

ACTIVE TRANSPORTATION PLAN *for* **WHEELING**



IMPROVING OPTIONS FOR BIKING,
WALKING, AND TRANSIT ACCESS
ADOPTED JANUARY 7, 2013 (ORDINANCE NO. 4749)



ACTIVE
TRANSPORTATION
ALLIANCE



ACTIVE TRANSPORTATION PLAN *for* WHEELING

INTRODUCTION	5	ACTIVE TRANSPORTATION POLICY	57
1.1 Vision for Active Transportation	6	3.1 Leverage support of key government agencies to foster active transportation.	58
1.2 Active Transportation Plan Goals	7	3.2 Ensure Village of Wheeling policies reflect best practices for promoting active transportation.	61
1.3 Planning Process	8	3.3 Provide safe accommodations for cyclists and pedestrians in all new development.	65
1.4 Benefits of Active Transportation	11		
1.5 How to Read This Plan	14		
ACTIVE TRANSPORTATION NETWORK	16	ACTIVE TRANSPORTATION PROGRAMS	67
2.1 Develop a toolbox of built environment design practices that will create a complete, connected network for active transportation.	17	4.1 Educate the community about active transportation.	68
2.2 Increase access to recreation, employment, education and commercial centers.	34	4.2. Encourage use of active transportation	72
2.3 Develop a local network of safe routes for biking and walking that serves people of all ages and all abilities.	41	4.3 Enforce safe travel behaviors.	78
2.4 Make it possible to travel on or parallel to major roads using active transportation.	44		
2.5 Make it easier to cross all streets on foot or bike.	46	IMPLEMENTATION	81
2.6 Upgrade and revise transit service to support active transportation.	52	5.1 Implement ideas contained in this plan	82
		APPENDIX	92
		Appendix A: Existing Conditions and Community Engagement Summary	93
		Appendix B: Design Guidance	94
		Appendix C: Funding Sources	95
		Appendix D: Policy Resources	96
		Appendix E: Programming Resources	97
		Appendix F: Sidewalk Installation and Prioritization Policy	98

Acknowledgements

ACTIVE TRANSPORTATION PLAN STEERING COMMITTEE

This plan represents the combined vision and goals of the steering committee that guided its development as well as residents and other key stakeholders. Thank you to these residents and the members of the steering committee for donating their time to this project.

WHEELING ACTIVE TRANSPORTATION PLAN STEERING COMMITTEE MEMBERS:

Andrew Jennings, Wheeling Village Planner

Brooke Jones, Wheeling Associate Planner

Tim Merrihew, Wheeling Capital Projects

Paul Hardt, Wheeling Police Department

Jon Sfondilis, Wheeling Village Manager

Mark Janeck, Community Development

Mike Burns, Plan Commission, Village of Wheeling

Bill Maloney, Plan Commission, Village of Wheeling

Larry Raffel, Superintendent of Planning, Wheeling Park District

Kathy Nowicki, Prospect Heights Park District

Andrew Kruzich, Community Consolidated School District 21

Kate Kraft, Wheeling High School

Scott Berman, SuperDawg

Pat Erickson, AccuFab, Inc

Joe Beemster, Wheeling Wheelmen, Bicycle Club

Mike Walczak, Northwest Municipal Conference

Lindsay Bayley, CMAP

ABOUT THE CONSULTANTS

This plan was produced by Active Transportation Alliance with the assistance of TranSystems. The mission of Active Transportation Alliance is to make bicycling, walking, and public transit safe, convenient, and fun. TranSystems experience includes involvement in bikeway planning, transit planning, land use analysis, local roadway and highways design.

THE PROJECT TEAM:

Barb Cornew, Active Transportation Alliance

Marissa Dolin, Active Transportation Alliance

Paul Lippens, Active Transportation Alliance

Dan Persky, Active Transportation Alliance

Brandon Whyte, Active Transportation Alliance

Gina Trimarco, TranSystems

Josh Sikich, TranSystems

CHICAGO METROPOLITAN AGENCY FOR PLANNING (CMAP), COMMUNITY PLANNING PROGRAM GRANT

Preparation and completion of this document was financed by federally funded grant dollars through the Chicago Metropolitan Agency for Planning (CMAP). The goals and recommendations of this plan have been developed in accordance with the CMAP GO TO 2040 Plan, a comprehensive, regional plan set in place to guide the seven counties and 284 communities of northeastern Illinois towards sustainable prosperity in the future.

INTRODUCTION



Active Transportation Plan for Wheeling

Improving options for biking,
walking and transit access.

1

1.1 Vision for Active Transportation

The Village of Wheeling will have a complete, safe and attractive network of transportation options for residents and visitors. The network will allow people to travel throughout Wheeling and connect to adjacent communities on foot or bike. The users of this network will benefit from the health, safety and economic opportunities provided by being able to access parks, schools, transit, trails, businesses and other destinations on foot or bike.

Wheeling's vision for active transportation is a statement about the future of walking, biking and access to transit in Wheeling. It is intended to guide the Village as it continues to develop its transportation network, make policy changes, and provide programming to residents and visitors.

This statement, crafted with input from residents and community organizations, along with input from hundreds of people in the Wheeling community, shapes the recommendations included in this plan. The vision is supported by goals, objectives, and strategies. This structure provides actionable steps to implement as the Village works toward enacting its vision for active transportation.

VISION: A statement about the future of active transportation in Wheeling

GOALS: Areas of focus for achieving Wheeling's vision for active transportation

OBJECTIVES: Specific ways to achieve Wheeling's vision for active transportation

STRATEGIES: Projects the Village can complete to achieve its goals

1.2 Active Transportation Plan Goals

The following goals are established to support the Village's vision for active transportation:

NETWORK.

Increase transportation options, accessibility and connectivity for people walking, bicycling and riding transit.

POLICIES.

Leverage municipal policies to develop a comprehensive active transportation network that is safe and inviting to all.

PROGRAMMING.

Provide education, encouragement and enforcement programs for active transportation users. Enable people of all ages, abilities, and spoken languages to feel safe and confident while walking and biking.

IMPLEMENTATION.

Implement recommendations contained in this plan.

1.3 Planning Process

This plan is the result of an eight-month process designed to result in community supported recommendations and priorities. Active Transportation Alliance, TranSystems and the Village created the following process to ensure that the Wheeling Active Transportation Plan reflects the goals and visions of the community.

1.3.1 ESTABLISHED A STEERING COMMITTEE

The steering committee represented a large number of stakeholders in the community and the interests of residents, businesses, agencies, and organizations that serve the Wheeling community. A complete list of steering committee members is available in the Acknowledgements section of this plan.

Steering committee members contributed to the development of the plan in the following ways:

Participated in a “Get to Know Wheeling” bike ride with the consulting team, where the participants were able to identify places that were challenging for cyclists and pedestrians

Engaged the communities they represented in the planning process by distributing information about meetings and events for this plan, posting electronic flyers on their organization’s websites, and distributing flyers and links to an online survey

Reviewed the research and recommendations made by the consulting team to ensure that the plan was reflective of their group’s priorities for active transportation



STEERING COMMITTEE MEMBERS
gather before leading a “Get to Know Wheeling” bike ride.

1.3.2 PROVIDED INFORMATION TO RESIDENTS ABOUT KEY WAYS TO GET INVOLVED

The project team applied a variety of strategies to get the word out about Wheeling's active transportation planning process. To reach the widest audience, the following strategies were used:

Gained media coverage in the local newspapers, on social media, and on various websites

Provided a representative to engage residents with mapping exercise and surveys at community events sponsored by members of the steering committee

Posted meeting notices, surveys and fliers throughout the community

Identified and targeted groups that are not on the steering committee but are key parts of the Wheeling community for public participation

1.3.3 ENGAGE THE COMMUNITY IN A VARIETY OF VISIONING ACTIVITIES

The project team employed a variety of strategies to engage Wheeling residents in the planning process:

Active transportation plan community meeting: An evening meeting was held to discuss and envision future active transportation conditions in the Village.

Surveying: Online and paper copy surveys were distributed throughout the community.

Interactive maps and surveys: Posters with questions about active transportation were posted at the recreation center and library.

Targeted focus groups: The project team met with key groups of residents in Wheeling to provide input.

Individual stakeholder interviews: The project team met with business owners and managers to discuss how active transportation affects businesses, their customers and employees in Wheeling.



WHEELING RESIDENTS attend a community meeting about active transportation.



THE PROJECT TEAM attends the Wheeling Bike Rodeo.



1.3.4 SOLICITED INPUT FROM NEIGHBORING MUNICIPALITIES AND OTHER GOVERNMENT AGENCIES

The project team met with the Cook County Forest Preserve District, the Village of Arlington Heights, the Village of Buffalo Grove and the Northwest Municipal Conference to ensure that the Wheeling Active Transportation Plan is consistent with the plans of the neighboring municipalities and other relevant government agencies.

1.3.5 DEVELOPED AN IN- DEPTH UNDERSTANDING OF WHEELING'S EXISTING TRANSPORTATION NETWORK

The project team conducted a technical analysis of existing conditions using available data provided by the Village in conjunction with field visits. This analysis identified strengths and challenges in Wheeling's existing active transportation network, and informed and refined the transportation network recommendations previously identified by residents.

1.3.6 SHARED RECOMMENDATIONS CONTAINED IN THIS PLAN THROUGH A TOUR

Upon completion of a draft of this plan, the project team lead a tour of recommendations contained in this plan. Participants received a hands-on lesson of the role active transportation plays in Wheeling and how continuing to work on active transportation issues in Wheeling will benefit the community. A large community ride is planned for Spring 2013.

1.4 Benefits of Active Transportation

There are many reasons people walk, bike and ride transit. By implementing this plan, the people in Wheeling will be able to enjoy all the benefits of active transportation.

1.4.1 HEALTH

Walking and biking are easy, affordable and convenient ways to get exercise. With sedentary lifestyles and obesity on the rise, promoting active transportation is more important than ever. People are encouraged to get at least 30 minutes of physical activity per day. That can easily be achieved by substituting one short car trip with a trip using active transportation.

1.4.2 SAFETY

Active transportation facilities provide safety benefits for all roadway users. Many of the built environment changes that support walking and biking have positive safety benefits for all roadway users by creating a safe place to walk, bike or access transit, and by encouraging more cautious driver behavior through complete streets design.

PEOPLE WHO WALK
AND BIKE
have more
opportunities to
connect with others.



1.4.3 SOCIAL

People who walk and bike have more opportunities to connect with each other. People who walk and bike are more aware of their neighborhood and tend to have more and stronger social connections with their neighbors. More connections encourage people to be active, happy and socially engaged.

WALKING AND BIKING
provide transportation
choices.



1.4.4 TRANSPORTATION

Walking and biking are more than just recreational activities. They are ways to get around in a community. For certain trips, especially at rush hour, walking, biking and riding transit can be faster than driving. Active transportation provides transportation options for people of all ages and abilities. Approximately one third of all Americans don't drive. Older adults, children, people with disabilities, and low-income residents also need a way to get around. They depend on walking, biking and transit for their transportation needs.

ACTIVE
TRANSPORTATION
connects local
residents to local
businesses



1.4.5 ECONOMIC

Walking and biking are affordable ways to travel. Safe, fast and convenient bike and pedestrian routes to stores encourage local shopping. The cost to an individual who owns, maintains and drives a car on a regular basis is about 12 times higher than transportation costs for a person who relies on walking, biking and transit. A complete and well-connected active transportation network also has a positive effect on property values and local spending.

1.4.6 ENVIRONMENTAL

Shifting motor vehicle trips to walking, biking or transit reduces greenhouse gas emissions and contributes to cleaner air.

In addition to the benefits experienced from using active transportation, the Village of Wheeling can expect other benefits from adopting this plan.

1.4.7 GRANTS AND FUNDING OPPORTUNITIES

Almost all state and federal sources of grant funding for municipalities to improve infrastructure, advance policy, and offer programming require an active transportation plan outlining the goals of the community. Having a plan increases Wheeling's chances of receiving grant funding.

1.4.8 BUILDING PARTNERSHIPS

The process of developing an active transportation plan in Wheeling will help to maintain existing partnerships and create new ones with common goals.

1.4.9 COORDINATION

An active transportation plan facilitates coordination among the Village, local school districts, the park districts, the forest preserve, developers, Cook County, and Illinois Department of Transportation. Many of these other agencies maintain parts of the transportation network in Wheeling. A plan helps to communicate the Village's priorities with other agencies and take advantage of implementation opportunities.



AN ACTIVE
TRANSPORTATION
PLAN
communicates
a community's
transportation needs.

1.5 How to Read This Plan

This plan is organized into chapters based on Wheeling's goals, objectives and recommendations for improving biking, walking and access to transit in the Village.

Within each chapter are several objectives that support the chapter's goal. And for each objective there are recommendations, actions or specific strategies and tools that can be used to reach the objective.

#	GOAL
---	------

##	OBJECTIVE
----	-----------

###	RECOMMENDATION/ACTION
-----	-----------------------

	TOOL/STRATEGY
--	---------------

###	MAP (NETWORK ONLY)
-----	--------------------

The final chapter, Implementation includes information on how to prioritize the plan's recommendations. Prioritization is based on five factors:

COORDINATION

Represents the general amount of time and coordination from the Village as well as cooperation with outside agencies needed from project initiation to project completion

HIGH: Requires coordination with multiple jurisdictions

MEDIUM: Requires some coordination with outside agencies

LOW: Requires low level of coordination with other agencies

COST

Represents a rough estimate of the dollars necessary to plan, design, construct and/or execute a specific strategy

HIGH: High-cost project, usually involves significant construction

MEDIUM: Mid-cost project

LOW: Low-cost project that involves minimal construction (e.g., signs or paint)

COMMUNITY INPUT

Represents the preference of community members based on feedback received during the community engagement phase of the planning process

HIGH: Received many public comments on safety or importance of strategy

MEDIUM: Received some public comments on safety or importance of strategy

LOW: Received few public comments on safety or importance of strategy

SAFETY

Represents the change in the level of safety for cyclists and pedestrians after implementation of the strategy

HIGH: Greatly reduces unfavorable environment for bicyclists and pedestrians based on national best practices for active transportation safety

MEDIUM: Reduces unfavorable environment for bicyclists and pedestrians based on national best practices for active transportation safety

LOW: Increases level of safety for cyclists and pedestrians in an area where there is some accommodation

IMPACT

Represents an estimate of usage of a particular strategy

HIGH: Likely to be a substitute for motor vehicle trips and/or provide a significant benefit for recreation. Significantly improves network connectivity

MEDIUM: A substitute for motor vehicle trips, but limited to a smaller area. For example, a project that connects two adjacent subdivisions but has little projected impact on the network as a whole

LOW: Slight increase in convenience, but may have a comparable existing alternate route or strategy

ACTIVE TRANSPORTATION NETWORK

2



Network Goal

Increase transportation options, accessibility and connectivity for people walking, bicycling and riding transit.

2.1 Develop a toolbox of built environment design practices that will create a complete, connected network for active transportation.

Wheeling's active transportation network connects people to places so that people throughout Wheeling can safely and conveniently walk, bike or ride transit everywhere in the community. In order to build a complete network, Wheeling will need to use a set of tools specially designed for pedestrians and cyclists. All of these tools are already in use in Wheeling or other local communities and are recommended as best practices by national authorities to make transportation safe for cyclists, pedestrians and drivers.

The following sections are meant to illustrate the most commonly used tools for cyclists and pedestrians. For additional technical guidance the following guidelines are recommended:

FEDERAL GUIDANCE

Manual on Uniform Traffic Control Devices (MUTCD)

American Association of State Highway and Transportation Officials (AASHTO)

The Pedestrian Right of Way Accessibility Guidelines (PROWAG)

SUPPLEMENTAL GUIDANCE

National Association of City Transportation Officials (NACTO)

Complete Streets, Complete Networks: A Manual for the Design of Active Transportation

See Appendix B for a more complete listing of design guidance and resources.

SIDEWALK
with buffer from
the street.



**PEDESTRIAN
CROSSING SIGNS**
create awareness for
pedestrian crossings.



2.1.1 RECOMMENDED TOOLS FOR PEDESTRIANS

To ensure the safety and integration of pedestrians within Wheeling's Active transportation network, a special set of tools can be used. These tools are intended to accommodate pedestrians of all ages and abilities.

The following tools will help make a complete, connected pedestrian network in Wheeling.

SIDEWALKS

A well-designed residential sidewalk has a minimum five-foot unobstructed width (10 feet in busy commercial areas) to allow pedestrians and people in wheelchairs to maneuver comfortably.

In addition to the sidewalk, there should be a space separating pedestrians and vehicular traffic. The sidewalk buffer zone, also called a furniture zone, is the area between the sidewalk and the curb or vehicle travelway. It provides separation from traffic and improves the pedestrian experience.

In residential areas, this zone is often a planting strip for trees or grass. Most trees require at least six feet of open space around the trunk to reach maturity and maintain health. Utilities and other structures can be located in the buffer zone.

SIGNS

Signs are an effective way to welcome, alert, inform and direct pedestrians and other roadway users, especially at intersections and crossings. The MUTCD offers guidance for signage use in the transportation network, including pedestrian and bicycle signs. Some special districts use distinctive wayfinding signs, interpretive placemaking signs and banners to provide necessary user information and convey a sense of local identity.

CURB RAMPS WITH TACTILE STRIPS

Curb ramps with tactile strips make it easier for people in wheelchairs, visually impaired persons, children, and people with strollers to cross from the sidewalk to the street at an intersection. Tactile strips, which are usually red and bumpy, are especially important for visually impaired people because the strips help them distinguish between the sidewalk and the street. All crossings, marked and unmarked, should have curb ramps with tactile strips.



CURB RAMPS AND TACTILE STRIPS (RED) make it easier to cross from the street to the sidewalk.

CROSSING ISLANDS

Crossing islands reduce crossing distance and allow pedestrians to cross only one direction of traffic at a time. Crossing islands are most beneficial at unsignalized pedestrian crossings, but they also can be useful to shorten crossing distances at signalized intersections. One way to add a crossing island at multi-lane intersection is by “nosing out” the median to extend the median beyond the crosswalk, creating a refuge for pedestrians where the median intersects the crosswalk.



CROSSING ISLANDS reduce crossing distance and traffic exposure time for pedestrians.

BUMP-OUTS

A curb bump-out is an extension of the sidewalk into the parking lane, reducing roadway width and creating a shorter crossing distance for pedestrians. Curb extensions can be used to slow vehicular traffic and increase awareness of pedestrians. Bump-outs may be used on arterial, collector and local roadways, and should not extend into travel space for bicycles.



BUMP-OUTS also reduce crossing distance and traffic exposure time for pedestrians.

PEDESTRIAN-SAFE TURNING RADIUS

The turning radius at a particular intersection needs to accommodate both the intended vehicles and any persons crossing the roadway. A wide turning radius facilitates fast turns by wider vehicles. A narrow turning radius will provide for a slower and safer turn by the vehicles. Intersections should be designed as compact as possible. On truck routes, designers should use the effective turning radius and allow turning to and from multiple receiving lanes.



CROSSWALKS

Painted crosswalks alert drivers where to expect people crossing. Crosswalks are typically two white lines across the street, but other designs draw more attention to the crossing and tend not to wear away as quickly. Special paving or colored markings may also be used.



STOP BARS

Stop bars, also called stop lines, emphasize the presence of a stop sign or traffic signal(s) and specify where a driver must stop in order to not block the crosswalk.



STOP BARS
illustrate where a driver must stop.

PEDESTRIAN SIGNALS

Pedestrian signals indicate when a pedestrian is allowed to walk across a street. For a complete, connected pedestrian network, all intersections with traffic signals should have pedestrian signals at every corner.

PEDESTRIAN COUNTDOWN SIGNALS

Countdown pedestrian signals show how much time remains before the traffic signal changes and are designed to reduce the number of pedestrians who start crossing when there is not enough time to complete their crossing safely.



PEDESTRIAN COUNTDOWN SIGNALS
let pedestrians know when it is safe to cross.

PEDESTRIAN DEMAND-ACTUATED SIGNAL

At traffic signals where pedestrians are expected during most signal cycles, the signal can automatically show a walk sign. For traffic signals where pedestrians are expected less frequently, a button can be placed for a demand actuated signal. This kind of signal shows a walk light only when pressed.



PEDESTRIAN ACTUATED SIGNALS
give pedestrians more time to cross, when pushed.

LEADING PEDESTRIAN INTERVAL

Leading pedestrian intervals are pedestrian signals that give pedestrians a head start in front of turning traffic when crossing the street. This tool should be used at traffic signals near parks, schools or in other areas with a higher than average number of pedestrians.

PEDESTRIAN BEACONS
flash when a user
activates them.



PEDESTRIAN BEACONS

Pedestrian beacons are user activated signals used to control traffic and create additional awareness for pedestrians at unsignalized crossings. They are usually dark, allowing traffic to flow. When a pedestrian activates a beacon, they begin to flash, alerting drivers to a pedestrian.

RAILROAD CROSSINGS

Railroad crossings should be designed according to guidelines provided in the MUTCD. Pedestrian gates should be included at all crossings. Whenever possible, the angle of the intersecting sidewalk or side path should be adjusted to meet the tracks at a 90-degree angle. An unobstructed pedestrian travel way should be maintained through the crossing area and tactile warning textures should be used to queue people with a visual impairment.

STREET ALIGNMENT CHANGES

Changes in the street alignment can encourage travel speeds at the posted limit. Pedestrians benefit from slower vehicle speeds because drivers tend to be more cautious, and crashes have higher survival rates.

CHICANES

Chicanes are planted areas, curb extensions and/or medians that require drivers to slow down to negotiate bends in the travel space. Chicanes are most appropriate on local, residential roads and should not be used on streets with bus transit service or heavy truck traffic.

ON-STREET PARKING

On-street parking calms traffic by visually narrowing a roadway and creating additional buffer space between pedestrians and automobile traffic.

ROAD DIETS

Road diets use the existing roadway, without expanding the paved surface, they reconfigure the lane width to add multimodal capacity, on-street parking and/or a turn lane. There are many types of road diets, but the two most common are described below.

Consolidate number of travel lanes: Some roads with four travel lanes, two in each direction, do not need the additional travel lane, except for left turning traffic. Traffic might flow more smoothly with one travel lane plus a center left turn lane. So, a four-lane roadway can be re-stripped as a three-lane roadway, and additional roadway can be used for on-street parking or a bike lane.

Reduce lane width: Minimum roadway width, while maintaining capacity for a travel lane is 10 feet. Many roads are built with 12 foot or wider travel lanes. If sufficient width is available, travel lanes may be repainted at the minimum width, and the additional roadway width can be used for bike lanes or on-street parking.



CHICANES AND ON-STREET PARKING encourage cautious driving on local roads

MINI-ROUNDAABOUTS
direct drivers through
intersections



MINI-ROUNDAABOUT

Mini-roundabouts direct users through intersections in a predictable manner at slow speeds and set a tone of cautious driving. They have a fully mountable center island that can be driven over by emergency vehicles, buses or large trucks, when necessary. Mini-roundabouts are most effective when placed at the intersection of two local roads.

TREES
make a street
feel narrower.



PLANTINGS AND TREES

Street trees and landscaping are essential parts of the urbanized ecosystem, enhancing the comfort and safety of people who live and travel along the street. Trees provide shade to pedestrians, have positive environmental benefits, and function as a traffic calming measure to visually narrow a roadway.

LIGHTING
allows pedestrians
to feel safe while
walking at night.



LIGHTING

Lighting creates safe and desirable places to walk at night and during daytime. Lighting selection can add value and aesthetic character to neighborhoods and commercial districts.

2.1.2 RECOMMENDED TOOLS FOR BICYCLISTS

To ensure the safety and integration of cyclists within Wheeling's Active Transportation Network, a special set of tools can be used. These tools are intended to accommodate cyclists of all ages and abilities. Some of these tools create awareness for cyclists on shared roadways, other tools help to create space for cyclists separated from traffic, but still on the roadway, while others create a shared space for cyclists and pedestrians off the roadway.

The following series of tools will help make a complete, connected bicycle network in Wheeling.

ON-STREET TOOLS

Because cyclists often move significantly faster than pedestrians and because cyclists are more visible to drivers on the roadway, bicycling on a street can often be safer than bicycling on a sidewalk. The following tools can be applied on a street, between the curbs of a roadway.

It should be noted that youth cyclists are encouraged to ride on the sidewalk, while adult cyclists are encouraged to ride in the street, when conditions are safe, and obey traffic laws.

SIGNED ROUTES

Bike route signs raise all users' awareness and acceptance of cycling. They make all residents aware of the most bike-friendly routes in their communities. Bike route signs are appropriate for any roadway that provides an essential link in a bicycle system, and can offer important, affordable motorist education and traffic calming. However, signage is no substitute for installation of an appropriate infrastructure to support safe cycling. Instead of posting simple "Bike Route" signs, the best solution is to implement a system of wayfinding signs that provide directions to specific destinations. These types of bikeway signs provide useful information and directions for cyclists, drivers and pedestrians alike.



SIGNED BIKE ROUTE
with distance,
destination, and
direction indicated

SHARED LANE MARKINGS
reinforce where
a cyclist should
be riding.



MARKED SHARED LANES

Marked shared lanes use a double chevron and bicycle marking, or “sharrow,” in a lane intended for the joint use of motorized and bicycle traffic. Chevron symbols direct bicyclists to ride in the safest location within the lane, outside of the door zone of parked cars and areas where debris is likely to collect. Generally, marked shared lanes are a low-cost treatment suitable for lightly travelled collector and arterial roads.

BIKE BOULEVARDS
are a place to bike.



BIKE BOULEVARDS

Bike boulevards, also called neighborhood greenways, are created by modifying a local street to give priority to bicyclists while maintaining access for local traffic. Traffic-calming measures reduce motor vehicle speeds and through trips; traffic controls limit conflicts between motorists and bicyclists, giving priority to bicyclists’ through-movement. Some bike boulevards replace stop signs with mini-circles and mini-roundabouts to reduce stopping for cyclists. Bike boulevards and neighborhood greenways also include provisions for crossing intersecting arterial corridors. They are good options for low-volume, low-speed corridors. They also can play a prominent role in a bicycle network by serving as viable alternatives to major arterials, linking important community places, and connecting multiple intersecting bike routes.

WIDE PAVED SHOULDERS
are a place to bike.



PAVED SHOULDERS

Paved shoulders are the paved areas adjacent to motor vehicle travel lanes. They can be considered for corridors that cannot accommodate 5-foot bike lanes, or as an interim step for corridors where funding has not yet been secured to add bike lane markings and signs. Paved shoulders also can be considered on roads where demand for bike lanes is limited, or on rural roads where shoulders are shared with pedestrians. For safe cycling, paved shoulders must be at least 4 feet wide.

BIKE LANES

Bike lanes create a dedicated space for cyclists on a roadway. They are appropriate on streets with moderate to heavy traffic. Bike lanes are indicated by on-street markings, which can be supplemented with signage. Bike lanes reinforce proper roadway etiquette, raise the visibility of bicyclists, and help both bicyclists and drivers behave predictably when sharing road space. For safe cycling, bike lanes should be 4'-6' wide. If more than 6' is available, consider buffered or protected bike lanes.

BUFFERED BIKE LANES (PAINTED SEPARATION)

Buffered bike lanes use a painted buffer area to separate the vehicle travel lane from the bike lane. This buffer, usually 2 to 3 feet wide, can provide sufficient separation to improve cyclists' comfort and safety on heavily traveled arterial corridors. Where there is sufficient space within the curb-to-curb area, buffered bike lanes provide a more affordable solution than a shared-use path. Buffers also can be used between the bike lane and on-street parking, to separate the lane from the door zone.

PROTECTED BIKE LANES (PHYSICAL SEPARATION)

Protected bike lanes (also called cycle tracks or green lanes) are bike lanes separated from vehicle traffic by a curb, rail, or bollards, providing dedicated space for bicyclists who are not comfortable riding on busy streets. Cycle tracks typically are wider than bike lanes, allowing cyclists to ride side-by-side or to pass each other.

ROAD DIETS

Road diets use the existing roadway, without expanding the paved surface, they reconfigure the lane width to add multimodal capacity, on-street parking and/or a turn lane. See complete description on p. 23.



BIKE LANES
designate a place
on the roadway
exclusively for
cyclists.



BUFFERED BIKE LANES
have a painted
buffer between
cars and cyclists.



PROTECTED BIKE LANES
have a physical
separation between
cars and cyclists.

SIDE PATHS
accommodate cyclists
and pedestrians.



CUT-THROUGHS
provide a shortcut
for people walking
and on bicycles.



OFF-STREET TOOLS

Sometimes, the best way to accommodate cyclists is by creating a separate path or trail that is shared with pedestrians. The following are a set of tools that can be used to accommodate pedestrians and cyclists, separate from the roadway.

SIDE PATHS

Side paths are paved concrete or asphalt paths wide enough to accommodate both pedestrians and cyclists. They are typically a minimum of 8-foot wide with 2 feet of clearance on either side of the path. Side paths offer cyclists a safe place to bike off-street when there is no space for a bike lane, or it is unsafe to bike on the street. They should be installed parallel to arterial and collector streets in areas where there are only a limited number of driveways. Typically sidepaths do not have a centerline stripe.

CUT-THROUGHS

Cut-throughs offer pedestrians and cyclists shorter and more direct routes to adjacent residential neighborhoods, schools, or parks. They are usually short sections of sidewalk or side path.

TRAILS

Trails are a place for recreation as well as transportation.

PAVED TRAILS

Paved trails are off-street paths, usually not paralleling a roadway. Trails should be at least 8 feet wide with 2 feet of clearance on either side. However, a 10- to 12-foot paved trail with additional clearance is recommended. A yellow centerline stripe may be used on this type of trail. The stripe should be dotted where there is adequate sight distance for passing, and solid where passing should be discouraged.

UNPAVED TRAILS

Unpaved trails are typically the same width as paved trails, but instead of concrete or asphalt, surfaced with crushed limestone. This ensures accessibility for people with disabilities. Dirt trails (such as Des Plaines River Trail in the Wheeling area) do not meet those requirements.



PAVED TRAIL



TRAIL WITH CRUSHED LIMESTONE

“U” BIKE RACKS
are ideal for short-term bike parking, and covered bike racks are ideal for longer-term bike parking.



BIKE PARKING

Having a safe, secure place to leave a bike is an important part of traveling by bicycle. Racks should be located within clear view of the destination's entranceway, preferably as close as the closest motor vehicle parking space, and no more than 50 feet away from the entrance. If multiple racks are clustered in a visible and signed location, they can be sited up to 100 feet away from the entrance. If racks are placed further away than this, cyclists are likely to ignore the racks and look for a closer place to lock up.

Bicycle parking should be located throughout the community on every block with stores or restaurants, at every school, park and recreational facility and at every place of employment. For destinations frequently visited by cyclists or where bicycles will be parked for a longer period of time, such as at a Metra station, covered bicycle parking should be considered in addition to racks. A bike parking policy should cover design, placement and other bike parking standards like those listed below.

Bicycle rack selection is important. A good rack has the following qualities:

Support the bicycle upright by its frame in two places

Prevent the wheel of the bicycle from tipping over

Enable the frame and one or both wheels to be secured

Support bicycles without a diamond-shaped frame with a horizontal top tube (e.g. a mixte frame)

Allow front-in parking: a U-lock should be able to lock the front wheel and the down tube of an upright bicycle

Allow back-in parking: a U-lock should be able to lock the rear wheel and seat tube of the bicycle

The rack element should resist being cut or detached using common hand tools, especially those that can be concealed in a backpack. Such tools include bolt cutters, pipe cutters, wrenches, and pry bars.

By choosing racks with a unique color or shape at high-visibility locations, the racks can add character to a community. The Village may also use a cost sharing program with businesses where businesses or the chamber of commerce purchase racks, and the Village installs them.

2.1.3 RECOMMENDED TOOLS FOR IMPROVING ACCESSIBILITY TO PLACES

There are several commonly occurring barriers to walking and biking to destinations in Wheeling. Applying the following design principals throughout the Village, especially during the development phase of a project, will ensure greater walkability to destinations in Wheeling.

The following tools will help the active transportation network connect to Wheeling's most important destinations.

COMMERCIAL DRIVEWAY CROSSINGS

Walking on an arterial or collector street is often the only option for a pedestrian wishing to access a shopping center, pedestrians are often not accommodated at shopping center and other driveways. In all new and reconstructed driveways, build sidewalk all the way across the driveway to illustrate that pedestrians have the right of way. If sidewalk is not available, stripe a crosswalk. Place a stop sign and stop bar at all driveway exits. Signs should be placed before the sidewalk so drivers do not stop in the sidewalk. Encourage narrow, shared driveways with the narrowest turning radius possible.

PARKING LOT DESIGN

Regardless of other modes of travel used, all trips begin and end with walking. Typically parking lots are designed for auto circulation. But for every car that enters a parking lot, one or more people are walking through that same lot. To better accommodate pedestrians within a parking lot, parking lot design should include crosswalks from the parking aisles to store entrances, as well as must stop for pedestrian signs and any other enhancements to accommodate pedestrians. Additionally, there should be a clear and convenient path for pedestrians and transit riders connecting sidewalk outside the shopping center to business entrances.



THERE ARE WAYS to accommodate pedestrians at driveway crossings.



THERE ARE WAYS to accommodate pedestrians in parking lots.

BIKE INTERSECTIONS

Bicyclists are particularly susceptible to crashes at intersections because motor vehicles are slowing down, speeding up and turning. There are special treatments that can be used at intersections to improve bicycle safety. Tools like thru-bike lanes, intersection marking and dashing, bike boxes, and bike turn lanes all can make the bicyclist more visible and thus less likely to be hit in intersections. Appendix B provides design resources that can be used for intersection improvements for bicycles.

LOCAL/COLLECTOR
AND LOCAL/ARTERIAL
INTERSECTIONS
should include
pedestrian
accommodations



LOCAL/COLLECTOR OR LOCAL/ARTERIAL INTERSECTIONS

Because many neighborhoods do not offer cut-through connections to nearby neighborhoods, pedestrians and cyclists often must use collector and arterial roads to access their destination. To better accommodate these active transportation trips, all intersections of local and collector roads or local and arterial roads should have the following:

Curb ramps with truncated domes at all corners of all intersections allowing pedestrians to cross both the local and collector or arterial roads from all corners of the intersection

Stop signs, stop bars and painted crosswalks on the local legs of the intersection

Paint on the curbs or signs delineating the areas prohibited for parking including a minimum 20 feet before each intersection on local roadways

LOCAL/LOCAL INTERSECTIONS

Although local streets are often pedestrian and bike friendly, ensuring that all corners of an intersection have curb ramps with truncated domes, sidewalk connecting to the intersection, stop signs instead of yield signs, marked crosswalks, and stop bars will make those intersections even safer for cyclists and pedestrians. Mini roundabouts and day-lighting (the removal of parking close to the intersection) can also be used at this type of intersection.

