# CITY OF BLOOMINGTON BICYCLE MASTER PLAN



Adopted by Bloomington City Council on May 11, 2015



City of Bloomington, Illinois 109 E. Olive St. Bloomington, IL 61701

Prepared By: League of Illinois Bicyclists

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## 1 Introduction/Executive Summary

Bloomington, Illinois, grew out of the 1820s settlement of Blooming Grove and has a population most recently estimated by the U.S. Census Bureau (in 2013) at 78,902. Its Central Business District is notable as the seat of city and county government and the former courthouse which now serves as the McLean County Museum of History. It was a workplace and political organizing site for Abraham Lincoln, Supreme Court Justice David Davis and their contemporaries.



Figure 1.1. The west side rail yards. McLean County
Museum of History image

Today, Bloomington's largest employer is State Farm Insurance Cos., but prior to State Farm's emergence in the 20<sup>th</sup> Century Bloomington was best known for its railroad shop operations on the west side and numerous railroad lines that made use of local tracks. The Chicago & Alton shops employed about 1,800 skilled shop workers in the early 1900s, when Bloomington's total population was under 25,000. The railroad lines -- and the interstates that would later parallel those lines -- also made Bloomington a transportation hub in Central Illinois.

The shops are long gone, and rail traffic decreased through the years. However, Bloomington-Normal's railroad history had major implications in the development of a shared pedestrian-bicycle trail. Bloomington and Normal jointly undertook creation of the Constitution Trail in 1987, and the initial phases of the trail followed the old Illinois Central Gulf Railroad right-of-way. The Constitution Trail emerged as a popular undertaking. It stretches approximately 37 miles through the Twin Cities thus far. A survey by the Bloomington Parks, Recreation and Cultural Arts Department found that the trail ranks among residents as Bloomington's most important parks and recreation amenity in the city (2010 Parks Master Plan Update).

In this new century, Bloomington and Normal look to expand upon that success not only with added trail but by creating networks of bicycle transportation on and alongside streets. The cities' leaders recognize that cycling takes various forms: a mode of transportation, a form of vigorous exercise, a method of casual exercise and general recreation. Both communities aspire to vastly expand routing to make bicycling more viable as a transportation mode in addition to a more easily accessed recreational outlet. Independent of each other, the twin communities in 2014 simultaneously created their first designated bike lanes, and the cities have created shared bicycle-motor vehicle routes. This marks an infancy of a comprehensive bicycling network through the cities. Normal has a master plan for bicycle and pedestrian routes; Bloomington creates a Bicycle Master Plan with these pages.

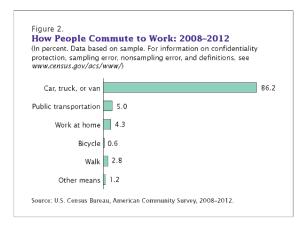
The existing Constitution Trail serves as a starting point for a cycling network. The trail's untapped potential can be seen in the accompanying Geographic Information Systems (GIS) map in which blue lines denote the existing Constitution Trail and red lines denote potential

future trail locations as identified by the City of Bloomington and the Town of Normal. The trail alone, however, cannot get people to work, to business districts and to other destinations. Terrain limitations, space limitations and the cost of street sidepaths and off-road routes limit scope and expansions of the Constitution Trail under ideal circumstances. Creation of bike-friendly streets, through designated bike lanes and shared lanes, are required to create a bicycling network that serves the various types of bicycle usage. It is important for the public to understand that a citywide Bicycle Master Plan must take (and does take) Bloomington well beyond the Constitution Trail.



Figure 1.2. Trail system map.

Bloomington covers approximately 27 square miles of area and serves as the county seat for McLean County, population 169,572 (2010 Census estimate). Normal has a 2013 Census estimate of 54,664 residents, counting Illinois State University college students. Normal's area is approximately 18 square miles.



*Figure 1.3. Commute rate by mode.* 

The cities continue to have both freight and passenger rail services, and transition to high speed passenger rail is underway. Add to this their strategic location within the federal interstate system, Twin City and intercity bus services, an airport, the bike-pedestrian trail and an emerging bicycle network. With this plan and other transportation initiatives, Bloomington-Normal has positioned itself as a truly multi-model metropolitan area.

Individually operated cars, vans and SUVs remain the dominant mode of transportation in

Bloomington and America, especially when viewing transportation to and from work sites. There are no illusions here about pushing the cars out. Nationally, just 0.6 percent of the American population commutes to work by bicycle, according to the 2008-2012 Survey of Communities conducted by the U.S. Census Bureau. The number of bike commuters, nonetheless, increased by 61 percent since the survey of 2000. It remains dwarfed by car, truck

and van commuters, who account for 86.2 percent.

What is clear from the Master Plan study, though, is that bike-friendly routes are not available to potential commuters desiring to reach various job sites. There are no predictions as to number of bike commuters

McLean County Top 5 Employ	ers			
State Farm Insurance Cos.	14,935			
Illinois State University	3,251			
Country Financial	1,955			
Unit 5 School District	1,674			
Advocate BroMenn Medical Center	1,347			
Bloomington-Normal Area Convention and Visitors Bureau				

Figure 1.4. Top employers.

once a network becomes reality in the Twin Cities. Certainly, availability will increase commuter use. However, the job commuters are but one of the constituencies.

The Master Plan places value on linkage of schools and neighborhoods, businesses and neighborhoods, Downtown Bloomington and Uptown Normal, and neighborhoods to other neighborhoods. Foremost, it aims to support the casual adult bicyclist while also taking into account the needs of children cyclists and advanced cyclists. Planners were mindful that national data shows national 27 percent of all car trips are one mile or shorter; 40 percent are less than two miles<sup>1</sup>. 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.

#### **Master Plan outline**

Chapter 2 of the plan explains the types of on-road and off-road bicycle facilities needed for a denser and more complete bikeway network in Bloomington. The primary target audience for the additions is the "casual adult" bicyclist, although the needs of advanced cyclists and children are both addressed. A thorough analysis is used to determine which option is appropriate for each of the "routes to study" suggested by the public. As described in Chapter 3, criteria include need, cost, technical factors, and strategies to gain public support while avoiding common bike plan pitfalls.

Chapter 4 details the specific recommendations for the bikeway network. These include an array of on-street bikeways such as bike lanes and sharrows, completion of a few major roads' sidepaths where gaps exist, expansion of some existing trails on their own rights-of-way, crossing improvements, trail signing and maintenance, remedying demand-actuated stoplights not triggered by on-road bicycles and posting wayfinding signage for the network. The chapter includes maps and tables for easier comprehension of the recommendations.

Chapter 5 identifies easy-to-use (and free) resources and strategies to supplement infrastructure investment with bicyclist education, motorist education, enforcement, and encouragement efforts. In addition, recommendations are offered on retrofitting bicycle parking where needed and adding bike parking requirements to the City development ordinance.

Chapter 6 recommends a multi-year implementation work plan with opportunistic and standalone projects in the City's Capital Improvement Program. Costs of various bikeway types are listed, along with funding and grant suggestions. The plan calls for an annual implementation report to track progress. Finally, as a topic to consider for a future plan update, key steps in Bloomington's path to national Bicycle Friendly Community designation are discussed.

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

## 2 Bikeway Types in the Bloomington Plan

#### **Standards and Guidelines**

The 2012 *Guide for the Development of Bicycle Facilities* by the American Association of State Highway and Transportation Officials (AASHTO), the Federal Highway Administration's (FHWA) Manual of Uniform Traffic Control Devices (MUTCD), and the NACTO Urban Bikeway Design Guide (NACTO) form the technical basis for the plan's recommendations.

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 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 Bloomington include the various branches of the Constitution Trail.



Figure 2.1. Multi-use trail on its own right-of-way

## **Sidepaths**

Sidepaths are trails running immediately parallel to a roadway, essentially a widened sidewalk. Examples include the Constitution Trail section along General Electric Road and the sidepaths along Hamilton and Beich Roads. Compared to trails on their own rights-of-way, most sidepaths have a larger fraction of use for transportation purposes.

While the physical separation from traffic provides a sense of security to sidepath users, intersections present inherent conflicts and visibility problems – especially for sidepath cyclists riding against the flow of adjacent traffic. Understanding these inherent conflicts can help in efforts to improve sidepath safety.

Figures 2.2 and 2.3 illustrate the visibility problems leading to intersection conflicts. 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, if at all. Many will look only to their left. Cyclist 2 might be seen. Cyclist 1 is much less likely to be seen.

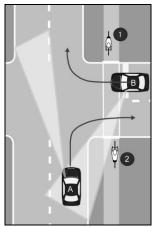


Figure 2.2. Right turns across sidepaths.

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.

It should be noted that a contributing factor in at least some of these conflicts is

disregard of pedestrian crosswalk laws and possibly traffic controls by bicyclists. Education and enforcement of both motorists and bicyclists can help somewhat in controlling sidepath problems. Chapter 6 provides some recommendations.

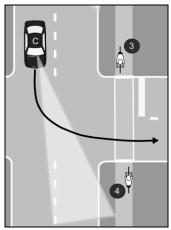


Figure 2.3. Left-turn across sidepath.

In addition, sidepath conflicts can be reduced through engineering by:

- Bringing the sidepath closer to the road at intersections, for better visibility during all turning motions and better stopline adherence for right-turners
- Using pedestrian refuge islands to break up major crossings and right-in-right-out entrances right-turn corner islands ("porkchops") are particularly effective
- Using higher visibility crosswalks see the recommendations in Chapter 4

These treatments are illustrated in Figures 2.4.

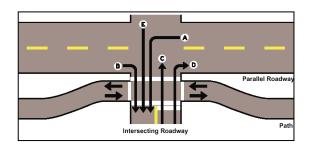




Figure 2.4. Top: Bringing sidepath crossings closer to the parallel road. Bottom: Right-turn corner island and high-visibility continental crosswalks

#### **On-road Bikeways**

Expanding Bloomington's bicycle network beyond its off-road trail and sidepath system requires the determination of appropriate bikeway choices for various contexts.

Due to the fear of getting hit by a car from behind, 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.<sup>2</sup> The visibility issues described above are a prime reason. Note that for each motorist turning motion illustrated in Figures 2.2 and 2.3, an on-road cyclist on the right side of the road is within the motorist's viewing area. In fact, especially in urban areas during the day or when the bike is well-lit at night, the large majority of car-bike crashes occur at intersections – not from cars striking bikes from behind<sup>3</sup>.

The AASHTO guide describes the above and other sidepath issues in discouraging their use in inappropriate locations. In general, sidepaths may be better choices than on-road bikeways for faster, busier roads without lots of crossings – as seen in the more newly-developed parts of Bloomington. Since that is not the case for many of the City's other roads, various on-road bikeway options are considered in this plan.

#### **Bike Lanes**

Bike lanes are portions of the roadway designated for bicyclist use. Bike lanes are typically 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<sup>2,4,5</sup> around the country for roads with bike lanes include:



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

- 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

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. When a road has bike lanes but no on-street parking, indicate the parking prohibition. This can be done either by adding a no parking sign (MUTCD R8-3) on the same post as optional Bike Lane

<sup>&</sup>lt;sup>2</sup> Moritz, W.E., "Survey of North American Bicycle Commuters: Design and Aggregate Results", Transportation Research Board, 1997.

<sup>&</sup>lt;sup>3</sup> AASHTO Guide for the Development of Bicycle Facilities, pp. 3-8 and 3-9, 2012.

<sup>&</sup>lt;sup>4</sup> AASHTO Guide for the Development of Bicycle Facilities, p. 22, 1999.

<sup>&</sup>lt;sup>5</sup> Reynolds, C, et al., "The Impact of Transportation Infrastructure on Bicycling Injuries and Crashes: A Review of the Literature", *Environmental Health*, 2009.

signs (MUTCD R3-17), using No Parking Bike Lane (MUTCD R7-9) signs, or using the standard No Parking signage typically used by the City.

Bike lane options are evolving, to provide benefits in various situations. Buffered Bike Lanes (Figure 2.6) are now accepted by the Federal Highway Administration and detailed in the



Figure 2.6. Buffered bike lanes (NACTO).

NACTO <u>Urban Bikeway Design Guide</u>. A buffer space may be added between travel lane and bike lane, or between bike lane and curbside parking. This plan lists Buffered Bike Lanes as the primary recommendation for the northern segments of Business US 51 and a small part of IL9.

Protected Bike Lanes (PBL) use bollards, curbs, or parking to separate bike lanes from travel lanes. American use of PBLs has grown significantly this decade in dense urban cores. While no PBLs are listed in the plan, they may be considered as an option – especially where intersection conflicts can be closely controlled, and motorist stop line compliance is high on cross streets and other intersections.

National standards are continually evolving on handling bike lanes at intersections. The AASHTO guide has long detailed advance merge areas and, where space allows, continuing bike lanes to intersections. New tools are colorized pavement and extensions of bike lanes *through* intersections.

Insufficient pavement width due to the presence of turn lanes may necessitate interruption of bike lanes at intersections. Where this occurs with a right-turn only lane, shared lane markings may now be used for straight-ahead bicycle travel in the right-turn lane (Figure 2.7). Where this occurs with a left-turn lane but no right-turn only lane, use shared lane markings in the center of the rightmost through lane.

Green-Colored Pavement may now be used to enhance the conspicuity of bicycle lanes, or extensions of those lanes at intersections. One useful application may be between the pair of dotted lines used to extend a bicycle lane across the beginning of a right-turn-only bay and lane. Regular sweeping is important, as bike lanes tend to collect debris. The City performs regular sweeping of streets, parking lanes, and bicycle facilities.

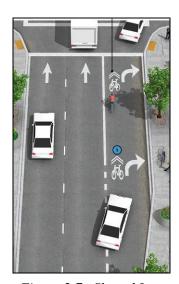


Figure 2.7. Shared Lane Markings in right-turn only lane. (NACTO)

### **Shared Lane Markings**

Shared lane markings (aka "Sharrows") inform cyclists of optimum lane positioning. Also, SLMs are more effective than signage alone in reminding drivers of the possibility that they will see a bicyclist in the road.

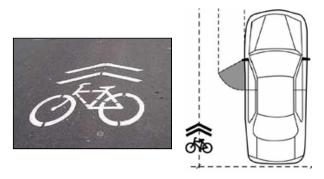


Figure 2.8. Shared Lane Marking.

Bloomington has already installed SLMs on Front, Prairie and Park streets and other streets. Bicycle positioning on the roadway is important to avoiding crashes with cars turning at intersections and doors opening on parked cars.

Shared lane markings may only be used on streets with speed limits of 35 mph or lower. Sometimes SLMs are used in lieu of bike lanes on relatively comfortable roads that would still benefit from a higher level of

guidance to bicyclists and motorists. More often, however, SLMs are a fallback treatment where there is insufficient width for bike lanes.

On roads with no permitted parking, the center of the marking shall be 4 feet (or more) from the curb. On roads with permitted and occupied parking, the center of the marking shall be 11 feet (or more) from the curb. SLMs that far from the curb work best at higher (>30%, perhaps) parking occupancies. However, this plan also recommends SLMs on some roads with lighter

parking and wider lanes lacking other options besides Bike Route wayfinding signage only.

The markings should be placed right after an intersection and spaced at intervals of 250 feet thereafter. See MUTCD chapter 9 for more installation guidance. The shared lane marking also can be used to indicate correct straight-ahead bicycle position at intersections with turn lanes, where bike lanes or combined bike/parking lanes have been temporarily dropped.

SLMs should be supplemented with wayfinding signage.



Figure 2.9. Sharrow near Franklin Park.

## **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.

It is recommended to use the updated signage styles available in the latest MUTCD. Some styles also provide wayfinding assistance at intersections with supplemental destination plates

and arrows placed beneath them. The 2009 version of the MUTCD manual includes signs that combine bike route designation with wayfinding information. Some Illinois towns have put two or three destinations on a single sign, with mileages. Figure 2.10 illustrates some examples.







Figure 2.10. Bike Route wayfinding sign options. Left: D11-1/D1-1 Middle: D11-1c Right: D1-2b

As described in Chapter 4, wayfinding signs are useful throughout the bikeways network, whether along a trail, bike lane or route. See 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 5% or 10% occupancy – except perhaps on special occasions ("party-parking"). While this may be an opportunity for dedicated bike lanes, removal of parking on even one side may be politically infeasible – even though the wider lanes often encourage faster traffic speeds through neighborhoods.



Figure 2.11. Combined Bike/Parking Lanes.

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

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

"Combined Bike/Parking Lanes" (CBPLs) 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. As mentioned earlier, bike lanes should use "no parking" signs – where there is no adjacent on-road parking.



Figure 2.12. Signal activation marking and sign.

#### **Signal Activation by Bicycles**

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.

Illinois now has a law by which bicyclists and motorcyclists may treat stoplights like stop signs, after two minutes of not being detected. Engineering solutions are safer and preferred.

For existing intersections, the MUTCD-approved Bicycle Detector Pavement Marking (MUTCD Fig. 9C-7) in Figure 2.12, together with the R10-22 Bicycle Signal Actuation Sign, can indicate a detector trigger point for actuating the signal. For standard detectors, the detector's perimeter – such as its right edge – is more sensitive to bicycles. Correct tuning of the detector may be needed, too.

For new intersections, quadrupole loop detectors, microwave or new camera detection technology could be used, as they are more sensitive to bikes and motorcycles. As an example, the City has moved to microwave detection at the Franklin/Emerson and Prairie/Washington traffic signals.

Chapter 4 includes a recommendation on this issue.

#### 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 striping for bike lanes or combined bike/parking lanes, completing sidepaths and trails, adding wayfinding signs and improving crossings.

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

• **Public Involvement:** On March 18, 2014, a "Public Brainstorming Workshop" was attended by over 90 residents. The purposes of the workshop included: a) gather local resident knowledge on biking needs; b) prioritize road corridors and other routes to study for potential improvements; c) build community support for the plan and its implementation. Each attendee marked individual maps with suggestions. A group exercise followed in which top priorities from three geographic regions of the City were discussed and reported. See Appendix 2 for results.

McLean County Regional Planning Commission greatly extended public involvement and outreach for the plan, through the MindMixer online application. Electronic publicity and an insert in City water bills resulted in over 1000 responses from local citizens. Appendix 3

Come Brainstorm with Us Join the discussion as the City of Bioomington develops its Master Plan for Bicycle Routes, to potentially include designated bike red routes (sharrows and side paths. Public Brainstorming Workshop 7:00 p.m. Tuesday, March 18 in the Osborn Room Bloomington Police Department

Figure 3.1. Ad for March 18 meeting.

provides a summary from the resident survey. Other open-ended questions in the survey, along with other extensive MindMixer input by residents, provided a wealth of detailed suggestions on infrastructure improvements, non-infrastructure efforts, and other community priorities. These raised ideas and issues not gathered at the public brainstorming workshop, while helping with prioritization of recommendations.

Consultation with Steering Committee and Staff: In addition to the workshop, two meetings were held with the Steering Committee of the Bloomington Bicycle Plan, consisting of City staff, elected officials, other relevant agencies, local bicycle groups, and others (see Appendix 1). The committee guided the project approach and the principles used in making recommendations, while providing valuable input on the recommendations and plan draft. Meanwhile, City staff and the plan consultant extensively discussed the long list of bicycle network recommendations in the plan.

- **Review of regional and Normal's plans**: Where possible, the recommended bikeway network includes connections and consistency with the Town of Normal's Bicycle and Pedestrian Master Plan. Off-road trails identified in the McLean County Regional Greenways Plan (2009) were also included.
- **Bicycle Level of Service Analysis:** The Bicycle Level Of Service<sup>6</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 has been added to the Highway Capacity Manual. More information and an online 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 Bloomington 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, the MUTCD (FHWA), and NACTO, nationally recognized resources for bicycle facility design. See Bikeways Types discussion in the previous section.

#### **Guiding Principles and Selecting Bikeway Type**

The following general guiding principles were used for the plan's recommended improvements to Bloomington'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.
- Strive for a network that is continuous, forming a grid of target spacing of ½ to 1 mile to facilitate bicycle transportation throughout the City.
- As much as possible, choose direct routes with lower traffic, ample width, stoplights for crossing busy roads – and at least some level of traffic control priority (minor collectors or higher classification) so that



Figure 3.2. Park Street, at Illinois Wesleyan University.

cyclists do not encounter stop signs at every street.

• Look for spot improvements, short links, and other small projects that make an impact.

<sup>&</sup>lt;sup>6</sup> Landis, Bruce, "Real-Time Human Perceptions: Toward a Bicycle Level of Service," <u>Transportation Research Record 1578</u> (Washington DC, Transportation Research Board, 1997).

• Be opportunistic, implementing improvements during other projects and development. An example is restriping during resurfacing. Widening a road to add an on-road bikeway will be considered as part of a major road reconstruction, but not as a standalone project.

These guidelines were used for making recommendations for specific route segments:

- Consider both on-road and off-road improvements, as described in Chapter 2. Narrowing lane width to 11' will be considered if necessary to implement an on-road bikeway on local roads with lower speed and lower truck traffic.
- 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 or Bike Route signage, plus 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 bikeway network.
- Only in special cases should sidepaths be recommended where there are too many crossing conflicts (driveways, entrances, cross streets) or where residential front yards will be impacted. 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. Shared Lane Markings should be used in straight-ahead lanes, at intersections where turn lanes require the interruption of striped bike lanes or Combined Bike/Parking Lanes.

## **Generating Public Support**

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

- Achieve early, easy successes ("low-hanging fruit") to gather momentum.
- Avoid removing on-road parking if at all possible, especially by businesses and on roads with more than very low parking occupancy. When a primary recommendation calls for the removal of any parking, list secondary, fallback recommendations as options.
- Where appropriate, use road striping to serve not only bicyclists but adjacent residents, as well. Cite the traffic calming (slowing) and other benefits of striped, narrower roads.

- Do not widen 4-5 foot sidewalks to 8-10 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 to help promote the plan and highlight progress.

#### **Bike Lane Recommendations and Tradeoffs**

The AASHTO guide says: "Bike lanes are the appropriate and preferred bicycle facility for thoroughfares in both urban and suburban areas." Implementation of some of the plan's bike lane recommendations (e.g., parts of Albert/East and Locust Streets and Springfield Road) are relatively straightforward, with sufficient pavement width under current conditions. However, other locations involve tradeoffs.

One such tradeoff is the reduction of lanes – a "road diet." For parts of Emerson and Lincoln Streets; Fairway, Regency, and ML King Drives; and Cottage Avenue, the primary recommendation calls for converting four lanes road sections to three lanes (one travel lane in each direction, plus continuous left-turn lane) plus bike lanes. For other parts of Emerson and Lincoln streets and elsewhere, the continuous left-turn lane of a three-lane road is recommended to be removed, creating space for bike lanes.

These recommendations considered current and project traffic levels and likely utilization of the continuous left-turn lane. The plan's recommendations regarding road diets are considered relatively conservative compared to some bicycle planning industry "rules of thumb." Further guidance on road diets will be forthcoming next year from the FHWA.



Figure 3.3. Jersey Avenue bike lanes.

Parking removal for the addition of bike lanes was considered even more seriously, due to potential political impacts. Some critical bikeway network road segments, having low parking occupancy and poor or no nearby alternatives, do have bike lanes with parking removal as the primary recommendation. These include still other parts of Emerson and Lincoln Streets in which parking would be reduced from two sides to one, and

east Grove Street, where existing parking on one side would be removed. Other such segments having permitted but extremely low or no parking occupancy on both sides are parts of Morris and Mercer Avenues and Fairway Drive.

As indicated by the maps' "Bike Lanes or options" symbolization, lesser, secondary options are listed for each segment in which parking removal is part of the primary recommendation. The plan recommends careful consideration and public involvement of these options on a case-by-

case basis. Another factor in the decision should be levels of speeding along the segment, as bike lanes can reduce speeds through passive traffic calming<sup>7,8</sup>.

In the case of Jersey Avenue in summer 2014, parking was removed on the south side of the street. However, the action was only taken after the City mailed out notices and invited comment from residents on both sides of the street.

For other segments in which parking removal was considered, various technical and/or political reasons led to a lesser level of accommodation being listed as the primary recommendation. In those cases, the bike lane configuration is listed as a secondary option, should the decision ever be made to remove parking there.

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<sup>&</sup>lt;sup>7</sup> Bureau of Traffic Management, "N. Ida Avenue Neighborhood Traffic Management Project—Final Report," City of Portland, OR, 1996.

<sup>&</sup>lt;sup>8</sup> Private communications with police departments in Geneva and Buffalo Grove, IL, who studied the effect locally.

## 4 Bikeway Network Recommendations

#### **Introduction**

The Bloomington Bicycle Plan proposes an expanded network of bicycle routes to facilitate travel to all sections of the City and beyond. The proposed network builds on the existing Constitution Trail system developed over the years by the City and other agencies. The recommended projects in this section will also help fill gaps, tackle barriers and improve conditions to complete the network. See the earlier Bikeways Guidelines section for more information on how routes and projects were selected.

A major caveat for the vast majority of these recommendations is that both the primary and secondary/other option recommendations assume the existing pavement width. Future reconstruction or expansion projects are opportunities to consider better bike accommodations, especially in those places where the bikeway network's comfort level target could not previously be met.



Figure 4.1. Constitution Trail bridge over Oakland Avenue.

## **Understanding the Maps**

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

- **Figure 4.2**) **Existing Conditions -- Trails and On-Road Comfort Level:** Shows *existing* on-road conditions for bicyclists on studied roads, including, but not limited to, all routes studied for the network. It also provides information on existing trails and sidepaths.
- **Figure 4.3**) **All Existing and Recommended Bikeways:** Recommended on- and off-road bike facilities, including long-term future projects as well as low priority projects resulting in only a minor improvement or a slightly denser network.
- Figure 4.4) Existing and High/Medium Priority Recommended Bikeways: A subset of the map above, without long-term future projects and low priority projects removed.
- **Figure 4.5**) **Future Conditions -- Trails and On-Road Comfort Level:** Portrays how the off-road trail system and on-road bicycle level of service will change, if the recommended projects are implemented. Only those on-road segments "in the network" are shown.

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

The recommended bikeways maps calls for bike lanes from Mercer to Hershey, with details of the proposed road diet described in the spreadsheet. From Morrissey to Mercer and from the Constitution Trail (by Clayton) to Bunn, bike lanes and one-side parking restriction is the primary recommendation – with the spreadsheet detailing secondary, fallback options. Removing the continuous left turn lane to add bike lanes is the recommendation described for Bunn to Morrissey. Separate recommendations are offered for Main to the Constitution Trail: shared lane markings westbound and combined bike/parking lane eastbound. Finally, Bike Route wayfinding signage is the only recommendation from Koch to Main. Due primarily to network significance and public demand, each segment west of Main is a high priority.

