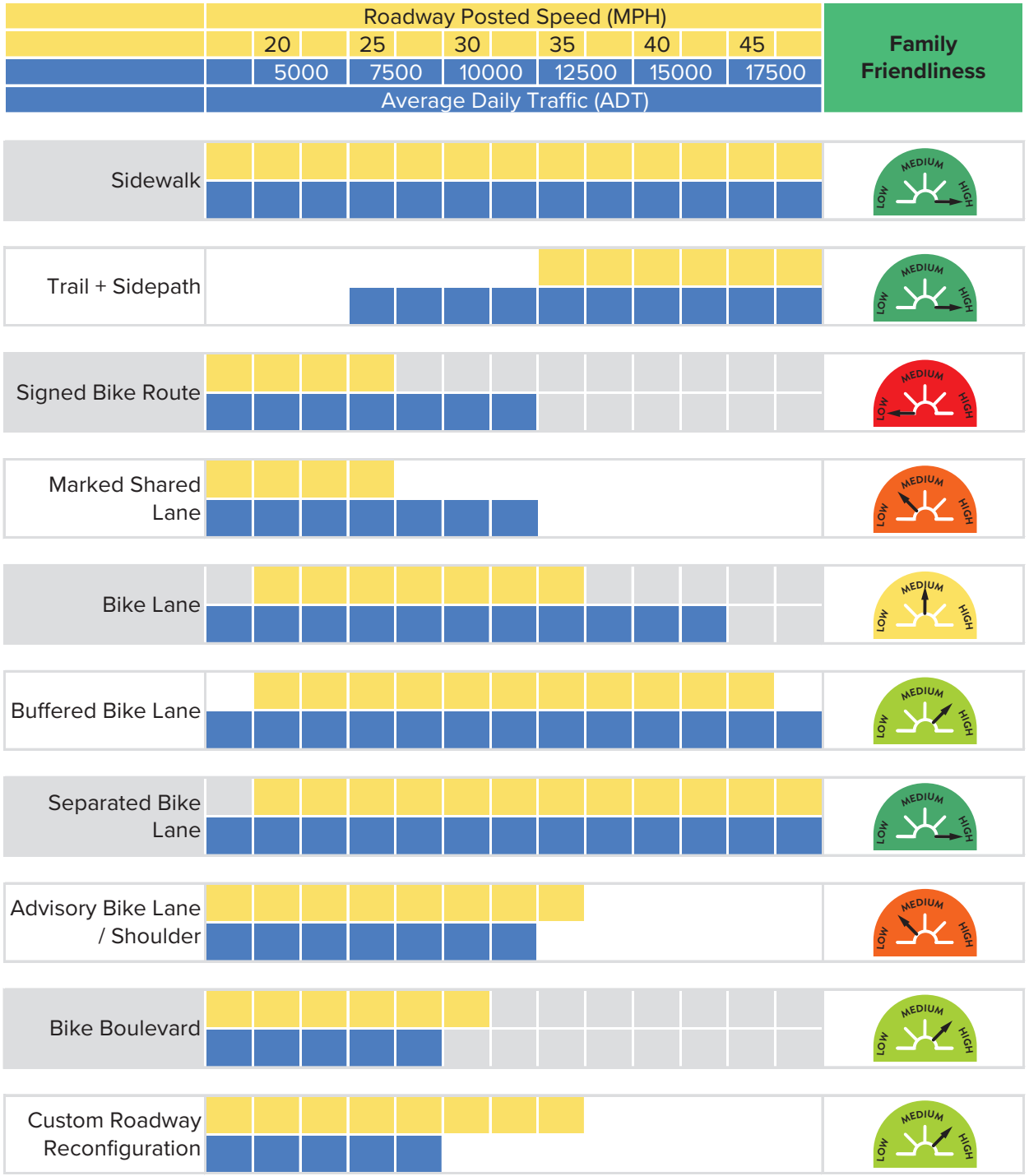
Wherever space permits, pedestrian and bicycle facilities (and buffers) should be made as wide as feasible to protect a roadway corridor's most vulnerable users:

people walking and bicycling.

Facility Selection Index

Figure 2.1: Facility Selection Index

How "comfortable" a walking or bicycling facility feels is a function of how much space is provided between the facility and motorized traffic, as well as the speed and volume of that traffic. Generally, facilities are viewed as more "family-friendly" when users are well separated from traffic, or when traffic volumes are low and speeds are calm.



Corridor Facility Design Guidelines

Sidewalk

Sidewalks are among the most basic yet important type of walking infrastructure. Gaps - even short ones - can render a block or a location inaccessible and discourage walking, particularly for people using wheelchairs, pushing strollers, or walking with carts.

Basics: Sidewalk design is governed primarily by the Americans with Disabilities Act (ADA) Accessibility Guidelines and the Draft Public Rights of Way Access Guidelines (PROWAG).

Wider is better: Sidewalks should be a minimum of 5-feet wide and should be constructed of concrete. Sidewalks 6-feet or wider are recommended in central business districts, near schools, churches, transit stops, and anywhere else where pedestrian activity is frequent or desired.

Sidewalks should be separated from the roadway by a 5-foot grass or landscaped parkway, or streetscape in commercial districts. This provides a buffer from pedestrian traffic, adjacent vehicular traffic, and creates space for curb ramps at intersections. In constrained areas where there is no space for a buffer, sidewalks must be at least 7-feet wide.

Note: Bicycling on sidewalks is typically not permitted for adults, but is acceptable for children under the age of 12.

Figure 2.2 Nautical-themed sidewalks in Winthrop Harbor.

Shared Use Path + Sidepath

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.

Basics: Paved shared use paths are specifically preferred in most conditions, as they can be maintained for year-round use. They should be a minimum of 10-feet wide with a 2-foot shoulder and a 3-foot clear zone on both sides kept free of branches, signs, and obstructions.

Shared Use Path vs. Sidepath: When shared use paths are located along a roadway, they are called sidepaths, as their design includes additional considerations for how to approach side streets and driveway crossings.

Unpaved Trails: IDNR and LCDOT maintain a network of unpaved trails, which may be lower cost and can be beneficial in sensitive areas or where bicycle use is not year-round. These make up a large share of the region's trail network. Unpaved trails can be ADA accessible as long as their surface material is regularly maintained to be "firm and stable."

Figure 2.3 (Top), Shared use path in the Lake County Forest Preserve. (Bottom) Sidepath in Beach Park.

Signed Bike Route

A signed bike route is one or more roadways that have been identified as preferable corridors for bicycling. The addition of signage to a bike route is a low-cost strategy for identifying where networks of streets suitable for bicycling are located.

Basics: Green directional signs (D-Series) are most commonly used to communicate distance, direction, and destination to roadway users. Signed bike routes are best suited for low-speed (25 mph or slower), shared roadways, but these signs may also be added on more robust facilities such as sidepaths or bike lanes.

Yellow warning (W-Series), and white regulatory (R-Series) signs also are recommended to communicate traffic laws and remind roadway users of the presence of bicyclists in a shared roadway environment.

Use Strategically: Bike routes that consist *only* of signs should be reserved for low-speed, low volume roadways where little else is needed to accommodate bicycling. Without more robust infrastructure, signed routes alone may not be viewed as "family-friendly" or comfortable for people of all ages and abilities.

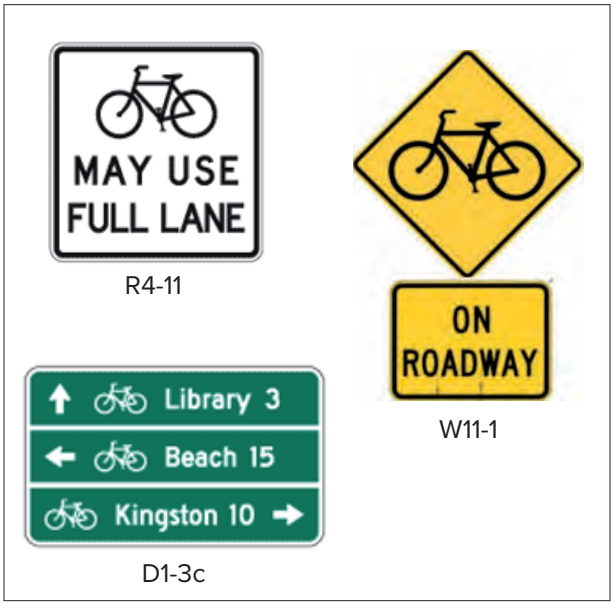


Figure 2.4 Examples of directional (D), warning (W), and regulatory (R) signs from the MUTCD.

Marked Shared Lane

When additional guidance is desired to accommodate bicyclists in low-speed (25 mph or slower) shared roadway conditions, marked shared lanes help identify bicycling networks with the help of pavement markings to show the expected location and path of bicyclists.

Basics: Referred to sometimes as "sharrows," marked shared lanes consist of a chevron pattern and bike symbol, and are placed at the beginning of each block on which they are installed, and then every 250 feet thereafter.

Shared lane markings should be placed 4 feet from the face of the curb or (edge of pavement on roads with no curb), and 11 feet from the face or curb on streets with on-street parking. Marked shared lanes can (and should) be used to supplement signed bike routes where applicable.

Prioritize Bicyclists in Select Locations: On narrow roadways, bike boulevards, or other shared lanes where it is desirable to give bicyclists priority movement, and discourage motorists from overtaking bicyclists (for short distances), shared lane markings may be placed in the center of a travel lane.

Figure 2.5 Shared lane marking on a suburban roadway. Source: CMAP

Bike Lanes

Bike lanes are facilities that create space for *exclusive* use by bicyclists. They provide more comfort than shared lanes and are among the most common bike facility types.

Basics: Bike lanes consist of a lane line separating the bike lane from automobile traffic, a bike symbol with an arrow pointing in the direction of travel, and a lane adjacent to the curb, edge of pavement, or parking lane. Bike lanes should be at least 5 feet wide, but 6 feet is strongly recommended on roadways with on-street parking, where trucks are present, or on roadways with more than 10,000 vehicles per day.

Customize: Bike lanes may be accompanied by bike lane signs (R-Series), and are usually designed so bicyclists travel in the same direction as other traffic. Bike lanes can be placed on the left side of one-way streets if it helps accommodate left turns or avoid conflicts with transit vehicles, and contra-flow bike lanes may be used if there is a need to accommodate bicycling in both directions on one-way streets.

Roadway space for bike lanes often is created through the narrowing of existing wide lanes, or roadway reconfigurations, though this is not necessarily required.

Figure 2.6 Bike lane in Richton Park.
Source: Active Transportation Alliance

Buffered Bike Lanes

Buffered bike lanes improve comfort for bicyclists and all other roadway users by pairing a conventional bike lane with a buffer between one or more lanes. Whenever there is available roadway space, it should be filled with buffers that favor more vulnerable users.

Basics: Buffered bike lanes consist of a 4- to 6-foot bike lane and buffer that is 2-feet or wider, resulting in a total width of at least 6-feet. Buffers may be placed adjacent to parking lanes, travel lanes, or both, depending on which lanes present a hazard worth mitigating. Buffers wider than 2-feet should be marked with consistent interior diagonal cross-hatching. All other pavement marking and signage design guidance that applies to conventional bike lanes also applies to buffered bike lanes.

Better Than Conventional: Buffered bike lanes are good at organizing roadway space, as the buffer helps align users to avoid conflicts. Buffers help keep car doors from opening into the bike lane, help keep truck and bus mirrors from encroaching in other lanes, and help calm traffic and discourage speeding by narrowing wide automobile travel lanes.

Figure 2.7 Buffered bike lane in Chicago.
Source: Active Transportation Alliance.

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 a physical vertical element. These could be curbs, vertical delineators ("flexposts"), planters, a row of parked vehicles, or may even be constructed at sidewalk level and separated from pedestrians.

Separated bike lanes often are called cycle tracks, and provide much more comfort than conventional or buffered bike lanes due to the presence of a physical barrier between bicyclists and other roadway users.

Basics: Separated bike lanes require at least 5 feet of width for each direction of travel, with a total clear width between barriers of 7 feet (the minimum width required to plow snow). A minimum buffer width of 3 feet is recommended, resulting in a total facility width of at least 8 feet.

Two-Way: Sometimes it is desirable to keep all bicyclists on one side of the street to connect to a trail or sidepath. In this case, both directions of separated bike lanes are placed together on one side of the roadway, and a single buffer is used to separate both bike lanes from all other traffic lanes.

Figure 2.8 Two-way separated bike lane. Source: Chicago Department of Transportation.

Advisory Shoulders (Advisory Bike Lanes)

An advisory shoulder delineates a shared space at the roadway edge on roadways too narrow for bike lanes. The FHWA refers to these as "dashed bike lanes" or "advisory shoulders," as they may function as a shoulder and are not just for use by bicyclists.

Advisory bike lanes are an experimental treatment. Installation is encouraged, but requires prior approval from FHWA.

Basics: Each advisory shoulder is marked with a broken lane line. Motorists may use this space when no bicyclists are present and must exit the shoulder to pass. They are intended for low speed (25 mph), low volume roadways and should be at least 4 feet wide (6 feet preferred) on either side of the roadway, and the remaining space in the center of the roadway reserved for two-way travel should be at least 10 feet wide (16 feet preferred to avoid encroachment).

Public Education is Important: Advisory shoulders may require motorists to *share* the center lane for two-way travel. This is uncommon, so education is recommended to bring awareness to this novel roadway condition.

Figure 2.9 Advisory shoulders shown installed on a street with on-street parking. Source: FHWA.

Bike Parking

Bike parking infrastructure is simple and low-cost, yet critically important to support bicycling. Whether installing single racks on a main street in a business district or large covered bike parking corrals at Metra Stations, the installation of visible and high quality bike parking can encourage bicycling by providing secure parking options.

Basics: Bike parking should be located in highly visible locations, close to building entrances, and adjacent and connected to pedestrian walkways for easy access.

“Post and ring” and “inverted U” racks are the most common and preferred style of bike parking as they allow the bicycle to be locked at two points in an upright position.

Cover + Corral: Assembly of several bike racks together is referred to as a corral and helps improve visibility and security by attracting multiple users to a single location. Covered bike parking also encourages year-round bicycling as it affords additional protection from rain and snow.

Figure 2.10 Covered bike parking at the Wilmette Metra Station. Source: RTA

Bus Stop + Shelter Improvements

Improvements to bus stops can help encourage and support transit ridership.

Basics: Typical bus stop and shelter improvements may include installing a concrete pad at the bus stop to facilitate boarding and alighting, and provide additional room for people using wheelchairs or pushing carts or strollers. In order to be made accessible to all persons, the bus stop pad should be attached to both the curb and the sidewalk for a continuous pathway for boarding and alighting.

Shelter + Inform: In addition to an accessible bus stop, bus stop shelters provide protection from wind and weather, and help to make the bus stop more visible to transit vehicle operators, motorists, and transit users. Pace’s bus shelter program provides guidelines for ad-free shelters as well as strict advertising standards for ad-supported shelters.

Transit information, including maps, arrival times, and connection information is also helpful at bus stops, as well as where Pace bus routes meet Metra stations. At these locations, the RTA Interagency Sign Design Manual is recommended for standardized wayfinding signage related specifically to transit transfer locations.

Figure 2.11 Covered bike parking at the Lake Forest Metra Station. Source: Daily North Shore JWC Media.

Bike Boulevard

A bike boulevard is a combination of traffic calming treatments combined with select pavement markings and signage to create a shared roadway where bicycle travel is prioritized.

Basics: Bike boulevards combine **speed management** strategies (speed humps, mini traffic circles, roadway narrowing) with **volume management** strategies (cul de sacs, barrier medians or partial closures with bicycle-size cut-throughs) to create a roadway where automobile travel is welcome, but speeding and excessive cut-through traffic are discouraged.

Shared lane markings or bike boulevard symbols are installed in the center of the travel lane, making clear that the space is intended for bicycling, and that motorists must change lanes to pass when space is available.

Mix and Match: When designing a bike boulevard, there is no one-size-fits-all, but generally they are designed with families in mind. Good roadway candidates include low-speed (25 mph preferred) roadways that are located near commercial corridors. Bike boulevards are more casual and family-friendly than traveling in a bike lane on a major road with on-street parking.

Figure 2.12 Bike boulevard in Berkeley, California. Source: NACTO.

Custom Roadway Reconfiguration

There are two locations where environmental or right of way constraints create challenges for accommodating bicycling in the Northern Lakeshore study area. Both occur within Illinois Beach State Park, where preservation of natural habitat is of primary importance, and roadway widening is not feasible. These two locations are shown in more detail in the Network Recommendations section of the plan.

When roadway widening or expansion is not an option, recommendations in this plan combine design guideline elements to create bicycle facilities using the existing pavement width.

These examples are referred to as “custom roadway reconfigurations” as they involve reallocating existing roadway space to make room for advisory bike lanes, advisory shoulders, separated bike lanes, or sidepaths.

By reallocating existing pavement, the footprint remains the same, traffic is calmed, and walking and bicycling facilities are created. Flexible delineator posts, like those shown below, are a gentle way to separate roadway users without inserting a fixed object that poses a crash hazard.

Figure 2.13 Flexible delineator posts near a pedestrian crossing. Source: Tactical Urbanist’s Guide.

Intersection Radius + Ramp Improvements

Intersection turning radii design guidelines are largely influenced by the types of vehicles that must be able to make turns, as larger vehicles require larger turning radii to complete a turn. However, in the presence of large radii, smaller vehicles can complete turns at higher speeds and may be less likely to see and yield to pedestrians and bicyclists in a crossing.

Basics: If large vehicle movements are infrequent or not permitted, reducing the turning radius can improve walking and bicycling by reducing the speed at which vehicles can turn and reduce the length of the crossing, thereby reducing the length of time a person is exposed to traffic.

More Room for Ramps: Reducing corner radii provides more room at crosswalks for the installation of accessible curb ramps. These ramps help align pedestrian crossings to the shortest intended path of travel and reduce the length of time users are exposed to potential conflicts.

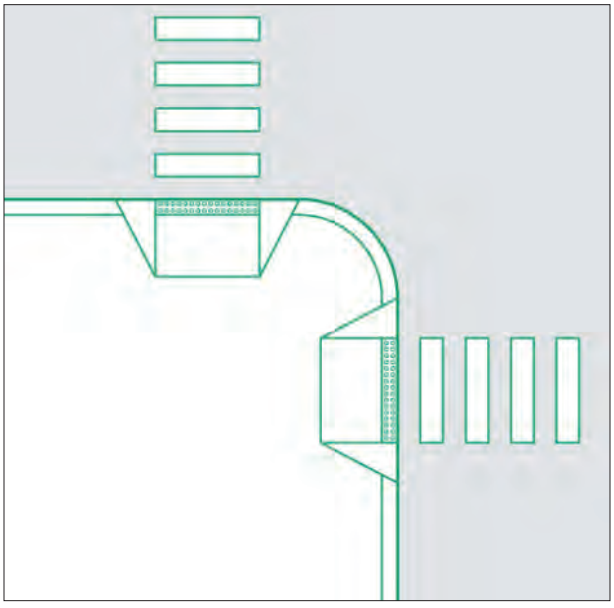


Figure 2.14 Small corner radius provides more room for curb ramps at intersections. Source: NACTO.

Marked Crosswalk

While crosswalks do not need to be marked to be considered legal, marked crosswalks provide helpful information on intended crossing locations at intersections. They also provide a visual indicator to approaching motorists.

Basics: Transverse lines like those shown below are referred to as high visibility or continental crosswalks, and are the preferred standard for any marked crosswalk at an unsignalized location, near schools, parks, places of worship, and anywhere pedestrian crossing activity is expected to be common. Markings are installed in this direction to be as visible as possible to approaching motorists.

Placement: Typical pavement markings for market crosswalks may be 1 or 2 feet wide and 6 feet long, with 1 or 2-foot gaps between each (1-foot line = 1-foot gap, 1-foot line = 2-foot gap). Where possible warning signage (MUTCD sign S1-1, W16-9P, and W16-7P) should be installed in advance of the crosswalk (300- to 500-feet in advance depending on posted speed).

These may be supplemented with in-street signs (MUTCD R1-6a and supplemented with S4-3P in school zones).

2.15 Marked crosswalk with in-road Must Stop for Pedestrian sign on 9th Street at Russell Avenue near Westfield School in Winthrop Harbor.

