CITY OF MATTOON
BICYCLE PLAN

DRAFT – City Council Version
January 28, 2019

MATTOON
MATTOON, ILLINOIS: *Working Together to Build the Future*

City of Mattoon
208 North 19th Street
Mattoon, Illinois

Funded by: The Lumpkin Family Foundation
Prepared By: Ride Illinois

The LUMPKIN FAMILY Foundation

ride ILLINOIS

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1 Introduction/Executive Summary

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

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

Besides those who bicycle by choice, there are many Mattoon residents – including children, many teenagers and other students, and some low-income workers – who depend on cycling as a transportation necessity. Whether for choice or necessity, transportation by bicycle is made safer and more inviting when a city designates a network of connected on-road and off-road bikeway segments throughout town.

In the late 1980's Mattoon began looking at a "rails to trails" project on the former railroad alignment that was initially built and operated by the Terre Haute & Alton Railroad Company circa 1856. Ultimately Mattoon and Charleston made a joint application for federal grant funds under the IDNR OSLAD program. The $100,000 grant was used to construct a crushed limestone surface from Mattoon to Charleston with signage, and trail-side amenities. The two cities have continued to make improvements over the years, and the Lincoln Prairie Grass Trail is now a 12 mile long, 10 foot wide pedestrian/bicycle trail beginning at 10th Street in Mattoon, and extending to CR1800E approximately 1 mile east of Charleston. The urban portions of the trail are paved with hot-mix-asphalt and the rural portions have an aggregate surface.

In 2019 the Cities of Mattoon and Charleston will expand the Lincoln Prairie Grass Trail and pave the rural portions of the trail with hot-mix-asphalt. This will be done with assistance from the IDOT Illinois Transportation Enhancement Program, and Mattoon will be the lead agency. Various local agencies and business as well as private individuals continue to support bicycling in the Mattoon area for transportation and recreation.

To build off these efforts, The Lumpkin Family Foundation funded Ride Illinois' work with the City to plan for bikeway networks and programs facilitating travel on two wheels throughout Mattoon.

Bicycle Plan outline

Appendix 1 of this plan explains the types of on-road and off-road bicycle facilities needed for a bikeway network in Mattoon. The primary target audience for the additions is the "casual adult"

[1] 2001 National Household Travel Survey

bicyclist, although the needs of advanced cyclists and children are both addressed. A thorough analysis is used to determine which option – if any – is appropriate for each of the "routes to study" suggested by the public at an April 11, 2018 public brainstorming workshop and otherwise. As described in Chapter 2, criteria include need, cost, technical factors, and strategies to gain public support while avoiding common bike plan pitfalls.

Chapter 3 details the specific recommendations for the bikeway network. These include a few off-road trail improvements and an array of on-street bikeways:

- An off-road trail from 21st or 24th to west of town on an old railroad right-of-way, a rail-with-trail on the southeast part of town, trail spurs from the Lincoln Prairie Grass Trail, and trail crossing improvements
- Adding sidewalk (or a sidepath trail) to or at commercial locations on the east side
- Signed bike routes on much of 32nd, Piatt, Marion, and Prairie; and parts of Richmond, Oklahoma, Western, 19th
- Bike lanes on short segments of 14th and Richmond
- Buffered bike lanes on parts of Richmond, 26th, 21st, Broadway, and DeWitt
- Shared lane markings on parts of Broadway, 17th, 14th, and Logan; also at some intersections
- Combined bike/parking lanes on Rudy, most of 9th, and parts of Western, Broadway, 32nd, 27th, 19th, and 14th
- Striped "urban shoulders" on most of Logan and 6th, and parts of 43rd, 33rd, Marshall, and Richmond. Other paved shoulders on most of Country Club and a part of Old State
- Adding "State Law – 3 Feet Min To Pass Bicycles" signs on Lafayette, 17th, Odd Fellows, DeWitt, and several popular routes exiting Mattoon
- Remedying demand-actuated stoplights not triggered by on-road bicycles
- Posting wayfinding signage for the network

The chapter includes maps and narrative descriptions for easier comprehension of the recommendations.

Chapter 4 suggests specific road design standards on bicycle and pedestrian accommodation, as part of a "complete streets" ordinance recommendation for use when roads are reconstructed or new roads built. References are given for bike-friendly development ordinances.

Chapter 5 identifies easy-to-use (and often free) resources and strategies to leverage 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 implementation strategies, which may include opportunistic and stand-alone projects in the City's Capital Improvement Program. Sample costs of various bikeway types are listed, along with funding and grant suggestions. Establishment of a Bicycle/ Pedestrian Advisory Commission and designation of a staff bike/ped coordinator are described as key steps to implementation. The plan calls for an annual implementation report to track progress. Finally, Mattoon's path to national Bicycle Friendly Community designation is discussed.

The other appendices cover the April 11, 2018 public brainstorming workshop input, the route segment data collection and analysis spreadsheet with details for the City's implementing staff, external grant source strategies and tips, and a graphical summary of national Bicycle Friendly Community designation.

Ride Illinois would like to thank The Lumpkin Family Foundation for its generous support.

2 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 in town. Developing a plan for a bikeways network establishes priorities for improvements, such as striping for bike lanes, adding shared lane markings, completing sidepaths and trails, installing wayfinding signs and improving crossings.

Mattoon's bikeways network recommendations were developed with a variety of inputs:

- **Public Involvement:** On April 11, 2018, a "Public Brainstorming Workshop" was attended by roughly 50 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.

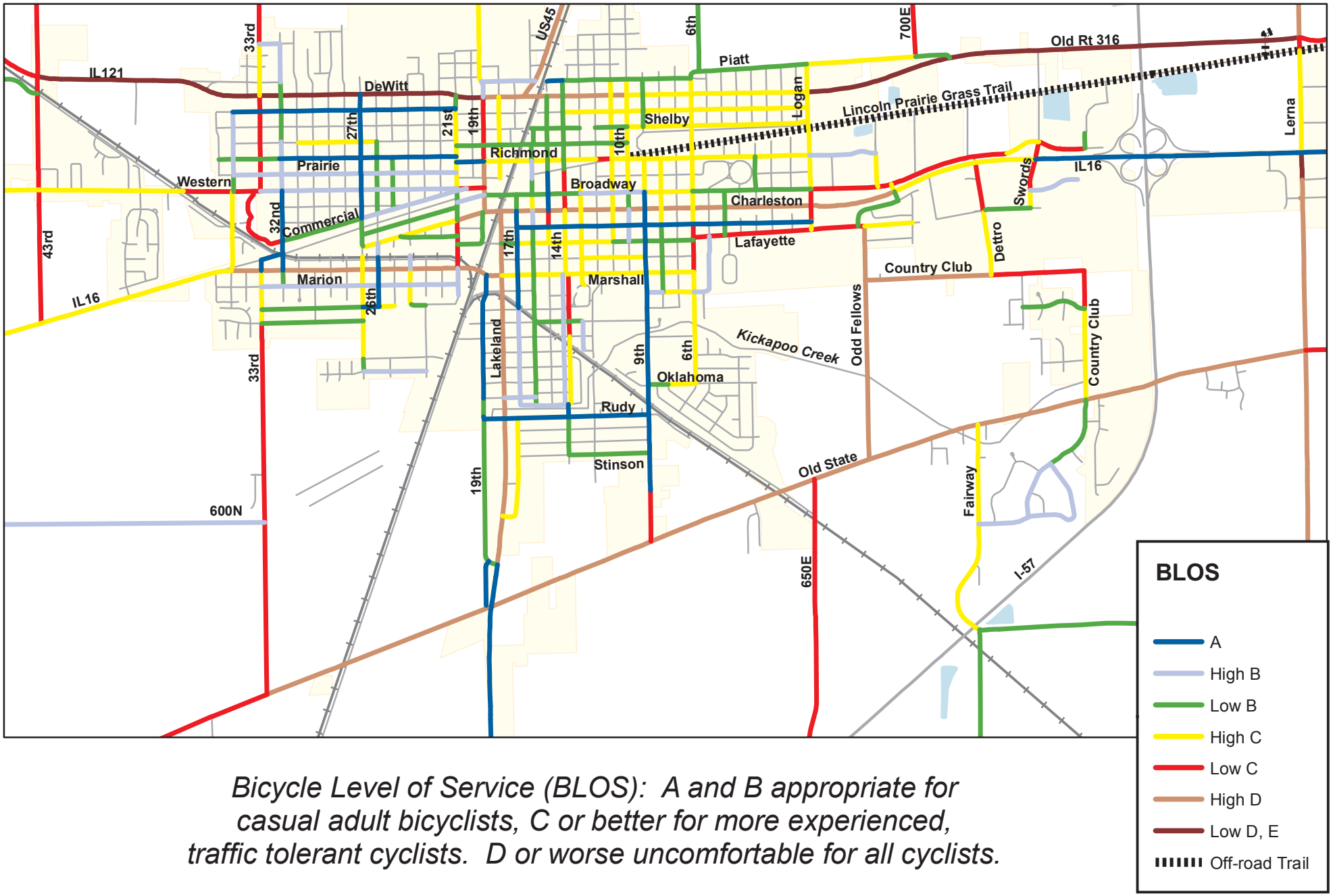
- **Consultation with Staff and Steering Committee**: In addition to the workshop, two meetings were held between the consultant and the Steering Committee of the Mattoon Bicycle Plan, consisting of City staff and other partners. The committee guided the project approach and the principles used in making recommendations, and extensively discussed the preliminary recommendations of the plan.

- **Bicycle Level of Service Analysis:** The Bicycle Level Of Service[2] (BLOS) measure quantifies the "bike-friendliness" of a roadway, helping to remove a wide range of subjectivity on this issue. The measure indicates adult bicyclist comfort level for specific roadway geometries and traffic conditions. Roadways with a better (lower) score are more attractive – and usually safer – for cyclists. BLOS has been used in IDOT's bicycle maps for years, and it has been added to the Highway Capacity Manual. More information and an online calculator is at rideillinois.org/blos/blosform.htm. BLOS is used in the Mattoon Bicycle Plan to measure existing and future conditions, to set on-road comfort goals for the bikeway network, and to justify recommendations. See Figure 2.1 for the BLOS of all "routes to study" examined in this plan.

- **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.

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

Figure 2.1. Current Conditions - All Studied Routes Trails and On-Road Comfort Level



Bicycle Level of Service (BLOS): A and B appropriate for casual adult bicyclists, C or better for more experienced, traffic tolerant cyclists. D or worse uncomfortable for all cyclists.

Guiding Principles and Selecting Bikeway Type

The following general guiding principles were used for the plan's recommended improvements to Mattoon'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 cyclists do not encounter stop signs at every street.
- Look for spot improvements, short links, and other small projects that make an impact.
- 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-ft or 10-ft 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 B or better for designation in the network – with high-C marginally acceptable if there are no other options. BLOS "B" is an appropriate goal for accommodating the casual adult bicyclist. Use 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 traditional bike lanes, buffered bike lanes, or combined bike/parking lanes. Where such roads have insufficient width for striping, shared lane markings or bike network wayfinding signs alone 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.

Many of the suggested "routes to study" by the public did not result in a recommendation, due to lack of feasibility, redundancy with a nearby network segment, and/or other factors. However, for a subset of these routes, the spreadsheet in Appendix 3 provides suggestions on what bikeway type(s) would be appropriate if those segments were added to the network.

In addition, both Chapter 3 and the spreadsheet sometimes list fallbacks or "backup options" for routes in which it is decided not to implement the plan's primary recommendation. In other cases, lower priority enhancements to the primary recommendation are suggested, when desired.

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, unless there is adequate funding and negligible impacts to front yards.
- Work with local businesses and media to help promote the plan and highlight progress.

3 Bikeway Network Recommendations

Introduction

The Mattoon Bicycle Plan provides technical recommendations for a priority network of designated bicycle routes, meant to facilitate bike travel to all sections of the City and beyond. See Chapter 2 for more information on how routes and projects were selected, and Appendix 1 for suggested Bike Network Wayfinding Signage standards to be used for each designated segment of the network.

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. Chapter 4's recommended roadway design standards could be used when widening is possible.

Understanding the Maps and Descriptions

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 3 for the entire dataset by road segment.

The narratives in the 27 pages following the maps detail recommended projects by road name, with east-west roads listed first and ordered from the north to south side of town. Each roadway (or trail) segment listing provides key factors of the current conditions, detailed recommendation(s) and backups, and suggested priorities.

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

- **Figure 3.1) Recommended Bike Improvements - All Priorities:** Recommended on- and off-road bike facilities, including low priority projects resulting in only a minor improvement or a somewhat denser network. Includes existing bikeways.

- **Figure 3.2) Recommended Bike Improvements – High and Medium Priorities:** A subset of the map above, with low priority projects removed. Includes existing bikeways.

- **Figure 3.3) Priority of Recommended Bike Improvements:** Instead of showing the types of recommended improvements, this map shows each recommendation's priority.

- **Figure 3.4) Current Conditions – Proposed Network Routes:** Meant as a comparison with the built-out conditions of Figure 3.5. Figure 2.1 was filtered to only show those roads in the proposed network.

- **Figure 3.5) Built-out Conditions – Proposed Bike Network, 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. Again, only those on-road segments "in the network" are shown.

Consider 6th Street as an example in using the maps, the recommendation details in this chapter, and the spreadsheet in Appendix 3. The current conditions maps (Figures 2.1 and 3.4) shows 6th Street's Bicycle Level of Service comfort level as a high-C, except for low-C between Wabash and Marshall. A BLOS of C is considered acceptable for more experienced cyclists, as is B for casual adult cyclists – the minimum target of this plan.

From the spreadsheet's listing of each segment's widths, it may be seen that 6th Street has wide lanes south of DeWitt but narrower lanes to the north. The recommended bike improvements map (Figure 3.1) calls for the striping of paved shoulders between DeWitt and Oklahoma, with only Bike Route wayfinding signage from DeWitt to Piatt. As long as consistent wayfinding signage is used, it is acceptable to vary a road's bikeway treatments according to the contexts of its segments. The implementation details for each are described in the spreadsheet and in a more user-friendly narrative format later in this chapter.

The paved shoulders are high priority (Figure 3.3), due to public demand and network significance. The north segment's wayfinding signage is low priority – so it does not show up on the high and medium priority improvements map (Figure 3.2).

The built-out conditions map (Figure 3.5) shows that paved shoulder striping would improve the high-C segments to high-B and the low-C segment to low-B. Adding signage only, north of DeWitt, does not affect the BLOS comfort level.