The future conditions map and spreadsheet show that bike lane striping would improve Lincoln from Main to Hershey to at least a High B. The exception is westbound from Main to the Constitution Trail, which remains a C with shared lane markings.

Figure 4.2: Existing Conditions
Trails and On-Road Comfort Level

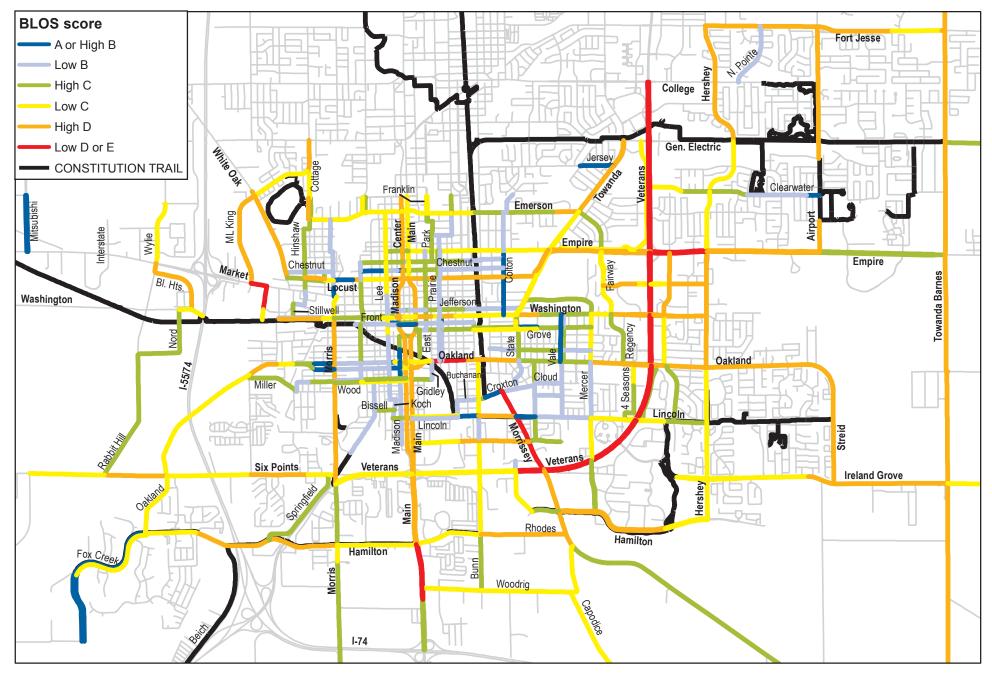


Figure 4.3: All Existing and Recommended Bikeways

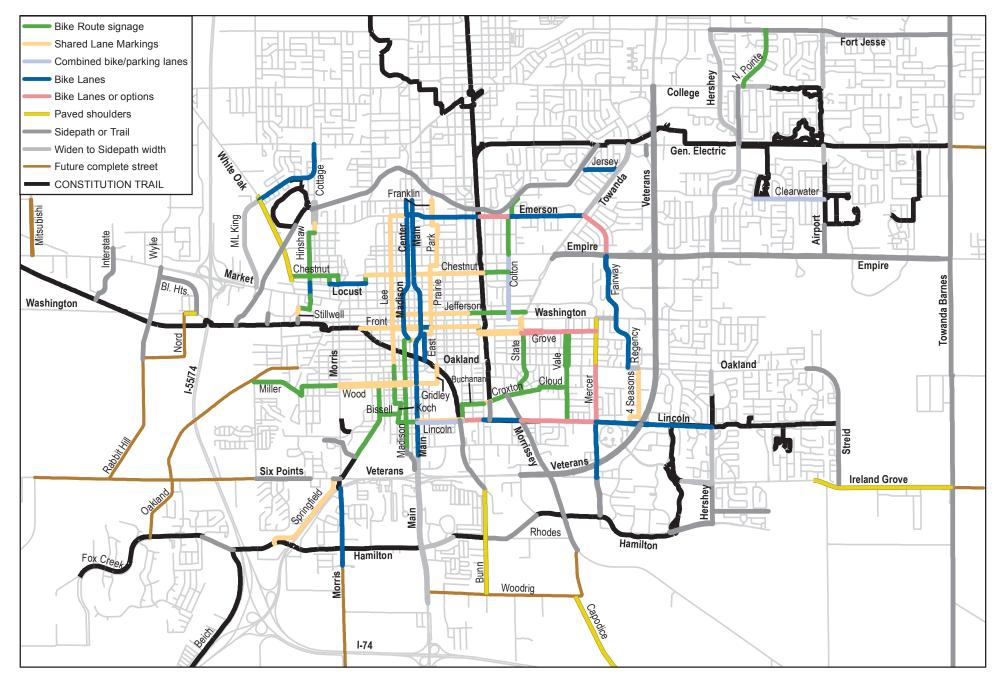


Figure 4.4: Existing and High/Medium Priority Recommended Bikeways

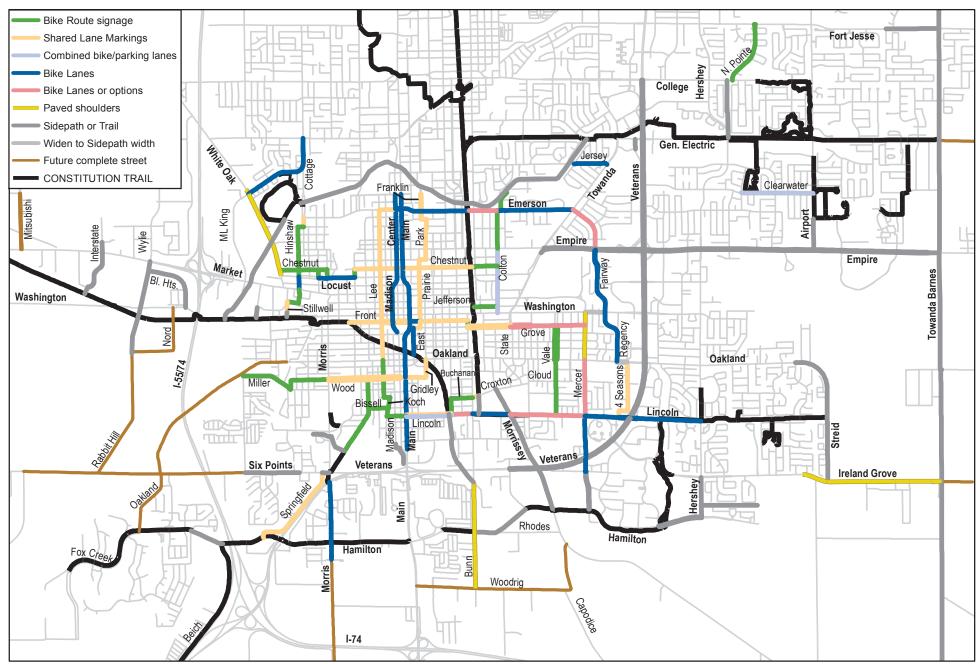
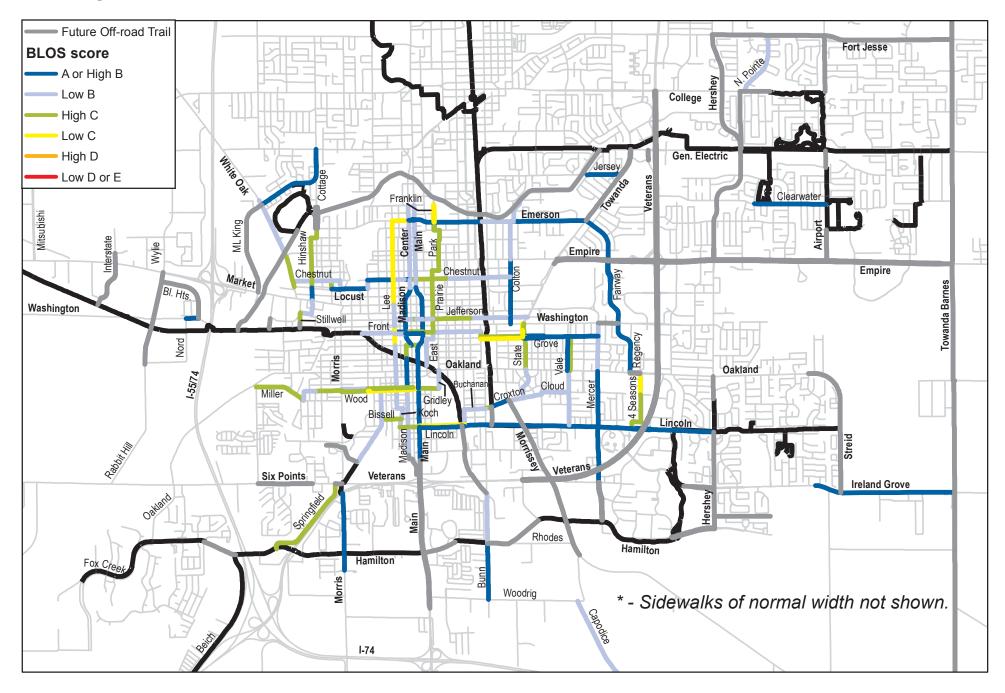


Figure 4.5: Future Conditions\* -- Trails and On-Road Comfort Level



#### **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, sidewalk coverage, recommendation details and implementation notes, is housed in a spreadsheet that helps create the maps. See Appendix 4 for the entire dataset by road segment.

The table below summarizes recommended projects by road name. Listed at the end are low priority routes less important to the network. When an agency other than the City of Bloomington has jurisdiction and could take the lead on implementation, that agency is listed in the Priority column: *IDOT*, McLean *County*, Town of *Normal*, or Bloomington-Normal Water Reclamation District (*BNWRD*). Bike facilities would not be installed on township (*Twsp*) roads unless jurisdiction is transferred to the City.

Table 4.1. Recommended Projects - High and Medium Priorities

Street	From (N/W)	To (S/E)	On Road Recommendation	Off Road Recommendation	Priority
Albert/East	Grove	Constitution Trail	Bike Lanes		High
Allin	Chestnut	Locust	Bike Route wayfinding signage		Medium
Bissell	Low	Koch	Bike Route wayfinding signage		Medium
BNWRD Trail	Const. Tr. W (Washington)	Const. Tr. N		Trail	High (BNWRD)
BNWRD Trail	Const. Tr. N.	Const. Tr. E.		Trail	Medium (BNWRD)
Buchanan	Clayton	Bunn	Bike Route wayfinding signage		High
Bunn	Lafayette	Veterans		Sidewalk	Medium
Bunn	RR Xing	Hamilton	Paved Shoulders	Sidewalk	High
Bunn	Hamilton	Woodrig	Paved Shoulders		Medium [Twsp]
Caroline	Circle	Washington		Trail link	Medium
Center	Normal border	Locust	Buffered Bike Lanes		High [IDOT]
Chestnut	White Oak	Morris	Bike Route wayfinding signage		Medium
Chestnut	Allin	Center	Shared Lane Markings		Medium
Chestnut	Center	Const. Tr./ Linden	Shared Lane Markings		High
Chestnut	Const. Tr./ Linden	Colton	Bike Route wayfinding signage		Medium
Clayton	Buchanan	Lincoln	Bike Route wayfinding signage		High
Clearwater	Veterans	N of Mt Vernon		Intersection improvement	Medium
Clearwater	Mill Creek	Airport	Combined Bike/Parking Lanes		Medium
Colton	Emerson	Empire	Bike Route wayfinding signage		Medium
Colton	Empire	Washington	Combined Bike/Parking Lanes		Medium
Const Tr SE extension	Lincoln	Bunn		Trail	High

Street	From (N/W)	To (S/E)	On Road Recommendation	Off Road Recommendation	Priority
Constitution Tr extension	Croxton	Lincoln		Trail	High
Cottage	Normal border	ML King Dr	Bike Lanes (road diet)		Medium
Cottage	Seminary	Forrest	Shared Lane Markings		High
Cottage	White Oak Park north edge	Seminary		Finish Sidewalks, (widen to sidepath)	Medium
Croxton	Bunn	Indianapolis	Shared Lane Markings		High
East	Locust	Olive	Buffered Bike Lanes (road diet)		High [IDOT]
Emerson	Lee	Center	Shared Lane Markings		High
Emerson	Center	Linden	Bike Lanes (road diet)		High
Emerson	Linden	State	Bike Lanes (remove parking) or backup options		High
Emerson	State	Eboch	Bike Lanes		High
Emerson	Eboch	Towanda	Bike Lanes (remove continuous left-turn lane)		High
Empire	Colton	Towanda		Finish Sidewalk	Medium [IDOT]
Empire	Towanda	Airport		Sidepath	High [IDOT]
Empire	Airport	Towanda Barnes		Sidepath	Medium [IDOT]
Ethell	Normal border	Emerson	Bike Route wayfinding signage	Sidewalk	Medium
Fairway	Towanda	Empire	Bike Lanes (remove parking) or backup options		High
Fairway	Empire	Eastland	Bike Lanes (road diet)		High
Four Seasons	Oakland	Lincoln	Shared Lane Markings		Medium
Fox Creek	Danbury	Beich		Sidepath	High
Franklin	Normal border	Emerson	Shared Lane Markings		Medium
Franklin	Emerson	Beecher	Shared Lane Markings		High
Gridley	Wood	Oakland	Shared Lane Markings		High
Grove	Albert	Prairie	Shared Lane Markings		High
Grove	Robinson	State	Shared Lane Markings		High
Grove	State	Vale	Bike Lanes (remove parking) or backup options		High
Grove	Vale	Mercer	Bike Route wayfinding signage		High
Hickory/Koch	Lee	Bissell	Bike Route wayfinding signage		High
Hinshaw/ Forrest	Cottage	Locust	Bike Route wayfinding signage		High
Hinshaw	Locust	Market	Bike Lanes		High [IDOT]
Hinshaw/ Sheridan	Market	Stillwell	Bike Route wayfinding signage		High
IAA Dr	Vernon	Kurt		Sidepath	High
Interstate	Westgate	S-end		Sidepath	Medium
Ireland Grove	Dover	E of Bear Creek		Sidewalk	Medium
Ireland Grove	E of Bear Creek	Towanda Barnes	Paved Shoulders	Sidewalk or Sidepath	High
Jefferson	Const. Tr./ Robinson	Colton	Bike Route wayfinding signage		Medium
Koch	Bissell	Lincoln	Bike Route wayfinding signage		High

Street	From (N/W)	To (S/E)	On Road Recommendation	Off Road Recommendation	Priority
Lafayette	Center	Bunn		Sidewalk	Medium
Lafayette	Bunn	Morrissey		Finish Sidewalk	Medium
Lee	Emerson	Oakland	Shared Lane Markings		High
Lee	Oakland	Hickory	Bike Route wayfinding signage		High
Lincoln	Koch	Main	Bike Route wayfinding signage		Medium
Lincoln	Constitution Trail	Bunn	Bike Lanes (remove parking) or backup options		High
Lincoln	Bunn	Morrissey	Bike Lanes (remove continuous left-turn lane)		High
Lincoln	Morrissey	Mercer	Bike Lanes (remove parking) or backup options		High
Lincoln	Mercer	Hershey	Bike Lanes (road diet)		High
Lincoln (E- bd)	Main	Constitution Trail	Combined Bike/Parking Lane		High
Lincoln (W- bd)	Main	Constitution Trail	Shared Lane Markings		High
Locust	Western	Morris	Bike Lanes		Medium [IDOT]
Locust	Morris	Catherine	Buffered Bike Lanes		High [IDOT]
Locust	Catherine	Allin	Bike Lanes (remove continuous left-turn lane)		High [IDOT]
Locust	Colton	Towanda		Finish Sidewalks	High
Low	Wood	Bissell	Bike Route wayfinding signage		Medium
Madison	Locust	Olive	Buffered Bike Lanes (road diet)		High [IDOT]
Main	Center	Hamilton		Finish Sidewalks, (widen to sidepath)	High
Main	S of Woodrig	I-74	Better rumble strips	Sidewalk	Medium
Main	Normal border	Locust	Buffered Bike Lanes (road diet)		High [IDOT]
Main	Olive	Center	Buffered Bike Lanes (road diet)		High [IDOT]
Market	ML King Dr	Caroline		Bridge improvement	Medium [IDOT]
Mercer	Washington	Oakland	Paved Shoulders	Sidewalk	Medium
Mercer	Oakland	Lincoln	Bike Lanes (remove parking) or backup options	Sidewalk	Medium
Mercer	Lincoln	Ireland Grove	Bike Lanes (road diet)		High
Mercer	Ireland Grove	Hamilton		Add Sidepath	High
Miller	Alexander	Pancake	Bike Route wayfinding signage	,	Medium
ML King Dr	Cottage	White Oak	Bike Lanes (road diet)		Medium
Morris	Chestnut	Locust	Bike Route wayfinding signage		Medium
Morris	Veterans	Hamilton	Bike Lanes (remove parking and lower speed)		High
Morris	Hamilton	Witten Woods	Bike lanes (remove continuous left-turn lane)	Finish Sidewalk	Medium
Morrissey	Croxton	Lincoln		Sidepath	Medium [IDOT]
Morrissey	Lincoln	Hamilton		Sidepath	High [IDOT]
North Pointe	Fort Jesse	College	Bike Route wayfinding signage		Medium
Oakland	Regency	Four Seasons		Widen to sidepath	Medium

Street	From (N/W)	To (S/E)	On Road Recommendation	Off Road Recommendation	Priority
Oakland/ Streid	Eddy	Const. Tr. /White Eagle		Sidepath	Medium
Pancake/ Wood	Miller	Barker	Bike Route wayfinding signage		Medium
Prairie	Front	Grove	Shared Lane Markings		High
Regency	Eastland	Oakland	Bike lanes (road diet)		High
Six Points	Alexander	Szaret		Sidepath	Medium
Six Points	Szaret	Springfield		Sidewalk	Medium
Six Points	Springfield	Morris		Sidepath	High
Springfield	Bissell	south end/ Forrest Park	Bike Route wayfinding signage		High
Springfield	Six Points	Fox Creek	Shared Lane Markings	Sidewalk	High
Stillwell	Sheridan	Washington	Shared Lane Markings		High
Streid	Constit. Tr. /White Eagle	Ireland Grove		Sidepath	Medium
Towanda	Locust	Washington		Finish Sidewalk	High
Towanda	Empire	Locust		Sidewalk	High
Towanda Barnes	Raab	Ireland Grove		Sidepath	High [County]
trail (by Ireland Grove)	Hershey	Brookstone		Trail	Medium
trail (by Oakwood)	College	Gen. Electric		Trail	Medium
trail	PJ Irvin Park	Miller Park		Trail	Medium
trail link	Interstate	Constitution Trail		Trail link	Medium
trail link	Washington	Constitution Trail		Trail link	High
trail link	Madison and Lafayette	Main and RT Dunn		Trail and sidepath	Medium
Vale	Oakland	Lincoln	Bike Route wayfinding signage		Medium
Vale	Grove	Oakland	Bike Route wayfinding signage		Medium
Veterans	College	Commerce		Sidepath	High [IDOT]
Veterans	Morris	Commerce		Bridge improvement	Medium [IDOT]
Washington	Mercer	Regency		Widen to sidepath	Medium
Western	Chestnut	Locust	Bike Route wayfinding signage		Medium
White Oak	Normal border	Locust	Paved Shoulders	Sidewalk or Sidepath	Medium [County]
Wood	Barker	Morris	Bike Route wayfinding signage		Medium
Wood	Center	Gridley	Shared Lane Markings		High
Wood	Morris	Center	Shared Lane Markings		High
Wylie	Normal border	IL9/Market		Finish sidewalks	High

Table 4.2. Recommended Projects - Low Priority

Street	From (N/W)	To (S/E)	On Road Recommendation	Off Road Recommendation	Priority
Airport	Fort Jesse	College		Widen to sidepath	Low
Airport	Gen. Electric	Gill		Widen to sidepath	Low
Capodice	Woodrig	south end	Paved Shoulders		Low [County]
Cloud	McGregor	Vale	Bike Route signage		Low
College	Oakwood	Berrywood		Widen to sidepath	Low
Croxton	Indianapolis	McGregor	Bike Route signage		Low
Fort Jesse	Hershey	Kaisner		Sidepath	Low
Hamilton	Main	7th St		Widen to sidepath	Low
Hershey	Fort Jesse	Empire		Widen to sidepath	Low
Hershey	Oakland	Mockingbird		Widen to sidepath	Low
Hershey	Lincoln	Ireland Grove		Widen to sidepath	Low
Ireland Grove	Brookridge Park	Hershey		Width to sidepath	Low
Jefferson	Lee	Clinton	Shared Lane Markings		Low
Jefferson	Clinton	Const. Tr./ Robinson	Bike Route signage		Low
Jefferson	Colton	Towanda	Bike Route signage		Low
Madison	Olive	Lafayette	Bike Route signage		Low
Main	Hamilton	S of Woodrig		Widen to sidepath	Low
Meadows	Oakland	Maizefield	Bike Route signage		Low
ML King Dr	White Oak	Market		Width to sidepath	Low
Morrissey	Hamilton	Woodrig		Sidepath	Low [IDOT]
O'Connell	Maizefield	Croxton	Bike Route signage		Low
Olive	Madison	Main	Shared Lane Markings		Low
State	Grove	Oakland	Bike Route signage		Low
State	Washington	Grove	Shared Lane Markings		Low
Towanda	Vernon	Jersey		Widen to sidepath	Low [Normal]
Towanda	Jersey	Fairway		Widen to sidepath	Low
Towanda	Fairway	Empire		Sidewalk	Low
Washington	Nord	Bloomington Heights	Paved Shoulders		Low [Twsp]
Washington	Brown	RR W of Morris		Finish sidewalk	Low

### **Trail Crossings**

The various stems of the Constitution Trail system intersect many streets in Bloomington. Trail overpasses and underpasses provide safe grade separations from some of the busiest roads, including Emerson, Washington, and Oakland; Veterans and Hershey; and Main and Center. At-grade crossings are well-marked with the higher-visibility continental style of crosswalk and usually with accompanying W11-1 Bicycle Warning and W16-7p diagonal downward pointing arrow signs.

A minor suggestion is to switch the crossing location standard from W11-1 to the W11-15 combined Bicycle/Pedestrian sign. Both this and the W16-7p sign should be in the brighter FYG (fluorescent yellow-green) color.



Figure 4.6. W11-15 and W16-7p signs.

For busier roads, it is recommended to also use the W11-15 (or W11-1) sign with "Trail X-ing" W11-15P and "Ahead" W16-9p supplement plaques in advance of the crossing. Bicycle crossing pavement markings are also possible. Details are provided in the AASHTO bike guide (2012)'s Figure 5-19, and MUTCD Table 2C-4.

A menu of more effective options exists for various situations:

- Crosswalks on raised speed tables, for lower volume and speed roads
- Curb extensions, for lower speed roads with significant on-street parallel parking
- Median refuge islands, which lower the crash rate by 40%
- Advance stoplines, to reduce multiple-threat crashes at multilane roads
- (Where warrants are met) Pedestrian Hybrid Beacon (aka "HAWK") traffic signals, activated by pedestrians and bicyclists
- (Where warrants are met) Rectangular Rapid Flashing Beacon (RRFB) signs, with either ped and cyclist activation or automatic detection. RRFB vehicular stopping rates approach that of HAWK signals, but at a much lower cost. For use with W11-2 Pedestrian Crossing sign.
- Trail grade separations of other busy roads, if feasible

In all cases, trail crossings shall meet ADA requirements, with features including detectable warnings.

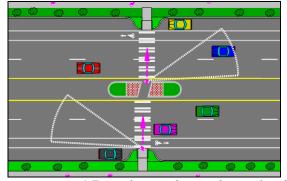




Figure 4.7. Left – median refuge island (courtesy Pedestrian Bicycle Information Center). Right – Rapid Rectangular Flashing Beacon (courtesy FHWA).

Rectangular Rapid Flashing Beacons are recommended to be added to Constitution Trail crossings at IDOT's Empire and Locust Streets and at the City's Oakland-Macarthur Avenues – with Grove Street as a lower priority. A raised median island could be added at Oakland-Macarthur where there is now a painted median.

To shorten crossing distance, curb extensions (aka "bulb-outs") could be added where on-street parking is allowed on the south side of Empire's crossing and the north side of Grove.



Figure 4.8. Trail underpass of Hershey Road.

The Constitution Trail's crossing of Airport at General Electric was mentioned as a concern by the public. An underpass similar to the one at Hershey's would be ideal but may not be feasible due to the building on the northeast corner.

Similarly, if safety problems justify it, the Constitution Trail's crossing of Euclid could be brought closer to Washington during an intersection reconstruction.

Where trail bollards are used, one center bollard is recommended over two. Locations now with two bollards include the north side of the Oakland-Macarthur crossing and the east side of Airport's.

Finally, wherever possible, **short trail links** should be provided to increase utility and access to the Constitution Trail system. Examples include links from the trail on the south side of Washington Street to both Stillwell and Caroline Streets.

## **Trail Usage Signage and Striping**

This section presents reference guidelines for consideration for the City's off-road trails.

In 1999, the State's Interagency Bikeways Council Working Group adopted the following recommended trail signage text to encourage better sharing of multi-use trails:

- All users keep right
- Pass on the left
- Announce intentions to pass
- Move off trail when stopped

This standard text may be used on signs installed at a few key trail locations.

Also, centerline striping can further enhance sharing of a trail. The AASHTO bike guide says: "A 4 to 6 in. wide, yellow centerline stripe may be used to separate opposite directions of travel where passing is inadvisable. The stripe should be dotted where there is adequate passing sight distance, and solid in locations where passing by path users should be discouraged,"

#### such as:

- For pathways with heavy user volumes
- On curves with restricted sight distance, or design speeds less than 14 mph
- On unlit paths where nighttime riding is not prohibited.

In addition, "A solid yellow centerline stripe may be used on the approach to intersections to discourage passing on the approach and departure of an intersection. If used, the centerline should be striped solid up to the stopping sight distance from edge of sidewalk.... A consistent approach to intersection striping can help to raise awareness of intersections."

#### **Traffic Signals for Bicycle Actuation Study**

An advantage of using collector streets in a bikeway network is that these roads usually have traffic signals to aid in crossing busier, arterial roads. There is a strong possibility that these stoplights are demand-actuated for those traveling on the collectors. Bicycles must be able to actuate the traffic signals' detectors – otherwise the routes become less useful to the network.

It is recommended that the demand-actuated signals slated for the routes of the bikeway network be field-tested for bicycle actuation. Chapter 2 lists some possible remedies.