INDUSTRIAL AND OFFICE PARKS

Many industrial and office parks are located on low volume roads that provide alternatives to walking or biking on arterial roadways. These roads should be signed as bike routes, and where right of way is available, sidewalks should be built, if missing. Each building should have bicycle parking for employees and visitors. The bike parking should be located close to the building entrance and easy to find. The Village may also consider additional transportation demand management strategies.

BIKE RACKS

should be available at
all schools and parks



PARKS

All entrances to parks should be connected by sidewalk and all subdivisions adjacent to parks should have at least one park entrance for people walking or biking to the park.

Place bike parking at each playground or playing field.

SCHOOLS

Schools should be accessible by foot and bike from all sides. Build paths or sidewalks connecting all adjacent streets to schools.

All schools with students in grades K–12 should have bike racks. Place bike racks in a clearly visible location so the bikes can be monitored during the day.

Students walking and bicycling to school should be considered in all pick-up/drop off procedure plans.

SCHOOL WALKING ROUTES

Identifying specific walking routes to schools that direct students along a route with crossing guards or encourage students to walk along streets with sidewalks can enhance student safety.

2.2 Increase access to recreation, employment, education and commercial centers.

The Village of Wheeling's active transportation network connects people to places in the Village. Providing bicycle and pedestrian access to important destinations will help people in the community travel to work, school, shopping or recreation in the Village using an active mode of transportation.

Map 2.2 and the implementation tables in Chapter 5 depict the recommendations described in this section

2.2.1 RECOMMENDATIONS FOR IMPROVING ACCESS TO PLACES

Based on input from more than 225 people within the Wheeling community, the following places were identified as the most important destinations. Most are places that community members visit frequently. The network was designed to provide safe and convenient routes to each of these places in Wheeling.

MILWAUKEE AVENUE BUSINESS DISTRICT ("RESTAURANT ROW")

Improve pedestrian connections between the residential and retail zones by providing a pedestrian crossing on Dundee Road, slightly west of Milwaukee Avenue.

Improve pedestrian access to businesses along Milwaukee Avenue by creating safer and more frequent crossings across Milwaukee Ave.

Decrease the likelihood of pedestrian crashes by encouraging new businesses to share driveways with existing, adjacent businesses, and encourage existing businesses to consolidate driveways.

As a traffic-calming measure, and as a way to create a more significant buffer between the roadway and pedestrian way, allow on-street parking during off-peak hours.

Create a more pedestrian friendly environment along this corridor by revising the development requirements to include wider sidewalks, street trees, lighting and other street furnishings, as well as requiring buildings to be built closer to the street with parking in the rear.



A PEDESTRIAN
on Milwaukee Avenue.

A FAMILY WALKING TO
TARGET
faces many barriers.



LAKE COOK ROAD/MCHENRY ROAD SHOPPING DISTRICT

Facilitate pedestrian access to this shopping area by formalizing cut throughs from near-by subdivisions.

Create safer driveway crossings for pedestrians by striping crosswalks across driveways.

For traffic signals in this area, all sides of the intersection should have crosswalks and demand-actuated pedestrian signals.

THE BUSINESS PARK
could be an inviting
place to walk or bike



BUSINESS PARK AT WOLF ROAD AND PALATINE ROAD

Encourage walking and biking within the business park by installing bike lanes on the street and upgrading any missing or damaged sidewalk.

Connect this business park to the active transportation network with bicycle facilities on the Palatine frontage road and Wolf Road.

Work with IDOT to ensure that pedestrian signals are installed at the intersection of Wolf Road and Palatine Road.

Explore opportunities to better connect Pace bus routes to this office park

Explore opportunities to improve connectivity across the NCS railroad tracks at Palatine Road

COMMUNITY CAMPUS: VILLAGE HALL, HERITAGE PARK, METRA STATION, REC CENTER, AQUATIC CENTER

Install signage within the campus directing people to the Metra station using the existing paths.

Install bike route signage directing cyclists to the north, south, west and east access points once the on-street accommodations are in place.

Monitor usage of bike parking at the various facilities and adjust quantity of parking as needed.

Complete the Heritage Park Master Plan

Complete the planned signalization of Community Boulevard at Dundee Road

Include bicycle and pedestrian routes and accommodations between the Community Campus and all future Town Center developments

INDIAN TRAILS PUBLIC LIBRARY

Add a mid-block crossing with Must Stop for Pedestrians signs, yellow pedestrian crossing warning signs and a ladder-style crosswalk to help people safely cross Schoenbeck Road.

Install additional lighting near the crossing to enhance pedestrian safety.

Explore opportunities for pedestrian cut throughs in Horizon Park and near-by subdivisions



HERITAGE PARK AND MUNICIPAL CAMPUS are popular destinations for people walking and biking in Wheeling



INDIAN TRAILS LIBRARY is a place people would like to walk to in Wheeling

2.2.2 RECOMMENDATIONS FOR IMPROVING ACCESS TO TRAILS AND FOREST PRESERVES

Trails in or near Wheeling offer cyclists and pedestrians an off-road place to walk and bike. Community members use the trails in Wheeling as a place for both recreation and transportation. Yet the trails can be challenging to access on foot or bike.

PROSPECT HEIGHTS BIKE PATH

The Prospect Heights Bike Path is a paved trail running east-west through the southern portion of the Village. One end of the path terminates at Lake Arlington in Arlington Heights, and the other end terminates at the Prospect Heights Metra station. Land uses near the path include residential and offices.

STREET CROSSINGS

The Prospect Heights Bike Path crosses several arterial streets. These streets can be challenging for trail users to cross. In the near term, signage at all trail crossings should be improved to include ladder-style crosswalks, as well as pedestrian crossing and “Must Stop for Pedestrians” signs in the roadway. For increased safety, a pedestrian crossing island should be installed.

SIDEWALK CONNECTING TO TRAIL

To connect people living near the trail, but not in a subdivision or apartment complex with direct access to the trail, sidewalk and bicycle facilities on Schoenbeck, Elmhurst and Wheeling Roads should be prioritized for installation.

TRAIL ACCESS ACROSS RAILROAD TRACKS

The Metra North Central Service tracks are a barrier for people wishing to access the trail from the east. A pedestrian railroad crossing or underpass should be considered at this location to connect the bike path to destinations east of the tracks.



PROSPECT HEIGHTS
Bike Path near
Palatine Road.



A DRIVER'S
PERSPECTIVE
of the bike path
crossing.



CYCLISTS AND
PEDESTRIANS
often walk across
the train tracks at
Palatine Road.

CYCLISTS GATHER
on the Des Plaines
River Trail near
Potawatomi Prairie.



CONNECTION TO LAKE ARLINGTON

The Prospect Heights Bike Path stops just short of connecting to the trail around Lake Arlington. Wheeling should work with Arlington Heights and the Prospect Heights Park District to improve the trail crossing at Schoenbeck as well as clearly marking a bicycle route to Lake Arlington. In the long term, Wheeling, in partnership with Arlington Heights could explore the possibility of routing the trail north along Schoenbeck to Glenbrook Drive, and then through the Com Ed right of way that connects to the northeast corner of Lake Arlington.

CURRENT ENTRANCE
to the Des Plaines
River Trail at
Potawatomi Prairie.



DES PLAINES RIVER TRAIL (DPRT)

The Des Plaines River Trail is part of a 50-mile off street trail system connecting through Wheeling, and extending north to Wisconsin and south to Chicago. The trail is accessible from three places in Wheeling; at Potawatomi Prairie off Milwaukee Avenue at Wolf Road, Potawatomi Woods north of Dundee Road, and Dam 1 Woods on the south side of Dundee Road. The trail has an unpaved, dirt surface through Wheeling.

ACCESS FROM DPRT TO THE POTAWATOMI PRAIRIE FOREST PRESERVE

The Potawatomi Prairie provides access to the Des Plaines River Trail near the intersection of Milwaukee Avenue and Wolf Road. The Village has plans to enhance this access with signage, a prairie restoration, and canoe launch, but the work will need to be completed in phases due to funding challenges.

**A PATH WORN BY
PEDESTRIANS**
walking or biking
to the Des Plaines
River Trail along
Dundee Road.



ACCESS TO THE DPRT FROM DUNDEE ROAD

Sidewalk along Dundee Road also connects to the DPRT from Wheeling, but no pedestrian or bicycle connections exist east of the trail. Wheeling should expedite the installation of a side path along Dundee, and work to improve pedestrian and cyclist visibility and safety at the trail crossing.

ACCESS TO DPRT AT DAM 1

Several decades ago, Dam 1, at Hintz Road and Milwaukee Avenue was also an access point to the trail. Restoration of this access point should be explored, particularly if the Army Corps and forest preserve district continue to pursue plans to alter the dam. This project would be a partnership with all agencies that own or maintain land around the dam.

ACCESS TO DPRT FROM RESIDENCES AND BUSINESSES WEST OF MILWAUKEE AVENUE

Residences and businesses west of the Des Plaines River are located very close to the trail. Yet accessing the trail can be challenging due to the traffic on Milwaukee Avenue and Dundee Road. Developing a local, connecting branch of the trail between Milwaukee Avenue and the Des Plaines River will invite more people living near-by to access the trail. Consideration for a pedestrian crossing on Milwaukee Avenue near Mors Avenue should also be made. Currently people living in the River Mill Crossing subdivision must travel 2.5 miles to the DPRT, but if accessibility were improved, the trip would be only .25 miles.

IMPROVEMENT TO TRAIL SURFACE

Currently, sections of the DPRT are a packed dirt surface. It is narrow, muddy after a heavy rain, and does not meet Americans with Disabilities Act standards for trails. To bring this trail up to current standards, and increase trail usability, the trail should be paved or resurfaced with crushed limestone.

TRAIL ACCESS SIGNAGE

Signs help to increase awareness for trail access points and help trail users understand where they are along the trail and what connections can be made from the trail. The Village could work with the Forest Preserve District to install signs along the trail at Lake Cook Road, Dundee Road and Milwaukee Avenue to help trail users understand their location. Additionally, signs could be installed along the trail at Dundee Road to better identify east-west connections such as the trails at Sanders and Portwine.



EXISTING SURFACE OF DES PLAINES RIVER TRAIL.

Currently the trail is not usable after a rain or by people with physical disabilities.

PARTNERSHIP WITH FOREST PRESERVE DISTRICT AND ADJACENT COMMUNITIES

Much of the Des Plaines River Trail lies on land owned by the Forest Preserve District of Cook County. To develop a more accessible, usable trail, Wheeling will need to partner with the Forest Preserve District as well as adjacent municipalities.

MAP 2.2

Proposed Active Transportation Network Recommendations

Prepared By: Active Transportation Alliance and TranSystems
11/19/2012 Data Source: Village of Wheeling

0 0.5 1
Mile



Existing Facilities

- Bike Lane
- Off-Street Path
- Sidepath
- Pace Bus Shelters
- Metra Stations
- Water
- Parks

Proposed Facilities

- Bike Lane
- Buffered Bike Lane
- Sidepath
- Off-Street Path
- Paved Shoulder
- Signed Bike Route
- Pedestrian Priority Zone



2.3 Develop a local network of safe routes for biking and walking that serves people of all ages and all abilities.

The Village of Wheeling controls most of the non-arterial roads within the municipal boundary. To support short trips within Wheeling, the Village should consider the following bicycle and pedestrian improvements.

Map 2.3 and the implementation tables in Chapter 5 depict the recommendations described in this section

2.3.1 SIGN AND MARK ROUTES ALREADY USED BY CYCLISTS AND PEDESTRIANS “IN THE KNOW.”

SIGNED ROUTES

Some local streets are already bicycle friendly, and people in Wheeling are using those streets to get around. Yet many people are not aware of the best or most direct route. To create awareness for commonly used local bike routes, a network of bike route signs should be installed to alert all roadway users. Signs should include distance, direction and routes to popular destinations. As additional bicycle facilities are installed, bike route signs should also be updated. A map of the signed routes should also be published and available on the Village’s website.

BIKE BOULEVARDS

For enhanced safety and awareness of bicycling, as well as a way to calm traffic, bicycle boulevard treatments, such as curb extensions and on-street markings should also be considered.

One street, Strong Avenue, is the signed-route that is a strong candidate for bike boulevard enhancements. This route provides a safe cycling and walking alternative to Dundee and connection to numerous other bike routes. The intersections of Strong/Milwaukee, and Dundee/Wolf may be studied for application of bike boulevard treatments. In addition, other signed routes can be enhanced with shared lane markings.

2.3.2 COMPLETE AND ENHANCE WHEELING’S PEDESTRIAN NETWORK ON ALL STREETS.

COMPLETE SIDEWALK NETWORK GAPS

Although sidewalks exist in many neighborhoods in Wheeling, there are gaps in the sidewalk network. The Village can complete the pedestrian network by filling in these gaps while prioritizing providing better connections to the important places in Wheeling.

A model policy and map, included in Appendix D describes one way for the Village to determine which locations to prioritize for sidewalk installation. The model policy suggests a point based prioritization system that awards points based on connectivity and proximity to destinations. This system could be applied to the sidewalk gaps in Wheeling, and used to develop a map of high, medium and low priority sidewalk gaps.

The Village may also consider instituting a 50/50 sidewalk matching program, where property owners and the Village share the cost of sidewalk construction or replacement.

PEDESTRIAN PRIORITY ZONES

The blocks surrounding schools, parks, community centers and shopping areas often have a higher volume of pedestrian traffic than other parts of the Village. To emphasize the presence of pedestrians, the Village can apply additional tools to calm traffic and make it safer and easier for people to walk to key destinations in the Village. Examples of the tools that can be used include:

- Higher visibility crosswalks
- Bump-outs
- Stop signs
- Stop bars
- Chicanes and other traffic calming measures
- Mini-roundabouts
- Pedestrian crossing islands

2.3.3 DEVELOP A SERIES OF PEDESTRIAN AND BIKE CUT-THROUGHS TO INCREASE CONNECTIVITY BETWEEN NEIGHBORHOODS.

Many neighborhoods in Wheeling offer limited connectivity to other adjacent neighborhoods. In order for a person to walk or bike between adjacent subdivisions they often have to use an indirect route that adds additional time and distance to a trip by requiring a person to exit one subdivision and walk or bike along an arterial road to go to a destination in an adjacent subdivision. To shorten trip time and distance for cyclists and pedestrians, the Village should construct cut-throughs between subdivisions, apartment complexes, parks and at other locations where there is an opportunity to shorten bicycle and pedestrian trips.

MAP 2.3

Proposed Local Bicycle and Pedestrian Network Recommendations

Prepared By: Active Transportation Alliance and TranSystems
11/7/2012
Data Source: Village of Wheeling

0 0.5 1 Mile



Existing Facilities

- Bike Lane
- Off-Street Path
- Sidepath
- + Parks
- ~ Water
- Metra Stations

Corridor Recommendations

Proposed Facilities

- - - Bike Lane
- - - Buffered Bike Lane
- - - Sidepath
- - - Off-Street Path
- - - Paved Shoulder
- - - Signed Bike Route
- Pedestrian Priority Zone



2.4 Make it possible to travel on or parallel to major roads using active transportation.

Many of the arterial and collector streets in the Village are controlled by Cook County Highway Department or Illinois Department of Transportation. Many of these streets will require collaboration with one of these outside agencies to accommodate cyclists and pedestrians on these streets.

Map 2.4 and the implementation tables in Chapter 5 depict the recommendations described in this section

2.4.1 STRATEGIES FOR ARTERIAL STREETS

Many important community, educational, retail and employment destinations are located on collector and arterial streets. In Wheeling, these streets frequently lack facilities for pedestrians and cyclists, yet may be the only route into an adjacent suburb. The Cook County Highway Department or the Illinois Department of Transportation maintains many of these streets, and Wheeling will have to work with these agencies when implementing facilities on these streets.

INSTALL SIDEWALK OR SIDE PATH WHERE GAPS IN THE NETWORK EXIST.

Several arterial and collector streets in Wheeling lack accommodations for pedestrians. Sidewalk or side path should be installed on all arterial and collector streets in Wheeling, with priority given to pedestrian connections near popular destinations..

ADD BICYCLE FACILITIES WITH RESURFACING PROJECTS

Many arterial and collector streets in Wheeling have travel lanes for cars that are wider than required. On these streets, travel lanes can be narrowed, and bicycle lanes or buffered bike lanes could be installed, while still maintaining the same level of capacity for vehicles. To minimize costs, these projects can be done in conjunction with resurfacing projects.

MAP 2.4

Proposed Regionally Significant Bicycle and Pedestrian Network Facilities

Prepared By: Active Transportation Alliance and TranSystems
11/19/2012 Data Source: Village of Wheeling

0 0.5 1
Mile



Existing Facilities	Corridor Recommendations
Bike Lane	Bike Lane
Off-Street Path	Buffered Bike Lane
Sidepath	Sidepath
Parks	Off-Street Path
Water	Paved Shoulder
Metra Stations	Signed Bike Route
	Pedestrian Priority Zone



2.5 Make it easier to cross all streets on foot or bike.

To make it easier to cross the street, a series of intersections have been selected for improvements. Map 2.5.3, as well as the descriptions below, describes typical improvements that can be made at each intersection.

Map 2.5 and the implementation tables in Chapter 5 depict the recommendations described in this section

Intersections and crossings can be the most challenging part of a bicycle or walking trip. Often intersections have limited accommodations for pedestrians and very rarely do they accommodate cyclists. Intersections are also the most common place for bicycle and pedestrian crashes to occur. In Wheeling there are many wide intersections where cyclists and pedestrians must cross four or more lanes of traffic to reach the other side. Besides traffic signals, which are typically spaced every half mile, there are few safe places for pedestrians and cyclists to cross the street. Developing more frequent street crossings, as well as upgrading existing intersections with pedestrian and bicycle accommodations will make it easier to cross all streets on foot or bike.

2.5.1 DEVELOP “COMPLETE INTERSECTIONS” AT ALL SIGNALIZED INTERSECTIONS AND AT KEY UNSIGNALIZED INTERSECTIONS.

“Complete” intersections are intersections where all modes; cyclists, pedestrians, autos, and transit can safely and easily cross the street. The following are descriptions of how treatments that may be applied in order to make “complete” intersections. Map 2.5 on p.51 illustrates the locations of each type of intersection.

S1—SIGNALIZED

Traffic signals can be a safe place for pedestrians and cyclists to cross the street. Yet many traffic signals in Wheeling have minimal or no accommodations for pedestrians. To accommodate pedestrians at all corners of all intersections, the following should be installed.

Demand actuated pedestrian countdown signals on all sides of all intersections

Striped crosswalks on all sides of the intersection

Sidewalk connecting to the intersection on all sides

ADA accessible curb ramps with truncated domes on all sides of the intersection

Depending on the vehicle and pedestrian traffic volumes, the following additional accommodations may be considered:

“Pork chop” style pedestrian islands at intersections with a right turn lane

Extend medians beyond the crosswalk and use them as pedestrian crossing islands, where medians exist or can be installed

Reduced turning radii or bump outs

Pedestrian crossing signs on roadway approaches



SIGNALIZED INTERSECTIONS should accommodate pedestrians at every corner.

UNSIGNALIZED
CROSSINGS
could also be a safe
place for pedestrians
to cross the street



U—UNSIGNALIZED

Most pedestrians will cross the street where it is most convenient. Frequent formalized mid-block crossings can decrease random crossing movements. It is appropriate to provide formalized crossings at mid-block transit stops, commercial destinations, unsignalized intersections and other pedestrian origin and destination points.

“Zebra stripe” or “ladder style” high visibility crosswalks

Sidewalk connecting to the intersection from all sides

ADA accessible curb ramps with truncated domes

Must Stop for Pedestrians signs on all roadway approaches

Pedestrian crossing signs on all roadway approaches

Curb extensions or bump-outs

Pedestrian crossing island for multi-lane streets

Depending on the vehicle and pedestrian traffic volumes, the following additional accommodations may be considered:

Pedestrian crossing islands

HAWK signals or other pedestrian activated signals

Pedestrian arms for railroad crossings

Reduced turning radii

2.5.2 DESIGNATE A SERIES OF INTERSECTIONS AND SURROUNDING ZONES BASED ON LAND USE TO BUILD UPON WHEELING'S SENSE OF PLACE.

Beyond basic accommodations for pedestrians and cyclists at each intersection, additional enhancements can be added to create a sense of place within the Village.



GATEWAY INTERSECTIONS
use signage and trees to welcome people into the Village.

S2—GATEWAY INTERSECTIONS

S2 intersections are gateways into the Village signifying an entrance to the Village or a district. Signs, banners and trees can be used to welcome residents and visitors into the community. In addition to the standard pedestrian and bicycle accommodations as described in S1 type intersections, the following amenities may also be considered for S2 intersections.

Countdown pedestrian signals

Rows of street trees along parkway to define entryway

Gateway signage enhanced with landscaping

Decorative paving at crosswalk visually connecting both sides of roadway

Large planting beds to address vehicular scale

Lighting hidden within landscaping within the entire gateway area providing night time effect

Landscaping to be arranged in masses to direct attention to Gateway signage

Through bike lanes at the intersections of Schoenbeck and Hintz, and Palatine and Wheeling

HUB INTERSECTIONS
are centers of activity
in the Village.



S3—HUB INTERSECTIONS

Hubs indicate a center of activity within the Village. A higher volume of pedestrians and cyclists can be expected at hubs. In addition to the standard pedestrian and bicycle accommodations as described for S1 intersections, the following amenities are suggested for consideration at S3 intersections.

Ornamental lighting with banners

Pedestrian scale lighting

Countdown pedestrian signals

Median with plantings

Special paving at crosswalks

Street trees

Decorative paving

Seasonal planting

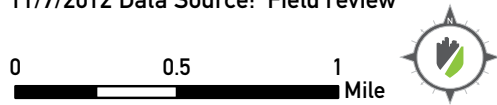
Planters

Through bike lanes or combined bike lanes/turn lanes on all roadways with bike lanes

MAP 2.5

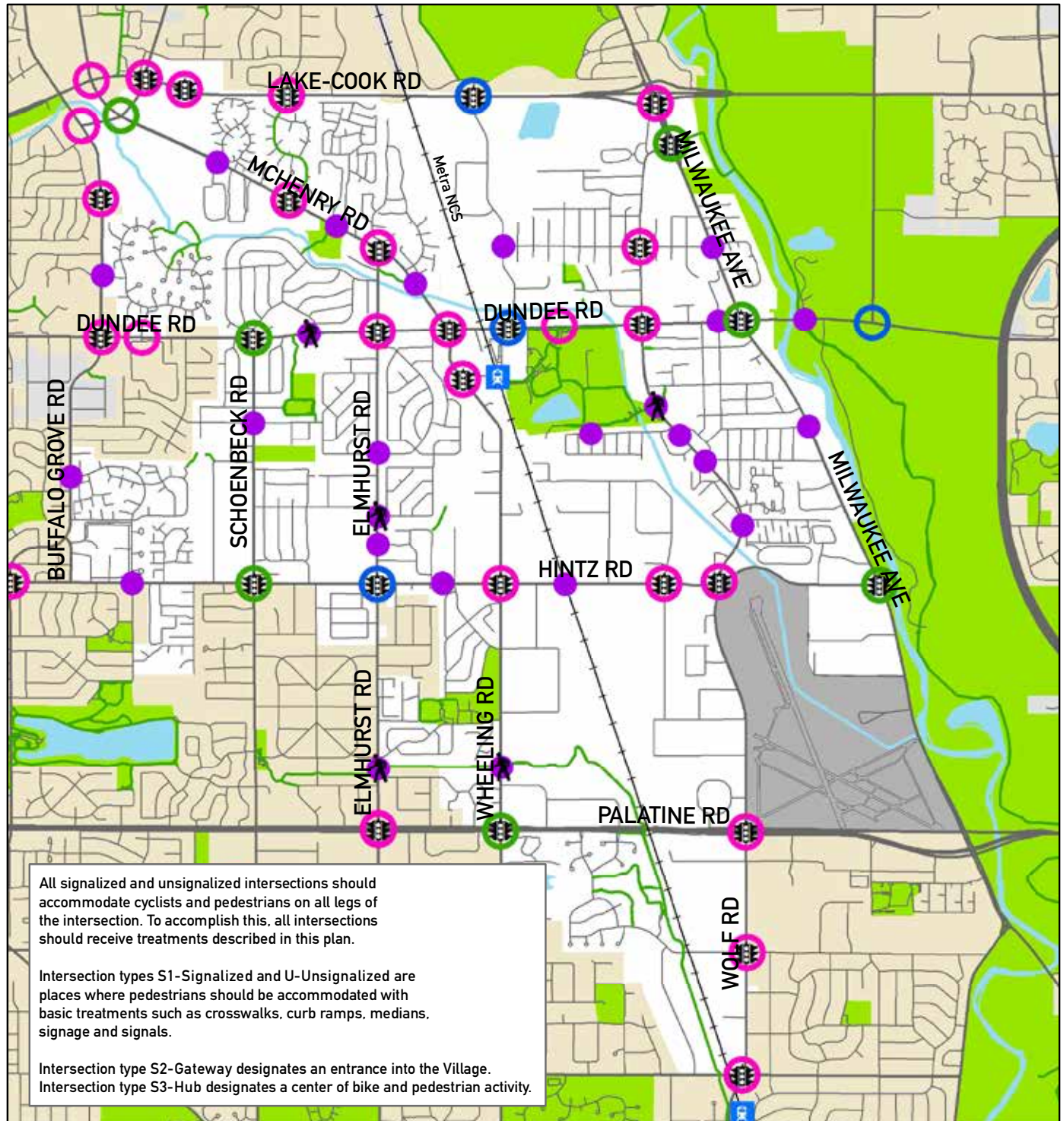
Intersection Recommendations

Prepared By: Active Transportation Alliance and TranSystems
11/7/2012 Data Source: Field review



- Metra Stations
- Existing Traffic Signal
- Existing crossing (no traffic signal)

- Intersection Type
- S1-Signalized
 - S2-Gateway
 - S3-Hub
 - U-Unsignalized Crossing



2.6 Upgrade and revise transit service to support active transportation.

Map 2.6 and the implementation tables in Chapter 5 depict the recommendations described in this section

2.6.1 MODIFY EXISTING TRANSIT ROUTING TO CONNECT RESIDENTS TO MAJOR DESTINATIONS NOT CURRENTLY SERVED BY TRANSIT.

Destinations near the Lake Cook Road / McHenry Road intersection as well as the office park on the northwest corner of Wolf and Palatine Roads lack transit service. Wheeling has three fixed bus routes that travel through the Village during peak and non-peak periods: Route 221, Route 234 and Route 272. Additional peak-only routes exist to shuttle residents to and from Metra stations. While these routes appear to provide adequate service coverage to destinations while meeting current market demand, two particular locations are lacking transit service: the shopping centers in the northwest corner of Wheeling and the office park on the south end of Wheeling. The area along Lake Cook Road includes many potential destinations including Walmart, Target, Sam's Club, Jewel-Osco, restaurants, and small retail stores, and the office park includes an extended stay hotel, and a branch of National-Louis University.

Regional Transportation Authority (RTA) recently developed a Transit Demand Index (TDI) based on a combination of factors to represent areas of low, moderate, and high transit demand as well as areas where transit is not necessary. The map on p.56 includes the TDI in Wheeling and shows that the proposed Route 221 and Route 234 realignment would pass through areas of high transit demand that are not currently served by a fixed-route bus. In addition to the shopping centers on Lake Cook Road, high density residential areas along McHenry Road would gain transit service.

This proposed realignment has not been approved by Pace, who is the operator of fixed-route service in Chicago's suburbs. Additional cost resulting from the additional route mileage would need to be covered by the commercial businesses served, local municipality or other local agency, or Pace. Prior to implementation, existing riders should be surveyed to gather their input and to fill in the gap in data regarding how many through riders exist between the southern portion and northern portions of the route. Despite potential negative impacts, it is expected that the Route 221 and Route 234 realignments would attract many additional riders and improve the quality of life for Wheeling residents.



PACE AND THE VILLAGE
can work to align
bus routes with
key destinations

ROUTE 234 REALIGNMENT

Route 234 can be realigned to travel on a three-mile loop along Buffalo Grove Road, Lake Cook Road, McHenry Road, and Elmhurst Road as shown on the map (p.56). The bus would travel through a shopping center between Lake Cook Road and McHenry Road. The existing one-mile route segment on Dundee Road between Buffalo Grove Road and Elmhurst Road would be discontinued.

According to Pace, Route 234 has appeared on Pace's "Review" list many times in the past several years ("Review" means a route is not meeting certain minimum service standards). This opens up the potential for Route 234 to be realigned to attempt to better meet operating standards while better serving transit demand in Wheeling.

ROUTE 221 REALIGNMENT

Route 221 can be realigned to add a three-fourths mile loop along Wolf Road, Palatine Road, South Drive, Capitol Drive, East Drive, and return to Wolf Road, as shown on the map (p.56). The bus would travel through a large office park that also includes educational facilities and an extended stay hotel. This section of the route would be an addition to the current routing.

2.6.2 WORK WITH EMPLOYERS IN WHEELING'S OFFICE AND INDUSTRIAL PARKS TO PROVIDE TRANSIT SERVICE TO EMPLOYEES.

Office and industrial parks throughout Wheeling and particularly in the southeastern portion of the village lack transit service. Due to the nature of the surrounding land use and disparate trip patterns of their workers, office and industrial parks are difficult to effectively serve with fixed-route bus service.

PROMOTE EXISTING ALTERNATIVE TRANSPORTATION PROGRAMS

Pace has existing vanpool programs which could be utilized by Wheeling workers but may not be well known. It is recommended that the Village work with Pace to promote these programs to Wheeling employers. Pace offers different types of Vanpool Incentive Programs, two of which are the Metra Feeder and the Traditional Vanpool.

By promoting these existing programs to corporate leaders and human resources departments, workers can learn about and benefit from these transportation options.

UTILIZE THE PACE TRADITIONAL VANPOOLS PROGRAM

Pace Traditional Vanpools are another alternative for groups of employees who live and work near one another. This option is for participants who cannot take Metra. The Traditional Vanpool is designed to transport a group of 5-13 people to work in a Pace van. Employees that live and work near one another (i.e. a group of Wheeling residents who work at the same location) and share similar schedules can form a group that conveniently gets them between home and work. Each rider pays a low monthly fare based on distance and number of participants.



UTILIZE THE METRA FEEDER PROGRAM

The Metra Feeder program allows for a Pace van to be parked at a Metra station near the worksite, so that participants (i.e. employees of a firm located in Wheeling) can take the train and then use the van to complete the commute. Five to thirteen participants share the van to get to their destination. To qualify for the program, at least half of the participants must purchase a Metra monthly pass or 10-ride ticket. Each participant also pays a monthly fee.

Metra Feeder Vanpools can be implemented relatively quickly because it is an existing program. Applicants can complete forms on Pace's website after collecting at least five participants per van. When compared to other transportation options, this is an affordable alternative to driving a car. The flexibility and lack of centralized requirements (no phone number to call or vehicle to wait for each day) make this an attractive option for employers who have many employees who can take Metra but have difficulty reaching the job site without a vehicle.



2.6.3 SUPPORT INCREASES IN FREQUENCY ON METRA NORTH CENTRAL SERVICE (NCS).

The Metra North Central Service (NCS), which serves the Village, has about half of the service of other Metra lines, thus impacting the attractiveness of the service to potential riders. By increasing service frequency, Wheeling residents and workers will be attracted to the convenience of having more options of when to travel on Metra. The service will accommodate a larger number of passengers' schedules and thereby allow for the possibility that more people will ride.

2.6.3 SUPPORT TRANSIT ORIENTED DEVELOPMENT NEAR THE METRA STATION

The Village developed a Town Center plan for some of the land around the Metra station. That plan calls for retail, entertainment and housing. By adding residences and jobs in close proximity to the Metra, the Village will likely increase Metra ridership. Additional housing should be considered for areas around the Metra to increase ridership.



2.6.4 ENSURE BICYCLE AND PEDESTRIAN ACCESS TO TRANSIT.

If someone can easily and conveniently walk or bike to a transit stop, they are more likely to choose transit. Almost all of the Village's existing transit service follows arterial roads. Most, but not all of the existing transit stops are on streets with sidewalk. Yet sometimes it takes more than just a connecting sidewalk to make transit ridership appealing.

Pace has written Development Guidelines that describe ways to increase passenger comfort and convenience. Guidelines suggest the following:

Paved passenger waiting area

Curb ramps at all corners

Passenger shelters at high volume boarding areas

Adequate lighting

Display of route information

Bicycle storage

The Village should work towards ensuring that all bus stops in the Village meet Pace's Development Guidelines.