Figure 3.1 - Recommended Bike Improvements
All Priorities (existing routes shown)

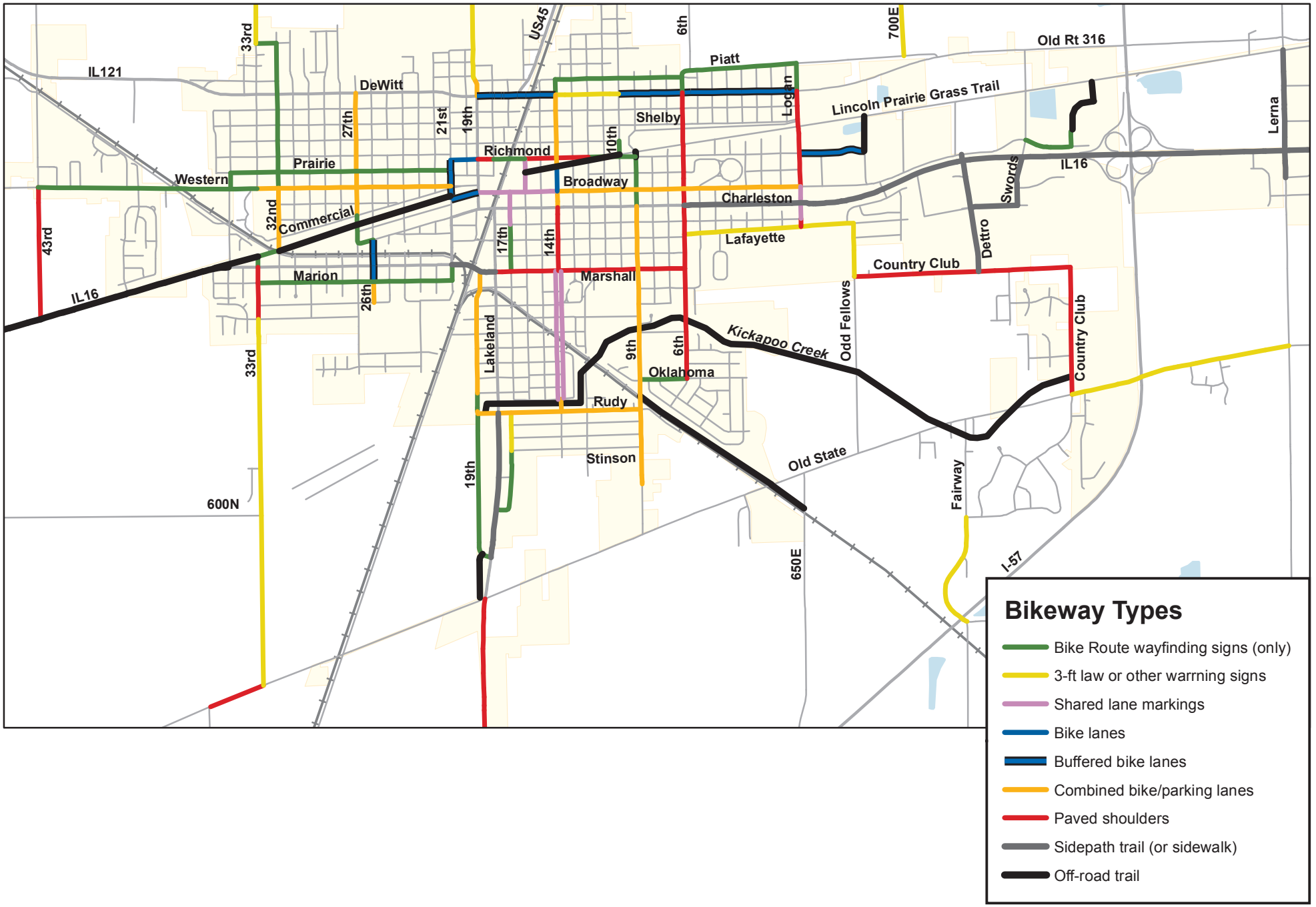


Figure 3.2 - Recommended Bike Improvements
High and Medium Priorities (existing routes shown)

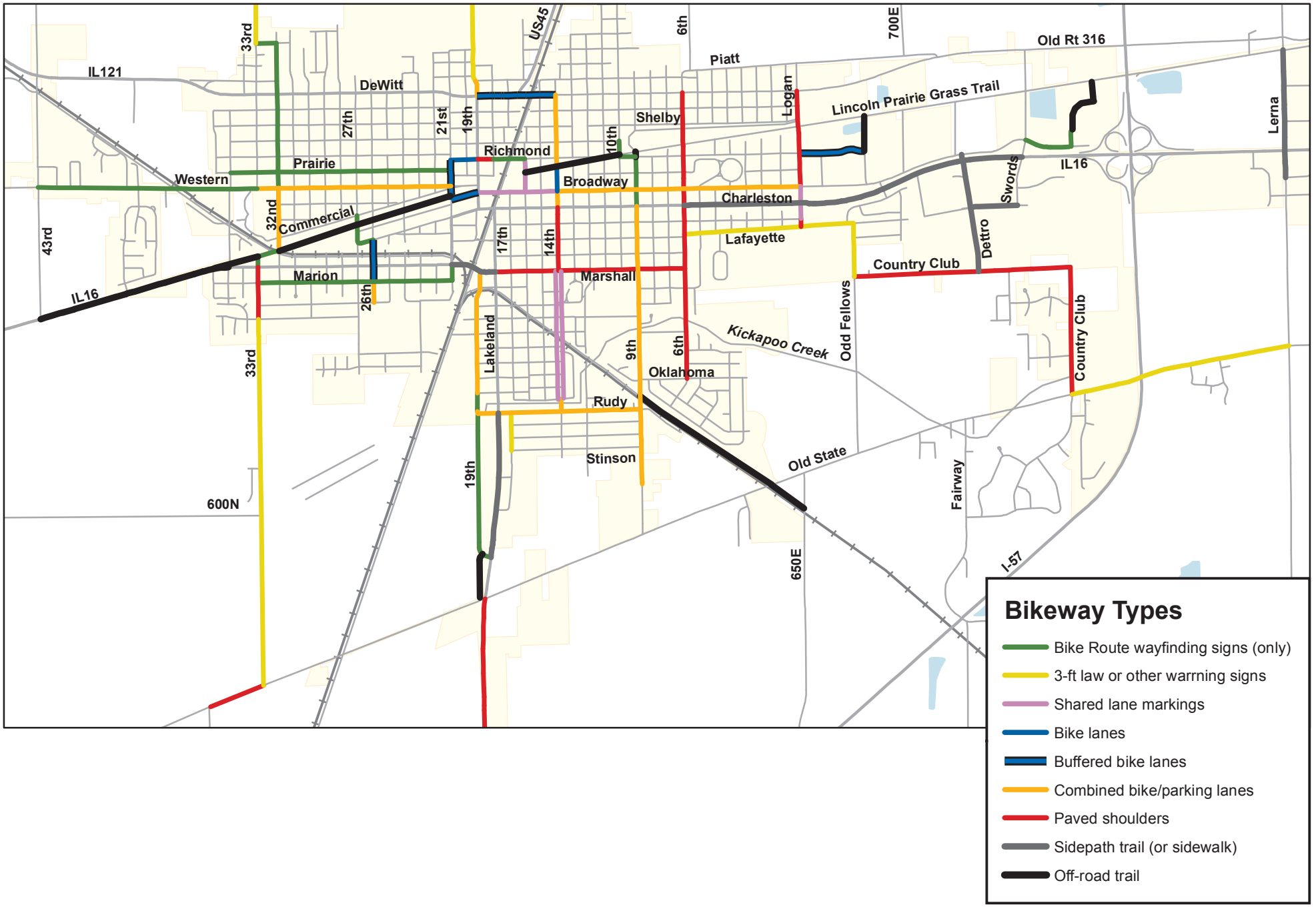


Figure 3.3 - Priority of Recommended Bike Improvements

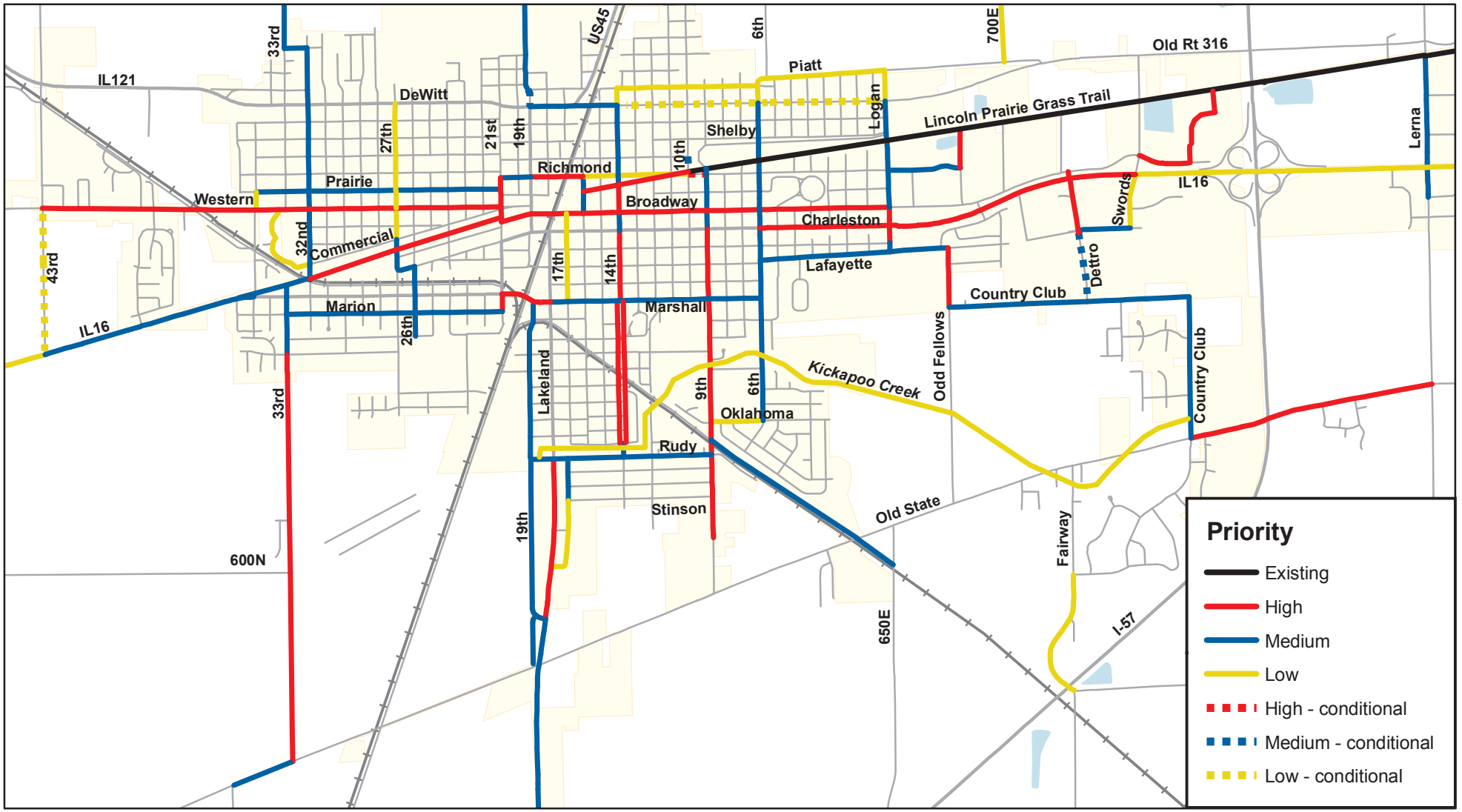


Figure 3.4 - Current Conditions - Proposed Network Routes Trails and On-Road Comfort Level