#### **Bikeway Wayfinding Signage**

The recommended bicycle network includes a variety of on-road and off-road bikeway types. For each of these, network signage can serve both wayfinding and safety purposes including:

- Helping to familiarize users with the bikeway system
- Helping users identify the best routes to significant destinations
- Helping to overcome a "barrier to entry" for people who do not bicycle much but who want to get started
- Alerting motorists to expect bicyclists on the route

It is recommended that Bloomington collaborate with Normal to adopt wayfinding conventions consistent with Section 4.11 of the 2012 AASHTO bike guide (see Figure 4.9). In general, signs should be placed where a route turns at an intersection, crosses another route,

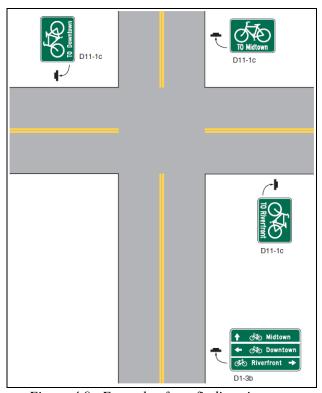


Figure 4.9. Example of wayfinding signage.

and crosses major intersections. Confirmation signs should be placed periodically, too.

Ideally, wayfinding signage would be installed for the entire Bloomington bikeway network, during the same time period. However, if priorities must be set, or if phasing will be done, then a suggested order or prioritization is as follows:

- 1. Trails on their own rights-of way, especially trails with confusing decision points
- 2. On-road bikeway sections implemented by that time
- 3. Sidepaths along major roads

Finally, Des Plaines provides an interesting example to consider: proposed 7.5" X 4" stickers on the backs of their bikeway wayfinding signs. The city's bicycle webpage and corresponding QR code are listed. The webpage has background information – and bikeway maps.



Figure 4.10. DesPlaines QR code sticker.

## **Other Agencies**

This plan includes the following **connections with the Town of Normal's** bike plan:

- White Oak Road (McLean County Highway Department) paved shoulders, plus sidewalk or sidepath
- Cottage Avenue road diet with bike lanes
- Franklin Street north to nearby Normal bikeways
- Jersey Avenue bike lanes (existing)
- Sidepaths along Towanda Avenue, Hershey Road, and Airport Road

While not shown in the maps or project list, the City should look for **rail-to-trail** (rail abandonment) or **rail-with-trail** (trail along active railroad) opportunities, in partnership with the appropriate railroads. An example is the railroad corridor extending southeast to Capodice Road and Downs from Bunn Street.

The City should work closely with IDOT and McLean County Highway Department to identify opportunities to improve roadways as part of new, reconstruction and maintenance projects. Each road occasionally has to be maintained, and sometimes intersection or expansion projects are done. These are the most cost-efficient opportunities to also make improvements (as needed) for those walking and biking. Specific suggestions from this plan:

**Veterans Parkway Crossings.** A recurring theme and need expressed during the plan's public input was safer bicycle crossings of Veterans Parkway. At present, there is one designated grade-separated crossing, a Constitution Trail underpass by General Electric Road. Bunn Street's tunnel is narrow and uncomfortable for most (a BLOS score of low-C) and Main Street has only a sidewalk on one side. Most (but not all) of the at-grade crossings have sidewalk pedestrian crossings with right-corner and median islands at most (but not all) intersection faces. Some relatively quieter roads that are good candidates for on-road bikeways away from Veterans have multiple turn lanes and narrower lane widths at Veterans – causing a lower level of accommodation at the intersection. Examples are Clearwater, Jackson, Lincoln, and Mercer.

A two-pronged approach to crossing Veterans Parkway is recommended:

- 1. Seek to provide grade-separated crossings every two miles or so. Investigate engineering feasibility for an underpass or overpass somewhere between Eastland Drive and Lincoln Street. Also, implement the Constitution Trail extension along the railroad easement from Lincoln/Clayton, under Veterans, to Bunn. If the grading permits it now or in the future, implement the plan recommendation to complete Main's sidewalks, widening to sidepath width on one side.
- 2. Any Veterans Parkway project that includes resurfacing of cross streets in their intersection functional areas should study striping reconfiguration and lane narrowing for bike lanes (regular or green bike lanes), combined bike lane/turn lanes (Shared Lane Markings in right turn lanes), or other FHWA-accepted treatments. If such improvements are not possible during resurfacing, reconstruction of Veterans should add cross street pavement width to allow for bike lanes.

**Bikeways On or Along IDOT Roads.** In addition to Veterans Parkway crossings, other specific plan recommendations relevant to IDOT roads are detailed in Appendix 4 and include:

- Business US 51 (Center/Madison to Olive, and Main/East) one-way couplet restripe to add bike lanes, usually buffered bike lanes and usually with a "road diet" reduction in the number of lanes. South of the couplet, add sidewalks, widen to sidepath width, and use IDOT's new, narrower rumble strip standard with longitudinal gaps for bicyclists.
- Empire finish sidewalks between Colton and Towanda; add sidepath and/or sidewalk between Towanda and Towanda-Barnes
- Locust bike lanes between Western and Allin; finish sidewalks Colton to Towanda
- Market accommodations added during future Sugar Creek bridge reconstruction
- Hinshaw bike lanes between Locust and Market
- Lee shared lane markings between Empire and Locust
- Morrissey sidepath between Croxton and Woodrig
- Veterans sidepath on one side, sidewalk on the other

In addition to the list above, any IDOT road improvement in Bloomington should be considered for possible improvements in bicycle and pedestrian accommodation. Of particular importance will be bridge reconstruction projects – as bridges are often barrier to bike/ped travel.

Recommendations in this plan for IDOT roadways will be reviewed and given consideration when completing the Bicycle Travel Assessment of the Phase 1 design process for each project. Any bikeways on state routes will have to meet IDOT design policies including geometric and capacity impacts. Accommodations stated in the plan are not necessarily projects IDOT has scheduled in the near or long term.

**Bikeways On or Along County Roads.** Specific plan recommendations relevant to McLean County Highway Department roads include:

- White Oak pave shoulders; add sidewalk or sidepath
- Towanda-Barnes add sidepath on west side
- Capodice pave shoulders

Installation of these bike facilities will be dependent on funding. The County Highway Department is currently focusing its funding and bike facilities on the Route 66 Trail, below.

**Bikeways On or Along Township Roads.** The plan recommends the addition of paved shoulders to two township-maintained segments of Washington and Bunn. Several other township roads are slated for "future complete streets" improvements. These projects will not be implemented until the City grows to a point that the potential exists for jurisdictional transfer of the roadways to the City.

#### **Route 66 Trail**

Illinois' Route 66 Trail is an evolving Chicago-to-St. Louis bicycle route consisting of on-road sections and off-road trails. Initiated by the Illinois Department of Natural Resources, the route is a collaborative effort by numerous local and state agencies and other partners. McLean County has been very active in improving the route through the Bloomington-Normal area. One such project is a sidepath constructed along Beich Road from Fox Creek Road to Shirley.



Figure 4.11. Route 66 Trail sign.

The <u>Route 66 Trail User's Guide</u>, <u>First Edition</u>, published by the League of Illinois Bicyclists in 2006, specifies an "interim route" adopted by the Route 66 Trail Executive Committee as the preferred route at that time. Segments through Bloomington include:

- Constitution Trail (main stem) south from Normal
- Grove Street west to Robinson Avenue, then 0.1 mile south
- Olive Street 0.9 mile west
- Constitution Trail 1.8 miles west
- Nord Lane/Rabbit Hill Road 1.8 miles south and west
- Six Points Road 0.6 mile east
- Oakland Avenue 0.6 mile southwest
- Fox Creek Rd / 1050N southwest toward Shirley

The new route to be used after implementation of this plan's recommendations shall be:

- Constitution Trail (main stem) south from Normal
- Grove Street west to Robinson Avenue, then 0.1 mile north
- Front Street 0.8 mile west
- Lee Street 0.5 mile south
- Wood Street 0.15 mile west
- Low Street/Springfield Road 0.7 mile southwest to road's dead end
- Trail 0.25 mile southwest to Morris/Six Points, then 0.1 mile west
- Springfield Road 0.85 mile southwest
- Fox Creek Road sidepath 0.4 mile west
- Beich Road sidepath southwest toward Shirley

## 5 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 Bloomington. 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*, at <a href="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 "post and loop." 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 5.1.

Old-fashioned "school racks," which secure only one wheel, are a poor choice for today's bicycles (Figure 5.2). Securing both the wheel and frame is difficult, and bicycles are not well supported, sometimes resulting in bent rims.





Figure 5.1. Inverted U, single (top) and in a series (bottom).

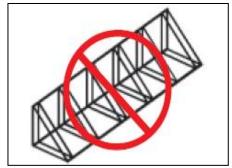


Figure 5.2. "Schoolyard" rack, not recommended.

**Locations:** The best locations for bike parking are near main building entrances, conveniently located, highly visible, lit at night, and—when possible—protected from the weather. When placing a bicycle rack in the public right-of-way or in a parking lot, it should be removed from

the natural flow of pedestrians, avoiding the curb and area adjacent to crosswalks. Racks should be installed a minimum of 6 feet from other street furniture and placed at least 15 feet away from other features, such as fire hydrants or bus stop shelters.

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

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



Figure 5.3. Bike rack at Illinois Wesleyan University.

(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.

The bicycle parking section in the City of Champaign's zoning ordinance (Section 37-376 to 37-379) not only specifies amount of bike parking per land use, but also bike rack type and general requirements for on-site location.

**Other Retrofits:** Retrofit bike parking is recommended in places of latent demand, including public buildings, recreation facilities, and commercial centers. Local bicycle groups should be tasked with providing suggestions. Note that retrofitting racks on commercial properties and other private property will require cooperation from the property managers.

### **Education**

There is a big educational gap – for both bicyclists and motorists – on how to legally and properly share the road. The result: avoidable crashes, too many people afraid to bike, and lots of anger and resentment. Education of both road user types is crucial to improving real and perceived bicycling safety in Bloomington. Investing some resources on public outreach and education would greatly leverage the City's infrastructure investment.

Many of the safety resources listed below are free, except for the time to get and use them. Much of this time could come from volunteers.

**Bicyclists:** Many people 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 to more places around town more safely.

The following safety materials could be distributed through schools and PTAs, at public places such as City Hall and the library, and on the City's and park department's websites:

- *Bicycle Rules of the Road*, a free guide from the Illinois Secretary of State: www.cyberdriveillinois.com/publications/pdf\_publications/dsd\_a143.pdf
- *Bike Safety*, a free brochure from the Illinois State Police: www.isp.state.il.us/docs/5-035.pdf
- Friends of the Constitution Trail's Bloomington-Normal bicycle map, with bike safety information on the back: <a href="www.constitutiontrail.org/Resources/Con\_Trail\_Map.pdf">www.constitutiontrail.org/Resources/Con\_Trail\_Map.pdf</a>
- League of Illinois Bicyclists' (LIB) single-page summaries for children and their parents. www.bikelib.org/safety-education/kids/bike-safety-sheet
- Illinois Bicycle Law cards, free from LIB. Relevant state laws, folds to business-card size. www.bikelib.org/wp-content/uploads/2013/02/BikeLawCard2013.pdf
- LIB offers free bike safety articles for newspapers, City newsletters and websites, and other municipal outreach. <a href="www.bikelib.org/other-advocacy/news-columns">www.bikelib.org/other-advocacy/news-columns</a>

In addition, the region has a network of bicycle safety instructors, nationally-certified by the League of American Bicyclists, to teach a menu of classes for children and adults. These classes – or training of new instructors – could be conducted in Bloomington. Details are at <a href="https://www.chicagobicycle.org">www.chicagobicycle.org</a> and <a href="https://www.bikeleague.org/bfa/search/list?bfaq=illinois#education">www.bikeleague.org/bfa/search/list?bfaq=illinois#education</a>.

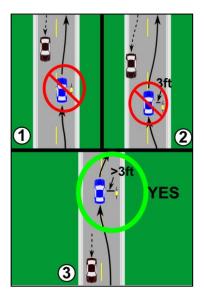


Figure 5.4. Motorist Quiz at www.bikesafetyquiz.com.

A new, online interactive resource on relevant laws and safety techniques is LIB's <a href="www.bikesafetyquiz.com">www.bikesafetyquiz.com</a>. Concise quizbased lessons are freely available for Adult Bicyclists, Child Bicyclists, and Motorists. Besides individual use, the application has functionality for easy use by schools, driver education programs, scouts, YMCAs, and more.

If needed, grant funding for grades K-8 education programs may be available from the Illinois Safe Routes to School program. See Appendix 5 for details.

**Motorists:** Drivers not trained on car-bike interactions are much more likely to make mistakes that are dangerous to people on bikes. The following safety resources are available from LIB, for driver education programs and existing motorists:

- The "Motorist Quiz" in the <u>www.bikesafetyquiz.com</u> resource mentioned above.
- "Share the Road: Same Road, Same Rights, Same Rules",

- a 7-minute video seen at <a href="www.bikelib.org/safety-education/motorists/driver-education">www.bikelib.org/safety-education/motorists/driver-education</a> and available as a DVD
- Motorist-relevant articles among the bike safety articles mentioned above.

The plan recommends that local high schools and private driver education programs be encouraged to use <a href="www.bikesafetyquiz.com">www.bikesafetyquiz.com</a> and/or the video and its accompanying lesson. Both resources could be added to the City website. During warmer months, the video could be shown on the local cable channel and the articles could be published for residents.

## **Enforcement**

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

According to Illinois law, bicyclists have both the rights and responsibilities of other vehicle users. Many cyclists 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. The aforementioned Illinois bike law cards are available from LIB. Also, LIB has piloted a bicycle ticket diversion program in Champaign, Urbana, and Highland Park. To reduce a ticket to a warning, offenders take the Adult Bicyclist quiz at <a href="www.bikesafetyquiz.com">www.bikesafetyquiz.com</a>, emailing their completion certificate to the police department. This has been received well and is suitable for Bloomington, too.

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. As with cyclists, police are encouraged to stop motorists if needed, to educate, issue warnings, or issue tickets. An annually-conducted, brief but well-publicized targeted enforcement campaign (aka "sting") can raise community awareness about particular problem issues. Warning tickets would be issued, along with instructions to complete the appropriate www.bikesafetyquiz.com lesson.

Officers are encouraged to learn or refresh their own knowledge on the common crash types through completion of the Motorist and Adult Bicyclist quiz lessons.

Finally, police might consider replicating an earlier Hoffman Estates "bike safety kit" program. There, the police regularly noticed 50-60 mostly low-income workers, relying on their bicycles for year-round transportation to their jobs. These residents, riding at dark on busy roads, were often at risk due to a lack of bike lights and reflective clothing. Officers distributed a kit of these items when they witnessed a cyclist in that situation. This low-cost program was a muchappreciated success that could be duplicated here.

## **Encouragement**

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

- Distribute the Friends of the Constitution Trail's
   Bloomington-Normal bicycle map showing the trail,
   preferred road routes, and bicycle safety information at
   public buildings and during events.
- Proclaim the City's observance of National Bike Month,
   Week, or Day. As part of the event, challenge residents to
   do the <a href="www.bikesafetyquiz.com">www.bikesafetyquiz.com</a>. Have the Mayor lead by
   example, holding his own certificates of completion from the
   Adult Bicyclist and Motorist quizzes in a press release photo
   publicizing the event.
- On Bike to Work Day, encourage bicycling to work, errands, or other destinations. Offer token incentives, such as refreshments at City Hall or coupons for ice cream.
- Work with the school districts to observe National Bike to School Day, in early May.
- Promote Bloomington as being bicycle-friendly in the City's advertising.

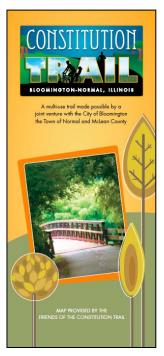


Figure 5.5. Bloomington-Normal bicycle map.

## **6** Plan Implementation

## **Introduction**

A key recommendation of this plan is to develop a way to ensure its implementation. Continued progress will require a commitment of time and financial resources over many years. Little by little, project by project, the City of Bloomington will become even more bike-friendly.

## Multi-Year Work Plan

This plan recommends a variety of strategies, from adopting policies to coordinating with other agencies, to quickly implementing "high priority, ready to go" projects. One of the first steps of plan implementation should be to go through the listed recommendations and draft a five year work plan. Some projects may be components of larger road projects in Bloomington's Capital Improvement Program. Others may be stand-alone retrofit projects. Projects that do not 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 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.

- 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 \$125,000 per mile for a soft surface trail to \$2,000,000 or more 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 \$15,000 to \$250,000 per mile, depending on the condition of the pavement, the need to remove and repaint the lane lines, the need to adjust signalization, and other factors. It is most cost efficient to create bicycle lanes during street reconstruction, street resurfacing, or at the time of original construction. Note that the high end estimate includes resurfacing of that portion of the existing pavement used for bike lanes.
- **Signed Bike Routes and Shared Lane Markings:** Signs and pavement stencils, at an estimated \$10,000 to \$25,000 per mile, 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.
- Maintenance: In addition to initial costs of bikeways, maintenance costs are ongoing.

These may be funded in a number of ways. First, the City of Bloomington 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.

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



Figure 6.1. Bike parked by courthouse.

Other opportunities include road projects by the City, McLean 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 onroad bikeway striping. In fact, it is likely that resurfacing projects will be a major component of plan implementation.

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

## **Technical Resources and Training**

City staff should have access to up-to-date resources to help with the details of design and implementation. In addition to including the printed resources below in the City planner's and engineer'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*, 4th Edition, 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 <a href="https://www.apbp.org">www.apbp.org</a>.
- NACTO Urban Bikeway Design Guide. Online at www.nacto.org.
- Manual on Uniform Traffic Control Devices. Online at <u>mutcd.fhwa.dot.gov</u>.

## **Websites and Professional Organizations:**

• The Pedestrian and Bicycle Information Center: Offers a wealth of information on engineering, encouragement, education and enforcement, including archived webinars and quarterly newsletters: www.pedbikeinfo.org

- The Association of Pedestrian and Bicycle Professionals: provides continuing education, technical resources and an online forum for exchanging questions and ideas.
   www.apbp.org
- League of Illinois Bicyclists: A planning and advocacy resource, with many on-line materials focused on best practices nationally as well as issues unique to Illinois: www.bikelib.org

## **Annual Evaluation**

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, publish a yearly plan status report in conjunction with a ribbon cutting ceremony or community event, Bike to Work Day or Bike to School Day, a community bike ride, or other event. This keeps local stakeholders focused on the progress that has been made and energizes everyone to keep moving forward. Also, consider updating this plan every 5-10 years to reflect progress and reevaluate priorities.

## **Future Plan Update Consideration Topic**

While not a specific recommendation of this first bicycle plan, a potential goal of future plan updates could be official designation as a "Bicycle Friendly Community" (BFC). This national League of American Bicyclists award program has Honorable Mention, Bronze, Silver, Gold, Platinum, and Diamond gradations. The program comprehensively assesses a community based on Engineering, Education, Enforcement, Encouragement, and Evaluation. Appendix 6 is an

infographic summarizing how Bronze and higher communities

have fared in key criteria.

Winning designation is not easy. In fact, the only Bronze or higher BFCs in Illinois are Schaumburg, Naperville, Normal, Champaign, Batavia and Elmhurst (Bronze); Chicago and Evanston (Silver); and Urbana (Gold). However, the recommendations in this plan encompass most of the award criteria. Whether or not BFC designation becomes an official City goal will be determined in the future by City Council priorities, staffing levels, and implementation progress of the current plan.

The League of Illinois Bicyclists, a longtime observer of and "local reviewer" for the BFC program, believes that Bloomington could achieve the Bronze level within 3-4 years. In addition to recently-designated on-road bikeways, Bloomington already has the impressive Constitution Trail system as the highlight of its

NEWPORT, RI
BICYCLE
FRIENDLY
COMMUNITY
2013-2017
THE LEAGUE
OF AMERICAN BRITCLISTS

Figure 6.2.. Bicycle Friendly Community sign.

bicycle-related accomplishments. However, this alone historically has not been enough to win Bronze or higher. LIB suggests that Bronze status could be achieved with steps such as:

- Adopting this plan, officially naming a Bicycle/Pedestrian Coordinator, and creating a Bicycle (or Bicycle/Pedestrian) Advisory Commission described next.
- Adopting a Complete Streets policy and/or bike parking ordinance.
- Implementing several more high-priority segments of on-road bikeways, especially bike lane sections.
- Implementing at least two of the Education recommendations from this plan.
- Implementing at least one of the Enforcement recommendations from this plan.
- Proclaiming Bike to Work Day, Week, or Month, with some accompanying public educational outreach.

Bicycle groups, or members of a possible Bicycle and Pedestrian Advisory Commission, could lead several of these efforts.

## Bicycle and Pedestrian Advisory Commission and Coordinator:

Perhaps the most important implementation tool is time. A key factor in achieving Bicycle Friendly Community designation is the dedication a staff member's time as the Bicycle and Pedestrian Coordinator. Such coordinators work on plan implementation and other active transportation issues. Also, a coordinator regularly collaborates with other staff and relevant agencies to ensure their work conforms to the goals of a City's bike plan. Routine review of development plans and road project designs is a prime example.

Similarly, BFC-designated municipalities usually have established an ongoing Bicycle and Pedestrian Advisory Commission (BPAC), reporting to the Plan Commission or directly to their city administrator/mayor's office. Volunteer involvement by a few energetic, knowledgeable, and dedicated residents can greatly leverage the staff time investment of the Bicycle/Pedestrian Coordinator, who would serve as the lead staff liaison to the BPAC. Usually, BPACs focus more heavily on bicycle than pedestrian issues. However, there would be much overlap in Bloomington, particularly with its Constitution Trail network.

BPAC membership should be limited to roughly 8 residents, consisting of at least 4-5 bicyclists ranging in experience. Should Bloomington's council create a BPAC, some members could come from the Steering Committee, the bike plan's March 18, 2014, public brainstorming meeting, and/or the City's organized bike-related groups: Bike BloNo, McLean County Wheelers, and Friends of the Constitution Trail. If these individuals lack interest in pedestrianonly issues, too, then at least 1-2 members should specifically represent these topics. Ideally, the residents who volunteer for BPAC should have some relevant, specialized expertise – and/or be willing to work on tasks outside of the meetings.

Other BPAC members usually come from other city departments (police, public works, parks and recreation, planning and zoning, economic development) or relevant agencies (such as a school district). However, it may be best for these departments and agencies to name representatives as "ex-officio" members, attending only when relevant topics are discussed. Meetings should be held every one, two, or three months, depending on level of activity.

A basic function of a BPAC is to routinely be given the opportunity to provide input into these city processes:

- Capital Improvement Program How can designs of the CIP's road projects and other capital projects implement bicycle plan recommendations or otherwise impact bicycling (and walking) positively? Also, the BPAC should propose stand-alone bike and/or pedestrian projects as priorities for the next CIP, each year.
- Site design and other development review Provide bicycle and pedestrian perspective to the plan commission's review of new development or redevelopment projects.
- Maintenance The BPAC should periodically review conditions on their city's bikeway system and make prioritized maintenance recommendations.

In addition, BPAC members should be empowered to work on several one-time and ongoing recommendations from this plan and other efforts. Examples include:

- Prioritize specific locations where bicycle parking is needed.
- Prioritize bikeways needing wayfinding signage and specifying destination content for each sign based on general guidelines from this plan.
- "Field test" demand-actuated traffic signals along the planned bikeway network, to determine and prioritize where bicycle-actuation improvements are needed.
- Bring or apply a variety of available education, enforcement, and outreach resources such as those detailed earlier in the plan to their city.
- Act as volunteer "bicycle ambassadors" at community events.
- Lead bike-related events, such as Bike to Work Day/Week/Month or Bike to School Day.
- Put together Safe Routes to School programming and grant applications
- Head the effort to win national Bicycle Friendly Community designation, including filling out the application and strategizing which areas need improvement.

If such a commission is formed, it is strongly recommended that each member be given "ownership" of at least one topic or effort. This would keep members energized and ensure the commission is a net positive in City time investment.

## Appendix 1 Bloomington Bicycle Plan Steering Committee

#### STEERING COMMITTEE

Tari Renner – Mayor

Scott Black – Alderman

Karen Schmidt – Alderman

Jim Karch, P.E. CFM – Director of Public Works

Kevin Kothe, P.E. – City Engineer

Bob Yehl, P.E. – Assistant City Engineer

Vasudha Pinnsmaraju – Executive Director, McLean County Regional Planning Commission

Mark Woolard - City Planner

Justine Robinson – Economic Development Coordinator

Michael Gorman – Illinois Wesleyan University

Marisa Brooks – McLean County Wellness Coalition

Caryn Davis – Bike BloNo

Julian Westerhout – McLean County Wheelers

Mike Kerber – Friends of the Constitution Trail

Ed Barsotti, Consultant – League of Illinois Bicyclists

## Appendix 2 Public Brainstorming Workshop Results

On March 18, 2014, a "Public Brainstorming Workshop" was attended by over 90 residents. The purposes of the workshop included:

- Gather local resident knowledge on biking needs
- Prioritize road corridors and other routes to study for potential improvements
- Build community support for the plan and its implementation.

Each attendee marked individual maps with suggested "routes to study" for improvements. The map at the end of Appendix 2 shows the results of this input, with each recommended segment color-coded by the number of participants suggesting that it be considered.

A group exercise followed in which top priorities of tables from three geographic regions of the City were discussed and reported. These include:

#### **Table 1, West Side (west of Main Street):**

- Bloomington Heights Road this will enable the trail to be connected to Walmart and the adjacent commerce.
- Morris Avenue in its entirety north to south. There is nothing major north and south, and Morris might be best.
- Sugar Creek branch of the trail. Currently you have to ride along the creek bank. Adelaide west to White Oak Park and straight to O'Neil. Or, add a leg to Graham.
- Springfield Road from Forrest Park to Bissell, south on Wright and to Lincoln.
- Explore Allin Street through the near west side. Consider Safe Routes to School funds to connect with schools.

## Table 2, West Side (west of Main Street):

- Fox Creek Road roadway and bridge over the railroad. This will allow connection to the west side of the City.
- Greenwood frontage road and connect that into Springfield Road idea and onto the north utilizing Lee Street.
- Bloomington Heights Road this will enable the trail to be connected to Walmart and the adjacent commerce.
- Some kind of connection along Seminary/Emerson (Cottage Avenue / White Oak Park to Linden) to the suggested Lee Street corridor.
- Connect White Oak Park into existing trail. South from White Oak Park using Cottage, Blackstone, Hinshaw, Sheridan and Stillwell. It was noted that Gas Avenue is closed and redirection (zig zag) is required.

#### Table 1, Central Section (east of Main Street, west of Veterans Parkway):

- Washington Street thoroughfare between Beer Nuts / Constitution Trail and Veterans. Potentially use bike lanes in this street segment.
- Lincoln Street as a southern east-west connecting different segments of the trail that currently exist.
- Mercer Avenue going north and south. Washington south to Hamilton Road trail. Good route for commuters to State Farm. Intersection where Mercer crosses Veterans.
- Towanda Avenue Washington all the way north through Bloomington and Normal. Cars are too fast. Major intersection issues at Empire Street and GE Road.