Midblock Crossings

Midblock crossings utilize the same design guidelines as marked crosswalks at intersections.

Basics: Midblock crossings should be placed no closer than 500 feet from the nearest signalized intersection and should utilize high visibility crosswalk markings, and warning signage in advance of the crossing as well as at the crossing location. They are recommended on roadways with posted speeds of 35 mph or lower. In-street signs may be installed at crossing locations to further improve visibility from a distance.

Mitigating Width, Volume + Speed: When midblock locations are located on roadways with posted speeds above 35 mph, roadways with more than 2 travel lanes, or on roadways with more than 15,000 daily vehicles, additional treatments should be considered.

Median refuge islands installed in the center of the roadway help to split the crossing into two smaller movements and provide a place for pedestrians or bicyclists to wait for a gap in traffic. Pedestrian hybrid beacons (PHB) may be considered for the crossing and function like railroad crossing lights when activated.

Figure 2.16 Midblock crossing with refuge island and hybrid beacon. Source: Atlanta Journal-Constitution.

Traffic Signal

Traffic signals are the most common method for assigning right of way at intersections and are among the most well understood. However, they are also among the most expensive.

Basics: Signalized intersections may be installed if they satisfy the criteria outlined in one or more warrants in the MUTCD. If warranted, signals should include signal phases to accommodate each movement and user group, including pedestrian crossings.

Equity + Function: Bicyclists and pedestrians should be able to cross during each signal cycle unless it is well documented that there is no current or future need. Crossings may be facilitated by providing a pedestrian phase by default or through the installation of pedestrian push buttons. Push buttons should be located where they are accessible from the sidewalk and should comply with ADA accessibility guidelines.

Bike signals may be provided, but are only necessary if bicyclists are traveling on a facility separated from automobile lanes or pedestrian traffic. On sidepaths, bicyclists would cross at the same time as pedestrians.

Figure 2.17 Sidepath on Wadsworth Road in Beach Park

Wayfinding + 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 best way to avoid crossing at unsignalized or otherwise uncomfortable locations. They provide helpful information in Mobility Improvement Areas, facilitating the first and last mile of nonmotorized trips.

Basics: Basic wayfinding signage consists of green signs (MUTCD D-series) that convey distance, destination, and direction information. These signs are intended to be read by people walking and bicycling, as well as motorized traffic traveling at slow speeds.

Branding Opportunity: Wayfinding signage may also be customized, which is a helpful way to brand a particular route, district, or region and allows municipalities to create a sense of place, as well as encourage and support recreation and tourism. For example, by branding a route or trail system, custom wayfinding signage helps users feel more comfortable navigating an area with which they may be unfamiliar. For wayfinding concepts developed for this plan, refer to the Appendix.

Figure 2.18 Example of a branded Northern Lakeshore directional sign concept.

Bridge or Railroad Overpass

There are some locations where a full grade separation is needed to safely accommodate trail crossings or to close gaps in the network. In these cases, at-grade crossings are particularly challenging to upgrade or widen, and an overpass is sometimes the most feasible option.

Basics: Bridges over railroads must provide adequate vertical clearance, which ranges from 22-30 feet above the top of rail. Bridges over other roadways must meet vertical clearance requirements for trucks on most routes, which ranges from 14-15 feet above the roadway. Trails approaching these heights must rise at a slope that is accessible to all users, which is approximately 4-5% with regularly spaced flat landings.

Gateway Opportunity: Since roadway bridges and railroad overpasses are costly, there is incentive to treat them as gateways, welcoming users to a new municipality, region, or trail network. Strategically placed overpasses have the potential to reorient primary pathways into Illinois Beach State Park or help make lakefront areas accessible that previously were out of reach to most people walking or bicycling.

Figure 2.19 Robert McClory trail with significant vertical clearance over IL 173 in Zion. Source: Google.

3. PROPOSED NETWORK

GROWING THE NETWORK

The Northern Lakeshore Trail Connectivity Network Plan recommends 109 miles of proposed walking and bicycling facilities and infrastructure improvements at more than 30 intersections, 11 midblock locations, along with wayfinding signage at 152 locations and other spot treatments.

Figures 3.1 and **3.2** show existing, programmed, and proposed improvements at the regional level. Recommendations consist of corridor improvements and spot improvements at intersections, midblock locations, and infrastructure associated with Mobility Improvement Areas (MIA).

The Northern Lakeshore Trail Connectivity Plan proposes a network of facilities between the Des Plaines River Trail and Lake Michigan. However, to be consistent with the project limits, cost estimates were developed for recommendations within the study area boundary.

How to Read These Maps

Existing corridor facilities are displayed as solid lines. **Proposed** improvements include are shown in dashed lines. Projects that were already in the planning stages during this planning process are shown as proposed.

There are two overview maps for the entire study area (everything east of Green Bay Road) and two or more maps for each municipality and Illinois Beach State Park.

Maps show the proposed network, crossing improvements and enhancements to Mobility Improvement Areas (MIA). MIA infrastructure includes curb ramps, recommended changes to intersection geometry, additional marked crosswalks, traffic signals, enhanced bus stops with shelters, wayfinding and directional signage, and bike parking. These items are shown in municipal maps on two or more maps for each municipality and Illinois Beach State Park in **Figures 3.3** through **3.25**.

Please note: Water trail access points are shown to reflect work being done as part of a planning project with the Illinois Department of Natural Resources Coastal Management Program to identify publically accessible canoe and kayak launch locations.

For more information, visit: https://www2.illinois.gov/dnr/cmp/Pages/Lake-Michigan-Water-Trail.aspx.

Figure 3.1. Recommendations Overview Map North

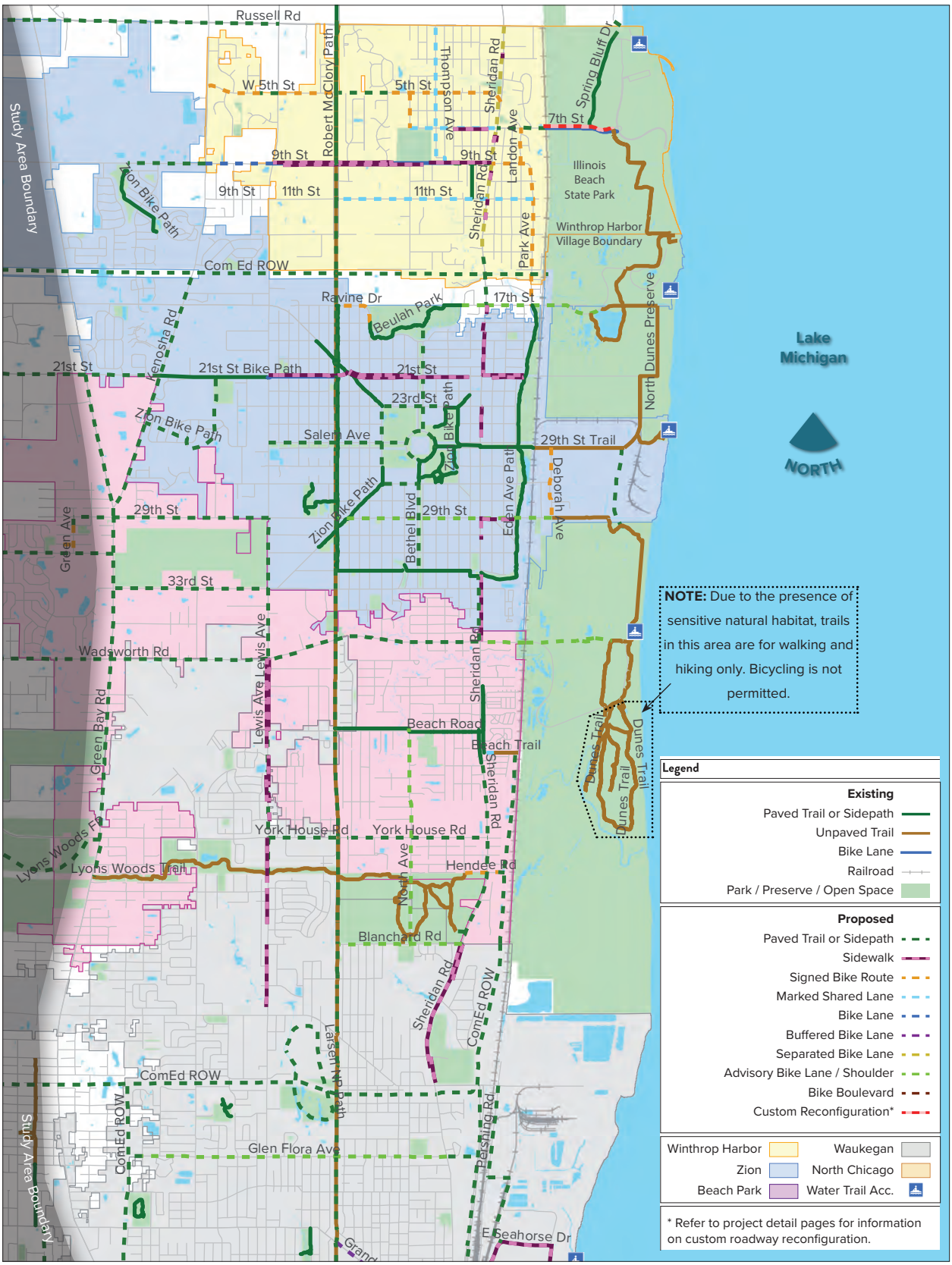


Figure 3.2. Recommendations Overview Map South

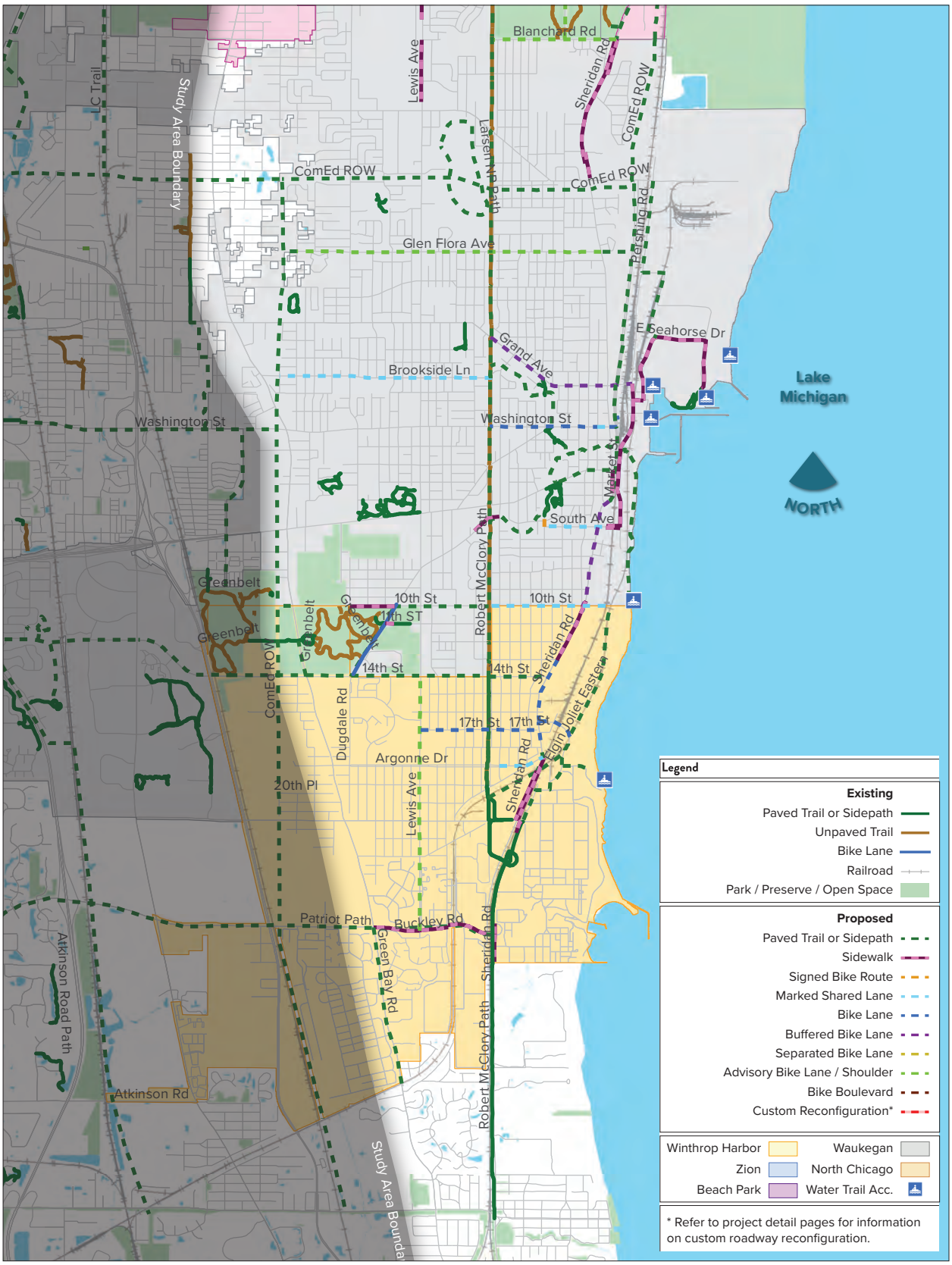


Figure 3.3. Winthrop Harbor West

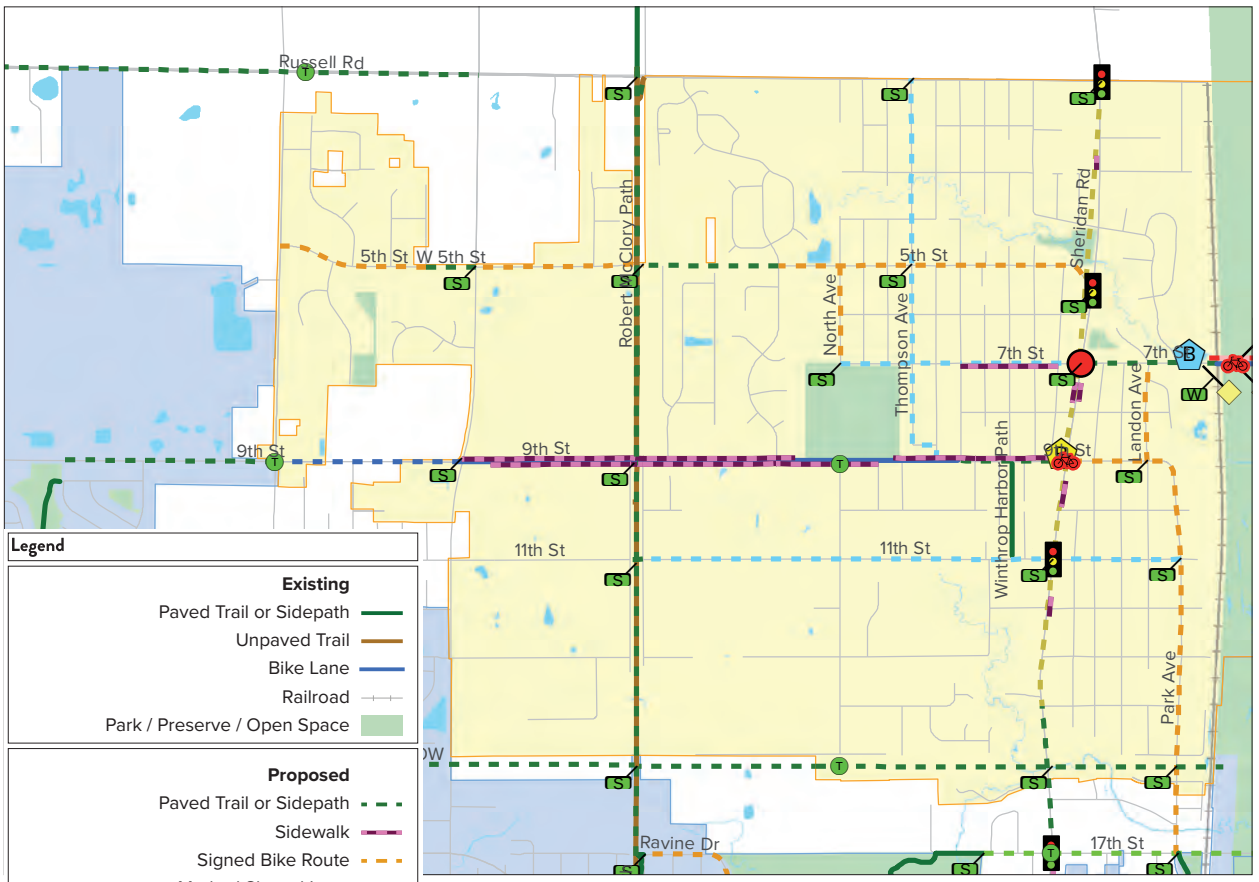


Figure 3.4. Winthrop Harbor East

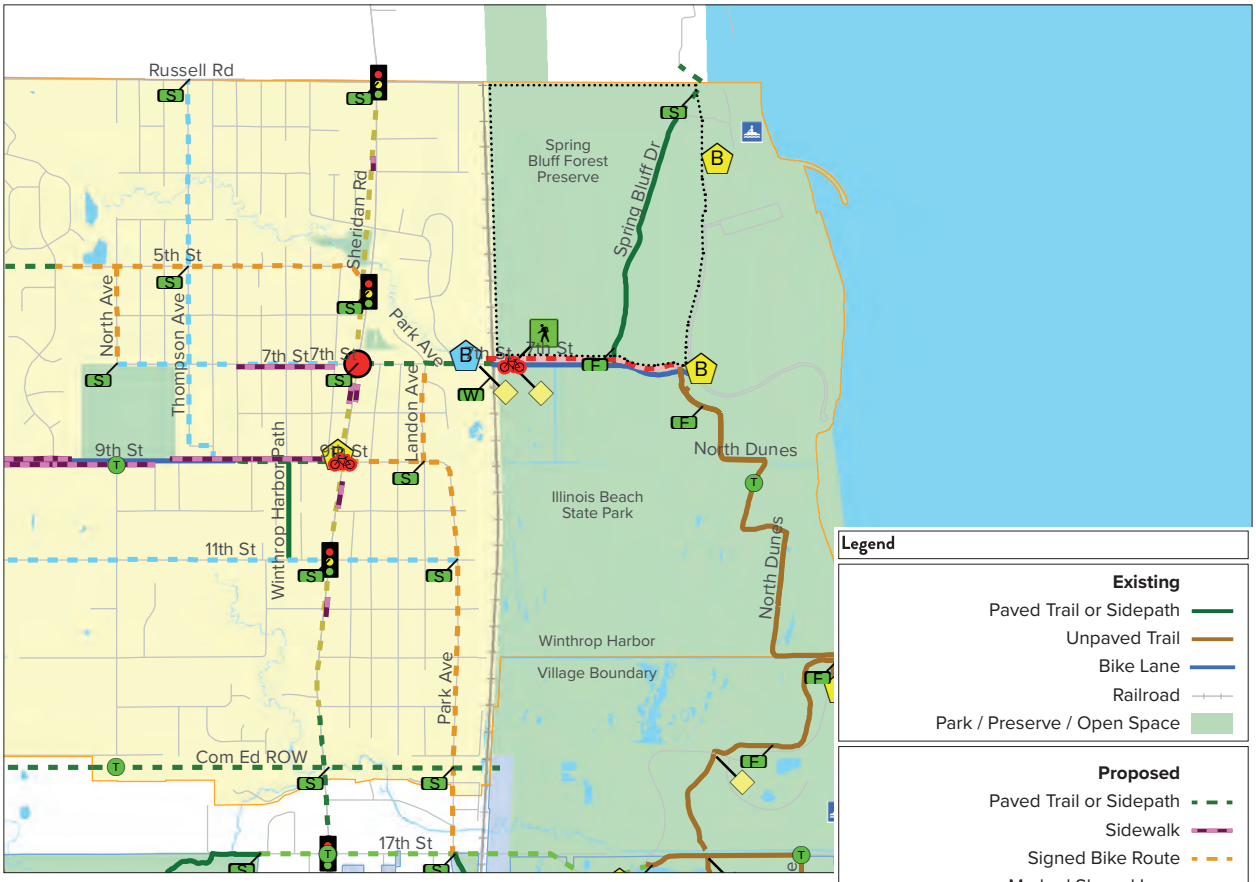


Figure 3.5. Winthrop Harbor + IDNR Custom Roadway Reconfiguration

7th Street

To improve connections between Metra and North Point Marina, a sidepath is recommended on the north side of 7th Street between the Metra Station and North Point Drive at North Point Marina. East of the tracks, a sidepath is proposed that utilizes existing pavement width. By reallocating roadway space, this would accommodate walking and bicycling on the north side of the roadway, with pavement markings and flexible delineators to separate it from the remaining two-way travel lanes for automobiles.