MAP 2.6

Transit Network

Proposed Modifications

Prepared By: Active Transportation Alliance and TranSystems
11/30/2012 Data Source: Village of Wheeling

0 0.5 1
Mile

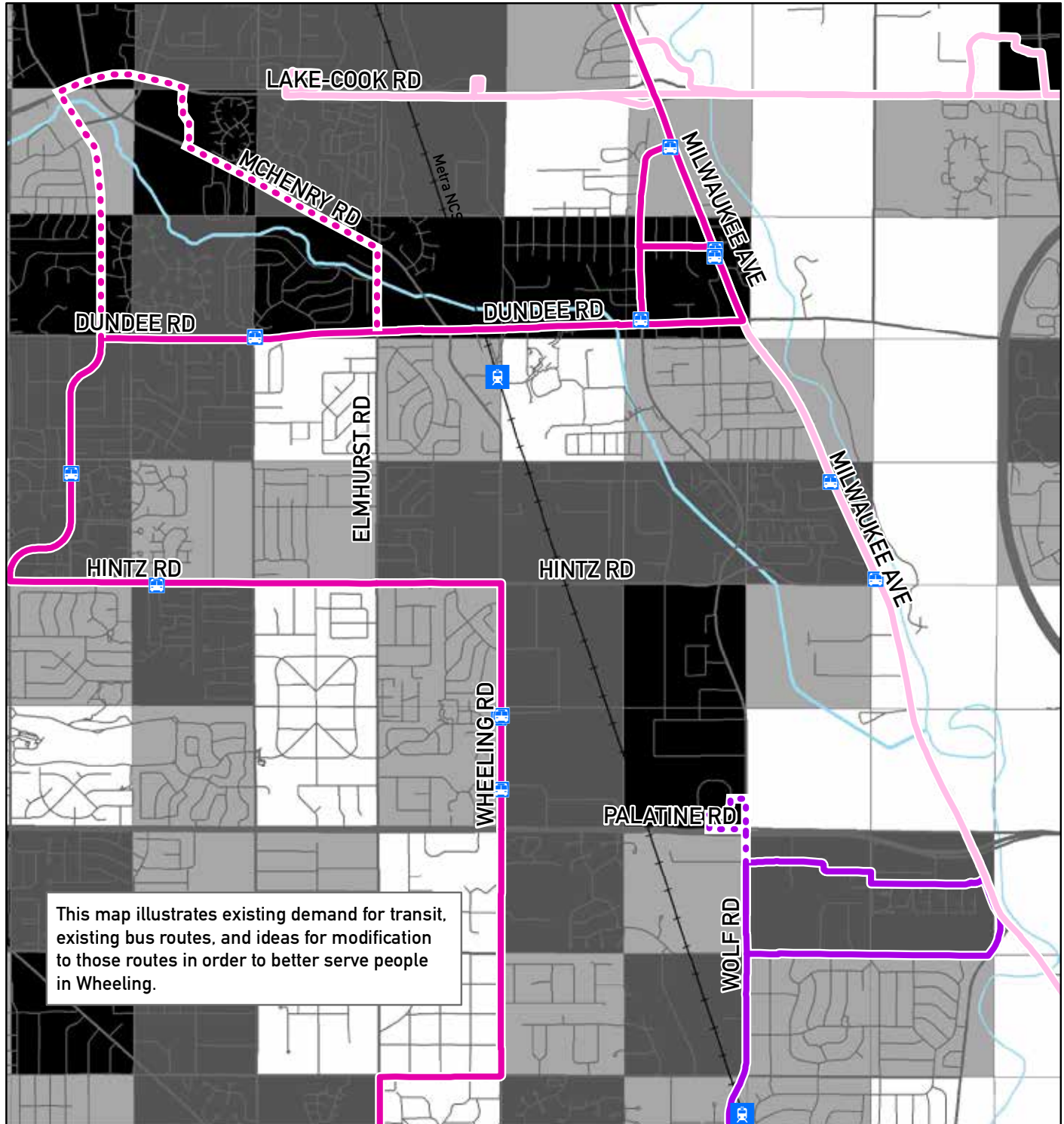


Pace routes in Wheeling

- Proposed Realignment Route 221
- Proposed Realignment Route 234
- Pace Route 221
- Pace Route 234
- Pace Routes 272, 626, 634
- 🚏 Pace Bus Shelters
- 🚉 Metra Stations

RTA Transit Demand Index

- ☐ Transit Not Necessary
- ☐ Low Transit Demand
- ☐ Moderate Transit Demand
- ☐ High Transit Demand



ACTIVE TRANSPORTATION POLICY

3



Policy Goal

Leverage municipal policies to develop a comprehensive active transportation network that is safe and inviting to all users.

3.1 Leverage support of key government agencies to foster active transportation.

There are many levels of government that play a role in the transportation policy that impacts residents and visitors in Wheeling. The Village can maximize the impact of this plan by coordinating its efforts with those of other government agencies and by leveraging other agencies' policies to support Wheeling's efforts.

The Village of Wheeling and its partners should leverage policies to develop a comprehensive active transportation network that is safe and inviting to all users. Having a strong set of policies in place will help to institutionalize support for active transportation. Policies ensure that as the Village's built environment changes, it will change in ways that support active transportation. Policies trigger the best solutions the first time a project or decision is considered, preventing the need for expensive retrofits in the future. Establishing policies sends a clear message to partner agencies that the Village wants people walking and biking in Wheeling.



WHEELING BENEFITS FROM ITS CLOSE RELATIONSHIP
with Cook County Forest Preserve District.

3.1.1 ADOPT A COMPLETE STREETS POLICY.

More than 350 governments across the United States have enacted policies that pledge to accommodate all users, regardless of age, ability or travel mode, on all roadways. The Village of Wheeling, through this plan, has demonstrated its commitment to multi-modal transportation. The enactment of a Complete Streets policy will codify this commitment into law. A Complete Streets policy will also establish Village priorities for the other agencies that manage roadways in the Village.

3.1.2 ADOPT A MUST STOP FOR PEDESTRIANS REQUIREMENT IN ACCORDANCE WITH STATE LAW.

Illinois state law requires motorists and bicyclists to stop for pedestrians in crosswalks. The Village should adopt a similar local ordinance to empower Village police to enforce this safety requirement.



COMPLETE STREETS
at work.



WALKING SCHOOL BUS
organized by a walk
to school committee
in Mount Prospect.



3.1.3 COORDINATE WITH LOCAL SCHOOL DISTRICTS TO ENHANCE ACTIVE TRANSPORTATION.

School districts in Wheeling were key stakeholders in the development of this plan. The schools have the ability to foster active transportation among their employees, students and parents of students. The school districts should:

Start active transportation committees at each school to promote walking and biking to school

Develop and adopt individual school travel plans that identify safe routes to school and strategies for promoting active transportation

Review areas designated for “hazard route” busing and work towards solutions that make these areas less hazardous

The Village has existing requirements specifying that schools should be located within “walking distance” of residential areas. The land dedication requirements of the municipal code should be enhanced by providing a clearer definition of the term “walking distance.” Generally, students should not be required to walk more than one mile to school, and only along safe routes.

3.2 Ensure Village of Wheeling policies reflect best practices for promoting active transportation.

Proactive design, construction and maintenance of facilities can lead to a comprehensive network of walking, biking and transit facilities. Policy and procedure enhancements can further improve the transportation environment by prioritizing the public health and safety of the community. This objective focuses on strategies to improve safety, land use connections and other policies that facilitate active transportation.

3.2.1 CONTINUE SUPPORT FOR AND ENFORCEMENT OF EXISTING POLICIES.

Wheeling has several existing ordinances that reflect national best practices for promoting active transportation. These ordinances go a long way toward enhancing the safety and convenience of Wheeling's transportation system for pedestrians, bicyclists and transit riders. As such, the following ordinances should be retained and aggressively enforced:

Section 9.28.010: Designation of stop intersections

Section 11.08.100: Prohibition on depositing of leaves on roadways

Section 11.16: Procedures for ensuring sidewalks are clear of snow

Title 19: Zoning procedures that encourage multi-use, transit-oriented development

RESIDENT WALKING
in the winter.



3.2.2 UPDATE THE SNOW REMOVAL ORDINANCE.

The Village of Wheeling has procedures for ensuring sidewalks are clear of snow. The requirements in Section 11.16 of the Municipal Code establish penalties for non-compliance. However, the code only provides for fines for non-compliance; it does not define procedures to ensure that the snow is actually removed following non-compliance. The Village should give its public works staff the power to remove snow from private facilities and bill the property owners for the service in addition to the applicable penalties.

3.2.3 ADOPT A POLICY TO MAINTAIN BICYCLE AND PEDESTRIAN FACILITIES.

This plan sets forth an ambitious schedule to create a comprehensive biking and walking network. In addition to completing the network, the Village must be committed to ensuring the network is maintained. The Village should adopt a policy ensuring that bicycle and pedestrian facilities on property owned or managed by the Village will be maintained at the same level as facilities for motorized vehicles. This will ensure that bikeways and sidewalks are free of snow, ice, debris, potholes, and other obstacles to active transportation.

EXISTING BIKE LANE
on Lexington.



3.2.4 ADOPT A POLICY REGARDING CONSTRUCTION ZONES.

The Municipal Code establishes certain procedures for construction practices in the public right-of-way. There is no provision to ensure that pedestrian and bicycle facilities in construction zones are maintained during the period of construction. The Village should ensure the availability of the transportation network for pedestrians and cyclists by requiring safe pedestrian and bicycle access through construction zones. National manuals for highway construction practices provide guidance on this issue. See Appendix D for guidance.

3.2.5 ADOPT A POLICY REGARDING TARGET SPEEDS FOR ROADWAY DESIGN.

The Village of Wheeling has established posted speed limits that are safe for active transportation on many local roads. However, the effective speeds (speed at which most vehicles are driven) on several of these roads are higher than the posted limits. This is because the roadways have been designed to support speeds higher than the posted speed limits. The Village should adopt a policy directing its staff and consultants to design, construct and operate all roadways in a manner that encourages travel at a target speed.

3.2.6 UPDATE SPEED LIMITS ON LOCAL ROADS.

The Village has established individual posted speed limits for various roads in the community. The varying speed limits can be confusing to motorists and other users of the roadways. The Village should enhance safety by establishing a default posted speed limit of 25 miles per hours for local roads not designated as truck routes, collectors or arterials.

3.2.7 UPDATE THE LIST OF LOCAL YIELD AND STOP INTERSECTIONS.

The Village has designated numerous intersections as either yield or stop intersections. New guidance from national authorities has established best practices for designating intersections as yield or stop. In some cases, current yield signs may not be sufficient to inform motorists on who has the right of way. The Village could benefit from reviewing its current lists in light of the new national guidance. See Appendix D for guidance.



REPLACING YIELD
SIGNS WITH STOP
SIGNS
will improve
traffic safety.

3.2.8 ADOPT A SIDEWALK INSTALLATION PRIORITIZATION POLICY.

This plan includes a comprehensive pedestrian network. An estimated 39 miles of sidewalk gaps exist in Wheeling. Building it out will take many years. The Village could benefit from a clear policy establishing priority locations for sidewalk installations including establishing a goal for the numbers of miles and/or budget spent each year to fill in sidewalk network gaps. A model policy can be found in Appendix F. Other ways to encourage sidewalk installation include:

Establish a “50/50” program or special service areas through which the Village and property owners share in the cost for installing new sidewalks

Explore opportunities to modify its subdivision code to include a required contribution to its sidewalk fund for all major construction projects requiring a building permit



3.2.9 ADOPT UPDATES TO PARKING ORDINANCE TO FOSTER ACTIVE TRANSPORTATION.

The Village of Wheeling has numerous policies concerning where vehicle parking is permitted. In some instances, parked cars can foster active transportation by buffering pedestrians from busy roadways and parking spaces give motorists an opportunity to get out and be active. However, parking designs that impede biking and walking should be discouraged. The Village can enhance safety for active transportation users by adopting a ban on double parking and a ban on parking, stopping or standing in on-street bicycle facilities.

3.2.10 ADOPT A TRANSPORTATION DEMAND MANAGEMENT ORDINANCE TO ENCOURAGE ACTIVE TRANSPORTATION.

Transportation demand management (TDM) is a set of strategies that maximize the efficiency of a transportation network, especially at peak periods. Specifically, TDM seeks to encourage biking, walking, transit and alternative forms of transportation through employer-based encouragement and incentives. The Village of Wheeling will benefit from adopting these individual TDM strategies:

Reducing parking requirements for employers who demonstrate high numbers of employees commuting by active transportation

Incentivizing employer-facilitated carpooling, vanpooling or shuttle buses

Encouraging “parking cash-outs” where employees receive cash in lieu of subsidized parking

Directing Village revenues received from parking at Metra station towards transit improvements

Requiring large non-residential developments to develop a transportation demand management plan

3.3 Provide safe accommodations for cyclists and pedestrians in all new development.

Wheeling is a community that is largely, but not completely, built out. The Village has an opportunity to enhance active transportation by ensuring that all new development, as well as future redevelopment, accommodates cyclists and pedestrians.

3.3.1 ENSURE STREET CONNECTIVITY WITHIN AND BETWEEN SUBDIVISIONS.

Existing subdivision development standards seek to create model places to live. However, the standards have the unintended consequences of isolating some communities. Small changes to the subdivision regulations could ensure that the neighborhoods are connected to each other. This would reduce travel times between neighborhoods and reduce traffic on collector and arterial roads. The regulations should also ensure that the subdivisions maximize street connectivity within the community to facilitate emergency access and minimize travel times. Enacting these changes will further the objectives established in the 2003 Comprehensive Plan to create better connections between neighborhoods.

3.3.2 UPDATE PARKING REQUIREMENTS FOR NEW DEVELOPMENTS.

The Village's existing parking requirements ensure adequate minimum parking in all developments. However, the requirements do little to encourage use of active transportation in exchange for reduced use of motorized transportation. The Village should reduce parking requirements for developments that provide bicycle and pedestrian facilities beyond those required by current law. The Village should also reduce parking requirements for businesses that demonstrate how they can feasibly share parking with other facilities. Village staff and the Plan Commission should regularly review parking requirements to ensure conformity with current best practices.

3.3.3 UPDATE THE BICYCLE PARKING ORDINANCE.

The existing bicycle parking requirements for Wheeling ensure the availability of parking for bicycles. However, the standards do not fully reflect national best practices for the design and installation of bike parking. Simple changes to the standards will ensure that the best-designed bike parking is available in Wheeling. Examples of possible changes to the ordinance include considering bike parking for both short and long term use, including major remodels as a trigger for bike parking installation, accommodation of bike parking during construction, and offering substitution of bike parking spaces for motor vehicle parking. See Appendix D for resources.

3.3.4 UPDATE SIDEWALK REQUIREMENTS.

The Village of Wheeling requires a minimum sidewalk width of five feet in most locations. Areas with heavy pedestrian traffic benefit from wider sidewalks. Specifically, commercial areas should have sidewalks 10 feet wide, and areas around schools and parks may be considered for six-foot-wide sidewalks. In addition, a minimum five-foot buffer between a sidewalk or side path and roadway is recommended.

3.3.5 ENCOURAGE BEST USE OF DRIVEWAYS.

There are many parcels in Wheeling that have limited demand for driveways. The Village should ensure the most efficient use of land by requiring complementary facilities to consolidate and share driveways when feasible.

3.3.6 ENACT A FORM-BASED CODE FOR COMMERCIAL AREAS.

This plan, in support of the Village's comprehensive plan, establishes Milwaukee Avenue and Dundee Road as primary commercial areas. The environment for pedestrians could be enhanced if the businesses in this area were built and operated in a manner to encourage pedestrian access. Enacting form-based design requirements will help the Village create a pedestrian-focused built environment.

ACTIVE TRANSPORTATION PROGRAMS



Goal for Education, Encouragement, and Enforcement Programs

Ensure that people of all ages and abilities feel safe and confident while walking and biking. Provide education, encouragement and enforcement programs for active transportation users.

4.1 Educate the community about active transportation.

Understanding the rules of the road is essential for traveling safely, regardless of which mode is chosen. However, many community members may be unaware of the rights and responsibilities of non-motorized users and how to safely interact. Educational opportunities promote safer interactions by all road users.

Education should come in a variety of forms to reach youth, teens and adults. The following recommendations are meant to reach all community members and include messages tailored to each specific audience.

Education, encouragement and enforcement programs are designed to motivate residents to walk or ride a bicycle safely and confidently. As the Village of Wheeling continues to build a complete, safe and attractive network of transportation options, more and more residents will begin to bike and walk throughout the community.

Programming is a powerful tool for promoting healthy and safe behaviors of all active transportation users. Targeted programming will enable people of all ages, abilities and spoken languages to feel safe and confident while walking and biking. Programming can be designed and implemented by many groups under the direction of the Village of Wheeling. Potential partners include park districts, school districts, the Wheeling/Prospect Heights Chamber of Commerce, the Wheeling Wheelmen, and other community groups.

4.1.1 PROVIDE EDUCATION TO THE ENTIRE COMMUNITY.

To reach the entire community, Wheeling should partner with various bicycle and pedestrian education instructors including league certified instructors of League of Illinois Bicyclists, local educators from REI, members of Wheeling Wheelmen or education staff from Active Transportation Alliance. These instructors could provide education and outreach on bicycle and pedestrian safety and sharing the road strategies. Examples of community education programs that are appropriate for all Wheeling community members include:

BICYCLE AND PEDESTRIAN AMBASSADORS

Wheeling should create an ambassador program to promote walking and bicycling safety at village events, schools, day camps, after-school programs and other community gatherings. Bicycle and pedestrian ambassadors are outreach specialists who educate the public through direct outreach, presentations, and distribution of educational materials approved by the Village of Wheeling. Members of the Wheeling Bicycle and Pedestrian Task Force and the Wheeling Wheelmen could become ambassadors or help identify other interested community members.

BIKE MAINTENANCE AND TRAFFIC SKILLS CLASSES

The Village of Wheeling may work in partnership with the Wheeling Park District to design and offer bicycle and pedestrian training for adults, teens, and youth. Classes on bicycle and pedestrian safety and skill building could be offered to all age ranges. Bicycle mechanics classes and on-bike education classes (such as Traffic Safety Skills 101) should be made available for middle and high school students as well as adults.



MEMBERS OF THE
WHEELING WHEELMEN
at the Bike
Safety Rodeo.



PEOPLE OF ALL AGES
can learn bike skills.



COMMUNITY ENGAGEMENT THROUGH PRINT AND ELECTRONIC MEDIA

During the community engagement process, more than 100 residents expressed interest in staying involved in the bike and pedestrian initiatives of Wheeling. The Facebook page created for this plan (<http://www.facebook.com/WheelingBikeWalkPlan>) should be maintained to continue to educate and engage residents. The Facebook page can reach a large and diverse audience by posting regular updates about the active transportation plan. This site can also be used to promote local events and convey important safety information.

The Village of Wheeling should continue to seek coverage in local newspapers as well. Media coverage not only can help to educate residents on active transportation but also to build support and identify more residents who wish to get involved with Wheeling's biking and walking initiatives.

FACEBOOK "LIKES"
are increasing.



MANY TYPES OF
ROADWAY USERS
enjoy complete
streets.



4.1.2 EDUCATE RESIDENTS ON THE VALUE OF COMPLETE STREETS.

As the plan gets implemented, residents will benefit from understanding the value of Complete Streets. Complete Streets are designed to enable safe access for all users of the transportation network regardless of age, ability or travel mode. The cost of automobile travel is growing, public health discussions are becoming increasingly urgent, and more people associate safer streets with a higher quality of life. These issues are triggering a need for more affordable, healthier travel options, such as walking, biking and transit. Wheeling residents will learn that Complete Streets:

Provide people with a choice of travel modes

Help people save money on transportation

Improve property values

Help youth stay active by walking or biking to school

Allow older adults to age in place by preserving their mobility

Improve transportation networks by providing greater access to more destinations

Save families and school districts money by switching some trips from motorized trips to walking or biking trips

4.1.3 PROVIDE YOUTH AND TEEN BICYCLE AND PEDESTRIAN EDUCATION.

Youth and teen walking and cycling safety education will provide a basis for a lifetime of active transportation habits, and will address parents' concerns about safety. Beginning in elementary school, students should receive age-appropriate education on safe walking and biking habits. The Village of Wheeling could seek partnership with School Districts 21, 23, and 214. The Wheeling Police Department and the proposed Bicycle Ambassadors can assist with various trainings.

PE CLASSES AND ASSEMBLIES

Provide a one class period on-bike safe cycling course to students as a prerequisite for the privilege of cycling to the elementary school and the junior high school. Include basic cycling skills, how to perform a bicycle safety check, helmet fit, and appropriate traffic skills such as biking on sidewalks, crossing roads and staying safe near driveways.

CURRICULAR EDUCATION MATERIALS

Encourage and equip teachers to integrate bicycle and pedestrian safety lessons and mobility education into existing subjects such as math, language arts, PE, and social studies. Free lesson books and teacher trainings are available for students in preschool through 12th grade from Active Transportation Alliance.

STUDENT-LED INITIATIVES

Once students reach middle school, the educational focus should focus not only on safety but on independence, the benefits of physical activity, how to safely navigate the bicycle and pedestrian network, and how to access public transportation. Contests and student-led initiatives can help inspire creative approaches to walking and cycling. Suggested projects include building a bike rack in a welding class or forming an after-school bike club.



ELEMENTARY SCHOOL STUDENTS participate in a class on bicycle safety.



WHEELING HIGH SCHOOL STUDENTS are bike commuters.

MOBILITY EDUCATION FOR TEENS

Include a module on how to safely share the road with cyclists and pedestrians in both school-based driver education programs with School District 214 and with private driver education programs.

4.2. Encourage use of active transportation

Encouragement programming is designed to increase the use of the active transportation network by helping residents understand how to safely navigate the network and urge residents to use active transportation.

4.2.1 PROVIDE THE COMMUNITY WITH INFORMATION ABOUT WALKING, BIKING AND TRANSIT ROUTES IN WHEELING.

Wheeling already has many great places to walk and bike, with more planned to be built in coming years. Yet many in the Wheeling community are unaware of the Village's routes. To raise awareness for existing routes and provide information on new routes, the Village may consider providing the following information to the community.

BICYCLE AND PEDESTRIAN ROUTE MAP

As recommended improvements are implemented, the design and production of an active transportation network map will create awareness for walking and biking routes throughout the whole community and encourage patronage of the key places identified in this plan. Wheeling should work with the Bike and Pedestrian Task Force and the Wheeling/ Prospect Heights Chamber of Commerce to produce and distribute a free active transportation network map that includes safe cycling and walking routes, destinations easily accessible by foot or bike and safety tips. The map should show existing routes. Large employers and local businesses could be approached for sponsorship of the map.

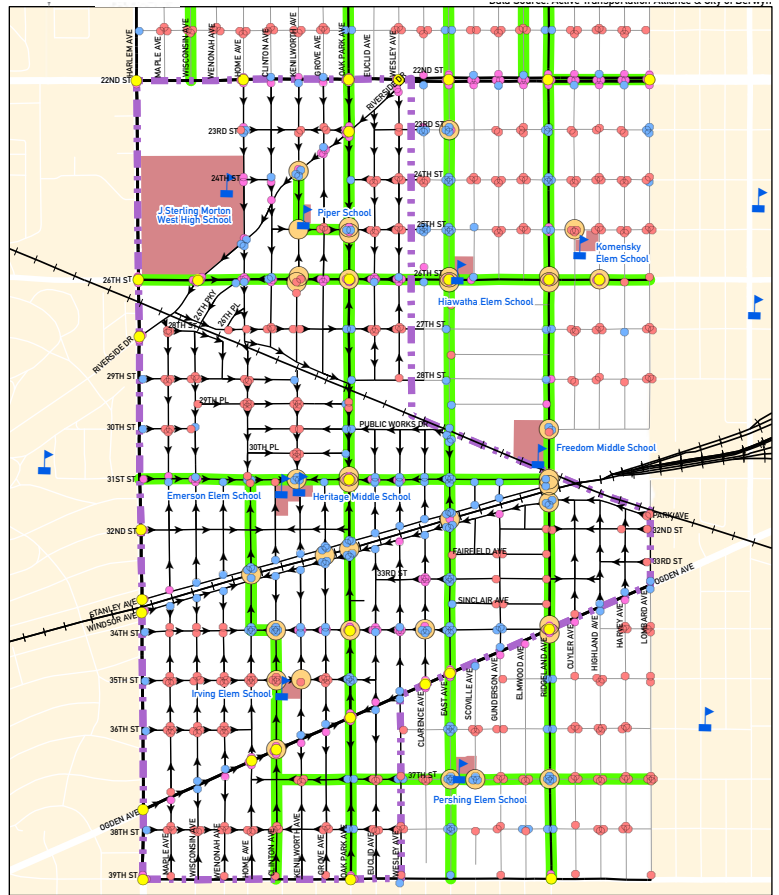
The map could be printed and distributed at key locations throughout the Village, including the library, rec center, and Village Hall. Large versions of the map can be printed and posted as part of an identity sign or informational kiosk along the Des Plaines River Trail and Prospect Heights Bike Path.

SCHOOL WALKING AND BIKING MAPS

School District 21 currently has pick-up and drop-off procedures and maps for each school. The Village should work with the school district to produce preferred walking and biking route maps for each individual school site to be integrated with pick-up and drop-off maps. The maps could also provide child-friendly safety tips and destinations.

TRANSIT INFORMATION

The Village of Wheeling can increase the use of public transit by distributing transit service information. Wheeling can partner with the transit providers to display timetables and install transit card vending machines in key places, such as bus shelters and community centers. The Village should consider working with Pace to provide digital reader boards with real-time bus arrival times at high-use bus stops. The Village should also promote the Regional Transportation Authority's existing transit mapping service (www.goroo.com).



BERWYN MIDDLE SCHOOL
Walking Travel Map



A BIKE TO METRA GUIDE
shows how to use multiple modes of travel for longer trips.

A CROSSING GUARD
greet students
biking to school.



4.2.2 ENCOURAGE STUDENTS TO WALK AND BIKE TO SCHOOL.

Wheeling should partner with School Districts 21, 23 and 214 to encourage more students to walk or bike to school. Local initiatives can be led by parents and neighbors under the guidance of the school district.

INTERNATIONAL WALK TO SCHOOL DAY AND BIKE TO SCHOOL DAY

The community can promote walking and biking by hosting events such as International Walk to School Day, which is held on the first Wednesday of October, or Bike to School Day in May. Children in over 40 countries participate.

WALKING SCHOOL BUS

Launching a Walking School Bus program is one way to encourage children to walk to school. Some parents do not want their children walking alone to school. By recruiting parents and seniors to lead a group of children along a walking route, more parents and children will be apt to walk to school. This program could run one morning a week for six weeks after spring vacation. Development of preferred biking and walking maps will be helpful to build support for this initiative.

SAFE ROUTES TO SCHOOL

The National Center for Safe Routes to School (SRTS) assists communities in enabling and encouraging children in grades K–8 to walk and bike safely to school. The National Center has an informative website about the five E's of SRTS (education, encouragement, enforcement, engineering, and evaluation), including case studies, resources, data collection, and trainings. Parents and administration at school districts can use these resources to develop a school travel plan integrating the five E's, tailored to each school.

4.2.3 HOLD COMMUNITY EVENTS AND PROGRAMS TO GET PEOPLE OUT WALKING AND BIKING.

Community events and programs focused on walking and biking will create awareness of active transportation and encourage more residents to start walking and biking in Wheeling. These programs also provide opportunities for community members to come out and get to know their neighbors, shop locally, and explore their community.

WALKING AND BIKING GROUPS

Walking and biking groups meet on a regular basis, often weekly for rides or walks. People enjoy the active transportation network more while engaged in group physical activity. These groups can target specific populations such as seniors or families. This effort should be launched with various partners such as the Wheeling Wheelmen and the Wheeling Park District. These groups may encourage casual cycling and walking for exercise and transportation.

BIKE AND DINE EVENTS

Bike and dine events invite cyclists to enjoy a progressive dinner by bike at Wheeling's restaurants. Wheeling's Restaurant Row is a neighborhood jewel and a regional destination with over 20 restaurants on a four-mile stretch of Milwaukee Avenue. A bicycle tour of these restaurants for groups of 30 or less will garner media attention for local restaurants and raise the profile of cycling as a way to encourage local patronage. The route will also highlight new or potential community improvements to the bicycle network.



MEMBERS OF A
SUBURBAN BIKING
GROUP
have reasons to smile.



RESTAURANT ROW
is a great destination
for residents
and visitors.

BIKE VALET
enhances community
events. .



BIKE PARKING AT COMMUNITY EVENTS AND FESTIVALS

The Village of Wheeling should advertise and offer bike parking to encourage bicycling to community events. Temporary racks or permanent racks should be installed depending on where the event is held. Bike valet, a service that checks bikes into a secure area and provides claim tags, should also be offered. Frontier Days and the Wheeling International Fair are two events that should incorporate bike parking strategies.

COMMUNITY BIKE RIDES
bring neighbors
together



COMMUNITY BIKE RIDES

Large-scale bike ride events are a great way to feature the active transportation network in Wheeling. Routes should be selected to feature local businesses and any new or planned network improvements. Large events can also serve as fundraisers for local projects and bring visitors from neighboring communities. Wheeling should host a joint ride with the Villages of Prospect Heights, Buffalo Grove and/or Arlington Heights.

BIKE SHARE PROGRAM

Bike sharing programs—fleets of bicycles designed for low-cost, short-term use and made available at conveniently spaced rental stations—have the potential to transform villages and cities. Bike sharing is a cost-effective way to increase bicycling. When combined with infrastructure improvements, it is a way to encourage more residents and local employees to travel around Wheeling by bike. A Village-wide bike pool or rental stations should be placed at major employment centers, the Metra station, popular bus stops, trails and other selected areas.

BIKE TO WORK WEEK AND COMMUTER CHALLENGE

The Bike Commuter Challenge is a great program to celebrate Bike to Work Week each June. Companies, village departments, organizations, and non-profits can sign up teams of employees and log every trip made by bike during Bike to Work Week. This is a free encouragement program that motivates people to get out and try biking for at least one leg of their journey to work. Employers compete against similar-size organizations for recognition and prizes.

The Village has participated in the Bike to Work Week, but should actively encourage major employers to do so as well

PROMOTION OF ACTIVE TRANSPORTATION BY LARGE EMPLOYERS

The Bike and Pedestrian Task Force should work with large employers to design customized walking and biking commuter routes or active loops for getting some exercise during the workday. The task force should also encourage businesses to participate in a transportation demand management program to reward employees for walking, biking or taking transit to work. The Bike Commuter Challenge should be the first step.



EMPLOYEES
leave a workplace
parking lot.



A PIT STOP
during Bike to
Work Week

4.3 Enforce safe travel behaviors.

Successful implementation of this plan will result in an increase in active transportation users, meaning more people will choose to walk and bike. This may create new law enforcement challenges. To promote the safety of all people using the active transportation network, Wheeling will continue to prioritize enforcement of traffic laws that deter reckless behavior by road users.

4.3.1 PROVIDE ACTIVE TRANSPORTATION TRAINING FOR POLICE.

Police in Illinois are required to participate in annual professional development opportunities. The Wheeling Police Department should ensure that all officers engaged in traffic safety enforcement receive introductory training on bicycle and pedestrian safety, followed by semi-annual refresher sessions. Information can be provided in person or through free videos and online training.

OFFICER TRAINING ON BICYCLE AND PEDESTRIAN BEHAVIORS

Officers should receive practical training focused on:

Illegal motorist behaviors that endanger bicyclists and pedestrians. The police department should strictly enforce existing laws concerning car speeding, car turning and car parking.

Dangerous types of bicycling behaviors

Common causes of bicycle and pedestrian crashes

Rules of the road for pedestrians and bicyclists

Reporting bicycle and pedestrian crashes

Investigating serious bicycle and pedestrian crash sites

Ways to prevent bicycle theft

Policing by bicycle

Transportation, health and environmental benefits of bicycling

UPDATES ON LAWS RELATING TO ACTIVE TRANSPORTATION

Special consideration should be given to new and existing laws that impact bicycle and pedestrian safety, particularly in school zones. These laws include:

Must stop for pedestrians in crosswalks

Handheld device ban in school zones

School zone fines

4.3.2 HOLD TARGETED ENFORCEMENT EFFORTS .

No police department can aggressively enforce all laws in all locations at all times. However, a targeted campaign and one-on-one conversations with a police officer can change behavior as well as educate community members.

USE CRASH DATA TO TARGET LOCATIONS FOR ENFORCEMENT.

The Wheeling Police Department can use existing crash data to identify the most dangerous locations and target enforcement at those sites. Intersections are often the most dangerous locations for pedestrians and cyclists. Many crashes in Wheeling occur within 200 feet of an intersection. Between 2006 and 2010, the following intersections had high bicycle and pedestrian crash rates:

Elmhurst/McHenry

Dundee/Milwaukee

Dundee/Schoenbeck

Dundee/Wolf

The Wheeling Police Department should target its enforcement efforts in these locations.

REVIEW ENFORCEMENT EFFORTS ON AN ANNUAL BASIS.

The Village of Wheeling should review these enforcement efforts on an annual basis to ensure appropriate allocation of police resources.



POLICE OFFICERS and community members can work together to create a safe walking and biking environment.



4.3.2 CONTINUE TO SUPPORT ACTIVE TRANSPORTATION ENCOURAGEMENT AND EDUCATION BY THE POLICE DEPARTMENT .

The Wheeling Police Department already makes an effort to educate residents and encourage bicycling behaviors. The police should continue those efforts and consider building upon those efforts.

BIKE RODEO

The police department holds an annual Bike Safety Rodeo that offers a kid-friendly bike course, including stop lights and railroad crossings. This is a community education and encouragement event that draws families from throughout the community.

BIKE SAFETY TIPS

The police department website provides “10 Steps to Bicycle Safety.” The police department should continue its encouragement work by expanding this site as well as beginning to utilize other marketing methods to distribute safety materials.

POLICE AND CITIZEN PATROL PARTNERSHIP

The police department works with the Citizens Patrol group, which is also interested in promoting safe bicycling and walking behaviors.

IMPLEMENTATION

5



Implementation Goal

Implement recommendations contained in this plan.

5.1 Implement ideas contained in this plan

This plan advocates for a comprehensive set of network improvements, policies and programs staggered over several years. When implemented, they will help Wheeling reach its vision for active transportation.

The effective implementation of this plan will require leadership by Village staff and elected officials, and a continued partnership with the schools and community organizations in Wheeling. It will also require cooperation with neighboring municipalities, Cook County Department of Transportation and Highways, Cook County Forest Preserve District, and the Illinois Department of Transportation.

The use of active transportation will only increase if this plan's recommendations are implemented in a timely manner. The following are ways to monitor implementation and measure progress towards achieving Wheeling's vision for active transportation.

5.1.1 EMPOWER THE WHEELING BIKE AND PEDESTRIAN TASK FORCE TO OVERSEE PLAN IMPLEMENTATION.

The Wheeling Bike and Pedestrian Task Force (BPTF) was established in 2010 to advance walking and biking in the Village. This group should continue working towards improving walking and bicycling in Wheeling.

Through the planning process, new connections with individuals, agencies and organizations have been established. To continue this partnership, Wheeling Bicycle and Pedestrian Task Force membership should be extended to people who have indicated their interest in active transportation through participation in creating this plan.

To empower the Bicycle and Pedestrian Task Force, the Village should consider the following:

Provide the BPTF with a modest annual budget for implementation of this plan

Require the BPTF to present annual report highlighting accomplishments, future goals and recommendations for the following year

Responsibilities for the Wheeling Bicycle and Pedestrian Task Force should include the following:

Facilitate outreach to the community at time of adoption of Wheeling's Active Transportation Plan and as parts of the plan are implemented. Task Force members can use their existing community and social networks to spread the word about upcoming active transportation projects.

Monitor implementation of the plan.

Establish a budget for the Task Force so that they may continue using Village resources to implement the plan's recommendations.