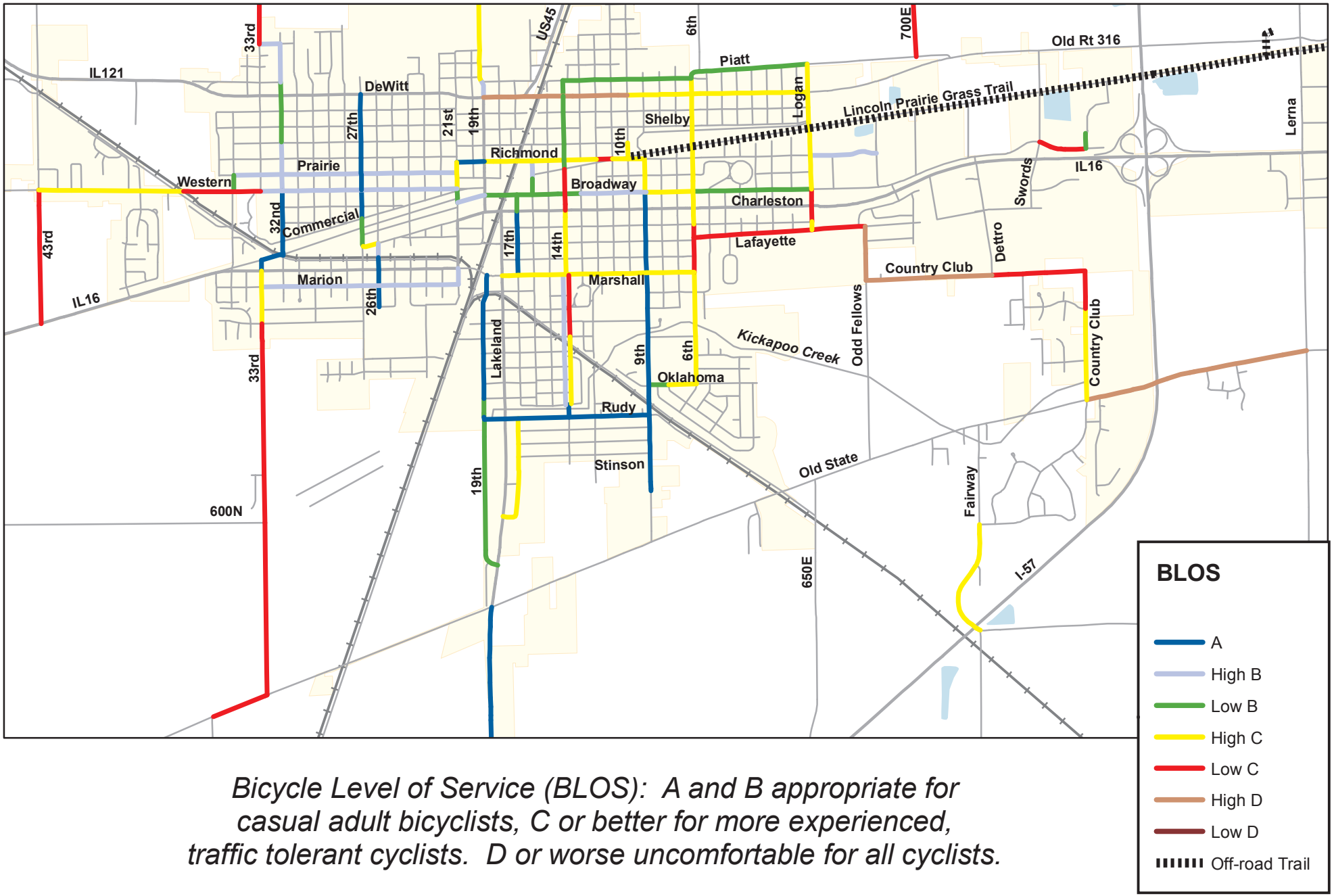


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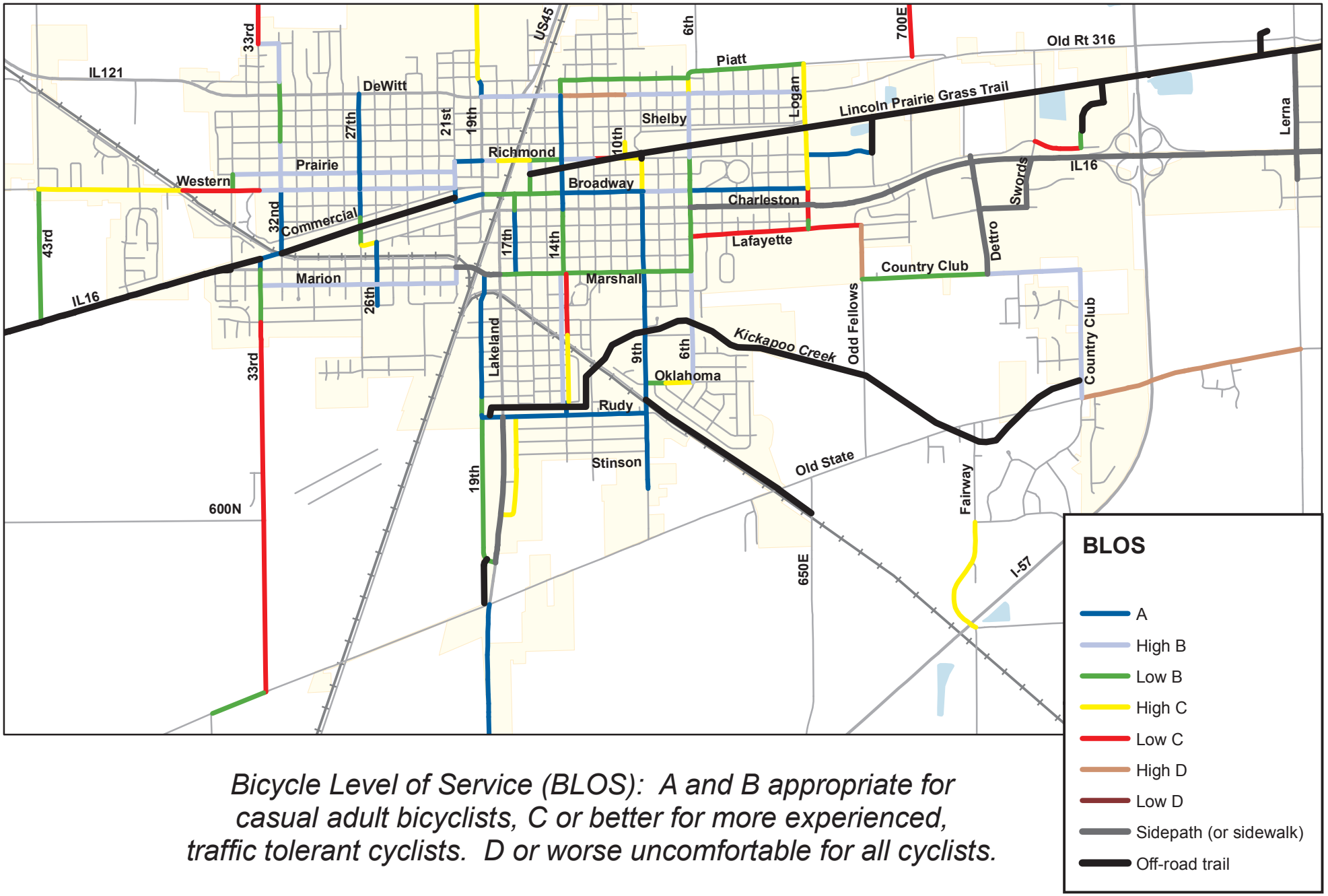
Figure 3.5 - Built-out Conditions - Proposed Bike Network Trails and On-Road Comfort Level



Bicycle Level of Service (BLOS): A and B appropriate for casual adult bicyclists, C or better for more experienced, traffic tolerant cyclists. D or worse uncomfortable for all cyclists.

East-West Road Corridors

West-to-east oriented road corridors with recommendations are described below, in north-to-south order. *[ADT = Average Daily Traffic]*

1000N (County Highway 18), Dole to Loxa

- *55mph truck route; 1700 Average Daily Traffic (ADT) west, increases to 3200 east.*
- *Paved shoulders: 1-ft west of 400E; 3.5-ft clear zone outside of 1.5-ft offset, 8-in rumble strips from 400E to US45 access road; 3-ft paved shoulders east of US45.*
- *County jurisdiction.*

Recommendation – low priority: Existing gravel shoulders may make it easier to widen the paved shoulders to 4-ft, where currently less. If rumble strips are needed west of 400E or east of US45, use only an offset of 8-in, include longitudinal gaps per IDOT's standard, and design at least 3-ft of clear zone outside of the rumbles.

Piatt, 14th to Logan

- *ADT 650 and 11.5-ft lanes east of 6th, estimated ADT lower than 500 and 9.5-ft lanes west of 6th.*
- *Yield signs on Piatt at most intersections with north-south streets.*

Recommendation – low priority: Add Bike Route wayfinding signs. If Dewitt is added to the network, Piatt serves as a low-traffic alternative. If not, Piatt is the only east-west network segment in this far northern part of town. As much as possible, move the yield signs to the north-south roads. Bike Route wayfinding signage could be extended east to 700E.

Dewitt, 19th to 14th

- *IDOT jurisdiction, 19th to US45 North. City jurisdiction east of that.*
- *ADT 8000 west, decreases to 7800 east. 35mph. No parking allowed.*
- *Four 12-ft lanes + 2-ft gutters.*

Recommendation – medium priority: Dewitt is the only option across the CN railroad tracks on the north end of town. Its traffic levels and overall width make it a good candidate for a 4-to-3 road diet (resulting in one 12-ft travel lane per direction, 12-ft center left-turn lane) with enough space remaining for buffered bike lanes (4-ft bike lanes, 2-ft travel-side buffers). An engineering study would be needed to consider road diet feasibility, with the FHWA's Road Diet Information Guide as a resource.

While sidewalks should not be designated as bikeways, Dewitt's sidewalks could suffice for less traffic-tolerant and child cyclists who would not want to use the proposed buffered bike lanes.

Dewitt, 14th to Logan

- *IDOT jurisdiction, 21st to 19th.*
- *ADT 7800 west, decreases to 5600 east. 35mph. No parking allowed.*
- *14.7-ft lanes (with gutters), 14th to 10th. 18.7-ft lanes (with gutters), 10th to Logan.*

(Conditional) recommendation – low priority: If the road diet above is implemented, stripe buffered bike lanes (4-ft bike lanes, 2-ft travel-side buffers) between 10th and Logan.

Between 14th and 10th, striping is not recommended due to insufficient width and the location of the gutter seams under the existing pavement. Other options are not favorable, either. Parkway trees deter any pavement widening. Shared Lane Markings would have to be centered 4-ft out, not ideal here. The remaining feasible recommendation is to add Bike Route wayfinding signage on this segment with "State Law – 3 Feet Min To Pass Bicycles" signs at its ends – but the comfort level is poor (Bicycle Level of Service high-D).

Again, there are sidewalks between 14th and Logan.

Richmond, 21st to 19th

- *1700 ADT. Jogs at 21st. Stoplight at 19th.*
- *Eastbound: 16-ft lane with (normally) lightly-occupied 8-ft parallel parking +1-ft gutter.*
- *Westbound: 15-ft lane with 9-ft diagonal parking +1-ft gutter – cars extend into lane.*

Recommendation #1 – medium priority: Eastbound, stripe a 5-ft bike lane between the existing parking lane and an 11-ft travel lane. Westbound, place Shared Lane Markings in the center of the travel lane. However, if parking demand is such that the diagonal parking can be converted to parallel parking, then use the same configuration as eastbound.

Recommendation #2 – medium priority: If the traffic signal at 19th is demand-actuated, test on-road bicycle triggering of green lights at one of the right-side corners of the detector, in each direction. If greens can be triggered there but not at most other points by the stopline, add the Bicycle Detector Pavement Marking and accompanying R10-22 sign there.

Richmond, 19th to 12th

- *Ranges from 2350 to 2800 ADT. No parking allowed. Stoplight at 19th.*
- *Between 18th and 16th, which includes a bridge over the CN railroad, 13-ft concrete lanes including paved gutters. Otherwise, 14.6-ft asphalt lanes (with any gutters) except wider with westbound right-turn lane just before 19th.*

Recommendation #1 – high priority west of 16th, low priority east: For 19th-18th and 16th-12th, stripe "paved shoulders" (narrower than 5-ft bike lanes), choosing a width between 4.0 and 4.6-ft. Use a Shared Lane Marking in the right part of the westbound straight-ahead lane at 19th.

Recommendation #2 – high priority: Between 18th-16th, where there is insufficient width for striping, add Bike Route wayfinding signage. Also, add W11-1 Bicycle Warning signs,

eastbound just east of 18th and westbound just west of 16th. A somewhat lower priority would be to supplement these with Shared Lane Markings centered 4-ft from the curbs.

Recommendation #3 – medium priority: See the above recommendation about triggering green lights at 19th.

Richmond, 12th to 9th

- *ADT 2350 west, decreases to 2000 east. 11.2-ft uncurbed lanes.*
- *Planned off-road trail in close proximity south.*

Recommendation #1 – high priority: Add Bike Route wayfinding signage from 12th to 10th.

(Conditional) recommendation #2 – high priority: If the recommended 70-ft off-road trail link from 9th and Richmond to the Lincoln Prairie Trail is not added, continue Bike Route wayfinding signage from 10th to 9th. If it is added, signing this block would be low priority.

Richmond, Logan to Holiday

- *ADT 2000. 18.5-ft lanes + 1-ft gutters. No parking allowed.*

Recommendation – medium priority: Stripe buffered bike lanes (4-ft bike lanes, 2-ft travel-side buffers). This segment of road is slated for resurfacing relatively soon.

Prairie, 34th to 21st

- *ADT 850 east, less west. 17.5-ft lanes including paved gutters. Up to 60% parking occupancy.*
- *Most cross-streets have yield signs; Prairie stops at some others – especially west.*

Recommendation – medium priority: Prairie is a lower-traffic alternative to Western. Add Bike Route wayfinding signage. For cross-streets with yields – or no traffic control in any direction – add stop signs to the cross-streets.

Western, 43rd to 33rd

- *ADT 1900 west, 2900 east. 11.5-ft uncurbed lanes.*
- *No parking allowed, except low-occupancy, westbound 10-ft striped parking from just west of 34th to 33rd.*
- *Skewed railroad crossing. School zone in west part of segment.*

Recommendation #1 – high priority: Add Bike Route wayfinding signage with a westbound "State Law – 3 Feet Min To Pass Bicycles" sign where the lane narrows west of 34th.

Ideally, in the future, widen the pavement between 2.5 and 5-ft on each side to add 4 or 5-ft bike lanes or paved shoulders. Travel lanes would be between 10 and 11.5-ft. Even wider striped shoulders/parking areas could be an alternative if there is some demand for parking.

Recommendation #2 – high priority: Add some pavement to the outside of the travel lanes, immediately before the railroad crossing, in each direction. By doing so, cyclists could cross the tracks perpendicularly – reducing the current slip-and-fall hazard – without having to move into the left part of their lane.

Western, 33rd to 32nd

- *ADT 4150, 11.8-ft lanes. With paved gutters, 6.3-ft westbound and 6.6-ft eastbound striped parking lanes, lightly occupied – estimated 5%.*

(Conditional) recommendation #1 – high priority: If the one-side parking removal of Recommendation #1 for Western east of 32nd is not accepted, and parking is retained on both sides, then add an eastbound W11-1 Bicycle Warning sign. This sign seeks to address the higher frequency of bikes going around parked cars when traffic is approaching from behind. The higher frequency of this is due to both a higher traffic level and parking occupancy – especially east of 32nd – compared to typical Combined Bike/Parking Lane locations.

Recommendation #2 – low priority: To reduce parked cars' encroachment into the travel lanes, narrow the lanes and widen parking to at least 7-ft, when resurfaced next.

Western, 32nd to 21st

- *ADT 4450, 12-ft lanes, 8-ft (with paved gutters) striped parking lanes, moderately occupied west end (30%+) and lower east.*

Recommendation – high priority: Especially in the west part, bikes will sometimes ride in the travel lane due to the moderate parking occupancy. Study the possible removal of parking on one side of the road and narrowing of travel lanes to 11-ft, to allow for 5-ft bike lanes on both sides.

Backup – high priority: If not, then as a lesser backup, keep the striped parking areas – which are effective as "Combined Bike/Parking Lanes" in the eastern part of this segment, where parking occupancy is minimal. Just west of 21st, add a westbound W11-1 Bicycle Warning sign, for the reason stated in Recommendation #1 of Western, 33rd-32nd.

For any portions of this segment having consistently high parking occupancy, use Shared Lane Marking(s) centered 11-ft from the curbs.

Lytle Park, internal road

Recommendation – low priority: Cut spaces for bicyclists in the park's speed bumps.

Broadway, 21st to 19th

- *ADT 1200. 20mph. Stoplight, eastbound right-turn lane at 19th.*
- *Lightly-used diagonal parking and off-street parking lots.*
- *60-ft total, 34-ft between diagonal parking but could be <28-ft so cars don't stick out.*

Recommendation #1 – high priority: If a parking study confirms the feasibility, convert from diagonal to parallel parking of 9-ft on each side. Add buffered bike lanes with 5-ft parking and 2-ft travel lane side buffer, leaving 14-ft travel lanes.

Backup – high priority: If diagonal parking is retained, then as a much lesser backup, add Shared Lane Markings centered in the travel lanes.

Recommendation #2 – medium priority: Add Shared Lane Markings in the right part of the straight-ahead eastbound lane at 19th.

Recommendation #3 – medium priority: If the traffic signal at 19th is demand-actuated, test on-road bicycle triggering of green lights at one of the right-side corners of the detector, in each direction. If greens can be triggered there but not at most other points by the stopline, add the Bicycle Detector Pavement Marking and accompanying R10-22 sign there.