Wisconsin Connection

A connection is proposed to connect to trails and the Chiwaukee Preserve in Pleasant Prairie, Wisconsin. Currently, visitors travel through the boat storage yard, which creates a safety hazard. A path is proposed around the outside edge of this property owned by IDNR, which would provide access to Wisconsin and mitigate potential trail impacts to the adjacent Spring Bluff Forest Preserve maintained by the Lake County Forest Preserve District.

Figure 3.6. Winthrop Harbor Recommendations Summary

NETWORK RECOMMENDATIONS	LENGTH (MI)	COST
RAISED BIKE LANES	1.61	$ 3,899,800
SHARED LANES	3.02	$ 16,000
SIDEPATH/PAVED TRAIL	2.78	$ 6,147,300
SIDEWALK	2.58	$ 2,855,900
SIGNED ROUTE	2.35	$ 27,400
UNPAVED TRAIL	0.47	$ 174,300
NETWORK SUBTOTAL	**12.81**	**$ 13,120,700**
INTERSECTION + MIDBLOCK		**COST**
TRAFFIC SIGNAL		$ 1,580,000
CROSSWALK		$ 3,000
TURNING RADIUS, CURB RAMP		$ 10,000
TRAIL CROSSING, CURB RAMP		$ 14,000
TRAIL CROSSING, BIKE TRANSITION, MIDBLOCK CROSSING		$ 14,000
BIKE TRANSITION		$ 10,000
INTERSECTION + MIDBLOCK SUBTOTAL		**$ 1,631,000**
OTHER MOBILITY IMPROVEMENTS		**COST**
BIKE RACKS		$ 4,000
COVERED BIKE PARKING		$ 5,600
WAYFINDING AND DIRECTIONAL SIGNS		$ 35,600
OTHER MOBILITY IMPROVEMENT SUBTOTAL		**$ 45,200**

WINTHROP HARBOR TOTAL		**$ 14,796,900**

Figure 3.7. Zion West

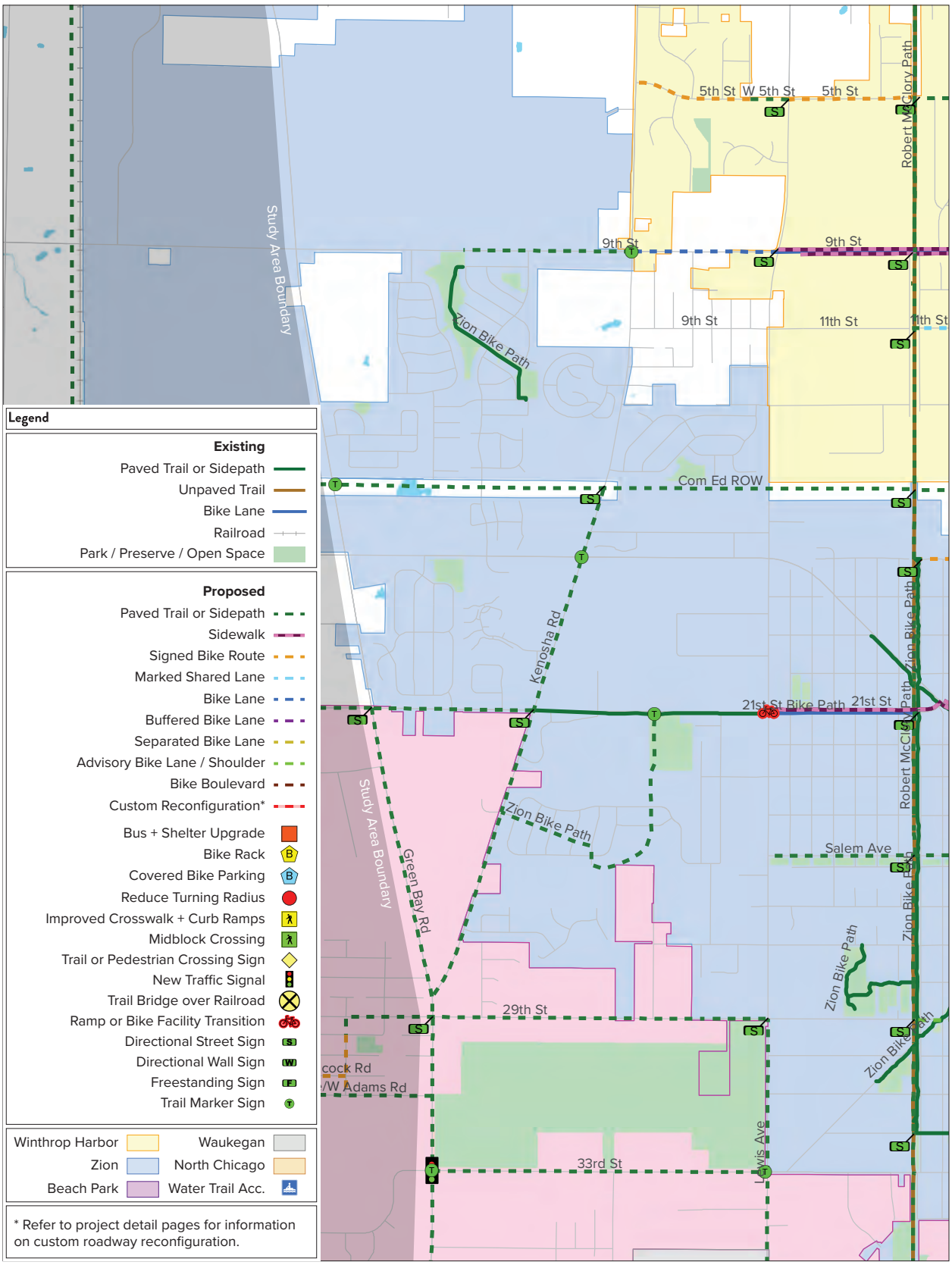


Figure 3.8. Zion East

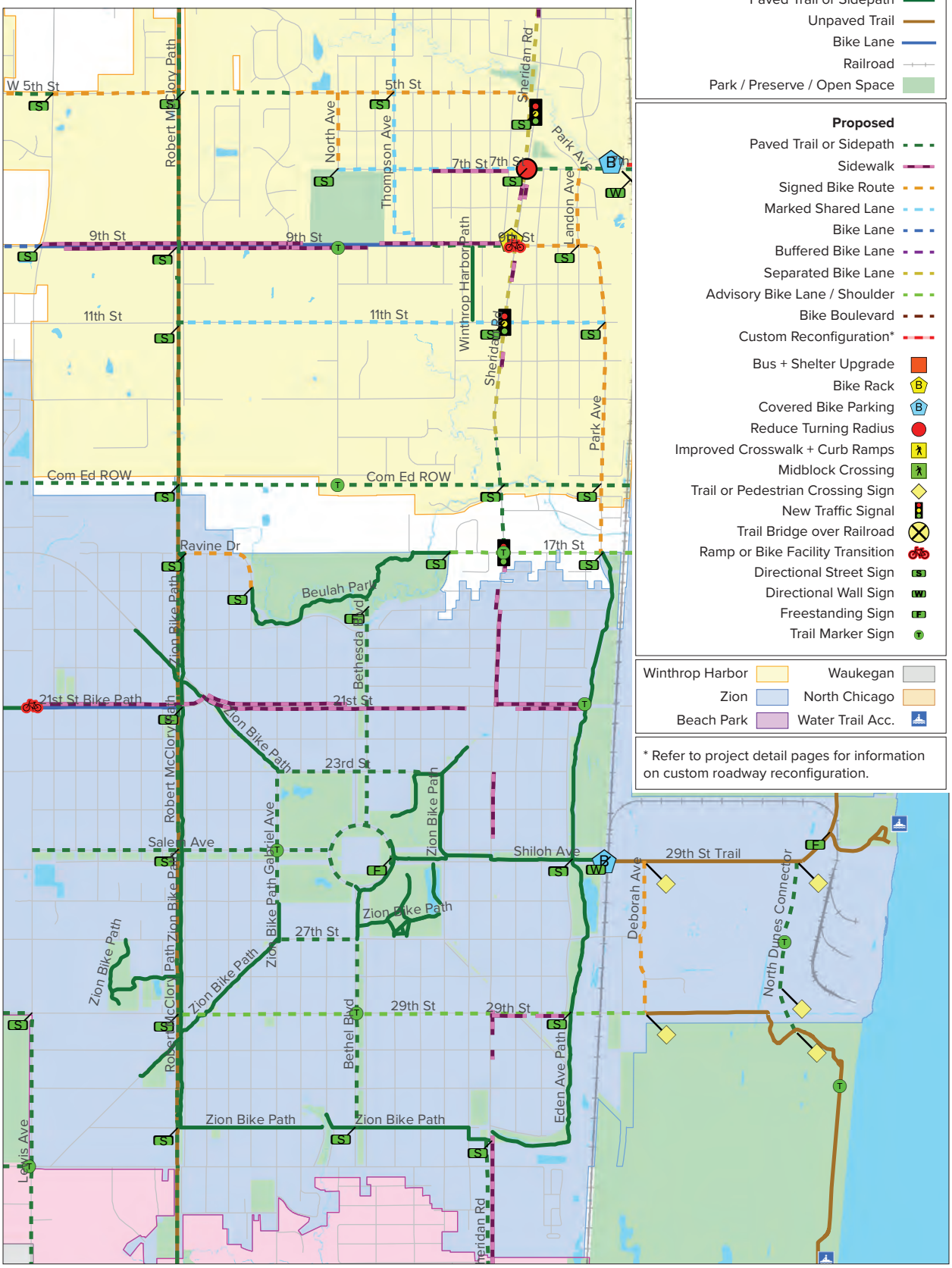


Figure 3.9. Zion Recommendations Summary

NETWORK RECOMMENDATIONS	LENGTH (MI)	COST
ADVISORY LANES	2.07	$ 674,300
BIKE LANES	0.48	$ 154,900
SIDEPATH/PAVED TRAIL	12.31	$ 13,328,900
SIDEWALK	3.86	$ 4,281,000
SIGNED ROUTE	1.86	$ 21,700
UNPAVED TRAIL	2.33	$ 861,300
NETWORK SUBTOTAL	**22.91**	**$ 19,322,100**
INTERSECTION + MIDBLOCK		**COST**
BIKE TRANSITION		$ 10,000
DETECTABLE WARNINGS		$ 130,000
TRAIL CROSSING SIGN		$ 2,000
TRAIL CROSSING		$ 16,000
INTERSECTION + MIDBLOCK SUBTOTAL		**$ 158,000**

OTHER MOBILITY IMPROVEMENTS		COST
COVERED BIKE PARKING		$ 5,600
WAYFINDING AND DIRECTIONAL SIGNS		$ 63,200
OTHER MOBILITY IMPROVEMENT SUBTOTAL		**$ 68,800**

ZION TOTAL		$ 19,548,900


AHEAD

Figure 3.10. Beach Park West

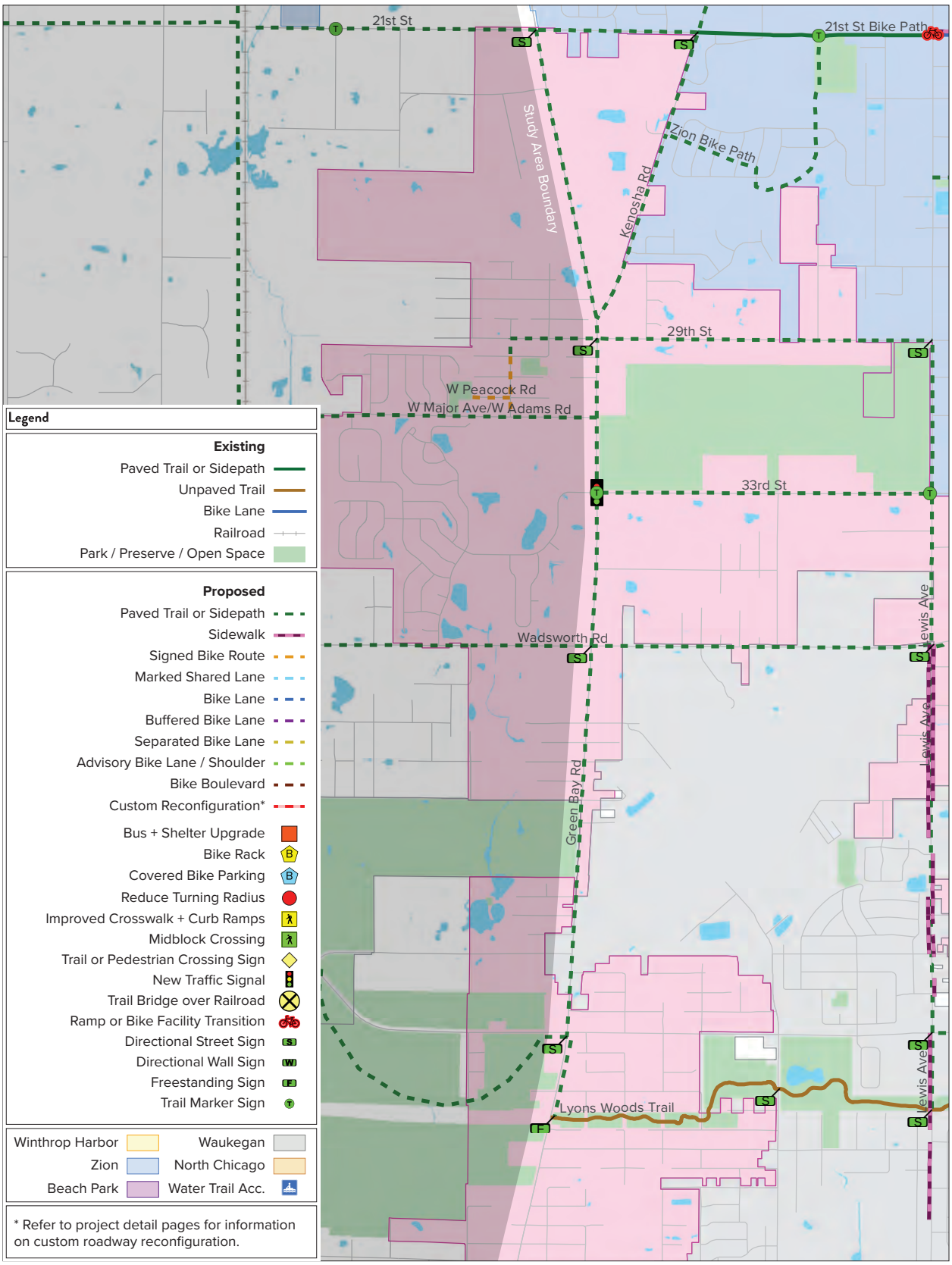


Figure 3.11. Beach Park East

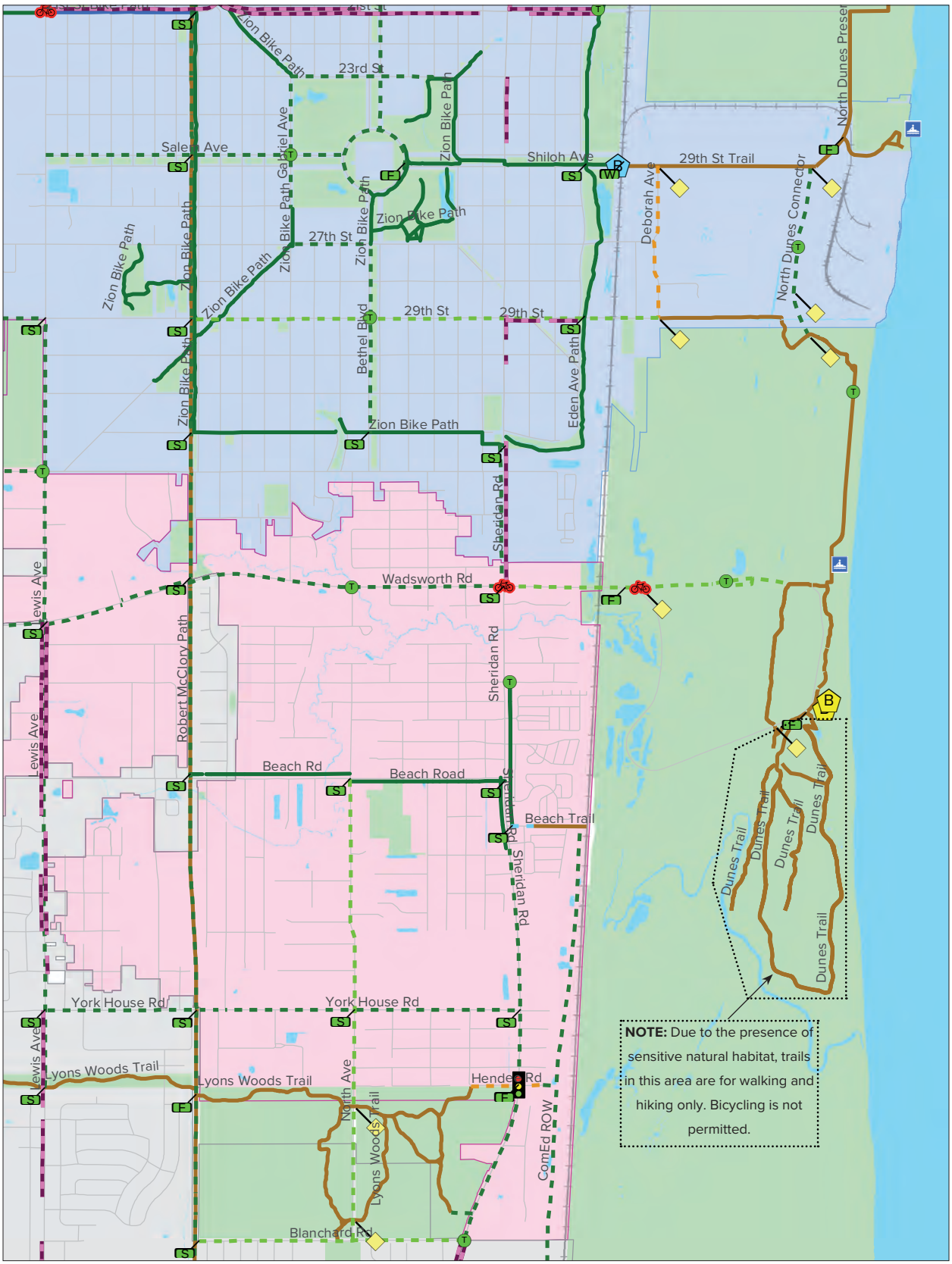


Figure 3.12. Beach Park + IDNR Custom Roadway Reconfiguration

Detail map of Wadsworth Road + Patomos Avenue reconfigurations to accommodate walking and bicycling.

Wadsworth Road + "Old Wadsworth Road"

Wadsworth Road is the primary entrance to Illinois Beach State Park (South Section). As discussed in the Existing Conditions Report, the entrance drive (Patomos Avenue) is a two-mile loop road and includes no accommodation for walking and bicycling.

To shorten the distance to the lakefront and better accommodate people walking and bicycling, a custom roadway reconfiguration is recommended that converts the east-west running campground access drive into a facility that also accommodates walking and bicycling.

Pavement markings and signage would be used to establish this arrangement at regular intervals to discourage automobiles from entering the non-motorized side of the roadway, and would not require roadway widening, which minimizes impacts to environmentally-sensitive areas in the park.