Form partnerships with schools and community organizations to advance recommendations in this plan.



WHEELING BIKE and Pedestrian Task Force Meeting, March 2010.

COUNTING USAGE
RATES
will show the
importance and
growth of walking
and biking.



5.1.2 REVIEW AND REPORT ON PLAN IMPLEMENTATION.

Village of Wheeling staff should regularly review and report on progress and implementation of this plan to the Bike and Pedestrian Task Force. The Village should establish performance metrics to include in the report. Recommended metrics include the following:

Miles of bicycle network implemented

Miles of sidewalk, paths and trails built

“Complete” intersections developed

Bus stops and shelters installed

Bicycle- and pedestrian-friendly policies adopted

Educational events and encouragement opportunities offered

Enforcement events held

Other bicycle and pedestrian improvements

5.1.3 MONITOR ACTIVE TRANSPORTATION PARTICIPATION AND USAGE RATES.

In addition to improving the built environment for active transportation, advancing policy, and holding programs that promote active transportation, it is important to monitor usage and safety of active transportation in Wheeling. The following data-collection and analysis efforts should be made on a regular basis:

Review and analyze crash data annually to identify high-crash area locations.

Develop and implement a counting system for assessing use of bike racks.

Conduct baseline and annual bicycle and pedestrian counts at key roadway and trail locations throughout the Village, including adjacent lands in Cook County Forest Preserve.

Survey Metra riders to understand mode share for how they access the station. Survey both traditional commuters that live in Wheeling and work elsewhere, as well as reverse commuters that work in Wheeling.

Work with Pace to receive data on bus ridership

5.1.4 STRATEGICALLY PURSUE FUNDING FOR IMPLEMENTATION OF THIS PLAN.

Although portions of this plan can be completed for little to no cost, this plan cannot be fully implemented without financial support. Many outside funding sources are available, and there are many opportunities to integrate active transportation into the Village's budget. A description of funding sources can be found in Appendix C. The following are suggestions for how to fund implementation of this plan:

Dedicate funding towards active transportation.

Integrate recommendations into the CIP.

Pursue outside funding opportunities.

Use resurfacing projects as opportunities to add on street bicycle facilities, where recommended.

**THE POTAWATOMI
PRAIRIE PROJECT**
is an example of a
project where multiple
agencies will need
to work together to
create a complete,
connected active
transportation network



5.1.5 COORDINATE IMPLEMENTATION OF THIS PLAN.

Wheeling's transportation network is part of a much larger network. Many recommendations in this plan are on roads or lands controlled by other agencies. To fully implement Wheeling's active transportation network and to connect Wheeling's transportation network with the larger regional and statewide transportation system, Wheeling will need to coordinate projects with other agencies.

Partners to help implement projects within Wheeling include, but are not limited to:

Wheeling and Prospect Heights Park Districts

School Districts 21, 23 and 214

Community groups such as the Wheeling Wheelmen

The following agencies have been identified as partners to coordinate projects outside of Wheeling:

Cook County Highway Department

Illinois Department of Transportation

Cook County Forest Preserve District

Neighboring municipalities: Arlington Heights, Northbrook, Buffalo Grove and Prospect Heights

Intersection Implementation Table

Intersection	Intersection Type	Notes	Overall Priority	Cost	Safety	Coordination	Community Input	Impact
Weiland / Lake Cook	S1	similar to other S1	Low	medium	medium	high	low	medium
Buffalo Grove / Aptakisic	U1	similar to other U1	Medium	low	medium	high	low	medium
Buffalo Grove / Bernier	S1	crossing medians/remove turn lane	Low	low	medium	medium	low	low
Buffalo Grove / Cobler	U1	crossing medians/remove turn lane	High	low	high	medium	low	medium
Buffalo Grove / Dundee	S1	similar to other S1	Low	medium	medium	high	low	medium
Buffalo Grove / Hintz	S1	similar to other S1	Medium	medium	medium	medium	low	medium
Buffalo Grove / Tahoe Circle	U1	crossing medians/remove turn lane	High	low	high	medium	low	medium
Dundee / Cedar	U1	median in existing striped space. Hawk signal	Low	high	low	high	low	medium
Dundee / Huntington	S1	similar to other S1	Low	medium	medium	high	low	medium
Dundee / Willie	U1	similar to other S1	High	low	high	high	high	medium
Dundee / Dundee	S1	similar to other S1	Low	high	high	high	medium	low
Ernhurst / Gregor	U1	crossing median in turn lane	High	low	high	high	low	high
Ernhurst / Hintz	S3	similar to other S2, S3	Low	high	high	high	low	low
Ernhurst / McHenry	S1	crosswalks; ped countdown signals and buttons; reduce curb radii/curb extend / curb ramps	Low	medium	medium	high	low	medium
Ernhurst / Merle	U1	crossing median in turn lane	Medium	low	high	high	low	medium
Ernhurst / Palatine	S1	similar to other S1	Low	medium	medium	high	low	medium
Ernhurst / Prospect Heights Bike Path	U1	crossing median in reduced length of turn lanes	High	low	high	high	medium	high
McHenry / Weiland	S2	similar to other S2, S3	Medium	high	high	high	low	high
Hintz / Lakeview	U1	crossing median, remove turn lane or reduce lane widths	High	low	high	medium	low	high
Hintz / Metra Tracks	U1	pedestrian crossing arms	Medium	low	low	high	low	medium
Hintz / Selon	U1	crossing median, reduce lane widths	Medium	low	high	high	low	medium
Jeanne/Heritage Park / Jeffrey	U1	sign cut through after it is constructed	Medium	low	low	medium	low	medium
Lake Cook / Shopping Center drives	U1	similar to other S1	Medium	medium	medium	medium	low	medium
Lake Cook / Lake Cook	S1	similar to other S1	Medium	medium	medium	medium	low	high
Lexington / McHenry	S1	similar to other S1	Low	medium	medium	high	low	low
McHenry / Cedar Run	U1	crossing median and rectangular rapid flashing beacon	Medium	medium	high	high	low	medium
McHenry / Denoyer	U1	crossing median and remove right turn lanes	Medium	low	high	high	low	medium
McHenry / Lake Cook	S1	similar to other S1	Low	medium	medium	high	low	medium
McHenry / Whipple Tree	S1	pedestrian hybrid beacon (HAWK) and crossing median	Low	high	high	high	low	medium
Milwaukee / Dundee	S2	crossing medians on all legs; reduce curb radii	High	high	high	high	high	high
Milwaukee / Hintz	S2	similar to other S2, S3	Medium	high	high	high	low	high
Milwaukee / Jeffrey	U1	crossing median where striping now exists	Medium	low	high	high	low	medium
Milwaukee / Lake Cook ramp	S1	similar to other S1	Medium	medium	medium	high	low	high
Milwaukee / Wolf	S2	similar to other S2, S3	Medium	high	high	high	low	medium
Nortgate / Strong	U1	one crosswalk and curb ramp	Medium	low	low	low	low	low
Nortgate Parkway / Dundee	S3	similar to other S2, S3	High	high	high	high	high	high
Nortgate Parkway / Lake Cook	S3	similar to other S2, S3	High	high	high	medium	high	high
Portwine / Dundee	U1	similar to other S3	High	medium	high	high	high	high
Schoenbeck / Anthony	S1	detectable ramps; crosswalk; additional sign	High	low	low	medium	medium	high
Schoenbeck / Dundee	S2	similar to other S2, S3	Low	high	high	high	low	low
Schoenbeck / Hintz	S2	S1 features, plus crossing medians	Medium	high	high	medium	low	medium
Wheeling / Palatine	S1	similar to other S1	Medium	high	high	medium	low	high
Wheeling / Hintz	S2	similar to other S2, S3	Low	high	high	high	low	high
Wheeling / Prospect Heights Bike Path	U1	intensity median where striping now exists	High	low	high	low	medium	high
Wheeling / Town	S1	similar to other S1	High	medium	medium	low	high	low
Wheeling/McHenry / Dundee	S3	similar to other S2, S3	Medium	high	high	high	medium	medium
Wolf / Camp McDonald	S1	crosswalks; ped countdown signals and buttons; reduce curb radii/curb extend / curb ramps	Medium	medium	medium	high	low	high
Wolf / Crescent	U1	crosswalks and signs	Medium	low	low	low	low	medium
Wolf / Dundee	S1	part of planned DOT improvement	Low	low	medium	high	low	low
Wolf / Hintz	S1	similar to other S1	0	high	high	medium	low	low
Wolf / Holmes Middle School	U1	additional sign	0	low	low	low	low	medium
Wolf / Inland	U1	crosswalk, formalize existing median with pedestrian signage	0	low	low	low	low	medium
Wolf / Strong	S1	similar to other S1	0	medium	medium	medium	low	low
Wolf / Willow	S1	similar to other S1	0	medium	medium	high	low	high

Costs: low=under \$20,000; medium=\$20-50K; high= over \$50K

assuming intersections will connect to sidewalks where none now exist as part of Wheeling's separate sidewalk improvement program

Coordination: Low=local/local, medium=local/county or county/county or on municipal border, high=at least one state road involved or railroad crossing, Wolf Road considered a local road for planning purposes.

Safety definition: While all recommendations will improve safety, ranking is a judgment based on the potential improvement to safety over existing conditions. Medians and flashing beacons increase safety to a greater extent, while curb extensions and striped crosswalks increase safety to a lesser extent. Safety improvements to arterial roads are ranked higher than improvements to local roads. Dundee and McHenry have demonstrated bike/ped crash issues and improvements to those roads are generally ranked highly.

Community Input: Low=0-3 suggested hazard votes, Medium=4-5 suggested hazard votes, High=6 or more suggested hazard votes

Intersection Impact: based on existing level of pedestrian accommodation. All uncontrolled crossings considered medium impact, unless in front of a school, park or community facility

See Appendix F for a sample sidewalk installation and prioritization policy for the Village of Wheeling.

Policy Implementation Table							
The recommendations in this plan have been prioritized for implementation based on coordination, cost, community input, safety, and impact.							
3.1	Leverage support of key government agencies to foster active transportation	Overall priority	Coordination	Cost	Community Input	Safety	Impact
3.1.1	<i>Adopt a Complete Streets policy</i>	High	Low	Low	High	High	High
3.1.2	<i>Adopt a Must Stop for Pedestrians requirement in accordance with state law</i>	High	Low	Low	Medium	High	Medium
3.1.3	<i>Coordinate with local school districts to enhance active transportation</i>	Medium	Medium	Low	High	Medium	Medium
3.2	Ensure Village of Wheeling policies reflect best practices for promoting active transportation	Overall priority	Coordination	Cost	Community Input	Safety	Impact
3.2.1	<i>Continue support for and enforcement of existing policies</i>	Medium	Low	Medium	Low	Medium	Medium
3.2.2	<i>Update snow removal ordinance</i>	High	Low	Low	High	Medium	Medium
3.2.3	<i>Adopt a policy to maintain bicycle and pedestrian facilities</i>	Medium	Low	Low	Low	Medium	Medium
3.2.4	<i>Adopt a policy regarding construction zones</i>	High	Low	Low	Medium	High	Medium
3.2.5	<i>Adopt a policy regarding effective speed limits</i>	Medium	Low	Low	Low	High	Medium
3.2.6	<i>Update speed limits on local roads</i>	Medium	Low	Low	Low	High	Medium
3.2.7	<i>Update list of local yield and stop intersections</i>	Medium	Low	Medium	Low	Medium	Low
3.2.8	<i>Adopt a sidewalk installation prioritization policy</i>	High	Low	Low	High	High	Medium
3.2.9	<i>Adopt updates to parking ordinance to foster active transportation</i>	Medium	Low	Low	Medium	Low	Medium
3.2.10	<i>Adopt a transportation demand management ordinance to encourage active transportation</i>	Medium	Low	Low	Medium	Low	High
3.3	Provide safe accommodations for cyclists and pedestrians in all new development	Overall priority	Coordination	Cost	Community Input	Safety	Impact
3.3.1	<i>Ensure street connectivity within and between sub-divisions</i>	Medium	Medium	Low	High	Medium	Low
3.3.2	<i>Update parking requirements for new developments</i>	Medium	Low	Low	High	Low	Low
3.3.3	<i>Update bike parking ordinance</i>	Medium	Low	Low	High	Low	Medium
3.3.4	<i>Update sidewalk requirements</i>	High	Low	Low	High	High	Medium
3.3.5	<i>Encourage best use of driveways</i>	Medium	Medium	Low	Medium	Medium	Low
3.3.6	<i>Enact a form based code for commercial areas</i>	Low	High	Low	Medium	Low	Low

Costs: Low=under \$20,000 ; Medium=\$20-50K ; High= over \$50k

Coordination: Low=Village of Wheeling, Medium=Wheeling plus another government agency, High=Wheeling plus two or more other government agencies

Safety: Low=makes walking and biking more convenient, but does not directly affect safety while walking or biking, Medium=supports maintenance of existing facilities, High=any policy that directly impacts driver behavior or creates additional accommodations for bikes and peds where none existed

Community Input: Low=0-5 votes, Medium=6-10 votes, High=11 or more votes

Impact: Low=neighborhood impact, Medium=village-wide impact, High=regional impact

Program Implementation Table							
The recommendations in this plan have been prioritized for implementation based on coordination, cost, community input, safety, and impact. A large number of these projects can be lead by the Bicycle and Pedestrian Task Force members in partnership with local organizations.							
4.1	Educate the public about active transportation	Overall priority	Coordination	Cost	Community Input	Safety	Impact
4.1.1	Provide education to the entire community						
	Bicycle and pedestrian ambassadors	high	low	medium	low	medium	medium
	Bike maintenance and traffic skills classes	medium	medium	medium	low	medium	medium
	Community engagement through print and online media	high	low	low	medium	medium	medium
4.1.2	Educate residents on the value of Complete Streets	high	high	medium	medium	medium	medium
4.1.3	Provide Youth and Teen Bicycle and Pedestrian Education						
	PE classes and assemblies	medium	medium	medium	medium	medium	medium
	Curricular education materials	high	medium	low	low	medium	medium
	Student led initiatives	medium	high	low	low	medium	medium
	Mobility education for teens	low	high	medium	low	medium	high
4.2	Encourage the use of active transportation	Overall priority	Coordination	Cost	Community Input	Safety	Impact
4.2.1	Provide the community with information about walking, biking and transit routes in Wheeling						
	Active Transportation network map	medium	medium	medium	medium	medium	medium
	School walking and biking maps	medium	high	medium	low	medium	medium
	Transit information	medium	low	medium	low	low	medium
4.2.2	Encourage students to walk and bike to school						
	International Walk to School Day and Bike to School Day	high	medium	low	medium	low	medium
	Walking School bus	medium	medium	low	low	medium	medium
	Safe Routes to School	medium	medium	low	low	medium	medium
4.2.3	Hold community events and programs to get people out walking and biking						
	Walking and biking groups	high	low	low	high	low	medium
	Bike and dine events	high	medium	low	medium	low	medium
	Bike parking at community events and festivals	high	low	low	high	low	medium
	Community bike rides	high	low	low	high	low	medium
	Bike to Work Week and Commuter Challenge	high	low	low	low	low	medium
	Encourage large employers to promote active transportation	medium	high	low	low	low	medium
	Bike Share program in Wheeling-feasibility study	low	low	medium	low	low	medium
4.3	Enforce safe travel behaviors	Overall priority	Coordination	Cost	Community Input	Safety	Impact
4.3.1	Provide Active Transportation Training for Police						
	Officer training on bicycle and pedestrian behaviors	medium	low	low	high	medium	medium
	Updates on laws relating to active transportation	medium	low	low	high	medium	medium
4.3.2	Hold Targeted Enforcement Efforts						
	Review crash data to target locations for enforcement	high	low	low	high	high	medium
	Review enforcement efforts on an annual basis	high	low	low	high	high	medium
4.3.3	Continue to support active transportation encouragement and education by the Police						
	Continue annual bike safety rodeo	high	low	low	medium	high	medium
	Provide bike safety info via various methods	high	low	low	medium	high	medium
	Police and citizen patrol partnership	high	low	low	medium	medium	medium

APPENDIX

6

Appendix A: Existing Conditions and Community Engagement Summary

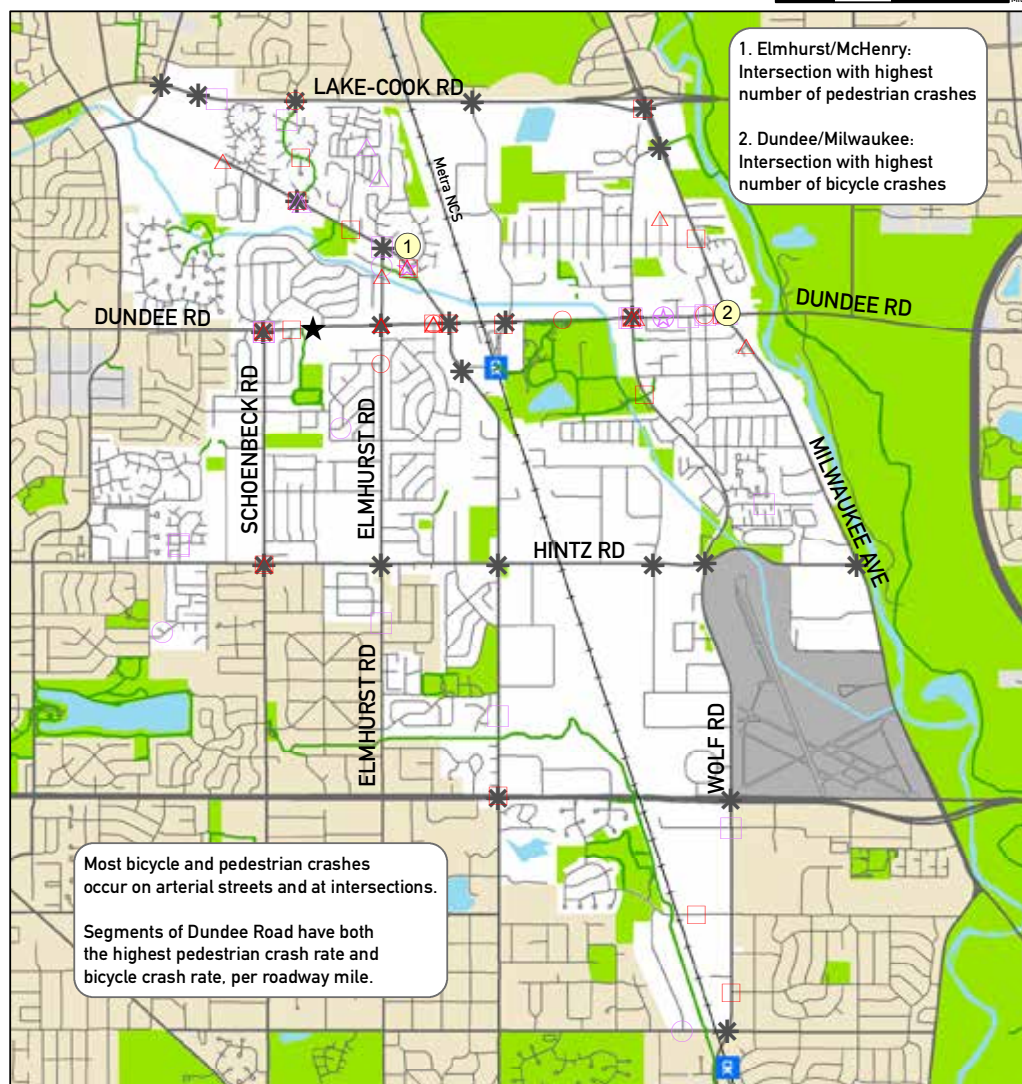
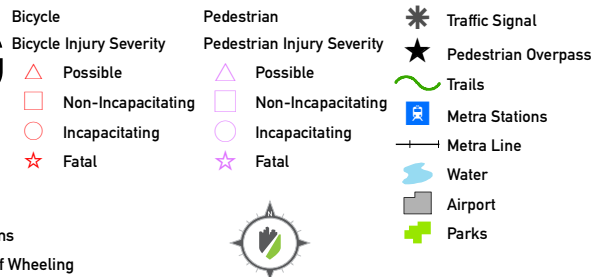
The Wheeling Existing Conditions Report is a PDF attachment that summarizes the analysis and outreach conducted while developing the Active Transportation Plan for Wheeling.

The crash map (right) is just one of a series of maps and information generated to inform recommendations made in this plan.

WHEELING

Pedestrian and Bicycle Crashes 2006-2010

Prepared By: Active Transportation Alliance and TranSystems
7/30/2012
Data Source: Active Transportation Alliance, IDOT, Village of Wheeling



VILLAGE OF WHEELING

EXISTING CONDITIONS AND COMMUNITY ENGAGEMENT REPORT

for the
WHEELING ACTIVE TRANSPORTATION PLAN
IMPROVING OPTIONS FOR BIKING, WALKING, AND TRANSIT ACCESS

prepared by



The Village of Wheeling is partnering with Active Transportation Alliance and TranSystems to produce an Active Transportation Plan for the Village in order to improve options for walking, biking and transit access in Wheeling.

The plan will build upon Wheeling's 2003 Comprehensive Plan, the 2010 Northwest Municipal Conference Bike Plan and other recent bicycle and pedestrian planning efforts in order to help the Village achieve its vision for active transportation.

The Village of Wheeling will have a complete, safe, attractive network of transportation options for residents and visitors. The network will allow people to travel throughout Wheeling and connect to adjacent communities on foot or bike. The users of this network will benefit from the health, safety and economic opportunities provided by being able to access parks, schools, trails, businesses and other destinations on foot or bike.

The following report is a summary of the existing transportation network and community input on priorities for making Wheeling a more bicycle and pedestrian friendly community.

Preparation and completion of this document was financed by federally funded grant dollars through the Chicago Metropolitan Agency for Planning (CMAP). The goals and recommendations of this plan have been developed in accordance with the CMAP GO TO 2040 Plan, a comprehensive, regional plan set in place to guide the seven counties and 284 communities of northeastern Illinois towards sustainable prosperity in the future.

Contents

EXISTING TRANSPORTATION NETWORK	3
MAIN ROADS	5
INTERSECTIONS	13
LOCAL ROADS	17
TRAILS AND BIKE FACILITIES	19
TRANSIT	21
COMMUNITY ENGAGEMENT	27
COMMUNITIES ENGAGED	29
VISION, GOALS AND OBJECTIVES	35
SURVEY RESULTS	39
DESTINATIONS	43
BARRIERS	45
LOCAL ROUTES	18
POLICIES	51
PROGRAMS	53



Children at the Wheeling Bike Rodeo learn how to stop at railroad crossings. June 16, 2012

Existing Transportation Network



Wheeling staff and residents show the Project Team a path connecting Chaddick Drive and Nancy Lane. April 27, 2012.

Main Roads

Importance

Arterial and collector streets, also known as major and secondary roads, generally provide the quickest, shortest paths between destinations for longer trips. Arterials commonly carry the highest traffic volume, followed by collectors and then local streets. Arterials and collectors are often characterized by a greater number of travel lanes and higher speeds. Most destinations are located along these streets such as workplaces, shopping centers, restaurants, educational institutions, and medical facilities. If deemed safe by bicyclists, these streets are optimal for long bike trips.

Existing Network

The Wheeling street network's arterials are:

- East-west: Dundee Road (IL 68), Lake-Cook Road, Palatine Road
- North-south: Buffalo Grove Road, Elmhurst Road (IL 83), McHenry Road, Milwaukee Avenue (US 45 / IL 21), Wolf Road

Wheeling's collector roads are:

- East-west: Camp McDonald Road, Hintz Road
- North-south: Schoenbeck Road, Wheeling Road

While Wheeling has jurisdiction over Wheeling Road, the other main roads are under the jurisdiction of either Illinois Department of Transportation or Cook County (see map).

Active Transportation Conditions

The majority of main roads in Wheeling have sidewalks (see map). Many streets have some areas with gaps in sidewalk coverage or only a sidewalk on one side. None of the main roads have bicycle facilities. Cyclists are permitted to use the sidewalk in Wheeling, but bicycling in places with a high frequency of driveways and intersections, and little room for cyclists and pedestrians to pass each other is unsafe. Current accommodations are not enough for a safe, comfortable biking and walking environment as there are often wide intersections to cross. While Dundee Road has sidewalks along both sides of the road for almost its entire length in Wheeling, it also has the highest rate of pedestrian and bicycle crashes.

Planned Projects

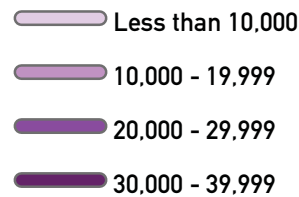
A side path is planned along Dundee Road to provide an increased level of pedestrian and bicycle comfort over the smaller sidewalk that currently exists. It is scheduled to begin construction in 2013.

WHEELING

Traffic Volume

Prepared By: Active Transportation Alliance and TranSystems
7/3/2012
Data Source: IDOT

Average Daily Traffic (Vehicles/day)



Trails



Metra Stations

Metra Line

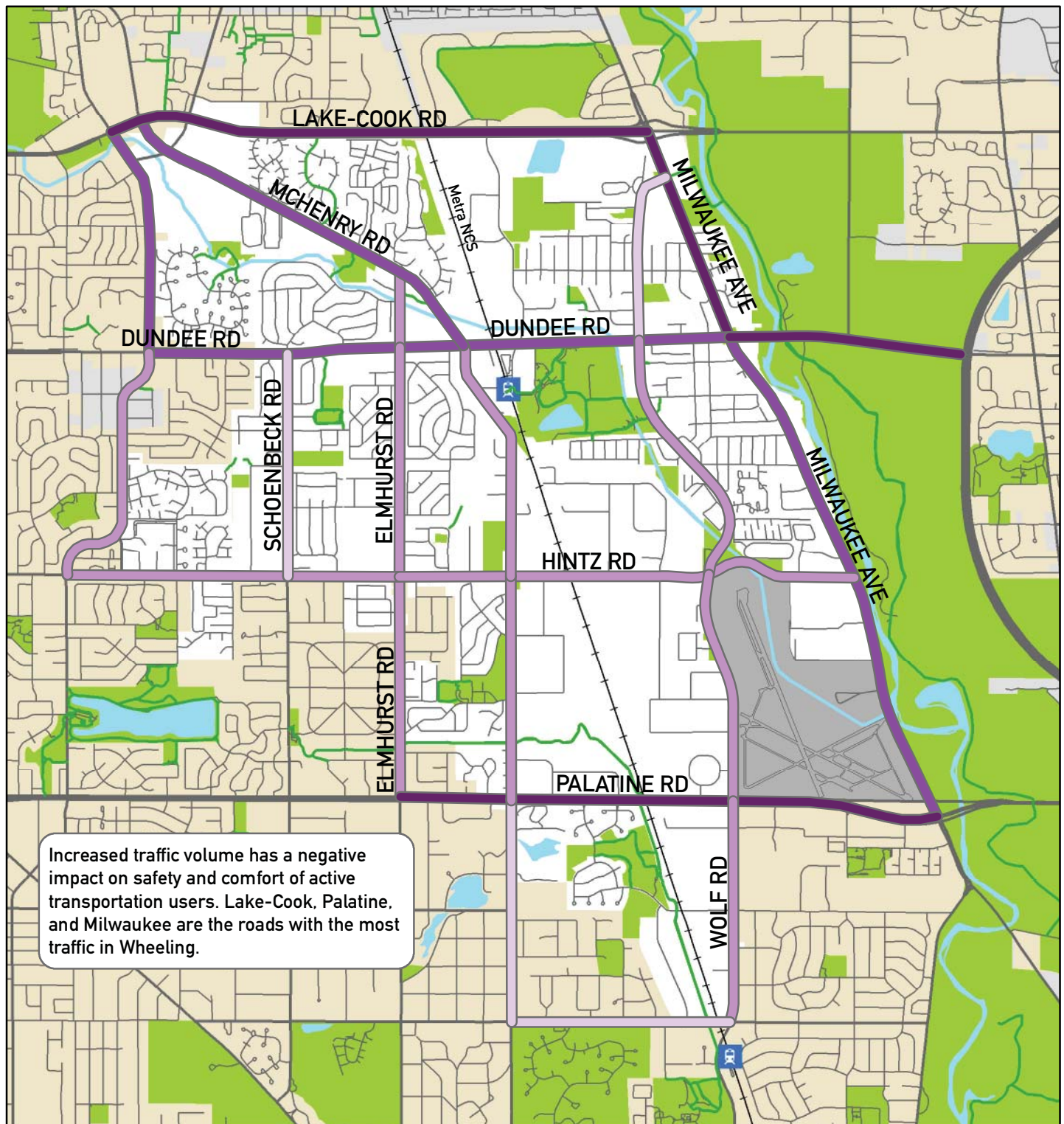
Water

Airport

Parks



0 0.5 1
Mile

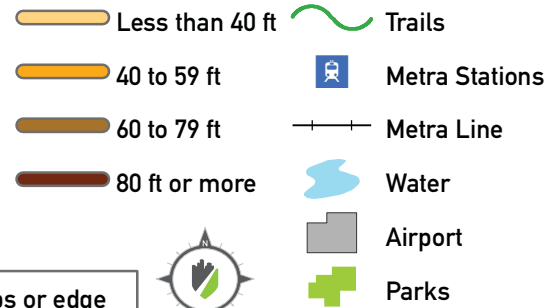


WHEELING

Width of Paved Travel Way for Main Roads*

Prepared By: Active Transportation Alliance and TranSystems
7/3/2012
Data Source: Village of Wheeling, Field review

*Width between curbs or edge lines, in feet, for the majority of roadway segment.
(Intersections are often wider)



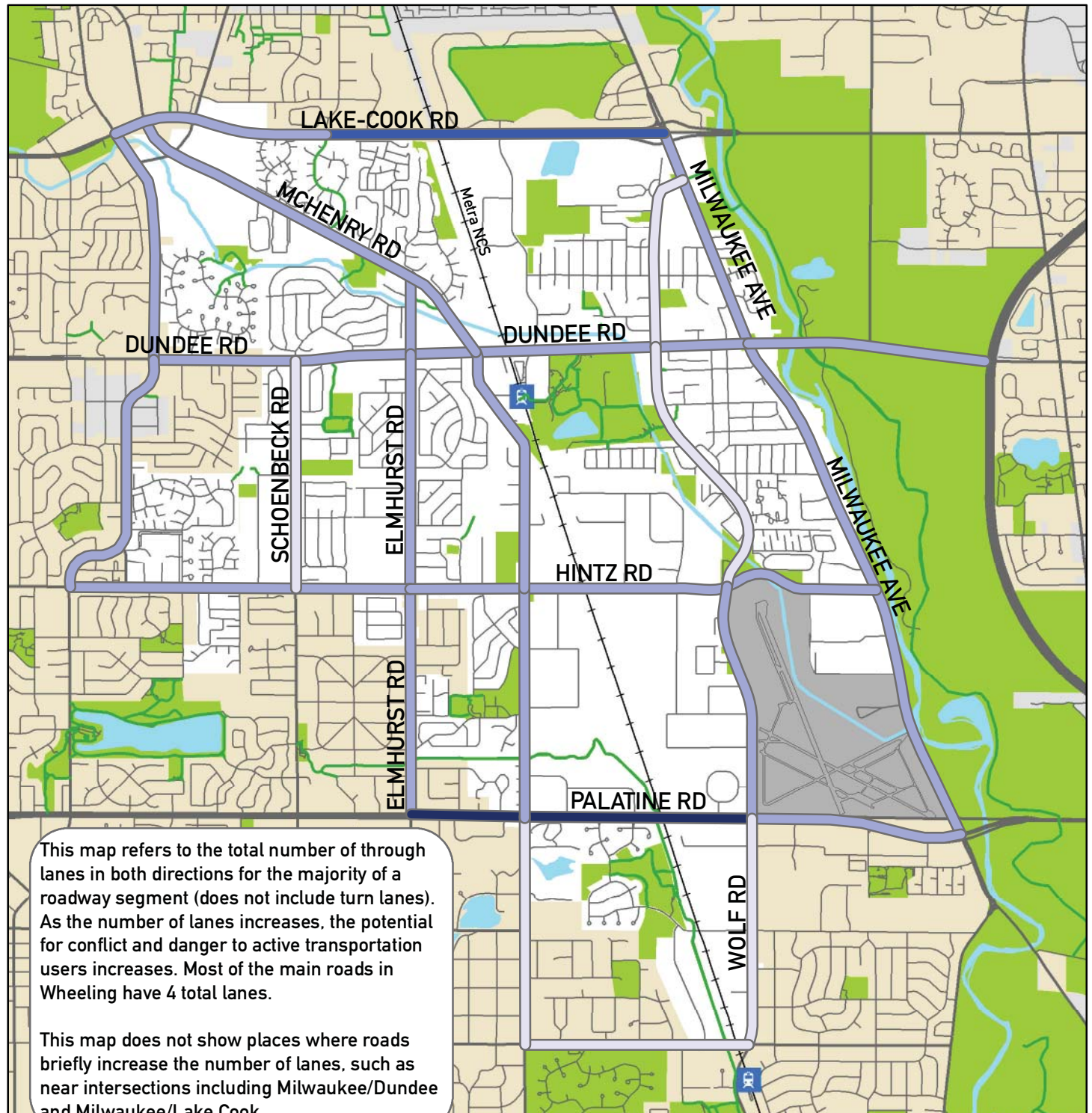
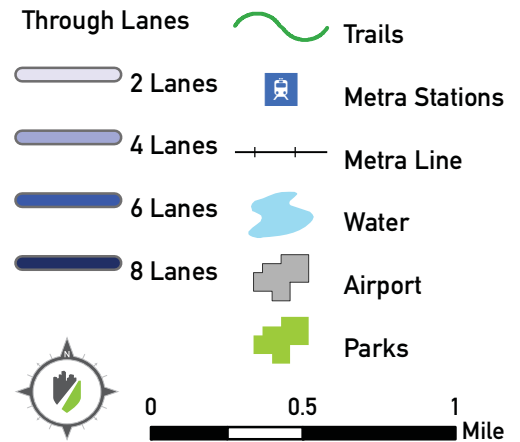
0 0.5 1 Mile



WHEELING

Through Lanes on Main Roads

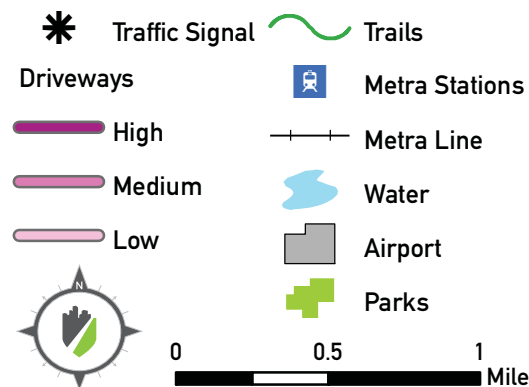
Prepared By: Active Transportation Alliance and TranSystems
5/3/2012
Data Source: Field review