Broadway, 19th to 14th

- *ADT 3150 west, 3250 east. 20mph.*
- *Three lanes with center left-turn lane and diagonal parking that is used where there is no off-street parking – i.e., most of the segment. Right-turn lanes westbound at 19th and eastbound at 14th.*
- *Distance between diagonal parking: 49-ft 19th-17th, 46-ft 17th-14th; in each case could be less since parked cars stick out.*
- *Stoplights at 19th, 17th, 16th, 15th, 14th.*

Recommendation #1 – high priority: Add Shared Lane Markings centered in the travel lanes, except in the right part of the straight-ahead westbound lane at 19th and the left part of the eastbound right-turn lane at 14th.

Recommendation #2 – high priority: For the 200-ft bridge segment, either stripe 5-ft bike lanes or add Shared Lane Markings centered 4-ft from the curb.

Broadway, 14th to Logan

- *ADT ranges from 3350 to 2900. 20mph west of 12th, 30mph east. Stoplights at 14th and 13th.*
- *20.2-ft lanes (including gutters) from 13th to Logan. 14th to 13th is 56-ft wide curb-to-curb with westbound right and left turn lanes at 14th.*
- *Perpendicular parking bays periodically between 9th and 2nd, separated 5-ft from travel lanes. Parallel parking 30-50% occupancy between 8th and 6th. Low occupancy otherwise*

between 13th and 2nd, and no parking occupancy 14th to 13th (plentiful off-road lots) and 2nd to Logan (only on parade days).

Recommendation #1 – high priority: Stripe Combined Bike/Parking Lanes, 8-ft from the curbs. Omit striping at the perpendicular parking bays, adding Shared Lane Markings centered in the travel lanes there. Remove the westbound right-turn lane at 14th.

Recommendation #2 – high priority: To call attention to bicyclists moving into the travel lane to avoid parallel-parked cars, add W11-1 Bicycle Warning signs either at the ends (eastbound past 14th and westbound past Logan) or before the segment of heavier parking occupancy.

Broadway, Logan to east end

Recommendation – high priority: If the Lincoln Prairie Trail access spur to and along McFall is built, then add Bike Route wayfinding signage from Swords to McFall. Shared Lane Markings could also be added, if desired, centered 4-ft from the curb and edge.

Future considerations: While not in the primary recommendations, the following could be done if it is desired to add east Broadway to the bikeway network. To provide an on-road designated bikeway complement to Broadway's sidewalk:

- Between Logan and Holiday, widen the 26-ft uncurbed pavement by four feet, then re-stripe to 11-ft travel lanes and 4-ft bike lanes.
- Between Holiday and the east end of the mall, reconfigure the existing width for 11-ft travel lanes and 5-ft (with gutter) bike lanes.
- Between the east end of the mall and Anamet, widen the 23-ft street (including gutter) by 5 to 9-ft for 11-ft travel lanes and 5-ft bike lanes – or, minimally, 10-ft lanes and/or 4-ft "paved shoulders".
- Between Anamet and east of Swords, reconfigure the existing width for either 10-ft travel lanes and 5-ft bike lanes, or 11-ft travel lanes and 4-ft "paved shoulders".
- Between east of Swords and the east end, either reconfigure the existing 28-ft width for 10-ft lanes and 4-ft "paved shoulders", or widen by up to four feet to implement 11-ft travel lanes and 5-ft bike lanes.

IL16/Charleston, 6th to Loxa

- *IDOT jurisdiction.*
- *Four lanes, divided, east of Crestview. ADT ranges from 14700 to 16100. Speed limit 40mph west of Crestview, 45mph Crestview-Lerna, 55mph east of Lerna.*
- *Paved shoulders 3.7-ft Crestview-Swords, 10-ft east of Swords*
- *No sidewalks or sidepath trails.*

Recommendation #1 – very high to high priority: Between 6th and Swords, add a sidewalk, or 10-ft off-road sidepath, on at least one side of the road. The south side would be better, since Broadway on the north already has a sidewalk and more commercial development is on the

south. If a sidewalk is added, do not officially designate it as part of the bikeway network. Very high priority is Crestview to Dettro, with Dettro to Swords as medium priority.

Recommendation #2 – low priority: Between Swords and Loxa, the wide paved shoulders serve cyclists who are more traffic-tolerant. Regular sweeping of shoulder debris is needed. Also, an off-road sidepath (or sidewalk) is the longer-term ideal. The priority of adding an off-road facility rises if bikeway network connections are not added from the Lincoln-Prairie Trail to the hospital and the destinations near Lerna and IL16.

Lafayette, 6th to Odd Fellows

- *Uncurbed. ADT 2450 and 10-ft lanes 6th-Logan; 3500 and 11.5-ft Logan-Odd Fellows.*
- *Parkway trees decrease feasibility of any possible widening.*

Recommendation – high priority: With no good on-road options apparent, add an eastbound "State Law – 3 Feet Min To Pass Bicycles" sign past 6th – and raise the priority of a proposed sidepath (or sidewalk) on the south side of Charleston Avenue. If Lafayette's (lightly-used) sidewalk is maintained well, with vegetation trimming, it can serve less traffic-tolerant cyclists. It should only be designated as part of the bikeway network if it can be widened to sidepath width.

Remington, Dettro to Swords

- *Low ADT now (undeveloped) and 14.4-ft concrete lanes.*
- *No on-road or off-road accommodations.*

Recommendation – low priority: While undeveloped now, this segment is an example of why a Complete Streets policy with road design standards requiring on-road and/or off-road accommodations is recommended, particularly as commercial areas grow near I-57. Either stripe 4-ft "paved shoulders" leaving 10.4-ft travel lanes, or add a continuous sidewalk of sidepath on at least one side of the road. Raises to medium or high priority when developed.

A sidewalk on the other side of the road would be lower priority.

Marshall, 21st to Lakeland

- *ADT 6500. 13-ft concrete lanes, with center left-turn lane and 40-ft total width.*
- *Sidewalk on north side.*

Recommendation – high priority: Add a 10-ft (or 8-ft) sidepath on the south side of the road. By focusing non-motorized traffic to the south side of Marshall, it would eliminate the need to cross Marshall twice when traveling westbound between proposed bikeways on 19th and 21st. The roadway corridor has an estimated 22-ft of off-road right-of-away available on the south side, away from the railroad. The Illinois Central Railroad and (possibly) Interstate Commerce Commission approval would be needed.

Backup options – high priority: If the south sidepath is not possible, there are two on-road backup options. The first would be to narrow the center left-turn lane to 10-ft and the travel lanes to 10-ft or 11-ft. This would allow enough width for either 5-ft bike lanes or 4-ft "paved shoulders", respectively.

Another possibility is to remove the lightly-used center left-turn lane completely, except for the left-turn lane approaching Lakeland. This allows for 13-ft travel lanes and buffered bike lanes (5-ft bike lanes, 2-ft travel-side buffers), with eastbound Shared Lane Markings in the center of the straight-ahead lane approaching Lakeland.

Marshall, Lakeland to 6th

- *ADT 4950 west, 3150 east. 14.8 to 15-ft lanes (including gutters), except for a transition to 40-ft total and two lanes plus westbound left-turn lane approaching Lakeland.*
- *No parking allowed.*

Recommendation #1 – medium priority: Stripe "paved shoulders". A width of 4-ft allows for 10.8-ft travel lanes, but wider up to 4.8-ft (10-ft travel lanes) could be chosen.

Recommendation #2 – medium priority: To transition to the south-side sidepath proposed west of Lakeland, one Shared Lane Marking could be added to the right part of the westbound left turn lane, and another centered 4-ft from the curb eastbound just past Lakeland.

Country Club, Odd Fellows to Old State

- *ADT 3100 Odd Fellows-Dettro, 1600 to 1300 Dettro-Old State. 11.3-ft lanes.*
- *Between Country and Hallmark, south/west side and some north side have 12-ft lanes and 29.5-ft total width, with a combination of very narrow shoulder and rolled gutter – with bicycle-unfriendly longitudinal slot drain grates and seam location.*
- *Sloped grading reduces the feasibility of widening the shoulder width.*
- *Along with Lafayette and Odd Fellows, this is a popular bicycle route to the southeast of town.*
- *No sidewalk or sidepath.*

Recommendation #1 – medium priority: Add either an off-road (sidewalk or sidepath) or on-road (4-ft paved shoulders, 11-ft travel lanes) accommodation in the future, possibly as part of development. Where there are rolled gutters now, narrow the travel lanes to 11-ft, pave over the gutter/shoulder seams, and switch to bike-friendly drain grates. These and the recommendations below rise to high priority if the proposed rail-with-trail to the southeast is not constructed.

Recommendation #2 – medium priority: As long as 4-ft paved shoulders are not in place, add a northbound "State Law – 3 Feet Min To Pass Bicycles" sign past Old State. For east/southbound, rely on the southbound 3-Ft Law sign on Odd Fellows.

Marion, 33rd to 21st

- *Uncurbed. ADT 250 to 275. 10.3-ft lanes. Parking off-road in gravel bays.*
- *Stop signs at almost every cross street.*

Recommendation #1 – medium priority: Marion is an alternative to Marshall, a state route with no good options. Add Bike Route wayfinding signage.

Adding Marion west of 27th to the bike network can be a lower priority.

Recommendation #2 – medium priority: Switch Marion's stop signs to its cross-streets, for those cross-streets with lower (less than 600 ADT?) traffic. .

Backup – medium priority: If it is decided not to switch Marion's stop signs to its lower-traffic cross-streets, then replace Marion's stop signs with yields, at those intersections.

Oklahoma, 9th to 6th

- *ADT 1900. Separated boulevard west of Illinois.*
- *South side, 1-ft gutters transition to carriage sidewalk used by parked cars. North side, 5-ft gutters used by parked cars. Very low parking west of Illinois, estimated 20% east.*

Recommendation – low priority: Add Bike Route wayfinding signage.

Rudy, 19th to 9th

- *ADT 600 east of Lakeland, 2550 west. Stoplight at Lakeland.*
- *11.1-ft travel lanes with 9.2-ft parking lanes (including gutter) with very low parking occupancy.*

Recommendation #1 – medium priority: Already functions as Combined Bike/Parking Lanes. Just add Bike Route wayfinding signage.

Recommendation #2 – medium priority: If the traffic signal at Lakeland is demand-actuated, test on-road bicycle triggering of green lights at one of the right-side corners of the detector, in each direction. If greens can be triggered there but not at most other points by the stopline, add the Bicycle Detector Pavement Marking and accompanying R10-22 sign there.

Old State (County Highway 7)

- *County jurisdiction. ADT 2100-5800. 50-55mph. 11.8-ft lanes with 1-ft paved shoulders.*

General: The public expressed a desire for Old State to be more bicycle-friendly along its entire length in the study area, as they cited particularly dangerous riding conditions now. For its high speeds, moderate to high traffic levels, and truck route status, an off-road sidepath would certainly be the most desirable, but implementing this would be quite difficult for various reasons. While not as desirable as a sidepath, paving shoulders would be more feasible and would serve more traffic-tolerant and necessity bicyclists. Four feet width is the minimum

width suggested by the Federal Highway Administration. IDOT's pre-2010 policy on paved shoulders called for six feet width when ADT exceeds 3000 and the speed limit is 55mph – or 45mph in areas of high truck, RV, or bus traffic.

There are two segments of Old State in particular that rise to the level of a plan recommendation:

Old State (County Highway 7), 380E to 33rd/400E

- *County jurisdiction. ADT 2100. 55mph. 11.8-ft lanes with 1-ft paved shoulders.*

Recommendation – medium priority: Add 4-ft paved shoulders, as part of a 1400-ft jog in a route to Lake Paradise. If rumble strips are added, use IDOT's standard of 4-in offset, 8-in narrow strips with longitudinal gaps, and ensure at least 3-ft of rumble-free clear zones to the outsides of the rumbles.

Old State (County Highway 7), Country Club to Lerna

- *County jurisdiction. ADT 3700. 50mph. 11.8-ft lanes with 1-ft paved shoulders.*
- *Appreciable bicycle use, per Strava's bicycle heat map.*

Recommendation – medium priority: Add an eastbound "State Law – 3 Feet Min To Pass Bicycles" sign past Country Club. Ideally, pave 4-6 ft shoulders in the future, while referring to the above comment regarding rumble strips. Rises to high priority if the proposed rail-with-trail to the southeast is not constructed.

North-South Road Corridors

North-to-south oriented road corridors with recommendations are described below, in west-to-east order.

43rd, Western to IL16

- *ADT 1900. 35mph. 10-ft uncurbed lanes.*
- *Perpendicular parking by elementary school.*

(Conditional) recommendation – low priority: If the proposed off-road trail on the old railroad right-of-way along IL16 is built out to 43rd, then pave 4-ft shoulders on 43rd, as a low priority.

34th, Prairie to Western

- *ADT 550. 11.8-ft lanes + 1-ft gutters.*

Recommendation – low priority: Add Bike Route wayfinding signage, to complete the Prairie alternative to Western from 34th to 21st.

33rd, 900N to Hayes

- *ADT 1350. 55mph, except 30mph on south end, within city. 12-ft uncurbed lanes.*

Recommendation – low priority: Add a northbound "State Law – 3 Feet Min To Pass Bicycles" sign past Hayes.

Ideally, pave 4-ft shoulders in the future, although much grading would be needed for that to be feasible. If rumble strips are added, use IDOT's standard of 4-in offset, 8-in narrow strips with longitudinal gaps, and ensure at least 3-ft of rumble-free clear zones to the outsides of the rumbles.

Hayes, from 33rd to 32nd ; and 32nd, Hayes to Western

- *Uncurbed. ADT 375 north, estimated 150 south.*
- *14-ft lanes + 1-ft gutters (and 10% parking occupancy) on 32nd from Hayes to Piatt and on Hayes from 33rd to 32nd. 9.5-ft uncurbed lanes, 32nd south of Piatt.*
- *2-way stop at DeWitt, Western. No traffic control at 1-way Moultrie, Shelby. Yield signs at Richmond, Champaign.*

Recommendation #1 – medium priority: 32nd is a lower-traffic alternative to 33rd. Add Bike Route wayfinding signage.

Recommendation #2 – medium priority: Add stop signs to Moultrie and Shelby. For both Dewitt and Western directions, add W11-1/W16-2P signs in advance and W11-1/W16-7P signs

at the intersection. For Richmond and Champaign, add W11-1/W16-7P signs at the intersection.

32nd, Western to railroad/Broadway

- *ADT 1750. 11.2-ft travel lanes with 8.2-ft striped parking lanes (including gutter) with low parking occupancy.*

Recommendation – medium priority: Already functions as Combined Bike/Parking Lanes. Just add Bike Route wayfinding signage.