## Table 2, Central Section (east of Main Street, west of Veterans Parkway):

- We also picked Lincoln Street and Washington Street for bike lanes or bikeways. Both are wide enough and both cross Veterans. The two locations may be the best places to cross Veterans.
- Picked Vale from Lincoln to Washington. Washington Street from Veterans west to and past BJHS and onto Colton.
- Find a crossing across Center and Main. Could be Walnut Street or Chestnut Street. Getting people from Center portion of the City to the West.
- Finish the trail on Hamilton Road Bunn Street to Commerce Parkway.

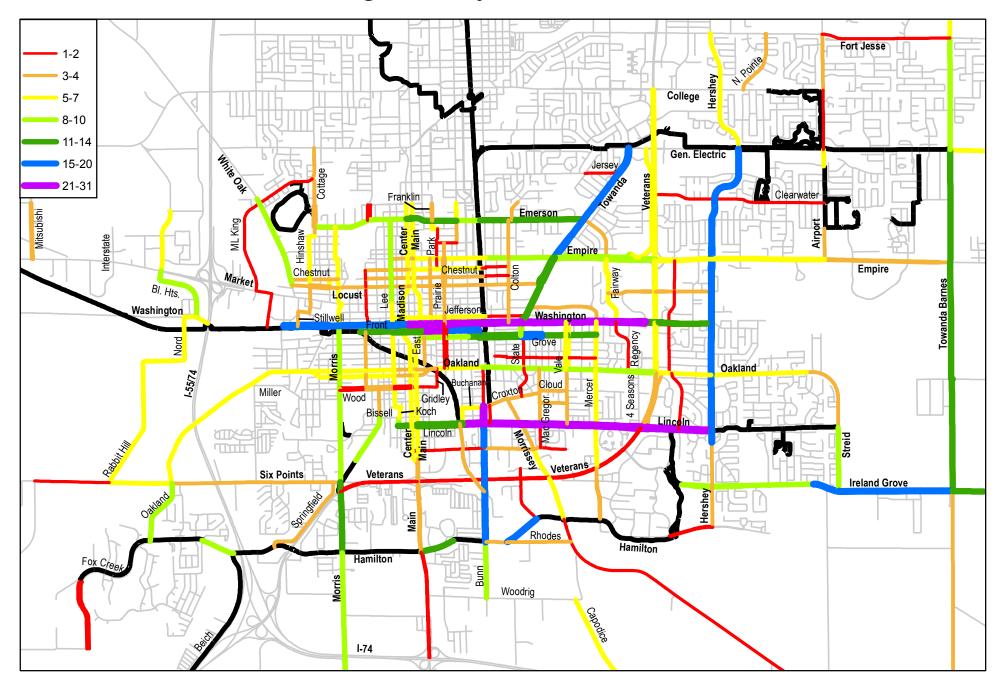
#### Table 3, Central Section (east of Main Street, west of Veterans Parkway):

- Not much left to add after last group. Southern end of trail connecting southern western and eastern part of trail.
- Focusing on bicycle infrastructure (signs, bike parking) in downtown including historic sites so people have an easy and clear way to connect. Gives people somewhere to go.
- Towanda Avenue Washington all the way north through Bloomington and Normal.

#### Table 1, East Side (east of Veterans Parkway):

- Connect the Lincoln Trail between McGregor and Arcadia potentially use combined parking bike lane.
- Study Hershey Road use sharrows to create a north-south route.
- Airport Road and GE Road Intersection study this dangerous intersection.
- Create connectivity by using Towanda Barnes from Ireland Grove to GE Road and Ireland Grove from Brookridge Park to Grove Park. Consider bike lanes on these street segments.

# Routes to Study "Votes" - 3/18/2014 Meeting Bloomington Bicycle Master Plan



## **Appendix 3: Survey Results and Other Public Input**

In addition to the Public Brainstorming Workshop, the public was given opportunities to comment both before and after the development of plan recommendations.

McLean County Regional Planning Commission greatly increased public involvement and outreach at the onset of the plan, through the MindMixer online application. Electronic publicity and an insert in City water bills resulted in over 1000 comments from local citizens. The water bill survey is at the end of this appendix.

Later in the planning process, the preliminary bikeway network recommendations were presented at a November 18, 2014 public meeting attended by twelve residents. These and others provided input at the meeting and during a public comment period afterwards. Several comments focused on specific additions to the proposed network. These were considered and the plan edited, as appropriate. Others expressed concerns about specific recommendations or the plan as a whole. The top concerns mentioned were implementation cost (13), safety issues (13), effect on motorized traffic (7), effect on businesses (3), lack of need due to the Constitution Trail already existing (3), and bicyclist non-compliance with traffic laws (1).

The following open-ended questions were asked in the MindMixer resident survey:

- What should be the top 3 infrastructure improvement priorities for enhancing the bicycling experience in the City?
- What are your most likely bicycling destinations?
- Any other comments/concerns to help Bloomington become a bike friendly community?

Responses to the survey questions, along with other extensive MindMixer input by residents, provided a wealth of detailed suggestions on infrastructure improvements, non-infrastructure efforts, and other community priorities. These raised ideas, issues, and concerns not gathered at the public brainstorming workshop, while helping with prioritization of recommendations.

A following is a summary of the remaining questions in the MindMixer resident survey:

## Within the last year, what mode of transportation did you use for local destination based trips?

```
Walk: Very often – 46, Often – 118, Not often – 254, Never – 105

<u>Bicycle:</u> Very often – 42, Often – 120, Not often – 168, Never – 187

<u>Car:</u> Very often – 527, Often – 57, Not often – 8, Never – 2

Public transit: Very often – 6, Often – 9, Not often – 43, Never – 427
```

#### What do you use your bicycle for?

```
Commuter – 99
Errands of other destination based trips – 146
Recreation- Family trips – 187
Recreation- Club or other Social biking – 128
Recreation- Individual workouts – 381
```

## I would ride my bicycle more often if:

I felt safer on the streets -295

There were more on-road bike lanes and shared lane markings – 291

There were more off-road trails – 269

Intersections were safer – 227

There was more bicyclist education and enforcement on safety techniques & laws – 114

Motorist education and enforcement made streets safer for bicyclists – 205

Destinations were closer to where I live – 131

There were more bike racks to lock my bike – 168

Changing facilities and/or showers at work – 69

## Under current street conditions I bike or would like to bike on the following types of roads:

I will not ride on any streets – 90

Very quiet, low speed residential streets (Ex. Croxton Ave, E. Jackson St.) – 401

Moderate traffic, low speed streets (Ex. W. MacArthur Ave, Springfield Rd) – 225

Somewhat higher traffic (Ex. W. Oakland Ave, Grove St) – 127

Busy and higher speed streets (Ex. Ireland Grove Rd, Main St, E Washington St) -53

Two questions from the survey's demographic questions focused on proximity to the Constitution Trail:

## Where do you live?

Within two blocks of the Constitution Trail – 163

Within a half mile of the Constitution Trail – 241

Farther than a half mile -179

#### If you are in the market to rent or buy a house; access to nearby trail is:

Very important – 97

Important – 191

Not so important – 187

## Bloomington Bike Plan

City of Bloomington is embarking on creating a bicycling master plan for the entire city. The goal of this plan is to help guide our bicycling infrastructure investments to achieve the greatest results with limited funding. Your feedback in this process is crucial. Please complete this 7 question survey to help us understand your bicycling needs & priorities.

Return the completed surveys:

option 1

Mail completed survey with your water bill

Option 2

Drop completed survey at these locations

McLean County

Regional Planning

City of Bloomington Public Works Dept. 3rd Floor,

3rd Floor, Commission (MCRPC)
Government Center Mezzanie suite 103
Government Center

ption 3
Participate online

Log on to: Bloomingtonil.mindmixer.com

Here you can take the survey online, express your opinions in many ways, learn what others have to say all while tracking the progress of the plan.

## earn and Participate

We encourage you to attend this interactive workshop led by League of Illinois Bicyclists (LIB) to learn about the project and types of bikeways, and to provide more detailed input in person.

## Public Brainstorming Workshop March 18, 2014 7-8:30 p.m.

Bloomington Police Station Osborne Room 305 S East St. Bloomingotn, IL 61701

Additional questions can be directed to:

Bob Yehl Vasudha Pinnamaraju City of Bloomington MCRPC

(309) 434-2437 (309) 828-4331



	the last year, ou use for lo			•	4. Under current street conditions I bike of like to bike on the following types of road (Please check all that apply)		7. Any other comiton become a bik			, ,
	Very Often	Often	Not Often	Never	I will not ride on any streets	$\bigcirc$				
Walk	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	Very quiet, low speed residential streets					
Bicycle	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	(Ex: Croxton Ave, E Jackson St)	$\bigcirc$				
Car	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	Moderate Traffice, low speed streets	$\circ$				
Public trans	sit 🔾	$\bigcirc$	$\bigcirc$	$\bigcirc$	(Ex: W MacArthur Ave, Springfield Rd)					
	o you use yo eck all that a		le for?		Somewhat higher traffic (Ex: W Oakland Ave, Grove St)	$\circ$				
Commuter	(Work or Sch	ool trips)		$\circ$	Busy and higher speed streets (Ex: Ireland Grove Rd, Main St, E Washington S	St) O		Abou	t You	
Errands or o	other destina	tion base	d trips	$\bigcirc$	(Da ireland Grove na, Main 30, 2 Washington 2	, , , , , , , , , , , , , , , , , , ,	Where do you liv	e?		
Recreation-	- Family Trips			0	5. What should be the top 3 infrastruture		Within two blocks	s of the Co	onstitution <sup>-</sup>	Trail 🔘
Recreation-	- Club or othe	er Social b	oiking	0	ment priorities for enhancing the bicyclir ence in the City?	ig experi-	Within a half mile	of the Co	nstitution T	Trail
Recreation-	- Individual w	orkouts					Farther than a ha	lf mile		$\bigcirc$
3. I would	ride my bic	ycle moi	re often if,				If you are in the n house; access to			іу а
(Please ch	eck all that a	apply)					Very Important			$\circ$
I felt safer o	on the streets			$\bigcirc$			Important			$\bigcirc$
There were lanes and s	more on road shared lane m	d bike arkings		$\circ$			Not so important			0
There were	more off roa	d trails		$\circ$			You are a:		_	
Intersection	ns were safer			$\bigcirc$	6. What are your most likely bicycling des	stinations?	Male		Fema	
There was r	more bicyclist nt on saftey to	t educatio	on and	$\bigcirc$			Your age:		C	)
enforcemen	nt on sartey to	ecnnique	s & laws				Under 18	19-35	35-50	Over 50
	ducation and		nent	$\bigcirc$			$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
made street	ts safer for bid	Lyclists					Your Household I	ncome:		
Destination	ns were closer	to where	e I live	$\bigcirc$			Under 30K	_		Over 100K
There were	more bike ra	cks to loc	k my bike	$\bigcirc$			Various allabara	$\circ$	0	$\bigcirc$
Changing fa	acilities and/	or showe	rs at work	$\bigcirc$			Your address:			

## **Appendix 4: Road Segment Data**

Extensive data collection on existing bicycling conditions informed the development of this plan. Most of this information, such as roadway geometry, traffic conditions, Bicycle Level of Service scores, sidewalk coverage, recommendation details and implementation notes, is housed in the spreadsheet beginning on the next page. The legend for the spreadsheet is below:

StreetStreet name of road segmentFrom (W/N)West or North segment endTo (E/S)East or South segment end

**Existing Conditions** 

Lanes Number of through lanes (excludes center/other turn lanes)

Traffic ADT Traffic count in vehicles/day. Gray or blue indicate estimates.

Speed Limit Posted speed limit

Lane Width Width from lane edge (often the gutter seam/pavement edge) to next lane, in feet

Extra Width Pavement width from outer lane edge to gutter seam/pavement edge. May include paved

shoulders, parking areas, bike lanes.

Gutter Pan Width of cement gutter pan in feet

Parking 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

Primary

Description of the recommendation (if any) considered best for this segment.

Recommendation

Notes and other

Either further detail on the primary recommendation, or "fallback" recommendation(s) if

**options** the primary cannot be achieved.

**New BLOS** Shown only if an on-road, primary recommendation bikeway is implemented.

Implementation

Public "Votes" Number of 5-2-13 public brainstorming workshop attendees suggesting this segment

**Priority** Recommended implementation priority of segment

Street	From (W/N)	To (E/S)	Lanes	Traffic ADT	Spd Limit	Lane Width	Extra Width	Gutter Pan	Park Occ %	% Truck	BLOS score	BLOS grade	Comments	Sidewalk Status	Primary recommendation	Notes and Other Options	New BLOS	Public "votes"	Priority
Fort Jesse	Hershey	Airport	2	6800	45	12	0	1.5	0	1	3.82	D	CLTL, turn lanes - 38+1.5. Concrete.	S-SW	Add Sidepath	SP on one side (widen S-SW, or build N-SP), SW on other.		0	Low
Fort Jesse	Airport	Kaisner	2	5600	45	12	0	1.5	0	1	3.72	D	CLTL, turn lanes - 38+1.5. Concrete.	S-SW	Add Sidepath	SP on one side (widen S-SW, or build N-SP), SW on other.		2	Low
Fort Jesse	Kaisner	Towanda Barnes	2	5200	45	12	0	0	0	0	3.49	С	Stone shoulders	None	Add Sidepath	As developed, SP on one side, SW on other.		2	Develop
College	Oakwood	Berrywood												Both SWs	Widen to Sidepath	Widen S-SW to SP width, after easement trail built from Jersey/GE to College/Oakwood		0	Low
Gen. Electric	Towanda Barnes	east end	2	450	45	9	0	0	0	0	2.57	С	Tar and chip	None	Complete Street	Build as complete street when developed. Fine now.		6	Develop
Jersey	Eisenhower	Ethell	2	3500	30	20	0	0-pvd	5	0	1.91	В	Most parking by multi-family. Speed trailer indicates a problem. W-bd 2 lane use seen. Normal removing N-parking, adding BLs w/ striped S-parking.	Both SWs	(Normal)	Normal's road. Already implementing BLs and striped S- parking, removing N-parking.		2	
Jersey	Ethell	Towanda	2	3000	30	11	5	0-pvd	0	0	1.52	В	Turn lanes by Towanda. N-side Normal, low parking. Removed S-parking, added BLs 8-5 11-11-5 in fall 2014.	Both SWs	Bike Lanes	Done		2	Done
Clearwater	Veterans	N of Mt Vernon	4	5500	30	11	0	1.5	0	0	3.08	С	Turn lanes by Veterans. Sidewalk link to IAA Dr.	Both SWs	Intersection improvement	SLM 4' possible but well below target. Road diet would allow BLs. Long-term: Vets intersection reconstruct w/N-face Xing, S-face Xing moved to island, and BLs on Clearwater		1	Medium
Clearwater	N of Mt Vernon	Oakbrook	2	5500	30	13	0	1.5	0	0	3.19	С	Turn lanes	Both SWs	None	SLM 4' possible but well below target. Removing CLTL allows for BLs - consider after Veterans intersection improved.		1	
Clearwater	Oakbrook	Hershey	2	4500	30	16.5	0	1.5	15	0	2.81	С	Constitution Trail 1/2 mile N	Both SWs	None	Bike Route signage, but below goal. Parking too low for SLM 11' but too high for CBPL.		1	
Clearwater	Hershey	Mill Creek	2	3300	30	16.5	0	1.5	15	0	2.65	С	Constitution Trail 1/2 mile N. More parking near Hershey.	Both SWs	None	Bike Route signage, but below goal. Parking too low for SLM 11' but too high for CBPL.		2	
Clearwater	Mill Creek	Kenneth	2	2700	30	16.5	0	1.5	5	0	2.40	В	Access from Constitution Trail (Clearwater Park) to McGraw Park. Concrete E of Holder.	Both SWs	Combined bike/parking lanes	Bike Route signage. CBPL 7-11-11-7 (w/ gutters) possible.	1.17	2	Medium
Clearwater	Kenneth	Airport	2	2600	30	20.5	0	1.5	20	0	1.95	В	Parking heavier by apts. Concrete.	Both SWs	Combined bike/parking lanes	CBPL 8-14-14-8 (w/ gutters), w/ 11' SLMs by always-high parking areas. Or, Bike Route wayfinding signage.	0.68	2	Medium
Seminary	Cottage	Morris	2	4000	30	12	0	1	0	0.5	3.23	С	BNWRD trail along Sugar Creek proposed north of here	Both SWs	None	SLM 4' possible if no parking, but well below target. Alternative: Forrest and Morris from College.		9	
Seminary /Emerson	Morris	Lee	2	6000	30	13	0	0-pvd	0	1	3.38	С	One of few RR Xings. BNWRD trail along Sugar Creek proposed north of here.	N-SW, some S-SW	None	SLM 4' possible but well below target. If BNWRD trail along Sugar Creek not feasible, THEN widen road 6' for bike lanes: 5- 11-11-5.		10	
Emerson	Lee	Center	2	7500	30	13	0	0-pvd	0	1	3.49	С		Both SWs	Shared Lane Markings	SLM 4' possible (and needed to connect Lee) but well below target. If BNWRD trail along Sugar Creek not feasible, THEN widen road 6' for bike lanes: 5-11-11-5.		10	High
Emerson	Center	Fell	4	9450	30	11	0	1	0	0	3.35	С	Some turn lanes. Unticked parking bays by Fell. Low median Center-East.	Both SWs	Bike lanes (road diet)	Good road diet possibility: 5 BL (incl gutter)-12-11 CLTL-12-5 BL, w/ median refuges by college.	1.54	12	High
Emerson	Fell	Linden	4	11500	30	11	0	0-pvd	0	0	3.45	С		Both SWs	Bike lanes (road diet)	Road diet feasible, 5 BL-11-11 CLTL-11-5 BL, with no overnight parking.	1.85	10	High
Emerson	Linden	State	2	9500	30	20.3	0	1.3	15	0	2.55	С		Both SWs	Bike lanes (remove parking) or backup options	Remove N-parking, add Bike Lanes 8 (parking)-5.5-12.1-12.1- 5.5. Lesser backup: CBPL 8 (incl gutter)-13.6-13.6-8, w/ 11' SLMs for any always-high parking segments.	2.10	14	High
Emerson	State	Eboch	2	10200	30	18	0	0-pvd	0	0	2.73	С	Turn lanes. No parking.	S-SW, some N-SW	Bike lanes	5.5 BL-12.5-12.5-5.5. Could use buffered Bike Lanes: 5-2-11-11-2-5.	1.70	12	High
Emerson	Eboch	Towanda	2	9800	30	12	0	0-pvd	0	0	3.61	D	Turn lanes. CLTL 36'.	S-SW, some N-SW	Bike Lanes (remove CLTL)	Only S-side intersections. Remove CLTL (for 5.5-12.5-12.5-5.5) if this would otherwise be a gap.	1.68	12	High
University	Park	Fell	2	450	30	11.6	0	1.5	40	0	2.48	В	N-side parking only.	Both SWs	None	Bike Route wayfinding signage.		2	
Empire	Lee	Main	2	3000	30	19	0	1	30	2.5	2.84	С	Lanes narrow and become turn lanes Truck, IDOT route. Parking both sides,	Both SWs	None	SLM 11' possible but somewhat below target.		4	<del>                                     </del>
Empire (W-bd)	Main	Clinton	2	6750	30	18.5	0	1.3	20	2.5	3.17	С	unstriped but diff. pavement. 37.3"+ gutters. Turn lanes Main, Center.	Both SWs	None	Too much parking for CBPL. Removing S-side parking would permit 5.5' BL with 2.5' buffer.		6	
Empire (W-bd)	Clinton	Const. Tr. / Linden	2	7400	30	18	0	0-pvd	20	2.5	3.30	С	N lane 13.5', S 12', unstriped parking (diff. pavement) 10.5' - 36' total. IDOT road.	Both SWs	None	N to S: 5 BL-11.5-11.5-8 parking (w/gutters) very (too?) tight; 4' SLM too much below target.		6	
Empire (W-bd)	Const. Tr./ Linden	Colton	2	8100	30	18	0	0-pvd	20	2	3.26	С	N lane 13.5', S 12', unstriped parking (diff. pavement) 10.5' - 36' total. IDOT road.	S-SW, most N-SW	None	N to S: 5 BL-11.5-11.5-8 parking (w/gutters) very (too?) tight; 4' SLM too much below target. Complete N-SW.		10	
Empire (W-bd)	Colton	Towanda	2	8100	30	15	0	0-pvd	0	2	3.41	С		S-SW, some N-SW	Finish Sidewalk	N to S: 5 BL-12.5-12.5 (w/ gutters) feasible but isolated. Complete N-SW. Widen SW to SP feasible.		10	Medium
Empire	Towanda	Veterans	4	21000	35	13	0	0-pvd	0	2	3.96	D	Divided, turn lanes. 14' outer, 12' inner lanes		Add Sidepath	At least SW needed, preferably both sides. SP and/or widened frontage w/ BL, if possible.		9	High
Frontage	Towanda	IAA	2	5050	30	12	0	1	0	0	3.27	С	N frontage road for Empire	None		See above		9	
Empire	Veterans	Hershey	4	21200	45	12	0	2	0	2.5	4.36	D	Divided, turn lanes	None	Add Sidepath	At least SW needed, preferably both sides. SP one side, if possible.		5	High
Empire	Hershey	Airport	4	23400	45	12	3	0	0	2.5	3.51	D	10' wide shoulders mostly, but long right-turn lanes greatly reduces effective width	None	Add Sidepath	At least SW needed, preferably both sides. SP one side, if possible.		5	High

Street	From (W/N)	To (E/S)	Lanes	Traffic ADT	Spd Limit	Lane Width	Extra Width	Gutter Pan	Park Occ %	% Truck	BLOS score	BLOS grade	Comments	Sidewalk Status	Primary recommendation	Notes and Other Options	New BLOS	Public "votes"	Priority
Empire	Airport	Towanda Barnes	4	23400	45	12	4	0	0	1.5	2.92	С	10' wide shoulders mostly, but long right-turn lanes greatly reduces effective width	None	Add Sidepath	SW (or SP) needed on one side		4	Medium
Walnut	Allin	Center	2	900	30	13.1	0	0-pvd	50	0	2.79	С		Both SWs	None	Bike Route wayfinding signage		3	
Walnut	Center	Main	2	1400	30	13.4	0	0-pvd	0	0	2.44	В	Brick	Both SWs	None	Bike Route wayfinding signage		3	
Walnut	Main	Prairie	2	1350	30	18.1	0	0-pvd	90	0	2.91	С	Parking heavy when university in session.	Both SWs	None	SLM 11' possible but somewhat below target.		5	
Walnut	Prairie	Park	2	1350	30	18.1	0	0-pvd	80	0	2.81	С	Parking heavy when university in session. 11' sharrows/SLMs Prairie-Park	Both SWs	Shared Lane Markings	SLMs already - nothing else likely		5	Done
Walnut	Park	Clinton	2	1250	30	18.1	0	0-pvd	60	0	2.55	С	Parking heavy when university in session.	Both SWs	None	SLM 11' possible but somewhat below target.		5	
Walnut	Clinton	Const. Tr./ Linden	2	1300	30	18.1	0	0-pvd	40	0	2.31	В	No Xwalk yet at trail Xing	Both SWs	None	SLM 11' possible, or Bike Route wayfinding signs only		5	
Walnut	Const. Tr./ Linden	Colton	2	800	30	13	0	0-pvd	10	0	2.34	В	Jr High school at E-end	Both SWs	None	Bike Route wayfinding signage		2	
Chestnut	White Oak	Hinshaw	2	800	30	12	0	0-pvd	5	0	2.40	В		Both SWs	Bike Route signage	Bike Route wayfinding signage		3	Medium
Chestnut	Hinshaw	Western	2	400	30	12	0	0-pvd	30	0	2.30	В		Both SWs	Bike Route signage	Bike Route wayfinding signage		3	Medium
Chestnut	Western	Morris	2	400	30	12	0	0-pvd	50	0	2.46	В		Both SWs	Bike Route signage	Bike Route wayfinding signage, if no Locust bike lanes Western-		3	Medium
																Morris			
Chestnut Chestnut	Allin Lee	Lee Madison	2	650 1950	30 30	20	0	0-pvd 0-pvd	50 40	0	2 23	B	Some brick.	Both SWs Both SWs	Shared Lane Markings Shared Lane Markings	SLM 11' possible, or Bike Route wayfinding signs only SLM 11' possible, or Bike Route wayfinding signs only		3	Medium Medium
Oncomut							_								, and the second	Bike Route wayfinding signage only. SLM 11' possible, but very		Ů	
Chestnut	Madison	Center	2	1950	30	20	0	0-pvd	5	0	1.61	В	W-bd turn lane, E-bd parking full (not	Both SWs	Shared Lane Markings	low parking		3	Medium
Chestnut	Center	Main	2	1950	30	12	0	0-pvd	0	0	2.79	С	included width). 44.3' total.	Both SWs	Shared Lane Markings	SLM 4' for W-bd, 11' for E-bd, but somewhat below target.		3	High
Chestnut	Main	McLean Const. Tr./	2	1300	30	16.1	0	0-pvd	40	0	2.57	С		Both SWs	Shared Lane Markings	SLM 11' possible		3	High
Chestnut	McLean Const. Tr./	Linden	2	750	30	15.5	0	0-pvd	40	0	2.36	В		Both SWs	Shared Lane Markings	SLM 11' or only Bike Route wayfinding signage		3	High
Chestnut	Linden	Colton	2	550	30	13.1	0	0-pvd	10	0	2.14	В	Brick. Stop signs.	Both SWs	Bike Route signage	Bike Route wayfinding signage		2	Medium
Locust	White Oak	Hinshaw	2	2000	30	17	0	1.5	50	1	2.95	С		Both SWs	None	SLM 11' possible		3	
Locust (E-bd)	Hinshaw	Western	2	5550	30	21.2	0	1.3	30	2.5	2.78	С	IDOT road	Both SWs	None	Very limited options w/ parking; 11' SLMs too far below target W-bd		3	
Locust (W-bd)	Hinshaw	Western	2	5550	30	12	0	1.3	0	2.5	3.71	D	IDOT road	Both SWs	None	Very limited options w/ parking; 11' SLMs too far below target W-bd		3	
Locust	Western	Morris	2	5550	30	16	0	2	0	2.5	3.15	С	IDOT road	Both SWs	Bike Lanes	BL 5.5 (incl gutter)-12.5-12.5-5.5	1.79	3	Medium
Locust	Morris	Catherine	2	6500	30	12	8	1.3	0	2.5	1.39	Α	IDOT road. Wide shoulders or turn lanes.	Both SWs	Buffered Bike Lanes	Bike Route wayfinding signage minimally. Buffered (or protected) bike lanes (5BL-3-12) feasible.		3	High
Locust	Catherine	Allin	2	6500	30	12	0	1.3	0	2.5	3.79	D	IDOT road. CLTL 36+1.3	Both SWs	Bike Lanes (remove CLTL)	Removing CLTL permits 5.5' BLs (w/gutter)-13.8-13.8-5.5. Or, 5.3' BLs, 2' buffer, 12' lanes.	1.56	3	High
Locust	Allin	Lee	2	6500	30	18.2	0	0-pvd	25	2.5	3.28	С	IDOT road. 50% parking by Allin.	Both SWs	None	11' STR possible but well below target. Removing S-side parking permits N-S: 8-11.7-11.7-5' BL - or narrower "shoulder" allowing 12' lanes.		3	
Locust (E-bd)	Lee	Center	3	5700	30	12.1	0	0-pvd	0	2.5	3.51	D	IDOT road.	Both SWs	None	Good road diet candidate. N-S: 14-14-2.5 buffer - 5.8 BL. Or, 15.1-15.1-6 BL.		3	
Locust (E-bd)	Center	Prairie	3	7000	30	12.1	0	0-pvd	0	2	3.53	D	IDOT road.	Both SWs	None	Good road diet candidate. N-S: 14-14-2.5 buffer - 5.8 BL. Or, 15.1-15.1-6 BL.		3	
Locust (E-bd)	Prairie	Robinson	2	7400	30	12.1	0	0-pvd	0	2	3.76	D	IDOT road. 36' total. N-side (left-most lane) 24' w/ 50% parking	Both SWs	None	Could restripe to 22' w/parking N-lane, 14' w/4' SLM S-lane, but still WELL below target. Or, N-S: 8 (parking)-12-12-4 (shoulder).		4	
Locust (E-bd)	Robinson	Colton	2	7300	30	13.3	0	0-pvd	0	2	3.60	D	IDOT road. Trail Xing well-marked.	N-SW	None	No good options. 4' SLMs would be WELL below target.		3	
Locust (E-bd)	Colton	Towanda	2	7300	30	13	0	2	0	2	3.64	D	IDOT road.	Most N-SW, some S-SW	Finish sidewalks	N to S: 12.5-12.5-5 BL (w/ gutters) feasible. Complete SWs.		3	High
Market	ML King Dr	Caroline	4	16800	40	13	0	1	0	3.5	4.26	D	Turn lanes, CLTL	S-SW	Bridge improvement	No good on-road options. Could improve S-SW, but low priority. Bridge replacement should add N-SP space, link to future BNWRD trail.		1	Medium
Eastland	Regency	Eastland Mall	2	8700	30	11.5	0	1	0	0	3.61	D	CLTL 36+1	Both SWs	None	No great on-road options, without widening pavement. Could widen S-SW as low priority.		3	
Eastland	Eastland Mall	Veterans	4	7200	30	11.5	0	1	0	0	3.16	С	Turn lanes. Concrete.	Both SWs	None	No great on-road options, without road diet or widening pavement. Could widen S-SW as low priority.		3	
Eastland	Veterans	Prospect	4	9700	30	11.5	0	1	0	0	3.31	С	Turn lanes. Concrete.	Both SWs	None	No great on-road options, without road diet or widening pavement. Could widen S-SW as low priority.		3	
Eastland	Prospect	Hershey	2	10900	30	11.5	0	1	0	0	3.72	D	CLTL 35+1.	Both SWs	None	No great on-road options, without widening pavement. Could		3	
Country Club	Towanda	Mercer	2	1000	30	10.8	0	1.7	0	0	2.59	С	Speed tables.	None	None	widen S-SW as low priority.  Bike Route wayfinding signage	-	3	
Jefferson	Lee	Madison	2	750	30	11	7	0-pvd	100	0	2.59	В	Some areas without 7' parking stalls - wider	Both SWs	Shared Lane Markings	SLM 11' possible		5	Low
		*** ***	-					-					lanes.		Ü			-	
Jefferson Jefferson	Madison Center	Center Main	2	1550 1550	30	13.7 11.9	7	0-pvd 0-pvd	100 100	0	2.46	B C	Rough pavement.	Both SWs Both SWs	Shared Lane Markings Shared Lane Markings	SLM 11' possible SLM 11' possible	1	5	Low
Jefferson	Main	East	2	1550	30	13.6	7	0-pvd	100	0	2.47	В		Both SWs	Shared Lane Markings	SLM 11' possible	1	5	Low
	East	Prairie	2	650	30	11	0		0	0	2.35		Full E-bd striped parking not included here.	Both SWs	Shared Lane Markings	SLM 11' E-bd and 4' W-bd possible		5	Low
Jefferson	East	Pialfie	2	Uca	30	17	U	0-pvd	U	U	∠.35	В	r un E-bu stripeu parking not included here.	DOIN SWS	Shareu Lane Markings	SEWLIT E-bu and 4 W-bu possible		ວ	LOW