WHEELING

Frequency of Driveways on Main Roads

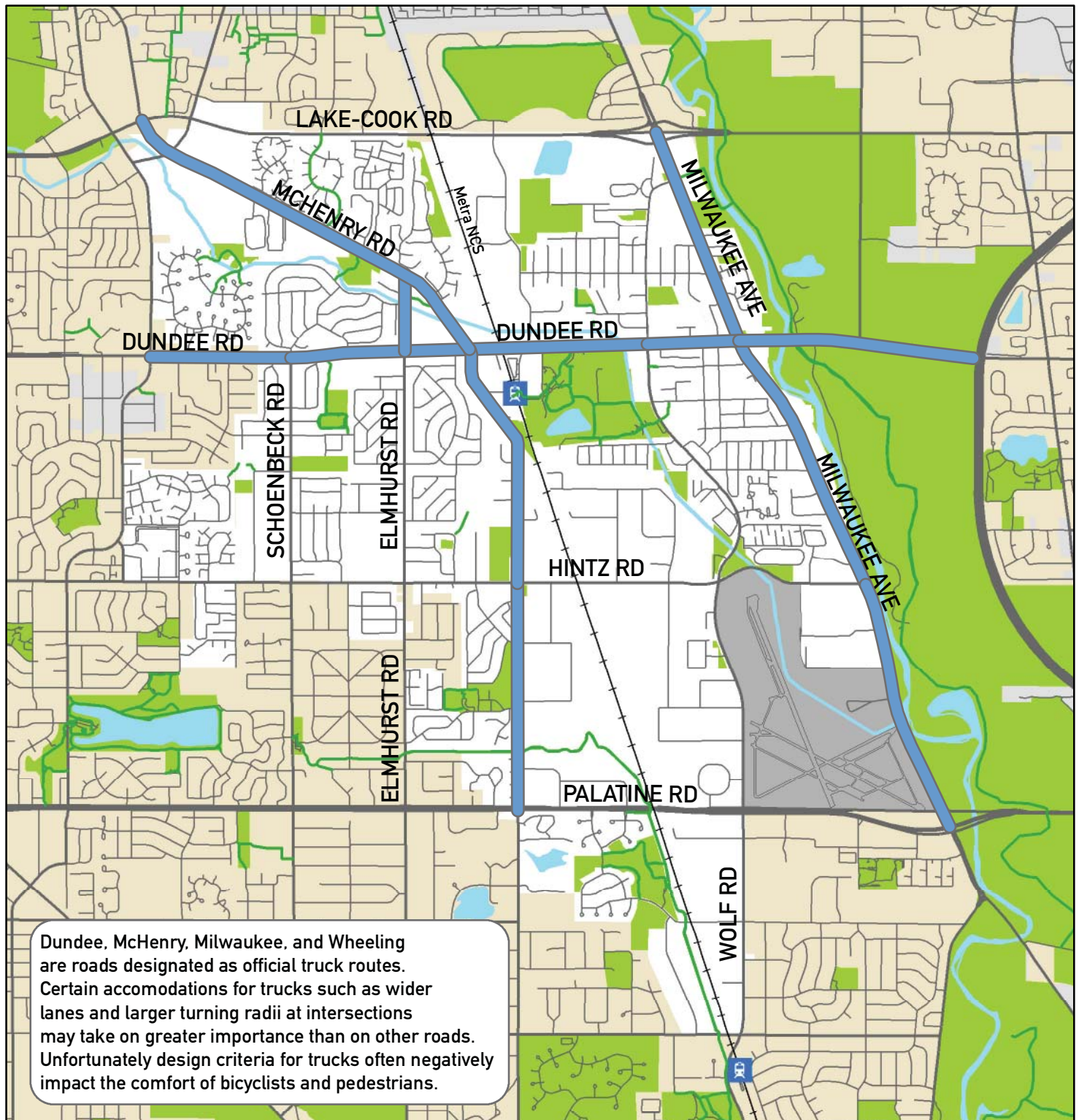
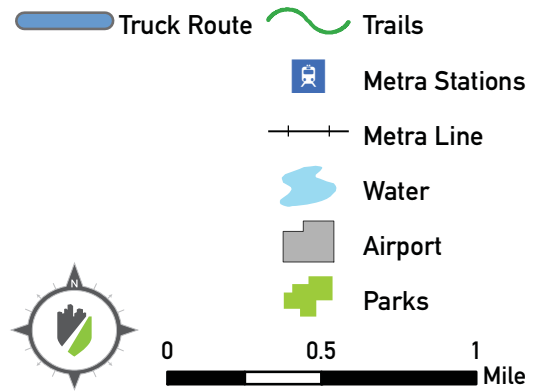
Prepared By: Active Transportation Alliance and TranSystems
5/3/2012
Data Source: Field review



WHEELING

Designated Truck Routes on Main Roads

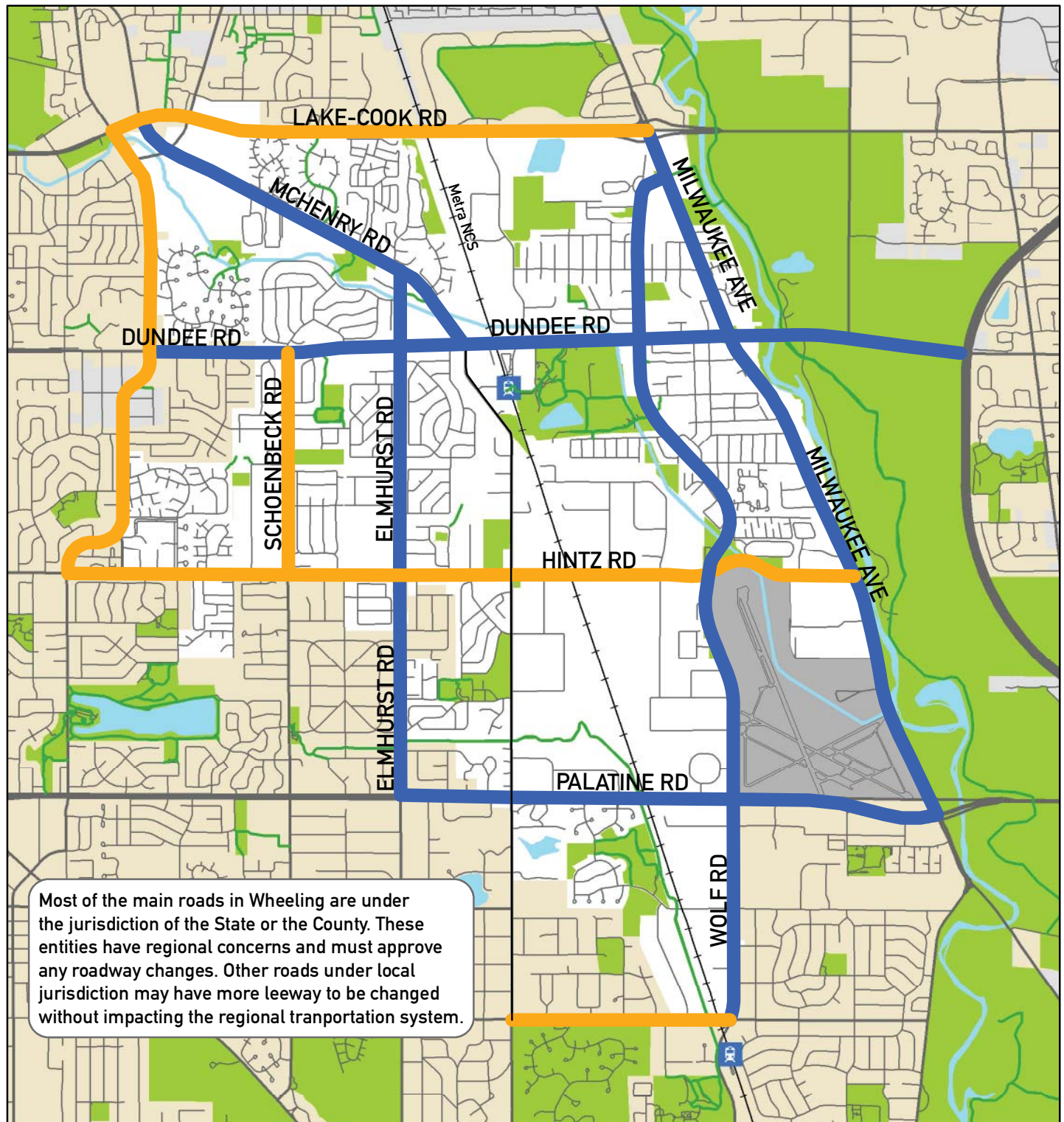
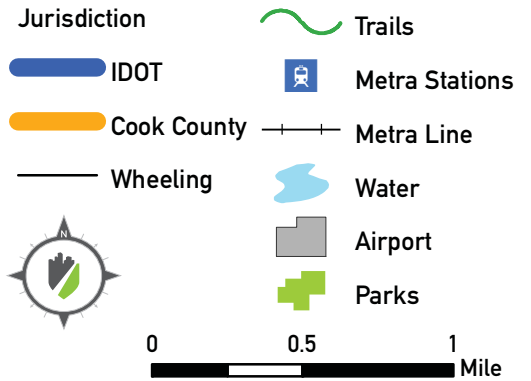
Prepared By: Active Transportation Alliance and TranSystems
7/3/2012
Data Source: IDOT



WHEELING

Roadway Jurisdiction

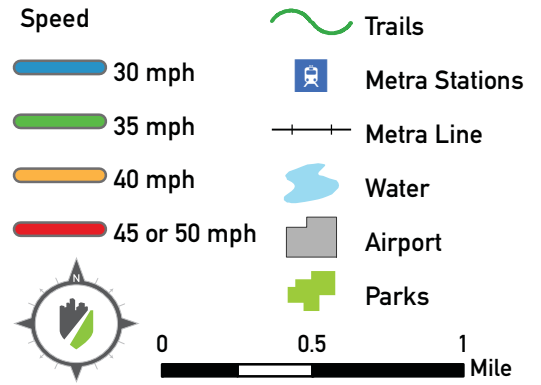
Prepared By: Active Transportation Alliance and TranSystems
7/3/2012
Data Source: Village of Wheeling, ESRI, IDOT



WHEELING

Posted Speed Limits on Main Roads

Prepared By: Active Transportation Alliance and TranSystems
7/9/2012
Data Source: Field review



Intersections

Importance

Intersections represent critical points within the active transportation network. Without safe intersection crossings for cyclists and pedestrians, bicycle and pedestrian improvements along roadways do little to effectively connect residents to destinations throughout the community.

Active Transportation Conditions

Because traffic volumes and vehicle speeds are high on major roadways in Wheeling, intersections with traffic signals are typically the only place for pedestrians and cyclists to safely and comfortably cross major roads. Signalized crossings occur approximately every half mile on major roadways in Wheeling. Most main intersections in Wheeling provide an intimidating experience for a person on foot or bike. The sheer number of lanes to cross is the most significant hazard, such as the seven lanes at the Dundee/Milwaukee intersection. Generally the number of lanes increases at intersections because turn lanes are added to accommodate automobile and truck traffic flow. However, this negatively impacts the real and perceived danger to pedestrians and bicyclists. Most signalized intersections are connected to sidewalks and include curb cuts for people in wheelchairs or with strollers. On the other hand, many intersections do not have crosswalks on all legs and although most have a pedestrian signal where crosswalks exist, no intersections have pedestrian countdown signals. Intersections are the main barrier for people who currently want to walk or cycle through Wheeling.

High Crash Locations

Intersections are often the most dangerous locations for pedestrians and cyclists. Many crashes in Wheeling occurred within 200 feet of an intersection. Between 2006-2010, the Elmhurst/McHenry intersection had the highest number of pedestrian crashes (3). The Dundee/Milwaukee intersection had the highest number of bicyclist crashes (4). Two intersections had multiple pedestrian and bicyclist crashes: Dundee/Schoenbeck and Dundee/Wolf, each with 2 pedestrian and 3 bicyclist crashes.

While crash statistics are important to consider, they paint a limited picture regarding active transportation. Perceived danger is a powerful barrier to someone considering walking or biking. A dangerous intersection may not have any pedestrian or bicyclist crashes because people may avoid that location if at all possible.

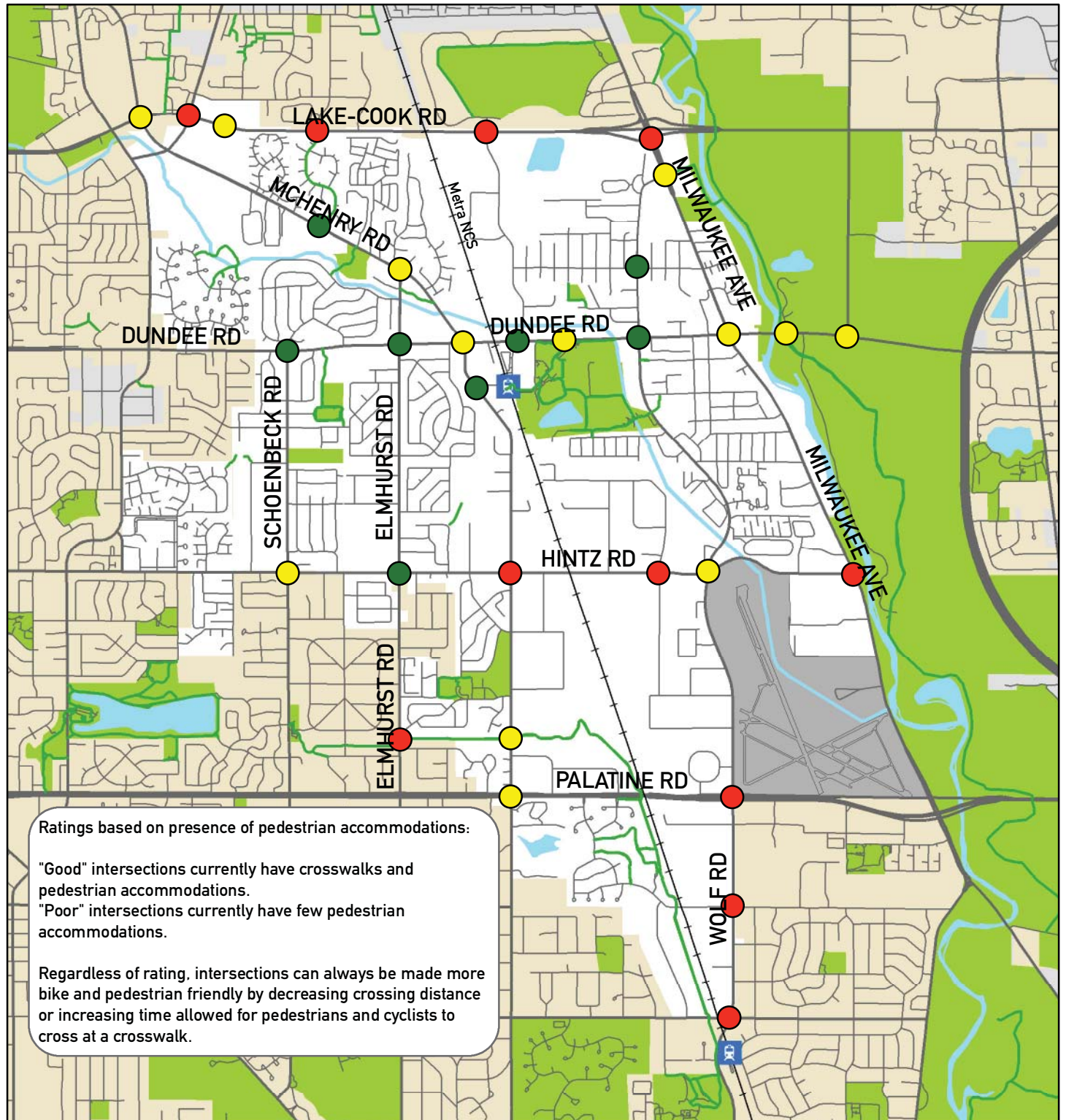
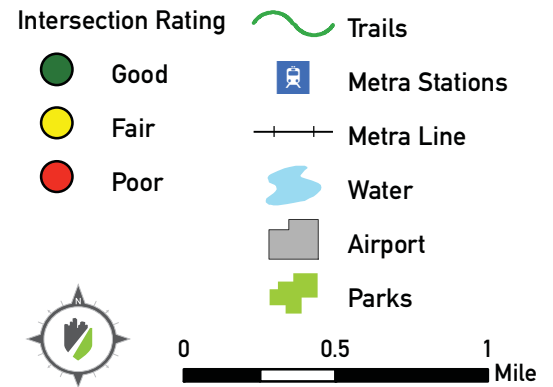
Planned Projects

Traffic signals are planned on Dundee Road at two locations: Community Boulevard and Portwine Road. Community Boulevard is the entrance to Heritage Park and Village offices. Portwine Road provides access to the Potawatomi Woods forest preserve and Des Plaines River Trail. These signals will increase safety for walkers and bicyclists to key destinations in Wheeling.

WHEELING

Intersection Ratings on Main Roads

Prepared By: Active Transportation Alliance and TranSystems
7/30/2012
Data Source: Field review



WHEELING

Pedestrian and Bicycle Crashes 2006-2010

Prepared By: Active Transportation Alliance and TranSystems

7/30/2012

Data Source: Active Transportation Alliance, IDOT, Village of Wheeling

Bicycle

Bicycle Injury Severity

- △ Possible
- Non-Incapacitating
- Incapacitating
- ★ Fatal

Pedestrian

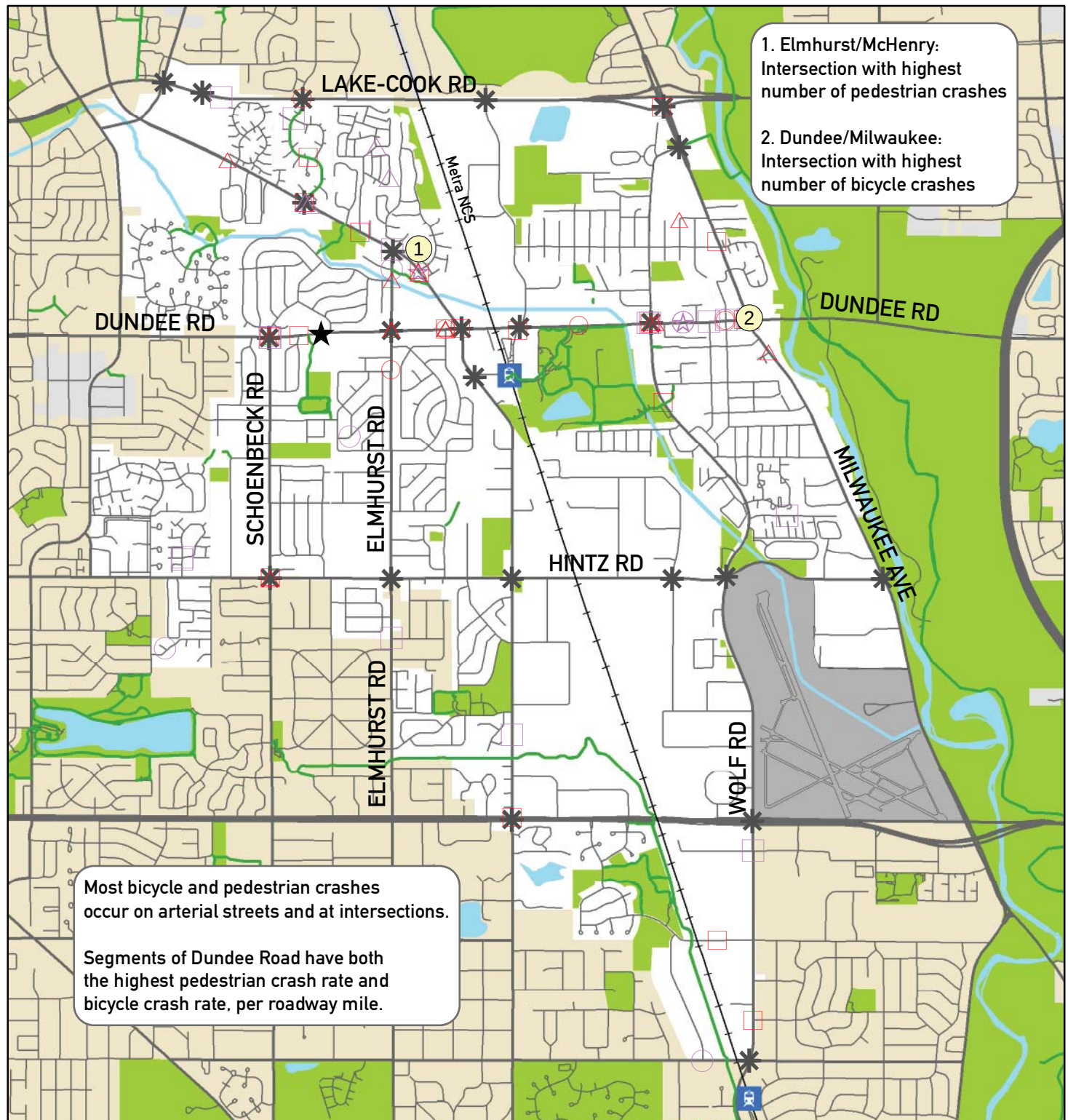
Pedestrian Injury Severity

- △ Possible
- Non-Incapacitating
- Incapacitating
- ★ Fatal

- ✱ Traffic Signal
- ★ Pedestrian Overpass
- ~ Trails
- Ⓜ Metra Stations
- Metra Line
- ~ Water
- Airport
- + Parks



0 0.5 1 Mile



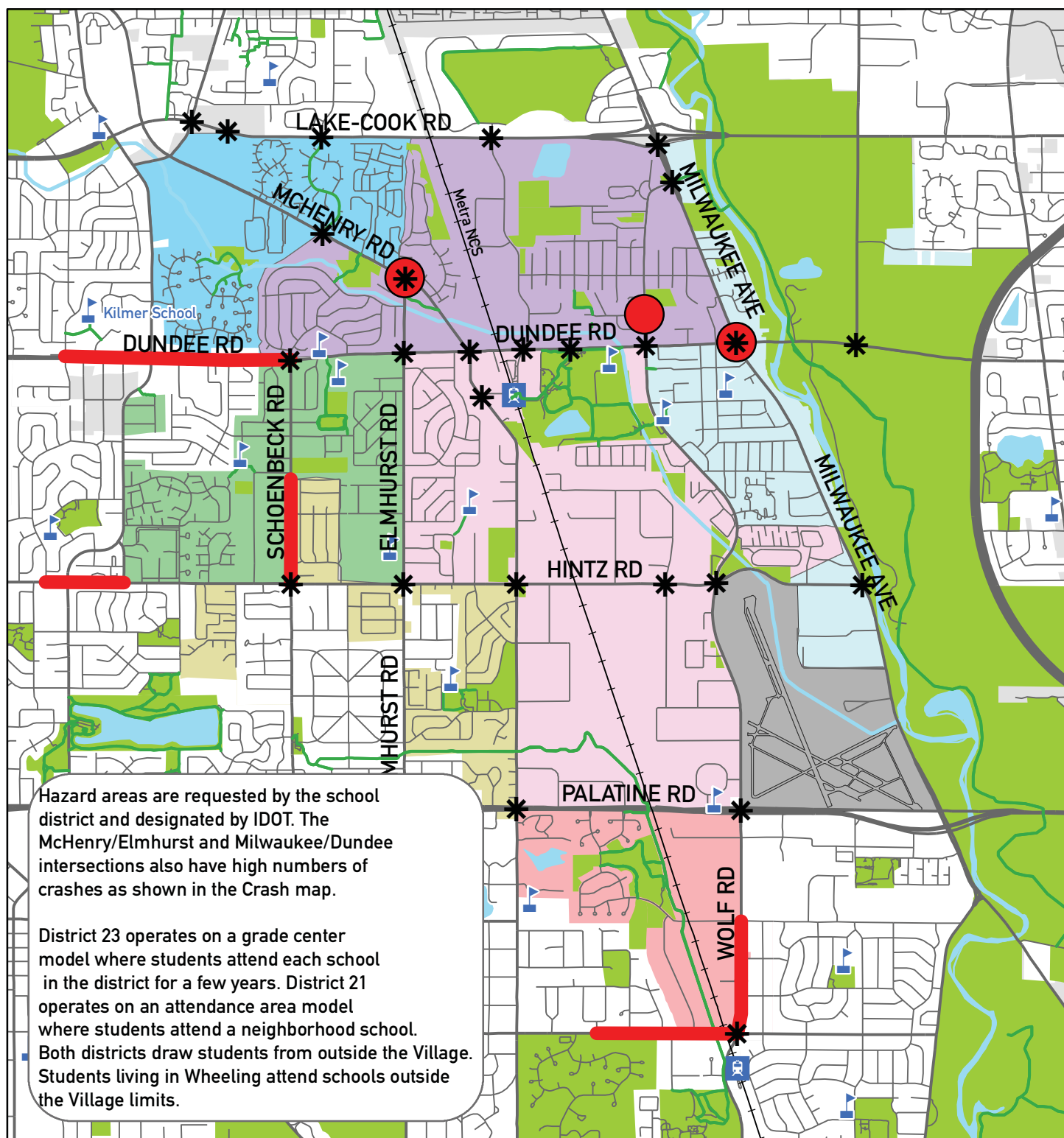
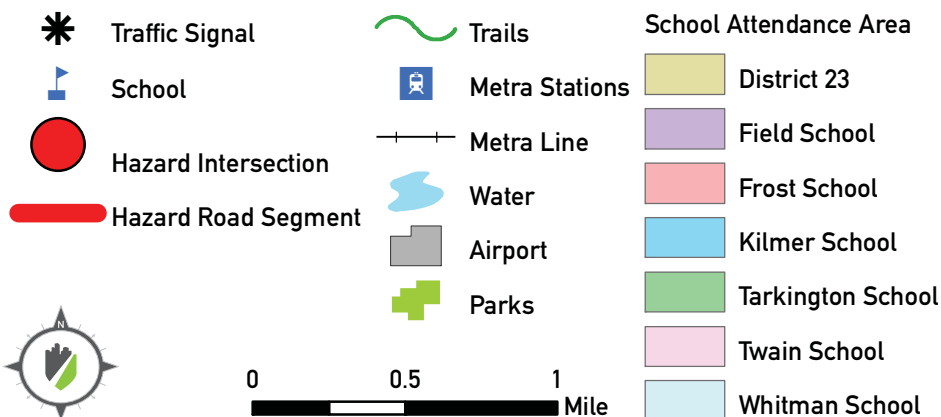
WHEELING

Designated School Hazard Areas

Prepared By: Active Transportation Alliance
and TranSystems
7/9/2012
Data Source: School Districts 21 and 23



0 0.5 1
Mile



Local Roads

Importance

In the street hierarchy, local roads (also known as residential streets) are designed to accommodate light traffic at low speeds. These streets typically have two travel lanes as well as parking lanes on both sides of the street. On-street parking is not often used in Wheeling since most homes have driveways or parking lots. Local roads usually provide direct access to homes, elementary schools, and neighborhood parks. These roads are good for short trips and for novice cyclists with a low level of traffic tolerance.

Street Connectivity

Wheeling's local roads are typified by suburban development patterns that include long, winding roads and separate land uses. Residential areas are often bunched into subdivisions that provide little connectivity to other residential areas. Office and industrial buildings can be located on local roads as well. These street and land use patterns help keep traffic volumes low on local roads. However, the distance required to travel to destinations increases, thereby increasing the likelihood that someone will choose to drive rather than choose active transportation.

Active Transportation Conditions

The large majority of local roads in Wheeling have sidewalks. Additionally, a number of parks within neighborhoods have direct access from adjacent local roads. Lexington Drive has bike lanes that were recently installed. Most residential streets are comfortable to walk or bike on and to cross safely. Most pedestrian and bicycle crashes in Wheeling occur on main roads, not on local streets within neighborhoods.

Local roads have a variety of positive attributes, for getting around within a subdivision. However, residents' ability to walk and bike through the greater Wheeling community is inhibited by a lack of connectivity between subdivisions. This often causes longer active transportation trips, and forces many of these trips onto main roads with limited facilities.

WHEELING

Sidewalk Coverage on Main Roads

Prepared By: Active Transportation Alliance and TranSystems
7/9/2012
Data Source: Wheeling, Field review



- * Traffic Signal

★ Pedestrian Overpass

Metra Stations

Metra Line

Water

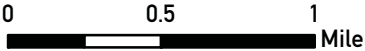
Airport

Parks
- Trails

Good

Fair

Poor



Sidewalks are vital to ensuring safe and comfortable passage of pedestrians along busy roadways. Wheeling has gaps in sidewalk coverage, but overall sidewalks are prevalent. In the map, Good means almost no gaps, while Fair means there are some areas that could be improved.

WHEELING

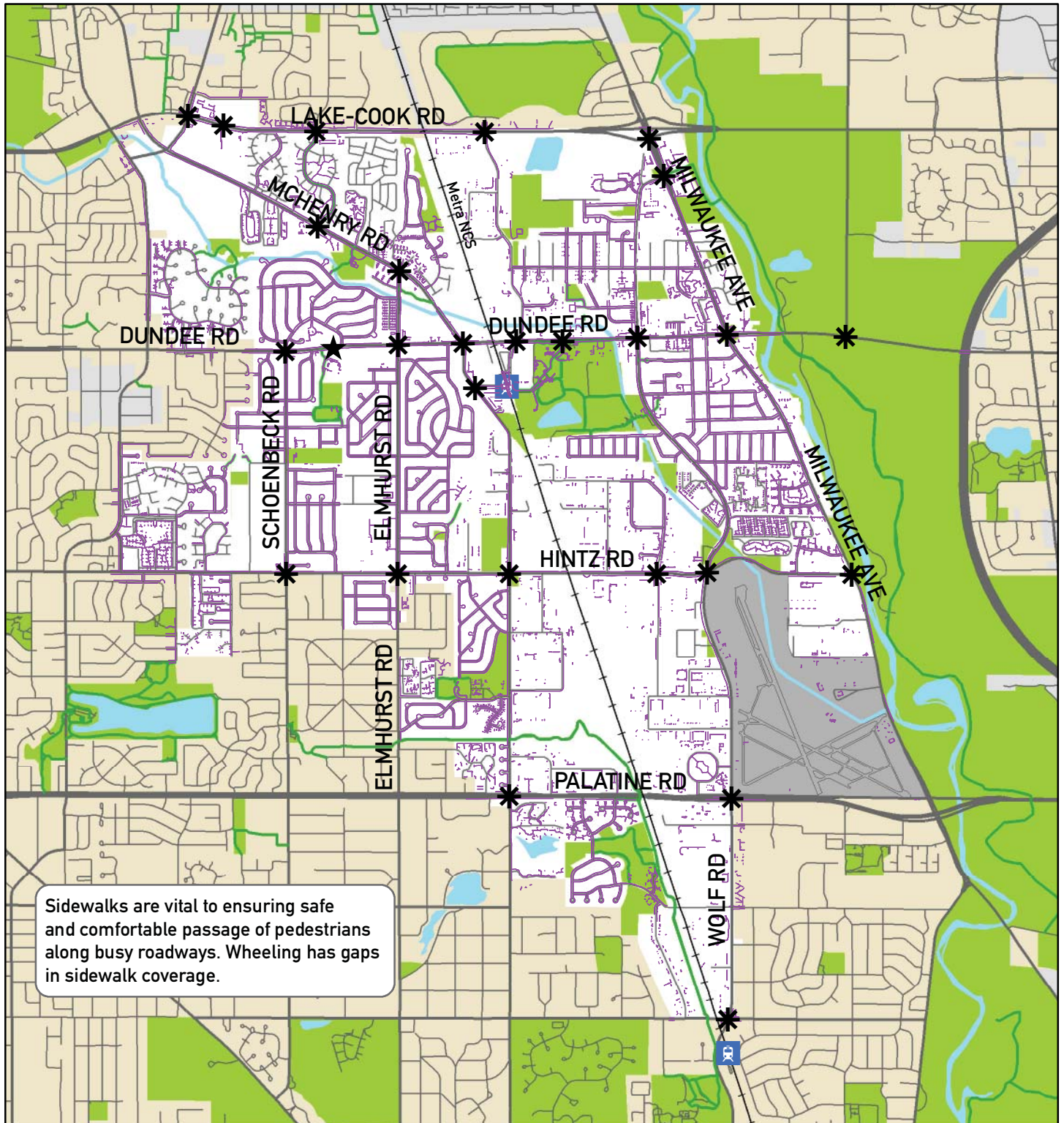
Sidewalk Coverage

Prepared By: Active Transportation Alliance
and TranSystems
7/9/2012
Data Source: Wheeling, Field review



-  Traffic Signal
-  Pedestrian Overpass
-  Sidewalks
-  Metra Stations
-  Trails
-  Metra Line
-  Water
-  Airport
-  Parks

0 0.5 1
Mile



Sidewalks are vital to ensuring safe and comfortable passage of pedestrians along busy roadways. Wheeling has gaps in sidewalk coverage.

Trails

Importance

Wheeling's trails provide recreation and transportation for the people of Wheeling by making connections where roadways do not exist. Longer trails offer safe, uninterrupted walking, running or biking routes that connect to neighboring towns and key destinations, like Metra stations and job centers. Shorter trails connect neighborhoods by leading people on foot or bike through schoolyards and parks. Counts conducted by the Village of Wheeling show that in summer, more 1,000 people visit the trails on a typical weekend, and they are also in high use on weekdays.

Existing Trails

Wheeling has two major trails: the Des Plaines River Trail and the Prospect Heights Bike Path. The Prospect Heights Bike Path is a 3.5 mile paved trail connecting the Prospect Heights Metra station, residential and industrial areas on the south side of Wheeling, and Lake Arlington to the west of Wheeling. Approximately 2 miles of this trail are located in Wheeling. This trail can be accessed from Camp McDonald Road, Willow Road, Palatine Road, Wheeling Road and Elmhurst Road, as well as some of the residential neighborhoods and complexes that abut the trail. The trail is managed by the Prospect Heights Park District.