Broadway, 32nd to 33rd; and 33rd, Broadway to IL16/Marshall

- *ADT estimated at 100. 14-ft lanes (including gutter) with low parking occupancy.*

Recommendation – medium priority: Add Bike Route wayfinding signage.

33rd, IL16/Marshall to Oak

- *ADT 1850. 13-ft lanes + 2-ft gutters.*
- *No parking allowed.*

Recommendation – medium priority: Stripe 5-ft "paved shoulders" from curbs (2-ft gutter, 3-ft paved), with 10-ft travel lanes. Don't mark as bike lanes, due to the location of the gutter seam.

33rd, Oak to 600N

- *ADT 1350. 55mph, except 30mph on north end, within city. 11-ft uncurbed lanes.*
- *Appreciable bicycle use, per Strava's bicycle heat map.*

Recommendation – high priority: As part of a proposed route to Lake Paradise, add a southbound "State Law – 3 Feet Min To Pass Bicycles" sign past Oak. Ideally, pave 4-ft shoulders in the future. If rumble strips are added, use IDOT's standard of 4-in offset, 8-in narrow strips with longitudinal gaps, and ensure at least 3-ft of rumble-free clear zones to the outsides of the rumbles.

27th, Dewitt to Pine

- *ADT ranges from 700 to 1100. 10-ft travel lanes with 8-ft striped parking lanes (including gutter) with low parking occupancy.*

Recommendation – low priority: Already functions as Combined Bike/Parking Lanes. Just add Bike Route wayfinding signage.

27th, Pine to Charleston

- *ADT 950 north, 1100 south. No parking allowed.*
- *10-ft travel lanes with 1.5-ft paved shoulders and 0.7-ft gutters (with drop-offs).*

Recommendation – low priority: Add Bike Route wayfinding signage. From Charleston to the proposed trail just south of Commercial, the priority is medium.

Charleston, 27th to 26th

- *ADT 1200. No parking allowed.*
- *10-ft travel lanes with 1-ft paved shoulders and 1-ft gutters (with drop-offs).*

Recommendation – medium priority: Add Bike Route wayfinding signage. Shared Lane Markings centered 4-ft from the curb would be feasible, too.

26th, Charleston to Marion

- *ADT 1600 north of IL16/Marshall, 500 south. 17.2-ft travel lanes + 0.7-ft gutters.*
- *No parking seen north, except west-side perpendicular parking by IL16, which sticks out into lane. South of IL16, no parking allowed.*

Recommendation – medium priority: Stripe buffered bike lanes (4-ft including gutter, 2-ft travel lane buffer), except southbound near IL16/Marshall. There, add a Shared Lane Marking centered in the lane to keep bikes away from the perpendicular parking.

Backup – medium priority: If parallel parking must be retained north of IL16, stripe Combined Bike/Parking Lanes of width between 7 and 7.9-ft.

26th, Marion to Walnut

- *ADT 450. 17.2-ft travel lanes + 0.7-ft gutters.*
- *No parking allowed, but compliance is poor during major events at high school.*

Recommendation – medium priority: Stripe Combined Bike/Parking Lanes of width between 7 and 7.9-ft. Sign to allow parking only during those major event times.

21st, (eastbound) Richmond to Western

- *ADT 3100. 54-ft total width. Northbound right-turn lane at eastbound Richmond.*
- *Some southbound diagonal parking marked and used, across from the right-turn lane.*
- *Resurfacing of 21st, from Richmond to Charleston, will be done soon, possibly in 2019.*

Recommendation – high priority: Remove the northbound right-turn lane to eastbound Richmond. Change the southbound diagonal parking to parallel – but only south of eastbound Richmond. With these two changes, reconfigure the pavement width for buffered bike lanes: 8-ft parking, 2-ft parking-side buffer, 4-ft bike lane, 13-ft travel lane on each side.

Backup – high priority: If southbound diagonal parking is kept, a much lesser backup is Shared Lane Markings centered in the southbound travel lane (to avoid the diagonal parking) and 4-ft from the northbound curb.

21st, Western to Broadway

- *ADT 4200. Tricky intersection at Western, Commercial. Low to very low parking occupancy.*
- *54-ft total width, north of (just south of) Commercial: 14.5-ft (with gutter) northbound diagonal parking, 21-ft northbound lane, 14-ft southbound lane, 15-ft southbound diagonal parking.*
- *South of that point, 19.6-ft lanes including gutters.*
- *Resurfacing of 21st, from Richmond to Charleston, will be done soon, possibly in 2019.*

Recommendation #1 – high priority: 21st is a better option than 19th, for the jog from Western to Broadway, and it accesses a possible east end of an off-road trail heading southwest. Where there is diagonal parking now, change to parallel parking and reconfigure for buffered bike lanes with parking on each side: 8-ft parking, 2-ft parking-side buffer, 4-ft bike lane, and either a 17.2-ft travel lane. The 17.2-ft travel lane could be replaced with a 2-ft travel-side buffer + 15.2-ft travel lane.

Backup – high priority: If diagonal parking is kept, a much lesser backup is Shared Lane Markings centered in the travel lanes.

Recommendation #2 – high priority: For the narrower width on the south part, disallow on-street parking (off-street lots are used now). Stripe buffered bike lanes with 5-ft bike lanes and 2-ft travel-side buffers.

21st, Marshall to Marion

- *ADT 325. 12-ft uncurbed lanes. Stoplight at Marshall.*

Recommendation – high priority: Add Bike Route wayfinding signage, to connect Marion to the proposed sidepath east from 21st on the south side of Marshall. Include a crosswalk on the south face to the Marshall intersection, for westbound users of the proposed sidepath coming from the east.

19th, Evergreen to Piatt

- *ADT 1550. 10.8-ft lanes, including gutters.*

Recommendation – medium priority: Add a northbound "State Law – 3 Feet Min To Pass Bicycles" sign 1-2 blocks past Piatt.

19th, Piatt to Dewitt

- *ADT 1450. 18-ft lanes, including gutters.*
- *No southbound parking allowed; northbound parking occupancy is light.*

(Conditional) recommendation – medium priority: If the proposed Dewitt road diet from 19th to 14th is done, add Combined Bike/Parking Lanes striping between 7 and 8-ft from the curbs.

19th, Marshall to Olive

- *ADT 1400. 10.3-ft travel lanes with 8-ft striped parking lanes (including gutter). Parking occupancy is zero to very low, except an estimated 20% by homes by Essex.*

Recommendation – medium priority: Already functions as Combined Bike/Parking Lanes. Just add Bike Route wayfinding signage.

19th, Olive to US45/Lakeland

- *ADT 700. 11.5-ft uncurbed lanes.*
- *Only some access to destinations on parallel US45/Lakeland.*

Recommendation – medium priority: Add Bike Route wayfinding signage. Also, encourage more driveways to the backs of businesses on US45.

US45/Lakeland, Rudy to 19th

- *Four 12-ft lanes plus center left-turn lane. ADT 7700. 35mph.*
- *No sidewalks or sidepath. Off-road commercial parking lots, several on east side connect.*

Recommendation – high priority: Add sidewalks, prioritizing connections between parking lots on the east side.

US45/Lakeland, 19th to Old State

- *19th Street spur is an access road that dead-ends near Old State/US45.*

Recommendation – medium priority: Provide a short (30-ft?) trail link from the south end of 19th to the US45/Old State intersection. Add crosswalks to the appropriate faces of the intersection.

US45/Lakeland, Old State to Athletic

- *ADT 7650. Four 12-ft lanes, divided. 10-ft paved shoulders. No sidewalks or sidepath.*
- *55mph 1/2 mi S of Old State to 1/2 mi N of I-57, otherwise 45mph.*

Recommendation – medium priority: The ideal would be an off-road sidepath to Lakeland Community College. If that is not done, then improve the paved shoulders by adding narrow rumble strips (with longitudinal breaks) near the foglines, regularly sweeping the shoulders,

adding W11-1 Bicycle Warning signs at the ends of the segment, and perhaps lowering the speed limit to 45mph throughout.

17th, Broadway to Wabash

- *ADT 950 north of IL16, 700 south. Stoplight at IL16.*
- *North of IL16: 11.5-ft lanes and 14-ft (heavily-occupied) diagonal parking.*
- *South of IL16: southbound 18-ft lane and 8-ft (with gutter) moderately-occupied parallel parking; northbound 17-ft lane and 14-ft diagonal parking.*

Recommendation #1 – low priority: Add Shared Lane Markings centered in the travel lanes where there is diagonal parking, and 11-ft from the curb where there is parallel parking.

Recommendation #2 – low priority: If the traffic signal at IL16 is demand-actuated, test on-road bicycle triggering of green lights at one of the right-side corners of the detector, in each direction. If greens can be triggered there but not at most other points by the stopline, add the Bicycle Detector Pavement Marking and accompanying R10-22 sign there.

17th, Wabash to Marshall

- *ADT 700 north, 650 south.*
- *20-ft lanes with moderate (estimated 20%) parallel parking occupancy.*

Recommendation – low priority: Add Bike Route wayfinding signage.

17th (and Warren), Rudy to Lakeland

- *ADT 1650 north, 850 south. 11.2-ft uncurbed lanes.*
- *Some stone shoulder. Good access to backs of businesses on Lakeland.*

Recommendation – medium priority: Add Bike Route wayfinding signage. Supplement with a southbound "State Law - 3 Feet Min To Pass Bicycles" sign just south of Rudy. Priority drops to low, south of Stinson.

16th, Richmond to Broadway

- *ADT 800.*
- *11.2-ft lanes with 9-ft (including gutter) striped parallel parking north of the future trail extension; 60% parking occupancy. South of there, 13.2-ft lanes plus diagonal parking, 80-100% occupied, total width 54.4-ft including 14-in gutters.*

Recommendation – medium priority: Add Shared Lane Markings, centered 11-ft from the curbs where there is parallel parking and in the center of the travel lanes where there is diagonal parking.

14th, Piatt to Dewitt

- *ADT 600. 15-ft lanes, including gutters. Moderate to heavy (estimated 50%) parking occupancy.*

Recommendation – low priority: Add Bike Route wayfinding signage.

14th, Dewitt to Broadway

- *ADT 2450 north, 3450 south. 4-way stop at Dewitt.*
- *North of future off-road trail: 17-ft lanes + 1-ft gutters, concrete north of Champaign, minimal parking occupancy.*
- *South of future off-road trail: total width 54.4-ft +1-ft gutters. Just north of Broadway, diagonal parking (some southbound use, none northbound) leaving 26-ft for lanes.*

Recommendation #1 – low priority: Add Combined Bike/Parking Lanes striping between 7 and 8-ft from the curbs. North of the future trail, that leaves 10 to 11-ft travel lanes. Where there is diagonal parking now, change to parallel parking, and stripe 8-ft from the curbs, leaving 19.2-ft lanes.

Recommendation #2 – low priority: If parking occupancy is or becomes significant only in a localized area (likely by Broadway), supplement striping with Shared Lane Markings centered 11-ft from the curb. If parking occupancy becomes greater than 10% over much of the segment from the trail to Broadway, add 5-ft bike lanes in addition to the 8-ft parking lanes, leaving 14.2-ft travel lanes.

14th, Broadway to IL16/Charleston

- *ADT 3450. Stoplights at Broadway and IL16.*
- *Total width 54.4-ft +1-ft gutters. Northbound right-turn lane at Broadway, left- and right-turn lanes at IL16.*

Recommendation – high priority: If it is desired to keep all current turn lanes, then knowing that off-road lots address parking needs, the configuration at Broadway could be: (southbound) 5-ft bike lane, 2-ft buffer, 21-ft travel lane; (northbound) 11-ft travel lane, 5-ft bike lane, 12-ft right-turn lane. At IL16: (southbound) 11-ft right-turn lane, 5-ft bike lane, 11-ft lane, 11-ft left-turn lane; (northbound) 13-ft lane, 5.5-ft bike lane. Use dashed lines per AASHTO's bike guide for transitions.

14th, IL16/Charleston to Marshall

- *ADT 3650. 14.7-ft lanes including gutters. Left-turn lane by IL16.*
- *No parking allowed.*

Recommendation #1 – high priority: Stripe "paved shoulders" (narrower than 5-ft bike lanes) with a width between 4.0 to 4.7-ft, leaving 10.7 to 10-ft travel lanes. Use No Parking signs to prevent confusion with exclusive Bike Lanes. Where the striping must be discontinued due to

the IL16 turn lane, add Shared Lane Markings centered in the straight-ahead northbound lane and 4-ft from the southbound curb.

Recommendation #2 – medium priority: If the traffic signal at IL16 is demand-actuated, test on-road bicycle triggering of green lights at one of the right-side corners of the detector, in each direction. If greens can be triggered there but not at most other points by the stopline, add the Bicycle Detector Pavement Marking and accompanying R10-22 sign there.

14th, Marshall to Palm

- *ADT 3300 north, 2700 south.*
- *Moderately-occupied southbound parking lane, no parking allowed northbound.*
- *North of Maple, 10.3-ft lanes with 8-ft southbound parking lane. South of Maple, 10-ft lane and 9-ft parking lane southbound, 11-ft lane and 2-ft shoulder northbound.*

Recommendation #1 – high priority: Lacking other good options, add Shared Lane Markings, centered 4-ft from the northbound curb and 11-ft from the southbound curb (except 12-ft from Maple to Palm).

Recommendation #2 – high priority: To supplement the above, add a southbound "State Law - 3 Feet Min To Pass Bicycles" sign just south of Marshall and another northbound just past Palm.

14th, Palm to Rudy

- *ADT 2700.*
- *10.5-ft travel lanes with 7.5-ft parking lanes (including gutter) with very low parking occupancy.*

Recommendation – medium priority: Already functions as Combined Bike/Parking Lanes. Just add Bike Route wayfinding signage.

10th, Champaign to Richmond

- *ADT 1600. 11.5-ft lanes (including gutters) with no parking demand.*

(Conditional) recommendation – medium priority: Add Bike Route wayfinding signage, if the proposed trail link from 9th and Richmond to Lincoln Prairie Trail is not added.

9th, Richmond to IL16/Charleston

- *North of Broadway, ADT 550, 9-ft uncurbed lanes. Stoplight, left-turn lane at IL16.*
- *South of Broadway, ADT 1250, 22.5-ft concrete lanes, moderate parking occupancy.*

Recommendation #1 – medium priority: Add Bike Route wayfinding signage. Add a Shared Lane Marking centered in the straight-ahead southbound lane at IL16.

Recommendation #2 – medium priority: If the traffic signal at IL16 is demand-actuated, test on-road bicycle triggering of green lights at one of the right-side corners of the detector, in each direction. If greens can be triggered there but not at most other points by the stopline, add the Bicycle Detector Pavement Marking and accompanying R10-22 sign there.

