VILLAGE OF PALATINE
BICYCLE TRANSPORTATION PLAN

July 11, 2011

Village of Palatine, Illinois
200 E. Wood St.
Palatine, IL 60067

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1 Introduction

Biking is a popular activity, a moderate form of exercise within the physical capabilities of most people. However, it need not be limited to weekend outings on designated trails. Although cycling is often thought of as just for recreation and exercise, nearly half (43%) of all bike trips are destination-based[1]—and many more would be if better facilities existed.

Biking can be a great form of transportation, especially for short, local trips. National data indicate that 27% of all car trips are one mile or shorter; 40% are less than two miles. When cycling conditions are improved, people are more willing to use bikes instead of cars for these short trips—which benefits their health, pocketbooks and surrounding air quality.

Besides those who bicycle by choice, there are residents – including children, many teenagers, and some low-income workers – who depend on cycling as a transportation necessity.

The process to develop a bike plan for the Village of Palatine has its beginnings in early 2009. At that time, a group of residents approached the Village of Palatine requesting assistance in developing Palatine as a bicycle friendly community. Numerous meetings were held with Village of Palatine and Palatine Park District officials to craft next steps. One such step was the need to create a Village Wide Bicycle Plan. As such, and thanks to an Energy Efficiency and Conservation Block Grant, the Village has developed this plan for bikeway networks and programs facilitating travel on two wheels throughout Palatine.

The plan explains the types of bicycle facilities that can help people use two wheels for safe and pleasant transportation and recreation, and the methodology used to propose a network of bikeways for Palatine. The bikeways network reflects public input and a detailed analysis of existing street conditions, significant barriers and priority destinations. The plan recommends a mixture of on-road bikeways and off-road sidepaths and trails to provide a network of bicycle routes linking the various areas in and around Palatine. The plan, however, is not a review of current maintenance conditions of existing bike facilities in the village.

It should be noted that while the bikeways network highlights key routes to facilitate travel in and around Palatine, all streets—unless otherwise noted—are open to cyclists.

This plan also addresses roadway and development design standards, bike parking, non-infrastructure efforts (Education, Encouragement, and Enforcement), implementation methods, and funding sources.

[1] 2001 National Household Travel Survey

2 Bikeway Types in the Palatine Plan

Standards and Guidelines

The 1999 *Guide for the Development of Bicycle Facilities* by the American Association of State Highway and Transportation Officials (AASHTO) forms the technical basis for the plan's recommendations. An updated version is scheduled to be released in late 2011.

The AASHTO guidelines are generally recognized by the industry – and the court system – as the standard for bicycle facility design. The Illinois Department of Transportation encourages communities to consult these guidelines and the Manual of Uniform Traffic Control Devices (MUTCD) when developing bicycle plans.

A general overview of bicycle facility options follows; more engineering details are in the publications.

Trails

Multi-use trails are physically separated from motor vehicle traffic, except at road crossings. Trails accommodate a variety of users, including pedestrians, bicyclists, and others, for both recreation and transportation purposes. Trails away from roads, on easements or their own rights-of-way, tend to be more pleasant and popular. Examples in Palatine include the Palatine Trail and other trails built and maintained by the Palatine Park District, and the Deer Grove Forest Preserve Trails.

Figure 2.1. Multi-use trail.

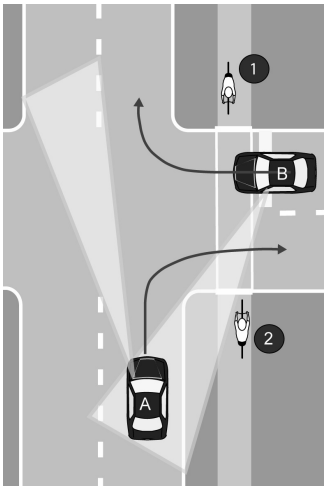


Figure 2.2. Right turns across sidepaths.

Sidepaths

Sidepaths are trails running immediately parallel to a roadway, essentially a widened sidewalk. The Algonquin Road sidepath is an example. Many believe sidepaths or sidewalks are *always* safer than on-road bicycling. Surprisingly, this is *not* the case where there are many side streets, residential driveways, and commercial entrances – especially for "contra-flow" cyclists biking against the flow of traffic. Figures 2.2 and 2.3 illustrate the visibility problems leading to intersection conflicts. Note that in each case, an on-road cyclist on the right side of the road is within the motorist's viewing area.

In Figure 2.2, Car B crosses the sidepath to turn right onto the parallel street. Rarely do motorists stop at the stopline – usually stops are in the crosswalk or at the street edge. Many do not fully stop. Many will look only to their left. Cyclist 2 might be seen. Cyclist 1 is much less likely to be seen.

Car A turns right off the parallel road then crosses the sidepath. Again, Cyclist 2 might be seen but Cyclist 1 is less visible. Particularly where a large turning radius permits fast turns, many motorists do not yield to cyclists entering or already in the crosswalk.

In Figure 2.3, Car C looks ahead, waiting for a traffic gap to turn left, then accelerates through the turn while crossing the crosswalk. Cyclist 4 might be seen. Again, the contra-flow cyclist (3) is less likely to be seen. If the traffic gap is short, sudden stops would be difficult.

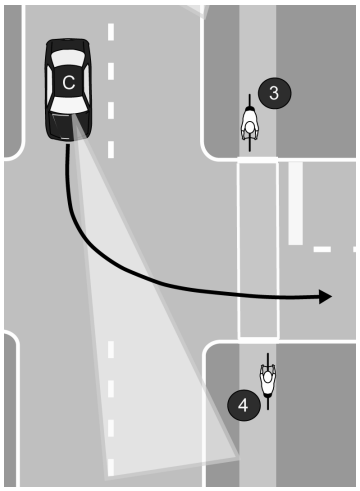


Figure 2.3. Left-turn across sidepath.

The AASHTO guide describes these and other sidepath issues in discouraging their use in inappropriate locations. This plan considers the feasibility of the sidepath option in specific cases. In general, sidepaths may be better choices than on-road bikeways for faster, busier roads without lots of crossings and with well-designed intersections. Sidepath conflicts can be reduced by:

- Bringing the sidepath closer to the road at intersections, for better visibility during all turning motions and better stopline adherence for right-turners
- Using pedestrian refuge islands to break up major crossings and right-in-right-out entrances – right-turn corner islands ("porkchops") are particularly effective
- Using high visibility crosswalks or color differences – at commercial entrances, too
- Using experimental signs, such as those used in St. Charles and elsewhere (below)
- Occasional police enforcement of stopline adherence at sidepath crossings.

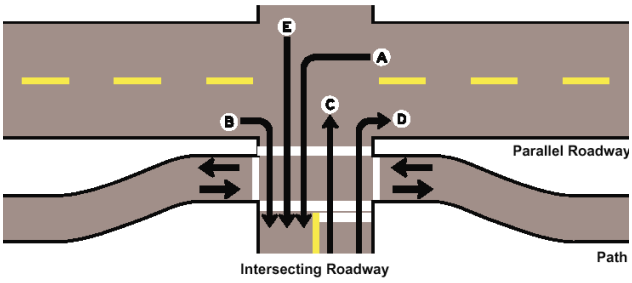


Figure 2.4. Intersection design methods to reduce sidepath conflicts.

Top left: bringing crossing closer.
Bottom left: right-turn refuge islands.
Bottom right: warning signage.

Bike Lanes

Bike lanes are portions of the roadway designated for bicyclist use. Bike lanes are between five and six feet wide (including gutter pan) on each side of the road with a stripe, signage, and pavement markings. Cyclists in each bike lane travel one-way with the flow of traffic. Sample results around the country for roads with bike lanes include:

- More predictable movements by both cars and bikes
- Better cyclist adherence to laws about riding on the right side of the road
- Dramatic increases in bike usage with lower car-bike crash rates
- Decreased car-car crashes, too – possibly from a traffic calming effect

Figure 2.5. Bike lanes (other side not shown).

Parking is not permitted in designated bicycle lanes. When a road has bike lanes and adjacent parking, the bike lanes should be striped between the parking space and the travel lanes. Regular sweeping is important, as bike lanes tend to collect debris.

Figure 2.6

Signed Bike Routes

Some roads may be identified by signage as preferred bike routes, because of particular advantages to using these routes compared to others. Palatine already has some signed bike routes, including parts of Benton and Wood Streets. These "signed shared roadways" may be appropriate where there is not enough room or less of a need for dedicated bike lanes. A road does not require a specific geometry to be signed as a Bike Route, providing flexibility. A Bike Route may be a striped or unstriped street, or a road with paved shoulders.

It is recommended to use the updated signage styles available in the Manual of Uniform Traffic Control Devices (MUTCD). Some can also provide wayfinding assistance at intersections with supplemental destination plates and arrows placed beneath them. The 2009 version of the MUTCD manual includes signs that combine bike route designation with wayfinding information. Some Illinois towns have put two or three destinations on a single sign, with mileages. Figure 2.6 illustrates some examples.

Wayfinding signs are useful throughout the bikeways network, whether along a trail, sidepath, bike lane or route. Consult MUTCD for spacing and placement specifications.

Combined Bike/Parking Lanes

Some residential collector streets with wide lane widths permit on-street parking, but parked cars are sparse – under 10% occupancy, preferably – except perhaps on special occasions ("party-parking"). While this may be an opportunity for dedicated bike lanes, removal of parking on even one side may be politically infeasible – even though the wider lanes often encourage faster traffic speeds through neighborhoods.

Figure 2.7. Combined Bike/Parking Lanes.

A fallback option is to stripe off 7-8 feet (including gutter pan) for the occasional parked car. This space may be used by bikes, too. Sign the road as a Bike Route, but do not include any designated Bike Lane signage or pavement markings. Cyclists in this space would pass parked cars just as they do on road shoulders and unstriped roads. Benefits include:

- An increased perception of comfort by the cyclist
- Lower likelihood of the occasional parked car being hit by another car
- The traffic-calming effect of narrower lanes, i.e., slowing car speeds

"Combined Bike/Parking Lanes" allow parking, but Bike Lanes do not. Steps should be taken to avoid confusion. Combined Bike/Parking Lanes should use signage indicating parking permission information. Bike Lanes should use "no parking" signs (where there is no adjacent on-road parking).

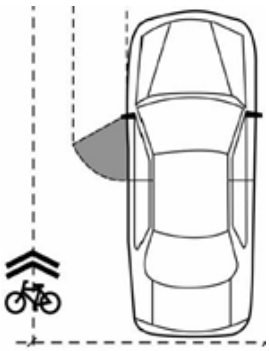


Figure 2.8. Shared Lane Marking (or "Sharrow").

Shared Lane Markings

Pavement markings inform cyclists of optimum lane positioning. Also, markings are more effective than signage alone in reminding drivers of the possibility that they will see a cyclist in the road.

Bicycle positioning on the roadway is key to avoiding crashes with cars turning at intersections and doors opening on parked cars. Figure 2.8 shows a Shared Lane Marking (or "sharrow"), approved in the MUTCD. Elgin and Northbrook are two of the Illinois cities using these.

The "SLM" marking is used primarily for streets with insufficient width for bike lanes, with speed limits below 40. On such roads with significantly occupied on-street parallel

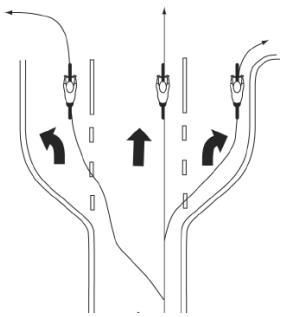


Figure 2.9.

parking, the center of the marking shall be 11 feet (or more) from the curb; with no occupied parking, the center of the marking shall be 4 feet (or more) from the curb. Along diagonal parking, SLMs are recommended to be in the center of the travel lane. The markings should be placed right after an intersection and spaced at intervals of 250 feet thereafter. See MUTCD chapter 9 for more installation guidance, and supplement SLMs with wayfinding signage. Finally, the shared lane marking also can be used to indicate correct straight-ahead bicycle position (Figure 2.9) at intersections with turn lanes, where bike lanes or combined bike/parking lanes have been temporarily dropped.

Signal Activation by Bicycles

Figure 2.10. Signal activation marking and sign.

Both bicycles and motorcycles have difficulty activating demand-actuated traffic signals. Cars may not be present to trip the signal, or cars may be stopped too far back of a bike. Pedestrian push-button actuation, if present, is often inconveniently located for on-road bikes.

The MUTCD-approved Bicycle Detector Pavement Marking (MUTCD Fig. 9C-7) in Figure 2.10, together with the R10-22 Bicycle Signal Actuation Sign, can indicate a detector trigger point for actuating the signal. Correct tuning of the detector is needed. Quadrupole loop detectors or new camera detection technology could be used, too, as they are more sensitive to bikes and motorcycles.

The detector marking also serves to indicate proper bicycle position at an intersection.

Public input identified the following intersections as needing on-road bicycle detection: Lincoln and Benton at Northwest Highway, Winston and Brockway at Palatine, Illinois at Quentin, and Cunningham at Hicks. It is recommended that such detection be added at least to any implemented on-road bikeway network segment having demand-actuated traffic signals. Additionally, the major streets at these intersections should have advance W11-1, W11-2, or W11-15 signage in the bright FYG color.

Mid-Block Trail Crossings

Where sidepaths or trails on their own rights-of-way cross major roads, safety can be improved through careful design. The "Sidepaths" section above addresses sidepath intersection design issues. At unsignalized mid-block crossings, trail crossing warning signage and higher visibility ladder crosswalks should only be considered a minimum. More effective options

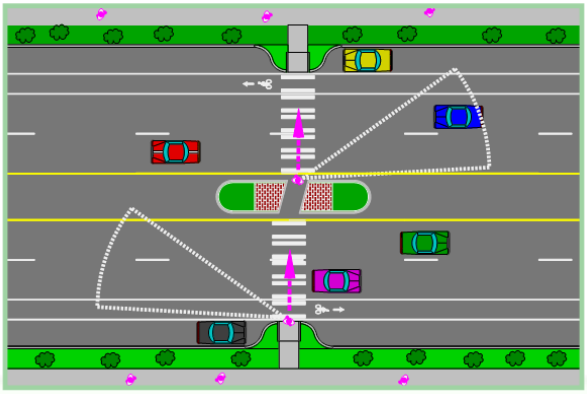


Figure 2.11. Median Refuge Island. Courtesy of the Pedestrian and Bicycle Information Center (PBIC).

for various situations include:

- Crosswalks on raised speed tables, for lower volume and speed roads
- Curb extensions, for roads with on-street parallel parking
- Median refuge islands, which lower the crash rate by 40%
- Advance stoplines, to reduce multiple-threat crashes at multilane roads
- Pedestrian Hybrid Beacon (aka "HAWK") traffic signals, activated by pedestrians and newly approved in the MUTCD where warrants are met
- Rectangular Rapid Flashing Beacon signs, activated by pedestrians, with vehicular stopping rates approaching that of HAWK signals
- Trail grade separations (tunnels or bridges, e.g. Palatine Trail under Hicks Road), ideal for the busiest roads and trails, but very costly and not feasible at many other locations

The Palatine Trail's crossing of Smith Road was identified by the public as a higher priority trail crossing needing improvement. The Rectangular Rapid Flashing Beacon may be appropriate.

