# CITY OF OTTAWA BICYCLE PLAN

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## CITY OF OTTAWA BICYCLE PLAN Executive Summary

The City of Ottawa has developed this plan to become a safer, more pleasant place for residents and visitors who bicycle, whether for recreation or for transportation, by choice or by necessity. By completing this plan, Ottawa joins an increasing number of Illinois cities desiring to be bike-friendly – and puts the City in better position to win future bikeway and trail grants.

Detailed recommendations specify a preferred network for bicycle travel throughout the City, while education, encouragement, and enforcement resources are identified to leverage infrastructure investments and further improve bicycling conditions.

A grid of "routes to study" came from City staff and consultant, the City's Bike Path Committee, and a public brainstorming workshop. Each potential network segment was objectively analyzed for the most appropriate bikeway type based on feasibility, safety, implementation cost, and other technical and strategic factors.

In some cases, the plan called for off-road bikeways and trails. However, in many others, an on-road designated bikeway was deemed best, for the above reasons. This is counterintuitive to most people (especially non-cyclists), so the plan explains intersection and car-bike safety dynamics to justify its on-road recommendations. While the plan's primary audience is the casual adult bicyclist, the plan addresses the lower mental and physical capabilities of children by calling for continuous sidewalks along roads with an on-road recommendation.

Suggested projects are assigned a priority of high or medium. Examples include on-road bike lanes on parts of Champlain, Etna, Main, and McKinley; bike route network wayfinding signage on some relatively quiet residential streets, and bridge improvements over Interstate 80 and the Illinois River. Also, other possible projects are listed as backup or other options.

In addition to retrofit improvements to existing streets and road corridors, the plan suggests road design standards and other ordinances to ensure future development is bike-friendly.

The plan outlines strategies on how City staff and volunteers can make the plan a reality, through phased and opportunistic implementation, cost efficiencies and external grants, and routine consideration of bicycling as a part of relevant City operations. A possible long-term goal is national "Bicycle-Friendly Community" designation.

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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 —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 City of Ottawa wants to be a bicycle-friendly community for its residents and visitors. Already, Ottawa is recognized as a destination for cyclists, with nearby Starved Rock State Park and the I&M Canal State Trail running through town. Building off this momentum, the City has developed this plan for bikeway networks and programs facilitating travel on two wheels throughout Ottawa. This plan is a detailed extension of the ideas and principles in the 2002 City of Ottawa Comprehensive Plan's trail networking plan.

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 Ottawa. 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 Ottawa.

It should be noted that while the bikeways network highlights key routes to facilitate travel in and around Ottawa, 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.

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<sup>&</sup>lt;sup>1</sup> 2001 National Household Travel Survey

## 2 Bikeway Types in the Ottawa 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 Ottawa include the I&M Canal State Trail and the Riverwalk trail.



Figure 2.1. Multi-use trail.

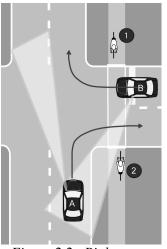


Figure 2.2. Right turns across sidepaths.

## **Sidepaths**

Sidepaths are trails running immediately parallel to a roadway, essentially a widened sidewalk. 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.

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:

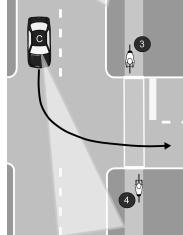


Figure 2.3. Left-turn across sidepath.

- 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
- 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.

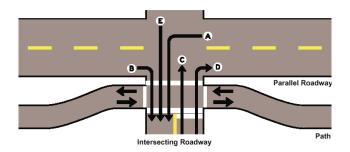


Figure 2.4. Intersection design methods to reduce sidepath conflicts.

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 <u>and</u> 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. 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.

There are various permitted 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 combines 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.

Another 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



Figure 2.7. Combined Bike/Parking Lanes.

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).



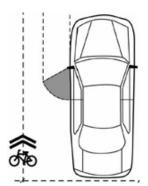


Figure 2.8. Shared Lane Marking (or "Sharrow").

## **Shared Lane Markings**

Pavement markings inform cyclists of optimum lane positioning while 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. Urbana is one of the Illinois cities using these.

The 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 parking, the center of the marking shall be

Figure 2.9.

11 feet (or more) from the curb, placed right after an intersection and spaced at intervals of 250 feet thereafter. On such roads with <u>no</u> occupied parking, the center of the marking shall be 4 feet (or more) from the curb. See MUTCD chapter 9 for more installation guidance. The shared lane marking also can be used to indicate correct straight-ahead bicycle position (Figure 2.9) at intersections with turn lanes.

#### **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.

## **On-road Bikeway Liability**

Since 1998, Illinois towns have faced a liability disincentive for on-road bikeways, such as those listed above. When towns designate that a particular route is "intended" for use by bikes, they raise their liability for cyclist injury due to road condition from zero to a negligence standard of care. This has dissuaded many communities from adding on-road bikeways.

On the other hand, at least 25 other Illinois communities are known to be proceeding with designated bike lanes and bike routes, despite the situation. Signed bike routes from before 1998 remain in dozens of other towns. The number of known lawsuits resulting from these onroad bikeways has been very minimal, demonstrating that the reaction of the more risk-averse towns may be out of proportion with the actual risk exposure incurred.

Local governments regularly weigh risk exposure against policy implications and services provided to residents for all sorts of facilities and programs. It is recommended that the City proceed with the on-road bikeways listed in this plan, after verifying the risk exposure involved.

<sup>&</sup>lt;sup>2</sup> "On-Road Bicycle Routes and Illinois' Liability Disincentive", League of Illinois Bicyclists, 2008.

## **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 city 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.

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

- **Public Involvement:** On October 1, 2009, a "Public Brainstorming Workshop" was attended by over 25 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 various geographic sections of the City were discussed and reported.
- Consultation with City staff and bike path committee: In addition to the workshop, meetings were held with the Ottawa Bike Path Committee consisting of City staff and residents. The committee guided the project approach and assisted with data collection, while City staff and interns provided much valuable input on existing conditions, data collection, and more.
- **Bicycle Level of Service Analysis:** The Bicycle Level Of Service<sup>3</sup> (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 <a href="http://www.bikelib.org/bike-planning/bicycle-level-of-service/">http://www.bikelib.org/bike-planning/bicycle-level-of-service/</a> BLOS is used in the Ottawa Bicycle Plan to measure existing and future conditions, to set standards for the bikeway network, and to justify recommendations.
- 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.

<sup>3</sup> Landis, Bruce, "Real-Time Human Perceptions: Toward a Bicycle Level of Service," <u>Transportation Research</u> Record 1578 (Washington DC, Transportation Research Board, 1997).

#### **Guiding Principles**

The following guiding principles informed the development of Ottawa'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 throughout the City with target spacing of ½ to 1 mile. 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.
- Emphasize the crossings of natural or man-made barriers such as the Illinois River and Interstate 80.
- 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 network, raise the priority of filling sidewalk or sidepath gaps on at least one side of the road. This recognizes that children and more traffic-intolerant adults will ride on the sidewalk. However, sidewalks with width under sidepath standards should not be designated or marked as part of the bike network.
- 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.
- Try to avoid widening 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 Ottawa Bicycle Plan proposes a network of bicycle routes to facilitate travel to all sections of the city. 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. Some projects are relatively easy. Others require a longer term vision, such as improving bridge accommodations. See the earlier Bikeways Guidelines section for more information on how routes and projects were selected.

#### **Understanding the Maps**

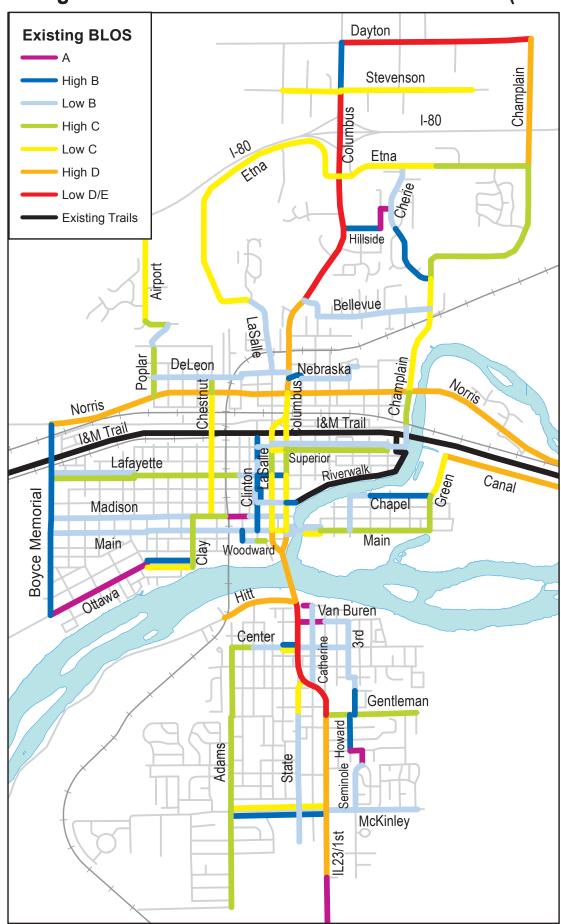
The plan's maps provide a snapshot of needs and recommendations.

- Existing Conditions -- Trails and On-Road Comfort (BLOS Bicycle Level of Service): Shows *existing* on-road conditions for bicyclists on studied roads throughout Ottawa, including, but not limited to, all routes in the proposed network. It also provides information on existing trails.
- **High/Medium Priority Recommended Bikeways Ottawa Bicycle Plan:** Includes on and off road bike facilities, new sidewalks and sidepaths, and other improvements. Superimposed on the recommendation type is the suggested priority, high or medium.
- Map of All Recommended Bikeways Ottawa Bicycle Plan: The above, plus: low-feasibility alternatives or backup routes for nearby segments; additional routes increasing network density; or low priority projects resulting in only minor improvement.
- 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).