9th, IL16/Charleston to south of First Baptist Church

- *ADT 3900 north, 5000 center, 2850 south. Left-turn lane at IL13.*
- *10-ft travel lanes with 9-ft parking lanes (including gutter) with low parking occupancy seen. South of Stinson, 10.2-ft lanes with 8.5-ft parking lanes.*

Recommendation – high priority: Already functions as Combined Bike/Parking Lanes. Just add Bike Route wayfinding signage. Due to higher traffic levels than preferred for Combined Bike/Parking Lanes, supplement with W11-1 Bicycle Warning signs, southbound just south of IL16 and northbound by Williams School. Add a Shared Lane Marking centered in the straight-ahead northbound lane at IL16.

6th, Piatt to Dewitt

- *ADT 950. 10.5-ft uncurbed lanes. 4-way stop at Dewitt.*

Recommendation – low priority: Add Bike Route wayfinding signage.

6th, Dewitt to Oklahoma

- *ADT 2300 north increasing to 5100, then decreasing to 3200 south of Marshall.*
- *15-ft concrete travel lanes north of Prairie, 14.8-ft asphalt south. Left-turn lanes at IL16.*
- *No parking allowed, except for northbound parking bay Broadway to Prairie.*

Recommendation #1 – medium priority: If the width is 30-ft curb-to-curb throughout, then 5-ft bike lanes could be striped and marked, leaving 10-ft travel lanes. Measurements indicate a bit less than 30-ft on most of the segment, so unmarked, striped "paved shoulders" of width between 4-ft and 4.8-ft (south) or 5.0-ft (north), leaving travel lanes of width between 11-ft and 10-ft.

Recommendation #2 – medium priority: Where the striping must be discontinued due to the IL16 turn lanes, add Shared Lane Markings centered in the straight-ahead lanes approaching IL16 and 4-ft from the curb of the other direction.

Logan, Piatt to Dewitt

- *ADT 900. 10-ft uncurbed lanes. 4-way stop at Dewitt.*

Recommendation – low priority: Add Bike Route wayfinding signage.

Logan, Dewitt to Broadway

- *ADT 3650 north, 4600 south. 11.8-ft lanes, 2-ft shoulders, 1.2-ft gutters.*
- *No parking allowed.*

Recommendation – medium priority: Restripe for 11-ft travel lanes and 4-ft shoulder space including 2.8-ft of asphalt and 1.2-ft gutter pans. A slight improvement, if possible considering more truck use of this road, would be 3-ft of asphalt and 10.8-ft lanes. For a more residential road with little to no truck traffic, 10-ft travel lanes and 5-ft (3.8-ft asphalt, 1.2-ft gutter) bike lanes would be possible.

Logan, Broadway to Wabash

- *ADT 4800 north of IL16, 3150 south. Stoplight, southbound right-turn lane at IL16.*
- *North of IL16, 13-ft lanes transition to 3 lanes. South, 13-ft concrete lanes including gutter.*
- *No sidewalks or sidepath.*

Recommendation #1 – high priority: Add two Shared Lane Markings per direction, north of IL16. Center each 4-ft from the curb, except southbound near IL16, where one should be in the right part of the straight-ahead lane. South of IL16, Shared Lane Markings should be centered 4-ft or more from the curbs.

Ideally, this section of Logan would be reconstructed wider in the future, so that 5-ft bike lanes could be added.

Recommendation #2 – very high priority: Add a sidewalk for Logan's sidewalk gap between Broadway and Wabash.

Logan, Wabash to Lafayette

- *ADT 3150. 14.7-ft concrete lanes.*

Recommendation – medium priority: Stripe "paved shoulders" (narrower than 5-ft bike lanes) with a width between 4.0 to 4.7-ft, leaving 10.7 to 10-ft travel lanes.

Odd Fellows, Lafayette to Country Club

- *ADT 2850. 30mph. 10-ft lanes with 1.7-ft rolled gutter pans.*

Recommendation – medium priority: Add a southbound "State Law – 3 Feet Min To Pass Bicycles" sign past Lafayette.

Ideally, this section of Logan would be reconstructed wider in the future, so that 4-ft paved shoulders or bike lanes could be added, along with a sidewalk or sidepath.

700E, north of Piatt

- *ADT 800. 55mph. 11-ft uncurbed lanes.*

Recommendation – low priority: Add a northbound "State Law – 3 Feet Min To Pass Bicycles" sign past Piatt.

Dettro, IL16 to Country Club

- *ADT 9150 near IL16, 3700 south. 35mph. No sidewalks or sidepath.*
- *North of Remington, 12-ft concrete lanes with center left-turn lane and 1.7-ft gutters.*
- *South of Remington, 12.2-ft asphalt lanes, 1.6-ft shoulders and grading drop-offs.*

Recommendation #1 – high priority: The relatively new segment from IL16 to Remington illustrates the need for a Complete Streets policy with road design standards requiring on-road and/or off-road accommodations, particularly as commercial areas grow near I-57. A sidewalk on the west side of the road will be retrofitted soon, from a new extension of Dettro north to Broadway, to the Walmart entrance. Adding a sidewalk or sidepath on the east side is recommended but as a low priority.

(Conditional) recommendation #2 – high priority: If a sidewalk or sidepath is added north from IL16, provide a sidewalk or trail link connection from Broadway's sidewalk to it, adjusting the IL16 intersection signalization and adding a crosswalk, as necessary.

(Conditional) recommendation #3 – high priority: If the segment south of Remington develops, add a (continuous) sidewalk or sidepath on at least one side of the road. The other side would be lower priority.

Swords, Broadway to Remington

- *ADT 3400-3550 north of Holiday Inn Express, 850 south. 12-ft concrete lanes with 2-ft gutters.*
- *West side sidewalk north of Holiday Inn Express.*

Recommendation #1 – low priority: Add a sidewalk or sidepath on the east side of Swords between the first commercial entrance south of IL16 and the Home Depot entrance. This would not be a recommendation if all the entrances to Swords were aligned on the two sides of the road.

Recommendation #2 – low priority: South of the Holiday Inn, add a continuous sidewalk of sidepath on at least one side of the road. Raises to medium or high priority when developed. A sidewalk on the other side would be lower priority.

Lerna, Lincoln-Prairie Trail to Hurst

- *ADT 3200 north of IL16, 4700 south. 55mph.*
- *North of IL16, 11-ft lanes with 4-ft paved shoulders, except curbed with a southbound left-turn lane and no shoulders approaching IL16.*

- *South of IL16, northbound left- and right-turn lanes by IL16, center left-turn lane and gravel shoulders otherwise.*

Recommendation – medium priority: Add a sidepath on the east side of road, with a sidewalk as the backup. As a lower priority, add a sidewalk or sidepath on the west side, too, as it develops.

Backup – medium priority: Paved 4-6 ft shoulders, where currently missing, to serve traffic-tolerant and necessity bicyclists.

Off-Road Trail Corridors

Lincoln Prairie Grass Trail, 10th to east end

- *Existing, unpaved trail to Charleston.*
- *Illinois Transportation Enhancements Program grant to fund paving, and extension from 10th to 16th, in 2019. The ITEP project includes spur trails to Mattoon's east-side hotel area.*

Recommendation #1: No change to the paving and westward trail extension plan above, which is expected to be constructed in 2019. Continuing further to the west, a future (and expensive) possibility might be to extend the trail around the YMCA parking lot and over the CN railroad tracks (site of an earlier bridge that no longer exists) to 19th and Broadway.

Recommendation #2 – medium priority: Proceed with the current ITEP-funded plan to improve the trail's road crossings. At present, most of the crossings only have advance W11-1 Bicycle Warning signs, possibly D11-1 Bike Route signs at the crossing, and no crosswalk. For lower-speed crossings, use uncontrolled crossing recommendations soon to be released by IDOT, modified slightly for bike and pedestrian use:

Figure 3.5. W11-15 and W16-7P signs.

For traffic ADT less than 9000 and a speed limit of 30mph (all crossings west of I-57), use:

- Two W11-15 Bicycle/Pedestrian Warning signs per direction, one in advance with a W16-9P "Ahead" plaque, the other at the crossing with a W16-7P Slanted Down Arrow plaque – with all signs and plaques in FYG color.
- A continental-style crosswalk

At Lerna, include the above, supplemented with at least a Rectangular Rapid Flashing Beacon in each direction, and possibly a demand-actuated overhead beacon and/or raised median island.

Lincoln Prairie Grass Trail access, McFall easement

- *From the current north end of the paved part of McFall, a dirt road heads north and east. Its endpoint is 500-ft from the Lincoln Prairie Grass Trail.*

Recommendation – high priority: Seek a trail easement to construct a 10-ft hard-surfaced trail linking the Lincoln Prairie Trail to the endpoint of the dirt road extending north and east from McFall. Pave or otherwise improve the surface of the existing dirt road section. The trail should be built to allow crossing of farm equipment. Sign McFall, and Broadway from Swords to McFall, with wayfinding bike route signage as part of this connection.

Backup #1: If the McFall easement trail proposal is not possible, another possibility is to seek an easement on the 50-ft wide, ¼-mile long Ameren corridor between the Lincoln Prairie Trail and Broadway just east of Swords. Construct a 10-ft, hard-surfaced trail which also allows the crossing of farm equipment.

Backup #2: As another backup, seek a 1/4-mi long easement along the west part of the Anamet property, to construct a 10-ft trail linking the Lincoln Prairie Trail and the north end of Dettro. Such a trail should be accompanied by a mid-block crossing of Broadway with uncontrolled crossing features recommended above, plus a link to the IL16 intersection, where signalization changes would be needed along with a sidewalk/sidepath along Dettro.

Lincoln Prairie Grass Trail access, Rural King easement

- *Rural King owns the property between the Lincoln Prairie Trail and the mall/north end of Holiday. North of Richmond, Holiday is just a mall driveway with no separation from parking lots.*

Recommendation – high priority: Seek a 320-ft trail easement from Rural King to construct a 10-ft trail linking the Lincoln-Prairie Trail to the north end of Holiday. If the trail link is built, use Bike Route wayfinding signage and Shared Lane Markings, possibly with striping to delineate "travel lanes" from parking lots, on Holiday between the trail and Richmond.

Backup: As a distant backup to the above, consider something similar on the east side of the Rural King property.

Lincoln Prairie Grass Trail access, 9th Street

- *A short, 85-ft distance separates the intersection of 9th and Richmond from the three-way trail intersection of the Lincoln Prairie Trail and the Mattoon Softball Complex's trail.*

Recommendation – medium priority: Build the 85-ft trail link extending the softball complex trail and connecting the Lincoln Prairie Trail to Richmond.

Douglas-Hart trail access

- *Existing trail spur from Lincoln Prairie Trail to Douglas-Hart Nature Center.*

Recommendation – medium priority: Supplement the existing crosswalk and warning signage with a Rectangular Rapid Flashing Beacon in each direction.

Old railroad right-of-way, 21st to the west-southwest

- *Informal, gravel trail along much of it now, from 32nd east to at least 24th.*
- *City-owned right-of-way, 24th to 43rd.*

Recommendation #1 – high priority: Develop a paved trail on the right-of-way, between 21st and 32nd. Secure right-of-way between 21st and 24th.

Backup: If a trail cannot be built from 21st to 24th, stripe 7-ft Combined Bike/Parking Lanes on Commercial. Omit striping in favor of Shared Lane Markings centered in the eastbound lane where there is perpendicular parking.

Recommendation #2 – medium priority: Extend the paved trail between Broadway (between 32nd and 33rd) and 43rd. The route would have to jog on 32nd across the railroad tracks and then use Broadway briefly – see the 32nd Street recommendations above for details.

Recommendation #3 – low priority: Seek to acquire the right-of-way, or an easement, to extend the paved trail between 43rd and Dole/County Highway 13. This would form part of a route to Lake Paradise, especially if paved shoulders are not added to Old State between 380E and 400E.

Funding possibility: Due to its lower demand-to-supply ratio, the (80% federal) Recreational Trails Program is recommended as a grant source, if the project cost is less than $240,000. Otherwise, the Illinois Transportation Enhancements Program is recommended, perhaps in combination with other off-road trails recommended in this plan.

Tate & Lyle Grain rail-with-trail, 9th to 650E or 720E

- *Active, privately-owned, lightly-used railroad track. 65-ft right-of-way (30-ft from track), southeast from 9th, and only 50-ft (22-ft from track) northwest of there.*

Recommendation – medium priority: Explore a "rail-with-trail" easement on the right-of-way from 9th Street, to 650E or even 720E. Such a trail would solve the difficulty of getting southeast of town, currently done often by using less-comfortable Lafayette, Odd Fellows, and Country Club. An 8-ft or 10-ft hard-surfaced trail and 2-ft buffer at the right-of-way edge leaves 20 or 18-ft to the track edge. According to the Federal Highway Administration's "Rails-with-Trails: Lessons Learned" report, this is a good setback for low-frequency, low-speed trains. Fencing between the trail and track would be needed.

Kickapoo Creek trail

Recommendation – low priority: As a long-term possibility, explore easement and right-of-way acquisition to construct a trail along Kickapoo Creek, in the southeast part of the city. Numerous private parcels would be involved, with a possible exception between Lakeland/Rudy/19th and the Tate & Lyle Grain railroad.

If the rail-with-trail above is not constructed, a trail along Kickapoo Creek from 6th Street to Fairway Lane or Country Club Road increases in priority.

Lake Paradise and Lake Mattoon access

Lake Paradise, and further south, Lake Mattoon, are two scenic destinations within bicycling distance of the City. A preliminary analysis of possible routes to Lake Paradise was done as part of this plan, with some comments on continuing to Lake Mattoon.

An off-road trail spur certainly would be the best solution, attracting a broad range of bicyclists as well as pedestrians. At present, there is no obvious and direct easement that would allow such an off-road trail for the entire distance, but future opportunities to acquire easements should be explored. In lieu of a direct off-road trail connection, this plan considers possible rural on-road alternative routes to the north end of the lake and West Lake Paradise Road.