Figure 3.13. Beach Park Recommendations Summary

NETWORK RECOMMENDATIONS	LENGTH (MI)		COST
ADVISORY LANES	1.84	$	597,600
SHARED LANES	0.09	$	500
SIDEPATH/PAVED TRAIL	11.19	$	13,757,500
SIDEWALK	2.30	$	2,551,800
SIGNED ROUTE	0.23	$	2,800
UNPAVED TRAIL	2.53	$	936,700
NETWORK SUBTOTAL	18.19	**$**	**17,846,900**
INTERSECTION + MIDBLOCK			**COST**
BIKE TRANSITION		$	10,000
TRAIL CROSSING SIGN		$	1,000
TRAIL CROSSING, MIDBLOCK CROSSING		$	14,000
RAILROAD OVERPASS, TRAIL CROSSING		$	5,251,000
TRAFFIC SIGNAL		$	1,185,000
INTERSECTION + MIDBLOCK SUBTOTAL		**$**	**6,461,000**

OTHER MOBILITY IMPROVEMENTS			COST
WAYFINDING AND DIRECTIONAL SIGNS		$	26,000
OTHER MOBILITY IMPROVEMENT SUBTOTAL		**$**	**26,000**

BEACH PARK TOTAL		**$**	**24,333,900**

Figure 3.14. Waukegan Northwest

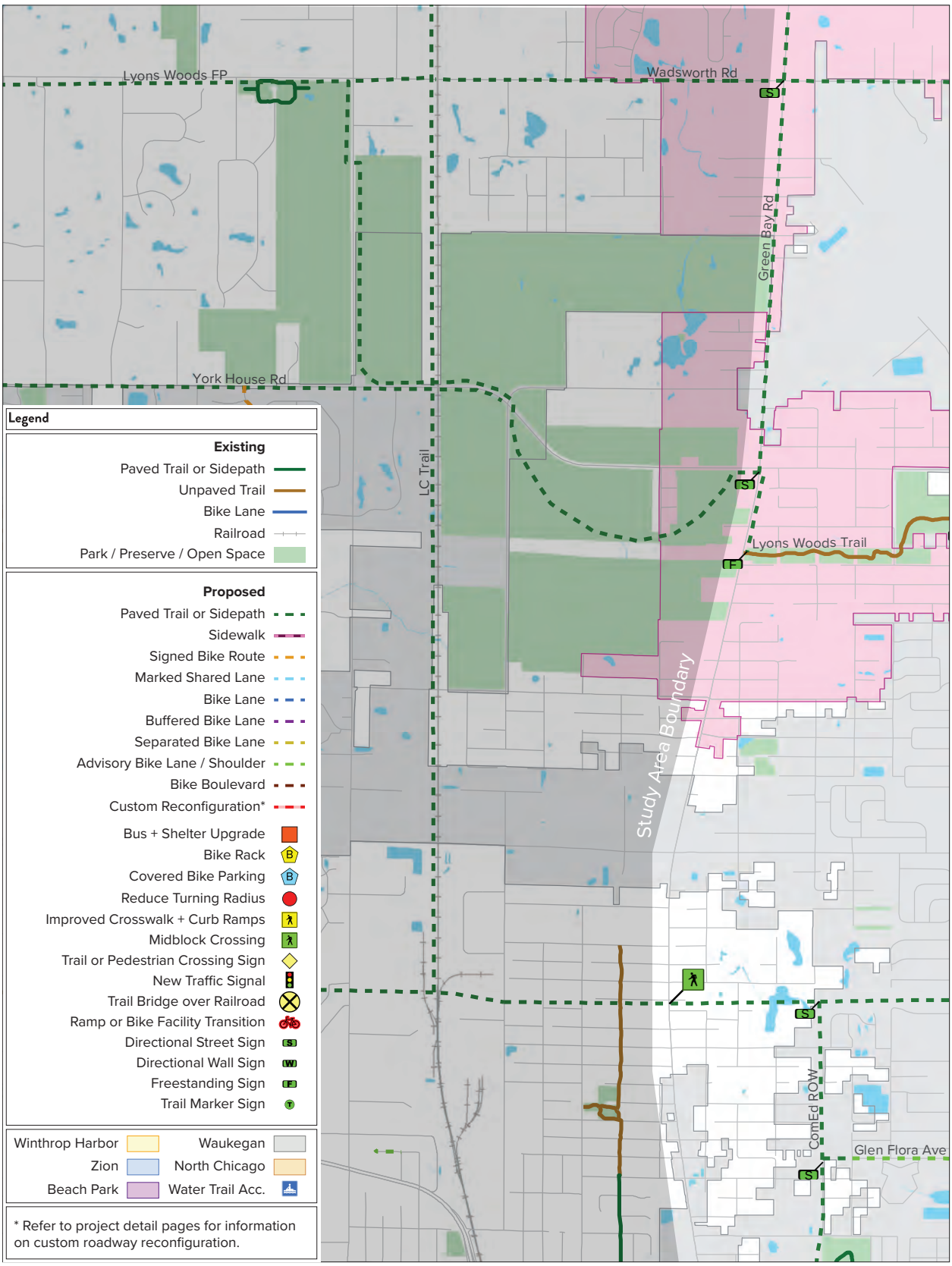


Figure 3.15. Waukegan Northeast

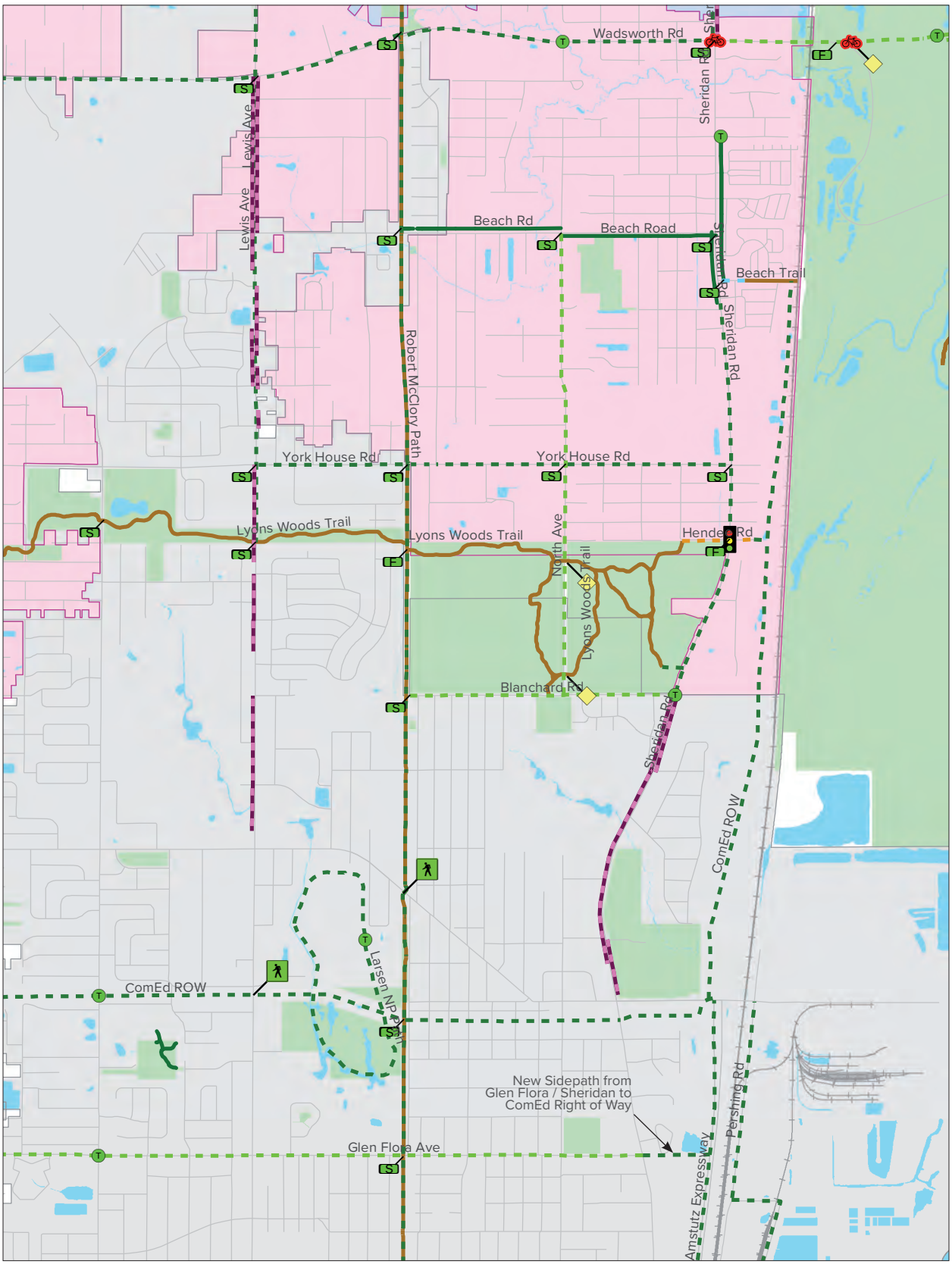


Figure 3.16. Waukegan Southwest

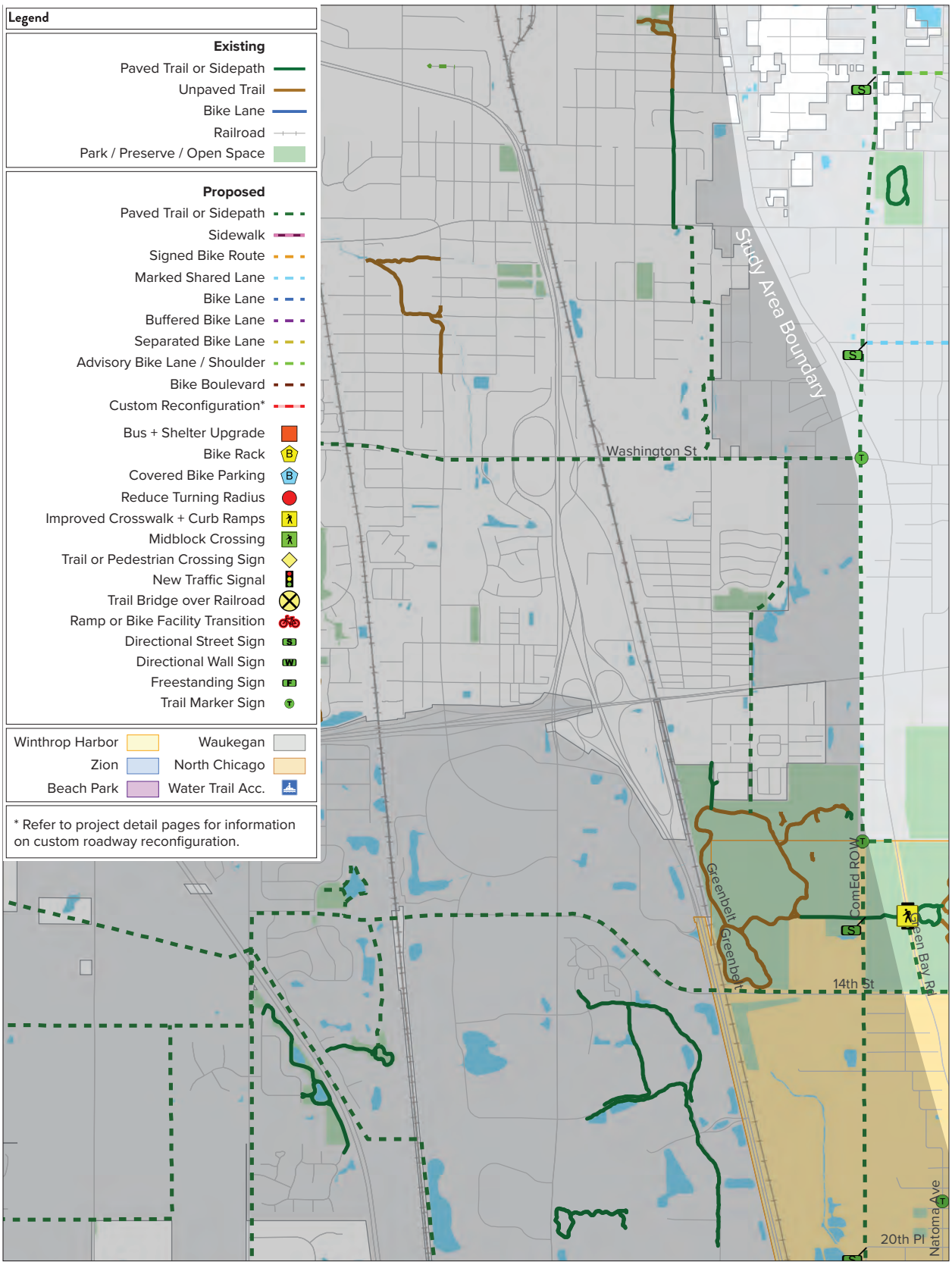


Figure 3.17. Waukegan Southeast

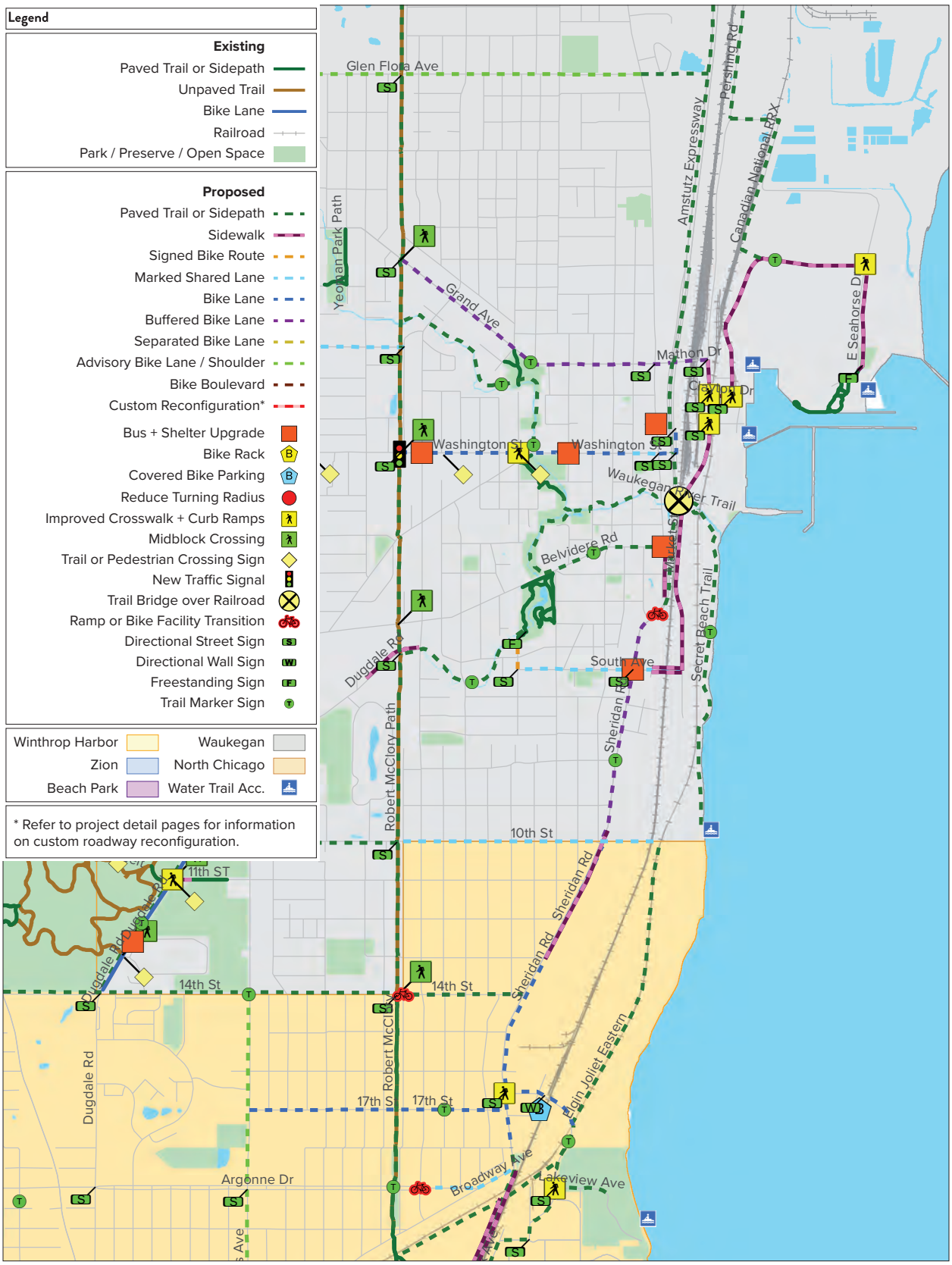


Figure 3.18. Waukegan Recommendations Summary

NETWORK RECOMMENDATIONS	LENGTH (MI)	COST
ADVISORY LANES	3.10	$ 1,005,300
BIKE LANES	3.19	$ 1,035,300
BUFFERED BIKE LANES	1.90	$ 681,500
RAIL TO TRAIL	0.96	$ 1,086,100
SHARED LANES	3.16	$ 16,900
SIDEPATH/PAVED TRAIL	11.92	$ 11,562,100
SIDEWALK	6.01	$ 6,696,700
SIGNED ROUTE	0.08	$ 900
UNPAVED TRAIL	6.55	$ 5,919,900
NETWORK SUBTOTAL	36.85	**$ 28,004,700**
INTERSECTION + MIDBLOCK		**COST**
ACCESS RAMP		$ 45,000
ACCESS RAMP, MIDBLOCK CROSSING		$ 70,000
BIKE TRANSITION		$ 10,000
CROSSWALK, CURB RAMP		$ 52,000
MIDBLOCK CROSSING		$ 61,000
MIDBLOCK CROSSING, ACCESS RAMP, CROSSWALK		$ 3,774,000
RAILROAD OVERPASS, TRAIL CROSSING		$ 5,250,000
TRAFFIC SIGNAL, ACCESS RAMP, CROSSWALK, CURB RAMP		$ 4,158,000
TRAFFIC SIGNAL, CROSSWALK, CURB RAMP		$ 408,000
TRAFFIC SIGNAL, MIDBLOCK CROSSING		$ 405,000
TRAIL CROSSING SIGN		$ 2,000
INTERSECTION + MIDBLOCK SUBTOTAL		**$ 14,235,000**

OTHER MOBILITY IMPROVEMENTS		COST
BUS SHELTER		$ 174,400
WAYFINDING AND DIRECTIONAL SIGNS		$ 91,600
OTHER MOBILITY IMPROVEMENT SUBTOTAL		**$ 266,000**