Street	From (W/N)	To (E/S)	Lanes	Traffic ADT	Spd Limit	Lane Width	Extra Width	Gutter Pan	Park Occ %	% Truck	BLOS score	BLOS grade	Comments	Sidewalk Status	Primary recommendation	Notes and Other Options	New BLOS	Public "votes"	Priority
Jefferson (E-bd)	Prairie	Clinton	2	650	30	15.3	0	0-pvd	60	0	2.52	С	N-side only parking closer to Clinton.	Both SWs	Shared Lane Markings	SLM 11' or only Bike Route wayfinding signage		5	Low
Jefferson	Clinton	Const. Tr./ Robinson	2	650	30	15.4	0	0-pvd	40	0	2.30	В	Brick. Stop signs.	Both SWs	Bike Route signage	SLM 11' or only Bike Route wayfinding signage. SLMs better if paved.		5	Low
Jefferson	Const. Tr./ Robinson	Colton	2	650	30	15.4	0	0-pvd	40	0	2.30	В	Brick. Stop signs.	Both SWs	Bike Route signage	SLM 11' (if paved) or only Bike Route wayfinding signage.		2	Medium
Jefferson	Colton	Towanda	2	650	30	15.4	0	0-pvd	40	0	2.30	В	Brick. Stop signs.	Both SWs	Bike Route signage	SLM 11' (if paved) or only Bike Route wayfinding signage.		2	Low
Washington	Nord	Bloomington Heights	2	1700	45	11.6	0	0	0	0.5	3.07	С	Const. Tr. S of Washington. For trail/Emerson access, since entering trail/Washington under I-55 is not advisable.	none	4' paved shoulders	4' Paved shoulders	1.82	6	Low
Washington	Bloomington Heights	Const. Tr./ under I-55	4	5500	45	12	0	1.7	0	1.5	3.46	С	Const. Tr approaches Washington	Some S-SP	None	Redundant with Const. Trail for E-W travel.		6	
Washington (W- bd)	Brown	RR W of Morris	2	6000	30	19	0	1	0	1	2.42	В		S-SP and some N-SW	Finish sidewalk	Redundant with Const. Trail for E-W travel. Several trail access points. Complete N-SW.		17	Low
Washington (E- bd)	Brown	RR W of Morris	2	6000	30	11	0	1	0	1	3.62	D		S-SP and some N-SW	None	Redundant with Const. Trail for E-W travel. Several trail access points.		17	
Washington	RR W of Morris	Morris	2	5400	30	19	0	1	60	1	3.33	С	Parking stalls faded	Both SWs	None	Redundant with nearby Const. Trail for E-W travel.		17	
Washington	Morris	Oak	2	5400	30	22.5	0	0-pvd	50	1	2.64	С		Both SWs	None	SLM 11' possible, but somewhat below target		17	
Washington (W- bd)	Oak	Roosevelt	4	5400	30	14	0	1.5	0	1	2.84	С	CLTL 45.5'; varies. W-bd 17' Oak-Lee, but 10' by 50%-filled (?) parking stalls Lee- Roosevelt	Both SWs	None	SLM 4' or 11' (depends on parking), but somewhat below target. Redundancy with Front.		20	
Washington (E- bd)	Oak	Roosevelt	2	5400	30	18	0	1.5	60	1	3.45	С	CLTL 45.5'; varies. E-bd 18' except for 11'  @ brief, striped parking each block.	Both SWs	None	SLM 11' possible, but well below target. Redundancy with Front.		20	
Washington	Roosevelt	Center	2	7100	30	17	0	1.5	75	1	3.86	D	CLTL 45.5'. E-bd parking only (heavy occupancy), no stalls.	Both SWs	None	Too far below target for SLMs. Redundancy with Front.		20	
Washington	Center	East	2	7000	30	12.5	7	1.5	90	1	3.37	С	CLTL 38' excl. parking stalls	Both SWs	None	SLM 11' possible, but well below target. Redundancy with Front.		21	
Washington	East	Gridley	2	10800	30	12	7	1.5	90	1	3.65	D	CLTL 36.6' excl. parking stalls	Both SWs	None	Too far below target for SLMs. Redundancy with Front.		21	
Washington	Gridley	McLean	4	10900	30	16.1	0	1.5	25	1	3.25	С		Both SWs	None	SLM 11' possible, but well below target. Redundancy with Front.		21	1
Washington	McLean	Clayton	4	11400	30	10.1	0	0-pvd	0	1	3.69	D		Both SWs	None	No good on-road options w/o widening. Even 4-3 road diet doesn't have enough room for BLs. 4-2 would, however.		21	
Washington	Clayton	Towanda	4	11800	30	11.4	0	1.5	0	0.5	3.49	С	Trail underpass. Some painted median Colton-Towanda. Clinton turn lanes. Concrete.	Both SWs	None	4-3 road diet (5.5 BL-12.5-12.6-12.5-5.5 BL) still feasible at this ADT.		24	
Washington	Towanda	Kreitzer	2	10300	30	12	0	0-pvd	0	0	3.63	D	CLTL 37' total	Both SWs	None	Too far below target for SLMs. Bike lanes only with CLTL removed: 5.5 BL-13-13-5.5 or buffered: 5-2.5-11-11-2.5-5.		25	
Washington	Kreitzer	Mercer	2	10800	30	18.5	0	0-pvd	0	0	2.67	С		Both SWs	None	If no parking, 5.5 BL-13-13-5.5 BL or buffered bike lanes 5-2- 11.5-11.5-2-5.		25	
Washington	Mercer	Regency	4	10600	30	10.5	0	1.3	0	0	3.47	С	Possible connection between Mercer, Regency networks. Others: Olive E to Regency (private partnership), Mercer to Canterbury Ct (unknown)	Both SWs	Widen to sidepath	SLM 4; but well below target. 4-3 road diet (5 BL-11.5-11.6- 11.5-5 BL) feasible. Not ideal for sidepaths, but widen to N-SP better. Explore Comments' other options.		23	Medium
Washington	Regency	St. Joseph's	4	11600	30	10.5	0	1.3	0	0	3.51	D		Both SWs	None	4-3 road diet (5 BL-11.5-11.6-11.5-5 BL) still feasible at this ADT. Widen to N-SP possible.		23	
Washington	St. Joseph's	Veterans	4	14000	30	10.7	0	1	0	0	3.59	D	Turn lanes	Both SWs	None	Veterans intersection reconstruction could allow space for future bike lanes on Washington		13	
Washington	Veterans	Hershey	4	10400	30	10.7	0	1	0	1	3.58	D	Various turn lanes	Both SWs	None	Too far below target for SLMs.		13	
Front	Const. Tr. / Allin	Lee	2	1850	30	20.7	0	1.5	50	0	2.25	В	SLMs 11' from curb. No parking seen Mason- Lee.	Both SWs	Shared Lane Markings	No change		12	Done
Front (W-bd)	Lee	Madison	2	2250	30	17.8	0	1.5	0	0	2.00	В	SLMs ?' from curb. Parking?. Concrete. CLTL 12.1' (total 51.3'+gutters.)	Both SWs	Shared Lane Markings	If CLTL removal deemed feasible, N-S: 8 parking-5.5 BL-13-13-5.5-9.3. Could even buffer bike lanes and use 11' travel lanes.		12	Done
Front E-bd)	Lee	Madison	2	2250	30	12.1	9.3	1.5	80	0	2.46	В	SLMs 11' from curb. Bus parking, usu. low occupancy.	Both SWs	Shared Lane Markings	If CLTL removal deemed feasible, N-S: 8 parking-5.5 BL-13-13- 5.5-9.3. Could even buffer bike lanes and use 11' travel lanes.		12	Done
Front (W-bd)	Madison	East	2	4850	30	13	7	0-pvd	90	0	2.96	С	10' CLTL (50' total). 11' SLM.	Both SWs	Shared Lane Markings	If CLTL removal deemed feasible: 8 parking-5 BL-12-12-5-8		12	Done
Front (E-bd)	Madison	East	2	4850	30	20	0	0-pvd	0	0	1.97	В	4' SLM, no parking. 20' sometimes bus lane, extra lane	Both SWs	Shared Lane Markings	If CLTL removal deemed feasible: 8 parking-5 BL-12-12-5-8		12	Done
Front	East	Prairie	2	2700	30	17.5	7.5	0-pvd	100	0	2.14	В	11' SLMs. 50' total.	Both SWs	Bike lanes	BLs: 8 parking-5 BL-12-12-5-8	2.96	23	Done
Front	Prairie	McLean	2	2700	30	22.9	0	0-pvd	75	0	2.49	В	45.8' total.	Both SWs	Shared Lane Markings	SLM 11'. Or: with lots of off-street parking, allow 1-side parking only, with BLs: 8.8-5.5-13-13-5.5		23	Done
Front	McLean	Robinson	2	2700	30	22.6	0	0-pvd	70	0	2.46	В	Lower traffic further E	Both SWs	Shared Lane Markings	SLM 11' possible		15	Done
Robinson	Front	Grove	2	1000	30	12	0	0-pvd	10	0	2.57	С		W-SW	Bike Route signage			15	Done
Grove	East	Albert	2	1600	30	12	0	0-pvd	0	0	2.69	С	E-bd 100% parking not shown here.	Both SWs	None	SLM 11' E-bd and 4' W-bd possible.		9	<u></u>
Grove	Albert	Prairie	2	1600	30	13.5	0	0-pvd	0	0	2.50	В	Some E-bd parking stalls; 20' elsewhere.	Both SWs	Shared Lane Markings	SLM 11' E-bd by parking, 4' elsewhere; 4' W-bd.		9	High

Convert   Miles   Convert   Conver	Street	From (W/N)	To (E/S)	Lanes	Traffic ADT	Spd Limit	Lane Width	Extra Width	Gutter Pan	Park Occ %	% Truck	BLOS score	BLOS grade	Comments	Sidewalk Status	Primary recommendation	Notes and Other Options	New BLOS	Public "votes"	Priority
Grown   Cutton   Cu	Grove	Prairie	Clinton	2	1800	30	17.5	0	0-pvd	50	0	2.69	С		Both SWs	None	SLM 11' possible		9	
Control   Cont	Grove	Clinton	Robinson	2	3650	30	17.5	0	0-pvd	30	0	2.78	С	Turn lanes by Clinton.	Both SWs	None			13	
Second Conference   Conferenc	Grove (W-bd)	Robinson	State	2	4000	30	21	0	0-pvd	50	0	2.59	С		Both SWs	Shared Lane Markings			13	High
Concess   Conc	Grove (E-bd)	Robinson	State	2	4000	30	11.9	0	0-pvd	0	0	3.17	С		Both SWs				13	High
Convert   Conv	Grove (W-bd)	State	Kreitzer	2	3800	30	21	0	0-pvd	10	0	1.85	В		Both SWs	parking) or backup	SLM 11' best if parking >30%, or Bike Route wayfinding signs only, below that. If parking disallowed, bike lanes 5-11.5-11.5-5	1.75	17	High
Convert   Vale   Vale	Grove (E-bd)	State	Kreitzer	2	3800	30	11.9	0	0-pvd	0	0	3.14	С		Both SWs	parking) or backup		1.54	17	High
Modelson	Grove	Kreitzer	Vale	2	3700	30	16	0	1.3	10	0	2.71	С	Unstriped	Both SWs	parking) or backup	Bike Route wayfinding signage, but somewhat below target. If parking disallowed, bike lanes 5-11-11-5.	1.84	12	High
Design	Grove	Vale	Mercer	2	2800	30	15	0	1.3	10	0	2.71	С	Unstriped	Both SWs	Bike Route signage	Bike Route wayfinding signage, but somewhat below target.		12	High
Accession	Olive	Madison	Main	2	2400	30	13	0	0-pvd	0	0	2.77	С		Both SWs	Shared Lane Markings	Olive. E-bd: SLMs in through lane Madison to Center, then		0	Low
Junisian   Value   12   700   70   70   70   70   70   70	Jackson	McClun	State	2	700	30	13.1	0	0-pvd	30	0	2.48	В		S-SW	None	Bike Route wayfinding signage		2	
Oakland   Fox Creek   Six Points   2   2350   45   11.7   0   0   0   0   0   5   3.22   0   Cases enoughed.   Some W-SW   Complete entered with excepted. If risk is provided in the confidence of the confiden														Few stops.					2	
Coalstand   Fox Cubes   Six Profits   Six		. 4																	2	<del></del>
Column	Oakland	Fox Creek	Six Points	2	2350	45	11.7	0	0	0	0.5	3.22	С		Some W-SW	Complete street	shoulders.		8	Develop
Casis   Casi	Oakland	Six Points	Alexander	2	2450	40	11	0	0	0	0.5	3.26	С		None	Complete street			5	Develop
Castland	Oakland	Alexander	Euclid	2	5900	30	10.8	0	0	0	1.5	3.71	D	Truck route.	None	Complete street			5	Develop
Cakland   Magoun   Livingston   4   4500   30   12   0   1   0   0.5   2.95   C   Bridge over RR   Both SWs   None   Good road date candidate a correct ACT (but prosed) for   5   5	Oakland	Euclid	Magoun	2	4650	30	13.5	0	0	0	1.5	3.26	С	Truck route.	Some N-SW	Complete street			5	Develop
Desiland (W-bd)   Center   Constitution Tr.   Cinton   2   12100   30   11.5   0   1.5   0   2   4.14   Desiland   W-bd   Center   Constitution Tr.   Cinton   2   12100   30   11.5   0   1   0   2   3.85   Desiland   Constitution Tr.   Macarthur   Cinton   Bunn   4   15300   30   11.5   0   1   0   2   3.85   Desiland   Constitution Tr.   Calkland   Cinton   Bunn   4   15300   30   11.5   0   1   0   2   3.85   Desiland   Constitution Tr.   Calkland   Cinton   Bunn   4   15300   30   11.5   0   1   0   2   3.85   Desiland   Constitution Tr.   Calkland   Cinton   Bunn   4   15300   30   11.5   0   1   0   2   3.85   Desiland   Constitution Tr.   Calkland   Cinton   Bunn   4   15300   30   11.5   0   1   0   2   3.85   Desiland   Constitution Tr.   Calkland   Cinton   Bunn   4   15300   30   11.5   0   1   0   2   3.85   Desiland   Calkland   Calkland   Calkland   Cinton   Bunn   4   15300   30   11.5   0   1   0   2   3.85   Desiland   Calkland   Calkland   Calkland   Cinton   Bunn   4   15300   30   11.5   0   1   0   2   3.85   Desiland   Calkland   Calkland   Calkland   Cinton   Bunn   4   15300   30   11.5   0   1   0   2   3.85   Desiland   Calkland   C	Oakland	Magoun	Livingston	4	4600	30	12	0	1	0	0.5	2.95	С	Bridge over RR	Both SWs	None	Good road diet candidate at current ADT (but possibly not in future). Instead of CLTL, E-bd left turn and painted median.		5	
Constitution Tr.   All   All   All   Constitution Tr.   All   Al	Oakland (W-bd)	Livingston	Morris	1	2250	30	26.6	0	0-pvd	50	0.5	1.67	В	N-side parking only. Just repaved.	Both SWs	None			5	
Cakland (W-bd)   Roosevelt   Center   Constitution Tr.   Maccarthur   South Service   Constitution Tr.   South Service   Constitution Tr.   Maccarthur   South Service   Constitution Tr.   Maccarthur   South Service   Constitution Tr.   Maccarthur   South Service   Constitution Tr.   South Ser	Oakland (W-bd)	Morris	Lee	1	3000	30	26.6	0	0-pvd	70	0.5	2.23	В	Parking S-side only, higher on W	Both SWs	None			5	
Cakland (W-bd)   Roosevelt   Center   2   4000   30   13.3   0   0-pvd   0   0.5   3.06   C   Transitions from 2L to 1L on W. Does not act, parking stalls. She will possible, but somewhat below target. Not enough room for the R. Road defice could keep as 1 lane will parking, BL - but   3   1   1   1   1   1   1   1   1   1	Oakland (W-bd)	Lee	Roosevelt	1	4000	30	26.6	0	0-pvd	35	0.5	1.63	В	Parking S-side only.	Both SWs	None			3	
Cakland (W-bd)   Center   Constitution Tr.   //Macarthur   3   5500   30   12   0   0-pvd   0   2   3.42   C   Both SWs   None   SLM 4 possible, but well below target. Center-East excellent road didet candidate, NS: 6 BL-15-16; p buffered 5 BL-3-14-14.   3   3   S   S   S   S   S   S   S   S	Oakland (W-bd)	Roosevelt	Center	2	4000	30	13.3	0	0-pvd	0	0.5	3.06	С		Both SWs	None	SLM 4' possible, but somewhat below target. Not enough room for BL. Road diet: could keep as 1 lane w/ parking, BL - but		3	
Oakland	Oakland (W-bd)	Center		3	5500	30	12	0	0-pvd	0	2	3.42	С		Both SWs	None	SLM 4' possible, but well below target. Center-East excellent road diet candidate, N-S: 6 BL-15-15, or buffered 5 BL-3-14-14.		3	
Oakland         Burn         4         15300         30         11.5         0         1         0         2         3.85         D         RR Xing.         Both SWs         None         Mone         Mogod on-road options (w/o widen). ADT too high for road diet.           Oakland         Hannah         4         15300         30         11.5         0         1         0         2         3.85         D         Both SWs         None         No good on-road options (w/o widen). ADT too high for road diet.           Oakland         Hannah         State         2         12700         30         11.5         0         1         0         1         3.95         D         E-bd mostly 2L. W-bd 1L. Turn lanes.         Both SWs         None         No good on-road options (w/o widening)         9           Oakland         State         Vale         2         10100         30         18.4         0         0-pvd         2         1         2.83         C         Both SWs         None         If no parking, 5.4 BL-13-13-5.4. If so CBPL (too) tight: 7.4-11-11-11-9.5 BL, but high ADT for CBPL.         11.74. Or, 1-side parking: 8 CBPL-11.9-11.9-5 BL         10           Oakland         Mercer         2         10100         30         18.4         0         0-pvd	Oakland		Clinton	2	12100	30	11	0	1.5	0	2	4.14	D			None	AASHTO). Otherwise, no good on-road options (without		6	
Cakland   Buff   Flatfield   4   15300   30   11.5   0   1   0   2   3.65   D   E-bd mostly 2L. W-bd 1L. Turn lanes.   Both SWs   None   No good on-road options (w/o widening)   9	Oakland	Clinton	Bunn	4	15300	30	11.5	0	1	0	2	3.85	D	W: trail skew Xing w/painted median. Skew RR Xing.	Both SWs	None	0,		6	
Oakland         State         Vale         2         10100         30         18.4         0         0-pvd         2         1         2.83         C         Both SWs         None         If no parking, 5.4 BL-13-13-5.4. If so CBPL (too) tight: 7.4-11-11-7.4. Or, 1-side parking: 8 CBPL-11.9-11.9-5 BL, but high ADT for CBPL         9           Oakland         Vale         Mercer         2         10100         30         18.4         0         0-pvd         2         1         2.83         C         Both SWs         None         If no parking, 5.4 BL-13-13-5.4. If so CBPL (too) tight: 7.4-11-11-7.4. Or, 1-side parking: 8 CBPL-11.9-11.9-5 BL         10           Oakland         Mercer         Regency         4         15800         30         10.5         0         1         0         1         3.81         D         Turn lanes, CLTL 54+1         Both SWs         None         No good on-road options without widening.         10         Medical Medic	Oakland	Bunn	Hannah	4	15300	30	11.5	0	1	0	2	3.85	D		Both SWs	None	No good on-road options (w/o widen). ADT too high for road diet.		9	<del></del>
Oakland         State         Vale         2         10100         30         18.4         0         0-pvd         2         1         2.83         C         Both SWs         None         11-7.4. Or, 1-side parking: 8 CBPL-11.9-11.9-5 BL, but high ADT for CBPL.         9           Oakland         Vale         Mercer         2         10100         30         18.4         0         0-pvd         2         1         2.83         C         Both SWs         None         If no parking: 8 CBPL-11.9-11.9-5 BL, but high ADT for CBPL.         10           Oakland         Mercer         2         10100         30         18.4         0         0-pvd         2         1         2.83         C         Both SWs         None         If no parking: 8 CBPL-11.9-11.9-5 BL, but high ADT for CBPL.         10           Oakland         Mercer         Regency         4         15800         30         10.5         0         1         0         1         3.81         D         Turn lanes, CLTL 54+1         Both SWs         None         No good on-road options without widening.         10         Media           Oakland         Four Seasons         4         15800         30         10.5         0         1         0         1         3.81	Oakland	Hannah	State	2	12700	30	11.5	0	1	0	1	3.95	D	E-bd mostly 2L. W-bd 1L. Turn lanes.	Both SWs	None	3,		9	
Oakland Mercer Regency 4 15800 30 10.5 0 1 0 1 3.81 D Turn lanes, CLTL 54+1 Both SWs Widen to sidepath None No good on-road options without widening.  Oakland Four Seasons Veterans 4 15800 30 10.5 0 1 0 1 3.81 D Turn lanes, CLTL 54+1 Both SWs None No good on-road options without widening.  10 Mediand Four Seasons Veterans 4 15800 30 10.5 0 1 0 1 3.81 D Turn lanes, CLTL 54+1 Both SWs None No good on-road options without widening.  10 Mediand Four Seasons Veterans 4 15800 30 10.5 0 1 0 1 3.81 D Turn lanes, CLTL 54+1 Both SWs None No good on-road options without widening.  10 Mediand Four Seasons Veterans 4 15800 30 10.5 0 1 0 1 3.81 D Turn lanes, CLTL 54+1 Both SWs None No good on-road options without widening.  11 -7.4 - Or, 1-side parking: 8 CBPL-11.9-11.9-5 BL  10 Mediand Four Seasons Veterans 4 15800 30 10.5 0 1 0 1 3.81 D Turn lanes, CLTL 54+1 Both SWs None No good on-road options without widening.  10 Mediand Four Seasons Veterans 4 15800 30 10.5 0 1 0 1 3.81 D Turn lanes, CLTL 54+1 Both SWs None No good on-road options without widening.  11 -7.4 - Or, 1-side parking: 8 CBPL-11.9-11.9-5 BL  11 -7.4 - Or, 1-side parking: 8 CBPL-11.9-11.9-5 BL  10 Mediand Four Seasons Veterans 4 15800 30 10.5 0 1 0 1 3.81 D Turn lanes, CLTL 54+1 Both SWs None No good on-road options without widening.	Oakland	State	Vale	2	10100	30	18.4	0	0-pvd	2	1	2.83	С		Both SWs	None	11-7.4. Or, 1-side parking: 8 CBPL-11.9-11.9-5 BL, but high		9	
Oakland Regency Four Seasons 4 15800 30 10.5 0 1 0 1 3.81 D Turn lanes, CLTL 54+1 Both SWs Widen to sidepath Widen S-SW to SP width. Better: look for private partnerships north or south to allow a better connection between Fairway and Regency  Oakland Four Seasons Veterans 4 15800 30 10.5 0 1 0 1 3.81 D Turn lanes, CLTL 54+1 Both SWs None No good on-road options without widening.  Oakland Veterans Herebay 4 13000 35 13 0 0 0 0 0 0 5 3 53 D Symptym lanes sen by Veterans S-SW None 4-3 road diet (with BLs) somewhat feasible, but really no ideal	Oakland	Vale	Mercer	2	10100	30	18.4	0	0-pvd	2	1	2.83	С		Both SWs	None			10	
Oakland Regency Four Seasons 4 15800 30 10.5 0 1 0 1 3.81 D Turn lanes, CLTL 54+1 Both SWs Widen to sidepath north or south to allow a better connection between Fairway and 10 Medi	Oakland	Mercer	Regency	4	15800	30	10.5	0	1	0	1	3.81	D	Turn lanes, CLTL 54+1	Both SWs	None	No good on-road options without widening.		10	 
Oakland Veterans Harshay 4 12000 35 12 0 0-pvd 0 0.5 3.53 D Some turn lange see by Veterans S-SW None 4-3 road diet (with BLs) somewhat feasible, but really no ideal 7	Oakland	Regency	Four Seasons	4	15800	30	10.5	0	1	0	1	3.81	D	Turn lanes, CLTL 54+1	Both SWs	Widen to sidepath	north or south to allow a better connection between Fairway and		10	Medium
	Oakland	Four Seasons	Veterans	4	15800	30	10.5	0	1	0	1	3.81	D	Turn lanes, CLTL 54+1	Both SWs	None	No good on-road options without widening.		10	
on to account of the contract	Oakland	Veterans	Hershey	4	12000	35	12	0	0-pvd	0	0.5	3.53	D	Some turn lanes, esp. by Veterans.	S-SW	None			7	
Oakland Hershey Eddy 4 10600 40 10.5 0 1.5 0 0.5 3.71 D 45 mph E end S-SW None No good on-road options without widening. Widen to S-SP 7	Oakland	Hershey	Eddy	4	10600	40	10.5	0	1.5	0	0.5	3.71	D	45 mph E end	S-SW	None	No good on-road options without widening. Widen to S-SP		7	<u> </u>