Western-Dole/200E-Paradise

- Western to 43rd/300E, 2650 to 1300 ADT on west part, 11.5-ft lanes, Bike Route signage recommended as high priority with widening for shoulders or bike lanes as the ideal
- Western/750N, 550 ADT, 11-ft lanes, 1 mile
- Dole/200E, 500 to 225 ADT, 9.5-ft lanes, 3.5 miles
- Paradise/400N, 400 ADT, 0.3 mile
- Most popular route currently, according to Strava's bicycle heat map

Western-43rd/300E-IL16-Lake/280E-Paradise

- Western to 43rd/300E, 2650 to 1300 ADT on west part, 11.5-ft lanes, Bike Route signage recommended as high priority with widening for shoulders or bike lanes as the ideal
- 43rd/300E, 1900 ADT, 10-ft lanes, 0.6 mile, 4-ft paved shoulders recommended as low priority
- IL16, 4150 ADT, 0.25 mile, off-road sidepath trail recommended as low priority
- Lake/280E, 1500 to 2050 ADT, 10.5-ft lanes + 1-ft shoulders, 2.9 miles
- Paradise/400N, 550 ADT, 10.5-ft lanes, 0.2 mile
- Least used option, according to Strava

33rd/400E-Old State-380E-Paradise

- 33rd/400E, 1350 to 1200 ADT, 11-ft lanes, 1.6 miles, 3-Ft Law sign recommended as high priority with widening for shoulders or bike lanes as the ideal
- Old State, 2100 ADT, 0.25 mile, 4-ft paved shoulders recommended as medium priority
- 380E, 325 to 275 ADT, 10.5-ft lanes, 1.1 miles
- Paradise/400N, 1100 to 550 ADT, 10.5-ft lanes, 1.4 miles
- Second most popular option, according to Strava

Canadian National (CN) "Rail-with-Trail"-Paradise

- While a rail-with-trail on a heavily-used, high-speed railroad corridor is a remote possibility, there may be sufficient right-of-way for an easement, if topography and the railroad's access roads allow. The option is worth exploring. The trail could possibly be accessed from the south end of 21st or 23rd. 3.1 miles
- Paradise/400N, 1100 to 550 ADT, 10.5-ft lanes, 1.5 miles

19th-Lakeland-Paradise

- 19th, 700 ADT on south part, 11.5-ft lanes, 0.8 mile; Bike Route wayfinding signage, short trail link to Lakeland/Old State intersection, crosswalks as medium priority
- Lakeland, 7650 ADT, four 12-ft lanes divided with 10-ft paved shoulders, 1.6 miles; W11-1 warning signage, rumble strips recommended as medium priority
- Paradise/400N, 1600 (briefly) to 1100 to 550 ADT, 10.5-ft lanes, 2.7 miles
- Second least used option, according to Strava

Recommendation to Lake Paradise

- Focus on the Western-Dole/200E-Paradise route, particularly the recommended improvements to Western.
- Add the 3-Ft Law sign to 33rd and seek to add the 4-ft paved shoulders to the 1400-ft segment of Old State, to improve safety for those already using that route.
- Explore the possibility of a rail-to-trail along the CN railroad tracks.

Continuing to Lake Mattoon

From the north end of Lake Paradise, West Lake Paradise Road and 150E (225 ADT) are low traffic, scenic routes hugging that lake's west perimeter. South of 250N, 150E gets busier (1250-1600 ADT with no paved shoulders) as it proceeds south, eventually to the east of Lake Mattoon.

To get from the intersection of 150E and 250N to the campground and marina, on Lake Mattoon's west side by the intersection of 0E (650 ADT by marina) and 975N/1250N, some possible options to consider include:

- Paving 4-ft shoulders on 150E (Fish Hatchery Rd) to 100N/1195N, then using either:
    - 100N (550 ADT) to 050E (325 ADT), to Ridge Rd and Clear Creek Dr (parts possibly needing a better surface), to 0E
    - 100N (550 ADT) – 1195N (200 ADT), to 3575E (175 ADT), to 1175N (150 ADT), which turns into 0E – this is currently the most popular route, as seen on Strava's bicycle heat map
- 250N (650 ADT), to Partridge Rd/100E (likely needs a better surface), to 100N and its two options, as above
- Further on 250N (decreases to 400 ADT), to 3575E (125 ADT), to 1175N and 0E.

If easements on private land become available, there may be opportunities to build off-road trail to replace some of the on-road segments.

4 Standards for Road Design and Development

Introduction

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

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

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

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

The National Complete Streets Coalition (smartgrowthamerica.org/program/national-complete-streets-coalition) provides resources for communities to adopt and implement a Complete Streets policy. An adopted ordinance can instruct relevant City departments to "make Complete Streets practices a routine part of everyday operations" and "approach every transportation project and program as an opportunity" to improve safety and convenience for all roadway users. A recommendation of this plan is for Mattoon to develop and adopt such an ordinance.

Roadway Design Guideline Recommendations

By adopting this bicycle plan, the City of Mattoon has established priorities for road corridors that need improvement. However, to ensure that all road projects—whether or not their corridors are addressed specifically in this plan—consider the needs of all potential travelers, the plan provides suggestions to consider as guidelines or for separate adoption into the City's roadway design standards.

City-Maintained Roads: To implement a Complete Streets ordinance on a practical level, local road design standards may need to be modified. As a major part of that, the tables below may

be used to specify appropriate bikeway accommodation and conditions for sidewalk construction. A "network route" is one that is or could be part of the designated bike network.

Table 4.1. Suggested Bicycle Accommodation in Road Designs

Minor urban 25-30 mph roads				
	No parking	*Parking <10%*	*Parking 10-30%*	*Parking >30%*
Under 1000 ADT	None	None	None	None
(Network route)	BR	BR	BR	BR
Over 1000 ADT	None	None	None	None
(Network route)	SLM-4 (or BL*)	CBPL	BR (and 3-ft S*)	SLM-11 (or BL*)

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

- (Parentheses) indicate the secondary option.
- A secondary with an asterisk* indicates the option may be used at the higher ends of a range or where the need is greater.

BR: Bike network wayfinding signage only. D1-nb and D1-nc (n= # of destinations), and D11-1c are recommended.
SLM-4: Shared Lane Markings centered 4-ft from curb faces. Bike network wayfinding signage recommended as a supplement.
SLM-11: Shared Lane Markings centered 11-ft from curb faces (on-street parking present). Bike network wayfinding signage recommended as a supplement.
CBPL: Combined Bike/Parking Lanes, solid stripes 7-8 ft from curb faces. Parking permission indicated with signage. Bike network wayfinding signage recommended as a supplement.
3-ft S: "State Law - 3 Feet Min To Pass Bicycles" sign, which has been approved by IDOT.
BL-5: Bike Lanes of width 5-ft, with pavement stencils per AASHTO and bike network wayfinding signage recommended as a supplement.
BBL: Buffered bike lanes of 3.5 to 5-ft width, plus 1.5 to 3-ft buffers on travel and/or parking (if present) sides. May substitute with Protected Bike Lanes. Wayfinding signage supplements.
SP: Off-road sidepath trail designed per AASHTO, on at least one side of road.
SH-4, SH-6, or SH-8: Paved shoulders of width 4, 6, or 8-ft, respectively. Any rumble strips should have longitudinal breaks and a minimum 4-ft clear zone for bikes.

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

Table 4.2. Federal Highway Administration's Guidelines for New Sidewalk Installation

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

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

Development Ordinances: Create development guidelines to help new developments contribute to Mattoon's efforts to become more pedestrian and bicycle-friendly. Possible topics:

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

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

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

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

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

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

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

[3] "Planning and Policy Models for Pedestrian and Bicycle Friendly Communities in New York State" by the Initiative for Healthy Infrastructure, University at Albany, State University of New York (www.albany.edu/ihi/files/NY_Planning_And_Policy_Models_iHi.pdf)

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 Mattoon. 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.

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

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

Style: A good bicycle rack provides support for the bike frame and allows both the frame and wheels to be secured with one lock. The most common styles include the inverted "U" (two bikes, around $150-300) and "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.

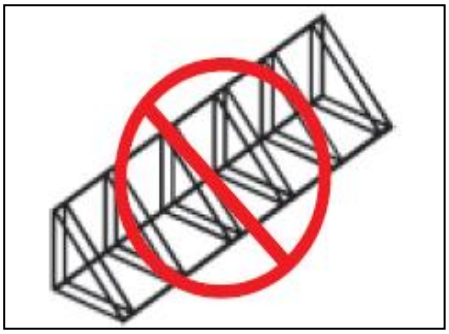


Figure 5.2. "Schoolyard" rack, not recommended.

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.

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

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

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 advocates might 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 Mattoon. 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, YMCA, and the library, and on the City's and park district'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
- Ride Illinois' single-page summaries for children and their parents. rideillinois.org/safety/kids-and-biking-resources
- Illinois Bicycle Law cards, free from Ride Illinois. Relevant state laws, folds to business-card size. rideillinois.org/wp-content/uploads/2018/08/BikeLawCard2018.pdf

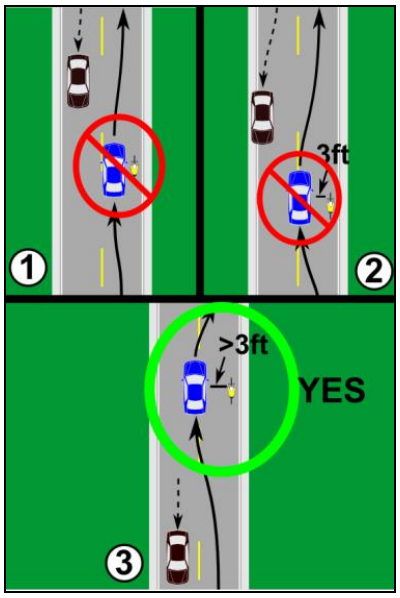


Figure 5.4. Motorist Quiz at www.bikesafetyquiz.com.

In addition, Illinois 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 Mattoon. Instructors are listed at www.bikeleague.org/bfa/search/list?bfaq=illinois#education.

An online interactive resource on relevant laws and safety techniques is Ride Illinois' www.bikesafetyquiz.com. Concise quiz-based 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. Ride Illinois has brief text promoting the quiz, available for municipal newsletters and websites.

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 Ride Illinois, for driver education programs and existing motorists:

- The "Motorist" and "Driver Education" quizzes in the www.bikesafetyquiz.com resource mentioned above.
- "Share the Road: Same Road, Same Rights, Same Rules", a 7-minute video available at www.youtube.com/watch?v=S1PXvxh_6MI and as a DVD

The plan recommends that local high schools and private driver education programs be encouraged to use www.bikesafetyquiz.com 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 Ride Illinois. Also, Ride Illinois has piloted a bicycle ticket diversion program in Urbana, Highland Park, and several other towns. To reduce a ticket to a warning, offenders take the Adult Bicyclist quiz at www.bikesafetyquiz.com, emailing their completion certificate to the police department. This has been received well and is suitable for Mattoon, 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 much-appreciated success that could be duplicated here.

These and other enforcement ideas are detailed in the Illinois Association of Chiefs of Police's magazine: rideillinois.org/wp-content/uploads/2016/01/PoliceChiefsArticle_Spring2014.pdf

Encouragement

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

- Creating and distributing a bicycle map – showing the trails, 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 www.bikesafetyquiz.com. 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 Mattoon as being bicycle-friendly in the City's advertising.

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 Mattoon will become even more bike-friendly.

Bicycle and Pedestrian Advisory Commission and Coordinator

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

In addition, the plan recommends the establishment of an ongoing Mattoon Bicycle and Pedestrian Advisory Commission (BPAC), reporting to City Council or to the 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.

BPAC membership should be limited to 4-7 residents, mostly bicyclists ranging in experience. Some may come from the bike plan's April 11, 2018 public brainstorming meeting, the sterring committee, and/or others who have been involved locally in bike issues. If these individuals lack interest in pedestrian-only 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 may come from other City departments (Community Development, Public Works, Parks and Recreation, Police) or relevant agencies (YMCA, Mattoon Community Unit 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 might be held quarterly or more, depending on level of activity.

The BPAC should 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 City's review of new development or re-development projects.

- Maintenance – The BPAC should periodically review conditions on the City's bikeway system and make prioritized maintenance recommendations.

In addition, the 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 Mattoon 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 Mattoon.
- 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.
- Head the effort to win national Bicycle Friendly Community designation, including filling out the application, and strategizing which areas need improvement.

It is strongly recommended that each commission member should have "ownership" of at least one topic or effort. This will keep members energized and ensure the commission is a net positive in City time investment.

Multi-Year Work Plan

This plan recommends a variety of strategies, from adopting policies to coordinating with other agencies, to quickly implement "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 Mattoon'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:** The cost of installing bike lanes on both sides of the road is estimated at $28,000 per mile where two stripes are needed. Where four stripes are needed due to adjacent parking or buffering, the estimate is $48,000 per mile. These costs include stripe painting, bike lane pavement markings, and wayfinding signage – but not removal of existing stripes. It is most cost efficient to create bike lanes during reconstruction or resurfacing.
- **Combined Bike/Parking Lanes:** With two stripes and no markings, combined bike/parking lanes on both sides of the road are estimated to cost $25,000 per mile.
- **Signed Bike Routes:** Only wayfinding signs and their posts are needed. At $200 per installation, the estimated cost is $2,500 per mile, for both sides of the road. Sign installation can be done at any time.
- **Shared Lane Markings:** Also known as "sharrows", the total per-mile estimate of $4,500 per mile includes pavement markings every 250-ft plus wayfinding signage. Again, shared lane markings can be done with other roadwork.
- **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 Mattoon 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 residential or commercial development is added.

Other opportunities include road projects by the City, Coles County, or the State. Addressing intersection improvements, bikeways, and sidewalks as part of a larger road project is substantially cheaper and easier than retrofitting. Even resurfacing work can be used to add on-road bikeway striping. 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 3.

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 www.apbp.org.

- *NACTO Urban Bikeway Design Guide*. Online at www.nacto.org.
- *Manual on Uniform Traffic Control Devices.* Online at mutcd.fhwa.dot.gov.

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
- Ride Illinois: A planning and advocacy resource, with many on-line materials focused on best practices nationally as well as issues unique to Illinois: www.rideillinois.org

Bicycle-Friendly Community Designation

A goal of plan implementation should 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 5 is an infographic summarizing how Bronze and higher communities have fared in key criteria.

Figure 6.2.. Bicycle Friendly Community sign.

Winning BFC designation is not easy. However, the recommendations in this plan encompass most of the award criteria.

Ride Illinois, a longtime observer of and "local reviewer" for the BFC program, believes Mattoon could achieve the Bronze level within 4 years, with steps such as:

- Adopting this plan, officially naming a Bicycle/Pedestrian Coordinator, and creating a Bicycle (or Bicycle/Pedestrian) Advisory Commission – described earlier
- Adopting a Complete Streets policy and bicycle/pedestrian friendly road design standards, such as those suggested in Chapter 5
- Adopting a bike parking ordinance
- Implementing several more high-priority segments on 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

As suggested later, Bicycle and Pedestrian Advisory Commission members could lead several of these efforts.

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.

Appendix 1 - Bikeway Types in the Bike Route Study

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 study's recommendations.

These references are recognized by the industry as the standards for bicycle facility design. The Illinois Department of Transportation encourages communities to consult these guidelines and standards when developing bicycle plans and studies.