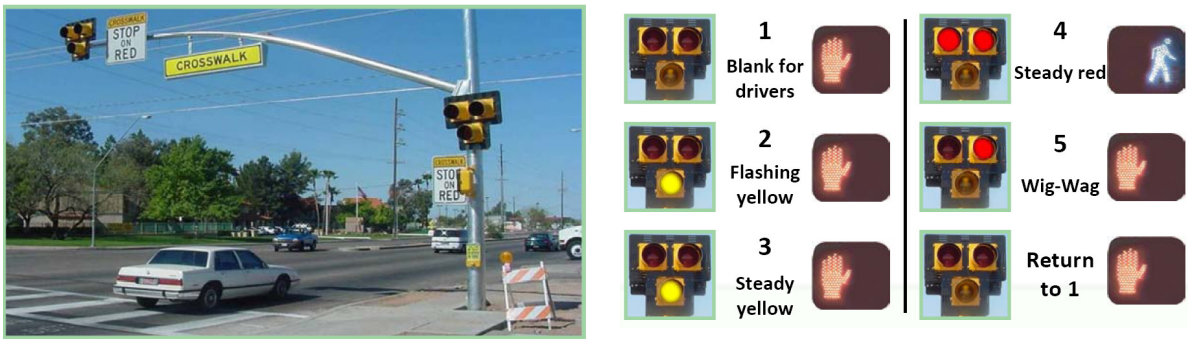


Figure 2.12. A Pedestrian Hybrid Beacon (or HAWK), included in the MUTCD, helps pedestrians and bicyclists cross busy roads. Images courtesy of PBIC.

Figure 2.13. Rectangular Rapid Flashing Beacon. Courtesy FHWA.

3 Guidelines For Bikeway Recommendations

Introduction

A bikeways network is comprised of routes that are particularly important because they serve key destinations and facilitate travel across barriers. Although all village streets, except where prohibited, will be used by cyclists, a designated bikeways network helps direct them to particularly favorable routes, especially for mid and long distance trips. Developing a plan for a bikeways network establishes priorities for improvements, such as restriping for bike lanes, completing trails, adding wayfinding signs and improving crossings.

Palatine's bikeways network was developed with a variety of inputs:

- **Public Involvement:** On September 30, 2010, a "Public Brainstorming Workshop" was attended by 37 residents. The purposes of the workshop included: a) gather local resident knowledge on biking needs; b) prioritize road corridors and other routes to study for potential improvements; c) build community support for the plan and its implementation. Each attendee marked individual maps with suggestions. A group exercise followed in which top priorities from three geographic regions of the Village were discussed and reported. See Appendix 2.

- **Consultation with Village staff and Steering Committee**: In addition to the workshop, meetings were held with the Steering Committee of the Palatine Bicycle Transportation Plan, consisting of Village staff and residents (See Appendix 1). The committee guided the project approach and recommendations, while Village staff provided much valuable input on existing conditions, data collection, and more.

- **Review of Northwest Municipal Conference and neighboring towns' plans**: Incorporated were connections to other communities' existing and planned bikeways and those 2010 NWMC regional corridors through Palatine. See Appendix 3.

- **Bicycle Level of Service Analysis:** The Bicycle Level Of Service[2] (BLOS) measure quantifies the "bike-friendliness" of a roadway, helping to remove a wide range of subjectivity on this issue. The measure indicates adult bicyclist comfort level for specific roadway geometries and traffic conditions. Roadways with a better (lower) score are more attractive – and usually safer – for cyclists. BLOS has been used in IDOT's bicycle maps for years, and it was recently added to the Highway Capacity Manual. More information and an on-line calculator is at http://www.bikelib.org/bike-planning/bicycle-level-of-service/ BLOS is used in the Palatine Bicycle Transportation Plan to measure existing and future conditions, to set standards for the bikeway network, and to justify recommendations.

[2] Landis, Bruce, "Real-Time Human Perceptions: Toward a Bicycle Level of Service," Transportation Research Record 1578 (Washington DC, Transportation Research Board, 1997).

- **Review of standards, guidelines and best practices**: The plan draws heavily from AASHTO, MUTCD, FHWA and other nationally recognized resources for bicycle facility design. See Bikeways Types discussion in the previous section.

Guiding Principles

The following guiding principles were used in the development of Palatine's bikeway network.

- Plan for a target audience of casual adult cyclists. At the same time, address the needs of those who are more advanced and those who are less traffic-tolerant, including children.
- Select a network that is continuous. Form a grid of target spacing of ½ to 1 mile to facilitate bicycle transportation throughout the Village. Consider both on-road and off-road improvements, as appropriate.
- As much as possible, choose routes with lower traffic, ample width, directness, fewer turns and stop signs, 4-way stops or stoplights at busy roads, and access to destinations.
- Look for spot improvements, short links, and other small projects that make an impact.
- Be opportunistic, implementing improvements during other projects and development.

Selecting Bikeway Type

These guidelines were used for specific route segments:

- Where on-road bikeways are recommended, try to achieve a BLOS rating of High C (marginal), B (ideal), or better for designation in the network. This is an appropriate goal for accommodating the casual adult bicyclist. Depending on the situation, use Bike Lane, Bike Route, and/or wayfinding signage to indicate inclusion in the network.
- For the on-road segments designated as being in the bikeway network, raise the priority of filling sidewalk gaps on at least one side of the road. This recognizes that children – and more traffic-intolerant adults – will ride on the sidewalk, even though sidewalks are not officially considered a bicycle facility.
- Do not recommend sidepaths where there are too many crossing conflicts (driveways, entrances, cross streets). Where sidepaths are recommended, use the design techniques described above to somewhat reduce the risks at intersections.
- Where there is sufficient width and need, and speeds are moderate to low, use striping to improve on-road cyclist comfort level. Depending on available width and parking occupancy, the striping may be in the form of either dedicated bike lanes or combined bike/parking lanes. Where such roads have insufficient width for striping, shared lane markings or simply Bike Route wayfinding signs are recommended, depending on parking occupancy and assuming an on-road comfort level meeting the target BLOS.
- Use shared lane marking and bike signal actuation pavement markings to indicate proper on-road bicycle position, especially where heavy bicycle traffic is expected.

Generating Public Support

To improve public support for plan implementation, these approaches are suggested:

- Achieve early, easy successes ("low-hanging fruit") to gather momentum.
- Do not remove on-road parking if at all possible, especially by businesses.
- Where appropriate, use road striping to serve not only bicyclists but adjacent residents, as well. Cite the traffic calming (slowing) and other benefits of striped, narrower roads.
- Do not widen sidewalks to 10-foot sidepath widths where at least some residential front yards would be impacted.
- Do not widen residential roads solely for bikeways.
- Work with local businesses and media outlets to help promote the plan and highlight progress.

4 Bikeway Network Recommendations

Introduction

The Palatine Bicycle Plan proposes a network of bicycle routes to facilitate travel to all sections of the village and beyond. The network builds on existing strengths, and so includes routes that already work reasonably well for cyclists. The recommended projects in this section will help fill gaps, tackle barriers and improve conditions to complete the network. Most projects are relatively easy, such as striping combined bike/parking lanes on north Rohlwing. See the earlier Bikeways Guidelines section for more information on how routes and projects were selected.

Understanding the Maps

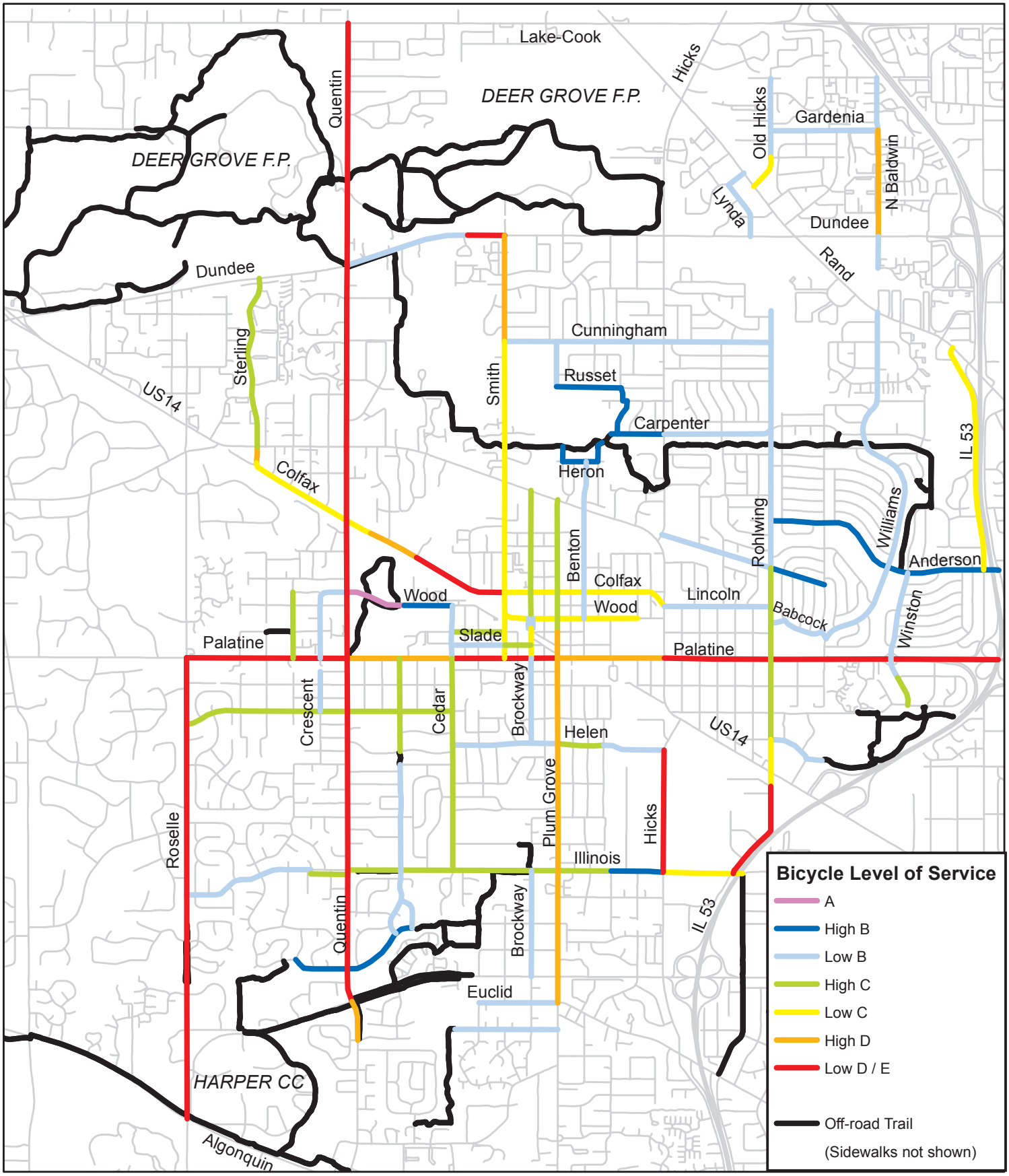
The plan's maps provide a snapshot of needs and recommendations.

- **Existing Conditions -- Trails and On-Road Comfort (BLOS – Bicycle Level of Service):** Shows *existing* on-road conditions for bicyclists on studied roads, including, but not limited to, all routes studied for the network. It also provides information on existing trails.
- **Palatine Bicycle Transportation Plan – Recommended Bikeways and High-Priority Sidewalks:** Includes on and off road bike facilities and existing off-road trails. Superimposed on the recommendation type is the suggested project priority, from high to low. Low priority indicates either backup or other route options considered, or projects resulting in only a minor improvement. In addition to the plan's recommended bikeways, the map shows high priority sidewalks where no bikeway is recommended. Not displayed are medium and low priority sidewalk recommendations, including those for road segments already having an on-road bikeway recommendation – consult the Project List and the Appendix 4 spreadsheet for these. Finally, connections to other towns from their and Northwest Municipal Conference plans are included.
- **Built-Out Conditions -- Trails and On-Road Comfort (BLOS – Bicycle Level of Service):** Portrays how level of service for cyclists will change if the recommended projects are implemented (all priorities). Trails and sidepaths are shown, but not sidewalks.

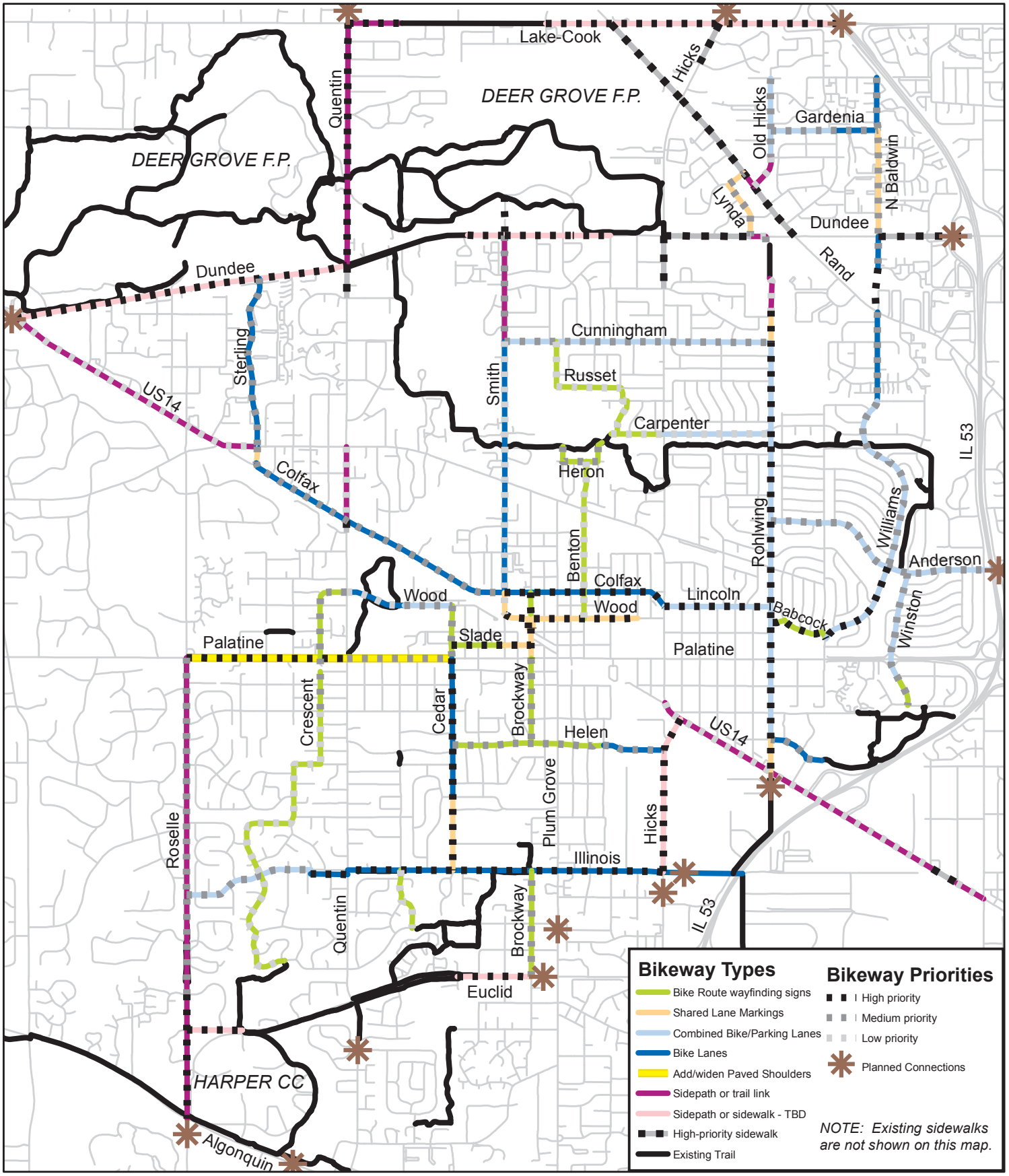
Consider Colfax/Lincoln as an example in using the maps and the spreadsheet in Appendix 4. The existing on-road conditions map shows comfort level west-to-east ranging from low C, high and low D, low C, and low B in terms of Bicycle Level of Service. C is acceptable for experienced cyclists, B for casual adult cyclists – the target of this plan.