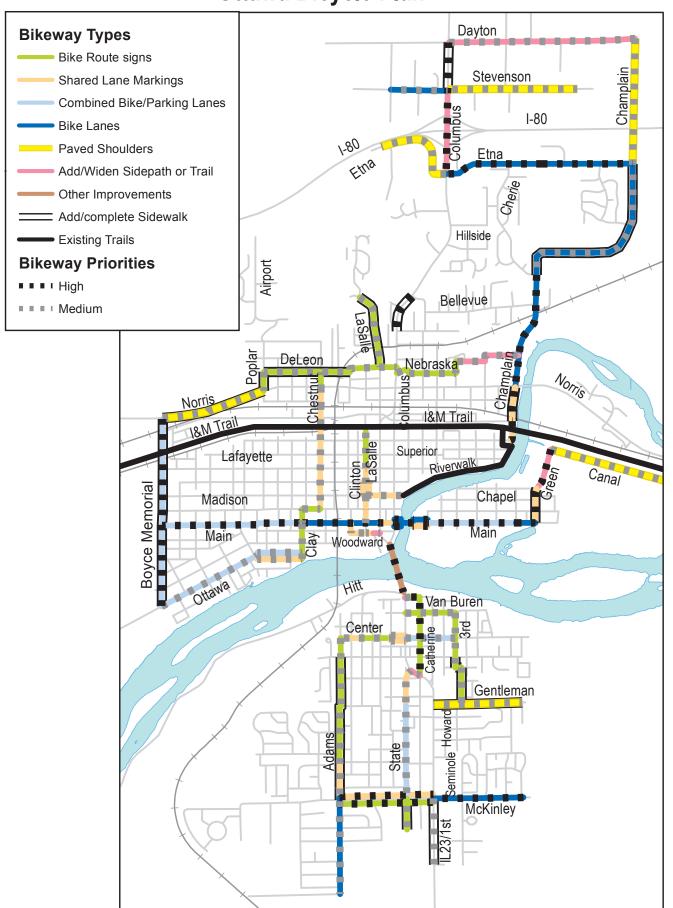
Consider Illinois Route 23 north of Main as an example in using the maps and the spreadsheet in Appendix 2. The existing on-road conditions map shows comfort level downtown is currently a mix of low and high C in terms of Bicycle Level of Service. North of Norris is a mix of low and high D, except for a high B rating between Dayton and Stevenson due to wide paved shoulders. C is acceptable for experienced cyclists, B for casual adult cyclists – the target of this plan.

The recommended projects map calls for two high priority sidewalk improvements. The spreadsheet gives the details: sidewalk on at least one side between Dayton and Stevenson, and adding a west-side sidewalk between Post and Prairie. Low priority between Etna and Post are the addition of a west sidewalk and the widening of the east sidewalk to sidepath width. Retrofitting of the I-80 bridge, or including accommodations when reconstructed, is a high priority. Restriping for bike lanes downtown is presented as a (less likely?) option for consideration. The built-out conditions map shows that downtown bike lanes would improve both LaSalle and Columbus to high B, meeting the target level for the bikeway network.

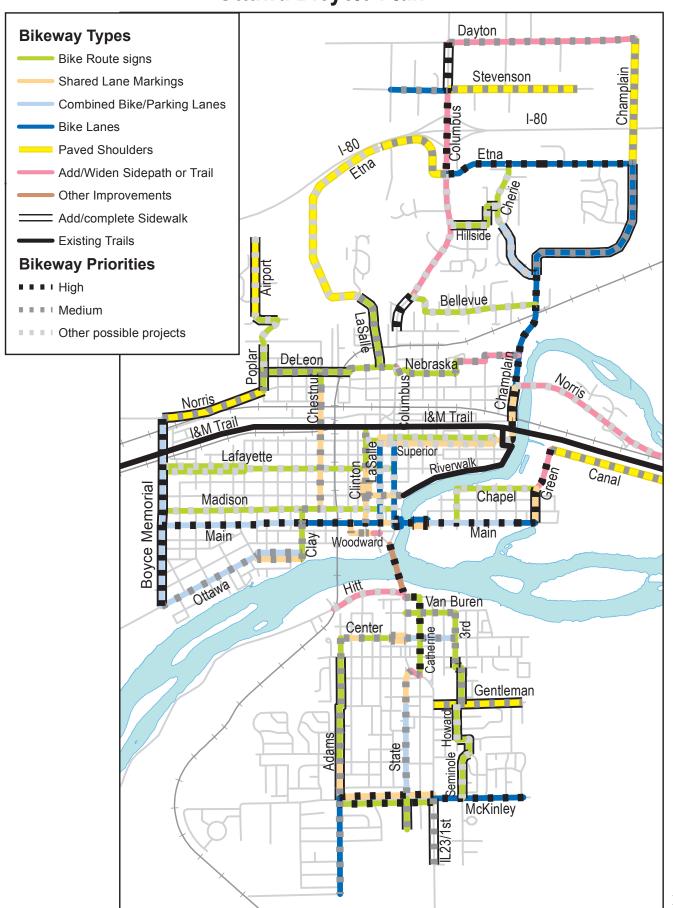
## **Existing Conditions - Trails and On-Road Comfort (BLOS)**



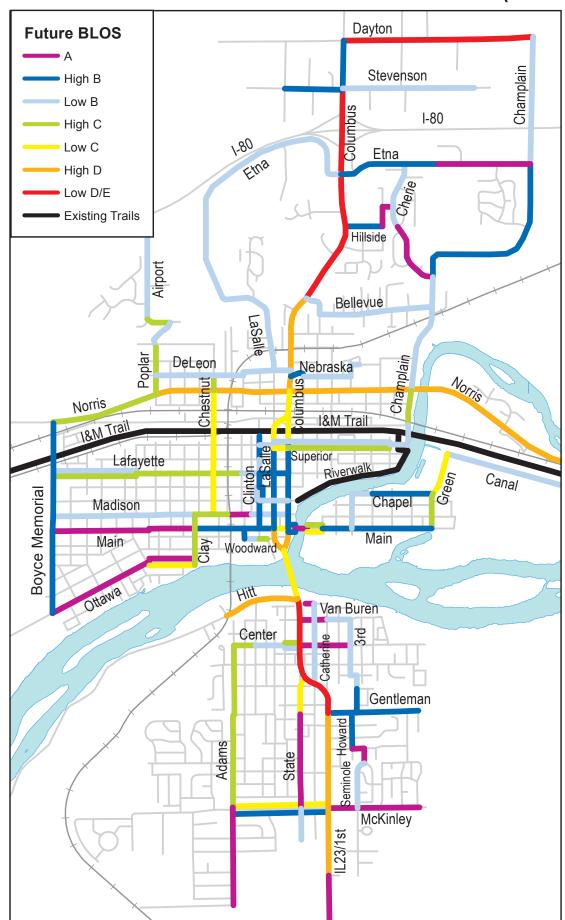
# High/Medium Priority Recommended Bikeways Ottawa Bicycle Plan



# All Recommended Bikeways Ottawa Bicycle Plan



## **Future 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, recommendations and implementation notes, is housed in a spreadsheet that helps generate the maps. See Appendix 2 for the entire dataset by road segment. The tables that follow summarize high and medium priority recommended projects by road name. Listed at the end are other possible projects including: secondary options (low-feasibility or backup routes) for nearby network segments; additional routes increasing network density; or low priority projects less important to the network and resulting in only minor improvement.

Table 4.1 – High Priority Projects										
Segment	From (W/N)	To (E/S)	On Road Recommendation	Off Road Recommendation	Jurisdiction					
Boyce Memorial	US 6/ Norris	Ottawa	Combined bike/parking lanes	Sidewalk Gaps	City					
Catherine	Prospect	IL 23	Signed Bike Route	Sidewalk	City					
Champlain	Cherie	Norris	Bike Lanes		City					
Champlain	Norris	Superior	Shared Lane Markings	Sidewalk Gaps	City					
Etna	IL 23	Champlain	Bike Lanes	Sidepath	County					
Green	Canal	Chapel		Sidepath	City					
Green	Chapel	Main	Shared Lane Markings	Sidewalk	City					
IL23/ Columbus	Dayton	Stevenson		Sidewalk	IDOT					
IL23 (over I-80)	Stevenson	Etna		Sidepath - cantilever bridge	IDOT					
IL23/ Columbus	Post	Prairie		Sidewalk (W)	IDOT					
IL23/bridge	Woodward	Hitt	Other	Sidepath	IDOT					
Main	Boyce Mem.	Clay	Combined bike/parking lanes		City					
Main	Clay	Clinton	Bike Lanes		City					
Main	Clinton	Columbus	Shared Lane Markings		City					
Main	Columbus	Fox River Br	Bike Lanes		City					
Main (E-bd)	Fox River Br	Shabbona	Shared Lane Markings		City					
Main (W-bd)	Fox River Br	Shabbona	Bike Lanes		City					
Main	Shabbona	Grafton	Combined bike/parking lanes		City					
Main	Grafton	Green	Bike Lanes		City					
Mc Kinley (E-bd)	Adams	1st	Signed Bike Route		City					
Mc Kinley (W-bd)	Adams	1st	Shared Lane Markings		City					
Mc Kinley	1st	Dakota	Bike Lanes		City					
Prospect	W-end	Catherine	Signed Bike Route		City					

Table 4.2 – Medium Priority Projects										
Segment	From (W/N)	To (E/S)	On Road Recommendation	Off Road Recommendation	Jurisdiction					
3rd	Van Buren	Glover	Signed Bike Route		City					
3rd	Glover	Gentleman	Signed Bike Route	Sidewalk	City					
Adams	Center	Erickson	Signed Bike Route		City					
Adams	Erickson	Mc Kinley	Shared Lane Markings	Sidewalk	City					
Adams	Mc Kinley	Fosse	Bike Lanes		City					
Canal St	Main	Woodward	Shared Lane Markings		City					
Canal Rd	Green	E of town	Paved shoulders		City					
Center	Adams	Guthrie	Shared Lane Markings		City					
Center	Guthrie	Christie	Signed Bike Route		City					
Center	Christie	IL 23	Shared Lane Markings		City					
Center	IL 23	3rd	Combined bike/parking lanes		City					
Champlain	Dayton	Etna	Paved shoulders	Future sidewalks	City					
	Etna	Cherie	Bike Lanes	Sidewalk	County					
Chestnut	DeLeon	US 6/Norrris	Signed Bike Route		City					
Chestnut	US 6/ Norris	Madison	Shared Lane Markings		City					
Clay	Madison	Ottawa	Signed Bike Route		City					
Clinton	I & M Canal	Lafayette	Signed Bike Route		City					
Clinton	Lafayette	Main	Shared Lane Markings		City					
Dayton	IL 23	Champlain	Granda Larro marringo	Sidepath	County					
DeLeon	Poplar	Sycamore	Signed Bike Route	Sidewalk	City					
DeLeon	Sycamore	Canal	Signed Bike Route	Sidewalk Gaps	City					
DeLeon	Canal	IL 23	Signed Bike Route	Cidowaiii dapo	City					
Etna	Emerald	IL 23	Paved shoulders	Sidepath	City					
Gentleman	IL 23	city limit	Paved shoulders	Sidewalk	City					
Highland	Third	Third	Signed Bike Route	Sidewalk	City					
IL23/ Moore	State	Catherine	Signed blike Houte	Oldewalk	IDOT					
IL23/ 1st	Mc Kinley	S city limits		Sidewalk Gaps	IDOT					
Jefferson	Clinton	Riverwalk	Shared Lane Markings	Oldewalk daps	City					
LaSalle	Forest Park	DeLeon	Signed Bike Route	Sidewalk Gaps	City					
Madison	Clay	Chestnut	Signed Bike Route	Sidewalk daps	City					
Nebraska	Paul	Wake	Signed Bike Route		City					
Ottawa	Boyce Mem.	Leland	Combined bike/parking lanes		City					
Ottawa (E-bd)	Leland	Clay	Combined bike/parking lanes		City					
Ottawa (W-bd)	Leland	Clay	Shared Lane Markings		City					
Paul	IL 23	Nebraska	Signed Bike Route		City					
Poplar	DeLeon	US 6/Norrris	Signed Bike Route	Sidewalk	City					
•	IL 23	Watson	Shared Lane Markings	Sidewalk	City					
State State	Watson	Mc Kinley	Combined bike/parking lanes		City					
State	Mc Kinley	park	Signed Bike Route	Sidewalk	City					
	Veterans	IL 23	Bike Lanes	Sidewalk	City					
Stevenson		E-end			•					
Stevenson	IL 23 Hitt/IL71		Paved shoulders	Sidepath Trail link	City					
trail link		Prospect			City					
trail link	L-D Park	Champlain		Trail link	City					
US 6/ Norris	Boyce Mem.	Poplar	Paved shoulders	Sidewalk	IDOT					
Van Buren	IL 23	3rd	Signed Bike Route		City					
Wake - Utica	Nebraska	trail	Signed Bike Route		City					
Woodward Mem.	Canal	Clinton	Shared Lane Markings		City					
Woodward Mem.	Clinton	LaSalle	Shared Lane Markings	Trail link	City					