WAUKEGAN TOTAL		**$ 42,505,700**

Figure 3.19. North Chicago West

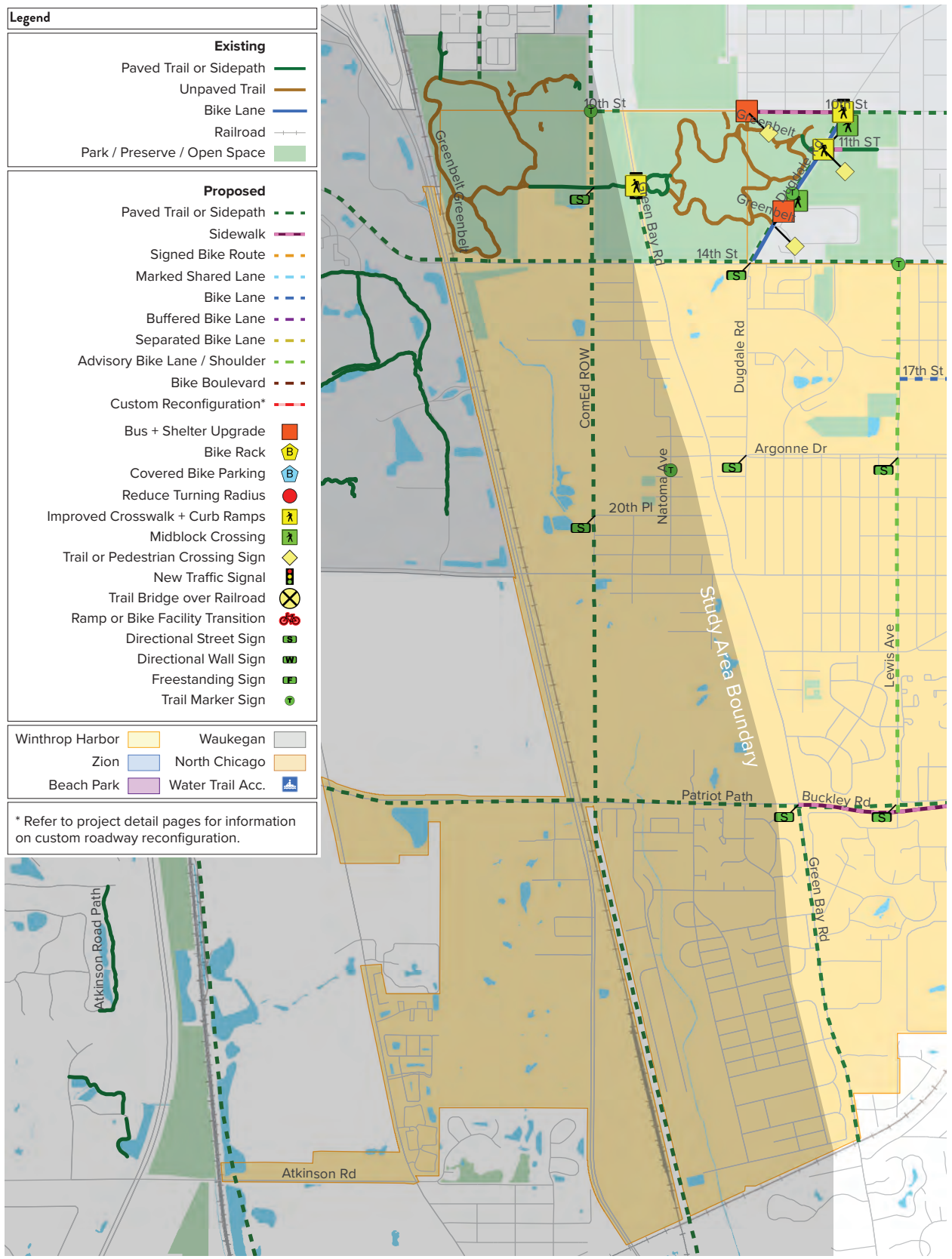


Figure 3.20. North Chicago East

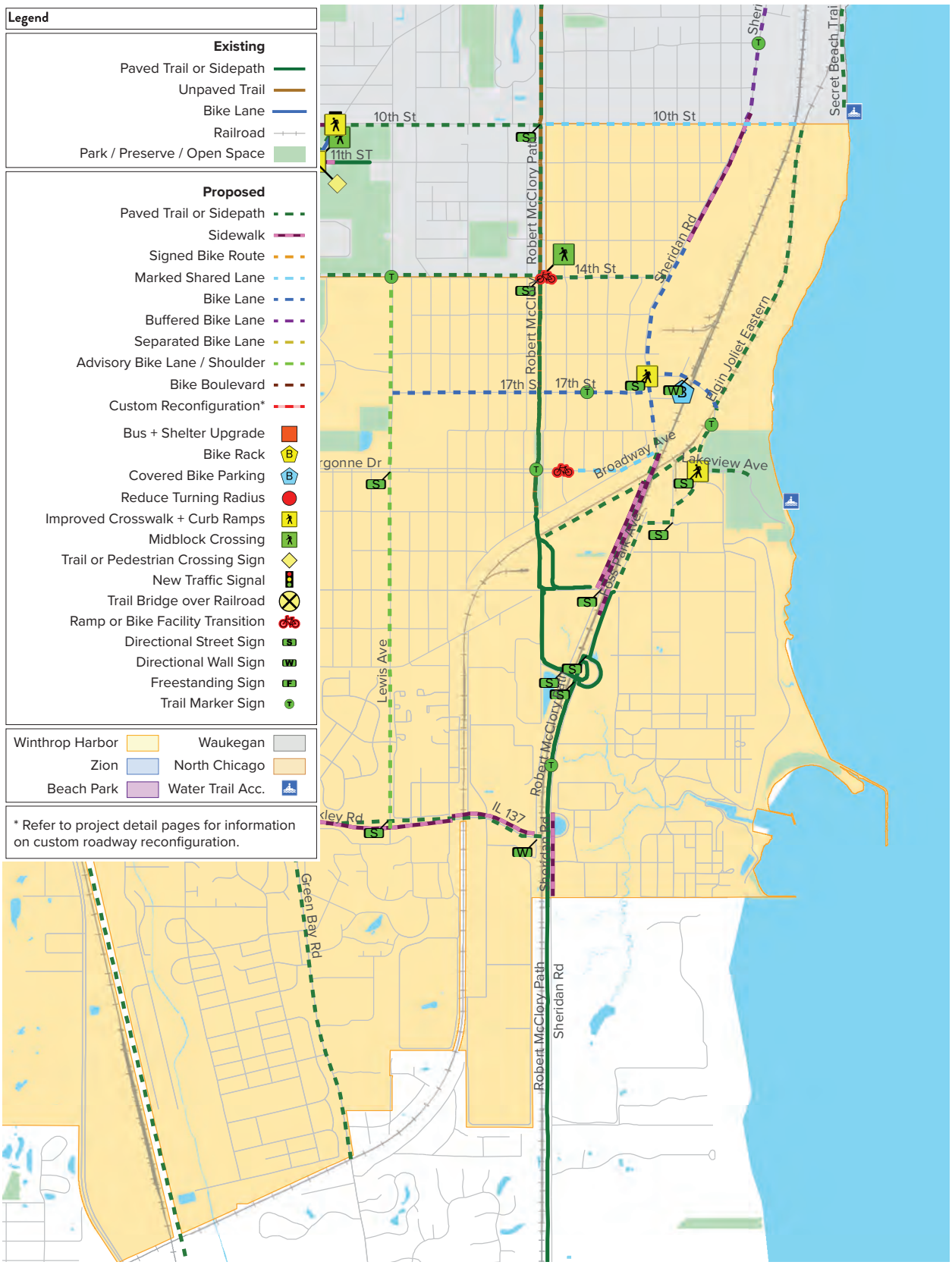


Figure 3.21. North Chicago Recommendations Summary

NETWORK RECOMMENDATIONS	LENGTH (MI)	COST
ADVISORY LANES	1.79	$ 582,300
BIKE LANES	2.63	$ 835,100
RAIL TO TRAIL	1.60	$ 1,806,600
SHARED LANES	1.24	$ 6,600
SIDEPATH/PAVED TRAIL	4.10	$ 3,946,200
SIDEWALK	2.03	$ 2,255,100
UNPAVED TRAIL	1.53	$ 565,400
NETWORK SUBTOTAL	14.93	**$ 9,997,300**
INTERSECTION + MIDBLOCK		**COST**
BIKE TRANSITION		$ 20,000
CROSSWALK, CURB RAMP		$ 26,000
MIDBLOCK CROSSING		$ 10,000
TRAFFIC SIGNAL, ACCESS RAMP, CROSSWALK		$ 4,158,000
TRAIL CROSSING, CURB RAMP		$ 14,000
INTERSECTION + MIDBLOCK SUBTOTAL		**$ 4,228,000**

OTHER MOBILITY IMPROVEMENTS		COST
COVERED BIKE PARKING		$ 5,600
BUS SHELTERS & BUS PAD		$ 21,800
WAYFINDING AND DIRECTIONAL SIGNS		$ 45,200
OTHER MOBILITY IMPROVEMENT SUBTOTAL		**$ 72,600**

NORTH CHICAGO TOTAL		$ 14,297,900

Figure 3.22. Illinois Beach State Park, North Unit

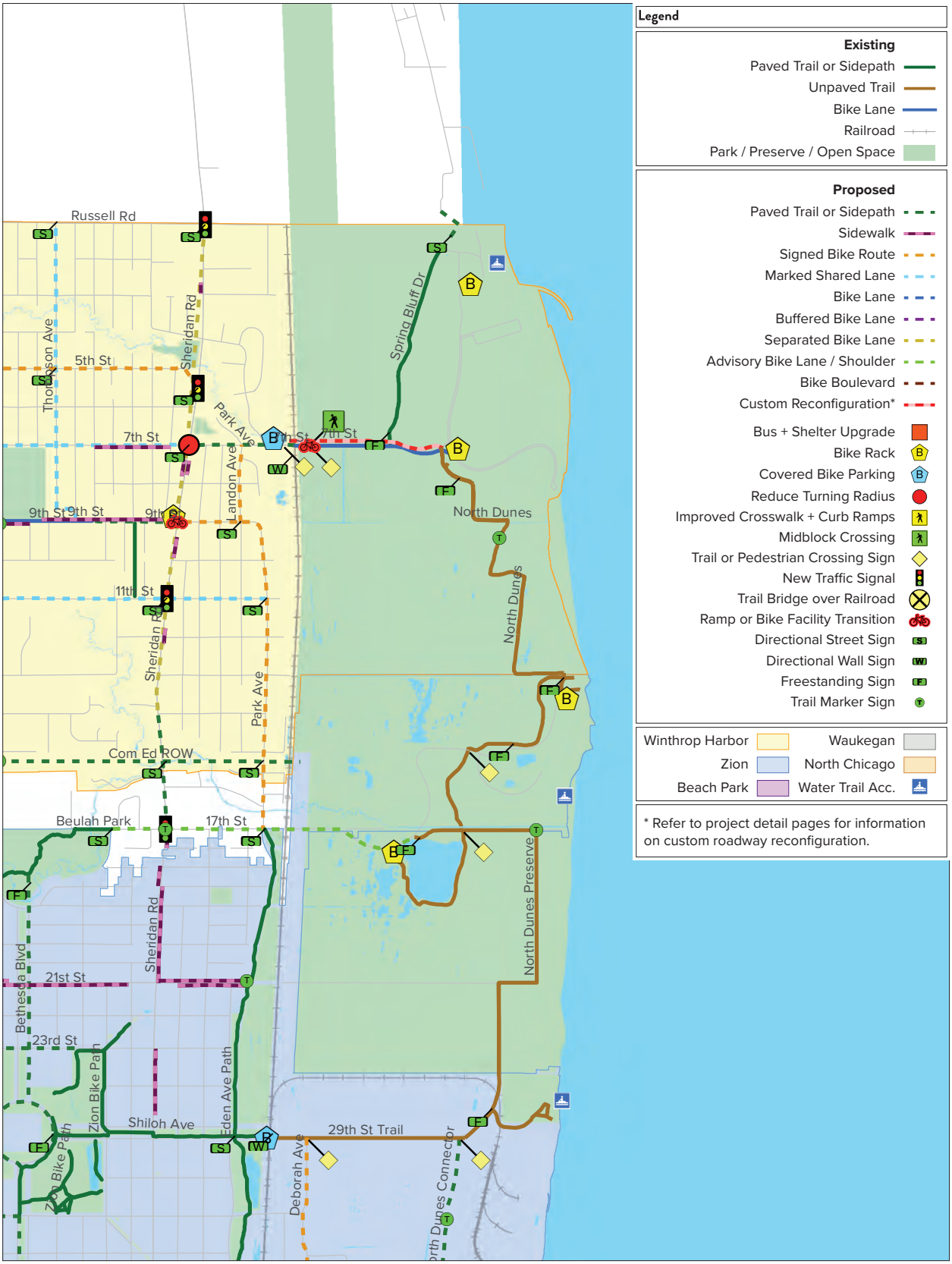


Figure 3.23. Illinois Beach State Park, South Unit

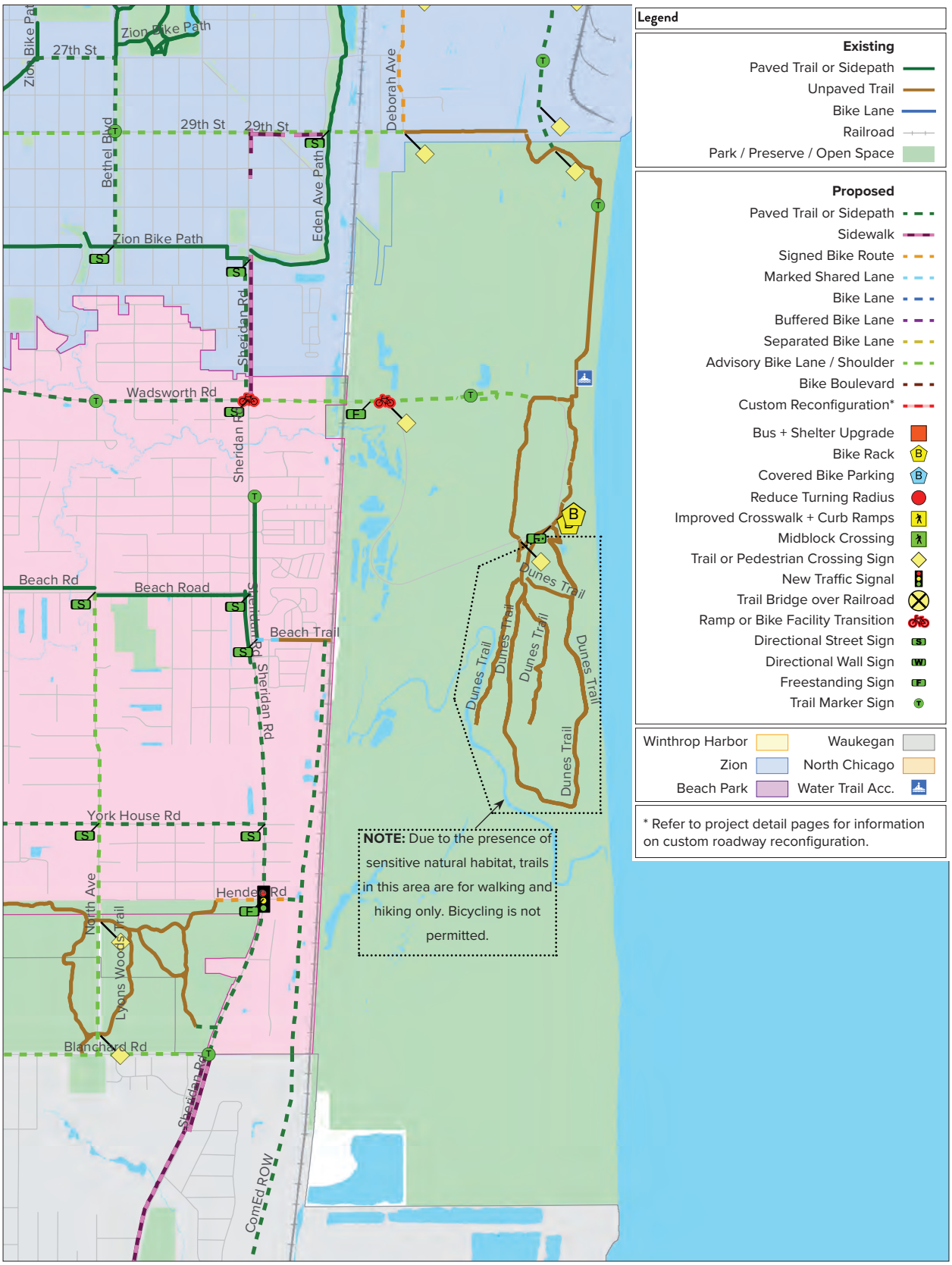


Figure 3.24. IDNR Recommendations Summary

NETWORK RECOMMENDATIONS	LENGTH (MI)	COST
ADVISORY LANES	0.45	$ 147,300
CUSTOM ROADWAY RECONFIGURATION	1.27	$ 413,600
NETWORK SUBTOTAL	1.72	**560,900**
INTERSECTION + MIDBLOCK		**COST**
CROSSWALK		$ 3,000
INTERSECTION + MIDBLOCK SUBTOTAL		**$ 3,000**

MOBILITY IMPROVEMENTS		
BIKE RACK		$ 6,000
MOBILITY IMPROVEMENT SUBTOTAL		**$ 6,000**

IDNR TOTAL		$ 569,900

Figure 3.25. Northern Lakeshore Recommendations Summary

NETWORK RECOMMENDATIONS	LENGTH (MI)	COST
ADVISORY LANES	9.26	$ 3,006,800
BIKE LANES	6.29	$ 2,025,300
BUFFERED BIKE LANES	1.90	$ 681,500
CUSTOM ROADWAY RECONFIGURATION	1.27	$ 413,600
RAIL TO TRAIL	2.56	$ 2,892,700
RAISED BIKE LANES	1.61	$ 3,899,800
SHARED LANES	7.50	$ 40,000
SIDEPATH/PAVED TRAIL	42.30	$ 48,742,000
SIDEWALK	16.79	$ 18,640,500
SIGNED ROUTE	4.52	$ 52,800
UNPAVED TRAIL	13.41	$ 8,457,600
NETWORK SUBTOTAL	**107.41**	**$ 88,852,600**
INTERSECTION + MIDBLOCK		**COST**
ACCESS RAMP		$ 45,000
ACCESS RAMP, MIDBLOCK CROSSING		$ 70,000
BIKE TRANSITION		$ 60,000
CROSSWALK		$ 6,000
CROSSWALK, CURB RAMP		$ 78,000
DETECTABLE WARNINGS		$ 130,000
MIDBLOCK CROSSING		$ 71,000
MIDBLOCK CROSSING, ACCESS RAMP, CROSSWALK		$ 3,774,000
RAILROAD OVERPASS, TRAIL CROSSING		$ 10,501,000
TRAFFIC SIGNAL		$ 2,765,000
TRAFFIC SIGNAL, ACCESS RAMP, CROSSWALK		$ 4,158,000
TRAFFIC SIGNAL, ACCESS RAMP, CROSSWALK, CURB RAMP		$ 4,158,000
TRAFFIC SIGNAL, CROSSWALK, CURB RAMP		$ 408,000
TRAFFIC SIGNAL, MIDBLOCK CROSSING		$ 405,000
TRAIL CROSSING		$ 16,000
TRAIL CROSSING, BIKE TRANSITION, MIDBLOCK CROSSING		$ 14,000
TRAIL CROSSING, CURB RAMP		$ 28,000
TRAIL CROSSING, MIDBLOCK CROSSING		$ 14,000
TRAIL CROSSING SIGN		$ 5,000
TURNING RADIUS, CURB RAMP		$ 10,000
INTERSECTION + MIDBLOCK SUBTOTAL		**$ 26,716,000**

OTHER MOBILITY IMPROVEMENTS		COST
BIKE RACKS		$ 10,000
COVERED BIKE PARKING		$ 16,800
BUS SHELTERS $ BUS PAD		$ 21,800
BUS SHELTER		$ 174,400
WAYFINDING AND DIRECTIONAL SIGNS		$ 267,600
OTHER MOBILITY IMPROVEMENT SUBTOTAL		**$ 490,600**

PROJECT TOTAL		**$ 116,059,200**

4. POLICIES + PROGRAMS

BEYOND INFRASTRUCTURE

Policies and programs help create a supportive and welcoming environment for pedestrians and bicyclists and provide near-term steps that can be taken in advance of infrastructure improvements. Each program or policy contains various steps that can be undertaken by one or more stakeholders and should be implemented to empower and provide leadership for the implementation of this plan. A brief overview is provided for each recommendation on the following pages.

More detailed information about each recommendation along with community examples and websites for further information is provided in the **Appendix.**

Adopt or Update Complete Streets Policies

As part of this plan, each municipality has been provided with the opportunity to develop or update its Complete Streets Policy to guide the accommodation of pedestrians, bicyclists, transit users, and motor vehicles.

This policy should be incorporated into all new transportation construction and maintenance projects whenever appropriate. Communities with a Complete Streets Policy are better positioned to take advantage of transportation funding opportunities.

Establish A Complete Streets Coordination Committee

Establish a Complete Streets Coordination Committee to guide implementation of complete streets, support interagency coordination, develop policies and programs, and evaluate progress made on plan implementation. The Committee should meet monthly or quarterly and be tasked with the following responsibilities:

- Review transportation projects
- Coordinate with IDOT
- Coordinate on funding
- Activate the community
- Address plan recommendations
- Evaluate progress

Education

Engaging educational activities and resources can be designed to promote safe travel behavior on local streets, help build more community support, and can foster an interest in walking, bicycling, and transit. The following educational programs and resources can be coordinated by the Complete Streets Coordination Committee and local municipalities:

Pedestrian & Bicycle Training
Offer pedestrian and bicycle training for adults, teens, and youth such as safety classes, bike mechanics workshops, and on-bike education classes.

Youth Bike Mechanics
Youth can learn to assemble bikes, ride safely, and use their knowledge to create a "pop-up" bike repair shop.

Regional Bike Map
Produce and distribute a free active transportation network map of the Northern Lakeshore region that includes safe bicycling and walking routes to key places and safety tips.