Street	From (W/N)	To (E/S)	Lanes	Traffic ADT	Spd Limit	Lane Width	Extra Width	Gutter Pan	Park Occ %	% Truck	BLOS score	BLOS grade	Comments	Sidewalk Status	Primary recommendation	Notes and Other Options	New BLOS	Public "votes"	Priority
Macarthur (E- bd)	Livingston	Morris	1	2700	30	26.2	0	0	50	0.5	1.85	В	S-side parking only. Needs repaving.	Both SWs	None	Under current conditions, could stripe BL - N-to-S: 13-5 BL-8.2 parking. Reserved for future 2 lanes.		5	
Macarthur (E- bd)	Morris	Lee	1	2500	30	26.2	0	0	70	0.5	2.22	В	S-side parking only, higher on W	Both SWs	None	Under current conditions, could stripe BL - N-to-S: 13-5 BL-8.2 parking. Reserved for future 2 lanes.		5	
Macarthur (E- bd)	Lee	Madison	1	4000	30	26.2	0	0-pvd	30	0.5	1.61	В		Both SWs	None	Under current conditions, could stripe BL - N-to-S: 13-5 BL-8.2 parking. Reserved for future 2 lanes.		3	
Macarthur (E- bd)	Madison	Center	2	4650	30	13.1	0	0-pvd	0	0.5	3.16	С		Both SWs	None	If 2 lanes incl. turn lane are kept, then add SLM in center of right lane. If road diet to 1 lane & BL, use typical intersection merge treatment		3	
Macarthur (E- bd)	Center	Main	2	5500	30	13	0	0-pvd	0	2	3.50	С	Truck route.	Both SWs	None	If 2 lanes incl. turn lane are kept, then add 4' SLM in right lane. If road diet to 1 lane & BL, can buffer BL.		3	
Macarthur (E- bd)	Main	Constitution Tr. /Oakland	2	5200	30	11.5	6.3	1.6	100	2	3.65	D	(Unused) N-side parking stalls becomes long LT lane, (used) S-side parking stalls shown. Transitions to 1L. Truck route.	Both SWs	None	Can road diet to one wider lane plus wider left turn lane, current 7.9' S-parking, 5' BL, even buffer?		3	
Miller	Alexander	Pancake	2	1400	30	10.5	0	0	0	0	2.79	С	RR Xing. Mostly uncurbed.	Some N-SW	Bike Route signage	Bike Route wayfinding signage, but somewhat below target. Complete N-SW where developed.		0	Medium
Pancake/ Wood	Miller	Barker	2	700	30	12	0	0	20	0	2.49	В		Some SWs	Bike Route signage	Bike Route wayfinding signage. Complete one SW.		0	Medium
Wood	Barker	Morris	2	700	30	12	0	0	50	0	2.75	С		Both SWs	Bike Route signage	Bike Route wayfinding signage, but somewhat below target.		0	Medium
Wood (W-bd)	Morris	Allin	2	4250	30	20.4	0	0-pvd	30	0	2.39	В		N-SW, some S-SW	Shared Lane Markings	SLM 11' (best if parking >30%) or Bike Route wayfinding signs only. If N-side parking ever removed, bike lanes 5.2-12-12-5.2 feasible.		1	High
Wood (E-bd)	Morris	Allin	2	4250	30	14	0	0-pvd	0	0	2.93	С	No sidewalk by park	N-SW, some S-SW	Shared Lane Markings	SLM 4', but somewhat below target. If N-side parking ever removed, bike lanes 5.2-12-12-5.2 feasible.		1	High
Wood (W-bd)	Allin	Summit	2	5600	30	20.4	0	0-pvd	30	0	2.53	С		N-SW	Shared Lane Markings	SLM 11' (best if parking >30%) or Bike Route wayfinding signs only, but both somewhat below target. If N-side parking ever removed, bike lanes 5.2-12-12-5.2 feasible.		4	High
Wood (E-bd)	Allin	Summit	2	5600	30	14	0	0-pvd	0	0	3.07	С		N-SW	Shared Lane Markings	SLM 4', but well below target. If N-side parking ever removed, bike lanes 5.2-12-12-5.2 feasible.		4	High
Wood (W-bd)	Summit	Lee	2	6200	30	18	0	0-pvd	30	0	2.97	С		Both SWs	Shared Lane Markings	SLM 11' (best if parking >30%) or Bike Route wayfinding signs only, but both somewhat below target. If N-side parking ever removed and 10' lanes approved, bike lanes 5-10-10-5 would be feasible.		4	High
Wood (E-bd)	Summit	Lee	2	6200	30	12	0	0-pvd	0	0	3.38	С		Both SWs	Shared Lane Markings	SLM 4', but well below target. If N-side parking ever removed, bike lanes 5.2-12-12-5.2 feasible.		4	High
Wood (W-bd)	Lee	Center	2	5000	30	18	0	0-pvd	10	0	2.54	С		Both SWs	Shared Lane Markings	SLM 11' (best if parking >30%) or Bike Route wayfinding signs only, but both somewhat below target. If N-side parking ever removed and 10' lanes approved, bike lanes 5-10-10-5 would be feasible.		2	High
Wood (E-bd)	Lee	Center	2	5000	30	12	0	0-pvd	0	0	3.27	С		Both SWs	Shared Lane Markings	SLM 4', but well below target. If N-side parking ever removed, bike lanes 5.2-12-12-5.2 feasible.		2	High
Wood	Center	Main	2	4700	30	10	0	0-pvd	0	0	3.46	С	Turn lanes, stoplights	Both SWs	Shared Lane Markings	SLMs 4' possible but well below target.		1	High
Wood	Main	Gridley	2	1300	30	13.4	0	0-pvd	15	0	2.60	С	E-bd parking only	Both SWs	Shared Lane Markings	SLM 4' W-bd & 11' E-bd possible if E-bd parking > 30%. Or, Bike Route wayfinding signage only, but somewhat below target.		1	High
Gridley	Wood	Oakland	2	1300	30	13.1	0	0-pvd	0	0	2.45	В	Tough intersection at Oakland, so trail crossing (better) jog to East/Albert, Grove, Front.	W-SW	Shared Lane Markings	SLM 4' possible, or Bike Route wayfinding signage only		1	High
Cloud	McGregor	Vale	2	500	30	11.8	0	0-pvd	10	0	2.24	В	E-bd parking 10%, no W-bd.	None	Bike Route signage	Bike Route wayfinding signage		4	Low
Buchanan	Clayton	Bunn	2	400	30	12.9	0	0-pvd	30	0	2.22	В		Most N-SW, S-SW	Bike Route signage	Bike Route wayfinding signage		7	High
Croxton	Bunn	Indianapolis	2	1050	30	12	0	1.5	0	0.5	2.55	С		None	Shared Lane Markings	SLM 4' possible, or Bike Route wayfinding signs only - but both somewhat below target. Add a SW		4	High
Croxton	Indianapolis	Morrissey	2	1050	30	10.8	6	1.3	30	3	1.97	В	2 hour parking	None	Bike Route signage	Bike Route wayfinding signage		4	Low
Croxton	Morrissey	McGregor	2	650	30	15.3	0	0-pvd	15	0	2.00	В		None	Bike Route signage	Bike Route wayfinding signage		3	Low
Croxton	McGregor	Vale	2	500	30	15.3	0	0-pvd	30	0	2.06	В		None	None	Bike Route wayfinding signage		3	
Bissell	Low	Koch	2	1300	30	13	0	0-pvd	20	0	2.70	С		N-SW, most S-SW	Bike Route signage	Bike Route wayfinding signs, but somewhat below target.		0	Medium
Lincoln	Koch	Main	2	1100	30	13.5	0	1.5	20	0	2.56	С	Uncontrolled Center, Main Xings. Unstriped.	Both SWs	Bike Route signage	Bike Route wayfinding signs		11	Medium
Lincoln (W-bd)	Main	Constitution Trail	2	3200	30	12	0	1.5	0	0.5	3.11	С	No parking allowed	Most S-SW	Shared Lane Markings	11' lane w/ 4' SLMs, but well below target.		12	High
Lincoln (E-bd)	Main	Constitution Trail	2	3200	30	18	0	1.5	10	0.5	2.39	В	SW gap by trail, RR tracks.	Most S-SW	Combined bike/parking lane	S-side CBPL 7-12. If parking removed for bike lanes, 10' travel lanes would be needed (5-10-10-5)	1.23	12	High
Lincoln	Constitution Trail	Bunn	2	3250	30	22	0	0-pvd	20	0.5	1.84	В	SW gap by RR.	Most N-SW, some S-SW	Bike lanes (remove parking) or backup options	Primary (if no CLTL E of Bunn): N-side parking only to allow bike lanes, 8-5 BL-13-13-5 BL. Backups: Parking may be too high for CBPL, but if so then 8-14-14-8. Or, SLM 11'.	1.64	31	High

Street	From (W/N)	To (E/S)	Lanes	Traffic ADT	Spd Limit	Lane Width	Extra Width	Gutter Pan	Park Occ %	% Truck	BLOS score	BLOS grade	Comments	Sidewalk Status	Primary recommendation	Notes and Other Options	New BLOS	Public "votes"	Priority
Lincoln	Bunn	Morrissey	2	5500	30	11	0	1.5	0	0.5	3.50	D	CLTL (no residences), 35+1.5.	S-SP	Bike Lanes (remove CLTL)	Long-term evaluate CLTL removal for on-road bike lanes: 5.5 BL (w/gutter)-13.5-13.5-5.5 BL or buffered BLs: 5-2.5-11.5- 11.5-2.5-5. SLMs at Morrissey where BLs must drop.	1.23	24	High
Lincoln	Morrissey	McGregor	2	4050	30	20.2	0	0-pvd	0	0.5	1.91	В	No residential driveways, on-street parking need is unlikely. Turn lanes by Morrissey. Saw bike.	S-SP	Bike lanes (remove parking) or backup options	Buffered bike lanes: 5.5-3-11.7-11.7-3-5.5. Backup: CBPL 7.8-12.4-12.4-7.8. Complete S-SW.	0.78	24	High
Lincoln	McGregor	Mercer	2	4300	30	20.2	0	0-pvd	10	0.5	2.14	В	S-side parking needed for residences McGregor-Arlene, but much less so elsewhere.	Some S-SW	Bike lanes (remove parking) or backup options	Primary: S-side parking only, w/ bike lanes: 8-5-11.2-11.2-5. Backup: CBPL 7.8-12.4-12.4-7.8. Complete S-SW.	1.94	28	High
Lincoln	Mercer	Veterans	4	5200	30	11	0	1.5	0	0.5	3.12	С	Turn lanes by Veterans. 48' total w/ 4 center lines. Concrete.	S-SW	Bike lanes (road diet)	Excellent road diet candidate: 5.5 BL (w/ gutter)-12-13 CLTL-12-5.5 BL.	1.20	29	High
Lincoln	Veterans	Arcadia	4	7400	35	10.5	0	1.5	0	0.5	3.46	С	Lots of turn lanes. CLTL 59' total. 69' on east end.	N-SW	Bike lanes (road diet)	Good road diet candidate: 5.5 BL (w/ gutter)-12 (E-bd)-12 CLTL- 12-12 (W-bd)-5.5 BL.	1.48	26	High
Lincoln	Arcadia	Hershey	4	2950	35	11	0	1.5	0	0.5	2.94	С	Turn lanes. Constitution Trail N-SP, continues E. Concrete.	N-SP, S-SW	Bike lanes (road diet)	Excellent road diet candidate: 5.5 BL (w/ gutter)-12-12 CLTL-12- 5.5 BL.	1.01	26	High
Lafayette	Center	Easy	2	1800	30	11	0	0	0	2.5	3.26	С	Stone shoulders 1-3'. Truck route.	Almost none	Add Sidewalk	Pave 4' shoulders, and add SW on at least one side.		2	Medium
Lafayette	Easy	Bunn	2	4150	30	11	0	0	0	2.5	3.68	D	Stone shoulders 1-3'. Truck route.	none	Add Sidewalk	Pave 4' shoulders, and add SW on at least one side.		2	Medium
Lafayette	Bunn	Morrissey	2	5200	30	11	0	0	0	2.5	3.79	D	Various uses	Some SW	Finish sidewalk	Complete SW on at least one side.		4	Medium
Lafayette	Morrissey	McGregor	2	1750	30	13	0	1.3	0	0	2.61	С		Some SW	None	SLM 4' possible		4	
Lafayette	McGregor	Meadowbrook	2	800	30	13	0	1.3	50	0	2.74	С		Both SWs	None	Bike Route wayfinding signage		2	
Six Points	west end	Rabbit Hill	2	1800	55	10.1	0	0	0	0.5	3.34	С		None	Complete street	Build as complete street when developed. If not, 4' paved shoulders.		2	Develop
Six Points	Rabbit Hill	Oakland	2	2550	55	10.1	0	0	0	0.5	3.52	D		None	Complete street	Build as complete street when developed. If not, 4' paved shoulders.		7	Develop
Six Points	Oakland	Alexander	2	2200	40	10.1	0	0	0	0.5	3.30	O		None	Complete street	Build as complete street when developed. If not, 4' paved shoulders.		3	Develop
Six Points	Alexander	Szaret	2	5800	40	10.1	0	0	0	0.5	3.80	D		None	Add Sidepath	Sidepath or sidewalk on at least one side.		3	Medium
Six Points	Szaret	Springfield	4	5800	30	12	0	2	0	0.5	3.06	С	RR crossing. Concrete.	None	Add Sidewalk	Add SW on at least one side (maybe SP, but not ideal). SLM 4' feasible. If future ADT doesn't rise, candidate for road diet 5.5 BL-13-15-13-5.5.		3	Medium
Six Points	Springfield	Morris	4	5800	30	12	0	2	0	0.5	3.06	С	Concrete. Gap from proposed Springfield bike lanes to trail at Morris	None	Add Sidepath	Add S sidepath. SLM 4' feasible. If future ADT doesn't rise, candidate for road diet 5.5 BL-13-15-13-5.5.		3	High
Ireland Grove	Brookridge Park	Hershey	4	6000	45	12.5	0	0	0	0.5	3.24	С	Divided road.	N-SW, some S-SW	Width to sidepath	Widen N-SW to SP width, but low priority		8	Low
Ireland Grove	Hershey	Dover	4	8000	45	12.5	0	0	0	0.5	3.39	С	Divided road.	Both SWs	None	Could widen N-SW to SP width, as low priority - but utility easement south to be used instead.		8	Low
Ireland Grove	Dover	E of Bear Creek	4	8000	45	12	0	1.5	0	0.5	3.45	С	CLTL 60'. Stone shoulders.	None	Add Sidewalk	Add N-SW. Add S-SW or SP when developed.		10	Medium
Ireland Grove	E of Bear Creek	Towanda Barnes	4	9400	55	12	0	1.5	0	0.5	3.62	D	CLTL 60'. Stone shoulders.	None	6' paved shoulders, SW or SP	Pave 6' shoulders. W of Streid, also add N-SW (or SP), plus S-side when developed. E of Streid, add S-SW/SP.	1.69	18	High
Ireland Grove	Towanda Barnes	east end	2	1500	50	11	0	0	0	0.5	3.11	С		None	Complete street	Build as complete street when developed. Until then, 4' paved shoulders.		13	Develop
Trail (by Ireland Grove)	Hershey	Brookstone											Along utility easement. Developer-granted ROW		Trail	To extend east, as developed		0	Medium
Fox Creek (S/W-	Scottsdale	Blue Ash	2	225	40	21.8	0	1.7	0	0.5	0.28	Α	CLTL, 44.5' total + gutters. Concrete.	Both SWs	None	See below. As is, S/W-bd 8' CBPL-like striping could help reduce speeding. Could widen W-SW to SP.		1	
Fox Creek (N/E- bd)	Scottsdale	Blue Ash	2	225	40	11.7	0	1.7	0	0.5	1.97	В	CLTL, 44.5' total + gutters. Concrete.	Both SWs	None	Too fast for SLM. If CLTL removed, 7.4 CBPL-11-11-7.4 feasible but tight. If parking removed too, 5 BL-13.4-13.4-5. Could widen W-SW to SP.		1	
Fox Creek (S/W- bd)	Blue Ash	Oakland	2	1800	40	21.8	0	1.7	2	0.5	1.38	Α	CLTL, 44.5'+gutters. Concrete. Parking allowed by unused. Some striping, parking marks at intersections.	N-SP, most S- SW	None	See below. As is, S/W-bd 8' CBPL-like striping could help reduce speeding.		0	
Fox Creek (N/E- bd)	Blue Ash	Oakland	2	1800	40	11.7	0	1.7	0	0.5	3.03	С	CLTL, 44.5' total + gutters. Concrete.	N-SP, most S- SW	None	Too fast for SLM. If CLTL removed, 7.4 CBPL-11-11-7.4 feasible but tight. If parking removed too, 5 BL-13.4-13.4-5. But already have N-SP.		0	
Fox Creek	Oakland	Danbury	4	5300	45	11.5	0	1.3	0	0.5	3.30	С	Turn lanes at ends, to transition to 2 lanes. Concrete.	N-SP	None	Already have N-SP. If desired, good candidate for road diet 6 BL-12-12.6-12-6, dep. on ADT projections.		0	
Fox Creek	Danbury	Beich	2	6200	45	10.9	0	0	0	0.5	3.80	D	Stone shoulders few feet; slopes. Bridge over RR.	None	Add Sidepath	Very important SP gap to fill, and in the planning stage.  Backup: pave shoulders 3-4' for advanced cyclists.		10	High
Fox Creek	Beich	Cabintown	4	9700	45	11	0	2	0	0.5	3.66	D	Bridge over I-55.	N-SP	None	Already have N-SP. If desired, could do road diet 6 BL-12-12- 12-6, dep. on ADT projections.		0	
Hamilton	Cabintown	Morris	4	10000	45	11	0	1.3	0	0.5	3.68	D	Turn lanes	N-SP	None	Already have N-SP. If desired, could do road diet 5.3 BL-12-12- 12-5.3, dep. on ADT projections.		0	
Hamilton	Morris	Main	4	5000	35	12	0	1.3	0	0.5	3.09	С	CLTL 59' total + gutters. Concrete.	N-SP, some S-SW	None	Already have N-SP. If desired, could do road diet 5.8 BL-12-13-		0	
Hamilton	Main	7th St	4	7600	40	10.9	0	1.5	0	0.5	3.50	С	Concrete	S-SW Both SWs	Widen to sidepath	12-5.8, dep. on ADT projections. Widen N-SW to SP. If desired, could do road diet 5 BL-12-11-		12	Low
Hamilton	7th St	Bunn	4	5800	40	10.9	0	1.5	0	0.5	3.36	С	Concrete	N-SP, S-SW	None	12-5, dep. on ADT projections.  Already have N-SP. If desired, could do road diet 5 BL-12-11-		0	
+		Hamilton					0	0								12-5, dep. on ADT projections.  Add N-SP. Add S-SW, when developed. Add 3-4' paved			Devolor
Hamilton	Bunn	(planned)	2	6100	45	10.5	U	U	0	0.5	3.83	D		none	Add Sidepath	shoulders if ADT>1000 after Hamilton gap filled.		3	Develop

Street	From (W/N)	To (E/S)	Lanes	Traffic ADT	Spd Limit	Lane Width	Extra Width	Gutter Pan	Park Occ %	% Truck	BLOS score	BLOS grade	Comments	Sidewalk Status	Primary recommendation	Notes and Other Options	New BLOS	Public "votes"	Priority
Rhodes	Hamilton (planned)	Morrissey	2	5300	45	10.5	0	0	0	0.5	3.76	D		none	None	Add SW on at least one side, when developed. Add 3-4' paved shoulders if ADT>1000 after Hamilton gap filled.		3	
Hamilton	Rhodes	Commerce		new											Add sidepath	Construct with N-SP. If road diet on either side, match cross section.		15	Develop
Hamilton	Commerce	Morrissey	4	3200	35	12	0	0-pvd	0	0.5	2.86	С		N-SP, S-SW	None	Already have N-SP. If desired, could do road diet 5.5 BL-12-13- 12-5.5, dep. on ADT projections.		0	
Hamilton	Morrissey	State Farm Plaza South	4	8000	40	11	0	1.5	0	0.5	3.51	D	Divided	S-SP	None	Already have S-SP. No good on-road options possible.		0	
Hamilton	State Farm Plaza South	Hershey	4	7400	40	11	0	1.5	0	0.5	3.47	С	Divided	none	Add Sidepath	Add S-SP, probably when developed.		1	Develop
Woodrig	Main	Capodice	2	1700	35	10.3	0	0	0	0.5	3.08	С	Some stone shoulder. Rough pavement.	none	Complete street	Build as complete street when developed. If not, 3' paved shoulders.		0	Develop
Woodrig	Capodice	Morrissey	2	2800	50	10.5	0	0	0	0.5	3.48	С	Some stone shoulder. Rough pavement.	none	Complete street	Build as complete street when developed. If not, 4' paved shoulders.		0	Develop
US150/ Mitsubishi	Normal border	IL9/Market	4	4250	55	12	10	0	0	2.5	0.74	Α	Turn lanes. Normal's plan calls for sidepath.	None	Complete street	Add SW (or SP) on at least one side, when developed further.		4	Develop
Interstate	Westgate	IL9/Market											E-SW north of this segment	None	Add Sidepath	Add E-SP. When developed, add W-SW. Route from Constitution Trail to businesses N of Market. Drops to low priority if Wylie extension includes SP.		0	Medium
Interstate	IL9/Market	S-end											S part road not completed	Some E-SP	Add Sidepath	Complete E-SP. Route from Constitution Trail to businesses N of Market. Drops to low priority if Wylie extension includes SP.		0	Medium
trail link	Interstate	Constitution Trail												None	Trail link	Create trail link from Constitution Trail and sidepath along Interstate Rd. Drops to low priority if Wylie extension includes SP.		0	Medium
Wylie	Normal border	IL9/Market	4	6500	35	11.5	0	1.3	0	1.5	3.45	С	Sidewalks missing S-end. Truck route.	Most E-SW, most W-SW	Finish sidewalks	Complete S-end SW gaps, both sides. Widen one side to SP-lower priority. Road diet 5.5 BL-12.5-12.6-12.5-5.5 possible, dep on future ADT.		5	High
Wylie Bloomington	IL9/Market	Rabbit Hill		new									Road to be extended in future		Add Sidepath	Construct with SP on one side, SW on other.			Develop
Heights Nord/ Rabbit	IL9/Market	Washington	2	6500	45	12.8	0	0	0	1	3.70	D	2' stone shoulder. Truck route.	None	Add Sidepath	Add SP/SW on at least one side when developed more.		9	Develop
Hill	Washington	Six Points	2	600	55	9	0	0	0	0	2.79	С	Manager and the search distance by	None	Complete street	Add paved shoulders when reconstructed, if ADT rises much.		6	Develop
ML King Dr	Cottage	White Oak	4	5200	35	12	0	0-pvd	0	2	3.37	С	Normal's plan calls for road diet and bike lanes N of border	Both SWs	Bike lanes (road diet)	Good candidate for road diet 5.5 BL-12.5-12-12.5-5.5, dep. on future ADT.	1.45	2	Medium
ML King Dr	White Oak	Market	4	4950	45	11.5	0	1.5	0	3	3.80	D	RR crossing. Concrete.	Both SWs	Width to sidepath	Widen one SW to SP width		1	Low
White Oak	Normal border	Graham	2	5500	35	11.5	0	0	0	1	3.63	D	McLean Co Hwy Dept. Several feet of stone shoulders. Normal's plan calls for BLs.	Some E-SP	4' paved shoulders; SW or SP	Pave 4' shoulders, and add SW or SP on at least one side. County's road.	2.39	8	Medium
White Oak	Graham	Locust	2	5500	45	11.5	0	0	0	1	3.77	D	McLean Co Hwy Dept. Several feet of stone shoulders.	Some E-SP	4' paved shoulders; SW or SP	Pave 4' shoulders, and add SW or SP on at least one side. County's road.	2.53	8	Medium
Caroline	Market	Circle	2	3400	30	13	0	0.5	0	6	4.04	D	Turn lanes. Access to Market commercial area from trail, w/ stoplight.	Both SWs	None	No good on/off-road options to improve.		1	
Caroline	Circle	Washington	2	2450	30	13	0	0.5	0	2	3.09	С	Missing link across Washington to Constitution Trail	Both SWs	Trail link	Link to trail from Washington intersection. No good on/off-road options to improve.		1	Medium
Cottage	Normal border	ML King Dr	4	8000	35	12	0	0-pvd	0	2	3.59	D	Normal's plan calls for road diet and bike lanes N of border	Both SWs	Bike lanes (road diet)	Decent candidate for road diet: 5.5-12.5-12-12.5-5.5	1.67	3	Medium
Cottage	ML King Dr	White Oak Park north edge	2	5200	30	13.4	0	1.3	0	0	3.11	С	Park trail W of road and houses	W-SW	None	SLM 4' possible, but well below target.		4	
Cottage (N-bd)	White Oak Park north edge	Seminary	2	5500	30	17.2	0	0-pvd	5	0	2.64	С	Park trail W on N-end, becomes SW on S-end	S-end both SWs	Finish sidewalks, (widen to sidepath)	No good on-road options without widening. Add bridge SWs when rebuilt. Fill W-SW gap, at least. Widen W-SW from park trail to Seminary.		4	Medium
Cottage (S-bd)	White Oak Park north edge	Seminary	2	5500	30	9.8	0	0-pvd	0	0	3.56	D		S-end both SWs	Finish sidewalks, (widen to sidepath)	No good on-road options without widening. Add bridge SWs when rebuilt. Fill W-SW gap, at least. Widen W-SW from park trail to Seminary.		4	Medium
Cottage	Seminary	Forrest	2	2800	30	13	0	0-pvd	0	0	2.85	С		Both SWs	Shared Lane Markings	SLM 4' possible, but somewhat below target.		4	High
Hinshaw/ Forrest	Cottage	Graham	2	2800	30	13.2	0	0-pvd	10	0	2.95	С		E-SW, some W-SW	Bike Route signage	Bike Route wayfinding signage, but somewhat below target. SLM 11' not feasible - would be too near center.		5	High
Hinshaw	Graham	Locust	2	2550	30	14.1	0	0-pvd	5	0	2.72	С	15' lanes S, 13.2' N.	E-SW, some W-SW	Bike Route signage	Bike Route wayfinding signage, but somewhat below target. SLM 11' not feasible - would be too near center.		5	High
Hinshaw Hinshaw/	Locust	Market	2	5250	30	18	0	0-pvd	0	2.5	2.78	С	IDOT road. No parking.	Both SWs W/N-SW,	Bike Lanes	Bike lanes: 5.5 BL-12.5-12.5-5.5.	1.76	4	High
Sheridan	Market	Stillwell	2	550	30	13.2	0	0-pvd	10	0	2.12	В	Turn lane by Market. Hill.	most E-SW	Bike Route signage	Bike Route wayfinding signage.		4	High
Stillwell	Sheridan	Circle	2	1200	30	12	0	1.3	0	2	2.85	С	Needs link to Constitution Trail (Washington S-SP)	E-SW	Shared Lane Markings	SLM 4' or Bike Route wayfinding signage, but somewhat below target.		4	High
Stillwell	Circle	Washington	2	1200	30	12	0	1.3	0	2	2.85	С		W-SW, some E-SW	Shared Lane Markings	SLM 4' or Bike Route wayfinding signage, but somewhat below target. Add link from Washington to trail.		4	High
trail link	Washington	Constitution Trail											Needs link to Constitution Trail (Washington S-SP)		Trail link			4	High
Western	Chestnut	Locust	2	1700	30	13	0	0-pvd	25	0	2.89	С		Both SWs	Bike Route signage	Bike Route wayfinding signage - only if yes on Locust bike lanes Western-Morris. Somewhat below target.		5	Medium