**Table 4.3 – Other Possible Projects** (low-feasibility alternatives or backup routes for nearby segments; extra routes to increase network density; or low priority projects resulting in only minor improvement)

Segment	From (W/N)	To (E/S)	On Road Recommendation	Off Road Recommendation	Jurisdiction	
Autumnwood	N. 30th	Evans	Paved shoulders	Sidewalk	City	
Arch/ Hickory	Howard	Seminole	Signed Bike Route	Sidewalk	City	
Bellevue	Everette	Cherie	Signed Bike Route	Sidewalk	City	
Bluff/ Poplar	Evans	near Caton	Signed Bike Route		City	
Caton	N. 30th	Forest Park	Paved shoulders		Township	
Chapel	Orleans	Green	Signed Bike Route		City	
Cherie	Etna	Mara	Combined bike/parking lanes	Sidewalk Gaps	City	
Cherie	Mara	Champlain	Signed Bike Route		City	
Etna	N. 30th	Emerald	Paved shoulders		City, Township	
Evans	Airport	Bluff	Signed Bike Route	Sidewalk	City	
Everette	Oaklawn	Hillside	Signed Bike Route	Sidewalk	City	
Hillside	Columbus	Everette	Signed Bike Route	Sidewalk	City	
Howard	Gentleman	Arch	Signed Bike Route	Sidewalk	City	
IL23/ Columbus	Etna	Post		Sidewalk (W), Sidepath (E)	IDOT	
IL23/ Columbus	DeLeon	Paul		Sidepath	IDOT	
Columbus (N-bd)	Superior	Main	Bike Lanes		IDOT	
LaSalle (S-bd)	Superior	Main	Bike Lanes		IDOT	
IL71/ Hitt	RR tracks	IL 23		Sidepath	IDOT	
Lafayette	Boyce Mem.	Columbus	Signed Bike Route		City	
Madison	Boyce Mem.	Clay	Signed Bike Route		City	
Madison	Chestnut	Columbus	Signed Bike Route		City	
Oaklawn	Everette	Cherie	Signed Bike Route	Sidewalk	City	
Orleans	Chapel	Main	Signed Bike Route		City	
Poplar	near Caton	DeLeon	Signed Bike Route	Sidewalk	City	
Post	IL 23	Bellevue	Signed Bike Route	Sidewalk	City	
Seminole	Hickory	Mc Kinley	Signed Bike Route	Sidewalk	City	
Superior	Clinton	LaSalle	Signed Bike Route	Sidewalk Gaps	City	
Superior	LaSalle	Columbus	Shared Lane Markings	Sidewalk Gaps	City	
Superior (E-bd)	Columbus	Ontario	Shared Lane Markings	Sidewalk Gaps	City	
Superior (W-bd)	Columbus	Ontario	Signed Bike Route	Sidewalk Gaps	City	
Superior	Ontario	Champlain	Shared Lane Markings	Sidewalk Gaps	City	
US 6/ Norris	Champlain	US6/IL71 split		Sidepath	IDOT	

## 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."

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



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

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 City of Ottawa 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**

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

The City of Ottawa 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 Ottawa's streets.

In addition to passing an overall Complete Streets resolution setting City philosophy, modify the City'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 1500											
<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.

<u>SLM-4:</u> Shared Lane Markings 4' from curb faces. MUTCD D1 or D11 wayfinding signage preferred as a supplement.

<u>SLM-11:</u> Shared Lane Markings 11' from curb faces (on-street parking present). D1 or D11 wayfinding signage preferred as a supplement.

<u>CBPL</u>: Combined Bike/Parking Lanes, solid stripes 7' from curb faces. Parking permission indicated with signage. D1 or D11 wayfinding signage preferred as a supplement.

<u>BL-5 or BL-6</u>: 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.

<u>SH-4, SH-6, or SH-8:</u> 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.

<u>Note A:</u> 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 Ottawa's efforts to become more pedestrian and bicycle friendly. Suggested content:

Developments shall contribute to the City of Ottawa'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 Ottawa'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, County, and Other Agency Roadways**: Work closely with IDOT, LaSalle County Highway Department, and other appropriate agencies to identify opportunities to improve roadways as part of new, reconstruction and maintenance projects. These are the most cost-efficient times to also make improvements (as needed) for those walking and biking.

**Additional Policies and Ordinances:** Other policies and ordinances may be adopted by the City of Ottawa 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<sup>4</sup> appropriate for:

- The City 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 City should consider adoption of these model policies and ordinances.

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<sup>&</sup>lt;sup>4</sup> "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 Ottawa. 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 City address bike parking by adopting a development ordinance requirement and by retrofitting racks at strategic locations in town.

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 <a href="https://www.apbp.org">www.apbp.org</a>.

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

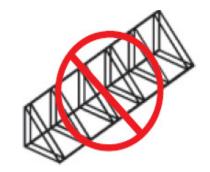


Figure 6.2. This style of rack is not recommended.

**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 come from the Kane County Bicycle and 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.

### **Education**

Education of both bicyclists and motorists is crucial to improving real and perceived bicycling safety in Ottawa. 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. Some possibilities include:

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

- *Kids on Bikes in Illinois* (<u>www.dot.state.il.us/bikemap/kidsonbikes/cover.pdf</u>), 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.
- Teaching Children to Walk Safely as They Grow and Develop: A Guide for Parents and Caregivers, a free guide from the National Center for Safe Routes to School: <a href="http://www.saferoutesinfo.org/resources/education\_teachingchildren.cfm">http://www.saferoutesinfo.org/resources/education\_teachingchildren.cfm</a>.

Other resources for kids and adults are listed at <a href="http://www.bikelib.org/safety-education">http://www.bikelib.org/safety-education</a>, 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 (<a href="http://www.bikelib.org/safety-education/motorists/driver-education">http://www.bikelib.org/safety-education/motorists/driver-education</a> and available as a DVD) on the City 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 plans, which include a road rage case study for classroom discussion.

Articles meant to educate the public on the above are available on the League of Illinois Bicyclists website. These are suitable for newspapers, local newsletters, and the City website.

A proposed Bicycle Advisory Commission could be involved in implementing these resources in Ottawa.

#### **Encouragement**

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

- Create a city map of Ottawa's bikeways network, as more facilities are developed. The map can show existing and proposed bikeways. Partner with local businesses to produce—and be listed—on the map.
- Proclaim the City's observance of National Bike Month in May (or June, when weather is more dependable).
- Declare a Bike to Work day to encourage bicycling to work, errands, or other destinations. Offer token incentives, such as refreshments at City 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 Ottawa as a bicycle-friendly community in the City's advertising.

Encouragement programs can also be implemented by a proposed Bicycle Advisory Commission.

## **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 <a href="https://www.bikelib.org/safety-education/enforcement-resources">www.bikelib.org/safety-education/enforcement-resources</a>

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" (<a href="http://www.bikelib.org/safety-education/motorists/driver-education">http://www.bikelib.org/safety-education/motorists/driver-education</a> and available as a DVD).

## 7 Plan Implementation

#### **Introduction**

The key recommendation of the plan is to develop ways to ensure its implementation. Continued progress will require a commitment of time and financial resources over many years. Little by little, project by project, Ottawa will become more bikeable. A long-term goal can be official "Bicycle Friendly Community" designation by the national League of American Bicyclists.

#### **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 City'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 City 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 Ottawa Bicycle (or Bicycle and Pedestrian) Advisory Commission, perhaps from the original bike path committee membership. 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 other tasks, the commission would be involved in education and encouragement projects and in general promotion of this plan.

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 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 city 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 coming in 2012) 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:**

- 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
- 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. <a href="http://www.apbp.org/">http://www.apbp.org/</a>

#### **Multi-Year Work Plan**

This plan recommends a variety of strategies; from adopting policies; to coordinating with other agencies; to quickly implementing some key, relatively easy projects. One of the first steps of plan implementation should be to consider the listed recommendations and draft a first five year work plan, which should at least include:

- Sending this plan to LaSalle County Highway Department and Illinois Department of Transportation
- Implementing "high priority, ready to go" projects first, followed by medium priority and finally low
- Reviewing this plan with all planned street improvement projects

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.<sup>5</sup>

- 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,

<sup>&</sup>lt;sup>5</sup> Explanations and figures from http://www.walkinginfo.org/engineering/roadway.cfm

- 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.
- 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 City of Ottawa 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 the LaSalle County, Illinois Department of Transportation, 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 City, 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.

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 3.