The Des Plaines River Trail, located just to the east of Wheeling, provides a north-south route through Wheeling and many other communities. The trail is part of a 53 mile trail through forest preserves connecting to the City of Chicago at the south terminus and the Wisconsin State Line on the north end. The trail crosses Lake Cook Road at mile 31 and Palatine Road at mile 35. The trail is unpaved and not continuous. There are three access points in Wheeling for this trail; one going south from Dundee Road at Dam 1 Woods Drive, one going north from Dundee Road at Potawatomi Woods Drive, and the other at a parking lot adjacent to the Westin Hotel, south of Lake Cook Road. The trail is on land managed by the Cook County Forest Preserve District.

In addition to the major trails, Wheeling has many paths connecting neighborhoods and parks. These paths usually begin at a dead end street or cul de sac and wind through adjacent parks, connecting to residential neighborhoods on the other end of the park.

Challenges

There are many challenges to accessing and using the trails in Wheeling. Most of the arterial and collector streets that cross the major trails lack bicycle or pedestrian facilities that facilitate access between homes and employment centers and the trails. Trail crossings typically are in the middle of a block and are not controlled with a stop sign or traffic signal. Many neighborhoods and subdivisions do not have local roads that connect, and are only connected by arterial streets that lack bicycle and pedestrian accommodations. There is little to no wayfinding signage in the community directing people to the trails. Additionally, because many of the paths are at the end of a dead end street, only people living near a path are aware of its existence.

Planned Projects

There are several projects under development currently. A sidepath on Dundee Road between the Des Plaines River Trail and I-294 is funded and construction is expected for 2013. A project to improve accessibility to the Des Plaines River Trail near Potawatomi Prairie is approved and awaiting funding. The Potawatomi Prairie project is a 14-acre parcel, with a design that was a joint effort between the Village, Cook County Forest Preserve District, the Friends of the Forest Preserve, and a local neighborhood group. It is intended to be the northern gateway to the trail and river, with access off of Milwaukee Avenue.

WHEELING

Wheeling Trails and Bike Facilities

- Existing Bike Facilities

Planned Bike Facilities

Planned Regional Bicycle Corridors
- Metra Station

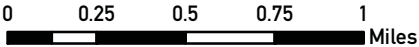
Metra Lines

Water

Airport

Parks

Prepared By: Active Transportation Alliance 7/2/2012
Data Source: Active Transportation Alliance, CMAP,
Navteq & the Village of Wheeling



Transit

Importance

Connections between transit service and active transportation facilities help build a larger network of locations accessible using active transportation. For example, a bus or train can travel long distances but often may not drop riders off precisely at their destination. In order to travel the final mile from the bus to work, a 20-minute walk can become a 5-minute bike ride if a safe, comfortable route exists. In this way, a trip that a person could not reasonably take solely by bus or by bike turns into a trip that is possible.

Transit Network Assets

Metra

The Wheeling Metra station is located in the heart of the village near Dundee and Wheeling roads. According to Metra data, three other stations are used regularly by Wheeling residents: Prospect Heights, Mount Prospect, and Lake Cook Road.

Metra Station	% of Wheeling Residents Who Ride Metra Who Use This Station	Metra Line	Number of Trains Serving Station Per Day			One-Way Fare to Downtown Chicago	Daily Parking Rate
			Weekday	Saturday	Sunday		
Wheeling	54%	NCS	IB = 9 OB = 10	No service	No service	F - \$5.75	\$1.75
Mount Prospect	21%	UP-NW	IB = 23 OB = 26	IB = 12 OB = 12	IB = 7 OB = 8	D - \$4.75	\$1.50
Lake Cook Road	14%	Milw-N	IB = 24 OB = 29	IB = 10 OB = 10	IB = 9 OB = 9	E - \$5.25	not available
Prospect Heights	11%	NCS	Same as Wheeling station			E - \$5.25	\$1.75

*IB = Inbound to Chicago

*OB = Outbound from Chicago

Source: RTAMS, Metra

For residents of the northern portion of Wheeling, Lake Cook Metra station is approximately 3 miles to the east. Pace bus 634 provides rush hour service between Wheeling and the station. For residents of the southern portion of Wheeling, Mount Prospect Metra station is approximately 3 miles to the south. Pace bus 234 provides service throughout the day between Wheeling and the station.

As shown in the table, service is similar for the Wheeling and Prospect Heights stations along the Metra NCS line. However, a rider who travels downtown with a regular monthly pass could save approximately \$15/month using the Prospect Heights station rather than the Wheeling station because they are classified as different zones in Metra's fare structure.

The NCS line is served by approximately 10 trains per weekday in each direction, less than half of the service of nearby Metra lines. The Mount Prospect station on the UP-NW line and the Lake Cook Road station on the Milw-N line are served by approximately 25 trains per weekday in each direction.

By choosing the Mount Prospect station rather than the Wheeling station, a monthly pass holder could save approximately \$30/month on a train pass and another \$5/month on parking while getting more than twice the service frequency.

Pace

Five Pace bus routes serve Wheeling: 221, 234, 272, 626, and 634 (see map). None of the routes provide service on Sundays. Routes 272 and 234 provide the most coverage of Wheeling, with 272 running north-south along Milwaukee Ave and 234 traversing Milwaukee Ave, Dundee Rd, Hintz Rd, and Wheeling Rd. Pace has 12 stops in Wheeling that have shelters, most of which were installed in 2010.

Pace Route Service Frequency			Pace Ridership (April 2012)		
Route	Weekday	Saturday	Weekday	Saturday	Sunday
221	Peak: 30 minutes Off-peak: none	None	826	None	None
234	Peak: 30 minutes Off-peak: 60 minutes	None	360	None	None
272	Peak: 30 minutes Off-peak: 60 minutes	60 minutes	722	362	None
626	Peak: 20-30 minutes Off-peak: none	None	422	None	None
634	Two morning trips, three evening trips	None	84	None	None

Challenges

The Wheeling Metra station is on the NCS line which has less than half of the service of other Metra lines. Pace fixed routes do not serve key destinations in Wheeling such as Target or Wal-mart on Lake Cook Road near McHenry Road.

Existing accessibility to transit via bicycling and walking

Metra trains and Pace buses allow bicycles on board, although bikes are not allowed on Metra during peak hours. As sidewalk coverage is widespread throughout Wheeling, walking to the Wheeling Metra station and Pace bus routes is possible. However, intersections are often wide and carry fast-moving traffic on busy roads. So, crossing streets is often the largest impediment to accessing transit on foot. In regards to bicycling, many average residents would not feel comfortable biking to Metra or Pace stops due to the lack of safe bike routes and crossings throughout Wheeling.

A reasonable walking distance for accessing transit on foot is about one quarter mile for buses, and one half mile for trains. A limited number of people live within that distance of a bus route or train station in Wheeling. While mode of access data does not exist for Pace riders, Metra has information from an access survey completed at stations. The table below shows that 6% of riders access Wheeling Metra station by walking and 1% do so by bus. A very small number of Metra riders ride a bike to access the station. Of nearby stations, Mount Prospect has the greatest proportion of people arriving by active transportation with 22% walking, 3% riding the bus, and 2% riding bicycles.

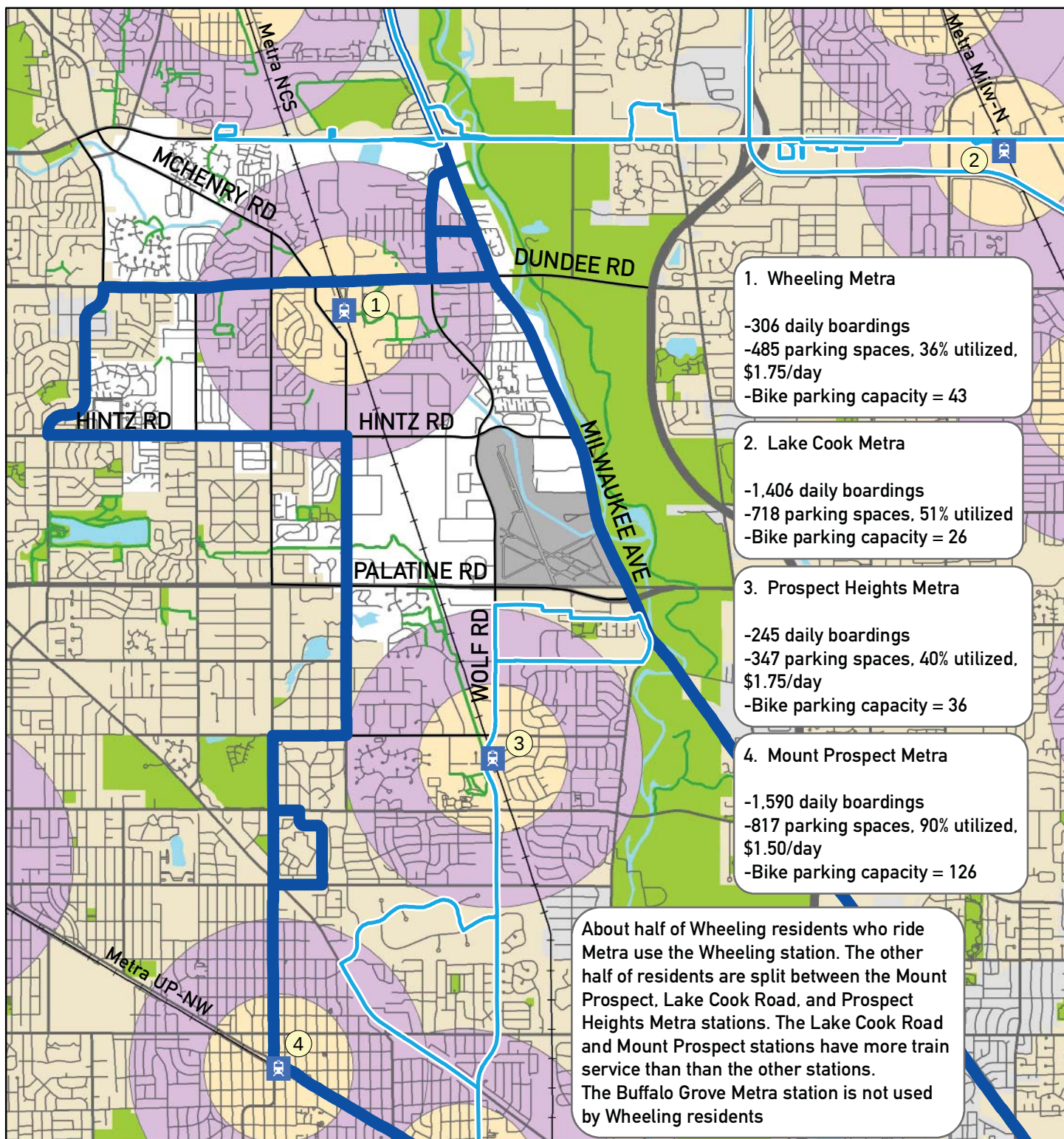
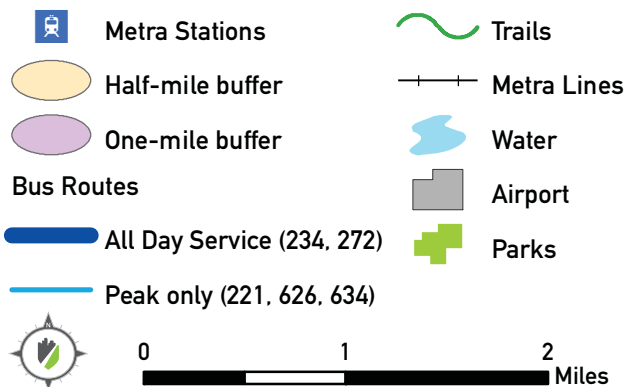
Metra Station	Walk	Bike	Bus	Drive Alone	Carpool	Dropped Off	Taxi
Wheeling	6%	0%	1%	68%	3%	20%	2%
Mount Prospect	22%	2%	3%	54%	4%	14%	1%
Lake Cook Road	3%	0%	1%	84%	2%	9%	0%
Prospect Heights	13%	0%	0%	69%	1%	17%	0%
Source: RTAMS, 2006 Metra Survey "Zero percent" may mean that some people did use that mode when the survey was conducted but it was a very small number.							

WHEELING

Metra Service

Prepared By: Active Transportation Alliance and TranSystems
7/3/2012

Data Source: RTAMS, Metra



WHEELING

Pace Bus Service

Prepared By: Active Transportation Alliance
and TranSystems
7/3/2012
Data Source: Pace - Fall 2011



Stops with more than 5
boardings/alightings per day

5 - 10 passengers

10 - 20 passengers

20 - 30 passengers

Bus Routes

All Day Service (234, 272)

Peak only (221, 626, 634)



Bus Stop Shelters

Trails



Metra Stations

Metra Lines

Water

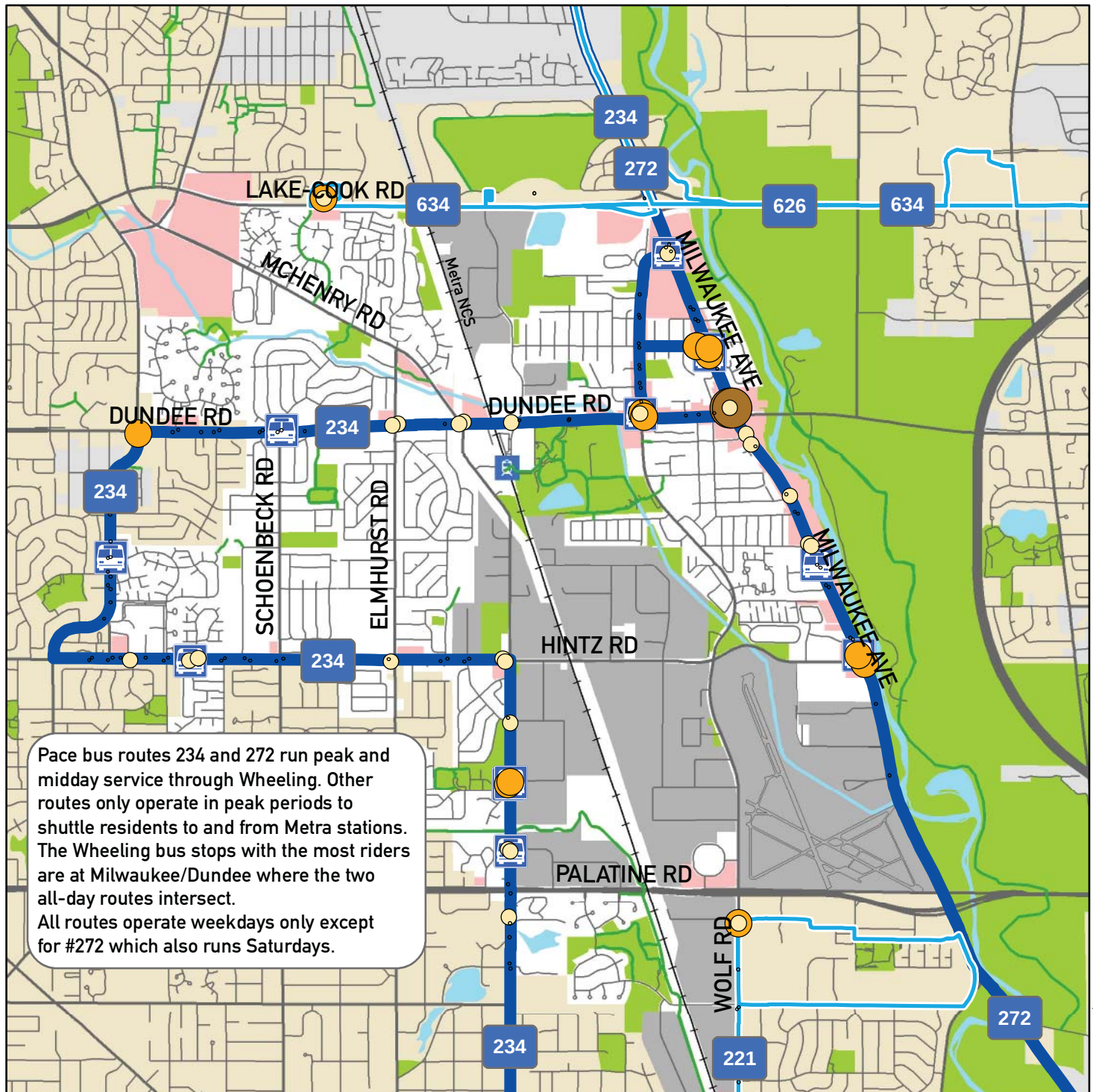
Industrial

Park

Commercial

XXX

Route Number



Wheeling Active Transportation Plan Community Engagement Summary Report



Active Trans staff talked to people at the Wheeling Bike Rodeo. June 16, 2012.

Communities Engaged

Community engagement is the organized, interactive partnership between the Village of Wheeling and its residents. Community engagement opportunities facilitate the understanding of the community's desire to improve safety and awareness for walking and biking in Wheeling.

Every community is different and every community deserves a plan that reflects its goals, visions and resources. The true experts are the people who live, work and play every day in Wheeling. A community-centered approach to planning includes extensive public engagement in all stages of the planning process. Active Transportation Alliance and Village of Wheeling sought to understand and engage the various communities of Wheeling. Active Trans and the Village designed a community engagement plan that listened, digested and integrated community goals with field work, best practices and a vision for active transportation in Wheeling in order to ensure successful design and implementation of Wheeling's Active Transportation Plan.

Community is the group of stakeholders with an interest in the outcome of the planning process. The following are stakeholders in Wheeling's active transportation network:

- Residents
- Commuters that work in Wheeling
- Owners of commercial enterprises
- Owners of retail establishments
- Users of the trails in Wheeling
- School Districts- School District 21, School District 23, High School District 214
- Park Districts- Wheeling Park District, Prospect Heights Park District
- Governmental bodies- The Village Board, The Plan Commission
- Adjacent communities- Northbrook, Buffalo Grove, Arlington Heights, Prospect Heights

Strategies

Active Transportation Alliance and the Village employed the following strategies to ensure that Wheeling's Active Transportation Plan reflects the goals and visions of the community.

1. Established a Steering Committee.
2. Communicated planning process by providing access to the information that citizens need to get involved.
3. Engaged the community in a variety of specific activities where they are able to provide input.
4. Celebrate with the community and encourage people to stay involved.



People in Wheeling respond to survey questions about where they walk, bike, and drive. Wheeling Community Meeting May 22, 2012

1. Established an Active Transportation Plan Steering Committee

The Steering Committee represents stakeholders in this community with members from: Wheeling Village Planning, Wheeling Public Works, Wheeling Police Department, Wheeling Community Development, Wheeling Plan Commission, Wheeling Park District, Prospect Heights Park District, Community Consolidated School District 21, Wheeling High School District 214, SuperDawg, AccuFab Inc., Wheeling Wheelmen Bicycle Club, Northwest Municipal Conference, and Chicago Metropolitan Agency for Planning.

The steering committee wrote a vision for active transportation in Wheeling:

The Village of Wheeling will have a complete, safe, attractive network of transportation options for residents and visitors. The network will allow people to travel throughout Wheeling and connect to adjacent communities on foot or bike. The users of this network will benefit from the health, safety and economic opportunities provided by being able to access parks, schools, trails, businesses and other destinations on foot or bike.

Steering committee members also contributed in the following ways:

- Participated in Get to Know Wheeling Bike Ride on April 27th: Village Staff and Wheeling Wheelmen Bike Club.
- Publicized information about the community meeting by posting electronic flyers on websites and distributed hard copy flyers.

And will contribute to contribute to the plan's development by:

- Reviewing results of research and public engagement
- Reviewing recommendations made by Active Trans and TranSystems



Participants pose before an on-bike tour of Wheeling lead by Village staff and Wheeling Wheelmen. April 27, 2012.

2. Communicated with Wheeling residents

Media Coverage

Gained coverage in the local newspapers, on social media, and on various web sites:

- Facebook page accessible at <http://www.facebook.com/WheelingBikeWalkPlan>
- Blog post at ActiveTrans.org
- Daily Herald article on 5/18/12
- Trib Local article on 5/21/12
- Wheeling Journal and Topics article on 5/11/12
- Wheeling Journal and Topics article on 7/2/12

Attended Community Events

Provided a representative to engage residents with mapping exercise and surveys at events sponsored by members of the steering committee:

- Participated at Wellness Fair for School District 21 on April 14
- Participated at District 214 Community Resource Fair on May 5
- Participated at the Bike Safety Rodeo sponsored by Police Department on June 16
- Participated at Family Learning Program Celebration /El Programa de la familia aprende on June 28

Posted meeting notices, surveys and fliers throughout the community

Identified groups that are not on the steering committee but can help spread the word about the community meeting and the survey to a wider audience including:

- Indian Trails Public Library
- Wheeling Pavilion Senior Center
- Wheeling based Korean Resource and Cultural Center
- Wheeling/Prospect Heights Chamber of Commerce including the Restaurant Row Hospitality Group and the Wheeling Industrial Network
- Carnicerias Jimenez Grocery Store and 8 tiendas on Wolf and Dundee.
- Flyers were also sent to PACE and Metra.



Wheeling Active Transportation Plan Facebook page.

3. Engaged community in a variety of activities

Active Transportation Plan Community Meeting

Tuesday, May 22nd 7:00 p.m.

Indian Trails Public Library

To get the word out, promotional flyers were distributed by the steering committee members, the Village of Wheeling, Active Transportation Alliance and community groups. Flyers were translated into Spanish and Korean. Flyers were also distributed at the Metra station. Posters were placed at three locations on the Des Plaines River Trail.

The meeting educated people about active transportation and offered opportunities for attendees to share their opinions on active transportation in Wheeling. A presentation of components of an active transportation plan kicked off the meeting. Interactive polling questions at the meeting mirrored the on-line survey questions. The community meeting was attended by 30 people. Five activity stations enabled attendees to be heard:

1. Challenges you face when biking and walking
2. Good routes for walking and biking
3. Education and encouragement programs,
4. Policies regarding biking and walking conditions
5. Brainstorming activity

Surveying

Online and hard copy surveys were distributed throughout the community to better understand current practices and ideas for future improvements to active transportation in Wheeling. Questions on both surveys were identical. Data collected included age and residence zip code. More than 250 surveys were collected. 104 surveys were completed on-line. 150 surveys were completed at community events. The hard copy survey in Spanish and Korean was distributed at grocery stores, faith based institutions and at the Family Learning Celebration. The on-line survey was open from April 16th through June 26th .

Hard copy surveys were distributed by various community groups or at events:

- Wheeling Park District
- Prospect Heights Park District
- School Districts 21 and 214
- Chamber of Commerce
- Russian Recreation Center
- Indian Trails Public Library
- Wheeling Metra station
- Wheeling Bike Rodeo
- Family learning event with District 21

Interactive Maps and Surveys

Interactive Maps and Surveys were set up at two community destinations. The materials from the May 22nd Community Meeting were scaled down to be displayed and used by community members at two locations; Indian Trails Public Library and the Park District Rec Center. The display allowed people to provide feedback by marking the map and signing up as residents interested in improving safety and awareness for walking and biking in Wheeling. Surveys were also completed at each of these Do-It-Yourself Displays.

Targeted Focus Groups

The Wheeling Bike and Pedestrian Task Force meeting on June 21st was a focus group session of stakeholders most committed to biking and walking in Wheeling. The results from the Community Meeting were presented to the attendees. They were asked to prioritize what was gathered regarding hazards, routes, programs, policies and implementation.

Individual Key Stakeholder Interviews

A set of questions were developed for meetings with elected officials, representatives from the large employers in Wheeling and with interested parties from adjacent communities. Wheeling staff and Active Trans prioritized what organizations to interview. Appointments were held with the following organizations: SuperDawg, Bob Chinns, Candlewood Suites, Chevy Chase Country Club, Lynfred Winery, and Durable Packaging. Interviews with the Village of Wheeling and the municipal staff of Arlington Heights and also with a representative of Cook County Forest Preserve are being sought for July by Active Trans.

Social Media

Wheeling Active Transportation Plan Facebook page has been established. It can be accessed at <http://www.facebook.com/WheelingBikeWalkPlan>. To date, 18 people have “liked” the page. Advertisements for the page and online survey ran on Facebook in early June. Ads received 52,000 impressions, and yielded several fans to the Facebook page and online survey responses. The Facebook page will be maintained throughout the planning process and be updated as the plan progresses.

Outreach to Elected Officials

Wheeling Village Trustees and Plan Commissioners and Park District Trustees have been well represented at both the Community Meeting and the Wheeling Bike and Pedestrian Task Force focus group meeting. Active Trans is seeking feedback from Village staff to determine if there are other opportunities to present to decision makers in the community.

4. Celebrate with community and encourage residents to stay involved

Active Trans continues to gather names of those that wish to stay involved with the development and implementation of the plan. A community bike ride is planned prior to adoption of the Wheeling Active Transportation Plan. The ride is meant to introduce community members to ideas and recommendations contained in the plan.

Vision, Goals and Objectives

The vision, goals and objectives of this plan were developed by the Wheeling Active Transportation Plan Steering Committee, a group of stakeholders representing local schools, park districts, businesses, and many of the departments at the Village. They were then reviewed and commented on by Wheeling's Bicycle and Pedestrian Advisory Committee. The Village's vision represents the future state of active transportation in Wheeling. Goals are aspirational statements supporting the community's vision. Objectives are action steps to achieve the goals. The Project Team will use the vision, goals, and objectives to guide developing recommendations for the Village's active transportation plan.

Vision

The Village of Wheeling will have a complete, safe and attractive network of transportation options for residents and visitors. The network will allow people to travel throughout Wheeling and connect to adjacent communities on foot or bike. The users of this network will benefit from the health, safety and economic opportunities provided by being able to access parks, schools, trails, businesses and other destinations on foot or bike.

Active Transportation Plan Goals

In order to achieve the Village's vision, we will:

Network: Increase transportation options, accessibility and connectivity for people walking, bicycling and riding transit.

Policies: Leverage municipal policies to develop a comprehensive active transportation network that is safe and welcoming of all users.

Programming: Provide education, encouragement and enforcement programs for active transportation users.

Implementation: Implement recommendations contained in this plan.

Active Transportation Network Objectives

1. Increase access to recreation, employment and commercial centers
2. Develop safe routes appropriate for users of all ages and all abilities
3. Make it possible to travel on or parallel to major roads
4. Make it easier to cross all streets on foot or bike

Policy Objectives

1. Leverage support of key government agencies to foster active transportation
2. Ensure Village of Wheeling policies reflect best practices for promoting active transportation
3. Provide for cyclists and pedestrians in all new development

Programming Objectives

1. Educate the public about active transportation:
 - a. Benefits of active transportation
 - b. Safety
2. Encourage the use of active transportation by:
 - a. Providing incentives for active commuting
 - b. Hold organized rides, tours and events
3. Enforce safe travel behaviors

Implementation Objectives

1. Regularly review and report on progress
2. Pursue outside funding opportunities
3. Involve businesses, community organizations, residents
4. Integrate recommendations into the Capital Improvement Program (CIP)
5. Monitor participation and usage rates of active transportation
6. Prioritize based on cost, safety, and feasibility
7. Coordinate projects with other agencies in Wheeling and adjacent communities
8. Dedicate funding towards active transportation

Bicycle and Pedestrian Advisory Committee Voting Exercise

Directions: Each person received 5 stickers for each goal. They used the stickers to indicate which objectives they would like to see in Wheeling, and added their own examples.

Goal	Objective	Votes	Examples
Network: Increase transportation options, accessibility and connectivity for people walking, bicycling and riding transit.	Increase access to recreation, employment and commercial centers	20	Paths directly to bike racks
			Identify centers and prioritize
			Connect to parks and businesses
			Riverwalk
	Develop safe routes appropriate for users of all ages and all abilities	6	Widen sidewalks
	Make it possible to travel on or parallel to major roads	16	Widen sidewalks
			Keep curb line free of debris
			Widen sidewalks
			Milwaukee Ave path
Policy: Leverage municipal policies to develop a comprehensive active transportation network that is safe and welcoming of all users.	Make it easier to cross all streets on foot or bike	18	Need more crosswalks with ped lights at more locations-especially major thoroughfares
			Stop autos turning left as pedestrians crossing
			Dundee road!
	Leverage support of key government agencies to foster active transportation	21	Monorail E-W on Lake Cook or Palatine from Edens to 53
			Need agencies and adjacent municipalities to create a good plan
	Ensure Village of Wheeling policies reflect best practices for promoting active transportation	19	
	Provide for cyclists and pedestrians in all new development	20	Either bike lanes or widen sidewalks and crosswalks with light changes and push button
			Shoulders or pedestrian lanes on roads
			Residential and commercial

Bicycle and Pedestrian Advisory Committee Voting Exercise

Directions: Each person received 5 stickers for each goal. They used the stickers to indicate which objectives they would like to see in Wheeling, and added their own examples.

Goal	Objective	Votes	Examples
Programming: Provide education, encouragement and enforcement programs for active transportation users.	Educate the public about active transportation	22	Open houses-village hall, library
			Publicize signs
			Provide a local bus route in the Village with a nominal fee
	Encourage the use of active transportation	25	Signs
			More bike racks
			Bike racks, signage, how to get places by bike
	Enforce safe travel behaviors	12	Citizen patrol training-police
			Continue to add to bike rodeo/training
			Reminder signs for drivers
Implementation: Implement recommendations contained in this plan.	Regularly review and report on progress	3	
	Pursue outside funding opportunities	11	
	Involve businesses, community organizations, residents	11	
	Integrate recommendations into the CIP and TIP	4	
	Monitor participation and usage rates of active transportation	2	
	Coordinate projects with other agencies in Wheeling and adjacent communities	12	
	Dedicate funding towards active transportation	9	

Survey Results

To better understand the needs and priorities of people in Wheeling, Active Trans surveyed more than 250 people about their perception of walking, biking and transit in the community. They were asked about how often they use active transportation and their priorities for improving existing conditions. Surveys were available online, distributed at community events and at community centers between April and June 2012.

Based on this input the top concerns in Wheeling are:

Lack of sidewalks

The need for bike facilities along major roadways

Bicycle and pedestrian connections between neighborhoods

Specific roads cited for improvement

Dundee

Milwaukee

Route 83/Wheeling/McHenry Road

Lake Cook

Wolf

Hintz

Schoenbeck

Elmhurst

Northgate

Summary of survey results

Walking

Wheeling community members walk often, 86% of respondents walk at least weekly with 56% of respondents walking daily. The top priority for improving walking in Wheeling was installing more sidewalks and improving existing, this was reflected in the survey questions as well as numerous written comments from survey respondents. Safer crossing at intersection also was a high priority for pedestrians in Wheeling. Other issues specifically mentioned by respondents were poor lighting conditions making walking at night unsafe, poor and too narrow sidewalks, not enough sidewalks, unsafe drivers, and no crossing guards at school intersections. Many roads and intersections were also mentioned as problems, largely the same ones reported in regard to cycling.

Bicycling

People in Wheeling often ride their bicycle, with 60% of survey respondents riding daily or weekly. Yet most people perceive the Village to be only moderately bikeable. Top priorities for biking improvements indicate a need for new bike paths or routes, especially parallel major roads. Written comments indicated a desire for more paths, trails and routes, especially trails through the forest preserve, along major roadways, and connecting neighborhoods. Several people requested better connections to Buffalo Grove and Prospect Heights. Many people indicated several roads or intersections that were particularly difficult to cross. Most of these were the same points as those indicated by people seeking pedestrian improvements. Routes and crossings along Dundee and Milwaukee were most frequently cited as places most in need of improvement. People would also like to see better maintenance of existing routes.

Transit

Transit, overall, does not seem to be a major concern for survey respondents. Very few people said they take public transit, 77% reported that they use transit a few times a year or not at all. When asked how to improve access to Metra and Pace people responded with a demand for more paths and improved sidewalks. In respondent's written entries, the need for increased frequency of Metra and Pace service was most frequently mentioned, with emphasis on weekend arrivals. Additionally, many people requested better bicycle connections to Metra and across railroad lines.

Policies and Programs

Beyond the built environment, policies and programming support the Village's vision for active transportation. Respondents would like to see policies that ensure a safe, well maintained network of bicycle and pedestrian facilities, with clear sidewalk and bike routes in all seasons, and all roadways accessible to all users. Enforcement programming was the most popular option among respondents when asked about programs. Enforcement of safe behavior for drivers received 30% of respondent's votes and enforcement of safe behavior for cyclists and pedestrians received 18% of votes. The other votes were nearly evenly split between encouragement programming, with 23% of responses and education programming for youth and adults, with 26% of all votes.

Businesses

In addition to residents, businesses also affect transportation in Wheeling. Active Trans interviewed business owners and managers. The businesses included restaurants, hotels, and industrial/manufacturing businesses. People interviewed showed a strong interest in connecting their business to trails, the Metra station, and improving sidewalks and bus routes to help both their employees and customers access their business. Many mentioned that few customers or employees visit the business on foot, bike, or transit because there are limited sidewalks connecting to the businesses. Several business owners indicated an interest in more information, such as a bike route map and signs for employees and customers on ways to access businesses using active transportation. Business owners located on Restaurant Row cited crossing Milwaukee Ave as a major challenge for their employees and customers to access their business.



A person in Wheeling attempts to cross the street. to a business..

WALKING AND BIKING IN WHEELING SURVEY

The Village of Wheeling wants your input on walking and biking in your community. Please help us enhance your experience as a walker, biker, and transit rider.

Please circle one answer to each of the following questions:

Walking

- 1) Except for getting into or out of a car, how often do you walk outside?
 - A. Daily
 - B. Weekly
 - C. Monthly
 - D. A few times per year
 - E. Never
- 2) The level of *walkability* is defined by how safe, convenient, and accessible places are to walk to in your community. Rate the walkability of Wheeling.
 - A. Very walkable
 - B. Moderately walkable
 - C. Not walkable
 - D. Very not walkable
- 3) What is your top priority for improving the walking environment in Wheeling?
 - A. Repair cracked, broken or inadequate sidewalks
 - B. Install missing sidewalks
 - C. Create safer street crossings at intersections
 - D. Enhance lighting
 - E. Install benches, drinking fountains, trees, and plantings
 - F. Other _____
- 4) What barriers keep you from walking more often?

Biking

- 5) How often do you ride a bicycle?
 - A. Daily
 - B. Weekly
 - C. Monthly
 - D. A few times per year
 - E. Never
- 6) The level of *bikeability* is defined by how safe, convenient, and accessible places are to walk to in your community. Rate the bikeability of Wheeling.
 - A. Very bikeable
 - B. Moderately bikeable
 - C. Not bikeable
 - D. Very not bikeable
- 7) What is your top priority for improving the biking conditions in Wheeling?
 - A. Upgrade existing paths and trails
 - B. Build new paths and trails in parks and forest preserves
 - C. Install bike paths or routes parallel to major streets
 - D. Install bike paths or routes through neighborhoods
 - E. Create safer street crossings at intersections
 - F. Install signage to help me find destinations
 - G. Increase availability of bike racks at businesses and public places
 - H. Other _____
- 8) What barriers keep you from biking more often?