The recommended bikeways map calls for high priority combined bike/parking lanes on Lincoln and bike lanes on Colfax. The bike lanes are high priority east of Smith, medium priority to the west – with sidewalks on one side also a medium priority west of Quentin in the recommended sidewalks map. The built-out conditions map shows that striping would improve Lincoln to an A. Bike lanes would improve Colfax west of Quentin and east of Smith to a low B, meeting the target level for the network. The high C from striping Colfax bike lanes between Quentin and Smith marginally meets the target but significantly improves conditions from present.

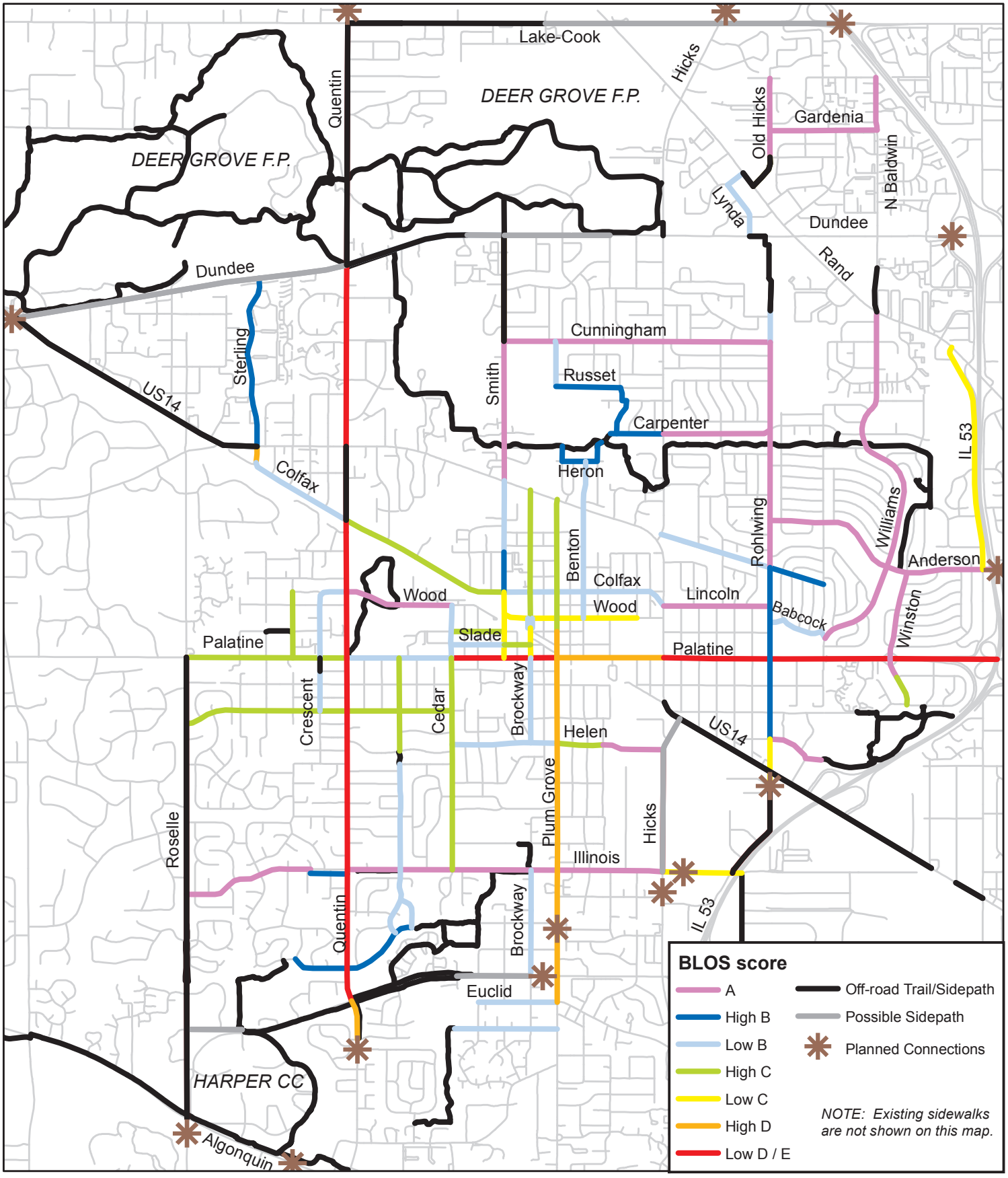
Existing Conditions - Trails and On-Road Comfort (BLOS)



Palatine Bicycle Transportation Plan
Recommended Bikeways and High-Priority Sidewalks



Built-Out Conditions - Trails and On-Road Comfort (BLOS)



Understanding the Project List

Extensive data collection on existing bicycling conditions informed the development of this plan. Most of this information, such as roadway geometry, traffic conditions, Bicycle Level of Service scores, sidewalk coverage, recommendation details and implementation notes, is housed in a spreadsheet that helps generate the maps. See Appendix 4 for the entire dataset by road segment. The table that follows summarizes recommended projects by road name. Listed at the end are low priority routes less important to the network or serving as secondary options.

Segment	From (W/N)	To (E/S)	On Road Recommendation	Off Road Recommendation	Priority
Anderson	Rohlwing	IL 53	Combined bike/parking lanes		Medium
Babcock	Church	Williams	Signed Bike Route		High
Brockway	Colfax	Wood	Signed Bike Route		High
Brockway	Wood	Palatine	Shared Lane Markings		High
Brockway	Palatine	Helen	Signed Bike Route		Medium
Brockway	Illinois	Euclid	Signed Bike Route		Medium
Cedar	Wood	Palatine	Signed Bike Route		Medium
Cedar	Palatine	Pleasant Hill Blvd	Bike Lanes		High
Cedar	Pleasant Hill Blvd	Illinois	Shared Lane Markings		High
Church	Rohlwing	Babcock	Signed Bike Route		High
Colfax	Sterling	Quentin	Bike Lanes	Sidewalk (one side)	Medium
Colfax	Quentin	Smith	Bike Lanes		Medium
Colfax	Smith	US14	Bike Lanes		High
Crescent	Quentin	Palatine	Signed Bike Route		Medium
Crescent	W. Leonard	Kenilworth	Signed Bike Route		Medium
Cunningham	Smith	Rohlwing	Combined bike/parking lanes		Medium
Diane	Lynda	Rand	Shared Lane Markings	Sidewalk (one side)	Medium
Dundee	US14	Quentin		Sidewalk or sidepath (one side)	High
Dundee	St. Mark's	Oak		Sidewalk or sidepath (one side)	High
Dundee	Hicks	Lynda		Sidewalk (other side)	High
Euclid	Roselle	Harper College		Sidewalk or sidepath (at least one side)	High
Euclid	Harper College	Old Forge		Sidewalk (other side)	Medium
Euclid	Old Forge	Brockway		Sidewalk or sidepath (at least one side)	High
Gardenia	Old Hicks	Capri	Combined bike/parking lanes		Medium
Gardenia	Capri	N. Baldwin	Bike Lanes	Sidewalk (one side)	Medium
Hawk/Heron	trail	Benton	Signed Bike Route		Medium
Helen	Cedar	Oak	Signed Bike Route		Medium
Helen	Oak	Hicks	Bike Lanes		Medium
Hicks	Lake-Cook	Constitution		Sidewalk (at least one side)	High
Hicks	Rand	N of Dundee		Sidewalk (other side)	Medium
Hicks	Dundee	Home		Sidewalk (other side)	High
Hicks	US14	Illinois		Sidewalk or sidepath (at least one side)	High
Illinois	Roselle	Oxford	Combined bike/parking lanes		Medium
Illinois	Oxford	Hicks	Bike Lanes		High

Segment	From (W/N)	To (E/S)	On Road Recommendation	Off Road Recommendation	Priority
Lake-Cook	Quentin	600W		Sidepath (on at least one side)	High
Lake-Cook	Dee	IL53		Sidewalk or sidepath (at least one side)	High
Lincoln	US14	Rohlwing	Combined bike/parking lanes		High
Lynda	Diane	Dundee	Shared Lane Markings	Sidewalk (one side)	Medium
mall trail	Dundee	Aspen Park trail		Trail link	Medium
N Baldwin	Nichols	Gardenia	Bike Lanes		Medium
N Baldwin	Gardenia	Dundee	Shared Lane Markings		Medium
N Baldwin	Dundee	east bend	Bike Lanes	Sidewalk (one side)	Medium
Old Hicks	Coach	Aster	Combined bike/parking lanes		Medium
Palatine	Roselle	Quentin	Fix paved shoulders	Sidewalk (one side)	High
Palatine	Quentin	Cedar	Add paved shoulders		Medium
Quentin	Lake-Cook	Lakeview		Sidepath	Highest
Quentin	Lakeview	Colfax		Sidewalk (other side)	Medium
Quentin	Colfax	St. John's		Sidewalk (at least one side)	Highest
Quentin	Crescent	Palatine		Sidewalk (other side)	Medium
Quentin	Euclid	Highland		Sidewalk (other side)	Medium
Rand	Lake-Cook	Diane		Sidewalk (at least one side)	High
Rand	Diane	Old Hicks		Sidepath (on at least one side)	High
Rand	Old Hicks	Dundee		Sidewalk (at least one side)	High
Rohlwing	Aspen Park	Cunningham	Shared Lane Markings		High
Rohlwing	Cunningham	Wilmette	Combined bike/parking lanes		High
Rohlwing	Wilmette	Berdnick	Shared Lane Markings	Sidewalk (both sides)	High
Roselle	Palatine	Shire		Sidepath	Medium
Roselle	Shire	Algonquin		Sidepath	High
Slade	Cedar	Smith	Signed Bike Route		High
Slade	Smith	Brockway	Shared Lane Markings		High
Smith	Dundee	Cunningham		Sidepath	Medium
Sterling	Dundee	US14	Bike Lanes		Medium
Sterling	US14	Colfax	Shared Lane Markings	Sidewalk (one side)	Medium
US14	Dundee	Sterling		Sidewalk (at least one side)	High
US14	Williams	Warren		Sidewalk (at least one side)	Highest
Williams	Rand	Cooper	Bike Lanes		Medium
Williams	Cooper	Anderson	Combined bike/parking lanes		Medium
Williams	Anderson	Babcock	Combined bike/parking lanes		High
Wilmette	Rohlwing	Twin Lakes	Bike Lanes		Medium
Winston	Anderson	Joyce	Combined bike/parking lanes		Medium
Winston	Joyce	Kenilworth	Signed Bike Route		Medium
Wood	Merrill	Cedar	Combined bike/parking lanes		Medium
Wood	Smith	Community Park	Shared Lane Markings		High
Wren/Heron	trail	Benton	Signed Bike Route		Medium
new trail	For. Pres. Trail	Dundee @Smith		Trail link	High
new trail	N Baldwin	Baldwin Ct		Trail link	High
new trail	Crescent/ Palatine	W. Leonard		Trail link	Medium

Segment	From (W/N)	To (E/S)	On Road Recommendation	Off Road Recommendation	Priority
Aspen Park	trail	Rohlwing		Sidepath	Low
Benton	Heron	Wood	Signed Bike Route		Low
Carpenter	W-end	Hicks	Signed Bike Route		Low
Carpenter	Hicks	Rohlwing	Combined bike/parking lanes		Low
Dundee	Lynda	existing mall trail		Sidepath	Low
Elm/ Stonehedge	Illinois	Perrigrine	Signed Bike Route		Low
Heatherlea/ Crestview	Russet	Carpenter	Signed Bike Route		Low
Lake-Cook	600W	Dee		Sidewalk (other side)	Low
Old Hicks	Aster	Hicks		Sidepath	Low
Plum Grove	Cunningham	Russet	Signed Bike Route		Low
Russet	Plum Grove	Heatherlea	Signed Bike Route		Low
Signed route	Crescent/ Kenilworth	Perrigrine/ Skylark	Signed Bike Route		Low
Smith	Cunningham	US14	Bike Lanes	Sidewalk (other side)	Low
Smith	US14	Colfax	Bike Lanes		Low
Smith	Colfax	Wood	Shared Lane Markings		Low
US14	Parallel	Williams		Sidepath (other side)	Low
US14	Warren	Wilke		Sidepath (other side)	Low
Wilke	Rand	Anderson		Sidewalk (one side)	Low
Wood	Quentin	Merrill	Bike Lanes		Low

5 Standards for Road Design and Development

Introduction

Complete Streets refers to a way of thinking about roadways that emphasizes the safety needs of all the people who travel along and across them—whether they are in a car, on a bike, on foot, in a wheelchair, or pushing a stroller. A busy street that efficiently moves cars but provides no room for bicyclists or no convenient crossing for school children might be considered "incomplete."

Figure 5.1: Filling in sidewalk gaps and improving intersections helps complete a street.

In recent years, agencies from all levels of government have developed policy and planning tools to ensure that road project designs accommodate those who walk or bike by choice or necessity. In 2010, IDOT adopted design policy changes to implement a new Complete Streets law for their roads. That same year, the US Department of Transportation also voiced support for Complete Streets with a new bicycle and pedestrian accommodation policy statement:

> *"Every transportation agency, including DOT, has the responsibility to improve conditions and opportunities for walking and bicycling and to integrate walking and bicycling into their transportation systems. Because of the numerous individual and community benefits that walking and bicycling provide — including health, safety, environmental, transportation, and quality of life — transportation agencies are encouraged to go beyond minimum standards to provide safe and convenient facilities for these modes."*

By developing this Bicycle Plan, the Village of Palatine has established priorities for road corridors that need improvement. However, to ensure that all road projects—whether or not they are addressed specifically in this plan—consider the needs of all potential travelers, the plan recommends adopting "Complete Streets" policies and favorable road design standards.

Plan Recommendations

Village-Maintained Roads: Pass a Complete Streets Policy to help guide transportation and development projects in Palatine. Suggested language:

> *The Village of Palatine establishes a "policy statement" to ensure that all streets shall be designed, built, maintained and operated to enable safe and convenient access for all users, to the extent practical. Pedestrians, bicyclists and motorists of all ages and abilities, including people who require mobility aids, must be able to safely move along and across Palatine's streets.*

In addition to passing an overall Complete Streets resolution setting Village philosophy, modify the Village's road design standards to implement the policy on a practical level. As a major part of that, the tables below may be used to specify appropriate bikeway accommodation and conditions for sidewalk construction.

Table 5.1. Suggested Bicycle Accommodation in Road Designs

Minor urban 25-30 mph roads			
	No parking	*Sparse (<10%) parking*	*Significant parking*
Local Residential	None	None	None
(Preferred route)	SLM-4	CBPL	SLM-11
Minor Collector	None	None	None
(Preferred route)	SLM-4 (or BL-5*)	CBPL	SLM-11 (or BL-5*)

Arterial or Major Collector *(Urban unless noted)*			
	2000-8000 ADT	*8000-15000 ADT*	*Over 15000 ADT*
<35 mph	BL-5	BL-5 (or BL-6*)	BL-6 (or SP) *Note A*
35-40 mph	BL-5 or SP *[Note A]*	SP (or BL-6) *Note A*	SP (or BL-6) *Note A*
>40 mph	SP	SP	SP
55 mph rural	SH-4 (or SH-6*)	SH-6 (or SH-8*)	SH-8

- (Parentheses) indicate the secondary recommendation, if certain conditions are met.
- An asterisk* indicates the secondary recommendation may be used at the higher ends of a range and/or where the need is greater.