Walk and Bicycling Education Campaign
Distribute information about pedestrian and cycling safety and the transportation network through local media, newspapers, social media, community partners, the private sector, and health providers.


Helmet fitting. Source: Active Transportation Alliance.

Driver Safety Education
Regularly educate residents on cell phone use, speeding laws, sharing the road, and rules of the road.

Community-Centered Public Safety Alternatives
A community task force should be assembled to begin a dialogue between public safety officers and community representatives interested in advancing equity in public safety and addressing concerns associated with the vulnerability of being a minority while walking or bicycling.

This group should be included in decision-making around public safety programs to help each community determine alternative programming to build trust, create safer streets, and improve community-police relations. If deemed appropriate, task force members could lead a "caught being good" program to reward children for good walking and bicycling behaviors such as stopping at traffic lights or wearing their helmet properly.

Safe Routes Plans + Activities

Creating plans and opportunities for children, older adults, and vulnerable populations to navigate our region's transportation network safely and comfortably by foot or bike is essential for creating healthier, sustainable, more equitable communities. The following plans and programs are recommended for the region:

Safe Routes to School Action Plans
Develop Safe Routes to School Action Plans that layout travel barriers and sets goals on how to increase the number of students choosing to walk or bike to school.

Walking and Bicycling Safety Education in Schools
Implement the Bike Walk Education in Schools Act which requires every public K-8 school in Illinois to provide walking and bicycling safety in school curriculum.

Walk and Bike to School Day
Encourage area schools to participate in National Walk to School Day every May and Bike to School Day every October. Schools can host educational assembly events and organize a "walking school bus" or bike rodeo obstacle course to teach rules of the road and safety skills.

Safe Routes for Seniors Action Plans
Develop Safe Routes for Seniors Action Plans to help make communities safer and more comfortable for older adults to walk and bike. An Action Plan can target pedestrian safety improvements around specific areas such as senior centers and hospitals and can help establish collaboration between key stakeholders.

Safe Routes for Faith Action Plans
A Safe Routes for Faith Action Plan can help map out walking and bicycling routes to churches, synagogues, mosques, and temples and identify infrastructure improvements needed to improve pedestrian and bicycle safety near places of worship.

Regional Vision Zero Action Plan
Each municipality should commit to eliminating traffic fatalities as part of a Regional Vision Zero Action Plan and implement proven crash prevention measures on high-crash corridors.

Safe Park & Worship Zones
Set lower speed limits and install traffic calming on streets within 1,000' of parks and places of worship.

Snow Clearing Ordinance & Assistance Program
Require residents to clear snow and ice from the sidewalks adjacent to their properties in a timely manner. Review and update municipal code to specify when snow removal needs to occur, under what conditions, and how much needs to be removed. Additionally, work with local organizations to develop a volunteer snow clearance program to help older adults or those with disabilities shovel their sidewalks.

Sidewalk snow clearance.
Source: Active Transportation SidewAlliance

Zoning Codes

Zoning can be used to hold private developers responsible for building communities that support walking and bicycling. Each municipality should consider updating its municipal zoning code and subdivision regulations to ensure connectivity and access for pedestrians, bicyclists, and transit users in all new and redeveloped sites. With the right strategies, zoning can be used to minimize distance barriers, build new bicycle and pedestrian facilities, and maximize connectivity. See the appendix for specific zoning code examples.

Public Works

Public works departments can help address safety issues for people walking and bicycling through infrastructure improvements and allowing opportunities for residents to make requests and flag problem areas:

Traffic Signal Improvements
Accommodate pedestrians and bicycles at intersections through the use of loop detectors, push buttons, signal timing considerations, and upgraded signals that include pedestrian countdown timers and audible signals.

Traffic Calming Policy
Each municipality should develop a Traffic Calming Policy that allows residents to submit concerns about streets with unreasonably high and unsafe traffic speeds or volumes.

Bike Parking Request Form
Set up a process for allowing residents and businesses to request bike parking online. To create more community ownership, each municipality could work with local students or volunteers to design and build bike racks.

Bike & Scooter Share

Bike share systems provide on-demand public transportation where users can rent a bike or scooter for a designated time. They are ideal for tourism, commuting trips, recreational riding, and providing first/last-mile connections to transit. Stakeholders in Lake County are exploring the possibility of a bike share pilot that would eventually expand throughout the County. To prepare for a countywide or regional system, municipalities should become informed about bike share options and review key considerations. See the appendix for details and a list of active Chicagoland bike share systems.

Promotion & Events

Through the promotion of new and existing events, Northern Lakeshore residents will have a greater awareness of opportunities to walk, bike, and enjoy the many amenities of the Lakefront and region:

Regional Brand, Advertising Strategy, and Event Promotion
A cohesive identity and brand for the region can attract tourism, economic development, as well as instill local pride in among the people that call this region home. The branding developed for this plan could serve as the starting point for a true regional brand. A coordinating committee of Northern Lakeshore Communities should hire a creative agency to lead a branding exercise to further develop the identity of this region and craft strategic messaging.

Once a brand and advertising strategy has been developed, this coordinating committee should create a shared calendar to promote Northern Lakeshore events and help event organizers reach a wider audience around the region. The public calendar should be cross promoted by the municipalities, regional agencies, and community organizations, with events listed in both English and Spanish. Advertising on Metra trains is a familiar, agency-supported means of marketing and is beneficial as the train connects residents and visitors to key destinations in the Northern Lakeshore region.

Joint, Public Calendar of Year-Round Trail Programming
Create a shared, public online calendar for the region that aggregates all planned walking, bicycling, transit, and trail events as well as other relevant outdoor and community events. On a monthly or quarterly basis, each municipality and various organizations within the region should submit relevant event information to a designated calendar manager, selected by the Complete Streets Coordination Committee. See the appendix for calendar examples.

Seasonal Walking & Bicycling Events
Organize seasonal walking and bicycling events to feature the natural beauty and the active transportation network of the region. Seasonal event ideas include a Spring beach clean-up, a Summer bike wash, a Fall Halloween bike ride, and a Winter holiday trail of lights.

Path Raising
Train residents on how to participate in the installation of sidewalks, or trails and organize path raising parties. Zion Cyclery and the Chicago Area Mountain Bikers, for example, provided tools and trained volunteers to build mountain bike trails in Beulah Park.

"Party on McClory": During one weekend each summer, plan a regionwide block party on sections of the Robert McClory Bike Path. Offer food, music, games, bike parades, or possibly a chalk art competition at key crossings trailheads that are closed to automobile traffic for the day. Creating an event along the trail can help create a lively environment and a chance for residents to meet their neighbors, build community, and become more familiar with the trail network.

Open Streets
Close a local street to vehicles and open it for walking, bicycling, and informal play. For example, one or both directions of the Amstutz Expressway could be closed for a regionwide "Amble the Amstutz" event. Programming could include walking, bicycling, a bike rodeo obstacle course, yoga, dance, face painting, arts and crafts, and live music.

Trail Block Party
Host block parties on various parts of the Robert McClory Bike Path or trails within the Illinois Beach State Park with food, music, and games. Streamline permitting processes to make it easy for community groups, block clubs, churches, etc., to organize and conduct events along the rights of way adjacent to the trail.

Bike/Walk to the Beach 5K
Bring all five communities together for an annual 5K run, walk, or bike ride. The event could start or end with a festival at Foss Park in North Chicago or North Point Marina in Winthrop Harbor.

Pilot Projects or Tactical Urbanism Installations
Install temporary infrastructure to visually demonstrate how walking and bicycling facilities can create safer, more engaging, livable streets. Examples include using duct tape to build a bike lane or flowerpots to create a curb bump-out or mini-roundabout. These projects can have a big impact on building political and public support. See the appendix for potential tactical urbanism locations in each community.

Walk/Bike & Dine Events
Invite pedestrians or cyclists to enjoy a progressive dinner on foot or by bike at local restaurants.

Shop by Foot & Bike
Develop a campaign to encourage residents to walk or bike when making short errands to local shops.

Bicycling "school bus." Source: Active Transportation Alliance.

5. FUNDING + IMPLEMENTATION STRATEGY

STRATEGIC INVESTMENT

Implementation of this plan will leverage local, state, and federal grants whenever feasible. Funding programs can be used to support the design and construction of walking and bicycling infrastructure and provide financial resources for programming and marketing initiatives. In some cases, one local grant award may be used as local match toward another (i.e., local grants or private funds may be used as a local match for federal funds.)

When considering funding programs for implementation, this plan pairs key projects with candidate funding sources, helping to align funding program requirements with eligible projects or corridors. Three primary strategies are recommended:

1. Proceed West from the Lakefront
2. Project Bundling
3. Intergovernmental Coordination

1. Proceed West from the Lakefront

A primary objective of this plan is to connect the Northern Lakeshore municipalities with Lake Michigan and regional trails.

Years 1-2: Primary Patrhways. As the lakefront is among the most desirable destinations for stakeholders, implementation of this plan should prioritize connections that improve access to it. Initiatives developed during the first two years of implementation should focus on projects that achieve the following objectives:

- Improving Crossings of Sheridan Road
- Improving Crossings of the Union Pacific Railroad
- Improving Walking and Bicycling Along Sheridan Road
- Improve the primary walking and bicycling entrances to Illinois Beach State Park: 7th Street in Winthrop Harbor and Wadsworth Road in Beach Park

Year 3-4: McClory-Lakefront Connections. After the first two years of plan implementation, stakeholders should focus on projects that connect between Sheridan Road and the Robert McClory Bike Path.

Year 5+: The third phase of plan implementation should involve filling in remaining gaps and advancing long-range or high-cost improvements such as new trails or overpasses.

2. Project Bundling

Assemble two or more, related projects that share similar geography and scope into a single application. For example, the RTA Access to Transit program provides funding for projects that have known benefits at improving access to transit stations to support increased ridership or mode share.

Implementing mobility improvements near each Metra Station and enhancing Pace bus stops near key destinations are candidate projects as they align with this program. To help meet the funding threshold, one or more municipalities should consider bundling wayfinding, pavement markings, intersection improvements, and enhanced bicycle parking facilities into a single application.

Bike parking installation. Source: Active Transportation Alliance.

3. Intergovernmental Coordination

The Northern Lakeshore communities have an established record of working together. They should continue to pursue projects that cross municipal boundaries and work to involve transportation agencies with jurisdiction over roadways and rights of way within the network.

The Northern Lakeshore communities should work together to advance network and intersection projects longer than 2-miles in length or exceeding $2-million in construction cost, and identify a lead municipal point of contact for coordination with LCDOT, IDOT, IDNR, and ComEd.

Funding

Recommendations in this plan are structured to encourage and empower stakeholders to maximize local, state, and federal grants for implementation.

Funding sources for transportation-related projects generally fall into one of five categories:

- Plans / Feasibility Studies
- Design
- Construction / Installation
- Maintenance
- Non-Infrastructure

Plans / Feasibility Studies
Plans and feasibility studies are important steps in project development, as they help establish a purpose and need, determine whether a recommendation is feasible within a reasonable cost (and other factors), and help to identify stakeholders who can generate support for a project.

This plan was funded in part by planning funds distributed through the CMAP Local Technical Assistance (LTA) program, which provides funding to municipalities undertaking planning efforts to implement the regional comprehensive plan, ON TO 2050. If recommendations within this plan require further study or the feasibility cannot easily be determined without collecting more information (e.g. if a traffic study is needed or right-of-way constraints are unknown), then planning grants should be considered as one method for financing these project development tasks.

September 2019 Northern Lakeshore Trail Connectivity Plan open house.

Design
Some grant programs provide funding to help pay a portion of the cost to prepare design plans for facilities such as sidewalks, pedestrian intersection improvements, shared use paths, bike lanes, and signage, etc. Design tasks are divided into preliminary engineering (Phase I) and detailed design (Phase II).

If an applicant plans to use federal funds for Phase II or construction, work completed during Phase I must meet specific federal reporting, analysis, and public involvement requirements. Documentation of this process is submitted with proposed improvement plans in a project development report (PDR).

Approval of a PDR makes the project eligible (but not guaranteed) for federal funding and is subject to approvals and commitments contained in the PDR. Once design approval is obtained, the project may advance to detailed design. If applicants are planning to use non-federal funds for construction, Phase I and II may be completed concurrently for installation directly by the local agency on their roads.

Construction / Installation
Construction funding makes up the largest share of program funding available for transportation projects, the majority of which is provided as federal funding passed through state agencies including IDOT and IDNR. If a municipality wishes to construct or improve a county or state road, they may do so either by permit or by paying for the marginal cost of adding a facility into an otherwise planned improvement by the state or county agency. Common examples of this include installing sidewalks or sidepaths being added to roadway widening or reconstruction projects, or when a storm sewer is being installed.

IDOT and LCDOT each have policies that outline cost share policies for various types of infrastructure projects. Municipalities should contact their transportation planning liaisons for more information.

While eligibility for federal funding does not guarantee funding will be made available, having a clear vision for project implementation helps make a project more competitive. Several grant programs require federal funds for construction to obtain design approval prior to application for construction funds.

Maintenance
Routine maintenance is an important factor in ensuring that investments in walking and bicycling can be enjoyed and remain functional, operational, and adhere to accessibility guidelines. This includes seasonal maintenance such as sweeping and snow clearance as well as mill and overlay, resurfacing, and periodic replacement of signs, pavement markings, and traffic signal components.

Unlike new construction, federal funds may not be used for maintenance. Therefore, municipalities should plan for maintenance funding to grow to keep pace with new construction. Motor fuel tax (MFT) funding is among the most common funding, but other local funds or user fees are sometimes used.

When municipalities install infrastructure along rights-of-way by other agencies or wish to construct a facility spanning multiple jurisdictions, maintenance agreements or intergovernmental agreements are the methods used to ensure someone is responsible for keeping a facility in a state of good repair.

Non-Infrastructure
Funds for programming and events are important and should be viewed as the marketing necessary to encourage efficient use of infrastructure investments. Recognizable examples of this are staff time, advertising, and promotional materials dedicated to Walk and Bike to School Day, funding allocations for crossing guards, and fees for hiring bicycle safety instructors to participate in bike rodeos or other school-sponsored bicycle safety events. Non-infrastructure funding also includes permit fees, insurance, traffic control, and traffic safety that would be required for open street or trail events where roadways are temporarily closed for special events.

Funding Sources Overview

While funding comes from a variety of sources, the majority of funding for implementing this plan is administered through IDOT, with additional support from IDNR, CMAP, and RTA. Most programs administered through IDOT require a local match between 20% and 50%, and several programs require preliminary engineering (Phase I) be complete or ready to be completed to ensure obligation of funding aligns with program year requirements. Candidate funding sources are grouped into those that fund infrastructure, programs, or marketing.

Infrastructure
- CMAP Congestion Mitigation and Air Quality Improvement Program (CMAQ)
- CMAP Surface Transportation Program (STP-L)
- CMAP Transportation Alternatives Program (TAP-L)
- IDNR Bicycle Path Grant Program
- IDNR Coastal Management Program
- IDNR Open Space, Land Acquisition and Development Program (OSLAD)
- IDNR Park and Recreation Facilities Program (PARC)
- IDNR Recreational Trails Program (RTP)
- IDOT Highway Safety Improvement Program (HSIP)
- IDOT Illinois Transportation Enhancements Program (ITEP)
- RTA Access to Transit, Small-Scale Capital Projects (RTA)
- Openlands ComEd Green Region Grant

Infrastructure or Non-Infrastructure, Programs, + Marketing
- IDOT Safe Routes to School Grant (SRTS)
- PeopleForBikes Community Grant Program
- Rails to Trails Conservancy Doppelt Family Trail Development Fund
- AARP Community Challenge Grant
- Action for Healthy Kids Game On Grant & Parents for Healthy Kids Grants

Non Infrastructure, Programs, + Marketing
- America Walks Community Change Grant

Foss Park Avenue and entrance to Foss Park.

Congestion Mitigation and Air Quality Program (CMAQ)

Agency: CMAP
Available Amount: $114 million
Typical Award: $16- 30 million
Website: https://www.cmap.illinois.gov/mobility/strategic-investment/cmaq

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
Available Amount: $266 million
Typical Award: $150,000 to no more than $4 million
Website: https://www.cmap.illinois.gov/committees/advisory/council-of-mayors/stp

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
Available Amount: $7.5 - 10 million
Typical Award: $100,00 - $1 million
Website: https://www.cmap.illinois.gov/mobility/strategic-investment/transportation-alternatives

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
Available Amount: $1 million ($200,000 max award)
Typical Award: $100,000 - $200,000
Website: https://www.dnr.illinois.gov/grants/Pages/BikePathProgram.aspx

Purpose: To assist local government agencies in the acquisition, rehabilitation, and construction of public nonmotorized 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 LCDOT right of way).

Coastal Management Program (CMP)

Agency: IDNR
Available Amount: $2 million
Typical Award: $1,000 - $100,000
Website: https://www2.illinois.gov/dnr/cmp/Pages/default.aspx

Purpose: To fund projects that protect and improve coastal habitat, species, support and facilitate economic development and public access to coastal resource-based tourism activities, and help coastal communities improve and protect natural resources.

Eligibility: Government organizations.

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

Candidate Projects: Wayfinding and interpretive signage, mobility improvements to help visitors respectfully enjoy accessible public open spaces.

Open Space, Land Acquisition and Development Program (OSLAD)

Agency: IDNR
Available Amount: $29 million
Typical Award: Up to $75,000
Website: https://www2.illinois.gov/dnr/news/Pages/IDNR-Accepting-Applications-for-OSLAD-and-LWCF-Grant-Programs.aspx

Purpose: To help agencies acquire land to be used for public open space and recreation. Can be used for development projects provided they are for public parks or open spaces.

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

Candidate Projects: Acquisition of property to build a park or open space recreation area.

Park and Recreational Facilities Construction Program (PARC)

Agency: IDNR
Available Amount: $25 million
Typical Award: $600,000 - $2 million
Website: https://www.dnr.illinois.gov/grants/Pages/PARC-Grant.aspx

Purpose: To provide funding for bondable or brick and mortar capital projects. Can be used for site demolition, site preparation, utility relocation, construction, or rehabilitation of buildings and structures.

Eligibility: Local government entities (municipalities, park districts) who are eligible to spend public funds to buy or develop property for parks, recreation, or conservation. School districts are not eligible.

Local Match: The grant covers 75% of the capital cost of a project, requiring a 25% local match. For economically disadvantaged communities, the grant pays for 90% and the local match requirement is 10%.

Candidate Projects: Acquisition of property for construction of a trail, outdoor restrooms, lockers, and wayfinding and/or interpretive signage.

Recreational Trails Program (RTP)

Agency: IDNR
Available Amount: $750,000
Typical Award: $200,000
Website: https://www.dnr.illinois.gov/grants/Pages/PARC-Grant.aspx

Purpose: To provide funding for acquisition, development, construction, and maintenance of motorized and nonmotorized 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 nonmotorized 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
Available Amount: $80 million (anticipated)
Typical Award: $2 million (maximum allowable)
Website: http://www.idot.illinois.gov/transportation-system/local-transportation-partners/county-engineers-and-local-public-agencies/funding-opportunities/ITEP

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: Local match requirements 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
Available Amount: $16.2 million
Typical Award: $2 - 5 million
Website: http://www.idot.illinois.gov/transportation-system/local-transportation-partners/county-engineers-and-local-public-agencies/funding-opportunities/highway-safety-improvement-program

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
Available Amount: Varies (as a program within CMAP)
Typical Award: $150,000 to no more than $1 million
Website: https://www.rtachicago.org/plans-programs/access-transit-program

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).

ComEd Green Region Grant

Agency: Openlands
Available Amount: Varies
Typical Award: Up to $10,000
Website: https://www.openlands.org/livability/greenregion/

Purpose: Protect or improve public spaces for the benefit of all.

Eligibility: Municipalities, townships, counties, park districts, conservation districts, and forest preserve districts within Lake County

Local Match: At least 50% local match required

Candidate Projects: Capital improvements to trails

Safe Route to School Grant (SRTS)

Agency: IDOT
Available Amount: $27.8 million
Typical Award: $25,000 to $200,000 for infrastructure and $2,500 to $50,000 for non-infrastructure applications
Website: http://www.idot.illinois.gov/transportation-system/local-transportation-partners/county-engineers-and-local-public-agencies/safe-routes-to-school/index

Purpose: Enable and encourage children to walk and bicycle to school

Eligibility: Government agencies, transit agencies, school districts.