Access to Transit

- 9) How often do you take public transit?
- A. Daily
 - B. Weekly
 - C. Monthly
 - D. A few times per year
 - E. Never
- 10) How easy is it for you to walk or bike to Metra and Pace?
- A. Very easy
 - B. Moderately easy
 - C. Not very easy
 - D. Impossible
- 11) What is your top priority for making it easier to walk or bike to Metra and Pace in Wheeling?
- A. Install or improve sidewalks connecting to Pace stops
 - B. Improve the paths, routes and sidewalks leading to the Metra station
 - C. Allowing bikes on Metra at more times
 - D. Helping me find real-time information for routes and arrival times
 - E. Better Pace routes to my destinations
 - F. Other _____
- 12) Which places in Wheeling are most in need of improvement in order to make your biking and walking experience better?
- A. _____
 - B. _____
 - C. _____

Learn more about this plan by attending:

Wheeling Active Transportation Plan
Community Open House
Tuesday, May 22 at 7pm
Indian Trails Public Library
355 S. Schoenbeck Road,
Wheeling, IL

Policies and Programs

- 13) Which of these policies would you like the Village of Wheeling to pursue to make your biking and walking experience better?
- A. Policies that ensure that all users have access to all roadways
 - B. Policies that ensure clear sidewalks and bike routes in all seasons
 - C. Policies that ensure new buildings and subdivisions accommodate walkers and cyclists
 - D. Other _____
- 14) Programming can educate, encourage, and enforce safe walking and biking behavior. What programs would you most like to see in Wheeling?
- A. Education programs for youth
 - B. Education programs for adults
 - C. Encouragement for using active transportation
 - D. Enforcement of safe roadway behaviors for drivers
 - E. Enforcement of safe travel behaviors for cyclists and pedestrians
 - F. Other _____
- 15) What is your age?
- A. 18 and under
 - B. 19-34
 - C. 35-49
 - D. 50-64
 - E. 65+
- 16) What is your Zip Code?
- _____
- 17) Any Other Comments:
- _____
- _____
- _____
- _____
- _____
- _____

Survey Results Summary

Survey Location

Question	TOTAL Responses		Online*		Open House*		District 21 School Wellness Fair		District 214 Resource Fair		Recreation Center		Russian Rec Center		Library		Metra Station		Bike Rodeo		El Programa de la Familia aprende		Bob Chins in English	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
0) When you were a child how did you usually get to school? walk or bike driven in a car school bus public transportation other	23	100%	0	#DIV/0!	23	100%	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
	17	74%	17	74%	17	74%	17	74%	17	74%	17	74%	17	74%	17	74%	17	74%	17	74%	17	74%	17	74%
	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%
	4	17%	4	17%	4	17%	4	17%	4	17%	4	17%	4	17%	4	17%	4	17%	4	17%	4	17%	4	17%
	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%
0) How do the children in this community get to school today? walk or bike driven in a car school bus public transportation other	23	100%	0	#DIV/0!	23	100%	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
	19	83%	19	83%	19	83%	19	83%	19	83%	19	83%	19	83%	19	83%	19	83%	19	83%	19	83%	19	83%
	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%
	2	9%	2	9%	2	9%	2	9%	2	9%	2	9%	2	9%	2	9%	2	9%	2	9%	2	9%	2	9%
	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%	1	4%
1) Except for getting into or out of a car, how often do you walk outside? Daily Weekly Monthly A few times per year Never	231	100%	105	100%	24	100%	5	100%	5	100%	16	100%	15	100%	23	100%	2	100%	10	100%	17	100%	14	100%
	129	56%	51	49%	15	63%	0	0%	5	100%	11	69%	11	73%	18	78%	2	100%	6	60%	9	53%	6	43%
	70	30%	40	38%	6	25%	5	100%	5	100%	4	25%	4	27%	5	22%	0	0%	0	0%	4	24%	2	14%
	14	6%	8	8%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	10%	3	18%	2	14%
	16	7%	5	5%	3	13%	0	0%	0	0%	1	6%	0	0%	0	0%	0	0%	2	20%	1	6%	4	29%
2) Rate the walkability of your community. Very walkable Moderately walkable Not walkable Very not walkable	253	100%	104	100%	26	100%	22	100%	5	100%	16	100%	15	100%	24	100%	2	100%	9	100%	16	100%	14	100%
	44	17%	16	15%	2	8%	6	27%	5	100%	3	19%	0	0%	6	25%	0	0%	1	11%	5	31%	5	36%
	164	65%	64	62%	17	65%	16	73%	5	100%	8	50%	12	80%	14	58%	2	100%	6	67%	11	69%	9	64%
	30	12%	15	14%	6	23%	0	0%	0	0%	3	19%	2	13%	3	13%	0	0%	1	11%	0	0%	0	0%
	15	6%	9	9%	1	4%	0	0%	0	0%	2	13%	1	7%	1	4%	0	0%	1	11%	0	0%	0	0%
3) What is your top priority for improving the walking environment in Wheeling? Repair cracked, broken or inadequate sidewalks Install missing sidewalks Create safer street crossings at intersections Enhance lighting Install benches, drinking fountains, trees Other	297	100%	103	100%	45	100%	23	100%	5	100%	25	100%	15	100%	32	100%	3	100%	12	100%	19	100%	14	100%
	70	24%	21	20%	12	27%	6	26%	0	0%	4	16%	6	40%	7	22%	0	0%	4	33%	6	32%	4	29%
	91	31%	26	25%	14	31%	9	39%	3	50%	6	24%	9	60%	14	44%	2	67%	4	33%	2	11%	2	14%
	71	24%	24	23%	15	33%	5	22%	1	17%	5	20%	0	0%	6	19%	1	33%	2	17%	6	32%	6	43%
	29	10%	18	18%	1	2%	1	4%	0	0%	3	12%	0	0%	2	6%	0	0%	2	17%	1	5%	1	7%
5) How often do you ride a bicycle? Daily Weekly Monthly A few times per year Never	30	10%	14	14%	3	7%	1	4%	2	33%	5	20%	0	0%	2	6%	0	0%	0	0%	3	16%	0	0%
	6	2%					1	4%	0	0%	2	8%	0	0%	1	3%	0	0%	0	0%	1	5%	1	7%
	247	100%	99	100%	24	100%	22	100%	5	100%	16	100%	15	100%	24	100%	2	100%	9	100%	17	100%	14	100%
	63	26%	21	21%	7	29%	4	18%	0	0%	5	31%	8	53%	11	46%	1	50%	2	22%	3	18%	1	7%
	83	34%	35	35%	6	25%	8	36%	4	80%	7	44%	3	20%	9	38%	0	0%	4	44%	4	24%	3	21%

Survey Results Summary														
	TOTAL Responses	Survey Location												
		Online*	Open House*	District 21 School Wellness Fair	District 214 Resource Fair	Recreation Center	Russian Rec Center	Library	Metra Station	Bike Rodeo	El Programa de la Familia aprende	Bob Chins in English		
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
6) Rate the bikeability (safe and convenient) of your community. Very bikeable Moderately bikeable Not bikeable Very not bikeable	239	100%	95	100%	22	100%	5	100%	14	100%	24	100%	2	100%
	19	8%	5	5%	3	14%	1	20%	1	7%	0	0%	0	0%
	135	56%	43	45%	14	61%	3	60%	7	50%	14	58%	1	50%
	57	24%	33	35%	6	26%	0	0%	4	29%	1	7%	0	0%
	28	12%	14	15%	3	13%	1	5%	2	14%	4	27%	0	0%
7) What is your top priority for improving the biking conditions in Wheeling? Upgrade existing paths and trails Build new paths and trails in parks and forest preserves Install bike paths or routes parallel to major streets Install bike paths or routes parallel to neighborhoods Create safer street crossings at intersections Install signage to help me find destinations Increase availability of bike racks at businesses and public places Other	305	100%	95	100%	24	100%	12	100%	22	100%	15	100%	2	100%
	41	13%	13	14%	3	13%	2	17%	1	5%	6	40%	1	50%
	66	22%	16	17%	6	25%	3	25%	4	18%	3	20%	1	50%
	79	26%	18	19%	10	42%	3	25%	6	27%	1	7%	0	0%
	51	17%	16	17%	0	0%	3	25%	4	18%	5	33%	0	0%
	34	11%	15	16%	3	13%	1	8%	3	14%	0	0%	0	0%
	12	4%	8	9%	1	4%	0	0%	0	0%	2	5%	0	0%
	17	6%	9	9%	1	4%	0	0%	2	9%	0	0%	0	0%
	5	2%	0	0%	0	0%	0	0%	2	9%	0	0%	0	0%
	236	100%	91	100%	21	100%	5	100%	16	100%	15	100%	1	100%
	19	8%	8	9%	2	10%	1	20%	1	6%	1	7%	0	0%
	17	7%	5	5%	1	4%	0	0%	0	0%	7	47%	0	0%
	18	8%	5	5%	3	12%	0	0%	0	0%	6	40%	0	0%
	101	43%	38	42%	14	54%	1	20%	6	38%	1	7%	16	64%
	81	34%	35	38%	8	31%	3	60%	8	50%	0	0%	4	16%
10) How easy is it for you to walk or bike to Metra and Pace? Very easy Moderately easy Not very easy Impossible	217	100%	83	100%	18	100%	4	100%	15	100%	23	100%	1	100%
	53	24%	18	22%	10	56%	0	0%	5	33%	0	0%	0	0%
	78	36%	30	36%	11	46%	3	75%	5	33%	1	7%	1	100%
	67	31%	28	34%	3	17%	1	25%	2	13%	5	33%	0	0%
	19	9%	7	8%	0	0%	0	0%	3	20%	9	60%	0	0%
11) What is your top priority for making it easier to walk/bike to Metra and Pace? Install or improve sidewalks connecting to Pace stops. Improve the paths, routes and sidewalks leading to the Metra station. Allowing bikes on Metra at more times. Helping me find real-time information for routes and arrival times Better Pace routes to my destinations Other	217	100%	79	100%	14	100%	4	100%	20	100%	15	100%	0	#DIV/0!
	38	18%	8	10%	2	14%	2	50%	2	10%	5	33%	0	#DIV/0!
	96	44%	36	46%	7	50%	0	0%	7	35%	8	53%	0	#DIV/0!
	24	11%	9	11%	2	14%	0	0%	2	10%	1	7%	0	#DIV/0!
	26	12%	6	8%	3	21%	2	50%	3	15%	1	7%	0	#DIV/0!
	17	8%	7	9%	0	0%	0	0%	4	20%	0	0%	0	#DIV/0!
	16	7%	13	16%	0	0%	0	0%	2	10%	0	0%	0	#DIV/0!
	217	100%	83	100%	18	100%	4	100%	15	100%	23	100%	1	100%
	53	24%	18	22%	10	56%	0	0%	5	33%	0	0%	0	0%
	78	36%	30	36%	11	46%	3	75%	5	33%	1	7%	1	100%

Survey Results Summary

Survey Location

	TOTAL Responses		Online*		Open House*		District 21 School Wellness Fair		District 214 Resource Fair		Recreation Center		Russian Rec Center		Library		Metra Station		Bike Rodeo		El Programa de la Familia aprende		Bob Chins in English	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
13) Which of these policies would you like Wheeling to pursue?	241	100%	87	100%	23	100%	22	100%	8	100%	21	100%	15	100%	25	100%	2	100%	9	100%	16	100%	13	100%
	81	34%	26	30%	9	39%	8	36%	3	38%	5	24%	13	87%	6	24%	1	50%	2	22%	4	25%	4	31%
			35	40%	10	43%	11	50%	4	50%	11	52%	1	7%	13	52%	0	0%	7	78%	7	44%	9	69%
	108	45%																						
Policies that ensure clear sidewalks and bike routes in all seasons																								
	43	18%	19	22%	4	17%	3	14%	1	13%	4	19%	1	7%	5	20%	1	50%	0	0%	5	31%	0	0%
Policies that ensure new buildings and subdivisions accommodate walkers and cyclists																								
Other	9	4%	7	8%			0	0%	0	0%	1	5%	0	0%	1	4%	0	0%	0	0%	0	0%	0	0%
14) What programs would you most like to see in Wheeling?																								
	260	100%	87	100%	22	100%	25	100%	7	100%	20	100%	15	100%	34	100%	3	100%	11	100%	24	100%	12	100%
	38	15%	7	8%	1	5%	6	24%	4	57%	1	5%	1	7%	6	18%	0	0%	2	18%	7	29%	3	25%
	28	11%	8	9%	0	0%	2	8%	1	14%	3	15%	6	40%	3	9%	0	0%	0	0%	5	21%	0	0%
	60	23%	22	25%	4	18%	5	20%	1	14%	5	25%	4	27%	6	18%	1	33%	6	55%	4	17%	2	17%
	78	30%	25	29%	12	55%	6	24%		0%	7	35%	1	7%	15	44%	1	33%	2	18%	6	25%	3	25%
	47	18%	19	22%	5	23%	6	24%	1	14%	3	15%	3	20%	4	12%	1	33%	1	9%	2	8%	2	17%
	9	3%	6	7%		0%	0	0%		0%	1	5%	0	0%	0	0%	0	0%	0	0%	0	0%	2	17%
	15) What is your age?	251	89%	79	100%	25	100%	22	100%	5	100%	17	100%	15	100%	24	100%	1	100%	9	100%	29	152%	25
17		7%	0	0%	0	0%	4	18%	3	60%	3	18%	0	0%	3	13%	0	0%	0	0%	4	14%	0	0%
27		11%	11	14%	1	4%	3	14%	0	0%	2	12%	0	0%	1	4%	0	0%	1	11%	3	10%	5	20%
69		27%	24	30%	5	20%	11	50%	0	0%	5	29%	0	0%	10	42%	1	100%	4	44%	6	21%	3	12%
35-49																								
50-64		68	27%	36	46%	8	32%	2	9%	1	20%	6	35%	2	13%	7	29%	0	0%	3	33%	0	0%	
65+		43	17%	8	10%	11	44%	2	9%	1	20%	1	6%	13	87%	3	13%	0	0%	1	11%	2	7%	
16) What is your Zip Code?		201	100%	80	100%	25	100%	18	100%	4	100%	16	100%	1	100%	23	100%	1	100%	9	100%	14	100%	13
	60004	7	3%	3	4%	0	0%	2	11%	1	25%	0	0%	0	0%	0	0%	0	0%	1	11%	0	0%	
	60005	3	1%	1	1%	0	0%	0	0%	0	0%	0	0%	1	4%	0	0%	0	0%	0	0%	0	0%	
	60089	10	5%	0	0%	0	0%	0	0%	2	13%	0	0%	3	13%	0	0%	0	0%	0	0%	0	0%	
	60090	161	79%	68	85%	19	76%	12	67%	3	75%	14	88%	1	100%	17	74%	0	0%	6	67%	11	79%	
	60090	23	11%	8	10%	6	24%	3	75%					2	9%	1	100%	2	22%	3	21%	1	8%	

Destinations

Destinations are the beginning and end points of any trip. Wheeling's many destinations bring together members of the community to work, learn, play and socialize. Having access to all types of places in the Village on foot and bike will help the people of Wheeling and visitors get to the places they need to go safely on foot and bike. A complete, connected active transportation network will allow people to safely and easily access each of these destinations.

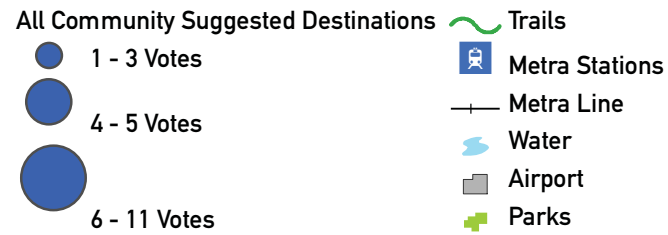
Based on results of community input, the most popular destinations in Wheeling are:

- Wheeling Metra Station
- Heritage Park
- Businesses near Milwaukee and Dundee Roads
- Indian Trails Public Library
- The Des Plaines River Trail
- The shopping centers located near McHenry, Lake Cook and Weiland Roads
- Schools, parks, and the Prospect Heights Bike Path are also common destinations

The following map illustrates all destinations suggested by survey respondents

WHEELING

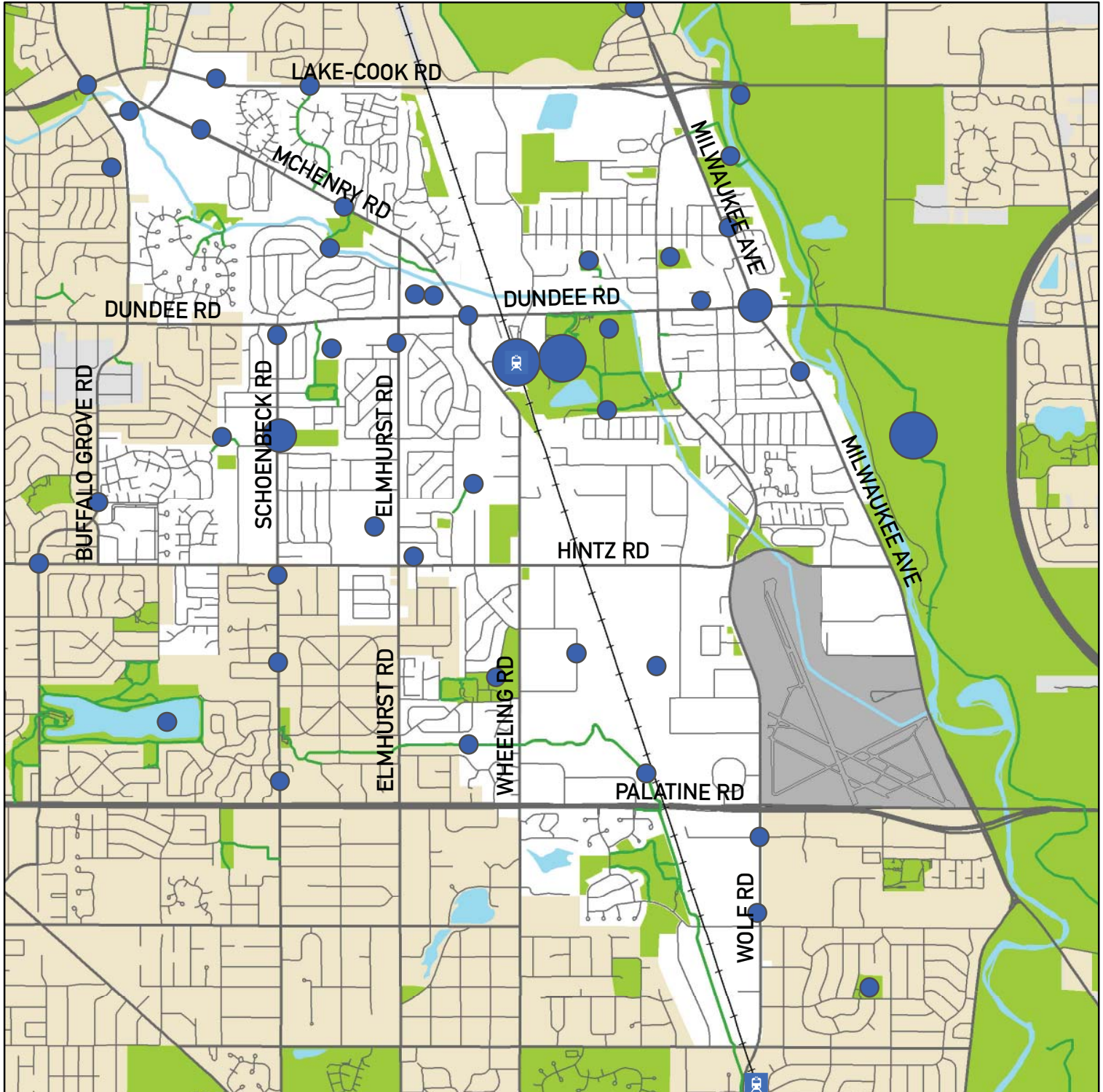
Community Suggested Walking and Biking Destinations



Prepared By: Active Transportation Alliance, 7/19/2012
 Data Source: Active Transportation Alliance,
 Navteq & the Village of Wheeling.
 Participants at Community Meeting, Bike Rodeo,
 Posters from Indian Trails Public Library
 and Wheeling Park District Recreation Center



0 0.5 1 Miles



Barriers

Barriers are the things and places that prevent people from using active transportation to get to their destination. They can be associated with the built environment, such as an intersection that lacks accommodations for pedestrians, or the current conditions such as a snowy sidewalk or uninformed drivers.

In Wheeling, the lack of bicycle and pedestrian facilities is perceived to be the biggest barrier to walking and biking. Missing sidewalk, hazardous street crossings, and no bike paths on major streets were observed by the project team and noted by survey takers as top priorities for improvements. Major roadways with high speed traffic and high traffic volumes were most frequently cited as barriers for walking, biking and crossing the street. Based on the results of community input, the most hazardous places in Wheeling to walk, bike or access transit are:

Major Roads:

- Dundee Road
- Milwaukee Avenue

Intersections and Crossings:

- Milwaukee and Dundee intersection
- Dundee and Portwine intersection
- Dundee and McHenry/Wheeling intersection
- Northgate Parkway and Lake Cook Road
- Trail crossings at Elmhurst and Wheeling Roads for the Prospect Heights Bike Path

Other barriers

- Weather
- Time

WHEELING

Survey Suggested Walking and Biking Hazards

Prepared By: Active Transportation Alliance, 7/30/2012

Data Source: Active Transportation Alliance,

Naveq & the Village of Wheeling.

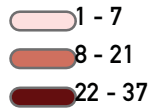
Online and hard copy surveys for

Wheeling Active Transportation Plan

Map illustrates number of times a roadway is mentioned in survey results
Mentions include comments about walking, biking or crossing these streets.

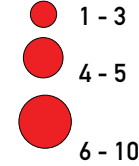
Resident Suggested Challenges

Total Votes



Resident Suggested Hazards

Total Votes



Trails



Metra Stations



Metra Line



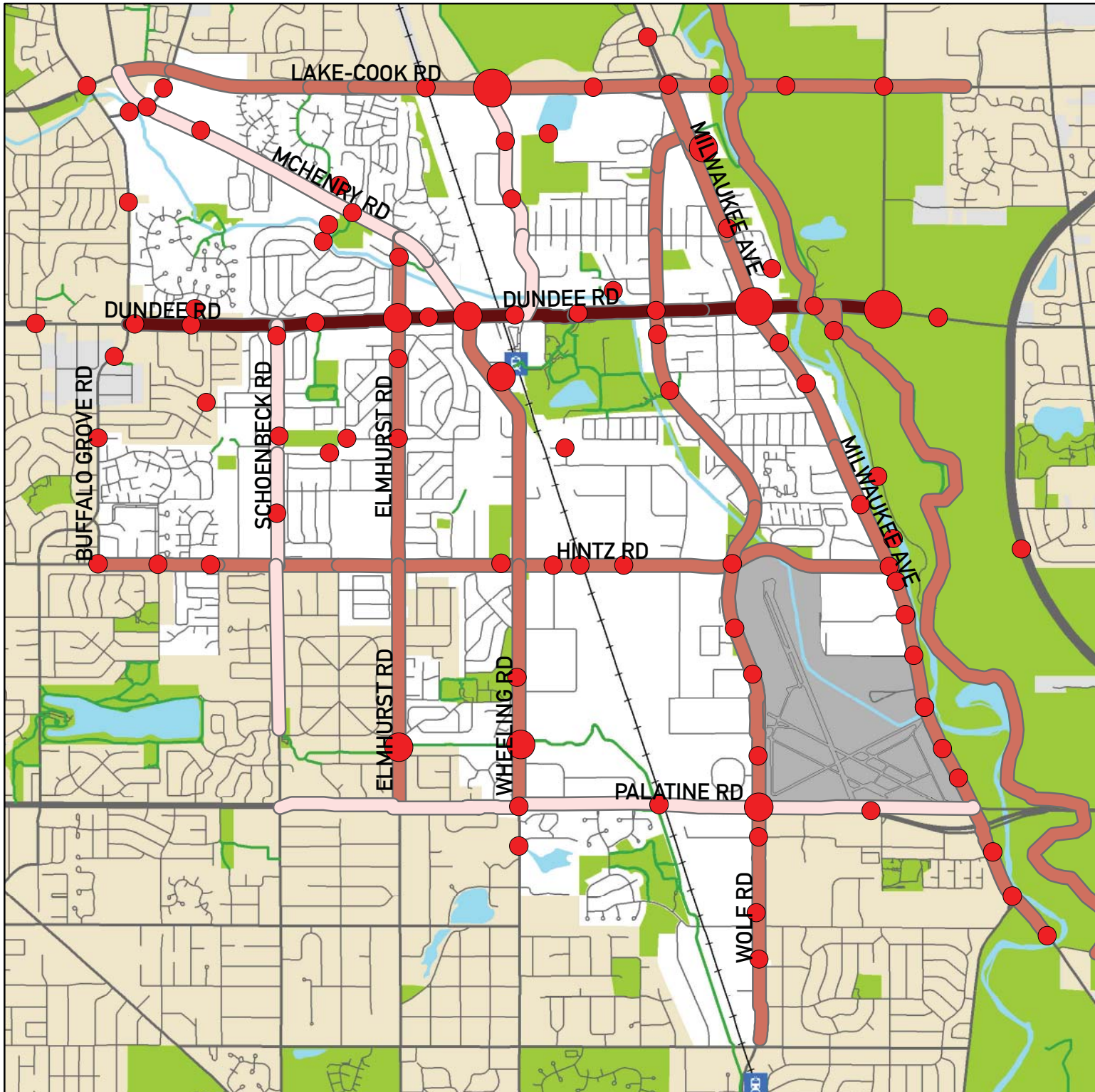
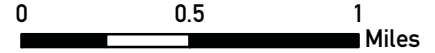
Water



Airport



Parks



Popular Local Routes

People in Wheeling were asked which routes they use in the Village for walking and biking. The majority of people indicated that there were a few good routes, and many that needed improvements. Most people reported that the local roads through subdivisions and parks provided good, safe connections. However, the local roads did not connect to all destinations in the Village. The major roads, which all lack bicycle facilities and many are missing sidewalks are often used because they are the only way to access a destination.

The routes people take are sometimes the most direct connections to destinations, while others may be less direct, but feel safer to cyclists and pedestrians. Some routes and cut-throughs are paved and clearly marked, while others are trails known only to locals, developed over time through high use. All of the routes were chosen because they are the most frequently used. Yet with additional improvements or awareness, all routes can become safer and more convenient for cyclists and pedestrians.

The following map illustrates all of these popular local routes for walking and biking. These routes will also be the focus of Wheeling's active transportation network.

WHEELING

Community Suggested Walking Routes

Suggested Walking Routes

Total Votes

1 - 2

3 - 4

5 - 7

Trails

Metra Stations

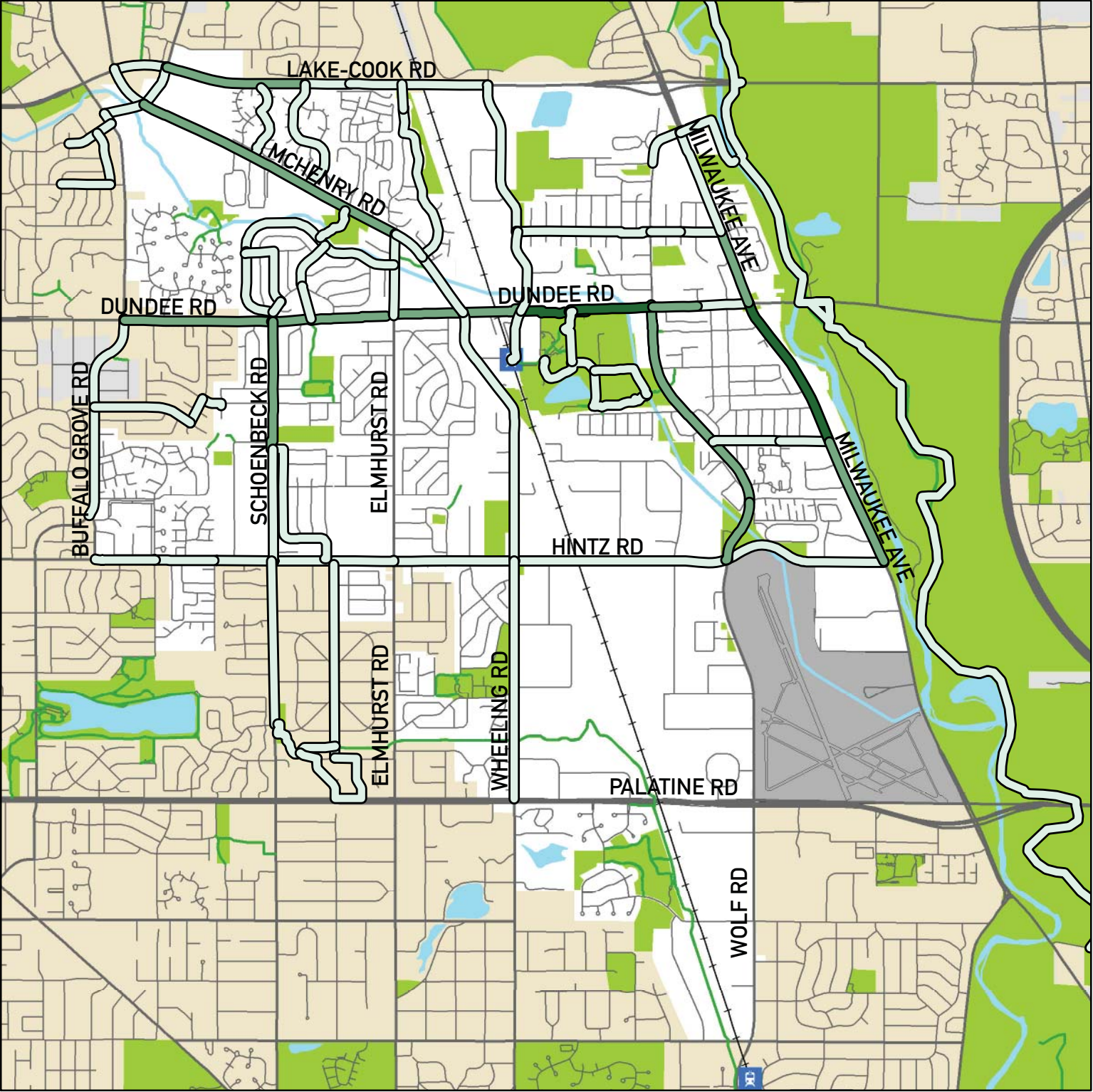
Metra Line

Water

Airport

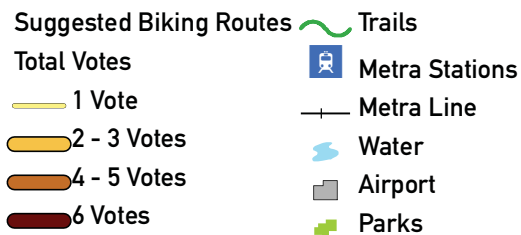
Parks

Prepared By: Active Transportation Alliance, 7/19/2012
Data Source: Active Transportation Alliance,
Navteq & the Village of Wheeling,
Wheeling Community Members



WHEELING

Community Suggested Bike Routes



Prepared By: Active Transportation Alliance, 7/19/2012

Data Source: Active Transportation Alliance,

Navteq & the Village of Wheeling,

Wheeling Community Members

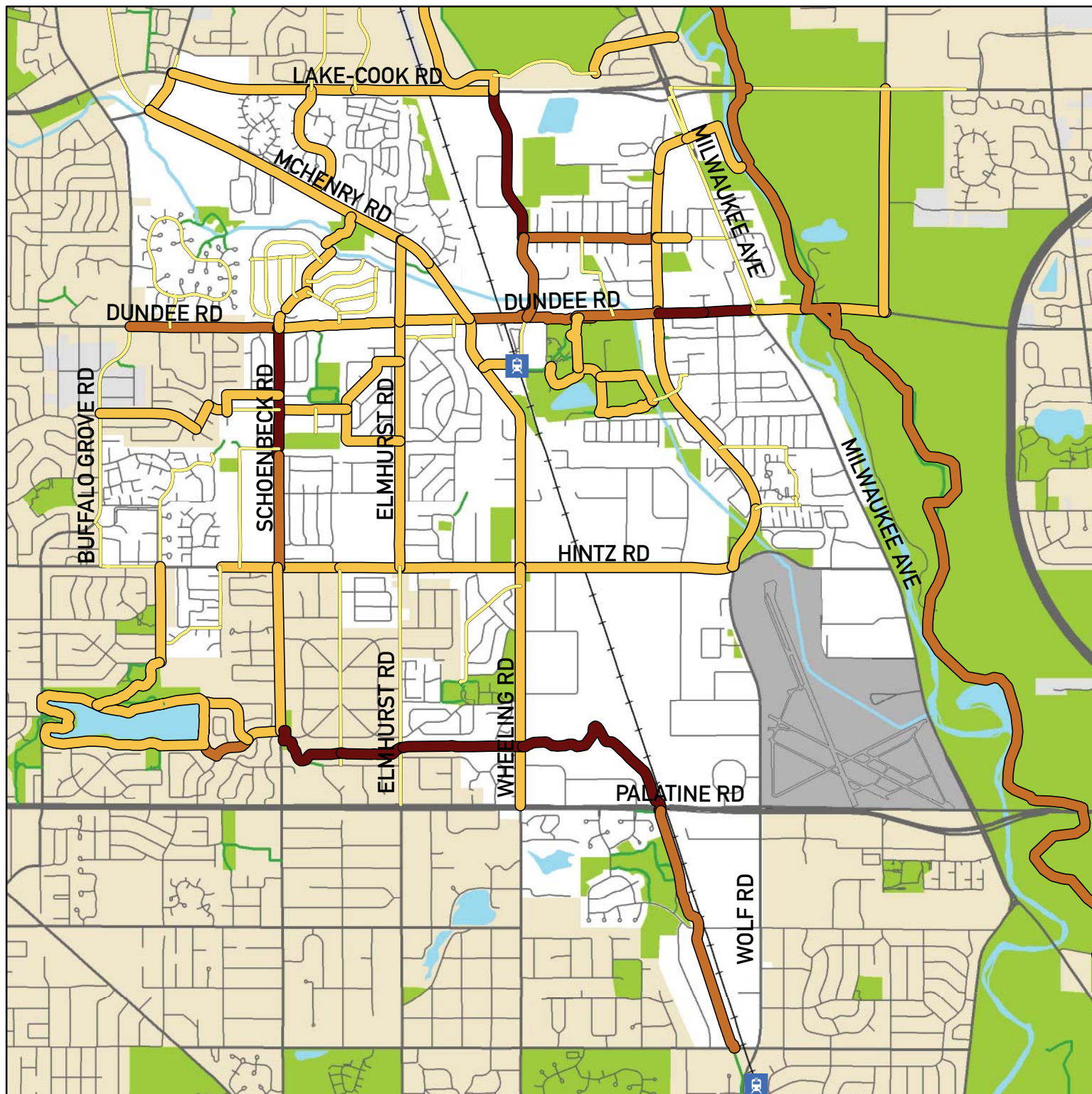


0

0.5

1

Miles



Policies

Policies ensure active transportation users and the active transportation network are considered at the institutional level. They support coordination with other agencies and developments as new buildings and roads are built or redeveloped in Wheeling.