SLM-4: Shared Lane Markings 4' from curb faces. MUTCD D1 or D11 wayfinding signage preferred as a supplement.
SLM-11: Shared Lane Markings 11' from curb faces (on-street parking present). D1 or D11 wayfinding signage preferred as a supplement.
CBPL: Combined Bike/Parking Lanes, solid stripes 7' from curb faces. Parking permission indicated with signage. D1 or D11 wayfinding signage preferred as a supplement.
BL-5 or BL-6: Bike Lanes of width 5 or 6 ft, respectively, with pavement stencils and signage per AASHTO. Where there is no parallel on-road parking next to the bike lane, indicate through signage that parking is not permitted in the bike lane.
SP: Off-road sidepath trail designed per AASHTO, on at least one side of road.
SH-4, SH-6, or SH-8: Paved shoulders of width 4, 6, or 8 ft, respectively. Any rumble strips should have longitudinal breaks and a minimum 4 ft clear zone for bikes.

Note A: As the frequency of crossings (side streets, commercial entrances, driveways) increase, the choice of bike lanes or sidepath moves closer to bike lanes.

Table 5.2. Federal Highway Administration's Guidelines for New Sidewalk Installation

Roadway Classification and Land Use	Sidewalk Requirements	Future Phasing
Highway (rural)	Min. of 1.525 m (60 in) shoulders required.	Secure/preserve ROW for future sidewalks.
Highway (rural/suburban - less than 2.5 d.u./hectare (1 d.u./acre))	One side preferred. Min. of 1.525 m (60 in) shoulders required.	Secure/preserve ROW for future sidewalks.
Suburban Highway (2.5 to 10 d.u./hectare (1 to 4 d.u./acre))	Both sides preferred. One side required.	Second side required if density becomes greater than 10 d.u./hectare (4 d.u./acre).
Major Arterial (residential)	Both sides required.	
Collector and Minor Arterial (residential)	Both sides required.	1.525 m (60 in)
Local Street (Residential - less than 2.5 d.u./hectare (1 d.u./acre))	One side preferred. Min. of 1.525 m (60 in) shoulders required.	Secure/preserve ROW for future sidewalks.
Local Street (Residential - 2.5 to 10 d.u./hectare (1 to 4 d.u./acre))	Both sides preferred. One side required.	Second side required if density becomes greater than 10 d.u./hectare (4 d.u./acre).
Local Street (Residential - more than 10 d.u./hectare (4 d.u./acre))	Both sides required.	
All Streets (commercial areas)	Both sides required.	
All Streets (industrial areas)	Both sides preferred. One side required.	

Note: *d.u. stands for dwelling unit*

Development Ordinances: Create development guidelines to help new developments contribute to Palatine's efforts to become more pedestrian and bicycle friendly. Suggested content:

Developments shall contribute to the Village of Palatine's efforts to become more pedestrian and bicycle friendly. This includes:

- *Considering bicycle and pedestrian traffic and facilities during the traffic impact analysis process.*
- *Installing bikeways as part of any required roadway improvements, per the table above, and consulting Palatine's Bicycle Plan for specifically-defined bikeway improvements.*
- *Installing sidewalks (with a minimum preferred width of 5 ft.) according to FHWA New Sidewalk installation guidelines, above.*
- *Considering pedestrian and bicycle access within the development as well as connections to adjacent properties.*
- *Considering connectivity between developments for pedestrians and bicyclists to minimize short-distance trips by motor vehicles. These can be provided as "cut through" easements in suburban cul-de-sac developments, and as part of connected street grids in traditional neighborhood development.*
- *Building out pedestrian and bicycle facilities concurrent with road construction, or in an otherwise timely manner, to prevent gaps due to undeveloped parcels.*

IDOT and Other Agency Roadways: Work closely with IDOT and the Cook County Highway Department to identify opportunities to improve roadways as part of new, reconstruction and maintenance projects. Each road occasionally has to be maintained, and sometimes intersection or expansion projects are done. These are the most cost-efficient opportunities to also make improvements (as needed) for those walking and biking. The Complete Streets philosophy is that a roadway's condition should not only be measured by motorist level-of-service and pavement condition, but also by safe accommodation of other users. Suggested policy content:

Resurfacing: *When Palatine works with other agencies (such as IDOT or CCHD) to do a simple resurfacing (overlay) of an arterial road through Palatine, with no widening of the asphalt, seek opportunities to include bicycle and pedestrian improvements, such as:*

- *For multilane roads, installing 5-ft (with gutter pan) bike lanes. If needed, travel lanes can be narrowed, particularly inside lanes. If there is not sufficient width for striping a bike lane, stripe a wide outside curb lane, with no less than 14 usable feet, to at least accommodate more advanced cyclists. These treatments also provide larger turning radii for right-lane trucks.*
- *Filling sidewalk gaps wherever a sidewalk exists but is incomplete. If no sidewalk exists on either side of the road, consider at least one side in the project scope. The preferred minimum width for sidewalks is five feet. Consult the FHWA "New Sidewalk Installation" guidance on the number of sides with sidewalks as a function of various roadway classifications and land uses. (see table above).*
- *Improving crossings: Examples at signalized intersections include ADA retrofits, pedestrian signalization and crosswalks, and (if possible at larger intersections) right-turn corner islands. Priority mid-block crossings may also be improved through raised median islands, pedestrian hybrid beacons, pavement markings and/or other treatments.*

Reconstruction/Expansion: *When Palatine works with another agency (such as IDOT or CCHD) to do a reconstruction or expansion of an arterial road through Palatine, include bicycle and pedestrian improvements such as:*

- *Fill sidewalk gaps wherever a sidewalk exists but is incomplete.*
- *If sidewalks are lacking on one or both sides, add sidewalks as part of the project consulting the FHWA "New Sidewalk Installation" guidance (as a function of roadway classification and land use). The preferred minimum width for sidewalks is five feet.*
- *Include crossing improvements in scope. Examples at signalized intersections include ADA retrofits, pedestrian signalization and crosswalks, and (if possible at larger intersections) right-turn corner islands. Priority mid-block crossings may also be improved through raised median islands, pedestrian hybrid beacons, and/or other treatments.*
- *Consult AASHTO bicycle facility guidelines and either IDOT's bikeway selection table or the table above for the appropriate bikeway treatment for the situation. For sidepath trails separate but parallel to the road, design to reduce the inherent conflicts at intersections and entrances. For bike lanes, either reconfigure and narrow travel lanes or widen pavement to allow the 5 or 6-ft (with gutter pan) for bike lanes. If there is not sufficient width for striping a bike lane, stripe a wide outside curb lane, with no less than 14 usable feet, to at least accommodate more advanced cyclists. These treatments also provide larger turning radii for right-lane trucks.*

Additional Policies and Ordinances: Other policies and ordinances may be adopted by the Village of Palatine to make adequate bicycle and pedestrian accommodation part of standard practice for any improvement in town.

The University of Albany provides simple and specific policy text[3] appropriate for:

- The Village comprehensive plan
- Subdivision regulations and site plan review
- Zoning laws
- School board policy on Safe Routes to School

The bicycle parking section of this plan suggests modifying the parking development ordinance to include bicycle racks.

The Village should consider adoption of these model policies and ordinances.

[3] "Planning and Policy Models for Pedestrian and Bicycle Friendly Communities in New York State" by the Initiative for Healthy Infrastructure, University at Albany, State University of New York (http://albany.edu/%7Eihi/ModelZoningCode.pdf)

6 Other Recommendations

Introduction

Engineering improvements to the physical environment for cycling should be accompanied by work in the "other E's": Education, Encouragement and Enforcement. The recommendations below will raise awareness of new facilities and motivate more people to safely and comfortably bike in Palatine. Bicycle Parking is treated as a separate category, given the breadth of the topic and its relationship to both engineering and encouragement.

Bicycle Parking

Secure bicycle parking is a necessary part of a bikeway network, allowing people to use their bikes for transportation and reducing parking in undesirable places. Successful bicycle parking requires a solid bike rack in a prime location. It is recommended that the Village address bike parking by adopting a development ordinance requirement and by retrofitting racks at strategic locations in town.

Figure 6.1. Inverted U, single (top) and in a series (bottom)

General bicycle parking considerations are covered below. For more details, consult *Bicycle Parking Guidelines, 2nd Edition: A Set of Recommendations from the Association of Pedestrian and Bicycle Professionals,* 2010, available at www.apbp.org.

Style: A good bicycle rack provides support for the bike frame and allows both the frame and wheels to be secured with one lock. The most common styles include the inverted "U" (two bikes, around $150-300) and the wave or continuous curve style (more than two). The preferred option for multiple spaces is a series of inverted "U" racks, situated parallel to one another. These can be installed as individual racks, or as a series of racks connected at the base, which is less expensive and easier to install and move, if needed. See Figure 6.1.

Old-fashioned "school racks," which secure only one wheel, are a poor choice for today's bicycles (Figure 6.2). Securing both the wheel and frame is difficult, and bicycles are not well supported, sometimes resulting in bent rims.

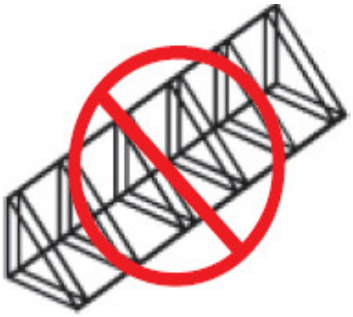


Figure 6.2. This style of rack is not recommended.

Locations: The best locations for bike parking are near main building entrances, conveniently located, highly visible, lit at night, and—when possible—protected from the weather. When placing a bicycle rack in the public right-of-way or in a parking lot, it should be removed from the natural flow of pedestrians, avoiding the curb and area adjacent to crosswalks. Racks should be installed a minimum of 6 feet from other street furniture and placed at least 15 feet away from other features, such as fire hydrants or bus stop shelters.

The installation recommendations below are from the Kane County Bicycle & Pedestrian Plan:

- Anchor racks into a hard surface
- Install racks a minimum of 24" from a parallel wall
- Install 30" from a perpendicular wall (as measured to the closest inverted U.)
- Allow at least 24" beside each parked bicycle for user access, although adjacent bicycles may share this access.
- Provide a 6 feet aisle from the front or rear of a bicycle parked for access to the facility.

Ordinances: Ideally, all multi-family and non-residential buildings should provide bike parking. A simple ordinance may call for one bike parking space for every 10 or 20 required car spaces, with a minimum of two spaces. The City of Naperville has a very good ordinance (Section 6-9-7) specifying bike rack standards and a detailed list of required spaces per land use. Most uses call for 5% of car spaces, with higher amounts for multi-family dwellings, schools, recreation facilities, etc. For suggestions on bike parking requirements according to land use type, consult the APBP bicycle parking guide referenced above.

Metra Station: Due in large part to the cost and scarcity of parking a car, suburban Metra stations often have high existing and latent demand for bicycling. Recent Metra station bicycle parking inventories[4] have found a steady growth in parked bikes at the Palatine Metra Station: 18 in 1998, 20 in 2003, 25 in 2008. In 2008, continuous curve racks with a capacity of 35 were reported. 21 bikes were using these racks, but 4 were locked to unofficial facilities elsewhere.

Particularly as this plan is implemented, it is important to keep ahead of the demand for secure bike parking. Plan ahead before a bike rack is near capacity. It is recommended to annually examine bike rack parking usage, adding more continuous curve racks where needed or distributed around the station area. Also, as several Metra towns have done, consider installing bike lockers in the parking garage, rented daily or by the year.

Downtown and Other Retrofits: In 2006, the City of Aurora spent $5500 to purchase 35 inverted "U" racks to provide distributed bicycle parking downtown. The City installed one rack on each side of the road on each street block, plus more where needed. A similar program is recommended for the Palatine downtown area.

Further retrofit bike parking is recommended in other places of latent demand, including public buildings, recreation facilities, and commercial centers. The Greater Palatine Bike Task Force could provide suggestions. Note that retrofitting racks on commercial properties and other private property will require cooperation from the property managers.

[4] Conducted by Metra in 1998, 2003, and 2008, the latter two with LIB and the Active Transportation Alliance

Education

Education of both bicyclists and motorists is crucial to improving real and perceived bicycling safety in Palatine. Many are afraid to bike, or bike only on off-road trails, because of their concern about safety. Improving education can lessen these concerns and instill the skills and confidence to bike around town more safely. The Greater Palatine Bicycle Task Force conducts efforts such as its Safe Routes to School program. Other possibilities include:

Bicyclists: Distribute safety materials through schools and PTAs; at public places such as Village Hall and the library; and on the Village's and park districts' websites:

- *Kids on Bikes in Illinois* (www.dot.state.il.us/bikemap/kidsonbikes/cover.pdf), a free pamphlet from IDOT's Division of Traffic Safety.
- League of Illinois Bicyclists' single-page summaries for children and their parents at http://www.bikelib.org/safety-education/kids/bike-safety-sheet/ .
- *Safe Bicycling in Illinois* (www.dot.state.il.us/bikemap/safekids/cover.pdf), a free booklet directed to teens and adults, from IDOT Traffic Safety.
- *Bicycle Rules of the Road*, a free guide from the Illinois Secretary of State: http://www.sos.state.il.us/publications/pdf_publications/dsd_a143.pdf .

Other resources for kids and adults are listed at http://www.bikelib.org/safety-education, ranging from bike safety classes to videos to a bike rodeo guide. Also, grant funding for grades K-8 education programs is available from the Illinois Safe Routes to School program.

Motorists: Educate motorists on sharing the road with bicyclists and avoiding common mistakes that lead to crashes. Include a link to the League of Illinois Bicyclists' "Share the Road: Same Road, Same Rights, Same Rules" video (http://www.bikelib.org/safety-education/motorists/driver-education and available as a DVD) on the Village website. Show the video on the local cable channel, especially during the warmer months, and encourage local high schools and private driver education programs to include the video and other materials from LIB's driver education lesson plan, which include a road rage case study for classroom discussion.

Short articles meant to educate the public on the above are available on the League of Illinois Bicyclists website. These are suitable for newspapers, village newsletters, and the Village website.

Encouragement

Suggestions for encouraging visitors or residents to explore Palatine by bicycle include:

- Continue the events conducted by the Greater Palatine Bicycle Task Force and its partners, such as Bike-to-Metra day, the Bike Bonanza, and Cycle Fest.
- Update the Palatine Trail Guide map as more of the bikeway network is developed. The map can show existing and proposed bikeways. Add on-road bike safety graphics and information, such as map content available from the League of Illinois Bicyclists. Partner with local businesses to produce—and be listed—on the map.

- Develop a Bike to Metra guide, tailored for Palatine, through the League of Illinois Bicyclists' program for suburban towns. Distribute at the station, public buildings, and events.
- Proclaim the Village's observance of National Bike Month in May (or June, when weather is more dependable).
- Perhaps on Bike to Metra day, declare a Bike to Work day to encourage bicycling to work, errands, or other destinations. Offer token incentives, such as refreshments at Village Hall or coupons for ice cream, for example.
- Work with the school district to observe International Walk and Bike to School Day, the first Wednesday of each October.
- Promote Palatine as a bicycle-friendly community in the Village's advertising.

Enforcement

A vital component of a safe bicycling environment is enforcement with education to reduce common car-bike collision types.

According to Illinois law, bicycles have both the rights and responsibilities of other vehicle users. Many bicyclists do not know about the law as it applies to bikes, and how following the law leads to safe cycling. Other cyclists ignore the law while riding in traffic, not only creating dangerous situations but also causing motorist resentment toward other cyclists trying to share the road safely. Police are encouraged to stop cyclists if the situation dictates, to educate, issue warning citations, or issue tickets. Changing their behavior could save their lives. Resources include Illinois bike law cards and warning citations from the League of Illinois Bicyclists. See www.bikelib.org/safety-education/enforcement-resources

In a car-bike crash, the motor vehicle does the most damage. Some aggressive motorists intentionally harass cyclists, while others simply don't know how to avoid common crash types. Police are encouraged to learn the common crash types and enforcement techniques to help ensure safer roads for bicycling. The League of Illinois Bicyclists offers a Safe Roads for Bicycling police training presentation, including the video referenced above: "Share the Road: Same Road, Same Rights, Same Rules" (http://www.bikelib.org/safety-education/motorists/driver-education and available as a DVD).