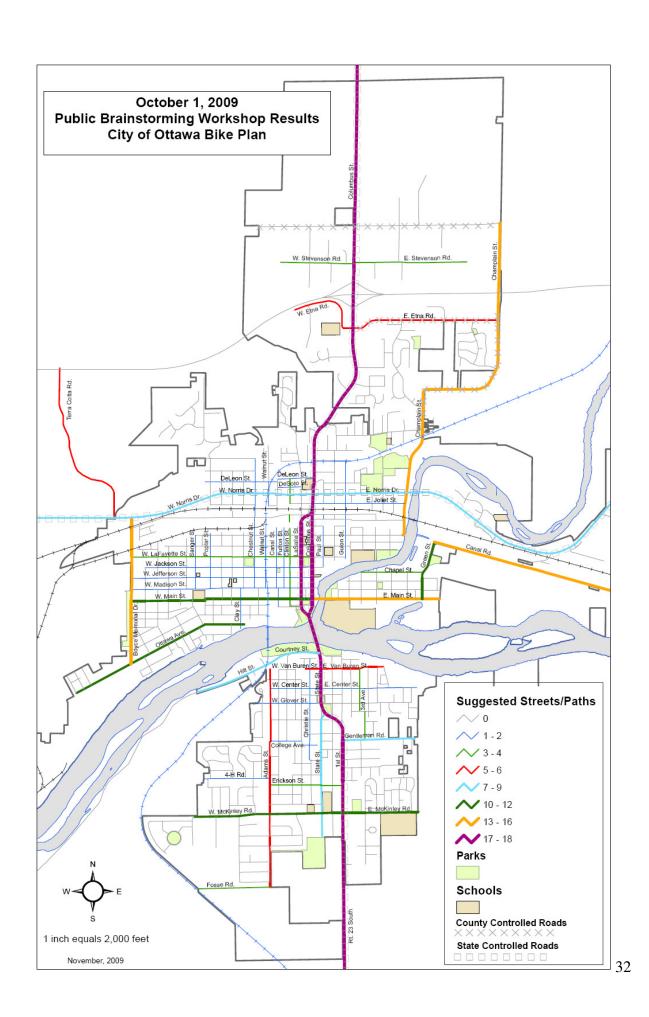
## **Annual Evaluation and Publicity**

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 Bike Path Committee to publish a yearly plan update in conjunction with a ribbon cutting ceremony or community event, such as Walk and Bike to School Day, a community bike ride, or something related to the I&M Canal State Trail or Riverwalk, such as a trail clean-up day. 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.

# **Appendix 1 Public Brainstorming Workshop Results**

On October 1, 2009, a "Public Brainstorming Workshop" was attended by over 25 residents. The purposes of the workshop included: a) gather local resident knowledge on biking and walking 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 from different geographic regions of the City were discussed.



## **Appendix 2 - Road Segment Spreadsheet**

The following legend describes columns of the spreadsheet that follows. Each row in the spreadsheet corresponds to a distinct roadway segment. Data include existing conditions, recommendations, and implementation information.

Seament Definition

Segment	Street name of road segment								
From (W/N)	West or North segment end								
To (E/S)	East or South segment end								

**Existina Conditions** 

Existing Cond	<u>ilions</u>
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. For 4 or more lanes, use the width of the lane closest to the curb/outside.
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 Occ%	Estimated % occupancy rate of on-street parking - excludes driveway areas. Averaged over 2-sides unless noted.
% Truck	Estimated % of heavy truck traffic
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

	Comments and some details on a feasible on-road bikeway treatment for that segment
facility type	
Sidepath	Suitability of a 10' sidepath. Reasons for "No": many existing residences (resid.), many and/or busy crossings (driveways, entrances,
Feasibility	side streets)
Recommendation	Description of any off-road or on-road recommendation
Rec. Lane Width	Lane width, with recommendation in place. Different from Lane Width above only if recommendation includes new or reconfigured striping.
Rec. Striped	Extra Width (see above), with recommendation in place, if that recommendation calls for new or reconfigured shoulders, parking areas,
Width	or bike lanes.
New BLOS score	BLOS score, shown only if the above on-road bikeway (and striping) is implemented.

Implementation

Public priority pts	Segment's prioritization points during 2-3-10 public workshop
Priority	Recommended implementation priority of segment
Implementation Notes	Further details on implementation for the "conditional" implementation segments

Segment	From (W/N)	To (E/S)	Lanes	Traffic ADT		Lane Width			Park Occ%		BLOS score			Sidewalk Status	Feasible on-road facility type	Sidepath Feasibility	Recommendation	Rec. Lane Width	Rec. Striped Width		Public priority points	Priority	Implementation Notes
Dayton	IL 23	Champlain	2	3650	55	12	0	0	0	3	4.07	D	Concrete from MBL Drive to Rte 23	none		Low- Medium (S), Medium- High (N)	Add N sidepath	12.0			0	Medium	
Stevenson	Veterans	IL 23	4	6600	30	12	0	2	0	2	3.36	С	Some CLTL (w/ 13' N- shoulder) in middle; turn lanes	Both SWs	Could use road diet w/ BLs near 23, and shift lanes N where CLTL and shoulder are now, for consistent 5.5-12-14-12-5.5 3L X-section with BLs & CLTL.	Low- Medium	Restripe with bike lanes, two travel lanes, continous left-turn lane	12.0	5.5	1.90	4	Medium	
Stevenson	IL 23	E-end	2	1500	30	11	0	0	0	3	3.25	С	Gravel shoulder N-most, S- some	none	Pave 4' (or more) of the gravel shoulders	Medium- High	Pave existing shoulders	11.0	4.0	2.05	3	Medium	
Etna	N. 30th	Emerald	2	1700	30	10	0	0	0	2	3.25	С	Few feet of gravel shoulder	none	Pave 3' of the gravel shoulders	High	Pave existing shoulders	10.0	3.0	2.47	0	Low	Much is unincorporated
Etna	Emerald	IL 23	2	2500	30	11	0	0	0	2	3.34	С	Gravel shoulder most. Higher ADT by 23	none	Pave 4' (or more) of the gravel shoulders	Medium N/E	Pave existing shoulders	11.0	4.0	2.14	5	Medium	
Etna	IL 23	post office	2	5800	30	13.8	0	2	0	2	3.42	С	lange median by 23		Narrowing travel lanes or CLTL would provide enough room for bike lanes: 5.5-11.5-12-11.5-5.5	Low- medium	Restripe with bike lanes, two travel lanes, continous left-turn lane	11.5	5.5	1.95	5	High	
Etna	post office	Champlain	2	1200	30	13.8	0	2	0	2	2.62	С	CLTL, 44.5' total.	S-SW	Narrowing travel lanes or CLTL would provide enough room for bike lanes: 5.5-11.5-12-11.5-5.5	Medium	Restripe with bike lanes, two travel lanes, continous left-turn lane	11.5	5.5	1.15	5	High	
Hillside	Columbus	Everette	2	500	25	15	0	0	10	0	1.69	В		none	Bike Route signage	Low	Add Bike Route wayfinding signs and sidewalk on 1 or more sides	15.0			0	Low	
Everette	Oaklawn	Hillside	2	300	25	15	0	0	5	0	1.36	Α		none	Bike Route signage	Low	Add Bike Route wayfinding signs and SW on at least 1-side	15.0			0	Low	
Oaklawn	Everette	Cherie	2	250	25	14	0	1	0	0	1.33	Α		none	Bike Route signage	Low	Add Bike Route wayfinding signs and SW on at least 1-side	14.0			0	Low	
Post	IL 23	Bellevue	2	1000	25	12	0	0	0	0	2.30	В		N/E-SW	Bike Route signage	Low	Add Bike Route wayfinding signs	12.0			0	Low	
Bellevue	Everette	Cherie	2	1000	25	13	0	2	3	0	2.21	В		S-SW	Bike Route signage. 5-10-10-5 bike lanes possible if parking removed.	Low	Add Bike Route wayfinding signs	13.0			0	Low	
DeLeon	Poplar	Sycamore	2	700	25	11	0	0	5	0.5	2.34	В	varying width, curbing, side parking areas	none	Bike Route signage	Low	Add Bike Route wayfinding signs and SW on at least 1-side	11.0			0	Medium	
DeLeon	Sycamore	Canal	2	700	25	13	0	0	15	0.5	2.23	В	varying width, curbing, side parking areas	with gap	Bike Route signage	Low	Add Bike Route wayfinding signs, fill N- SW gaps	13.0			0	Medium	
DeLeon	Canal	LaSalle	2	700	25	15	0	0	30	0.5	2.17	В		N-SW, some S- SW	Bike Route signage	Low	Add Bike Route wayfinding signs	15.0			1	Medium	
DeLeon	LaSalle	IL 23	2	1400	25	16	0	0	10	0.5	2.12	В	IL23	Both SWs	Bike Route signage	Low	Add Bike Route wayfinding signs	16.0			1	Medium	
IL 23	DeLeon	Paul											E-SW at IL23 jog between DeLeon and Paul is preferred over on-road, which as slight raised median	E-SW		Low-Med	Widen E sidewalk to sidepath width (8-10')					Low	Could widen IL23 E-SW between stoplight and Paul. Does stoplight have ped signal for westbound users?
Paul	IL 23	Nebraska	2	325	25	10	0	0	5	0	2.00	В		N/E-SW	Bike Route signage	Low	Add Bike Route wayfinding signs	10.0			0	Medium	
Nebraska	Paul	Wake	2	1000	25	12.5	0	0	5	0.5	2.35	В	Stop signs	Both SWs	Bike Route signage	Low	Add Bike Route wayfinding signs	12.5			0	Medium	Could use Guion as N-S link but no US 6 stoplight.