Existing Policies

The Village of Wheeling municipal code contains many provisions that advance active transportation. These include low speed limits on certain Village roads (most roads use state-standard speed limits), and a requirement for bike parking at most newly constructed facilities.

There are several vehicle code provisions that are silent in the municipal code. These may need to be addressed in the non-motorized transportation plan. The silent code provisions are for use and blocking of bike lanes, use of hand-held electronic devices, and accommodation of bikeways and pedestrianways during construction.

It is still unclear what internal policies, if any the Village of Wheeling maintains to ensure that internal municipal procedures advance active transportation and complete streets. These critical policies include maintenance of bikeways and pedestrianways, allocation of law enforcement resources for traffic safety, and funding and selection criteria for transportation projects.

Policies related to land use and development can also affect the use of active transportation. The Village is currently considering a policy for prioritizing sidewalk installation and retrofits. The municipal code has limited design standards addressing street connectivity between subdivisions, or site design standards that support pedestrian access, such as limiting the number of driveways and size of setbacks. It does, however address parking lot design standards that encourage walkability.

Community Opinion

Based on feedback from community members, the people of Wheeling have two top priorities for the Village. Most importantly, they would like clear sidewalks and bike routes. Additionally, they would like to see a policy that supports complete streets so all roadway users (pedestrians, cyclists, automobiles and transit) are accommodated in all roadway designs. The community also showed strong support for policies that encouraged better street connectivity, new developments that were bicycle and pedestrian friendly, restriction on distracted driving, and bike parking.

Community Meeting Voting Exercise: Policies

Directions: Each person received 5 stickers. They used the stickers to indicate which policies they would like to see in Wheeling.

Policy Idea	Votes
Complete Streets -a policy to accommodate all users in all roadway designs	23
Snow clearance-ensure that sidewalks and bike facilities are kept clear of snow and ice	17
Street connectivity-encourage new streets to be built in a connected pattern so pedestrians and cyclists have a shorter distance to walk or bike	13
Bicycle and pedestrian friendly new developments-require connected sidewalks, mixing of land uses and other requirements for new construction to facilitate walking and biking	12
Distracted driving-restrict use of handheld mobile devices while driving	11
Bike Parking-require bike parking at all new retail, office, community and industrial facilities	10
Encourage transit oriented and mixed use development so people can live closer to shopping and transit	7
Provide incentives for employers to offer amenities for bicyclists and pedestrians	4
Reduce speed limits to under 30 mph on bicycle routes	3
Safe Park Zones-a policy to enforce low speed limits around parks, similar to a school speed zone	1
Prohibiting parking in bike lanes-to ensure that bike lanes are accessible at all times	1
Require new developments to show how bicyclists and pedestrians will be accommodated on the development site	

Other Ideas

Crosswalk time has to be increased on wide streets like Dundee and Milwaukee

Snow-weather 1-plowers block sidewalk, businesses don't shovel or homeowners

snow-weather 2-Enforcement of speeds from major roads as they enter Village of Wheeling

Adjust stop lights (signs) for blind spots for bikes and pedestrians

Programs

Programs build an active and safe population of active transportation users by encouraging people to walk, bike or take transit, by educating people on safe behaviors and benefits of active transportation, and ensuring that the rules of the road are followed by all users.

Education, encouragement and enforcement programs will motivate residents and visitors to enjoy the complete, safe and attractive network of transportation options in Wheeling. An on-going concerted effort to educate community members on bike, pedestrian and motorist issues will raise awareness about the biking and pedestrian networks and encourage more people to walk and bike.

Education programs are designed to teach residents about the benefits of active transportation and help them learn the skills necessary for safely and confidently navigating the pedestrian network and the bike network in Wheeling.

Encouragement programs are designed to encourage increased usage of the networks by helping residents think about bicycling and walking as easy and safe ways to get around Wheeling.

Enforcement programs are critical to promote the safety of all transportation users: motorists, cyclists and pedestrians.

Existing Programs in Wheeling

The Village and other groups in the community are already working to educate and encourage cyclists and pedestrians, while also enforcing safe behaviors.

- Wheeling established a Bike and Pedestrian Task Force in 2010 composed of stakeholders in the community.
- Wheeling has participated in Bike to Work Week's Commuter Challenge for the last two years. In 2012, the Village came in second place in the category of municipal governments with 100-499 employees. Village employees logged 310 miles during the week-long event.
- The Wheeling Wheelmen Bicycle Club, with nearly 300 members, organizes several bike rides each week, holds social events, informative meetings, and advocates for bicycling in the northwest suburbs.
- The Wheeling Police Department sponsors the annual Bike Safety Rodeo
- School District 21 offers bicycle parking at all its schools

Community Opinion

Based on feedback from the Wheeling community, residents were most interested in enforcement of safe behaviors for drivers and active transportation users, but were also interested in education and encouragement. Bike parking at community events and festivals, holding enforcement events reminding drivers and cyclists how they can pass each other safely and follow the rules of the road, conducting an analysis of bicycle and pedestrian crashes and prioritize those locations for increased traffic safety enforcement, and publishing a Bike Map of local trails and routes were some of the most popular ideas for programming in Wheeling. Although not specifically programming, community members also mentioned their interest in signs and maps to create awareness for how to get places on bike, and more bike racks. Business owners also showed support for increase awareness of how to access businesses by foot or bike.

Community Meeting Voting Exercise: Programs

Directions: Each person received 3 stickers. They used the stickers to indicate which programs they would like to see in Wheeling.

Program	Votes
Education	16
Bike map-Publish a map of local trails and routes	7
Bike and pedestrian safety classes for children	6
Bike maintenance classes for teens and adults	2
Bike ambassador program-a trained bicycle educator to visit camps and community events teaching bike safety	1
Print and social media campaign to remind people about safe rules of the road	0
Encouragement	19
Offer bike parking at community events and festivals	10
Group rides and walks for families to showcase community assets	5
Bike and dine events-progressive meals visiting restaurants on bike	3
Open Streets-limit access to streets on a temporary basis for the exclusive use of bicyclists and pedestrians	1
Enforcement	31
Hold enforcement events reminding drivers and cyclists how they can pass each other safely and follow rules of the road	9
Conduct an analysis of bicycle and pedestrian crashes and prioritize those locations for increased traffic safety enforcement	9
Sponsor enforcement events reminding drivers to stop for pedestrians in crosswalks	7
Train police officers on current rules of the road and enforcement techniques for all roadway users	3
Caught Good Campaign-Police officers can issue reward tickets to children who practice safe walking and biking behavior	3

Other Ideas

Education-part of High School Drivers ed

Education-reeducate drivers to stop before crossing sidewalk/crosswalk

Encouragement-Hold community Bike ride event

Encouragement-emphasize that you are on a bike/walk route...beautify...show your curb

prepared by
ACTIVE TRANSPORTATION ALLIANCE
AND TRANSYSTEMS
on 7.3.2012



Appendix B: Design Guidance

BIKEWAY AND PEDESTRIAN FACILITIES DESIGN

Guide for the Planning, Design, and Operation of Pedestrian Facilities
American Association of State Highway and Transportation Officials (AASHTO), 2004
[HTTP://WWW.TRANSPORTATION.ORG](http://www.transportation.org)

Designing Sidewalks and Trails for Access
U.S. DOT Federal Highway Administration
[HTTP://WWW.FHWA.DOT.GOV/ENVIRONMENT/SIDEWALKS/INDEX.HTM](http://www.fhwa.dot.gov/environment/sidewalks/index.htm)

Guide for the Development of Bicycle Facilities, 4th Edition
American Association of State Highway and Transportation Officials (AASHTO), 2012
[HTTP://WWW.TRANSPORTATION.ORG](http://www.transportation.org)

Urban Bikeway Design Guide
National Association of City Transportation Officials
[HTTP://NACTO.ORG/CITIES-FOR-CYCLING/DESIGN-GUIDE/](http://nacto.org/cities-for-cycling/design-guide/)

Complete Streets Complete Networks: A Manual for the Design of Active Transportation
Active Transportation Alliance, 2012
[WWW.ATPOLICY.ORG/DESIGN](http://www.atpolicy.org/design)

BIKE PARKING

Bicycle Parking Design Guidelines
Association of Pedestrian and Bicycling Professionals
[HTTP://WWW.APBP.ORG/?PAGE=PUBLICATIONS](http://www.apbp.org/?PAGE=PUBLICATIONS)

Bike Parking for Your Business
Active Transportation Alliance, 2003
[HTTP://WWW.CHICAGOBIKES.ORG/PDF/BIKE_PARKING_BUSINESS.PDF](http://www.chicagobikes.org/pdf/bike_parking_business.pdf)

OTHER RESOURCES

Active Transportation Alliance
[HTTP://WWW.ACTIVETRANS.ORG](http://www.activetrans.org)

National Complete Streets Coalition
[HTTP://WWW.COMPLETESTREETS.ORG](http://www.completestreets.org)

Manual on Uniform Traffic Control Devices
Federal Highway Administration, 2009
[HTTP://MUTCD.FHWA.DOT.GOV/](http://mutcd.fhwa.dot.gov/)

Bicycle and Pedestrian Accommodations
Bureau of Design & Environment Manual
Illinois Department of Transportation, 2011 Edition
[HTTP://WWW.DOT.STATE.IL.US/DEENV/BDE%20MANUAL/BDE/PDF/CHAPTER%2017%20BICYCLE%20AND%20PEDESTRIAN.PDF](http://www.dot.state.il.us/deenv/BDE%20MANUAL/BDE/PDF/CHAPTER%2017%20BICYCLE%20AND%20PEDESTRIAN.PDF)

Safety Benefits of Raised Medians and Pedestrian Refuge Areas
Federal Highway Administration
[HTTP://SAFETY.FHWA.DOT.GOV/PED_BIKE/TOOLS_SOLVE/MEDIANS_BROCHURE/](http://safety.fhwa.dot.gov/ped_bike/tools_solve/medians_brochure/)

Safety Benefits of Walkways, Sidewalks, and Paved Shoulders
Federal Highway Administration
[HTTP://SAFETY.FHWA.DOT.GOV/PED_BIKE/TOOLS_SOLVE/WALKWAYS_BROCHURE/](http://safety.fhwa.dot.gov/ped_bike/tools_solve/walkways_brochure/)

Parking Strategies to Support Livable Communities
Chicago Metropolitan Agency for Planning
[HTTP://WWW.CMAP.ILLINOIS.GOV/DOCUMENTS/20583/C224C06F-2735-4400-8281-D3C263CE5BA6](http://www.cmap.illinois.gov/documents/20583/C224C06F-2735-4400-8281-D3C263CE5BA6)

Appendix C: Funding Sources

There are numerous funding sources available to support the implementation of this plan. Most funding sources prefer funding projects contained in an active transportation plan.

TRANSPORTATION ALTERNATIVES

Transportation Alternatives is a federal grant program jointly administered by the state departments of transportation and metropolitan planning organizations in large metropolitan areas. The program funds a variety of bicycle and pedestrian improvement strategies including trail enhancements, pedestrian network improvements and bike facilities.

CONGESTION MITIGATION AND QUALITY PROGRAM (CMAQ)

The CMAQ program funds transportation projects that improve air quality. These include bicycle ways, pedestrian network improvements and transit facilities. Locally, the program is administered by the Chicago Metropolitan Agency for Planning which emphasizes projects of regional significance. CMAQ funds generally cannot be used for preliminary planning, design and engineering.

SURFACE TRANSPORTATION PROGRAM

These federal funds are distributed locally by the various councils of mayors. STP supports improvements to local roads that benefit the federal highway network. Among other uses, STP funds can be used for traffic calming, pedestrian facilities and bike routes. Each council of mayors has its own procedures for evaluation of project proposals. STP generally is one of the most flexible funding sources.

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)

The Illinois Department of Transportation provides grants to improve facilities with documented crash problems. These projects can be focused on auto crash locations, or those involving pedestrians or cyclists. HSIP generally provides 90% of the project funds with a 10% local match. Funding is usually available for all phases of the project.

GRADE CROSSING PROTECTION FUND

This fund, administered by the Illinois Commerce Commission, assists local governments pay for improvements at highway-railroad crossings. Eligible uses include pedestrian gates, pedestrian signals and grade separations.

OTHER FEDERAL FUNDS

Federal agencies sometimes make grants available for energy efficiency, sustainability or obesity-prevention projects that could include active transportation initiatives. An up to date listing of all federal grants is available at www.grants.gov. The Legislative Research Unit of the Illinois General Assembly also publishes lists of state and federal grants.

COUNTY AND LOCAL FUNDING

Many federal and state funding sources require local match funds. Coalitions can be built between jurisdictions to prioritize the implementation of shared objectives. Many counties and local governments have access to motor fuel tax and other transportation revenue sources. They may also have economic development programs that can fund projects. School and park districts can also be sources of funds.

Appendix D: Policy Resources

This appendix provides resources to implement the policy recommendations in this plan.

COMPLETE STREETS POLICY RESOURCES

The materials referenced below can assist with formulating policy, structuring implementation developing performance criteria.

ACTIVE TRANSPORTATION ALLIANCE

Active Transportation Alliance has created a policy resource micro-site, WWW.ATPOLICY.ORG, with free access to Complete Streets Complete Networks: A Manual for the Design of Active Transportation, Complete Streets policy briefs and implementation materials.

MCCANN, BARBARA, AND SUZANNE RYNNE

Complete Streets: Best Policy and Implementation Practices. (Chicago: American Planning Association, 2010). This publication of the American Planning Association's Planning Advisory Service includes case studies, model policies, and development strategies revolving around Complete Streets.

NATIONAL COMPLETE STREETS COALITION.

NCSC has a very informative website. accessible at WWW.COMPLETESTREETS.ORG Among others, the following NCSC documents can be considered a good "jumping off" point for those unfamiliar with Complete Streets policy and design.

"Complete Streets Policy Elements." National Complete Streets Coalition. [HTTP://WWW.COMPLETESTREETS.ORG/CHANGING-POLICY/POLICY-ELEMENTS/](http://WWW.COMPLETESTREETS.ORG/CHANGING-POLICY/POLICY-ELEMENTS/). Provides a framework by which Complete Streets policy can be designed and a basic outline of the elements of robust Complete Streets policy.

"Federal Policy Resources." National Complete Streets Coalition. [HTTP://WWW.COMPLETESTREETS.ORG/FEDERAL-POLICY/FEDERAL-POLICY-RESOURCES/](http://WWW.COMPLETESTREETS.ORG/FEDERAL-POLICY/FEDERAL-POLICY-RESOURCES/). Knowing the trends in national policy concerning Complete Streets can help reinforce local policy initiatives. The NCSC website details past federal activity concerning Complete Streets, features legislative language, and has tips for getting the attention of lawmakers at the federal level.

POLICIES REGARDING CONSTRUCTION ZONES

The Village can reference standards in these manuals while developing its policy to maintain pedestrian and bicycle access in construction zones.

Public Rights-of-Way Accessibility Guidelines (proposed guidelines)

Manual on Uniform Traffic Control Devices, Chapter 6D (2009 edition)

MODEL BICYCLE PARKING ORDINANCE

An annotated model policy for bike parking was developed through the Public Health Law and Policy (name changed to ChangeLab Solutions) "Model Bike Parking Ordinance (with annotations)" [HTTP://ACTIVETRANSPORTATIONPOLICY.ORG/NODE/121](http://ACTIVETRANSPORTATIONPOLICY.ORG/NODE/121)

MODEL SIDEWALK INSTALLATION PRIORITIZATION POLICY

One example of a possible sidewalk prioritization program and resulting map are included in appendix F.

Appendix E: Programming Resources

EDUCATION RESOURCES

There are many organizations who offer free and low-cost resources to educate people about the benefits of active transportation. These include:

ACTIVE TRANSPORTATION ALLIANCE

WWW.ACTIVETRANS.ORG/EDUCATION

Offers free curricula, professional development for educators and other resources. Active Transportation Alliance also offers education materials on Complete Streets at www.activetrans.org/completestreets.

NATIONAL SAFE ROUTES TO SCHOOL PARTNERSHIP

WWW.SAFEROUTESPARTNERSHIP.ORG

They offer an annotated bibliography of traffic safety curricula and other educational resources.

NATIONAL COMPLETE STREETS COALITION

WWW.COMPLETESTREETS.ORG

This initiative of Smart Growth America provides resources to help educate citizens, municipal staff and elected officials on the benefits of Complete Streets.

ENCOURAGEMENT RESOURCES

Marketing and promotion efforts are essential to any successful bikeways plan. These organizations provide resources to help encourage more cycling:

LEAGUE OF AMERICAN BICYCLISTS

WWW.BIKELEAGUE.ORG

They sponsor the Bicycle Friendly Community program and offer resources for encouragement campaigns. They also certify instructors to provide bike mechanic and traffic safety skills courses.

ALLIANCE FOR BIKING AND WALKING

WWW.PEOPLEPOWEREDMOVEMENT.ORG

They offer trainings to help develop a movement for cycling in your community.

ASSOCIATION OF PEDESTRIAN & BICYCLE OFFICIALS

WWW.APBP.ORG

They offer webinars and other resources for professionals who implement education and encouragement campaigns.

DRIVE LESS LIVE MORE

WWW.DRIVELESSLIVEMORE.COM

This campaign to encourage multi-modal transportation has numerous resources to encourage use of biking, walking and transit.

ENFORCEMENT RESOURCES

Active Transportation Alliance provides training for the law enforcement community including police, judges and prosecutors. The training focuses on best law enforcement practices to ensure traffic safety and an overview of current Illinois traffic safety laws. Active Transportation Alliance also provides free support services for victims of bicycle crashes.

Appendix F: Sidewalk Installation and Prioritization Policy

Appendix F: Sidewalk Priority Plan

[1.0] Sidewalk Prioritization Policy

It is the policy of the Village of Wheeling to ensure that all residents and visitors can safely travel the community by foot. The Village of Wheeling adopts this policy to guide the development of a comprehensive pedestrian network in our community. Previous requirements have placed a disproportionate cost burden on small in-fill development without resulting in the installation of high-need sidewalks. The recommendations of this policy are intended to: (a) increase the base of contributors to ensure that the program is funded; (b) reduce the contribution amount for low-impact development; and (c) facilitate the Village installation of sidewalks in locations identified as higher priority.

In making determinations regarding the pedestrian network, the Village will strive towards:

1. **Collaborative Planning:** Ensure that the pedestrian network is developed in collaboration with partner agencies and organizations including local school districts, neighboring municipalities, county and state transportation departments.
2. **Community-Based Planning:** Empower community members to establish priorities for where they want to walk and identify the challenges they face in travelling around the community. The Village will engage residents early and often in establishing priorities and monitoring implementation.
3. **Complete Network Planning:** The Village shall create a complete pedestrian network that connects to community-identified destinations and addresses community identified challenges.
4. **Data-Driven Planning:** Use the most current and accurate data to fairly assess all locations for improvements based on community-articulated priorities. Update and collect data when incomplete or insufficient information is available to assess conditions and make planning decisions.
5. **Appropriate and Fair Costs:** The costs of the policy should be reflected in budgets for all applicable projects as well as permit/development, subdivision, and impact fees paid by private parties. The Village will evaluate the costs on a regular basis (1-3 years) to ensure that the contribution levels are fair and that the funding amount is appropriate to complete the installation in the time frames identified for the high, medium, and low priority locations.

[2.0] Sidewalk Network Prioritization Process

The Village of Wheeling shall maintain a comprehensive map of all roadways and sidewalks in the community (see Official Map and Map F-1, Sidewalk Map). As the network is improved and land uses change through redevelopment, the Bicycle and Pedestrian Task Force (BPTF) will continue to evaluate the priority destinations and challenges to walking in the community as identified in this plan. The BPTF will use the guidelines in this plan to update the priorities for installation.

2.1 Gap Analysis

The Village has created a map of the existing gaps in the sidewalk network (Map F-2, Gap Analysis). The map illustrates gaps in the sidewalk network as well as a 1/8 mile radius from significant community facilities (schools, parks, and Village facilities).

2.2 Final Prioritization of Sidewalk Segments

In order to create the map for Sidewalk Priority Plan, the Village used the Gap Analysis and then applied two additional considerations: (1) a factor of cost per year over the 10 year time frame for completion (see Implementation Tables, Chapter 5 of the Active Transportation Plan); and (2) a subjective priority for routes determined as high demand through the Community Engagement Plan process (see Appendix A).

The resulting map represents the graphic depiction of the Sidewalk Priority Plan (Map F-3, Sidewalk Priority Plan). The map shall be evaluated on an annual basis by the BPTF so that modifications can be recommended to the Board of Trustees. The Priority Plan categorizes the sidewalk segments as follows:

- High:** 2-3 year projected timeframe for completion. High priority segments include those with community facilities close by, segments along major arterials, or small gaps that are easily filled.
- Medium:** 3-5 year projected timeframe for completion. Medium priority segments include segments on collector streets or segments just beyond the 1/8 radius of community facilities.
- Low:** 6-10 year projected timeframe for completion. Low priority segments include segments that are expected to be completed in conjunction with another project (road construction, development project) or a reasonable alternative route exists. Also includes some segments with significant design or land acquisition challenges.
- No facility planned:** Segments for which a safe parallel route exists and there is no projected need for additional facilities. For example, a minor road within a fully developed industrial park with a sidewalk on one side of the street.
- Programmed:** Regardless of priority level, programmed segments are currently awaiting installation.

[3.0] Implementation and Funding

It is the intent of the Village of Wheeling to accomplish the following objectives relative the implementation of the Sidewalk Prioritization Plan: (1) establish clear requirements for the participation in the sidewalk program so that it may be implemented and administered by the Village Staff; and (2) establish a funding mechanism that is fair to businesses and residents while not adding a significant cost to the Capital Improvement Program.

The recommendations contained within this section are intended to describe examples of updates to Village ordinances that would be needed to enact the Sidewalk Prioritization Policy described in Sections 1 and 2. The adoption of the Active Transportation Plan does not by itself establish these regulations. The Village Staff would need to draft legislation for the review and approval of the Board of Trustees in order to implement the recommendations of the plan. The form of that legislation would be determined at the direction of the Board following the review and adoption of the Active Transportation Plan.

The Village should also consider whether the new ordinances and fee structure should be established in general terms (such as a Capital Project fee), with the expectation that the fees will continue to be collected in conjunction with development projects beyond the completion of the sidewalk program.

3.1 Require Broad Participation in the Program

The requirement to participate in the program is intended to be broad, affordable, and easily incorporated into the existing Village fee structure. All businesses and residents benefit from a complete network, and the sidewalk requirements must be adjusted to fairly distribute the burden of the cost across the network. The sections below illustrate two options to fund the program. These options are provided as examples; the details of the program and its funding source would be incorporated into an Ordinance following the adoption of the plan. Regardless of the funding method, the Village may wish to issue a bond to initiate the program.

Funding Option 1: Scaled contribution

Development projects would be required to contribute a fee that is proportional to the type of development that is proposed (see table below). The Village would need to adopt an amendment to Title 17 (cross-referenced in Title 15 and Title 19) to establish the requirement. The amendment must also establish the criteria for a waiver. The items eligible for a waiver should be very limited and clearly defined. For example: *"Locations in high or medium priority areas may install the sidewalk in lieu of paying the required fees"* and *"Locations with sidewalks that were constructed within the last ten years."*

SAMPLE: Sidewalk Installation Fund Contribution by Development Type

Development Type	Contribution Percentage*	Payment Timing
Subdivision	100%	Subdivision (prior to signature for recording)
New construction – no extg. walk	100%	Building permit
New construction – has extg. walk	25%	Building permit
Other major site plan change – no existing walk	50%	Building permit
Other major site plan change – has existing walk	25%	Building permit
Change of use** – no existing walk	50%	Building permit or prior to final occupancy
Change of use** – has existing walk	10%	Building permit or prior to final occupancy

* As a percentage of the total cost of sidewalk installation for the property based on the sidewalk width, the current annual installation cost, and (if applicable) the proportional size of the unit in a multi-unit building.

**Change that increases need for pedestrian access, such as conversion to residential use or conversion from office or industrial to restaurant / educational / assembly use.

Funding Option 2: Flat Fee Added to Building Permit Fees

The Building Permit fees are based primarily on the value of the construction project. Using rationale similar to the Scaled Contribution method (above) the projects with a greater potential for an increased demand in pedestrian trips would also be the larger construction and renovation projects. By adding a small flat Capital Project fee to the permit fees, the projects generating the greatest demand for pedestrian facilities would contribute the highest amount. Using conservative estimates based on the permits from the lower activity months from 2012, it is estimated that a 1% fee would fund the design and construction of all high and medium priority sidewalks within 10 years.

3.2 Adjust fees based on projected installation schedule and scope

The sidewalks as illustrated on Map F-3, Sidewalk Priority Plan, are summarized as follows:

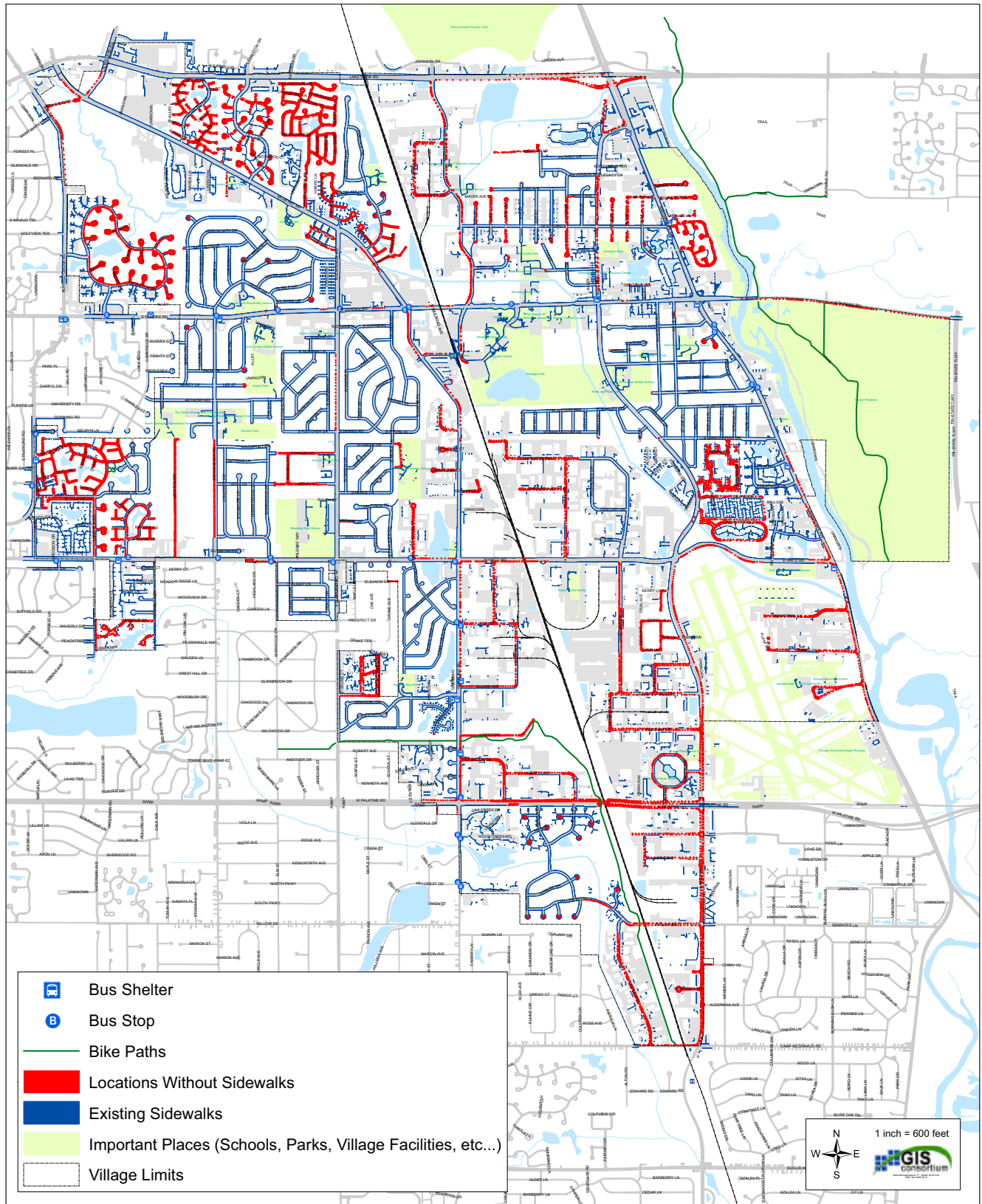
- High Priority. 14,935 linear feet (2.83 miles). Estimated to cost a total of \$808,000 to design and install.
- Medium Priority. 18,480 linear feet (3.5 miles). Estimated to cost a total of \$1,289,000 to design and install.
- Low Priority. 47,460 linear feet (9.0 miles). Estimated to cost a total of \$3,352,300 to design and install.

Regardless of the funding mechanism selected, the annual cost of implementing the program will depend on the desired timeframe for completion and the scope of the work. The following scenarios illustrate this point:

- Program A: Ten year program to complete High and Medium Priority segments only. Total cost of program is \$2,097,250. Fund using 1% Capital Projects fee. Seek grant funding for any difficult or unusual segments. Re-evaluate before completing low priority segments.
- Program B: Fifteen year program to complete all segments. Total cost is \$5,449,550. Fund using 1.7% Capital Projects fee. Use the revenue stream to complete other Village-wide capital projects once sidewalk program is complete.

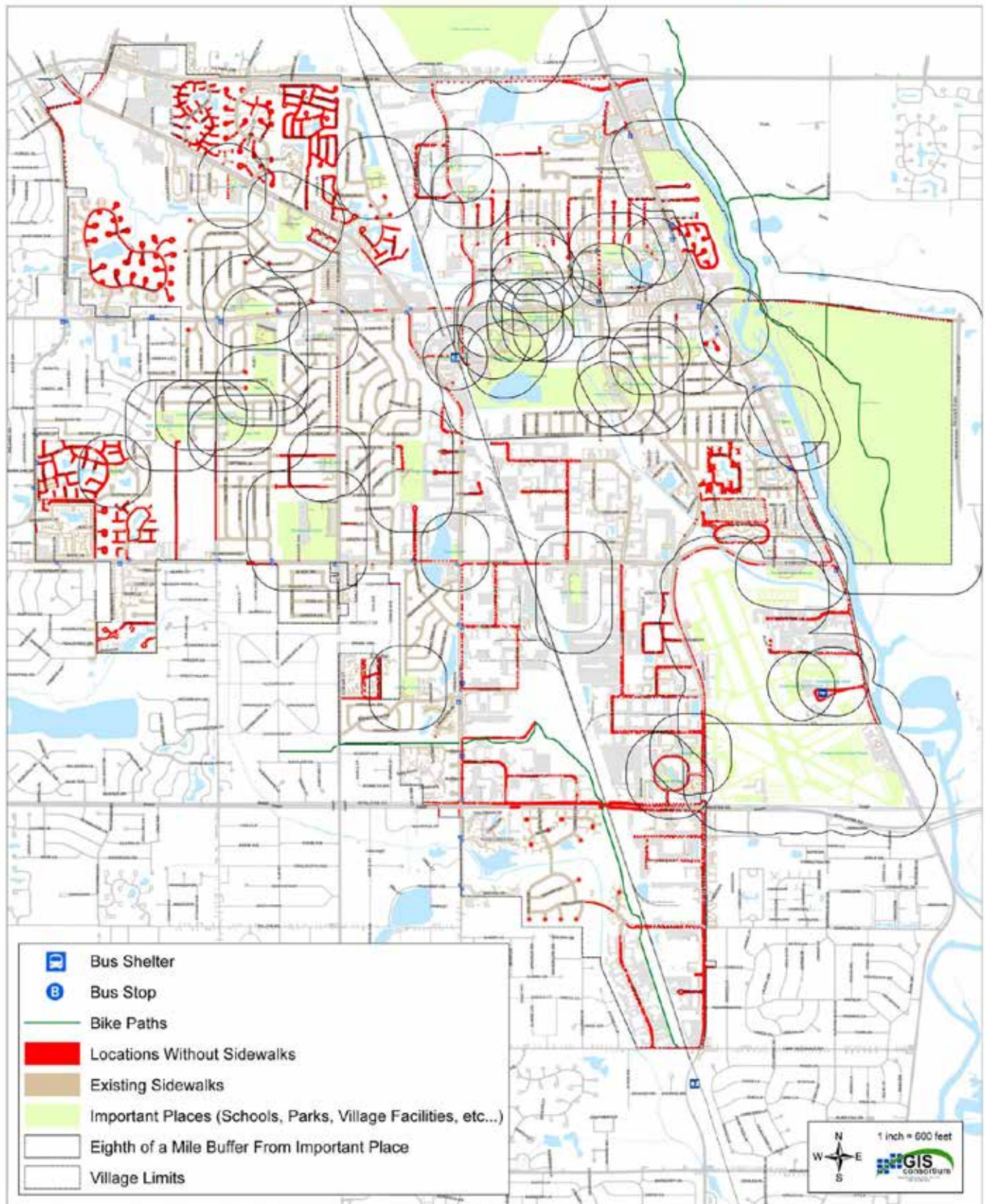
Village of Wheeling

Map F-1: Sidewalk Inventory



Village of Wheeling

Map F-2: Sidewalk Gap Analysis



Village of Wheeling

Map F-3: Sidewalk Priority Plan