7 Plan Implementation

Introduction

The key recommendation of this plan is to develop a way to ensure its implementation. Continued progress will require a commitment of time and financial resources over many years. Little by little, project by project, the Village of Palatine will become a more bikeable community.

Committee or Staff Time

Perhaps the most important implementation tool is time. The plan recommends dedicating some fraction of a staff member's time as the Village's bicycle and pedestrian coordinator. This individual would work on plan implementation projects and other active transportation issues. Also, the coordinator would regularly collaborate with other Village staff and relevant agencies to ensure their work conforms to the goals of the plan. Routine review of development plans and road project designs is a prime example.

In addition, consider establishing an on-going Palatine Bicycle Advisory Committee, perhaps from the steering committee and Greater Palatine Bicycle Task Force memberships. Other communities, such as Naperville and Urbana, have found that volunteer involvement by a few energetic, knowledgeable, and dedicated residents can greatly leverage their staff time investment. In addition to implementation of this plan's recommendations, another committee role may be to analyze existing maintenance conditions on the village's bike facilities.

Organizing regular, such as quarterly, meetings with this advisory committee can also be an effective way to keep up momentum.

Technical Resources and Training

The staff person or persons in charge of plan implementation should have access to up to date resources to help with the details of design and implementation. In addition to adding the printed resources below to the village planner's library, seek out opportunities to participate in webinars and workshops on best practices. Not only do these events provide useful information, they are an opportunity to interact with other planners and engineers grappling with similar issues.

Manuals and Guidelines:

- *AASHTO Guide for the Development of Bicycle Facilities*, 3rd Edition, 1999 (new edition expected in 2011) available at www.transportation.org

- *Bicycle Parking Guidelines, 2nd Edition: A Set of Recommendations from the Association of Pedestrian and Bicycle Professionals*, 2010, available at www.apbp.org.

Websites and Professional Organizations:

- The Pedestrian and Bicycle Information Center: Offers a wealth of information on engineering, encouragement, education and enforcement, including archived webinars and quarterly newsletters: www.pedbikeinfo.org
- The Association of Pedestrian and Bicycle Professionals: provides continuing education, technical resources and an online forum for exchanging questions and ideas. www.apbp.org
- League of Illinois Bicyclists: A planning and advocacy resource, with many on-line materials focused on best practices nationally as well as issues unique to Illinois: www.bikelib.org

Multi-Year Work Plan

This plan recommends a variety of strategies, from adopting policies to coordinating with other agencies, to quickly implementing "high priority, ready to go" projects. One of the first steps of plan implementation should be to go through the listed recommendations and draft a five year work plan. Projects that don't get completed on a given year move into a future year's work plan. Dividing plan implementation across a span of years makes it more manageable, especially in terms of funding.

Implementation Funding

Recommendations in this plan range from low-cost or no-cost improvements to major capital investments. Project costs depend on myriad factors. It is usually most cost effective to address bicycling improvements as part of larger projects, instead of retrofitting. Estimates for projects are below.[5]

- **Trail or Sidepath:** The cost of developing trails varies according to land acquisition costs, new structures needed, the type of trail surface, the width of the trail, and the facilities that are provided for trail users. Construction costs alone can run $40,000 per mile for a soft surface trail to more than $1,000,000 per mile in an urban area for a paved trail.
- **Bike Lanes (and Combined Bike/Parking Lanes):** The cost of installing a bike lane is approximately $5,000 to $50,000 per mile, depending on the condition of the pavement, the need to remove and repaint the lane lines, the need to adjust signalization, and other factors. It is most cost efficient to create bicycle lanes during street reconstruction, street resurfacing, or at the time of original construction.

[5] Explanations and figures from http://www.walkinginfo.org/engineering/roadway.cfm

- **Signed Bike Routes and Shared Lane Markings:** Signs and pavement stencils are even less expensive than designated bike lanes. Again, shared lane markings can be done with other roadwork, while sign installation can be done at any time.

These may be funded in a number of ways. First, the Village of Palatine may dedicate an annual budget for a bicycle implementation program. If needed, one strategy may entail a smaller first year budget for the highest priority projects, as a way to build momentum for following years. Additional funding may come from Palatine Park District, Cook County Forest Preserve District, and other relevant agencies.

Another major builder of bikeways is developers. Plan recommendations may be implemented opportunistically when a new subdivision or commercial development is added.

Other opportunities include road projects by the Village, County, or State. Addressing intersection improvements, bikeways and sidewalks as part of a larger road project is substantially cheaper and easier than retrofitting. Even resurfacing work can be used to add on-road bikeway striping, sometimes at no additional cost. Chapter 5 has policy suggestions to ensure these opportunities are seized.

Finally, outside government funding sources can be used for bikeway retrofit projects. A number of state and federal grant programs are available and summarized in Appendix 5.

Annual Evaluation and Long-term Goal

Another way to keep up momentum and public support is to plan for a yearly evaluation (often called the fifth "E") and celebration of plan progress. For example, work with the proposed Palatine Bicycle Advisory Committee to publish a yearly plan status report in conjunction with a ribbon cutting ceremony or community event, such as Bike Bonanza or Cycle Fest, Walk and Bike to School Day, a community bike ride, or other event. This keeps local stakeholders focused on the progress that has been made and energizes everyone to keep moving forward. Also consider updating this plan every 5-10 years to reflect progress and reevaluate priorities.

A long-term goal of plan implementation should be official designation as a "Bicycle Friendly Community". This national League of American Bicyclists award program has Honorable Mention, Bronze, Silver, Gold, and Platinum gradations. Winning designation is not easy, in fact, only Schaumburg, Chicago, Naperville, and Urbana have reached at least Bronze status in Illinois. However, the recommendations in this plan encompass most of the award criteria.

Appendix 1
Palatine Bicycle Transportation Plan
Steering Committee

MEMBERS
Harry Spila – Village of Palatine, Director of Community Services

Kevin Anderson – Village of Palatine, Assistant Director of Planning and Zoning
Gail Artrip – Member of Greater Palatine Bicycle Task Force
Matthew Dusckett – Village of Palatine, Fleet Services Coordinator
Craig Lesselyoung – Village of Palatine, Police Department Commander
Wayne Mikes – Member of Greater Palatine Bicycle Task Force
George Ruppert – Village of Palatine, Assistant Village Engineer
Jeremy Smith – Village of Palatine, GIS Administrator
Cheryl Tynczuk – Palatine Park District, Landscape Architect

CONSULTANTS
Tom McCabe – Spaceco, Inc.
Ed Barsotti – League of Illinois Bicyclists

Appendix 2
Public Brainstorming Workshop Results

On September 30, 2010 a "Public Brainstorming Workshop" was attended by 37 residents. The purposes of the workshop included: a) gather local resident knowledge on biking needs; b) prioritize road corridors and other routes to study for potential improvements; c) build community support for the plan and its implementation.

Each attendee marked individual maps with suggested "routes to study" for improvements. The map on the following page shows the results of this input, with each recommended segment color-coded by the number of participants suggesting that it be considered. A group exercise followed in which top priorities of two tables each from three geographic regions of the Village were discussed and reported. These include:

South of UP-NW railroad tracks:

- Palatine Road, Northwest Highway to west village limits (but higher speed west)
- Cedar Street, Palatine to Illinois
- Illinois bike lanes, Roselle to Plum Grove or IL53
- Roselle Road, through town and over I-90; reconstruct sidepaths
- North end of Ela to Deer Grove Forest Preserve
- Along Euclid connection through park

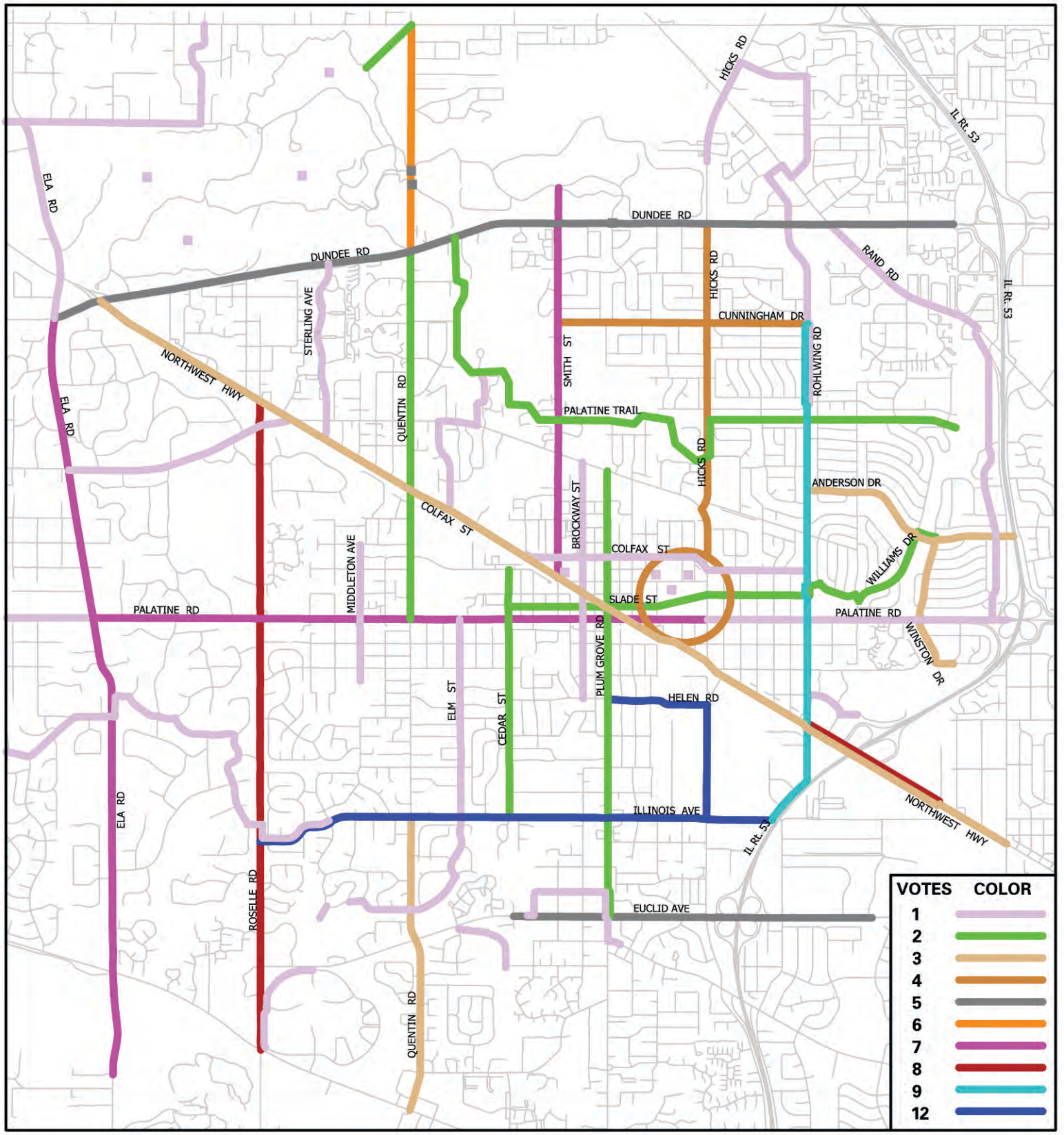
North of UP-NW railroad tracks, west of Hicks Road:

- Deer Grove Forest Preserve access, including from the Smith/Dundee intersection
- Improve Palatine Trail's crossing of Smith Road and its steep downhills
- Trail along Dundee Road, west from Hicks, and Smith to the west village limits
- Quentin east-side sidepath north from Dundee
- Bike lanes west on Colfax to Northwest Highway when road re-done (poor condition)
- Add short (100 yd?) link from end of Colfax to Baldwin
- YMCA to Palatine Metra station via Northwest, Sterling, Colfax

North of UP-NW railroad tracks, east of Hicks Road:

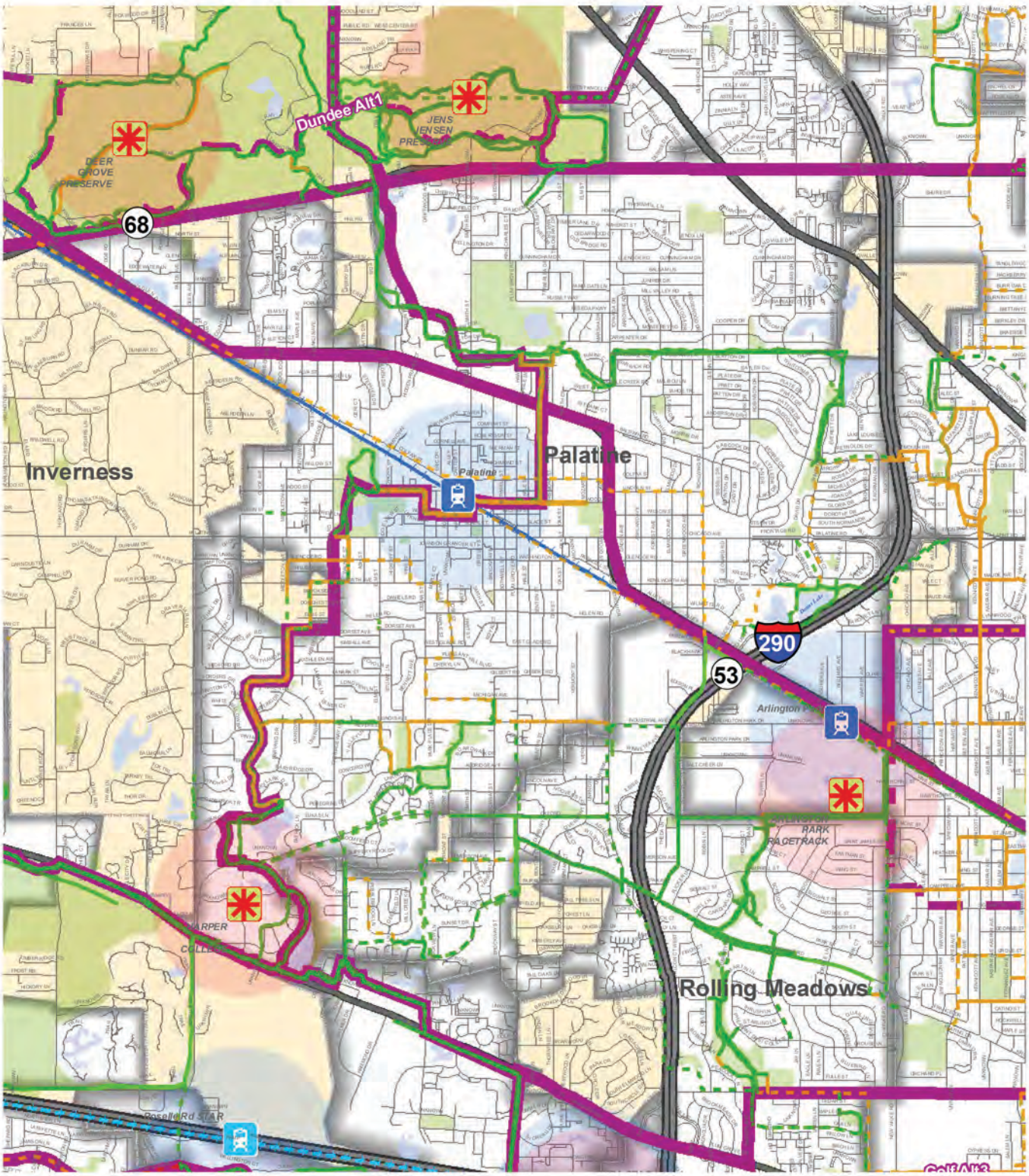
- Rohlwing Road somewhat rough, but a natural, north to high school
- Traffic signal actuation or timing at Lincoln/Northwest Highway and a traffic signal at Camp Reinberg
- Make Anderson Drive a bike route
- Arlington Heights (and Metra) access – Northwest Hwy frontage road from Rohlwing
- Falcon Park to Celtic Park wayfinding, safer route
- Twin Lakes or Maple Park under IL53 – just signage
- Route from northeast to southwest Palatine, and forest preserves, without zigzags or main roads