Street	From (W/N)	To (E/S)	Lanes	Traffic ADT	Spd Limit	Lane Width	Extra Width	Gutter Pan	Park Occ %	% Truck	BLOS score	BLOS grade	Comments	Sidewalk Status	Primary recommendation	Notes and Other Options	New BLOS	Public "votes"	Priority
Morris	Seminary	Chestnut	2	600	30	13	0	0-pvd	25	0	2.36	В	Jogs at Empire.	Both SWs	None	Bike Route wayfinding signage.		5	
Morris	Chestnut	Locust	2	600	30	13	0	0-pvd	25	0	2.36	В		Both SWs	Bike Route signage	Bike Route wayfinding signage - only if no Locust bike lanes Western-Morris.		5	Medium
Morris	Locust	Mulberry	2	600	30	13	0	0-pvd	25	0	2.36	В		Both SWs	None	Bike Route wayfinding signage.		5	
Morris (N-bd)	Mulberry	Market	1	100	25	12	0	0	20	0	1.70	В	Bad condition alley. S-bd contraflow not possible - terrible sightlines. Alternative (Western) S-bd queues up at Market.	Some W-SW	Future opportunity	If Market underpass rebuilt, add BLs here, with S-bd being contraflow. Widen N-SW to SP under RR. This would allow crossing to Morris S of Market at stoplight.		7	Develop
Morris	Market	Washington	2	6000	35	15.2	0	0-pvd	0	1	3.18	С	Narrower by Washington	Both SWs	None	SLM 4' possible, but well below target. Not quite wide enough for BLs - 4' urban shoulders?		7	
Morris	Washington	Grove	2	8800	35	11	0	1.5	0	1	3.93	D	RR crossing. CLTL 33' total+18" (11-11-11); concrete.	E-SW, some W-SW	None	BLs feasible only if CLTL removed. Too far below target for SLM 4'.		8	
Morris	Grove	Macarthur	2	8800	35	11	0	1.5	0	1	3.93	D	CLTL 33' total+18" (11-11-11); concrete.	Both SWs	None	BLs feasible only if CLTL removed. Too far below target for SLM 4'.		8	
Morris	Macarthur	Six Points	2	6600	35	11	0	1.5	0	1	3.78	D	CLTL 33' total+18" (11-11-11); concrete. Carraige SWs, both sides S of Butcher.	W-SW, some E-SW	None	BLs feasible only if CLTL removed (less needed on S-end). Too far below target for SLM 4'.		8	
Morris	Six Points	Veterans	2	11500	35	12	0	1.5	0	1	3.95	D	Divided. Turn lanes. N-bd has 2 lanes.	W-SP	None	On-road difficult. Already have SP.		13	
Morris	Veterans	Hamilton	2	3800	40	16.5	0	1.3	0	0.5	2.73	С	Parking allowed but maybe never used? Turn lanes by Veterans, Heather Hill, Hamilton	W-SW, most E-SW	Bike lanes (remove parking and lower speed)	Bike lanes: 5.5 BL-12.3-12.3-5.5, plus lower speed to 35mph.	1.49	13	High
Morris	Hamilton	Witten Woods	2	2050	40	11	0	1.5	0	0.5	3.17	O	Concrete. CLTL 11-11-11 +18".	Some W-SW	Bike lanes (no CLTL); finish sidewalk	If CLTL removed, 5.5 BL-12.5-12.5-5.5. Widening to W-SP feasible, esp. S, but low priority.	1.13	8	Medium
Morris	Witten Woods	Brigham School	2	1400	40	11	0	0	0	0.5	2.98	O	Slopes on sides	None	Complete street	When developed, construct with BLs and W-SW; or W-SP.		8	Develop
Morris	Brigham School	south end	2	550	55	10	0	0	0	0.5	2.75	O		None	Complete street	When developed, construct with BLs and W-SW; or W-SP.		8	Develop
Low	Wood	Bissell	2	800	30	13	0	0-pvd	20	0	2.45	В		Both SWs	Bike Route signage	Bike Route wayfinding signage. Koch/Lee would be nearby.		4	Medium
Springfield	Bissell	south end/ Forrest Park	2	1000	30	13	0	0-pvd	0	0	2.33	В	Seems much lower ADT	Some W-SW, some E-SW	Bike Route signage	Bike Route wayfinding signage.		8	High
Springfield	Six Points	Fox Creek	2	1050	35	13.5	0	1.5	0	1	2.54	С	Concrete. South end 15+1.5=33' wide curb- curb.	Some N-SW	Shared Lane Markings; add sidewalk	SLM 4'. Complete N-SW.		3	High
Allin (N-bd)	Normal border	Seminary	2	2400	30	16	0	1	30	0	2.77	С	Concrete. Normal has SLMs north of border. Seminary no longer on Bloomington list.	Both SWs	None	If parking <30%, Bike Route wayfinding signs only. If >30%, SLM 11'. Both somewhat below target.		2	
Allin (S-bd)	Normal border	Seminary	2	2400	30	10	0	1	0	0	3.12	С	Concrete. Normal has SLMs north of border. Seminary no longer on Bloomington list.	Both SWs	None	SLM 4' possible, but well below target.		2	
Allin Allin	Walnut Chestnut	Chestnut Locust	2	<b>400</b> 750	30 30	11.8	0	1.5	10	0	2.12	B B		E-SW Both SWs	None Bike Route signage	Bike Route wayfinding signage Bike Route wayfinding signage		2	Medium
Allin	Locust	Market	2	900	30	11.8	0	1.5	30	0	2.73	С	No parking S-bd, 40% N-bd. Tough Locust, Market Xings.	Both SWs	None	Bike Route wayfinding signage, but somewhat below target		2	Wicaidiff
Allin	Market	Washington	2	1400	30	13.1	0	0	20	0	2.73	С	No parking S-bd, 30% N-bd.	Both SWs	None	Bike Route wayfinding signage, but somewhat below target		2	
Allin	Washington	Front	2	1500	30	13.5	0	1.5	10	0	2.60	С	Jog W at Front.	Both SWs	None	Bike Route wayfinding signage, but somewhat below target		3	
Allin	Front	Oakland	2	1550	30	15.1	0	0-pvd	20	0	2.54	С	Skew trail Xing. N-bd 18.1', 40%; S-bd 12.1', no parking	Both SWs	None	Bike Route wayfinding signage, but somewhat below target		3	
Allin	Oakland	Wood	2	700	30	13.5	0	0-pvd	20	0	2.33	В		Both SWs	None	Bike Route wayfinding signage.		3	
Lee	Emerson	Empire	2	3100	30	13.1	0	0-pvd	10	0	3.01	С	20% parking S-bd, no parking N-bd. 4-W stop at Empire.	Both SWs	Shared Lane Markings	SLM 4' N-bd. S-bd either SLM 11' (if parking>30%) or Bike Route signage only. But, well below target. Drops in priority if Main/Center couplet gets bike lanes.		8	High
Lee	Empire	Market	2	4300	30	18.5	0	1.5	60	0	3.13	С	4-W stop, turn lanes at Locust. Some no parking areas. IDOT road, Empire-Locust	Both SWs	Shared Lane Markings	SLM 11' possible, but well below target. Future transfer to City may lessen ADT. Drops in priority if Main/Center couplet gets bike lanes.		8	High
Lee	Market	Washington	2	3100	30	20.2	0	0-pvd	20	2	2.40	В		Both SWs	Shared Lane Markings	If parking-10%, 8 CPBL-12.2-12.2-8. If 5-10%, -30%, Bike Route wayfinding signage. If >30%, SLM 11'. Or, 1-side parking only: 8-5 BL-11.2-11.2-5. Drops in priority if Main/Center couplet gets bike lanes.		7	High
Lee	Washington	Olive	2	3500	30	11.3	0	1.7	0	0	3.17	С	Turn lanes/CLTL 10.5N-13-12S-5 parking (40.5' total)+20" gutters. S-bd striped parking 100%.	Both SWs	Shared Lane Markings	Consider feasibility of removing CLTL and turn lanes: W-E 8 parking-5.5 BL-12.5-12.5-5. Otherwise, SLM 11' S-bd, 4' N-bd, but well below target.		7	High
Lee	Olive	Jackson	2	2700	30	18	0	0-pvd	0	0	2.06	В		Both SWs	Shared Lane Markings	If no parking: bike lanes 5-13-13-5 feasible - or SLM 4'. If parking (low occupancy), could use CLTL 7-11-11-7.		7	High
Lee	Jackson	Oakland	2	2700	30	18	0	0-pvd	20	0	2.40	В	40% parking S-bd, no parking N-bd.	Both SWs	Shared Lane Markings	N-bd SLM 4'. S-bd SLM 11', or Bike Route signage if parking <30%.		7	High
Lee	Oakland Wood	Wood Hickory	2	1250 650	30 30	15.3 13.1	0	0-pvd	20 30	0	2.40	B B		Both SWs Both SWs	Bike Route signage Bike Route signage	Bike Route wayfinding signage. Bike Route wayfinding signage.	1	7 6	High
Lee Hickory/Koch	Wood Lee	Hickory Bissell	2	500	30	13.1	0	0-pvd 0-pvd	30	0	2.44	В		Both SWs	Bike Route signage Bike Route signage	Bike Route wayfinding signage.  Bike Route wayfinding signage.	1	6	High High
Koch	Bissell	Lincoln	2	300	30	13.1	0	0-pvd	30	0	2.05	В		Both SWs	Bike Route signage	Bike Route wayfinding signage.		10	High
Center (S-bd)	Normal border	Locust	2	13000	30	13.5	0	1.5	0	2.5	3.95	D	IDOT road, studied by Farr and Associates. 30' total w/ gutters.	Both SWs	Buffered Bike Lanes	Buffered bike lanes, E-to-W (modified from Farr): 12-11- 2 buffer-5 BL. Backup: 12-12-6 BL.	2.44	5	High

Street	From (W/N)	To (E/S)	Lanes	Traffic ADT	Spd Limit	Lane Width	Extra Width	Gutter Pan	Park Occ %	% Truck	BLOS score	BLOS grade	Comments	Sidewalk Status	Primary recommendation	Notes and Other Options	New BLOS	Public "votes"	Priority
Madison (S-bd)	Locust	Washington	4	12500	30	12.5	0	0-pvd	0	2.5	3.71	D	IDOT road, studied by Farr and Associates. 50' total w/ gutters	Both SWs	Buffered Bike Lanes (road diet)	Good road diet candidate, buffered bike lanes, E to W: 15-12- 13-4 buffer-5 BL. Second option: 8 parking-12-11-12-2 buffer- 5 BL.	1.51	5	High
Madison (S-bd)	Washington	Olive	4	10250	30	12.5	0	0-pvd	0	3	3.70	D	IDOT road, studied by Farr and Associates. 50' total w/ gutters	Both SWs	Buffered Bike Lanes (road diet)	Good road diet candidate, buffered bike lanes, E to W: 15-12- 13-4 buffer-5 BL. Or, 8 parking-12-11-12-2 buffer-5 BL.	1.50	6	High
Madison	Olive	Constitution Trail	2	600	30	17.5	0	0-pvd	70	2	2.67	С	Most parking could be moved to off-street lots, if needed. Low parking turnover rate.	Both SWs	Bike Route signage	BR signage or SLM 11'. Add (as High priority) only if BLs added to S-bd Madison N of Olive. But, use S-bd Center (S of Olive) instead if it is reconstructed, widened w/ BLs.		0	Low
Madison	Constitution Trail	Wood	2	600	30	17.5	0	0-pvd	10	2	1.86	В	Unprotected Xings of Oakland, Macarthur could be future issue.	Both SWs	Bike Route signage	Bike Route wayfinding signage. Add (as High priority) only if BLs added to S-bd Madison N of Olive. But, use S-bd Center (S of Olive) instead if it is reconstructed, widened w/ BLs.		0	Low
Madison	Wood	Lafayette	2	400	30	12.5	0	0-pvd	15	2	2.41	В	S-bd parking only. SW gaps at S end.	Most SWs, S- end gaps	Bike Route signage	Bike Route wayfinding signage. Add (as High priority) only if BLs added to S-bd Madison N of Olive. But, use S-bd Center (S of Olive) instead if it is reconstructed, widened w/ BLs.		0	Low
trail	Madison	RT Dunn											Adjacent to golf course		Trail	Add trail link, sidepath to existing sidewalk S of R.T.Dunn on Main. High priority if Madison is BR.		0	Medium
Center (S-bd)	Olive	Main	2	10000	30	13	0	0-pvd	0	2	3.80	D	IDOT road. Width conflicts in studies (38' Farr, 36' 2012 Main St report) - use 36'. Has bridge. Used parking Olive-1 blk S. 20"? gutters not always paved.	Both SWs (N of Lafayette)	None	SLM not enough. Ideally, when bridge reconstructed, widen somewhat for 13-12-5 or even buffered BL.		6	
Main (N-bd)	Normal border	Beecher	3	13000	30	12	0	0-pvd	0	2.5	3.94	D	IDOT road, studied by Farr & Associates. 36' total w/ gutters. Transitions from 4L to 2L over this segment.	Both SWs	Buffered Bike Lanes (road diet)	Road diet candidate (with buffered bike lanes) to transition to 2 lanes earlier, W to E: 14.5-12-4 buffer-5.5 BL.	1.86	5	High
Main (N-bd)	Beecher	Locust	3	13000	30	19	0	0-pvd	25	2.5	3.30	С	IDOT road, studied by Farr & Associates. 50' total w/ gutters. Parking both sides, rarely striped. Off-street parking mostly available.	Both SWs	Buffered Bike Lanes (road diet)	Road diet with buffered bike lanes, W-to-E: 8 parking-14-12-3 buffer-5 BL-8 parking. Or, remove parking E-side, for W-E: 8 parking-12-12-12-6 BL.	2.10	5	High
East (N-bd)	Locust	Washington	4	11800	30	10	0	0-pvd	0	2.5	3.96	D	IDOT road, studied by Farr & Associates. 42.4' total w/ gutters.	Both SWs	Buffered Bike Lanes (road diet)	Good road diet candidate, buffered bike lanes, W to E: 12-11-12-2.5-5 (modified from Farr). Or, no buffer: 12.3-12-12-6 BL.	1.91	5	High
East (N-bd)	Washington	Olive	4	10500	30	10	0	0-pvd	0	2	3.82	D	IDOT road, studied by Farr & Associates. 42.4' total w/ gutters.	Both SWs	Buffered Bike Lanes (road diet)	Good road diet candidate, buffered bike lanes, W to E: 12-11-12-2.5-5 (modified from Farr). Or, no buffer: 12.3-12-12-6 BL.	1.76	6	High
Main (N-bd)	Olive	Miller	4	10900	30	11	0	0-pvd	0	2	3.73	D	IDOT road, studied by Farr & Associates. 44' total w/ gutters.	Both SWs	Buffered Bike Lanes (road diet)	Good road diet candidate, buffered bike lanes W to E: 13-12- 12-2 buffer-5 BL. Or, no buffer: 13-12-13-6 BL. [Farr: 2L+BL+2-side parking]	1.84	6	High
Main (N-bd)	Miller	Center	3	10500	30	12	0	1.5	0	2.5	3.83	D	IDOT road, studied by Farr & Associates. 38.8' total w/ gutters.	Both SWs	Buffered Bike Lanes (road diet)	Fitting bike lanes (W-E: 11.7-11-11-5) ok but a little tight. Road diet candidate - 16-13-4 buffer-5 BL. Or, modified Farr: 8 parking-11.9-11.9-2-5.	1.63	6	High
Main	Center	Hamilton	4	17200	35	13	0	0-pvd	0	2	3.86	D	IDOT road. Divided, turn lanes. Gutters not always paved.	Most W-SW, some E-SW	Finish sidewalks; (widen to sidepath)	Complete SW on at least one side - high priority. Widening to SP on E-side low priority. Not enough room for BLs (Farr) unless 10.5' travel lanes or expanded.		3	High
Main	Hamilton	S of Woodrig	4	13600	45	12	0	2	0	2	4.03	D	IDOT road. Divided, turn lanes	W-SW	Widen to sidepath	Add E-SW. Going to SP width on either side low priority.		2	Low
Main	S of Woodrig	1-74	4	14100	45	12	4	0	0	2	2.76	С	IDOT road. Divided. 9' shoulders w/shallow rumbles, no gaps, 4' clear zones.	None	Add sidewalk; better rumbles	When shoulders repaved, use new IDOT rumble strip standard w/ gaps. Add SW on at least one side.		2	Medium
Albert/East	Grove	Constitution Trail	2	2100	30	15	0	0-pvd	30	0	2.83	С	Off-street parking only. Better option than Gridley to Front, due to tough Oakland crossing.	Both SWs	Bike lanes	SLM 4' possible, but somewhat below target. 10' travel lanes would allow bike lanes 5-10-10-5.	2.10	4	High
Prairie	Empire	Walnut	2	850	30	15.2	0	0-pvd	30	0	2.35	В	E-side parking only. Heavier parking during school year?	Both SWs	None	11' SLM, but close to Park/Prairie.		4	
Prairie	Walnut	Locust	2	1200	30	15.2	0	0-pvd	30	0	2.52	С	W-side parking only. 11' SLMs S-bd (W), 4' N-bd (E); Bike Route signs.	Both SWs	Shared Lane Markings	SLMs already - nothing else likely		4	Done
Prairie	Locust	Jefferson	2	1200	30	15.2	0	0-pvd	50	0	2.74	С	W-side parking only, more S. 11' sharrows S-bd (W), 4' N-bd (E); Bike Route signs.	Both SWs	Shared Lane Markings	SLMs already - nothing else likely		4	Done
Prairie	Jefferson	Front	2	1200	30	11.7	0	0-pvd	0	0	2.58	С	S-bd has full 7' striped parking, not shown here, and 11' SLMs. N-bd has 4' SLMs.	Both SWs	Shared Lane Markings	SLMs already - nothing else likely		4	Done
Prairie	Front	Grove	2	1050	30	12	0	0-pvd	0	0	2.48	В	S-bd has some 7' striped parking, 19' lanes elsewhere.	Both SWs	Shared Lane Markings	SLM 11' S-bd by parking, 4' elsewhere. SLM 4' N-bd.		4	High
Franklin	Normal border	Emerson	2	2700	30	19.4	0	1.5	100	0	3.23	С	Divided. Stoplight w/ microwave detection (picks up bikes).	Both SWs	Shared Lane Markings	Only 11' SLMs feasible, but well below target.		3	Medium
Franklin	Emerson	Beecher	2	1050	30	19.4	0	1.5	100	0	2.75	С	Divided	Both SWs	Shared Lane Markings	SLM 11' possible, but somewhat below target.		7	High
Park	Beecher	University	2	900	30	14.2	0	0-pvd	90	0	2.98	С	Sharrows 11' + BR, STR signs. College parking.	E-SW, some W-SW	Shared Lane Markings	SLMs already - nothing else likely		2	Done
Park	University	Walnut	2	800	30	17.8	0	0-pvd	90	0	2.67	С	Sharrows 11' + BR, STR signs. College parking.	Both SWs	Shared Lane Markings	SLMs already - nothing else likely		2	Done
McLean	University	Empire	2	600	30	15.2	0	0-pvd	60	0	2.49	В	E-side parking only. Heavier parking during school year?	Both SWs	None	Bike Route wayfinding signs, but redundant route to Park		3	
McLean (N-bd)	Empire	Locust	2	1300	30	19.5	0	0-pvd	60	0	2.39	В	E-side parking only. Heavier parking during school year?	Both SWs	None	11' SLM, but route is close to Park/Prairie.		3	