Segment	From (W/N)	To (E/S)	Lanes	Traffic ADT	Speed Limit		ExtraW idth		Park Occ%	% Truck	BLOS score	BLOS grade	Comments	Sidewalk Status	Feasible on-road facility type	Sidepath Feasibility	Recommendation	Rec. Lane Width	Rec. Striped Width	New BLOS score	Public priority points	Priority	Implementation Notes
Wake	Nebraska	Utica	2	950	25	15	0	0	30	0.5	2.33	В		Both SWs	Bike Route signage	Low	Add Bike Route wayfinding signs	15.0			0	Medium	Add ped crossing signage, high- visibility crosswalk, perhaps with push-button Rapid Rectangular Flashing Beacons at US 6/Norris crossing
Utica	Wake	trail	2	650	25	15	0	0	30	0.5	2.13	В		Both SWs	Bike Route signage	Low	Add Bike Route wayfinding signs	15.0			0	Medium	Dead-ends at trail leading to Lincoln- Douglas Park
trail	Utica	Champlain														High	Extend trail to Champlain when park rehabbed					Medium	
US 6/Norris	Boyce Memorial	Poplar	4	8000	45	12	1	0	0	3	3.72	D	Paved Shoulder (2.5'), Gravel Sholder (6') No curb	none	Pave 4' (or more) of the gravel shoulders	High	Add paved shoulders and sidewalk on at least 1- side	12.0	4.0	2.70	6	Medium	
US 6/Norris	Poplar	LaSalle	4	12000	35	12	0	0	0	3	4.00	D	Curb, no gutter pan, no left- turn lanes or CLTL.	N-SW	SLMs possible, as are narrower (10') lanes for Bike Lanes, but these are not advised here	Low		12.0			6		
US 6/Norris	LaSalle	Champlain	4	15300	30	12	0	0	0	3	3.96	D	Lot of turn lanes, raised medians	Both SWs	SLMs possible, as are narrower (10') lanes for Bike Lanes, but these are not advised here	Low		12.0			6		
US 6/Norris	Champlain	US6/IL71 split	4	10600	45	12	2	0	0	3	3.57	D	Divided hwy. Both sides have 2' inner, outer shoulders but bad drain grate drops	N-SW	None, without widening pavement or narrowing to 10' lanes (not advised)	High	Widen N-sidewalk to sidepath width (8-10')	12.0	2.0		6	Low	Sidewalk serves as like a sidepath and has very few pedestrian conflicts
Superior	Clinton	LaSalle	2	2150	25	15	0	0	5	1	2.47	В		Both SWs	Bike Route signage. 5-10-10-5 bike lanes possible if parking removed.	Low	Add Bike Route wayfinding signs	15.0			0	Low	Parallel to I&M Trail
Superior (W-bd)	LaSalle	Columbus	2	3500	25	11.3	7.7	0	60	1	2.42	В		Both SWs	Shared Lane Markings, 11' from curb	Low	Add Shared Lane Markings, wayfinding bike route signs	11.3	7.7		0	Low	Parallel to I&M Trail
Superior (E-bd)	LaSalle	Columbus	2	3500	25	11	0	0	0	1	3.16	С	60% diagonal parking. 48' total	Both SWs	Shared Lane Markings, but in middle of travel lane due to diagonal parking.	Low	Add Shared Lane Markings, wayfinding bike route signs	11.0			0	Low	Parallel to I&M Trail
Superior (W-bd)	Columbus	Ontario	2	2600	25	18	0	2	15	1	2.25	В	More parking W, less parking E	Both SWs	Especially W-end, parking too high for combined bike/parking lane. Bike Route signage.	Low	Add Bike Route wayfinding signs	18.0			0	Low	Parallel to I&M Trail
Superior (E- bd)	Columbus	Ontario	2	2600	25	12	0	2	0	1	2.89	С	No parking	Both SWs	SLMs 4' from curb, although not consistent w/ W-bd (where sparse parking prevents SLMs).	Low	Add Shared Lane Markings, wayfinding bike route signs	12.0			0	Low	Parallel to I&M Trail
Superior	Ontario	Champlain	2	2200	25	14.7	0	0	0	1	2.45	В	No parking	Both SWs	Very close to 5-10-10-5 bike lanes width, but not quite. SLMs 4' from curb.		Add Shared Lane Markings, wayfinding bike route signs	14.7			0	Low	Parallel to I&M Trail
Canal Rd	Green	E of town	2	4300	45	12	0	0	0	2	3.79	D		none	5' paved shoulders	I&M Canal Trail	Add paved shoulders	12.0	5.0	2.09	12	Medium	More cost-efficient to do when repaving.
Lafayette (W- bd)	Boyce Memorial	Sanger	2	1050	25	16	0	2	20	0.5	2.12	В	no stops	Both SWs	Bike Route signage	Low	Add Bike Route wayfinding signs	16.0			3	Low	Higher priority if I&M Trail alternative wanted, especially for all seasons.
Lafayette (E- bd)	Boyce Memorial	Sanger	2	1050	25	10	0	2	0	0.5	2.60	С		Both SWs	Shared Lane Markings, 4' from curb face; or BR signs	Low	Add Bike Route wayfinding signs	10.0			3	Low	Higher priority if I&M Trail alternative wanted, especially for all seasons.
Lafayette	Sanger	Canal	2	2200	25	15	0	0	20	0.5	2.63	С	N-side parking	Both SWs	Bike Route signage	Low	Add Bike Route wayfinding signs	15.0			3	Low	Higher priority if I&M Trail alternative wanted, especially for all seasons.
Lafayette	Canal	Clinton	2	1600	25	17	0	0	10	0.5	2.03	В	N-side parking	Both SWs	Bike Route signage	Low	Add Bike Route wayfinding signs	17.0			3	Low	Higher priority if I&M Trail alternative wanted, especially for all seasons.
Lafayette	Clinton	Columbus	2	3000	25	16	8	0	70	0.5	1.65	В	parking both sides	Both SWs	Bike lanes and parking could both fit 8-5-11-11-5-8. Bike route signage should suffice.	Low	Add Bike Route wayfinding signs	16.0	8.0		3	Low	Higher priority if I&M Trail alternative wanted, especially for all seasons.
Jefferson	Clinton	Columbus	2	1800	25	12	7.5	1	70	1	2.19	В	parking both sides, left-turn lanes	Both SWs	Shared Lane Markings 11' from curbs	Low	Add Shared Lane Markings	12.0	7.5		1	Medium	West only to LaSalle if Columbus/LaSalle used instead of Clinton.

Segment	From (W/N)	To (E/S)	Lanes	Traffic ADT	Speed Limit	Lane Width	ExtraW idth	Gutter Pan	Park Occ%		BLOS score			Sidewalk Status	Feasible on-road facility type	Sidepath Feasibility	Recommendation	Rec. Lane Width	Rec. Striped Width	New BLOS score	Public priority points	Priority	Implementation Notes
Jefferson	Columbus	Riverwalk	2	300	25	12	0	1	0	0.5	1.74	В	Perpendicular parking not shown	Both SWs	Shared Lane Markings in center of travel lane, away from perpedicular parking	Low	Add Shared Lane Markings	13.0			1	Medium	
Chapel	Orleans	York	2	600	25	12	0	0	3	0	2.07	В		S-SW	Bike Route signage	Low	Add Bike Route wayfinding signs	12.0			4	Low	Priority goes up if striping not possible on Main E of Orleans
Chapel	York	Green	2	500	25	15	0	0	3	0	1.59	В		Both SWs	Bike Route signage	Low	Add Bike Route wayfinding signs	15.0			4	Low	Priority goes up if striping not possible on Main E of Orleans
Madison	Boyce Memorial	Armstrong	2	1300	25	20	0	0	15	0.5	1.49	Α	Madison and Main are redundant - only one should be chosen.	Both SWs	15% parking too high for combined bike/park lane, so Bike Route signage	Low	Add Bike Route wayfinding signs	20.0			2	Low	Priority of Madison goes up if Main Street is not improved for bicycling.
Madison	Armstrong	Clay	2	3200	25	18	0	0	20	0.5	2.38	В	Madison and Main are redundant - only one should be chosen.	Both SWs	20% parking too high for combined bike/park lane, so Bike Route signage (though below BLOS guideline)	Low	Add Bike Route wayfinding signs	18.0			2	Low	Priority of Madison goes up if Main Street is not improved for bicycling.
Madison	Clay	Chestnut	2	5500	25	18	0	0	20	0.5	2.66	С		Both SWs	20% parking too high for combined bike/park lane, so Bike Route signage (though below BLOS guideline)	Low	Add Bike Route wayfinding signs	18.0			2	Medium	Priority of Madison goes up if Main Street is not improved for bicycling.
Madison	Chestnut	Walker	2	4850	25	18	0	0	20	0.5	2.59	С		Both SWs	20% parking too high for combined bike/park lane, so Bike Route signage (though below BLOS guideline)	Low	Add Bike Route wayfinding signs	18.0			2	Low	Priority of Madison goes up if Main Street is not improved for bicycling.
Madison	Walker	Fulton	2	4850	25	23	0	0	25	0.5	1.77	В		Both SWs	Bike lanes and parking could both fit 8-5-10- 10-5-8. Bike route signage should suffice.	Low	Add Bike Route wayfinding signs	23.0			2	Low	Priority of Madison goes up if Main Street is not improved for bicycling. In that case, consider bike lanes here.
Madison	Fulton	Columbus	2	4850	25	15	8	0	75	0.5	2.21	В	49' total W of Fulton	Both SWs	Bike lanes and parking could both fit 8-5-10- 10-5-8. Bike route signage should suffice.	Low	Add Bike Route wayfinding signs	15.0	8.0		2	Low	Priority of Madison goes up if Main Street is not improved for bicycling. In that case, consider bike lanes here.
Main	Boyce Memorial	Clay	2	3700	25	18	0	2	10	1	2.35	В	parking increases closer to downtown	Both SWs	1-side parking allows 8-5-10-10-5 BLs - but unpopular? Combined bike/prk lanes 7-11- 11-7, even though >10% parking in parts. Backup: just Bike Route signs.	Low	Add Combined Bike/Parking Lanes	11.0	7.0	1.42	11	High	
Main	Clay	Canal	2	6400	25	23.6	0	0	35	1	2.05	В	47.5' total. Turn lanes @Clay,Fillmore,Canal	Both SWs	Bike Lanes 7.5-5-11-11-5-7.5 best; or SLMs	Low	Add Bike Lanes	11.0	5.0	1.87	11	High	
Main	Canal	Clinton	2	6400	25	16	8	0	80	1	2.34	В	no bikes on sidewalks	Both SWs	Bike Lanes 8-5-11-11-5-8 best; or SLMs	Low	Add Bike Lanes	11.0	5.0	1.87	11	High	
Main	Clinton	Columbus	2	9000	25	11	7.5	0	80	1	3.33	С	No bikes on SWs. CLTL, turn lanes. 48' total.	Both SWs	SLMs, but considerably below BLOS guideline	Low	Add Shared Lane Markings	11.0	7.5		11	High	
Main (W-bd)	Columbus	Fox River Bridge	2	8300	25	20	0	0	0	1	2.20	В	44' total	Both SWs	Bike Lanes 5-13 best; or SLMs	Low	Add Bike Lane	13.0	5.0	1.56	13	High	
Main (E-bd)	Columbus	Fox River Bridge	2	8300	25	16	8	0	80	1	2.47	В	44' total	Both SWs	Bike Lanes 8-5-13 best; or SLMs	Low	Add Bike Lane	13.0	5.0	1.56	13	High	
Main	Fox River Bridge	Fox River Bridge	2	8300	25	20	0	0	0	1	2.20	В		Both SWs	Bike Lanes 6-14-14-6	Low	Add Bike Lanes	14.0	6.0	1.08	13	High	
Main (W-bd)	Fox River Bridge	Shabbona	2	6500	25	24	0	1	40	1	2.08	В		Both SWs	If W-bd parking needed, then bike lane w/ parking 8-5-11	Low	Add W-bd Bike Lane	11.0	5.0	1.87	13	High	
Main (E-bd)	Fox River Bridge	Shabbona	2	6500	25	18	0	1	40	1	3.10	С		Both SWs	If 18' correct, then SLMs 11' from curb. Below BLOS guideline.	Low	Add E-bd Shared Lane Marking	18.0			13	High	
Main	Shabbona	Grafton	2	5400	25	17.8	0	0	10	1	2.57	С	1-hr parking school days, W- end. Traffic higher W, lower E		Combined bike/parking lanes 7.3-10.5-10.5-7.3	Low	Add Combined/Bike Parking Lane	10.5	7.3	1.66	13	High	
Main	Grafton	Green	2	4000	25	13	0	2	0	1	2.99	С	30' total	Both SWs	Bike Lanes 5-10-10-5 (using gutter pans)	Low	Add Bike Lanes	10.0	5.0	1.83	13	High	
Woodward Memorial	Canal	Clinton	2	1800	25	14.5	0	0	0	1	2.38	В	cars).	Both SWs	Could remove N-parking (using parking lot instead) for 5-14-14-5 bike lanes. Or, Shared Lane Markings 4' from S-curb, 11' from N-curb.	Medium	Add Shared Lane Markings	14.5			0	Medium	Corridor suggested by City.
Woodward Memorial	Clinton	Stevens	2	1800	25	13	0	1.5	0	1	2.58	С			SLMs 4' from curb to Stevens Dr, then add better S-SP link to bridge's W-SW.	Medium	Add Shared Lane Markings	13.0			0	Medium	Corridor suggested by City.