PUBLIC BRAINSTORMING WORKSHOP - INDIVIDUAL MAPPING RESULTS



Appendix 3:

NWMC Bike Plan 2010



Appendix 4: Road Segment Data

Segment Definition	
Segment	Street name of road segment
From (W/N)	West or North segment end
To (E/S)	East or South segment end
Existing Conditions	
Lanes	Number of through lanes (excludes center/other turn lanes)
Traffic ADT	Traffic count in vehicles/day. Gray or blue indicate estimates.
Speed Limit	Posted speed limit
Lane Width	Width from lane edge (often the gutter seam/pavement edge) to next lane, in feet
Extra Width	Pavement width from outer lane edge to gutter seam/pavement edge. May include paved shoulders, parking areas, bike lanes.
Gutter Pan	Width of cement gutter pan in feet
Parking Occupancy	Estimated % occupancy rate of on-street parking - excludes driveway areas. Averaged over 2-sides unless noted.
% Truck Traffic	Estimated % of heavy truck traffic
Pavement condition	FHWA's scale (5=best, 1=worst)
BLOS score	Bicycle Level of Service score of road segment - measure of on-road comfort level for a range of adult cyclists, as a function of geometry and traffic conditions
BLOS grade	BLOS converted to a grade range. B (or better) might be considered "comfortable" for casual adult cyclists, C (or better) for experienced cyclists
Comments	Further details
Sidewalk Status	Are there sidewalks (SW) or sidepaths (SP) on each side (N-north, S-south, E-east, W-west)
Recommendations	
Feasible on-road facility type	Comments and some details on a feasible on-road bikeway treatment for that segment
Sidepath Feasibility	Suitability of a 10' sidepath. Reasons for "No": many existing residences (resid.), many and/or busy crossings (driveways, entrances, side streets)
Recommendation	Projects recommended for the segment.
Rec. Lane Width	Travel lane width after recommendation is implemented. Often, no change.
Rec. Striped Width	Extra width (see above), after recommendation is implemented. 0 (no change) if no value given.
New BLOS score	BLOS score, if the above on-road bikeway is implemented. Again, only different if re-striping is involved (in **bold**).
Implementation	
Public priority pts	Segment's prioritization points during public workshop
Priority	Recommended implementation priority of segment
Implement Notes	Further details on implementation, especially for the "conditional" implementation segments

Segment	From (W/N)	To (E/S)	Lanes	Traffic ADT	Speed Limit	Lane Width	Extra Width	Gutter Pan	Park Occ%	% Truck	BLOS score	BLOS grade	Comments	SidewalkStatus	Feasible on-road facility type	Sidepath Feasibility	Recommendation	Rec. Lane Width	Rec. Striped Width	New BLOS score	Public priority points	Priority	Implementation Notes
Lake-Cook	Quentin	600W												None			Add N-SP; (S-SW)				0	High	S-SW low priority
Lake-Cook	600W	Dee												N-SP			Add S-SW				0	Low	
Lake-Cook	Dee	IL53												None			Add SP/SW one side; (SW on other)				0	High	Other side SW low priority
Gardenia	Old Hicks	Capri	2	*3000*	*30*	16.5	0	1	3	*0.5*	2.49	B	Driveways S-side, none N.	S-SW	Combined Bike/Parking Lanes 7-10.5-10.5-7	High N	Combined bike/parking lanes	**10.5**	**7.0**	1.35	0	Medium	
Gardenia	Capri	N. Baldwin	2	*3000*	*30*	16.5	0	1	0	*0.5*	2.44	B	No parking E of Capri	Most S-SW, E-gap	Bike Lanes: 5-12.5-12.5-5; make it clear parking is not allowed	High N	Stripe 5' bike lanes; fill S-SW gap	12.5	5.0	1.27	0	Medium	
Dundee	US14	Quentin												Sparse S-SW	Some forest preserve trail N		Add SP/SW S-side				0	High	
Dundee	Quentin	St. Mark's	2	25800	45	12	7.5	2	0	*2*	2.42	B	N-side no curb	S-SP/SW		Medium-High	None	12.0	7.5		5		
Dundee	St. Mark's	Smith	2	25800	45	12	0	0	0	*2*	4.70	E		none		Medium-High	Add SP/SW; pave shoulders	12.0	**7.5**	2.42	5	High	Paving shoulders drops to medium/low if SP built
Dundee	Smith	Pepper Tree												none			Add SP/SW S-side				5	High	
Dundee	Pepper Tree	Oak												S-SW, one gap			Fill S-SW gap				5	High	
Dundee	Oak	Hicks												S-SW	Some forest preserve trail N		None				5		
Dundee	Hicks	Lynda												S-SW			Add N-SW				5	High	
Dundee	existing trail	Rand												Both SWs			None				5		
Dundee	Rand	Baldwin												Both SWs			None				5		
Dundee	Baldwin	IL 53												Sparse S-SW			Add SW one side; (SW on other)				5	High	Other side SW medium priority.
Cunningham	Smith	Hicks	2	*4000*	*25*	17	0	1	0	*0.5*	2.33	B	Check speed limit, parking allowed? Stoplight at Hicks.	N-SW, S-SW E of Old Mill	If parking ok, combined bike/ parking lanes 7-11-11-7. Better: no parking, bike lanes 5-13-13-5.	Low	Combined Bike/Parking Lanes	**11.0**	**7.0**	1.13	4	Medium	Wayfinding signage higher priority than stripes
Cunningham	Hicks	Rohlwing	2	*4000*	*25*	17	0	1	5	*0.5*	2.41	B		Both SWs	Combined Bike/Parking Lanes 7-11-11-7	Low	Combined Bike/Parking Lanes	**11.0**	**7.0**	1.27	4	Medium	Wayfinding signage higher priority than stripes
Carpenter	W-end	Hicks	2	*1500*	25	16.5	0	1	1	*0*	1.88	B		Both SWs	Combined Bike/Parking Lanes 7-10.5-10.5-7 or Signed Bike Route	Low	Sign as Bike Route	16.5	0.0		0	Low	
Carpenter	Hicks	Rohlwing	2	*4200*	25	16.5	0	1	1	*0.5*	2.46	B	Avoids Palatine Trail's Providence SP Xing	Both SWs	Combined Bike/Parking Lanes 7-10.5-10.5-7	Low	Combined bike/parking lanes	**10.5**	**7.5**	1.18	0	Low	
US14	Dundee	Sterling												Most N-SW			Complete N-SW; (add S-SP)				3	High	S-SP low priority
US14	Sterling	Parallel												Both SWs	3 priority points along RR sections only		None				3		
US14	Parallel	Williams												N-SW			Add S-SP				4	Low	
US14	Williams	Warren												None			Fill N-SW gap; (add S-SP)				4	Highest	S-SP low priority
US14	Warren	Wilke												N-SW			Add S-SP				4	Low	
Anderson	Rohlwing	IL 53	2	*2000*	25	17	0	1	1	*0.5*	2.00	B	bike path conn., schools and parks	Both SWs	Combined Bike/Parking Lanes 7-11-11-7	Low	Combined Bike/Parking Lanes	**11.0**	**7.0**	0.81	4	Medium	Wayfinding signage higher priority than stripes
Baldwin	Hicks	Rohlwing	2	*3500*	25	17	0	1	3	*0.5*	2.31	B	Parking near Hicks by apts, otherwise, allowed but not used	Both SWs	Assuming parking allowed on entire segment, Combined B/P lanes 7-11-11-7	Low	None	17.0	0.0		0		
Baldwin	Rohlwing	Clark	2	*1500*	25	17	0	1	5	*0.5*	1.92	B		Both SWs	Combined Bike/Parking Lanes 7-11-11-7	Low	None	17.0	0.0		0		
Palatine	Roselle	Quentin	2	11300	*35*	12	0	1	0	*2*	4.12	D	Unusable: newly paved 4' shoulders w/ 16" rumble strips starting 12" out. IDOT road.	some SW (Marion-Clyde)	Paved shoulders (no rumbles or 8" wide, 4" out for 3' clear zone)	Medium (guard rails, creek)	Better paved shoulders; add sidewalk	12.0	**4.0**	2.84	7	High	Shoulder recommendation meets IDOT HSIP rumble strip policy
Palatine	Quentin	Cedar	2	11300	*35*	12	2	1	0	*2*	3.56	D	Paved shoulders, with pinch points	Both SWs	Paved and stripe for consistent 5' shoulders (or bike lanes). Reduce to 11' lanes?	Low	Paved shoulders	12.0	**5.0**	2.42	7	Medium	
Palatine	Cedar	Plum Grove	2	11300	*35*	12	0	1	0	*2*	4.12	D	CLTL	Both SWs	SLMs insufficient. Bike lanes possible w/ narrower lanes.	Low	None	12.0	0.0		7		Use Cedar to get to/from other E W options N & S
Palatine	Plum Grove	US14	2	14700	*35*	14	0	1	0	*2*	3.99	D		Both SWs	SLMs insufficient. Bike lanes possible w/ narrower lanes.	Low	None	14.0	0.0		7		
Palatine	US14	IL53	4	20400	*35*	12	0	1	0	*3*	4.26	D		Both SWs		Low	None	12.0	0.0		1		
Sterling	US14/ Northwest	Colfax	2	*4000*	40	12	0	2	0	*1.5*	3.57	D	N-bd left turn lane	none	Shorten turn lane?, use SLMs in thru lanes. Add E-SW	Medium	Add Shared Lane Markings, E-SW	12.0	0.0		3	Medium	
Colfax	Sterling	Quentin	2	*4000*	40	11	2	0	0	*1.5*	3.17	C		none	Widen shoulders to 4' uncurbed bike lanes. Add N-SW.	High S	Widen shoulders to 4' bike lanes; add N-SW	11.0	**4.0**	2.49	3	Medium	
Colfax	Quentin	650' East	2	*9000*	40	13	2	0	0	*2*	3.37	C		N-SW	SLMs insufficient. Bike lanes possible 5-10-10-5. 30mph speed limit?	Low	Stripe 5' bike lanes; (lower to 30mph?)	**10.0**	**5.0**	2.82	3	Medium	
Colfax	650' East	Wanda	2	*9000*	35	13	0	2	0	*2*	3.88	D		N-SW	SLMs insufficient. Bike lanes possible 5-10-10-5	Low	Stripe 5' bike lanes; (lower to 30mph?)	**10.0**	**5.0**	2.72	3	Medium	
Colfax	Wanda	Smith	2	*9000*	35	12	0	2	0	*2*	4.00	D	CLTL. 36' total (40' w/ gutters)	N-SW	SLMs insufficient. Bike lanes possible w/ restriping: 5-10-10-10-5 or 5.5-14.5-14.5-5.5 (no CLTL).	Low	Stripe 5' bike lanes; (lower to 30mph?)	**10.0**	**5.0**	2.72	3	Medium	