Local Match: At least 20% local match required.

PeopleForBikes Community Grant Program

Agency: PeopleForBikes
Available Amount: Varies
Typical Award: Up to $10,000
Website: https://peopleforbikes.org/grant-guidelines/

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, bicycle lanes, bike racks, rail trails, mountain bike trails, bike parks, and large-scale bicycle advocacy initiatives.

Doppelt Family Trail Development Fund

Agency: Rails to Trails Conservancy
Available Amount: $85,000
Typical Award: $5,000 to $50,000
Website: https://www.railstotrails.org/our-work/doppelt-family-trail-development-fund/

Purpose: To support the development and improvement of multi-use trails.

Eligibility: Non-profits; state, regional, local or tribal government agencies; and other organizations.

Local Match: None

Candidate Projects: New trail construction, trail facility/infrastructure, land acquisition, trail signage, improvements to existing trails, maintenance tasks, local media promotion, feasibility studies, or adding personnel/volunteer coordination capacity.

AARP Community Challenge Grant

Agency: AARP
Available Amount: Varies
Typical Award: $500 - $30,000
Website: https://www.aarp.org/livable-communities/community-challenge/

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
Available Amount: Varies
Typical Award: $1,000 to $2,500
Website: https://www.actionforhealthykids.org/school-grants-support/

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

America Walks Community Change Grant

Agency: America Walks

Available Amount: Varies
Typical Award: $1,500
Website: https://americawalks.org/community-change-grants/

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.

APPENDIX

Policy and Program Recommendations

Policies and programs help create a supportive and welcoming environment for pedestrians and bicyclists and provide near-term steps that can be taken in advance of infrastructure improvements. Through the adoptions of these recommendations, Northern Lakefront residents will have more opportunities to safely walk, bicycle, and enjoy the many amenities of the Lakefront and region.

Complete Streets Related Recommendations

Complete Streets Policy Adoption

Complete streets are designed to enable safe access for all users of the transportation network regardless of age, ability, or travel mode. A complete street has no predefined facilities requirements but is optimized within its surrounding context to promote safe, convenient active transportation options for the community.

To ensure that these principles play a lasting role in the development of the local transportation network, the adoption of a Complete Streets policy by each community is recommended. This means committing to the accommodation of pedestrians, bicyclists, and transit users as well as motor vehicles in all new transportation construction and maintenance projects whenever appropriate.

Additionally, adopting a Complete Streets policy helps connect municipalities to more transportation funding opportunities. The Lake County Council of Mayors (LCCOM), for example, adopted new council rules in August 2019 for the allocation of their federal Surface Transportation Program (STP) Block Grant funds. Municipalities will now receive an additional 50 points out of 200 for having a Complete Streets policy, greatly increasing their likelihood of receiving STP funding.

To better position communities to access future funding and implement complete streets projects, the project team provided each of the five communities with a model Complete Streets policy, following best practices from the National Complete Streets Coalition. Using this model policy to serve as a customizable template for policy development, the team offered assistance and attended village board and policy committee meetings to help staff modify and develop a policy appropriate to their local priorities and culture.

The development of a Complete Streets policy is underway in each municipality. As of the publication of this plan, the following communities have adopted a policy:

- Beach Park: Adopted December 2019
- North Chicago: Originally adopted January 2014, update planned: https://atpolicy.org/complete-streets-policy-north-chicago-il-2014/
- Waukegan: In progress
- Winthrop Harbor: In progress
- Zion: TBD

Complete Streets Coordination Committee

Successful incorporation of complete streets into regular project development processes will rely heavily on a commitment from each municipality to implement all facets of this plan, from scope development and programming through detailed engineering (design), and construction. Key staff from each municipality should meet regularly to coordinate this plan's implementation locally, and should include representatives from one or more of the following departments from each municipality:

- Public Works / Engineering
- Village Administration / City Manager
- Planning / Community Development

The Complete Streets Coordination Committee should meet monthly or quarterly with meeting locations rotating between each municipality. Responsibilities of the Committee may include the following activities:

- **Review road projects**
  On a quarterly or monthly basis, meet to review upcoming transportation projects to determine if additional coordination is needed to ensure complete streets are considered and incorporated in project development.

- **Coordinate with IDOT**
  To increase the likelihood of including walking, bicycling, and transit access in a project's scope, the Complete Streets Coordination Committee should receive quarterly status updates on all relevant transportation projects from the Illinois Department of Transportation (IDOT). The Lakefront Economic Development Group, consulting engineers, or other relevant staff can act as IDOT liaisons and report back to the Coordination Committee and elected officials in each municipality.

- **Coordinate on funding**
  Multi-jurisdictional, community-supported projects often make for more competitive grant applications. The Complete Streets Coordination Committee can help prioritize and apply for funding for relevant projects from this plan that span community boundaries. The Committee can also coordinate on sharing local match obligations between municipalities to help lower the overall contributions of each body of government.

- **Activate the community**
  The Committee can coordinate regional educational and event programming and help regularly add to and promote a public, year-round community calendar highlighting events in the Northern Lakefront region. See policy and program recommendations for more details about coordination responsibilities.

- **Address plan recommendations**
  The Committee can take the lead helping each municipality implement the infrastructure, policy, and program recommendations in this plan. Best practices and model policies can be shared during the quarterly or monthly meetings.

- **Evaluate progress**
  A successful plan involves collecting and reporting data to evaluate progress so achievements can be celebrated, lessons can be shared, and strategies can be adjusted. On an annual basis, the Committee should review progress made on implementation of this plan. Regional performance measures could include the following:
    - Infrastructure installed (feet/miles of sidewalk, bicycle lanes, trails, etc.)
    - Mode share counts
    - Severe and fatal crash statistics for all modes

Education

Engaging educational activities and resources can be designed to promote safe travel behavior on local streets and help build more community support and interest in walking, bicycling, and transit. The following educational programs and resources can be coordinated by the Complete Streets Coordination Committee and local municipalities.

- **Pedestrian & Bicycle Training**
  Pedestrian and bicycle training for adults, teens, and youth should be offered in each municipality. Youth will benefit from classes on bicycle and pedestrian safety and skills building. Bicycle mechanics classes, education related to the variety of transportation options, and on-bicycle education classes (such as Learn to Ride or Traffic Safety Skills 101) can be made available for middle and high school students and adults. Local experts such as staff from Zion Cyclery or a League Certified Instructor (LCI) could be recruited to assist with these trainings.

- **Youth Bicycle Mechanics**
  Youth can learn to assemble bicycles, ride safely, and use their knowledge to create a "pop-up" bicycle shop. This shop will give residents a cheap bicycle repair and the youth in the community will learn valuable skills. The Complete Streets Coordination Committee and local municipalities could work with community organizations such as Zion Cyclery, local chambers of commerce, or places of worship to develop this program and recruit participants from Boy Scout, Girl Scout, or high school clubs.

- **Regional Bicycle Map**
  A user-friendly bicycle network map would encourage use of the improved pedestrian and bicycle network and patronage of local businesses, the Illinois Beach State Park, and other destinations identified in this plan. The Complete Street Coordination Committee could lead this or hire a contractor to produce and distribute a free active transportation network map that includes safe bicycling and walking routes to key places and safety tips. Large employers and local businesses could be approached for sponsorship and distribution of the map.

- **Walk and Bicycling Education Campaign**
  Regional and national organizations such as the Active Transportation Alliance, Ride Illinois, America Walks, the League of American Bicyclists have many existing educational and safety resources for walking and bicycling. The Complete Streets Coordination Committee can assist each municipality in the distribution of relevant safety materials and the region's active transportation network through the following means:
    - Use local media outlets such as municipal websites, cable access stations, local newspapers, and online social networks to broadcast videos and publish articles on pedestrian and bicycle safety.
    - Arrange for pedestrian and bicycle information to be reprinted or distributed by partner agencies, Zion Cyclery, utility companies, and the private sector. Materials should be made available in both English and Spanish.
    - Work with local doctors and health care providers to distribute information on the health benefits of bicycling and walking.
    - Give away front and rear lights to cyclists with educational information on bicycle safety. Lights could be donated by local businesses, police departments, or public health departments.

- **Driver Safety Education**
  Regularly educate residents on cell phone use and speeding laws. Residents can sign a pledge through newsletters, board meetings, businesses, events, and local social media outlets. Providing yard signs, city stickers, announcements with water bills, posters, and educational events will bring more awareness to these laws. Additionally, other topics can include walking & bicycling rules of the road, tricks and tips, sharing the road with non-motorized users, Must Stop for Pedestrians law, promoting local bicycling and walking events, and issues for discussion or action.

- **Community-Centered Public Safety Alternatives**
  To make the region's streets and trails safe, comfortable, and welcoming to all, improving relationships between residents, visitors, and public safety officers should take priority. Every resident and visitor should feel welcome and comfortable regardless of race, gender, and mode of transportation. People walking and bicycling should not be any more exposed to traffic violence than those traveling in automobiles. The region should consider modifying or eliminating conventional enforcement strategies and instead work on diversifying which agencies are best suited to build community trust while encouraging safe behaviors, particularly in communities of color.

  A community-led task force should be brought together to begin a dialogue on the harm that traffic enforcement practices have created in the past and ways the community can move forward together. Those represented on this task force should include people of color, low-income people, and those who have been negatively impacted by enforcement.

  This group of community residents should be included in decision-making around public safety programs to help each community determine alternative programming to build trust, create safer streets, and improve community-police relations.

  For example, community-based public safety programs can implement a "Rewarding Good Behavior" program could be considered to reward children for good walking and bicycling behaviors such as stopping at traffic lights or wearing their helmet properly. When community-based task force members observe these behaviors, residents can be recognized at community events and be awarded prizes for demonstrating desirable behavior. Working with local businesses or the police department to donate rewards will provide sustainability to this program and encourage children to walk and bicycle safely around the Northern Lakefront communities.

Safe Routes Plans & Activities

Creating plans and opportunities for children, older adults, and vulnerable populations to navigate our region's transportation network safely and comfortably by foot or bicycle is essential for creating healthier, sustainable, more equitable communities.

- **Safe Route to School Action Plans**
  Safe Routes to School is a federally funded program that helps communities identify social and physical barriers to walking and bicycling to school. The program provides funding for education, encouragement, enforcement, and engineering projects aimed at making the trip to school safe, fun, and convenient for students in elementary and middle school.

  A Safe Routes to School Action Plan is a valuable tool that lays out current travel barriers and sets goals on how to increase the number of students choosing to walk or bicycle to school. Schools without a program should organize a Safe Routes to School Committee to develop an Action Plan, which is a pre-requisite for federal Safe Routes to School funding.

- **Walking and Bicycling Safety Education in Schools**
  The impacts that walking and bicycling can have on our children are enormous. Students test better and are more focused throughout the day and they are more likely to get their recommended daily dose of physical activity, reducing the risk of obesity and promoting good overall health.

  Passed in September 2018, The Bicycle Walk Education in Schools Act requires every public K-8 school in Illinois to provide walking and bicycling safety education. School boards are responsible for ensuring that the law is appropriately implemented in their district.

  To assist school districts in this task, the Active Transportation Alliance and Illinois Association of School Boards compiled multiple recommended educational resources that teachers can incorporate in their classroom. Resources include quizzes, videos, lesson plans and workshops which can be found at activetrans.org/resources/education.

- **Walk and Bicycle to School Day**
  Encourage area schools to participate in National Walk School Day every May and Bicycle to School Day every October. Schools can host educational assembly events and organize a walking school bus or bicycle rodeo to teach rules of the road and safety skills.

    - Walking school buses involve children walking to school together with one or more adult volunteers. It can have a planned route, similar to a school bus, where children are 'picked up' at designated meeting points. For children who live too far away to participate in Walk to School Day, they can be dropped off at a meeting point such as a playground or church to be picked up by the walking school bus. See the National Center for Safe Route to School's Walking School Bus Guide for more information: guide.saferoutesinfo.org/walking_school_bus/

    - Bicycle rodeos are obstacle courses designed to teach bicycle safety skills. They can be set up on a flat surface such as a parking lot or tennis court during the school day with volunteers leading different stations to teach maneuvering skills, stopping/starting, turning, and balancing. See the Active Transportation Alliance's guide for detailed bicycle rodeo station ideas: activetrans.org/sites/files/BicycleRodeoStationIdeas.pdf

  As part of National Walk to School Day, North Chicago Community Unit School District 187 has started an annual tradition called 'Walk a Cop to School Day'. The event brings together police officers, elected officials, teachers, families, and children for healthy snacks at a church parking lot followed by a group walk to school. The event is dually intended to build more positive relationships between officers and youth.

Toolkits and materials to plan a walk or bicycle to school event are available at walkbicycletoschool.org.

- **Safe Routes for Seniors Action Plans**
  A Safe Routes for Seniors Action Plan aims to make a community safer and more comfortable for older adults to walk and bicycle. Developing a plan may be especially relevant to communities with a high concentration of adults 65 and older such as Winthrop Harbor or Beach Park.

  An Action Plan can target pedestrian safety improvements around specific areas such as senior centers and hospitals and can help establish collaboration between key stakeholders who can identify and address mobility and safety concerns of older adults. Crossing intersections, for example, is often cited as particularly challenging for older adults. The plan could identify the need for countdown timers or adjustments to signal timing to accommodate slower walking speeds and give everyone enough time to safely cross the street.

  By planning our streets to accommodate the needs of older adults, they become a more attractive walking environment for all people using the road.

- **Safe Routes for Faith Action Plans**
  Similar to Safe Route to School and Safe Route for Seniors Plans, a Safe Route for Faith Plan could help map out walking and bicycling routes to churches, synagogues, mosques, and temples and identify infrastructure improvements needed to improve pedestrian and bicycle safety near places of worship.

- **Regional Vision Zero Action Plan**
  Vision Zero is an international traffic safety movement guided by the principle that no loss of life on our streets is acceptable. Each municipality should commit to eliminating traffic fatalities as part of a Regional Vision Zero Action Plan and implement proven crash prevention measures on high-crash corridors.

  On a quarterly or annual basis, the Complete Streets Coordination Committee should continue to review new crash data and reprioritize design safety improvements as needed. To determine which roads are the best candidates for funding from the federal Highway Safety Improvement Program (HSIP), the Committee should consult with the Lake County Division of Transportation and Council of Mayors and facilitate the formation of intergovernmental agreements for road projects that span multiple jurisdictions.

- **Safe Park & Worship Zones**
  Safe Park Zones are streets adjacent to parks where traffic safety is prioritized with lower speed limits when children are present. Safe Park Zone streets should be designated by a local ordinance and marked with signs. Safe Worship Zones can be similarly designed to slow traffic near places of worship during services.

- **Snow Clearing Ordinance & Assistance Program**
  The accumulation of snow and ice on sidewalks creates a major barrier to pedestrians, especially older adults, children, and people with disabilities.

  Municipal code should include snow removal responsibilities that require property owners or another responsible party to maintain sidewalks adjacent to their properties during and after a snow event in a timely manner.

  The municipal codes of North Chicago, Waukegan, and Beach Park include some language on who is responsible for keeping sidewalks free and clear of snow, ice, and other debris. However, in addition to establishing who is responsible for snow clearance, it is best practice for code to also specify when snow removal needs to occur, under what conditions, and how much needs to be removed. The City of Evanston's ordinance, for example, requires property owners to clear a three-foot path on sidewalks within 24 hours after a snowfall of four inches or more. Each municipality should review and update their code accordingly.

Additionally, each municipality should consider developing a snow shoveling assistance program to help people with disabilities and others who need assistance with snow clearance. Other communities have issued a call for volunteers or coordinated with local Boy Scout, Girl Scout, or high school clubs in need of volunteer hours to remove snow from the sidewalks of older adults or those with disabilities. See the City of Evanston's Volunteer Snow Shoveling Program as an example: cityofevanston.org/government/departments/parks-recreation-community-services/senior-services/snow-shoveling-program

Zoning Codes

Zoning can be used to hold private developers responsible for building communities that support walking and bicycling as new sites are built or redeveloped within the community. With the right strategies, zoning can be used to minimize distance barriers, build new bicycle and pedestrian facilities, and maximize connectivity.

Municipal Zoning Code
Facilities within private developments play a significant role in whether they can be accessed by active transportation. Each municipality should consider updating its zoning code to ensure connectivity and access for pedestrians, bicyclists, and transit users in all new and redeveloped sites. Examples include:

- Require development site plans to comply with each community's Complete Streets policy and Active Transportation Plan where applicable to ensure that sidewalks, bicycle facilities, and network connectivity are included.
- Allow for greater integration of land use types, thereby decreasing distance barriers for walking and bicycling.
- Give priority to continuous sidewalks adjacent to large developments and require connectivity to building entrances.
- Require a maximum setback distance for building entrances, ensuring shorter trips through parking lots for people walking and bicycling.
- Require street connectivity for housing developments to improve the directness of routes, again decreasing distance barriers for walking and bicycling.
- Increase flexibility on the required number of car parking spaces to limit parking lot size.
- Create minimum standards for bicycle parking accommodations at commercial and workplace locations.
- Develop specifications for planting trees, installing benches, including pedestrian scale lighting, and installing awnings in business districts.

Developers should be expected to implement this plan as a condition of any proposed development. Proposed plans that do this and meet any of the above criteria could receive expedited permits, density bonuses, or reduced costs by allowing for reduced parking.

Subdivision Regulations
Each community should review its current planned development or subdivision ordinance to assess whether Complete Streets features are required as new sites are built or redeveloped. If needed, these ordinances should be revised to hold private developers responsible for building communities that support walking, bicycling, and access to transit.

Subdivision and Planned Unit Development regulations, for example, can include a statement that all subdivisions shall make adequate provision for bicycle and pedestrian access. Design standards can be set (e.g. sidewalks, crosswalks, bicycle lanes, bicycle parking, street furniture), pedestrian and bicycle circulation plans can be required, and terms for plan approval can be stated.

Providing a checklist of requirements can be a very useful tool to help both the developer and administrative zoning staff better gauge if an application is complete. Approval of the subdivision can be withheld if pedestrian and bicycle access and circulation are deemed inadequate. Developers, on the other hand, can save time and money if they clearly understand what they are expected to provide.

Some examples:

- Skokie: skokie.org/DocumentCenter/View/1705/Preliminary-Plan-Review---Checklist-for-Development-Design-and-Complete-Streets-Policy-Implementation-PDF

- Oak Park: https://www.oak-park.us/sites/default/files/bfc/6_Complete%20Streets%20Checklist.pdf

Bicycle Parking Ordinance
To promote the use of the bicycleway and trail networks and to boost local commerce, each community should adopt a zoning ordinance to require bicycle parking at key commercial, residential, and industrial sites.

The ordinance could require a specific number of bicycle parking spaces, depending on land use type, in both new development and major renovations. Density bonuses for including bicycle parking could also be used as an incentive for developers. A model bicycle parking ordinance can be found at changelabsolutions.org/product/making-place-bicycles

Public Works

Public works departments can help address safety issues for people walking and bicycling through infrastructure improvements and allowing opportunities for residents to make requests and flag problem areas.

Traffic Signal Improvements

Intersections can act as a barrier to non-motorized travel when traffic signals are poorly timed or when they are not easily triggered by people traveling by foot or bicycle. When an intersection is built or redesigned, pedestrians and bicyclists should always be considered.

Actuated or semi-actuated signals should accommodate pedestrian and bicycle crossings through loop detectors and push buttons. Loop detectors embedded in the pavement need to be calibrated to detect bicyclists and should be clearly marked for activation. Push buttons should include signage and be easily accessible to someone on foot and, if needed, to someone riding a bicycle if no loop detector exists.

When triggered, traffic signals should allow enough time for slower pedestrians including children, older adults, and people with disabilities to cross safely. Long traffic signal delays for pedestrians and bicyclists should be avoided as people will be more likely to cross against on-coming traffic or choose to avoid travel by foot or bicycle altogether. Improved signal spacing on arterials to every quarter to a half-mile will also reduce the likelihood of a person crossing without a signal and help prevent fatal or serious traffic crashes.