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McLean (S-bd)	Empire	Locust	2	1300	30	10.9	0	0-pvd	0	0	2.71	С		Both SWs	None	4' SLM, but route is close to Park/Prairie.		3	
McLean	Locust	Washington	2	1500	30	20.5	0	1.3	40	0	2.02	В	Striped. Heavier parking by Washington	Both SWs	None	11' SLM, but route is close to Park/Prairie. BLs possible only if 1-side parking.		3	
McLean (N-bd)	Washington	Front	2	850	30	19	0	0-pvd	30	0	1.81	В		Both SWs	None	11' SLM, but route is close to Park/Prairie.		2	
McLean (S-bd)	Washington	Front	2	850	30	11.5	0	0-pvd	0	0	2.43	В		Both SWs	None	4' SLM, but route is close to Park/Prairie.		2	
McLean (N-bd)	Front	Oakland	2	850	30	12	0	0-pvd	0	0	2.37	В		Both SWs	None	4' SLM possible		2	
McLean (S-bd)	Front	Oakland	2	850	30	18.9	0	0-pvd	70	0	2.38	В	Industrial dead-end S of Oakland	Both SWs	None	11' SLM possible		2	
Fell	Normal border	Emerson	2	1550	30	11	0	1	0	0	2.79	С	Bridge. Tough Emerson Xing. Normal to add SLM when resurfaced.	Both SWs	None	Bike Route wayfinding signage, or 4' SLM, but somewhat below target.		5	
Fell	Emerson	University	2	900	30	13.5	0	0-pvd	20	0	2.46	В	Big trees. W-side parking only.	Both SWs	None	Bike Route wayfinding signage		3	
Clayton	Buchanan	Lincoln	2	650	30	13	0	0-pvd	30	0	2.45	В		Both SWs	Bike Route signage	Bike Route wayfinding signage		7	High
Const. Tr. SE extension	Lincoln	Bunn											Along active railroad. City ROW owned SE to Bunn only.		Trail	W-side of active railroad tracks		3	High
Bunn	Oakland	Croxton	2	3700	30	13.2	0	0-pvd	10	1	3.24	С		Both SWs (gap at Croxton)	None	Parking too low for 11' SLM. Bike Route signage but well below target.		2	
Bunn	Croxton	Lincoln	2	3550	30	13.2	0	0-pvd	0	0.5	3.01	С	Parking allowed W-side, but not seen. Currently, a link from trail S-end to Lincoln.	W-SW, most E-SW	None	If W-side parking banned, SLM 4' both sides. Otherwise, Bike Route signage, but somewhat over target. Better to extend trail S to Lincoln.		24	
Bunn	Lincoln	Lafayette	2	3300	30	20.5	0	1.5	30	0.5	2.32	В	Parking 40% S-bd, 10% N-bd	Both SWs	None	Parking too high for CBPL. SLM 11' possible but not ideal at this parking level. Bike Route signage. Instead, rail-trail to be used Lincoln to Bunn (S of Veterans).		17	
Bunn	Lafayette	Veterans	2	3300	30	11	0	0	0	0.5	3.24	С	Rough pavement. Narrow underpass of Veterans. Saw bike.	None	Add sidewalk	Add W-SW. 3-4' paved shoulders possible, but Veterans underpass narrow. Instead, rail-trail to be used Lincoln to Bunn (S of Veterans).		17	Medium
Bunn	Veterans	RR Xing	2	3300	35	11	0	0	0	0.5	3.34	С	Skewed railroad crossing	None	None	Add W-SW. 3-4' paved shoulders possible, extra for perpendicular RR Xing. Instead, rail-trail to be used Lincoln to Bunn (S of Veterans).		16	
Bunn	RR Xing	Hamilton	2	2950	35	11	0	0	0	0.5	3.29	С		None	Paved shoulders, add sidewalk	3 or 4' paved shoulders. SW on one (W?) side. Rail-trail ROW not owned SE of here, so Bunn become route S.	2.27	16	High
Bunn	Hamilton	Woodrig	2	1000	35	10	0	0	0	0.5	2.84	С		None	Paved shoulders, (add sidewalk)	3 or 4' paved shoulders. SW on at least one (W?) side when developed.	1.90	9	Medium
Constitution Tr extension	Croxton	Lincoln													Trail			2	High
Ethell	Normal border	Emerson	2	1000	30	13.5	0	1.5	5	0	2.33	В	Meets Belt Avenue, part of Normal's plan.	None	Bike Route signage; add sidewalk	Bike Route wayfinding signage. Add E sidewalk.		3	Medium
Colton	Emerson	Empire	2	750	30	14.1	0	0-pvd	20	0	2.29	В	Speed tables. N-bd 40% parking, banned S-bd.	E-SW, some W-SW	Bike Route signage	Bike Route wayfinding signage		3	Medium
Colton	Empire	Locust	2	1450	30	19	0	0-pvd	8	0	1.70	В	Turn lanes by Empire.	Both SWs	Combined Bike/Parking Lanes	If parking <10%, 7 CBPL-12-12-7, with SLM 11' at always-high parking locations. Or, Bike Route wayfinding signage only.	0.71	3	Medium
Colton	Locust	Washington	2	2500	30	20.2	0	0-pvd	15	0	1.89	В	Possible heavier parking S?	W-SW, some E-SW	Combined Bike/Parking Lanes	If average parking <10% or heavy parking areas isolated, 7.5 CBPL-12.7-12.7-7.5 with SLM 11' at high parking. Otherwise, Bike Route signage.	0.92	4	Medium
Commerce	Gilmore	Veterans	2	1550	30	14	0	0-pvd	0	0.5	2.49	В	Turn lanes, width varies	Both SWs	None	SLM 4' possible.		2	
Commerce	Veterans	Hamilton	2	6700	30	13	0	0-pvd	0	0.5	3.36	С	Turn lanes. CLTL 39' total. Much lower traffic away from Veterans.	Both SWs	None	SLM 4' possible, but well below target. No good road options unless CLTL removed. Not ideal SP location - Xings.		2	
Morrissey	Croxton	Lincoln	2	7350	35	11.4	0	0	0	2.5	4.07	D	IDOT road. Stone shoulders few feet.	Some W-SW	Add Sidepath	Paved 5' shoulders. Complete SW on at least one side, E-SP feasible.		4	Medium
Morrissey	Lincoln	Lafayette	2	9000	35	12	0	2	0	2.5	4.10	D	IDOT road. CLTL 38+2'	Some W-SW	Add Sidepath	Complete SW on at least one side, E-SP feasible.		4	High
Morrissey	Lafayette	Veterans	2	9000	35	13	0	1.5	0	3	4.08	D	IDOT road. CLTL 38.5+1.5'. Turn lanes by Veterans.	None	Add Sidepath	Complete SW on at least one side.		5	High
Morrissey	Veterans	Hamilton	4	10400	40	12	0	2	0	2	3.82	D	IDOT road. CLTL 63+2'. Concrete.	None	Add Sidepath	Complete SW on at least one side, SP relatively feasible on either side.		5	High
Morrissey	Hamilton	Woodrig	4	11400	40	12	0	2	0	2	3.86	D	IDOT road. CLTL 63+2'. Concrete.	None	Add Sidepath	Complete SW or SP (feasible) on one side.		2	Low
Morrissey	Woodrig	Hershey	2	5200	55	12	4	0	0	2	2.72	С	ADT seems higher	None	None	Paved shoulders close to target.		2	
Towanda	Vernon	Jersey	4	15300	30	11.5	0	1.3	0	1	3.69	D	CLTL 56+1.3'. Normal's plan calls for sidepath.	Both SWs	Widen to sidepath	BL only possible if CLTL removed. Widening a SW to SP low priority.		16	Low
Towanda	Jersey	Fairway	4	11300	30	11.5	0	1.3	0	1	3.53	D	Turn lanes by Jersey, Fairway	E-SW, most W-SW	Widen to sidepath	Complete W-SW. Widening a SW to SP low priority. BL only possible if CLTL removed.		15	Low
Towanda	Fairway	Empire	4	10400	30	11.5	0	1.3	0	1	3.49	С	CLTL 56+1.3'. Near Empire, median raised, then painted.	E-SW	Add sidewalk	Add W-SW. BL only possible if CLTL removed.		15	Low
Towanda (N-bd)	Empire	Locust	6	9900	35	12	0	0-pvd	0	2	3.49	С	IDOT road. Divided road.	None	Add sidewalk	Add SW (or SP) on at least one side. Road diet to 2 N-bd lanes feasible, for BL - but not feasible S-bd.		14	High
Towanda (S-bd)	Empire	Locust	4	9900	35	12	0	0-pvd	0	2	3.70	D	IDOT road. Divided road.	None	Add sidewalk	Add SW (or SP) on at least one side. Road diet to 2 N-bd lanes feasible, for BL - but not feasible S-bd.		14	High

Street	From (W/N)	To (E/S)	Lanes	Traffic ADT	Spd Limit	Lane Width	Extra Width	Gutter Pan	Park Occ %	% Truck	BLOS score	BLOS grade	Comments	Sidewalk Status	Primary recommendation	Notes and Other Options	New BLOS	Public "votes"	Priority
Towanda	Locust	Washington	4	8500	30	11.1	0	0-pvd	0	0.5	3.36	С	CLTL 56.3'. Raised median, turn lanes by Washington, Empire	Most W-SW, some E-SW	Finish sidewalk	Complete W-SW. Widening a SW to SP low priority. BL only possible if CLTL removed.		14	High
State (N-bd)	Washington	Grove	2	4350	30	19	0	0-pvd	40	0	2.79	С		Both SWs	Shared Lane Markings	SLM 4' possible, but somewhat below target.		8	Low
State (S-bd)	Washington	Grove	2	4350	30	11.4	0	0-pvd	0	0	3.27	С		Both SWs	Shared Lane Markings	SLM 11' possible, but well below target.		8	Low
State	Grove	Oakland	2	1850	30	14	0	0-pvd	20	0	2.76	С		Both SWs	Bike Route signage	Bike Route wayfinding signage, but somewhat below target		1	Low
Meadows	Oakland	Maizefield	2	600	30	13	0	0-pvd	10	0	2.19	В	Oakland Xing difficult	None	Bike Route signage	Bike Route wayfinding signage		1	Low
O'Connell	Maizefield	Croxton	2	300	30	12.5	0	0	20	0	2.01	В		None	Bike Route signage	Bike Route wayfinding signage		1	Low
McGregor	Oakland	Croxton	2	1450	30	13.1	0	0-pvd	5	0	2.57	C		Some E-SW, some W-SW	None	Bike Route wayfinding signage, but somewhat below target		3	
McGregor	Croxton	Lincoln	2	1300	30	13.1	0	0-pvd	0	0	2.45	В	No S-bd parking, by golf course.	Some E-SW	None	Bike Route wayfinding signage; finish E-SW and possibly add W-SW.		3	
McGregor	Lincoln	Lafayette	2	1850	30	13	0	1.3	15	0	2.82	С		Both SWs	None	Bike Route wayfinding signage, but somewhat below target		1	
Vale (N-bd)	Washington	Grove	2	700	30	10.3	0	0-pvd	0	0	2.46	В		Both SWs	None	Bike Route wayfinding signage		5	
Vale (S-bd)	Washington	Grove	2	700	30	19.7	0	0-pvd	25	0	1.51	В	2-W stop at Grove	Both SWs	None	Bike Route wayfinding signage		5	
Vale (N-bd)	Grove	Oakland	2	950	30	10.9	0	0-pvd	0	0	2.55	С	Tough Xing of Oakland	Both SWs	Bike Route signage	Bike Route wayfinding signage, but somewhat below target		5	Medium
Vale (S-bd)	Grove	Oakland	2	950	30	19.1	0	0-pvd	10	0	1.51	В	<b> </b>	Both SWs	Bike Route signage	Bike Route wayfinding signage	1	5	Medium
Vale	Oakland	Lincoln	2	650	30	13.5	0	1.5	5	0	2.11	В	5% S-bd parking, no N-bd. No SWs S of Golden. Needs repaving.	Some E-SW, some W-SW	Bike Route signage	Bike Route wayfinding signage		3	Medium
Capodice	Woodrig	south end	2	1850	45	10.3	0	1.7	0	0.5	3.25 2.54	C		None	Paved shoulders None	Paved 3-4' shoulders. Or, rail-trail towards Downs.	2.28	6 3	Low
Mercer Mercer	Country Club Washington	Washington Grove	2	900 5500	30	13.5	0	1.7	0	0	3.13	С	Parking not allowed. Turn lanes at Washington.	None None	Paved shoulders, add sidewalk	Bike Route wayfinding signage. Add SW one side. Not enough room for BLs. 3.8-11-11-3.8 "shoulders"/log lines with Bike Route signage possible. Or, BR signage only, but well below target. Add SW on at least one side. See Comments of #1451 for options.	2.31	7	Medium
Mercer	Grove	Oakland	2	6100	30	13.5	0	1.3	0	0	3.18	С	Parking not allowed. Turn lanes at Oakland	None	Paved shoulders, add sidewalk	Not enough room for BLs. 3.8-11-11-3.8 "shoulders"/fog lines with Bike Route signage possible. Or, BR signage only, but well below target. Add SW on at least one side.	2.36	7	Medium
Mercer	Oakland	Lincoln	2	4600	30	18.1	0	0-pvd	0	0	2.31	В	Parking allowed, except by Lincoln, Oakland.	None	Bike lanes (remove parking) or backup options; add sidewalk	Low parking = no SLM 4' or 11'; too narrow for CBPLs. 5 BL- 13.1-13.1-5 possible if no parking. Otherwise, Bike Route wayfinding signage. Add SW on at least one side.	1.28	6	Medium
Mercer	Lincoln	Veterans	4	5200	30	10.9	0	1.3	0	0	3.06	С	Concrete, no parking. Turn lanes at Veterans	Both SWs	Bike lanes (road diet)	Excellent road diet candidate: 5 BL-12-11-12-5. 58' at Veterans allows (W-to-E): 12 RT lane-5 BL-12-12 LT lane-12-5.	1.24	6	High
Mercer	Veterans	Ireland Grove	4	4350	30	11.5	0	1.5	0	0	2.90	С	CLTL, 60.3' total + gutters.	Both SWs	Bike lanes (road diet)	Excellent road diet candidate. 5-to-3: 5 BL-3 buffer-14-16-14-3-5. 5-to-4: 5 BL-13-12-12-13-5. Bike lanes can be carried through to Veterans.	0.67	4	High
Mercer	Ireland Grove	Hamilton	4	2450	40	11	0	1.7	0	0	2.82	С	Divided, concrete. Turn lanes.	None	Add Sidepath	Add SW on at least one side. SP width appropriate.		4	High
Fairway	Towanda	Empire	2	8500	30	16.5	0	1.5	2	0	2.93	С	Parking ok. Narrower due to turn lanes by Towanda, Empire	Some E-SW	Bike lanes (remove parking) or backup options	If parking banned, then 5.5 BL (w/ gutter)-12.5-12.5-5.5. Backup: combined bike/parking lanes 7-11-11-7, or Bike Route wayfinding signage only (somewhat below target)	1.66	4	High
Fairway	Empire	Eastland	4	10100	30	10.5	0	1.5	0	0	3.44	С	Painted, raised medians W side of mall - raised stops road diet	E-SW, most W-SW	Bike lanes (road diet)	Consider road diet long term: remove medians, 5 BL (w/ gutter)- 12-11 CLTL-12-5 BL. Else: 4' SLMs, but well below target.	1.57	5	High
Regency	Eastland	Washington	4	6400	30	10.5	0	1.5	0	0	3.21	С	Gutters paved for much	Both SWs	Bike lanes (road diet)	Excellent road diet candidate: 5 BL (w/ gutter)-12-11 CLTL-12-5 BL.	1.34	5	High
Regency	Washington	Oakland	4	4000	30	10.5	0	1.5	0	0	2.97	С	Gutters paved for much	Both SWs	Bike lanes (road diet)	Excellent road diet candidate: 5 BL (w/ gutter)-12-11 CLTL-12-5 BL.	1.10	1	High
Four Seasons	Oakland	N of Clobertin	2	5200	30	12	0	1	0	0	3.29	С	Turn lanes, lane tapering. ADT lower away from Oakland.	Both SWs	Shared Lane Markings	SLM 4' possible, but well below target. Higher priority if no Veterans W-SP built.		0	Medium
Four Seasons	N of Clobertin	Lincoln	2	2750	30	14	0	1	0	0	2.70	С	No stoplight at Lincoln	Both SWs	Shared Lane Markings	SLM 4' possible, but somewhat below target. Higher priority if no Veterans W-SP built.		0	Medium
Veterans	College	Vernon/ Gen. Electric	6	45000	45	12	0	1.3	0	1	4.22	D	Divided, turn lanes. 13-14' outer lanes where no R-turn lanes. Constitution Trail underpass.	None	Add sidepath	SP on one side, SW on other, using right corner islands at intersections. Links to Constitution Trail underpass.		6	High
Veterans	Vernon/ Gen. Electric	Empire	6	45000	45	12	0	1.3	0	1	4.22	D	Holiday & sidewalk link, Clearwater-Empire	None	Add sidepath	Add W-SP (E-side of IAA), E-SW. Clearwater intersection needs N-face Xing, S-face Xing moved to island, and BLs on Clearwater.		5	High
IAA Dr	Vernon	Kurt	2	6500	30	12	0	1.3	0	0	3.40	С	CLTL 36' + gutters	W-SW	Add sidepath	See Veterans for SP on E-side of IAA.	1	5	High
IAA Dr	Kurt	Empire	2	4450	30	13.5	0	1.3	0	0	3.02	С	W frontage road for Veterans	Most W-SW	None	Complete W-SW. See Veterans for SP on E-side of IAA.		5	
Veterans	Empire	Oakland	6	42000	45	12	0	1.3	0	1	4.18	D	Divided, turn lanes. 13-14' outer lanes where no R-turn lanes. E-side: Eldorado and sidewalks	None	Add sidepath	Add W-SP, complete E-SW. Add SW and Xwalks (using islands) at all intersections. Add BLs to cross streets at Eastland, Washington, Jackson intersections.		5	High

Street	From (W/N)	To (E/S)	Lanes	Traffic ADT	Spd Limit	Lane Width	Extra Width	Gutter Pan	Park Occ %	% Truck	BLOS score	BLOS grade	Comments	Sidewalk Status	Primary recommendation	Notes and Other Options	New BLOS	Public "votes"	Priority
Veterans	Oakland	Lincoln	6	35900	45	12	0	1.3	0	1	4.10	D	Divided, turn lanes. 13-14' outer lanes where no R-turn lanes.	None	Add sidepath	Add W-SP (Eldorado has E-SW). Add SW and Xwalks (using islands) at all intersections. Add BLs to cross streets at Oakland, Lincoln intersections.		4	High
Eldorado	Oakland	Lincoln	2	2600	30	13.5	0	1.5	0	0	2.75	С	E frontage road for Veterans	E-SW	None	Nothing further beyond Veterans recommendation.		4	
Veterans	Commerce	Lincoln	6	31000	45	12	0	1.3	0	1	4.03	D	Divided, turn lanes. 13-14' outer lanes where no R-turn lanes.	None	Add sidepath	SP on one side, SW on other. Add SW and Xwalks (using islands) at all intersections. Add BLs to cross streets at Mercer, Commerce intersections.		2	High
Veterans	Morris	Commerce	4	26000	45	12	3	1.3	0	1	3.25	С	5'+ paved shoulders mostly, except by turn lanes, Main bridge	None	Bridge improvement	Fewer direct destinations, harder to achieve off-road accommodations on this segment. Add 6-8' shoulders when bridges reconstructed. Focus on improving alternative routes.		2	Medium
Prospect	Empire	Washington	2	7200	30	11.7	0	1	0	0.5	3.56	D	CLTL avg 35' total + gutters. Lights at Empire, Washington	Most E-SW, some W-SW	None	BLs only possible if CLTL removed. SLM 4' possible but well below target.		2	
Prospect	Washington	Oakland	2	5700	30	11.3	0	1	0	0.5	3.49	С	CLTL 34.3' total + gutters.	Both SWs	None	BLs only possible if CLTL removed. SLM 4' possible but well below target.		2	
Broadmoor	Oakland	Lincoln	2	1100	30	12	0	0-pvd	10	0	2.62	С	Turn lanes. Jog on Oakland from Prospect to Broadmoor.	E-SW, most W-SW	None	Bike Route wayfinding signs, but below target.		2	
Hershey	Fort Jesse	Gen. Electric	4	10500	40	12	0	1.5	0	0.5	3.53	D	Normal's plan calls for BL (road diet?).	W-SW, most E-SW	Widen to sidepath	Complete E-SW when developed. Widening a SW to SP width is feasible. Road diet still feasible now, dep. on future ADT.		7	Low
Hershey	Gen. Electric	Clearwater	4	11300	30	12.5	0	0-pvd	0	0.5	3.34	С		Both SWs	Widen to sidepath	Widening a SW to SP width is feasible, but not at single-family front yards. Road diet still feasible now, dep. on future ADT.		18	Low
Hershey	Clearwater	Empire	4	13500	30	12.5	0	0-pvd	0	0.5	3.43	С		Both SWs	Widen to sidepath	Widening E-SW to SP width is feasible. Road diet still feasible now, dep. on future ADT.		17	Low
Hershey	Empire	Washington	4	17700	35	10	0	1.5	0	0.5	3.95	D	CLTL, 57.5' total	W-SW, most E-SW	None	Complete E-SW. Many Xings make SP less feasible. BLs possible if CLTL removed: 5-12-11.7-11.7-12-5.		19	
Hershey	Washington	Oakland	4	15000	30	10	0	1.5	0	0.5	3.76	D		Both SWs	None	No on-road options w/o widening. Not suitable for SPs.		19	
Hershey	Oakland	Mockingbird	4	10900	30	11	0	1.5	0	0.5	3.50	С	Concrete	Both SWs	Widen to sidepath	Widening E-SW to SP width is feasible. Road diet still feasible		19	Low
Hershey	Mockingbird	Lincoln	4	10500	30	11	0	1.5	0	0.5	3.48	С	Concrete	E-SP, most W	None	now, dep. on future ADT.  Complete W-SW. Road diet still feasible now, dep. on future ADT.		19	
Hershey	Lincoln	Manor	4	10500	30	11	0	1.5	0	0.5	3.48	С	Concrete	Both SWs	Widen to sidepath	Widening W-SW to SP width is feasible. Road diet feasible, dep. on future ADT.		19	Low
Hershey	Manor	Ireland Grove	4	8000	35	11	0	1.5	0	0.5	3.44	С	Concrete	E-SW, most W-SW	Widen to sidepath	Complete W-SW. Widening W-SW to SP width is feasible. Road diet feasible, dep. on future ADT.		4	Low
Hershey	Ireland Grove	Hamilton	4	7000	40	11	0	1.5	0	0.5	3.44	С	Concrete	None	Add sidepath	Add E-SW. Add W-SP when developed.		3	Develop
North Pointe	Fort Jesse	College	2	1000	30	13.5	0	1.5	0	0	2.26	В	1500 ADT S, 550 N.	Both SWs	Bike Route signage	Bike Route wayfinding signage, when trail S developed. College Xwalks and link to S-SP needed.		0	Medium
Trail (by Oakwood)	College	Gen. Electric											City ROW		Trail			0	Medium
Airport	Fort Jesse	College	2	7700	40	11	0	1.7	0	0.5	3.84	D	Turn lanes. Normal's plan calls for sidepath.	E-SW, some W-SW	Widen to sidepath	Complete W-SW. Widening E-SW to SP width is feasible.		4	Low
Airport	College	Gen. Electric	4	10300	45	12	0	1.5	0	0.5	3.58	D	Turn lanes	W-SP, E-SW	None			1	
Airport	Gen. Electric	Gill	4	11300	40	11.5	0	1.5	0	0.5	3.63	D	Turn lanes	Both SWs	Widen to sidepath	Widening E-SW to SP width is feasible.		6	Low
Airport	Gill Cornelius	Cornelius	4	11300	40 40	11.5	0	1.5	0	0.5	3.63	D D	Turn lanes Turn lanes	E-SP, W-SW	None Add Sidepath	Add E-SP when developed.		6	Develor
Airport Oakland/ Streid	Eddy	Empire Const. Tr. /White Eagle	2	9600 5700	45	11.5 11.6	0	0	0	0.5	3.55	D	Stone shoulders	Some W-SW	Add Sidepath	Pave 4' shoulders. Add W-SP		3	Develop Medium
Streid	Constit. Tr. /White Eagle	Ireland Grove	2	3950	50	11.6	0	0	0	0.5	3.54	D	Turn lanes	None	Add Sidepath	Pave 4' shoulders. Add W-SP		9	Medium
Towanda Barnes	Raab	Fort Jesse	2	5000	55	11.5	0	0	0	1	3.81	D	McLean Hwy Dept road. Stone shoulders. Turn lanes. Normal's plan calls for sidepath.	None	Add Sidepath	Pave 4-6' shoulders. Add W-SP		6	High
Towanda Barnes	Fort Jesse	Gen. Electric	4	8600	45	12	0	1.5	0	1	3.59	D	McLean Hwy Dept road. CLTL 62+1.5'. Turn lanes	None	Add Sidepath	Add W-SP		8	High
Towanda Barnes	Gen. Electric	Empire	4	10300	45	12	0	1.5	0	1	3.68	D	McLean Hwy Dept road. CLTL 62+1.5'. Turn lanes	None	Add Sidepath	Add W-SP		12	High
Towanda Barnes	Empire	Ireland Grove	4	11900	55	12	0	0	0	1	3.84	D	McLean Hwy Dept road. CLTL 62+1.5'. Stone shoulders. Turn lanes, 45mph by intersections.	None	Add Sidepath	Pave 4-6' shoulders. Add W-SP		12	High
Towanda Barnes	Ireland Grove	south end	4	9100	55	12	0	0	0	1	3.71	D	McLean Hwy Dept road. CLTL 62+1.5'. Stone shoulders. Turn lanes	None	Add Sidepath	Pave 4-6' shoulders. Add W-SP		3	Develop
trail	PJ Irvin Park Const. Tr. W	Miller Park											Includes underpass of Morris		Trail			0	Medium
BNWRD Trail	(Washington)	White Oak Park											Along Water Reclamation District ROW		Trail			0	High
BNWRD Trail	White Oak Park	Const. Tr. N		<u> </u>									Along Water Reclamation District ROW	<u> </u>	Trail			0	High
BNWRD Trail	Const. Tr. N.	Const. Tr. E.											Along Water Reclamation District ROW		Trail			0	Medium

## **Appendix 5 Summary of Major Funding Sources**

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

## **Illinois Transportation Enhancements Program (ITEP)**

- Federal source with 80% federal/state, 20% local cost shares.
- Administered by IDOT. Calls for applications have been irregularly scheduled. In recent years in which grants were offered, applications have been due in spring.
- ITEP is one component of the federal Transportation Alternatives Program (TAP), along with Safe Routes to School, Recreational Trails Program, and suballocated TAP dollars administered by Illinois' five largest urbanized regions.
- Due to 2012 changes in federal law, Illinois receives less TAP money than the previous sum of its three components. However, grants announced in April 2014 totaled \$52.7M

   an estimated three years of IDOT's ITEP funding – with a very high fraction going to bicycle-related projects.
- High funding demand to supply ratio (5:1 in 2013-2014).
- Emphasis on transportation potential and inclusion in a larger, officially-adopted plan.

With more stringent federal engineering standards and review processes, this source is better suited for significant (\$400K to \$1M+) bikeway projects and those requiring substantial engineering work, such as bridges. In part to accommodate the tremendous demand, mediumsized projects are usually funded more than very large projects.

#### Illinois State Bike Grant Program

- State source with 50% state, 50% local cost shares and a \$200K grant (\$400K project) limit.
- Reimbursement grant administered annually (March 1) by IDNR.
- Pre-2007 average of \$2.5M per year, with a \$200K limit (except for land acquisition projects). After a five year hiatus due to the State's financial crisis, the program was reinstated in 2013 and 2014 with \$1M in grants.
- 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/federal, projects. Good for simpler projects and those that can easily be phased. Many agencies prefer these over ITEP/TAP, even though the cost share is higher, due to grant administrative burden and costs.

## **Recreational Trails Program**

- Federal source with 80% federal/state, 20% local cost shares.
- Administered by IDNR with IDOT. Annual March 1 deadline.
- \$1.5M per year. About half is dedicated for non-motorized, off-road trails emphasizing underserved user types. \$200K limit (except for land acquisition projects).
- Much less competitive, with application demand usually not much more than grant supply.

This has been an underutilized source. Because of the decline of the Illinois State Bike Path Grant program, more standard multi-use (bike) trails are getting funded recently. A good target range is \$100-200K.

## Illinois Safe Routes to School program

- Federal source with 80% federal/state, 20% local cost shares; reimbursable grants. SRTS is a component of Transportation Alternatives Program funding.
- Administered by IDOT.
- An application cycle for \$6M, or two years of funding, was due February 2014. However, grants have not yet been announced, as of October 2014. \$5M will go toward for infrastructure projects (\$200K limit each) within 2 miles of schools serving any K-8 grades. \$1M will go for education and encouragement programs for the same grades, with an application maximum of \$30K.
- Demand to supply ratio was 2:1 in 2008 and 2011. Non-infrastructure grants are much less competitive.
- The next cycle depends on continued federal funding past September 2014.

Sidewalk/sidepath, trail link, and road crossing projects fare well under the SRTS program.

#### **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.

# THE BUILDING BLOCKS OF A BICYCLE FRIENDLY COMMUNITY

## Appendix 6



unique strengths to make biking better. But, over the past decade, we've pored through nearly 600 applications and identified the key benchmarks that define the BFC award levels. Here's a glimpse at the average performance of the BFCs in important categories, like ridership, safety and education.