Segment	From (W/N)	To (E/S)	Lanes	Traffic ADT	Speed Limit	Lane Width	Extra Width	Gutter Pan	Park Occ%	% Truck	BLOS score	BLOS grade	Comments	SidewalkStatus	Feasible on-road facility type	Sidepath Feasibility	Recommendation	Rec. Lane Width	Rec. Striped Width	New BLOS score	Public priority points	Priority	Implementation Notes
Colfax	Smith	Plum Grove	2	4800	*30*	14	0	1	0	*1*	3.13	C		Both SWs	Bike Lanes 5-10-10-5, incl gutter pan. SLMs in thru lane by Smith	Low	Stripe 5' bike lanes	**10.0**	**5.0**	2.11	1	High	
Colfax	Plum Grove	US14/ Hicks	2	4350	*30*	13	0	2	0	*1*	3.22	C		Both SWs	Bike Lanes 5-10-10-5. SLMs 11' from curb @parking, and in thru lane by US14	Low	Stripe 5' bike lanes	**10.0**	**5.0**	2.06	1	High	
Lincoln	US14/ Northwest	Rohlwing	2	*3000*	25	17	0	1	2	*0.5*	2.22	B		Both SWs	Combined Bike/Parking Lanes 7-11-11-7	Low	Combined bike/parking lanes	**11.0**	**7.0**	1.04	1	High	
Wood	Quentin	Merrill	2	*1250*	*30*	12	6	0	0	*0*	0.64	A	Through park	S-SP	Mark shoulders as bike lanes.	High	Mark shoulders as bike lanes.	12.0	6.0		0	Low	Wayfinding signage higher priority than bike lane markings
Wood	Merrill	Cedar	2	*1250*	*30*	17	0	1	3	*0*	1.89	B		N-SW, some S-SW	Already signed as route. Combined bike/parking lanes 7-11-11-7	Low	Combined Bike/Parking Lanes	11.0	7.0	0.72	0	Medium	Wayfinding signage higher priority than stripes
Wood	Smith	Community Park	2	*4000*	*30*	11.5	0	1	0	*1*	3.36	C	Metra station W-end. Diagonal parking E of Oak. Already signed route.	Both SWs	SLM, although not up to BLOS goal. 4' from curb, except middle of lanes by diagonal parking. No SLMs where parking or loading permitted.	Low	Shared Lane Markings	11.5	0.0		0	High	
Church	Rohlwing	Babcock	2	*1000*	25	12.5	0	1	1	*0*	2.25	B		Both SWs	Signed Bike Route	Low	Sign as Bike Route	12.5	0.0		2	High	
Babcock	Church	Williams	2	*1000*	25	12.5	0	1	1	*0*	2.25	B	Includes jog on Clark	Both SWs	Combined Bike/Parking Lanes 7-11-11-7 or Signed Bike Route	Low	Sign as Bike Route	12.5	0.0		2	High	
Wilson	Cedar	Smith	2	*1250*	25	11.5	0	1	1	*0.5*	2.54	C	Already signed as route	Both SWs	Signed Bike Route	Low	None - Smith intersection poor	11.5	0.0		0		
Slade	Cedar	Smith	2	*800*	25	11.5	0	1	1	*0.5*	2.31	B		Both SWs	Signed Bike Route	Low	Sign as Bike Route	11.5	0.0		0	High	
Slade	Smith	Greeley	2	*1500*	25	11.5	0	1	0	*0.5*	2.62	C	E-bd diagonal parking	Both SWs	SLMs. 4' from W-bd curb. Middle of E-bd lane due to diag. parking.	Low	Shared Lane Markings	11.5	0.0		0	High	
Slade	Greeley	Brockway	2	*1500*	25	11.5	0	1	1	*0.5*	2.63	C	E-bd diagonal parking; W-bd parallel parking	Both SWs	SLMs. 11' from W-bd curb due to parallel parking. Middle of E-bd lane due to diagonal parking.	Low	Shared Lane Markings	11.5	0.0		0	High	
Kenilworth	Roselle	Cedar	2	*2500*	25	12	0	1	5	*0*	2.82	C	Unprotected crossing of Quentin	Some W of Quentin, N-SW E	Signed Bike Route	Low	None	12.0	0.0		0		
Helen	Cedar	Plum Grove	2	*1500*	25	14	0	1	5	*0.5*	2.37	B	No N-side parking Rose to Hart	Both SWs	Signed Bike Route	Low	Sign as Bike Route	14.0	0.0		0	Medium	
Helen	Plum Grove	Oak	2	*1500*	25	11	0	1	0	*0.5*	2.67	C	Unprotected Plum Grove Xing (no PG stop or signal)	Both SWs	Signed Bike Route with SLMs; Plum Grove Xing signs	Low	Sign as Bike Route; improve Plum Grove Xing	11.0	0.0		*12*	Medium	Increases to high priority if Hicks SP built
Helen	Oak	Hicks	2	*3000*	25	17	0	1	0	*2*	2.37	B	Light industrial. Near Hicks: LT lane, no SWs. Hicks stoplight.	Most N-SW, some S-SW	Bike Lanes 5.5-12.5-12.5-5.5	Low	Stripe 5.5' bike lanes	**12.5**	**5.5**	1.17	*12*	Medium	Increases to high priority if Hicks SP built
Wilmette	Rohlwing	Twin Lakes	2	*4000*	25	17	0	1	0	*1*	2.39	B	multi family N, office S. No parking N-side.	Both SWs	Bike Lanes 5.5-12.5-12.5-5.5 if S-parking removed, else combined bike/parking lanes 7-11-11-7	Low	Stripe 5.5' bike lanes	**12.5**	**5.5**	1.19	1	Medium	
Illinois	Roselle	Oxford	2	*3000*	25	17	0	1	0	*0*	2.13	B	Some stretches with no parking allowed.	Both SWs	If no parking, then Bike Lanes 5-13-13-5, otherwise combined bike/parking lanes 7-11-11-7.	Low	Combined Bike/Parking Lanes	**11.0**	**7.0**	0.93	12	Medium	Bike lanes better from a purely technical basis
Illinois (E-bd)	Oxford	Quentin	2	*5000*	25	23	0	1	70	*0*	2.55	C	LT lane and taper to Quentin	Both SWs	Either bike lane w/parking 8-5-11, or SLM	Low	Stripe 5' bike lane	**11.0**	**5.0**	1.63	12	High	
Illinois (W-bd)	Oxford	Quentin	2	*5000*	25	17	0	1	0	*0*	2.39	B	Signed bike route. Fremd HS.	Both SWs	W-bd bike lane: 5-12	Low	Stripe 5' bike lane	**12.0**	**5.0**	1.41	12	High	
Illinois	Quentin	Plum Grove	2	*5000*	30	17	0	1	0	*0*	2.54	C	LT lane @Plum Grove. 2 parks. S-SP Elm-Quentin, Cardinal Park-Brockway. Quentin stoplight.	Both SWs	Bike Lanes: 5-13-13-5. Requires more parking prohibitions than exists now, but very few home fronts affected	Low	Stripe 5' bike lanes, if all parking prohibited.	**13.0**	**5.0**	1.34	12	High	
Illinois	Plum Grove	California	2	*5000*	30	17	0	1	0	*0*	2.54	C	Some N-SW gaps Benton-California. LT lane, stoplight @ Plum Grove	Both SWs	Bike Lanes: 5-13-13-5	Low	Stripe 5' bike lanes, if all parking prohibited.	**13.0**	**5.0**	1.34	12	High	
Illinois	California	Hicks	2	*5000*	30	21.5	0	1	0	*0*	1.68	B	Stoplight, LT lane @ Hicks. W of Hicks (Rolling Meadows) goes to Rohlwing SP	S-SW	Bike Lanes: 5.5-17-17-5.5	Low	Stripe 5' bike lanes, if all parking prohibited.	**17.0**	**5.5**	0.21	12	High	
Industrial	Hicks	IL 53	2	5400	30	16	0	1	0	*4*	3.42	C	Not in Palatine	None	Bike Lanes		None - not in Palatine	16.0	0.0		12		
Perrigrine	Nightingale	Stonebridge	2	*1500*	25	17	0	1	2	*0*	1.81	B	No parking - school hours. Unprotected Quentin Xing.	Both SWs	Combined Bike/Parking Lanes 7-11-11-7	Low	None	17.0	0.0		2		
Euclid	Roselle	Harper College												None			Add SP/SW one side; (SW on other)				0	High	Other side SW low priority
Euclid	Harper College	Old Forge												Both-SW/SP			Fix SW connectivity NW corner of Quentin				0	Medium	
Euclid	Old Forge	Brockway												None			Add SP/SW one side; (SW on other)				0	High	Other side SW low priority
DuPont	W-end	Plum Grove	2	500	25	11	0	0	1	*0*	2.07	B		Some S-SW	Signed Bike Route	Low	None	11.0	0.0		1		
Emerson	Meacham	West End	2	*1000*	25	12	0	0	1	*0*	2.31	B	signed bike route	S-SW	Not in Palatine		None - not in Palatine	12.0	0.0		0		
Algonquin	Kembley	E-end												N-SP			None				0		

Segment	From (W/N)	To (E/S)	Lanes	Traffic ADT	Speed Limit	Lane Width	Extra Width	Gutter Pan	Park Occ%	% Truck	BLOS score	BLOS grade	Comments	SidewalkStatus	Feasible on-road facility type	Sidepath Feasibility	Recommendation	Rec. Lane Width	Rec. Striped Width	New BLOS score	Public priority points	Priority	Implementation Notes
Roselle	Palatine	Shire	2	13700	45	12	0	1	0	*2*	4.38	D	4' asphalt carriage path/SWs	Both SWs		High	Improve E-SP	12.0	0.0		8	Medium	
Roselle	Shire	Algonquin	4	21300	45	12	0	2	0	*2*	4.25	D	CLTL	none		High	Add E-SP	12.0	0.0		8	High	
Sterling	Dundee	US14	2	*4000*	*30*	17	0	1	1	*2*	2.75	C	Vast majority of parcels have off-road parking	Both, w/ W-gap S-end	Combined Bike/Parking Lanes 7-11-11-7. Or, add bike lanes 5-13-13-5 and disallow parking.	Low	Stripe 5' bike lanes, if all parking prohibited.	**13.0**	**5.0**	1.56	1	Medium	
Middleton	Hidden Hills	Palatine	2	*2000*	25	11	0	0.5	1	*0*	2.77	C	Trail link to W @ Wilson; trail S of Palatine	Most E-SW, some W-SW	Crescent better for connectivity S of Palatine; (unprotected Palatine Xing)	Low	None	11.0	0.0		1		
Crescent	Quentin	Palatine	2	*1250*	*25*	12.5	0	1	5	*0*	2.41	B	Unprotected crossing of Palatine	Both, but E-gap S-end	Signed Bike Route	Low	Sign as Bike Route; Palatine Xing warnings	12.5	0.0		0	Medium	Only if trail link/bridge between Palatine and West Leonard
new trail	Crescent/ Palatine	W. Leonard															Add trail link, bridge; Palatine Xing warnings				0	Medium	
Crescent	W. Leonard	Kenilworth	2	*500*	*25*	9	0	0	0	*0*	2.26	B		None	Signed Bike Route	Low	Sign as Bike Route	9.0	0.0		0	Medium	Only if trail link/bridge between Palatine and West Leonard
Signed route	Crescent/ Kenilworth	Perrigrine/ Skylark											Several turns on quiet residential roads		Signed Bike Route	Low	Switch to wayfinding Bike Route signs					Low	
Quentin	Lake-Cook	Dundee	2	17000	45	12	0	2	0	*3*	4.72	E	Decade-long, road expansion project being designed.	Some E-SP		High	Add sidepath	12.0	0.0		6	Highest	
Quentin	Dundee	Lakeview	4	14700	40	12	0	2	0	*3*	4.21	D		none		Low-medium W	Fill W-SW gap; (add E-SW)	12.0	0.0		2	Highest	E-SW medium priority
Quentin	Lakeview	US14	4	14700	40	12	0	2	0	*3*	4.21	D		W-SW		Low-medium W	Add E-SW	12.0	0.0		2	Medium	
Quentin	US14	Colfax	4	17100	40	12	0	2	0	*3*	4.28	D	LT lanes @ Baldwin, Colfax	E-SW		Medium E	Add W-SW; (widen E-SW to sidepath width)	12.0	0.0		2	Medium	Widening E-SW low priority
Quentin	Colfax	St. John's	4	20400	40	12	0	2	0	*3*	4.37	D	RR Xing	none		High	Fill E-SW gap; (fill W-SW gap)	12.0	0.0		2	Highest	W gap medium priority
Quentin	St. John's	Crescent	4	20400	40	12	0	2	0	*3*	4.37	D	4' median	Both SWs		Low-medium	None	12.0	0.0		2		
Quentin	Crescent	Palatine	4	20400	40	12	0	2	0	*3*	4.37	D	4' median	W-SW, nearby E trail in park		Low-medium W	Complete E-SW	12.0	0.0		2	Medium	
Quentin	Palatine	Euclid	4	*15000*	35	12	0	2	0	*3*	4.11	D	turn lanes, medians (painted and rumbled)	Both SWs		Low-medium (W better)	None	12.0	0.0		3		
Quentin	Euclid	Highland	5	*12000*	35	12	0	2	0	*3*	3.88	D		E-SP		Medium	Add W-SW	12.0	0.0		3	Medium	
Elm	Palatine	Helen	2	*1250*	25	11	0	1	2	*0*	2.55	C	stop signs every street	Both N of Kenilworth, none S	Signed Bike Route	Low	None	11.0	0.0		3		Cedar is a better option in this area
Elm	Helen	Dorset											bike path only, no roadway				None				3		
Elm	Dorset	Illinois	2	*1250*	25	12.5	0	1	4	*0*	2.40	B		Both SWs	Signed Bike Route	Low	None	12.5	0.0		3		
Elm	Stonehedge	Perrigrine	2	*1500*	25	12.5	0	1	4	*0*	2.49	B	Perrigrine has no traffic control @Quentin	Both SWs	Signed Bike Route	Low	None	12.5	0.0		3		
Elm/ Stonehedge	Illinois	Perrigrine	2	*1500*	25	12.5	0	1	4	*0*	2.49	B	Already signed	Both SWs	Signed Bike Route	Low	Switch to wayfinding Bike Route signs	12.5	0.0		3	Low	
Cedar	Wood	Palatine	2	*1000*	25	14	0	1	5	*0.5*	2.16	B	4-hour parking. Wood-Wilson signed now.	Both SWs	Signed Bike Route. Optional: use SLMs 4' from curb on longer "no parking" stretches.	Low	Sign as Bike Route	14.0	0.0		2	Medium	
Cedar	Palatine	Pleasant Hill Blvd	2	*2500*	25	14	0	1	1	*0.5*	2.57	C	Unprotected Xing (no light/stop) @ Palatine.	Both SWs	If no parking, bike lanes 5-10-10-5. If parking maintained: signed bike route	Low	Stripe 5' bike lanes, if all parking prohibited.	14.0	0.0		2	High	Lesser backup: use Elm as signed bike route, with Helen, Glencoe links
Cedar	Pleasant Hill Blvd	Illinois	2	*2500*	25	12.5	0	1	1	*0.5*	2.77	C	No parking S of Michigan	Both SWs	If no parking, SLMs 4' from curb. If parking maintained: signed bike route.	Low	Shared Lane Markings, if all parking prohibited.	12.5	0.0		2	High	Lesser backup: use Elm as signed bike route
new trail	For. Pres. Trail	Dundee @Smith											Currently a forest pres. maintenance road				Add trail or route link				7	High	Implemented by Forest Preserve
Smith	Dundee	Cunningham	2	6600	30	11	0	1	0	*1.5*	3.74	D	CLTL. Light @ Dundee. Village wants For Pres trail link to Smith/Dundee intersection	Both SWs	SLM, although not up to BLOS goal. If CLTL removed, 5.5-13.5-13.5-5.5 bike lanes.	Low E, Medium W	Widen W-SW to sidepath width	11.0	0.0		7	Medium	If Forest Preserve link above is added
Smith	Cunningham	US14	2	*4000*	30	11	0	2	0	*1.5*	3.49	C	parks & schools; CLTL	W-SW, some E-SW	SLM, although not up to BLOS goal. If CLTL removed, 5.5-13.5-13.5-5.5 bike lanes.	Low-medium	Complete E-SW, stripe 5.5' bike lanes	**13.5**	**5.5**	1.21	7	Low	Becomes high priority if CLTL removed and trail link added further north
Smith	US14	Cornell	2	6500	*25*	13	0	2	0	*1*	3.23	C	Parking permitted, but no one does	Both SWs	SLM, although not up to BLOS goal. Disallow parking, add bike lanes 5-10-10-5.	Low	Stripe 5' bike lanes, if all parking prohibited.	**10.0**	**5.0**	2.08	7	Low	Becomes high priority if CLTL removed and trail link added further north
Smith	Cornell	Colfax	2	6500	*25*	14	0	2	0	*1*	3.10	C	Parking permitted, but no one does	Both SWs	SLM, although not up to BLOS goal. Disallow parking, add bike lanes 5-11-11-5.	Low	Stripe 5' bike lanes, if all parking prohibited.	**11.0**	**5.0**	1.87	7	Low	Becomes high priority if CLTL removed and trail link added further north