Segment	From (W/N)	To (E/S)	Lanes	Traffic ADT	Speed Limit	Lane Width	ExtraW idth		Park Occ%		BLOS score			Sidewalk Status	Feasible on-road facility type	Sidepath Feasibility	Recommendation	Rec. Lane Width	Rec. Striped Width	New BLOS score	Public priority points	Priority	Implementation Notes
Woodward Memorial	Stevens	LaSalle												S-SW	Add better S-SP link to bridge's W-SW.	Medium	Add trail link				0	Medium	Corridor suggested by City.
Ottawa	Boyce Memorial	Leland	2	2350	25	22	0	0	8	1	1.32	Α	Boulevard (separated)	Both SWs	Combined bike/parking lanes 8-14 each side	Low	Add Combined Bike/Parking Lanes	14.0	8.0	0.19	11	Medium	
Ottawa (E- bd)	Leland	Clay	2	2950	25	19	0	0	5	1	1.97	В		Both SWs	Combined bike/parking lane 7-12, only if SLM on W-bd side (need both sides)	Low	Add Combined/Bike Parking Lane	12.0	7.0	0.94	11	Medium	
Ottawa (W- bd)	Leland	Clay	2	2950	25	11	0	0	0	1	3.07	С	no parking	Both SWs	Below BLOS guideline, but SLMs (4' from curb) possible	Low	Add Shared Lane Markings and wayfinding signage	11.0			11	Medium	
Boyce Memorial	US 6/ Norris	Ottawa	2	5500	30	12	8	2	4	5	1.71	В	Marked parking stalls 300' S of Marquette, S to Ottawa	E-SW Marquette- Lafayette	Combined bike/parking lanes 7.5-12.5-12.5-7.5	Low E (and W S-side), high most of W	Add Combined Bike/Parking Lanes; E- SW Lafayette-Ottawa	12.5	7.5	1.70	15	High	Change from parking stalls to stripe next time repaving is done
Autumnwood	N. 30th	Evans	2	1150	30	10	0	0	0	2	3.05	С	Some narrow stone shoulders	None	Pave 3' shoulders. Backup: Bike Route signage, although somewhat below BLOS guideline.	Low	Pave shoulders and add SW on at least 1-side	10.0	3.0	2.27	0	Low	
Evans	Airport	Bluff	2	1150	25	11.8	0	0	0	2	2.63	С	Some stone shoulders for parking		Bike Route signage, although somewhat below BLOS guideline	Low	Add Bike Route wayfinding signs and SW on at least 1-side	11.8			0	Low	
Bluff/ Poplar	Evans	near Caton	2	1150	25	15.5	0	0	0	2	2.12	В	Steep hill	W-SW	Bike lanes (with SLMs in middle of S-bd lane downhill); SLMs or Bike Route signs	Low	Add Bike Route wayfinding signs	15.5			0	Low	
Poplar	near Caton	DeLeon	2	1150	25	10.5	0	0	0	2	2.77	С	Some stone shoulders for parking	None	Bike Route signage, although somewhat below BLOS guideline	Low	Add Bike Route wayfinding signs and SW on at least 1-side	10.5			0	Low	
Poplar	DeLeon	US 6/Norris	2	1150	25	10.5	0	0	0	2	2.77	С	Some stone shoulders for parking	None	Bike Route signage, although somewhat below BLOS guideline	Medium	Add Bike Route wayfinding signs and SW on at least 1-side	10.5			0	Medium	
Clay	Madison	Main	2	1850	25	16	0	2	30	1	2.60	С	High W-parking by store, 10% E	Both SWs	20% parking too high for combined bike/park lane, so Bike Route signage (though below BLOS guideline)	Low	Add Bike Route wayfinding signs	16.0			2	Medium	
Clay	Main	Ottawa	2	3650	25	15.3	0	0	3	1	2.66	С	Only S-bd parking. No lane stripes.	Both SWs	If parking banned, 5-10.3-10.3-5 bike lanes. Else: just bike route signs	1 0 1 0 1 0 1	Add Bike Route wayfinding signs	15.3			2	Medium	Only if Ottawa is improved for bicycles. Could add N-bd SLMs 4' from curb.
Chestnut	DeLeon	US 6/Norris	2	1000	25	11	0	1	5	1	2.58	С	No parking E, 5-10% W	Both SWs	Bike Route signage	Low	Add Bike Route wayfinding signs	11.0			0	Medium	
Chestnut	US 6/ Norris	North RR tracks	2	6000	25	13.3	0	2	0	1	3.15	С	Stoplight at Norris. No parking	Both SWs	curb) possible	Low	Add Shared Lane Markings	13.3			1	Medium	
Chestnut	North RR tracks	Madison	2	5200	25	12	0	0	0	1	3.25	С	Stop signs. No parking.	Both SWs	Below BLOS guideline, but SLMs (4' from curb) possible	Low	Add Shared Lane Markings	12.0			1	Medium	
Canal St	Main	Woodward Memorial	2	1800	25	19.5	0	1	0	1	1.53	В	Average of N,S lanes. Some S-bd parking as road turns, N-bd perpendicular.	W-SW	S-bd 5' bike lane (although BLOS is fine) or SLMs; N-bd SLM in center of lane due to perpendicular parking	Low	Add Shared Lane Markings	19.5			1	Medium	Mentioned by City.
Clinton	I & M Canal	Washington	2	700	25	15	0	0	10	1	1.97	В		Both SWs	Bike Route signage	Low	Add Bike Route wayfinding signs	15.0			3	Medium	Priority of Clinton goes up or down depending on whether LaSalle and Columbus are improved for bicycles.
Clinton	Washington	Lafayette	2	700	25	14	0	1	20	1	2.23	В		Both SWs	Bike Route signage	Low	Add Bike Route wayfinding signs	14.0			3	Medium	Priority of Clinton goes up or down depending on whether LaSalle and Columbus are improved for bicycles.
Clinton	Lafayette	Jackson	2	2150	25	15.3	7.7	0	70	1	1.69	В		Both SWs	Bike Lanes possible, but use SLMs (11' out) to be consistent	Low	Add Shared Lane Markings	15.3	7.0	1.73	3	Medium	Priority of Clinton goes up or down depending on whether LaSalle and Columbus are improved for bicycles.
Clinton (S- bd)	Jackson	Jefferson	2	2150	25	15.3	0	0	0	1	2.35	В	Data doesn't include diagonal parking width, occupancy	Both SWs	Shared Lane Markings, middle of lane (to avoid diagonal parking)	Low	Add Shared Lane Markings	15.3			3	Medium	Priority of Clinton goes up or down depending on whether LaSalle and Columbus are improved for bicycles.