Accessible pedestrian signals inclusive of audible and countdown timers are now the standard for signal upgrades. Whenever a signal is upgraded, it should be upgraded with the latest technology to help people walking and bicycling feel more comfortable while traveling on the road. These measures are especially important for vulnerable populations including older adults and those with visual impairments.

Traffic Calming Policy

Develop a Traffic Calming Policy that allows residents to submit concerns about streets with unreasonably high and unsafe traffic speeds or volumes. Complaints can be evaluated by municipal staff and, if warranted, affordable interventions can be proposed to address the concerns.

Low-cost traffic calming measures can include signage, pavement markings, bump-outs, or speed humps/bumps. Other Chicagoland communities including Wilmette and Glenview have adopted traffic calming policies and a process to receive input from community members:

- Village of Wilmette's Traffic Calming Policy and Procedure: wilmette.com/download/engineering/Traffic_Calming_Policy__Procedure_8-21-98_(2).pdf
- Village of Glenview's Traffic Calming Procedures and Policies: glenview.il.us/Documents/Traffic%20studies/Traffic_Calming.pdf

Bicycle Parking Request Form

Residents will not use bicycleways to reach businesses unless they can safely lock their bicycles at their destinations. Each community should set up a process for allowing residents and businesses to request bicycle parking.

An online request form can be created to offer residents an opportunity to share where they would like a bicycle rack and why it would be helpful at a location. The form can note that the municipality can only install bicycle parking racks within the public right-of-way and at municipality-owned facilities and that making a request will not guarantee that a rack will be installed. A staff person from each community should be assigned to take requests, document them, and respond to residents.

In addition, to create more community ownership, each municipality could work with area high schools to design and build bicycle racks. Public Works departments can provide students or volunteers with materials to produce the racks to be installed by each municipality. Work with the Complete Streets Coordination Committee, residents, and elected officials to prioritize locations.

Bike Share / Scooter Share

Bike share and some scooter share systems provide on-demand public transportation where users can rent a vehicle for a designated period. Bike share can help create more visibility for bicycling, increase access to jobs, transit, and other destinations, and positively impact public health, air quality, and local economies. They are ideal for tourism, commuting trips, recreational riding, and providing first/last-mile connections to transit.

Stakeholders in Lake County including the Village of Grayslake, College of Lake County, Lake County Forest Preserves, and Lake County Division of Transportation are exploring the possibility of a bike share pilot that would eventually expand throughout Lake County. To prepare for a countywide or regional system, municipalities should become informed about bike share options and review key considerations. Scooter share is being considered, but the majority of interest is focused on nonmotorized vehicles first.

Traditionally, bike share systems have been station-based where users check out and return bicycles to an automated station at a fixed location. Other bike share models include dockless and hybrid systems that have integrated locks so a bicycle can be locked to itself or an object such as a bicycle rack. Dockless systems allow users to rent bicycles and leave them at any location while hybrid systems require bicycles to be left in bicycle share parking areas, often designated by a painted box on the pavement. Scooter share tends to be dockless, but there is an increasing interest in docks or corrals as a means of discouraging parking bicycles or scooters on sidewalks or blocking areas that block the public way.

Hybrid and dockless systems typically create more convenience for users and are less costly for a municipality to implement. Docked systems, however, create more consistency where users can reliably find an available bicycle. They also eliminate issues with 'bicycle litter' where bicycles are improperly parked in sidewalks, pathways, and other public spaces, creating a safety hazard and public nuisance.

When developing a bike share program, additional consideration needs to be given to bicycle or station density and coverage area, check-out and payment options, equipment and maintenance, financing and sponsorship, private versus public operations, regulations and operating permits, communications and community engagement, and strategies for encouraging bicycle share use in underserved communities.

In the Chicagoland region, the following communities and counties have implemented or have plans to specifically create bike share programs:

- Kane and Kendall Counties – docked system to launch in Summer 2020
- McHenry County (Bicycle MC) - docked system launched in Summer 2019
- I&M Canal Trail – docked system launched Summer 2019
- Cook County Forest Preserves – hybrid system launched in 2018
- Evanston (Divvy) –docked system launched Summer 2016
- Aurora – docked system launched Summer 2016
- Chicago (Divvy) – docked system launched Summer 2013, dockless coming in 2020

For best practices on developing a bike share program, visit NACTO's Bike Share resource page nacto.org/program/bicycle-share-initiative/ and Transport for America's Shared Micromobility Playbook playbook.t4america.org/

Promotion & Events

Through the promotion of existing and new events, Northern Lakefront residents will have a greater awareness of opportunities to walk, bicycle, and enjoy the many amenities of the Lakefront and region.

Promotion

Joint, Public Calendar of Year-Round Trail Programming

Hundreds of community events take place in Beach Park, North Chicago, Waukegan, Winthrop Harbor, and Zion every year. Building more local awareness of existing trail and community programming was identified as a key need for the Northern Lakeshore region to help more residents and visitors take advantage of existing activities, promote local business, and connect more people to the Lakefront. Creating a shared, public online calendar for the region that aggregates all planned walking, bicycling, transit, and trail events, as well as other relevant outdoor and community events is recommended.

On a monthly or quarterly basis, each municipality and various organizations within the region should submit relevant event information to a designated calendar manager, selected by the Complete Streets Coordination Committee.

The Calumet Heritage Area Calendar, managed by the Calumet Collaborative, is an example of a successful collaborative, public calendar used to promote events and programming throughout the southern Cook County and northwest Indiana region. Calendar submissions are made through an online form and are either accepted or denied by the calendar manager based on submission guidelines. The Calumet Heritage Area Calendar uses a platform called Tockify and can be viewed at //calumetheritage.org/calendar.html.

Calendar platform options should be researched and reviewed by the Coordination Committee. If needed, the lead organization or individual selected to manage the calendar could seek funding from the participating municipalities to develop and host a website and manage the calendar.

Regional Brand, Advertising Strategy, and Event Promotion

A cohesive identity and brand for the region can attract tourism, economic development, as well as instill local pride in among the people that call this region home. The branding developed for the Northern Lakeshore Trail Connectivity Plan has been embraced by many and serve as the starting point for a true regional brand—particularly in relation to the typography, iconography, and color palette. A coordinating committee of Northern Lakeshore Communities should hire a creative agency to lead a branding exercise to further develop the identity of this region and craft strategic messaging to communicate its unique value.

A full advertising strategy should include recommendations for online and print marketing materials. Advertising on the Union Pacific North Metra Line is recommended to draw more visitors from outside of the region. Metra offers a wide array of advertising options including banners on trains, posters at stations, and ads in their train schedule booklets and newsletter, which are read by tens of thousands of Metra riders. In the Calumet region, for example, the South Shore Convention and Visitors Bureau commissioned local artists to design vintage-style posters to advertise on the South Shore Line to draw in more tourism to attractions along the route: southshorecva.com/region/south-shore-posters/

Once a brand and advertising strategy has been developed, this coordinating committee should create a shared calendar to promote Northern Lakeshore events and help event organizers reach a wider audience around the region. The public calendar should be cross promoted by the municipalities, regional agencies, and community organizations including the Lake County Illinois Convention & Visitors Bureau (LCICVB), Lake County Health Department, Illinois Department of National Resources (IDNR), and local chambers of commerce. Events should be listed in both English and Spanish.

Events

Community walking and bicycling events are a great way to feature the region's active transportation network. Select a route or activity that features local businesses or attractions such as the Illinois Beach State Park or any new or planned network improvements. Large events can also serve as fundraisers for local projects and bring visitors from neighboring communities.

Seasonal Walking & Bicycling Events
The Key Recommendations Memo includes existing events and new event ideas the community expressed interest in during the public outreach process for this plan. The following seasonal events are examples of activities that could be coordinated by the Complete Streets Coordination Committee in collaboration with community partners.

- **Spring Beach Clean-up –** Encourage community members to take care of their beaches and become stewards to the environment by cleaning up trash from the shoreline or helping to implement erosion control measures**.** The annual beach clean-up could include competitions between municipalities or teams to see who can collect the most trash bags or walk the most steps.
- **Summer Bicycle Wash –** Set-up a stand at local farmers' markets where people can wash their bicycles for free. Partner with Zion Cyclery or others to additionally offer quick bicycle tune-ups, helmet checks, and safety resources. This would encourage people to bicycle to the farmer's market and promote a lifestyle where bicycling is a means of transportation and not just a hobby.
- **Fall Halloween Bicycle Ride** – Host a Halloween party on two wheels where people come dressed in costume, decorate their bicycles, and ride a route of their choice or parade together through a downtown business district.
- **Winter Holiday Trail of Lights** – Decorate a trail or street with holiday lights for outdoor appreciation while bicycling or walking around the region.

Regionwide Activities
The following events could encourage more walking and bicycling in the region and help participants re-envision the design and use of their streets.

- **Path Raising** - To improve paths in the network, municipalities can train residents on how to install sidewalks and build trails. Path raising parties for trained residents can be organized to put their new skills to work in prioritized areas throughout the region (under the direction of city-authorized crews).

  The Chicago Area Mountain Bicyclers (CAMBr) and Zion Cyclery, for example, provided tools and trained volunteers to build mountain bicycle trails in Beulah Park. CAMBr now maintains these trails as well as several other trails they have built around the Chicagoland region with volunteers. In Southern Illinois, students and community members have volunteered with Southern Illinois University to help build part of a 30-mile trail network near the Shawnee National Forest. During trail building days, organizers ask volunteers to sign a waiver and provide tools and safety equipment including gloves and eye and head protective gear.

- **Open Streets** - Open Streets events occur anytime local streets are closed to vehicles and open for walking, bicycling, and informal play. The municipalities can adopt Open Streets as an annual event to complement existing events such as the Faith in Place Farmer's Markets, Zion Cyclery Bicycle Fest or Fat Tire Rides, or other local events or festivals.

  Special times or days can also be designated for stand-alone Open Streets events. One or both directions of the Amstutz Expressway between downtown Waukegan and Lake Michigan could be closed for a regionwide **Amble the Amstutz** event. In addition to proving space to walk or bicycle up and down the Amstutz, programming could include a bicycle rodeo obstacle course, yoga, dance, face painting, arts and crafts, and live music.

- **Trail Block Party** – During one month each summer, encourage community organizations to host block parties on various parts of the Robert McClory Bicycle Path or trails within the Illinois Beach State Park. Food, music, games, and bicycle parades can create a lively environment and a chance for residents to

meet their neighbors, build community, and get to know the trail network.

- **Bicycle/Walk to the Beach 5K** – Bring all five communities together for an annual 5K walk, run, or bicycle ride that brings participants along a route featuring future transportation improvement areas, local businesses, and key destinations. The event could start or end with a festival at Foss Park in North Chicago or North Point Marina in Winthrop Harbor.

- **Pilot Projects or Tactical Urbanism Installations** – Pilot project and tactical urbanism events are powerful and popular tools used by communities to visually demonstrate how walking and bicycling facilities can create safer, more engaging, livable streets. These low-cost, temporary projects, such as building a bicycle lane out of duct tape or curb bump-out with flowerpots, should be regularly used to 'test out' new designs or improvements to public spaces. They can have a big impact on building public and political support of walking and bicycling projects and can inspire long-term physical change.

  Potential tactical urbanism locations:

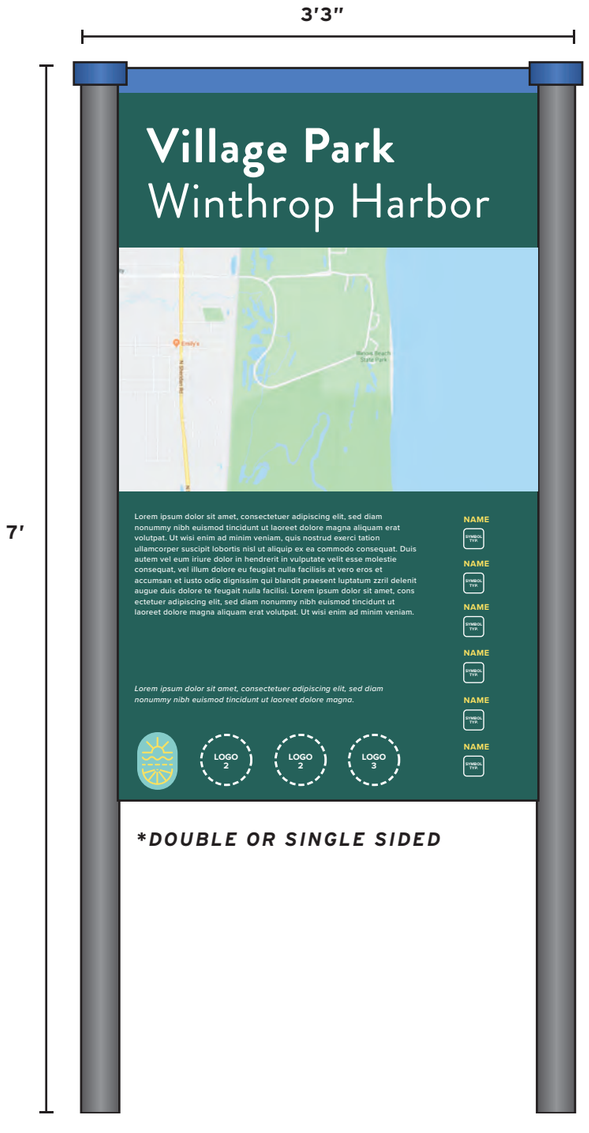
  - **North Chicago:** Foss Park District Office and Community Center
  - **Waukegan:** Waukegan High School Campuses
  - **Zion:** Roads leading into Beulah Park or Shiloh Park
  - **Beach Park:** Robert McClory Bicycle Path and W. Wadsworth Road crossing
  - **Winthrop Harbor**: Roads around Village Park
  - **Regionwide:** Mobility Improvement Areas
  - **Regionwide:** Robert McClory Bicycle Path – Host a public art competition to design and create painted intersections and trail crossings using chalk paint. The artwork will help slow down vehicle traffic, celebrate the trail, and draw attention to it. A month-long competition could coincide with the Trail Block Party.

- **Walk/Bicycle & Dine Events** - Invite pedestrians or cyclists to enjoy a progressive dinner on foot or by bicycle at local restaurants. A bicycle or walking tour of these establishments for groups of 30 or less can garner media attention for local businesses and raise the profile of walking and cycling as a way to encourage and enjoy local patronage. The route can also highlight new or potential community improvements to the transportation network.

- **Shop by Foot & Bicycle** - Encourage residents to walk or bicycle when making short errands to local shops. Partner with local businesses to provide discounts and promotions for encouragement. The Lake County Libation Trail, for example, could be expanded to encourage walk and bicycling and to incentivize more businesses to locate within the Northern Lakeshore region.

FREESTANDING SIGN STRUCTURE*

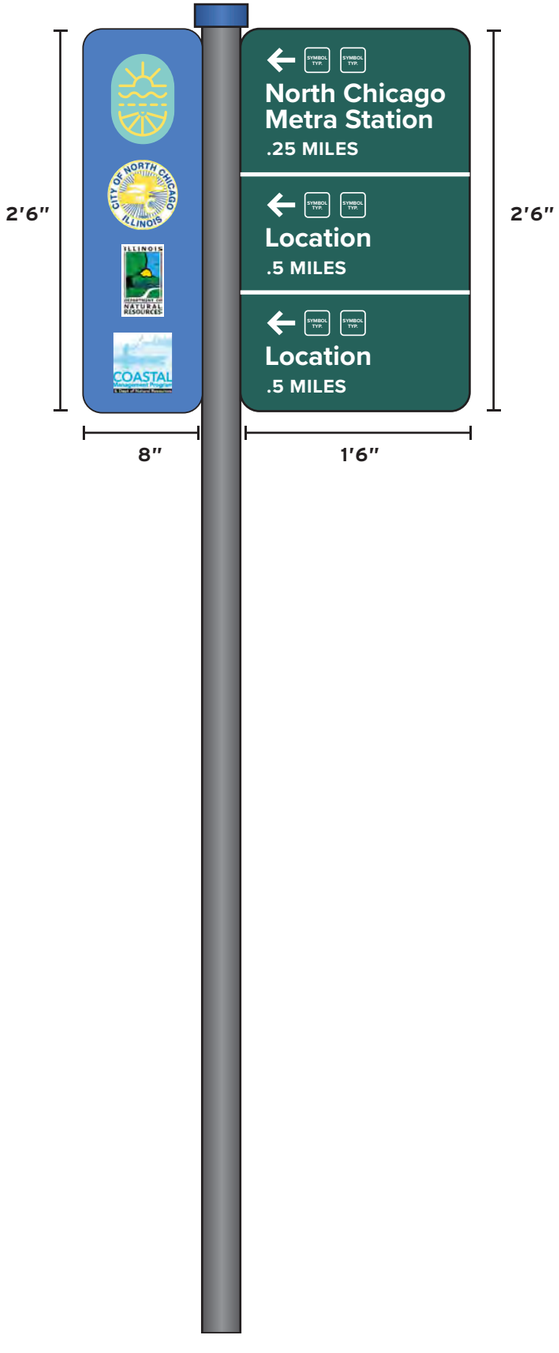
~$4,000



***DOUBLE OR SINGLE SIDED**

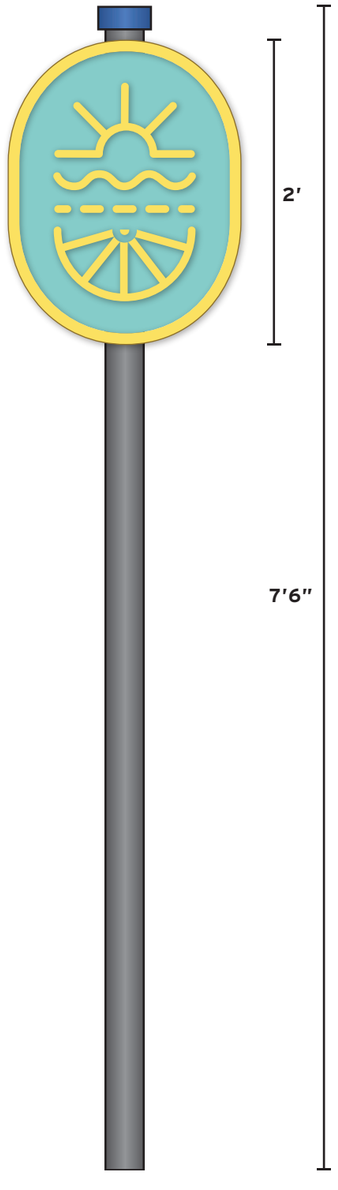
DIRECTIONAL STREET SIGNS*

~$2,000



TRAIL MARKER SIGN

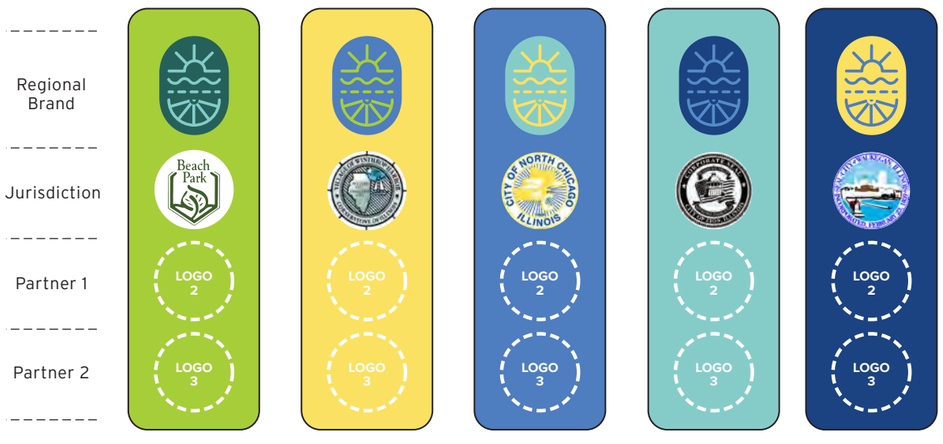
~$1,200



DIRECTIONAL WALL SIGN

~$800

***DECORATIVE SIDE MOUNT**



COLOR VARIATIONS BASED ON COMMUNITY LOCATION

NORTHERN LAKESHORE TRAIL CONNECTIVITY PLAN

WAYFINDING TYPOLOGY

INFORMED AND INSPIRED BY MUTCD AND RTA GUIDELINES

THE LAKOTA GROUP.