Segment	From (W/N)	To (E/S)	Lanes	Traffic ADT	Speed Limit	Lane Width	Extra Width	Gutter Pan	Park Occ%	% Truck	BLOS score	BLOS grade	Comments	SidewalkStatus	Feasible on-road facility type	Sidepath Feasibility	Recommendation	Rec. Lane Width	Rec. Striped Width	New BLOS score	Public priority points	Priority	Implementation Notes
Smith	Colfax	Wood	2	6500	*25*	12	0	2	0	*1*	3.36	C	Turn lanes throughout	Both SWs	SLM 4' from curbs, although not up to BLOS goal.	Low	Shared Lane Markings	12.0	0.0		7	Low	Becomes high priority if CLTL removed and trail link added further north
Smith	Wood	Wilson	2	6500	*25*	12	0	2	0	*1*	3.36	C	Turn lanes throughout; already signed as route	Both SWs	SLM 4' from curbs, although not up to BLOS goal. Add wayfinding signage.	Low	None	12.0	0.0		7		
Smith	Wilson	Palatine	2	6500	*25*	12	0	2	0	*1*	3.36	C	Turn lanes throughout	Both SWs	SLM 4' from curbs, although not up to BLOS goal.	Low	None	12.0	0.0		7		
Brockway	US14	Colfax	2	*1000*	30	11	0	0	1	*0.5*	2.65	C	No Parking - east side	Both SWs	Signed Bike Route	Low	None	11.0	0.0		2		
Brockway	Colfax	Wood	2	*1500*	30	14.5	0	1	5	*1*	2.54	C		Both SWs	Signed Bike Route. If parking not allowed on either side, SLM's 4' from that curb	Low	Sign as Bike Route	14.5	0.0		2	High	
Brockway (S-bd)	Wood	Emmetts driveway	2	*2500*	*25*	15.5	13	1	100	*1.5*	2.45	B		Both SWs	SLM, in middle of lane, to avoid diag. parking	Low	Shared Lane Markings	15.5	13.0		1	High	
Brockway (N-bd)	Wood	Emmetts driveway	2	*2500*	*25*	13	8	0	80	*1.5*	2.44	B	S of here, becomes diagonal parking on this side	Both SWs	SLM, 11' from curb, to avoid door zone	Low	Shared Lane Markings	13.0	8.0		1	High	
Brockway	Emmets driveway	Palatine	2	*2500*	30	12	8	1	100	*1.5*	3.14	C	Some diagonal, some parallel parking	Both SWs	Shared Lane Markings. Middle of lane where diagonal parking. 11' from curb where parallel parking. Otherwise, 4' from curb.	Low	Shared Lane Markings	12.0	8.0		2	High	
Brockway	Palatine	Helen	2	*1000*	25	12	0	0	3	*0*	2.33	B		Both SWs	Signed Bike Route	Low	Sign as Bike Route	12.0	0.0		1	Medium	
Brockway	Illinois	Boardwalk	2	*500*	25	11	0	1	3	*0*	2.09	B		W-SW	Signed Bike Route	Low	Sign as Bike Route	11.0	0.0		0	Medium	
Brockway	Boardwalk	Euclid	2	*500*	25	11	0	1	3	*0*	2.09	B		none	Signed Bike Route	Low	Sign as Bike Route; (add W-SW)	11.0	0.0		0	Medium	(W-SW lower priority)
Plum Grove	Cunningham	Russet	2	*500*	*25*	8.5	0	0	0	*0*	2.30	B		E-SW	Signed Bike Route	Low	Sign as Bike Route	8.5	0.0		0	Low	High priority if Smith W-SP, forest pres link built
Plum Grove	US14	Colfax	2	5900	30	17.5	0	1	1	*1.5*	2.78	C	Long N-bd turn lanes @US14; turn lanes S-bd @Colfax	Both SWs	Combined Bike/Parking Lanes 7.5-11-11-7.5	Low	None	17.5	0.0		2		
Plum Grove	Colfax	Wilson	2	5900	30	17.5	0	1	1	*1.5*	2.78	C		Both SWs	Combined Bike/Parking Lanes 7.5-11-11-7.5	Low	None	17.5	0.0		2		
Plum Grove	Wilson	Palatine	2	5900	30	12	0	1	1	*1.5*	3.59	D	Turn lanes, median	Both SWs	SLMs not adequate, limited options	Low	None	12.0	0.0		2		
Plum Grove	Palatine	Michigan	2	10500	30	12	0	2	0	*1.5*	3.87	D	CLTL	Both SWs	SLMs insufficient. Bike lanes possible w/ restriping: 5-10-10-10-5 or 5.5-14.5-14.5-5.5 (no CLTL).	Low	None	12.0	0.0		2		
Plum Grove	Michigan	Euclid	4	*15500*	35	12	0	2	0	*2*	3.93	D	Much of S part not in Palatine	Both w/ W-SW gap S-end	Bike lanes feasible if lanes narrowed	Low	None	12.0	0.0		2		
Plum Grove	Euclid	DuPont	6	*20000*	35	12	0	2	0	*2*	3.85	D	Not in Palatine	E-SW		Low	None	12.0	0.0		3		
Hawk/Heron	trail	Benton	2	*500*	25	12.5	0	1	1	*0*	1.90	B		Both SWs	Signed Bike Route	Low	Sign as Bike Route	12.5	0.0		2	Medium	
Wren/Heron	trail	Benton	2	*500*	25	12.5	0	1	1	*0*	1.90	B		Both SWs	Signed Bike Route	Low	Sign as Bike Route	12.5	0.0		2	Medium	
Benton	Heron	Wood	2	*1400*	25	12.5	0	1	5	*0*	2.47	B	Already signed as route	Both SWs	Signed Bike Route. Optional: use SLMs 4' from curb on longer "no parking" stretches.	Low	Switch to wayfinding Bike Route signs	12.5	0.0		2	Low	
Russet	Plum Grove	Heatherlea	2	*500*	*25*	12	0	1	0	*0*	1.95	B		Both SWs	Signed Bike Route	Low	Sign as Bike Route	12.0	0.0		0	Low	High priority if Smith W-SP, forest pres link built
Heatherlea/ Crestview	Russet	Carpenter	2	*500*	*25*	12	0	1	0	*0*	1.95	B		Both SWs	Signed Bike Route	Low	Sign as Bike Route	12.0	0.0		0	Low	High priority if Smith W-SP, forest pres link built
Hicks	Lake-Cook	Constitution												None			Add W-SW; (add E-SW)				0	High	Other side SW low priority
Hicks	Constitution	Rand												Both SWs	No SW connection E corner Rand intersection		Add SW connection link at Rand				1	Medium	
Hicks	Rand	Deer Grove link												W-SW, some E-SW			Complete E-SW				0	Medium	
Hicks	Deer Grove link	N of Dundee											Forest Preserve trail on W	Some E-SW			Complete E-SW				0	Medium	
Hicks	N of Dundee	Dundee											Newly-constructed trail link	W-SP, E-SW			none				0		
Hicks	Dundee	Home												E-SW, some W-SW			Fill W-SW gap				4	High	Access to forest preserve trail
Hicks	Home	Baldwin												Both SWs			None				4		
Hicks	US14	Helen												none			Add SP/SW one side; (SW on other)				4	High	
Hicks	Helen	Illinois	4	13800	40	12	0	2	0	*4*	4.41	D	CLTL	None	*(Restripe for WCL)*	Medium	Add SP/SW one side - W?; (SW on other)	12.0	0.0		*12*	High	Other side SW low priority
Rand	Lake-Cook	Hicks												sparse NE-SW			Add SW one side; (SW on other)				0	High	Other side SW low priority
Rand	Hicks	Diane												Some SWs both sides			Complete SW on one side; (and the other)				0	High	Other side SW medium priority.

Segment	From (W/N)	To (E/S)	Lanes	Traffic ADT	Speed Limit	Lane Width	Extra Width	Gutter Pan	Park Occ%	% Truck	BLOS score	BLOS grade	Comments	SidewalkStatus	Feasible on-road facility type	Sidepath Feasibility	Recommendation	Rec. Lane Width	Rec. Striped Width	New BLOS score	Public priority points	Priority	Implementation Notes
Rand	Diane	Old Hicks												Some SWs both sides			Add S/E-SP; (N/W-SW)				0	High	S/E tight - 18' available. N/W medium priority.
Rand	Old Hicks	Dundee												Some SWs both sides			Complete SW on one side; (and the other)				0	High	Other side SW medium priority.
Rand	Dundee	IL53												Both SWs			None				1		
Old Hicks	Coach	Aster	2	*4000*	*30*	18	0	1	2	*1*	2.44	B	Access to Falcon Park and Rec Center	E-SW, some W-SW	Combined bike/parking lanes 7.5-11.5-11.5-7.5	Low	Combined Bike/Parking Lanes	**11.5**	**7.5**	1.20	1	Medium	
Old Hicks	Aster	Hicks	2	*4000*	*30*	12	0	1	0	*1*	3.30	C	Left-turn lane @ Hicks. One W-SW crossing.	Both SWs	Shared Lane Markings, but below target BLOS.	Medium W	Widen W-SW to sidepath width	12.0	0.0		1	Low	N-end transition to Combined Bike/Parking Lanes at midblock crosswalk
Diane	Lynda	Rand	2	*800*	*25*	10.5	0	1	0	*0.5*	2.41	B		None	SLMs, if no parking. Otherwise, Bike Route signage.	Low	Add Shared Lane Markings, (SW on one side)	10.5	0.0		1	Medium	SW lower priority
Lynda	Diane	Dundee	2	*800*	*25*	10.5	0	1	0	*0.5*	2.41	B	S-end has E-SW	Some E-SW	SLMs, if no parking. Otherwise, Bike Route signage. Widen E-SW to SP width @ S-end.	Low	Add Shared Lane Markings and SW on one side; widen E-SW to SP at S-end.	10.5	0.0		1	Medium	SW lower priority
Dundee	Lynda	existing mall trail												S-SW		Medium S	Improve Dundee crossing, (widen S-SW to SP width)				0	Medium	Add "pork chop" island, SE corner of Lynda/Dundee Xing
mall trail	Dundee	Aspen Park trail											Existing trail from Dundee S-SW to parallel mall road.				Add interior mall road Xing, link between existing trails					Medium	Cross interior mall road at stop sign
trail	Deer Grove Xing mall	Aspen Park											Existing trail				None						
Aspen Park	trail	Rohlwing											Through parking lot	None		High	Add sidepath					Low	
Rohlwing	Aspen Park	Cunningham	2	*1000*	25	12.5	0	1	0	*0.5*	2.29	B		Both SWs	If no parking anywhere, SLMs 4' from curbs.	Low	Shared Lane Markings	12.5	0.0		9	High	
Rohlwing	Cunningham	Baldwin	2	*4000*	25	17	0	1	0	*0.5*	2.33	B	no parking by schools, except "alcove" by grade school. Check elsewhere.	Both SWs	If no parking anywhere, Bike Lanes 5.5-12.5-12.5-5.5. If parking, Combined bike/parking lanes 7-11-11-7.	Low	Combined Bike/Parking Lanes	**11.0**	**7.0**	1.13	9	High	
Rohlwing	Baldwin	Palatine	2	*8000*	25	17	0	1	2	*0.5*	2.72	C	No Parking - south block	Both SWs	If no parking anywhere, Bike Lanes 5.5-12.5-12.5-5.5. If parking, Combined bike/parking lanes 7-11-11-7.	Low	Combined Bike/Parking Lanes	**11.0**	**7.0**	1.54	9	High	
Rohlwing	Palatine	Wilmette	2	*9000*	25	17	0	1	0	*0.5*	2.74	C		Both SWs	If no parking anywhere, Bike Lanes 5.5-12.5-12.5-5.5. If parking, Combined bike/parking lanes 7-11-11-7.	Low	Combined Bike/Parking Lanes	**11.0**	**7.0**	1.54	9	High	
Rohlwing	Wilmette	Berdnick	4	*9000*	25	12	0	1	0	*2*	3.30	C	US14 stoplight, turn lanes	Both SWs N of US14, none S	SLMs in thru lanes	Medium, esp. S-end	Shared Lane Markings, fill SW gaps across US14 and RR	12.0	0.0		9	High	
Rohlwing	Berdnick	Industrial	2	*8000*	35	12	0	2	0	*3*	4.14	D	CLTL; not in Palatine	E-SP			None	12.0	0.0		9		
N Baldwin	Nichols	Gardenia	2	*2500*	*30*	17	0	1	0	*1*	2.34	B		W-SW	Bike lanes 5.5-12.5-12.5-5.5	Low	Stripe 5.5' bike lanes	**12.5**	**5.5**	1.14	0	Medium	
N Baldwin	Gardenia	Dundee	2	*5000*	*30*	11	0	1	0	*1*	3.53	D	many multi-family. CLTL.	W-SW, E-SW S-end	SLMs 4' from curbs. Or, remove CLTL and restripe for bike lanes	Low	Shared Lane Markings	11.0	0.0		0	Medium	
N Baldwin	Dundee	east bend	2	*1500*	*30*	17	0	1	0	*1*	2.08	B	many multi-family	None	Bike lanes 5.5-12.5-12.5-5.5 w/ SLMs @Dundee turn lanes	Low	Stripe 5.5' bike lanes; add sidewalk one side	17.0	0.0		0	Medium	
new trail	N Baldwin	Baldwin Ct											Between mall and apartment parking				Trail link				0	High	
Williams	Rand	Cooper	2	*5000*	25	17	0	1		*0.5*	2.44	B	wide road/ no parking west side	Both SWs	Bike lanes 5.5-12.5-12.5-5.5 where no parking, combined bike/parking lanes 7-11-11-7 where parking allowed	Low-medium	Stripe 5.5' bike lanes	**12.5**	**5.5**	1.24	0	Medium	Increases to high priority if N Baldwin trail gap built
Williams	Cooper	Anderson	2	*4000*	25	17	0	1	1	*0*	2.29	B	parking allowed both sides	Both SWs	Combined Bike/Parking Lanes 7-11-11-7	Low	Combined bike/parking lanes	**11.0**	**7.0**	1.10	0	Medium	Increases to high priority if N Baldwin trail gap built
Williams	Anderson	Babcock	2	*4000*	25	17	0	1	1	*0*	2.29	B	parking allowed both sides	Both SWs	Combined Bike/Parking Lanes 7-11-11-7	Low	Combined bike/parking lanes	**11.0**	**7.0**	1.10	2	High	
Winston	Anderson	Joyce	2	*2500*	25	17	0	1	1	*0*	2.05	B	light @ Palatine Rd.	E-SW, S-end W-SW	Combined Bike/Parking Lanes 7-11-11-7	Low	Combined bike/parking lanes	**11.0**	**7.0**	0.86	3	Medium	
Winston	Joyce	Kenilworth	2	*2500*	25	12.5	0	1	1	*0*	2.71	C	To Twin Lakes trail	Both SWs	Signed Bike Route	Low	Sign as Bike Route	12.5	0.0		3	Medium	
Wilke	Rand	Anderson	2	*6500*	30	12	0	0.5	0		3.40	C	Adjacent to Rte 53. Not Palatine's road(?). Some unincorporated.	W-SW most (in Palatine)		High (Low S-end)	Complete W-SW when incorporated	12.0	0.0		1	Low	

Appendix 5
Summary of Major Funding Sources

Some of the most commonly used funding sources for bicycle and pedestrian projects are listed below. The funding landscape is always evolving. Check http://www.bikelib.org/bike-planning/bikeway-funding-tips/ for updates.

Illinois Transportation Enhancements Program (ITEP)

- Federal source with 80% federal/state, 20% local cost shares.
- Administered by IDOT. Irregular application cycle averaging every two years.
- Overall historical average of $12M/year in Illinois for bikeway projects, but widely varying including $49M in October, 2010.
- Very high demand to supply ratio (averaging 8:1).
- Emphasis on transportation potential and inclusion in a larger, officially-adopted plan.

With more stringent federal engineering standards and review processes, this source is better suited for larger ($400K to $1M+) bikeway projects and those requiring substantial engineering work, such as bridges.

Illinois State Bike Grant Program

- State source with 50% state, 50% local cost shares.
- Reimbursement grant administered annually (March 1) by IDNR.
- Averages $2.5M per year, with a $200K limit (except for land acquisition projects). **However**, the program was cancelled 2008-2012 due to the State's financial crisis.
- Typically a 2:1 ratio of applications to grants.
- Only off-road trails and bikeways are eligible.

Much simpler process and standards as these remain local, not IDOT, projects. Good for simpler projects and those that can easily be phased. Many agencies prefer these over ITEP, even though the cost share is higher, due to grant administrative burden and costs.

Recreational Trails Program

- Federal source with 80% federal/state, 20% local cost shares.
- Administered by IDNR with IDOT. Annual March 1 deadline. Long delays between application and grants, in recent years.
- $1-2M per year. About half is dedicated for non-motorized, off-road trails emphasizing underserved user groups. $200K limit (except for land acquisition projects).
- Much less competitive, with application demand usually not much more than grant supply.
- In addition to government agencies, non-profit organizations may apply.

This has been an underutilized source. Trails serving other user groups (equestrian, hiking, cross-country ski, snowmobile) get priority, so partnering with these uses will increase chances for funding. A good target range is $100-200K.

Illinois Safe Routes to School program

- Federal source paid entirely (100%) by federal/state, with no local cost share.
- Administered by IDOT. Grant cycles have been held once every 1-2 years.
- Usually $7M per year; reimbursement grants.
- 70-90% for infrastructure projects within 2 miles of schools serving any K-8 grades, with an application maximum of $250K for up to 3 projects.
- 10-30% for education and encouragement programs for the same grades, with an application maximum of $100K for up to 3 projects. Schools, school districts, and non-profits may also apply for these non-infrastructure funds.
- Demand to supply ratio was 10:1 in 2007 and then 2:1 in 2008 and 2010, when current application maxima were adopted. Non-infrastructure grants are much less competitive.
- Preparation of IDOT's on-line "School Travel Plan" is a prerequisite for grant applications.

Many of this plan's recommendations are eligible for this funding source. Again, geographic diversity in grant selections gives Palatine an advantage.

Non-Government Sources

Private foundations, local businesses and individual donors can be another resource, especially for high profile projects. The national focus on public health is also creating more opportunities for active transportation. Many high profile organizations, such the Robert Wood Johnson Foundation, are committing resources to projects that promote public health.