Segment	From (W/N)	To (E/S)	Lanes	Traffic ADT		Lane Width			Park Occ%		BLOS score		Comments	Sidewalk Status	Feasible on-road facility type	Sidepath Feasibility	Recommendation	Rec. Lane Width	Rec. Striped Width		Public priority points	Priority	Implementation Notes
Clinton (N- bd)	Jackson	Jefferson	2	2150	25	15.3	7	0	70	1	1.73	В		Both SWs	Bike Lanes possible, but use SLMs (11' out) to be consistent	Low	Add Shared Lane Markings	15.3	7.0		3	Medium	Priority of Clinton goes up or down depending on whether LaSalle and Columbus are improved for bicycles.
Clinton	Jefferson	Madison	2	2150	25	14	7	0	70	1	1.97	В		Both SWs	Shared Lane Markings, 11' from curb	Low	Add Shared Lane Markings	14.0	7.0		3	Medium	Priority of Clinton goes up or down depending on whether LaSalle and Columbus are improved for bicycles.
Clinton	Madison	Main	2	2150	25	16.6	7.2	0	75	1	1.59	В		Both SWs	Bike Lanes possible, but use SLMs (11' out) to be consistent	Low	Add Shared Lane Markings	16.6	7.0	1.60	3	Medium	Priority of Clinton goes up or down depending on whether LaSalle and Columbus are improved for bicycles.
Caton	30th St	Forest Park	2	2100	25	10	0	0	0	1	3.01	С	Some stone pulloff parking. Bluff hill. Unincorporated.	none	Pave 3' shoulders	Low	Pave shoulders	10.0	3.0	2.23	0	Low	
LaSalle	Forest Park	DeLeon	2	2150	25	16	0	2	10	1	2.39	В		gaps,	Combined bike/parking lanes (7.5-10.5- 10.5-7.5) if parking <10% most of time. If not, Bike Route signage meets the target here.	Low	Add Bike Route wayfinding signs; fill E- SW gaps	16.0			0	Medium	
IL23/ LaSalle (S-bd)	Norris	Superior	3	13000	25	13	0	2	0	2	3.15	С	Crosses I&M Canal, trail	Both SWs	39' asphalt? Bike lane if narrow lanes: 11- 11-12-5, or 6' bike lane if reduced to 2 lanes S of here	Low		13.0			18		Connectivity to other bikeways would not be good on north end.
IL23/ LaSalle (S-bd)	Superior	Lafayette	3	12800	25	19	0	0	30	2.5	2.77	С	Outer lanes 19', total 48'	Both SWs	Bike lane possible if reduce to 2 thru lanes (8-13.5-13- <b>5.5</b> -8). <b>If not</b> , SLM 11' from R curb.	Low	Restripe with parking, bike lane, two travel lanes	13.0	5.5	1.50	18	Low	May increase to High Priority, depending on desired routing.
IL23/ LaSalle (S-bd)	Lafayette	Main	3	13000	25	11	7.5	0	80	2.5	3.15	С	Total 48'	Both SWs	Bike lane possible if reduce to 2 thru lanes (8-13.5-13- <b>5.5</b> -8). <b>If not</b> , SLM 11' from R curb.	Low	Restripe with bike lane, two travel lanes	13.0	5.5	1.51	18	Low	May increase to High Priority, depending on desired routing.
IL23/ LaSalle (S-bd)	Main	Lincoln	2	13000	30	12	0		0	2	3.71	D	1-way S. Excessive R, L turn lanes. Parking besides LT lane.	Both SWs	Dramatically shortening right-turn lane would allow bike lane.	Medium		12.0			18		If N of Main gets bike lanes, and bridge gets any on-road accommodation, then add Bike Lane here, otherwise W-SW is adequate
IL23/ LaSalle	Lincoln	Columbus	2	13000	30	12	0		0	2	3.71	D	1-way S. S-curve bridge approach.	Both SWs	If bike lane added N, transition to right-in- right-out island, crosswalk, and bridge S- SW	High		12.0			18		If N of Main gets bike lanes, and bridge gets any on-road accommodation, then add Bike Lane here, otherwise W-SW is adequate
IL23/ Columbus	Dayton	Stevenson	4	10200	45	12	11	0	0	2	1.72	В	Turn lanes	None	Already have wide paved shoulders		Add SW on at least 1- side, two preferred	12.0	7.0		18	High	
IL23/ Columbus	Stevenson	Etna	4	19000	45	12	0	2	0	2	4.20	D	No I-80 bridge room for walks. LT lanes, narrow raised median	None	Trucks, speeds preclude lane narrowing for BLs. Possible to reconfigure bridge deck space (eliminate median or a lane) or retrofit a cantilever sidepath bridge.	Medium-	Explore reconfigure or retrofit options, including seeking grant for cantilever retrofit.	12.0			18	High	Improving 16th/Airport or 18th/Champlain as alternative routes is far from ideal, but may be the only semi-realistic options.
IL23/ Columbus	Etna	Post	4	19000	40	12	0	2	0	2	4.12	D	LT lane is painted median much of the time. Goat line on W	E-SW	Trucks, speeds preclude lane narrowing for bike lanes.	Low-med N part, Medium S (hill)	Add SW on W side. Widen E-side SW to sidepath width.	12.0			18	Low	
IL23/ Columbus	Post	Prairie	4	21000	30	12	0	2	0	2	3.95	D	No access to Alexis Ave currently	E-SW	Trucks, speeds preclude lane narrowing for bike lanes.	W, Low E	Add SW on W side	12.0			18	High	Prairie to Alexis W-SW is high priority, N of Alexis is low.
IL23/ Columbus	Prairie	Norris	4	21000	30	12	0	2	0	2	3.95	D	Raised Median	Both SWs	Trucks, speeds preclude lane narrowing for bike lanes.	Low		12.0			18		
IL23/ Columbus (N- bd)	Norris	Superior	3	13700	25	13	0	2	0	2.5	3.24	С	1-way N. Crosses canal	Both SWs	39' asphalt? Bike lane if narrow lanes: 11- 11-12-5, or 6' bike lane if reduced to 2 lanes S of here	Low		13.0			18		Connectivity to other bikeways would not be good on north end.
IL23/ Columbus (N- bd)	Superior	Lafayette	3	13700	25	20	0	0	30	2.5	2.64	С	Outer lanes 19.5', total 49'	Both SWs	Bike lane possible if reduce to 2 thru lanes (8-14-13- <b>5.5</b> -8.5). <b>If not</b> , SLM 11' from R curb.		Restripe with parking, bike lane, two travel lanes	13.0	5.5	1.53	18	Low	May increase to High Priority, depending on desired routing.

Segment	From (W/N)	To (E/S)	Lanes	Traffic ADT		Lane Width		Gutter Pan	Park Occ%		BLOS score		Comments	Sidewalk Status	Feasible on-road facility type	Sidepath Feasibility	Recommendation	Rec. Lane Width	Rec. Striped Width		Public priority points	Priority	Implementation Notes
IL23/ Columbus (N- bd)	Lafayette	Main	3	12600	25	11	8	0	80	2.5	3.12	С	Total 49'		Bike lane possible if reduce to 2 thru lanes (8-14-13- <b>5.5</b> -8.5). <b>If not</b> , SLM 11' from R curb.	Low	Restripe with bike lane, two travel lanes	13.0	5.0	1.61	18	Low	May increase to High Priority, depending on desired routing.
IL23/ Columbus	Main	LaSalle	3	13700	30	12	0		0	2	3.53	D	1-way N. Long right-turn lane. E-SW close to barrier, buildings	Both SWs	Bike lanes possible depending on implementation N and S of segment	High S of Lincoln, Med N		12.0			18		If N of Main gets bike lanes, and bridge gets any on-road accommodation, then add Bike Lane here, otherwise E-SW is adequate
Orleans	Chapel	Main	2	500	25	10	0	1.5	0	1	2.28	В	Brick Main-Pearl	Both SWs	Bike Route signage	Low	Add Bike Route wayfinding signs	10.0			0	Low	Priority goes up if striping not possible on Main E of Orleans
Cherie	Mara	Champlain	2	1350	25	13	0	1	2	1	2.46	В	Big uphill N-bd	E-SW	Bike Route signage	Low	Add Bike Route wayfinding signs	13.0			0	Low	
Cherie	Etna	Mara	2	1850	25	20	0	0	10	1	1.64	В	sidewalk gaps between Mara & Etna	Some on both sides	Within BLOS range now so Bike Route signage would be fine. Could add Combined bike/parking lane 8-12-12-8	Low	Add Combined Bike/Parking Lanes. Fill SW gaps, at least 1-side	11.5	7.5	0.85	0	Low	
Champlain	Dayton	Etna	2	2650	55	11	0	0	0	1	3.55	D	Rural road, better I-80 crossing than IL23	none	4' paved shoulders	High (present day), except bridge	Add paved shoulders. If widened and slowed in future, add bike lanes and sidewalks	11.0	4.0	2.35	14	Medium	
Champlain	Etna	Cherie	2	2900	45	15	0	2	0	1	2.98	С	No parking	none	Bike Lanes 5.5-11.5-11.5-5.5 (using gutter pans)	Medium- High (W/N)	Add Bike Lanes (cheaper) and sidewalk on at least one-side, <b>OR</b> sidepath	11.5	5.5	1.69	14	Medium	
Champlain	Cherie	Norris	2	6000	30	13	0	2	0	1	3.38	С	SB turn lane at Norris, actuated light	W-SW	Bike Lanes 5-10-10-5 (using gutter pans)	Low- Medium (W)	Add Bike Lanes, on-road signal activation	10.0	5.0	2.23	14	High	
Champlain	Norris	Michigan	2	2200	25	13.7	0	0	0	1	2.59	С		W-SW N of Joliet	Shared Lane Markings, 4' from curb. Tune for signal actuation, adding MUTCD markings, signs.	Low	Add Shared Lane Markings, fill Michigan- Joliet SW gap, tune for on-road signal activation	13.7			14	High	
Champlain	Michigan	Superior	2	2200	25	14.7	0	0	0	1	2.45	В	No parking	E-SW	Very close to 5-10-10-5 bike lanes width, but not quite. SLMs 4' from curb.	Low	Add Shared Lane Markings	14.7			14	High	
Green	Canal	Chapel	2	3650	25	11	0	0	0	1	3.18	С	Route for that part of town to rech I&M Trail	none	Shared Lane Markings, 4' from curb. Below BLOS guideline.	Medium- High	Add Shared Lane Markings or Sidepath	11.0			11	High	Sidepath would serve more users going to the I&M Trail
Green	Chapel	Main	2	3650	25	14	0	0	0	1	2.81	С	15' S-bd, 13' N-bd		SLMs 4' from curb, below BLOS guideline. Or, create "shoulders" 3.5-10.5-10.5-3.5, which are narrower than BL standard	Low	Add Shared Lane Markings; add SW on at least 1-side	14.0			11	High	Re-stripe when road is repaved, if desired to use foglines for "paved shoulder" serving as narrow, unofficial bike lanes.
Hitt/ IL71	RR tracks	Spring	2	3700	35	13.2	0	2	0	3	3.60	D		S-SW	Enough room for bike lanes, but truck route.	Medium- High	Widen S sidewalk to sidepath width (8-10')	13.2			8	Low	
Hitt/ IL71	Spring	IL 23	2	3700	35	13.2	0	2	0	3	3.60	D		Both SWs	Enough room for bike lanes, but truck route.	Medium- High	Widen S sidewalk to sidepath width (8-10')	13.2			8	Low	
trail link	Hitt/IL71	Prospect											Existing SW link			High	Widen to SP width, link to Prospect				0	Medium	
Prospect	W-end	Catherine	2	100	25	12	0	0	0	0	1.13	Α		N-SW	Bike Route signage	Low	Add Bike Route wayfinding signs	12.0			0	High	
Van Buren	IL 23	1st	2	800	25	18	0	0	0	1	1.40	Α		Both SWs	Bike Route signage	Low	Add Bike Route wayfinding signs	18.0			5	Medium	
Van Buren	1st	3rd	2	600	25	12	0	0	0	1	2.15	В		Both SWs	Bike Route signage SLMs (4' out), but only where no parking.	Low	Add Bike Route wayfinding signs Add Shared Lane	12.0			5	Medium	
Center	Adams	Guthrie	2	1200	25	12	0	0	3	1	2.54	С			Bike Route signage (marginal BLOS score).	Low	Marking and wayfinding signs	12.0			1	Medium	
Center	Guthrie	Christie	2	1800	25	15	0	0	10	1	2.45	В		Both SWs	Bike Route signage (marginal BLOS score).	Low	Add Bike Route wayfinding signs	15.0			1	Medium	
Center (W- bd)	Christie	IL 23	2	2400	25	24	0	2	60	1	1.95	В			Could restripe for 7.5(parking)-14.5-14.5-7.5 with SLMs 11' from curbs. Backup: only Bike Route signage	Low	Restripe for parking, Shared Lane Markings	14.5		2.52	1	Medium	

Segment	From (W/N)	To (E/S)	Lanes		Speed Limit				Park Occ%	% Truck	BLOS score		Commonto	Sidewalk Status	Feasible on-road facility type	Sidepath Feasibility	Recommendation	Rec. Lane Width	Rec. Striped Width		Public priority points	Priority	Implementation Notes
Center (E- bd)	Christie	IL 23	2	2400	25	16	0	2	70	1	3.17	С		Both SWs	Could restripe for 7.5(parking)-14.5-14.5-7.5 with SLMs 11' from curbs. Backup: only Bike Route signage	Low	Restripe for parking, Shared Lane Markings	14.5		2.41	1	Medium	
Center	IL 23	3rd	2	1400	25	16	0	2	10	1	2.18	В	Stoplight at IL23.	N-SW	Combined bike/parking lanes (7.5-10.5- 10.5-7.5) if parking <10% most of time. If not, Bike Route signage meets the target here.	Low	Add Combined Bike/Parking Lanes; on- road bike signal actuation if needed.	10.5	7.5	0.94	1	Medium	If IL23 stoplight is demand-actuated, check whether on-road bikes can trigger.
Gentleman	IL 23	city limit	2	2850	25	11.5	0	0	0	1	3.00	С		none	4-ft paved shoulders	Low	Add SW on at least 1- side. Lower priority: add paved shoulders	11.5	4.0	1.76	7		Shoulders low priority since Gentleman only briefly on the recommended network, due to poor connectivity with rest of network.
Mc Kinley (W- bd)	Adams	1st	2	4600	30	12	0	2	0	1	3.37	С		N-SW	Shared Lane Markings, 4' from curb. Below BLOS guideline.	Low	Add Shared Lane Markings	12.0			10	High	
Mc Kinley (E- bd)	Adams	1st	2	4600	30	14	6	2	40	1	1.97	В		N-SW	Bike Route signage; perhaps add SLM by higher parking (E-end)	Low	Add Bike Route wayfinding signs. Consider SLMs by high parking.	14.0	6.0		10	High	W-end has low parking, existing de facto Combined Bike/Parking Lane. E-end has more parking, could supplement with SLMs 11' from curb.
Mc Kinley	1st	Dakota	2	4650	30	20	0	2	3	1	2.16	В	Parking only allowed on N- side by apartments	Most S- SW	Bike Lanes 5.5-16.5-16.5-5.5. By apts, stripe parking lane, add SLMs 11' from curb.	Medium S	Add Bike Lanes	16.5	5.5	0.54	10		By apartments, where parking ok, drop W-bd bike lane. Elsewhere, indicate no parking on bike lane sign posts.
Adams	Center	Glover	2	1250	30	12	0	0	10	1	2.83	O	S-bd (W-side) parking only		Bike Route signage, although somewhat below BLOS guideline	Low	Add Bike Route wayfinding signs	12.0			5	Medium	On N-bd (E side), can add Shared Lane Markings 4' from edge, since no parking
Adams	Glover	Robin Hood	2	1250	30	12	0	0	5	1	2.77	С		none	Bike Route signage, although somewhat below BLOS guideline	Low	Add Bike Route wayfinding signs; add SW on at least 1-side	12.0			5	Medium	
Adams	Robin Hood	Erickson	2	1250	30	13.5	0	2	5	1	2.59	С		none	Bike Route signage, although somewhat below BLOS guideline	Low	Add Bike Route wayfinding signs; add SW on at least 1-side	13.5			5	Medium	
Adams (N- bd)	Erickson	View	2	1350	30	10	0	0	0	1	2.97	С		none	Bike Route signage, but marginal BLOS. SLMs 4' from edge.	Low	Add Shared Lane Markings; add sidewalk on at least 1-side	10.0			5	Medium	
Adams (S-bd)	Erickson	View	2	1350	30	18	0	0	60	1	2.75	С			Bike Route signage, but marginal BLOS. Use SLMs 11' from edge, if high parking occupancy consistent.	Low	Add Shared Lane Markings; add sidewalk on at least 1-side	18.0			5	Medium	
Adams	View	Mc Kinley	2	1350	30	11	0	0	0	1	2.86	С		none	Bike Route signage, though somewhat below BLOS guideline. If parking prohibited, use SLMs 4' from curb.	Low	Add Shared Lane Markings; add sidewalk on at least 1-side	11.0			5	Medium	
Adams	Mc Kinley	Fosse	2	1900	25	13	0	2	0	1	2.61		Example of X-section built with recent standards. No parking.	Both SWs	Bike Lanes 5-10-10-5 (using gutter pans)	Low	Add Bike Lanes	10.0	5.0	1.46	5	Medium	
State	IL 23	Watson	2	4000	25	12	0	0	0	1	3.11	С	No parking	Both SWs	SLMs (4' from curb). Bike Route signage - but below BLOS guideline.	Low	Add Shared Lane Marking and wayfinding signs	12.0			6		Route crosses IL 23 at stoplight, uses IL 23's E-SW (widened to SP) to Catherine
State	Watson	Mc Kinley	2	4000	25	20	0	0	10	1	2.03	В		1-side SW (alternates)	Combined bike/parking lanes (7.5-12.5-12.5-7.5) if parking <10% most of time. If not, Bike Route signage.	Low	Add Combined Bike/Parking Lanes	12.5	7.5	1.01	6	Medium	
State	Mc Kinley	park	2	800	25	10	0	0	0	0.5	2.46	В		none	Bike Route signage	Medium	Add Bike Route wayfinding signs and sidewalk on 1 or more sides	10.0			6	Medium	

Segment	From (W/N)	To (E/S)	Lanes	Traffic ADT	Speed Limit				Park Occ%	% Truck	BLOS score			Sidewalk Status	Feasible on-road facility type	Sidepath Feasibility	Recommendation	Rec. Lane Width	Rec. Striped Width		Public priority points	Priority	Implementation Notes
IL23/ Columbus/St ate	LaSalle	Hitt	4	28800	30	12	1.8	0	0	2	3.61	D	Bridge over Illinois River.		Lanes could be restriped to widen "shoulder" 11-11-3.8 each side, if drain grate drops fixed	High	Restripe, fix drains near term. Long term: widen for SP one side, 6' SW other. Improve Hitt intersection.	11.0	3.8	3.10	18	High	Hitt intersection: crosswalks and islands too far back, traffic stops in front on crosswalk.
IL23/ State	Hitt	State	4	21200	35	12	0	2	0	2	4.09	D	Continuous left-turn lane or painted median	Both SWs	Narrowing travel lanes or median/turn lane would provide enough room for bike lanes.	Low		12.0			18		Redesign State/Hitt intersection for better crossings of each leg. See Prospect link recommendations elsewhere.
IL23/ Moore	State	Catherine	4	21200	35	12	0	2	0	2	4.09	D	Continuous left-turn lane or painted median	Both SWs	Narrowing travel lanes or median/turn lane would provide enough room for bike lanes.	Low	Widen E-SW to SP width, for State-to- Catherine route	12.0			18	Medium	
IL23/ 1st	Catherine	Gentleman	4	21200	35	12	0	2	0	2	4.09	D	Continuous left-turn lane or painted median		Narrowing travel lanes or median/turn lane would provide enough room for bike lanes.	Low		12.0			18		
IL23/1st	Gentleman	Mc Kinley	4	15100	35	12	0	2	0	2	3.91	D	Turn Lanes by McKinley only	Both SWs	Bike lanes only possible if travel lanes all narrowed to 10'	Low		12.0			18		
IL23/1st	Mc Kinley	S city limits	4	7600	35	12	0	0	0	2	3.57	D	Continuous left-turn lane or painted median		Narrowing travel lanes or median/turn lane would provide enough room for bike lanes.	Low- medium	Fill sidewalk gaps	12.0			18	Medium	
IL23	S city limits	S from town	2	7600	55	12	10	0	0	2	1.27	Α		none	Existing paved shoulder	High		12.0	10.0		18		As development occurs, include sidewalks (minimum), sidepath and/or bike lanes (preferred)
Catherine	Prospect	IL 23	2	500	25	11	0	1	15	0	2.21	В	ADT higher S, lower N. Stop signs.	Both SWs	Bike Route signage	Low	Add Bike Route wayfinding signs	11.0			0	High	
3rd	Van Buren	Glover	2	500	25	11	0	1	30	0	2.35	В		Both SWs	Bike Route signage	Low	Add Bike Route wayfinding signs	11.0			4	Medium	
3rd	Glover	Highland	2	500	25	10	0	0	0	0	2.17	В		none	Bike Route signage	Low	Add Bike Route signs. Lower priority: add SW on at least 1-side	10.0			4	Medium	
Highland	Third	Third	2	400	35	10	0	0	0	0	2.30	В		none	Bike Route signage	Low	Add Bike Route signs. Lower priority: add SW on at least 1-side	10.0			4	Medium	
3rd	Highland	Grover	2	500	25	10	0	0	0	0	2.17	В		none	Bike Route signage	Low	Add Bike Route signs. Lower priority: add SW on at least 1-side	10.0			4	Medium	
3rd	Grover	Gentleman	2	500	25	15	0	0	3	0	1.59	В		none	Bike Route signage	Low	Add Bike Route signs. Lower priority: add SW on at least 1-side	15.0			4	Medium	
Howard	Gentleman	Arch	2	300	25	10	0	0	0	0	1.91	В		none	Bike Route signage	Low	Add Bike Route signs. Lower priority: add SW on at least 1-side	10.0			0	Low	
Arch/ Hickory	Howard	Seminole	2	600	25	20	0	0	15	0	1.05	Α		none	Bike Route signage	Low	Add Bike Route signs. Lower priority: add SW on at least 1-side	20.0			0	Low	
Seminole	Hickory	Mc Kinley	2	500	25	10	0	0	0	0	2.17	В		none	Bike Route signage	Low	Add Bike Route signs. Lower priority: add SW on at least 1-side	10.0			0	Low	

# **Appendix 3 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 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), but geographic diversity in grant selections would generally favor Ottawa area projects.

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. Some agencies prefer these over ITEP.

#### **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 Ottawa 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.