After a description of the recommended network wayfinding signage, a general overview of bicycle facility options follows. More engineering details are in the publications.

Bike Network Wayfinding Signage

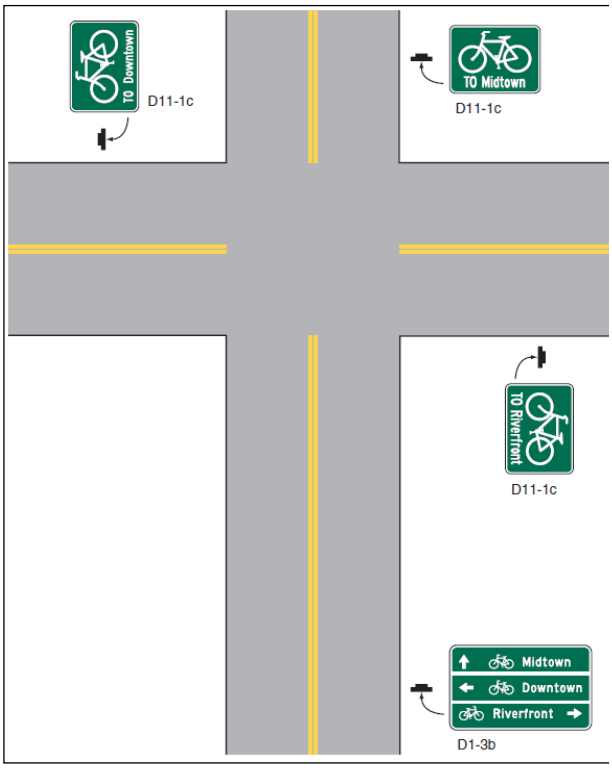
For both on- and off-road bikeway segments in a town, bicycle network signage can serve both wayfinding and safety purposes including:

- 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

Recommended network wayfinding signs. Left: D1-3b Middle: D1-2c Right: D11-1c

It is recommended that Mattoon adopt wayfinding conventions consistent with the MUTCD and 2012 AASHTO bike guide. Instead of the old D11-1 "Bike Route" signs, recommended is the newer, more informative destination-based signage illustrated above.

Signs should be installed on each officially-designated on-road or off-road segment of the network. The recommendations in this study often list other bikeway types, such as shared lane markings and bike lanes, but **in each case there should be accompanying wayfinding signage.**



Example of signage placement.

The figure at right illustrates signage placement. In general, signs should be placed where a route turns at an intersection, crosses another route, and crosses major intersections. The D1-nb series (above, left) is recommended, with D1-nc (above, center) used where destination distance is far enough to show mileages. The D11-1c confirmation signs (above, right) should be placed on long stretches, too. Besides MUTCD, the NACTO guide gives detail on signage content and placement. Individual signs should be specified by the task force.

DesPlaines QR code sticker.

Additionally, the City of 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.

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. The Lincoln Prairie Grass Trail is Mattoon's prime example.

Multi-use trail on its own right-of-way

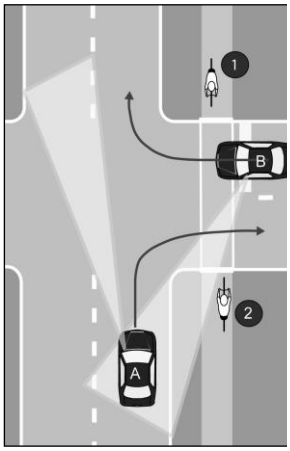
Sidepaths and Sidewalks

Sidepaths are trails running immediately parallel to a roadway, essentially a widened sidewalk. The width, in feet, can vary from eight (minimum) to ten (desired) or more, where heavily used. Compared to trails on their own rights-of-way, most sidepaths have a larger fraction of use for transportation purposes.

Sidewalks are often used for bicycling, particularly by children or when on-road conditions are uncomfortable. However, widths are usually too narrow for comfortable use by both cyclists and pedestrians. Sidewalks are not considered official bikeways, so where short segments are used for connectivity, signage recommending cyclists to dismount and walk is suggested.

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

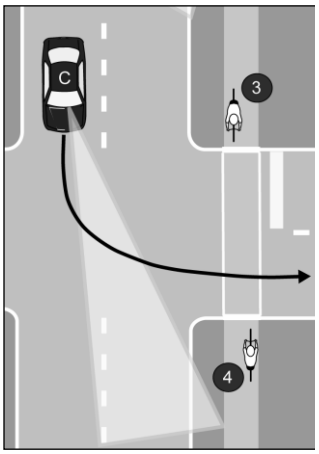
The figures below illustrate the visibility problems leading to intersection conflicts. At left, Car B crosses the sidepath to turn right onto the parallel street. Rarely do motorists stop at the stopline – usually stops are in the crosswalk or at the street edge, if at all. Many will look only to their left. Cyclist 2 might be seen. Cyclist 1 is much less likely to be seen.



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.

At right, 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.



Left-turn across sidepath.

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. The study provides some recommendations.

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, specifically the "continental" style
- Bicycle Signal Faces for bikeway-specific phases at signalized intersections. This treatment has Interim Approval from the Federal Highway Administration.
- As a backup option to Bicycle Signal Faces, signalized intersections may provide a manually-activated Lead Pedestrian Interval to give off-road cyclists and pedestrians a "head start" before conflicting right-turning traffic gets a green signal.

On-road Bikeways

Expanding Mattoon's bicycle network 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.[4] The visibility issues described above are a prime reason. Note that for each motorist turning motion illustrated above, an on-road cyclist on the right side of the road is within the motorist's viewing area. In fact, especially in cities during the day or when the bike is well-lit at night, most car-bike crashes occur at intersections – not from cars striking bikes from behind[5].

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. Since that is not the case for most of the City's other roads, various on-road bikeway options are usually recommended in this study.

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 and pavement markings. Bike Lane (MUTCD R3-17) signs are optional to supplement markings but are not recommended here. For one-way streets, bike lanes *usually* are better placed on the right side of the road.

Bike lanes (other side not shown).

Cyclists in each bike lane travel one-way with the flow of traffic. Sample results[2,6,7] around the country for roads with bike lanes include:

- More predictable movements by both cars and bikes
- Better cyclist adherence to laws about riding on the right side of the road
- Dramatic increases in bike usage with lower car-bike crash rates

[4] Moritz, W.E., "Survey of North American Bicycle Commuters: Design and Aggregate Results", Transportation Research Board, 1997.
[5] AASHTO Guide for the Development of Bicycle Facilities, pp. 3-8 and 3-9, 2012.
[6] AASHTO Guide for the Development of Bicycle Facilities, p. 22, 1999.
[7] Reynolds, C, et al., "The Impact of Transportation Infrastructure on Bicycling Injuries and Crashes: A Review of the Literature", *Environmental Health*, 2009.

Buffered bike lanes (NACTO).

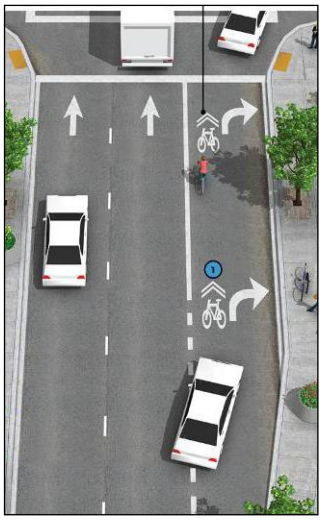
Parking is not permitted in designated bicycle lanes. When a road has bike lanes and adjacent parking, the bike lanes should be striped between the parking space and the travel lanes. When a road has bike lanes but no on-street parking, indicate the parking prohibition using No Parking (MUTCD R8-3) or No Parking Bike Lane (MUTCD R7-9) signs.

Bike lane options are evolving, to provide benefits in various situations. **Buffered Bike Lanes** are now accepted by the Federal Highway Administration and detailed in the NACTO Urban Bikeway Design Guide. A buffer space may be added between travel lane and bike lane, or between bike lane and curbside parking. This plan calls for Buffered Bike Lanes on several segments.

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 as primary recommendations in the study, they may be considered as a future 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. 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.



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

Green-Colored Pavement may now be used to enhance the conspicuity of bicycle lanes, or extensions of those lanes at intersections. The NACTO guide provides details.

Regular sweeping is important, as bike lanes tend to collect debris.

"Paved Shoulders"

For several segments recommended for this plan's bikeway network, officially-designated and marked Bike Lanes *could* be used *if* the absolute minimum widths cited in the AASHTO bike guide are used. Instead, unmarked striped spaces acting as urban cross-section (curbed) "paved shoulders" are the plan's recommendation – but most of these could be marked and signed as bike lanes, if desired.

The road segments in this category have curb-to-curb widths between 29-ft and 30-ft. Where travel lanes are reduced to 10-ft, a 30-ft curb-to-curb width could fit AASHTO's 5-ft bike lane minimum width – assuming AASHTO's recommendation of at least 4-ft between gutter seam and the center of the bike lane stripe is met. Less than 30-ft curb-to-curb or less than 28-ft seam-to-seam requires some compromise.

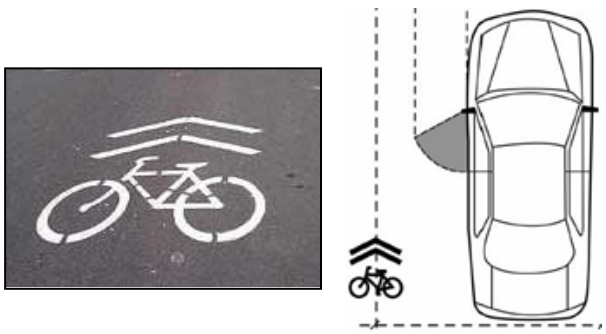
The plan's "paved shoulder" recommendations give the option of width between 4-ft (maximizing travel lane width) and whatever width (between 4-ft and 5-ft) results from minimizing travel lane width to 10-ft.

AASHTO's exceptions permitting bike lane pavement markings and signs on these are:

- *"On extremely constrained, low-speed roadways with curbs but no gutter, where the preferred bike lane width cannot be achieved despite narrowing all other travel lanes to their minimum widths, a 4-ft wide bike lane can be used."*
- AASHTO only *recommends* that 4-ft of the bike lane width be to the left of the gutter seam. NACTO's guide says that 4-ft is desirable, while 3-ft is the minimum and can be used when travel lanes have been reduced to their minimum widths.

Shared Lane Markings

Shared lane markings (SLMs, aka "Sharrows") inform cyclists of optimum lane positioning. Bicycle positioning on the roadway is important to avoiding conflicts with cars turning at intersections and doors opening on parked cars. Also, SLMs are more effective than signage alone in reminding drivers of the possibility that they will see a bicyclist in the road.



Shared Lane Marking.

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. Another SLM use, seen often in this plan, is to direct bicyclists to the center of the travel lane to improve visibility and reaction time when diagonally- or perpendicularly-parked cars back up.

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 *any level* of occupied parking, the center of the marking shall be 11 feet (or more) from the curb. SLMs that far from the curb are best at higher (>30-40%, perhaps) parking occupancies. This plan recommends SLMs for some road segments having parking and others that do not.

The markings should be placed right after an intersection and spaced at intervals of 250 feet thereafter. See MUTCD Part 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 have been temporarily dropped.

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" only use the bike network wayfinding signage described above, with no pavement striping or marking. Signed Bike Routes may be appropriate where:

- There is not enough roadway width for bike lanes,
- Relatively low – but nonzero – parking occupancy makes shared lane markings less desirable, or
- Low traffic and comfortable conditions reduce the need for the cost of pavement stripes and/or markings.

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.

Combined Bike/Parking Lanes

Some residential collector streets with wide lane widths permit on-street parking, but parked cars are sparse – under 5% or at most 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.

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 with bike route wayfinding signage, 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

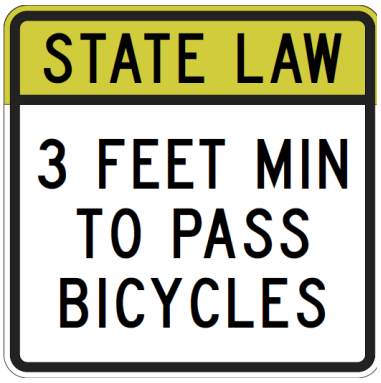
- Lower likelihood of the occasional parked car being hit by another car
- The traffic-calming effect of narrower lanes, i.e., slowing car speeds

"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.

Where road traffic volume is moderate and/or parking occupancy is more than rare but still very low, there is an increased probability of bicyclists moving from CBPL into travel lane when a car is approaching from behind. For these segments in the plan, additional warning signage is recommended.

Three-Foot Law Signage

Nationally, the "Share the Road" sign has been falling out of favor, due to recent studies showing misinterpretation by many motorists. To deliver a clearer message, IDOT recently approved local agency use of a regulatory sign informing drivers of the state's three-foot lateral clearance law when passing bikes. Installation should be limited to locations where the operation of the two vehicle types is demonstrating a problem or crash history. Several agencies have installed them, in partnership with Ride Illinois.



3-ft law sign.

Three-foot law signs are recommended in this study for four street segments needed for the bike network but lacking options to achieve a reasonable level of bicyclist comfort.


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 Appendix 1, 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. Alternatively, a special detector loop can be installed for bikes.

For new intersections, quadrupole loop detectors, microwave or new camera detection technology could be used, as they are more sensitive to bikes and motorcycles.

Improving Unsignalized Crossings

A good goal in developing a bicycle network is to avoid the use of unsignalized crossings of busy roads unless absolutely necessary. If needed, there are Federal Highway Administration-accepted treatments intended to improve safety of those crossings.

The Lincoln Prairie Grass Trail currently has several unsignalized crossings. Also, several of the plan's suggested bike network segments will have (relatively minor) unsignalized crossings. Suggestions for various treatments come from Chapter 3 of National Cooperative Highway Research Program Report #562 "Improving Pedestrian Safety at Unsignalized Crossings".

1) A regular traffic signal is considered the preferred solution, but MUTCD warrants must be met first. If the designated bikeway is on-road, automatic signal activation is needed for on-road bicycles, if pedestrian-activation buttons are out of reach from the road.

2) If the roadway width allows for it, median refuge islands have been demonstrated to reduce pedestrian crashes by nearly half.

3) If more than 20 pedestrians and bicyclists are projected to use an unsignalized crossing per peak hour, a manually-actuated Pedestrian Hybrid Beacon (PHB) traffic signal would be warranted, supplemented with a crosswalk and advance warning signage.

4) If a PHB is not warranted, manually-activated Rectangular Rapid Flashing Beacons (RRFB) could be used with crossing warning signs, below.

Left: Rectangular Rapid Flashing Beacon.
Right: W11-15 and W16-7P signs.

5) As a backup – or supplement – to RRFBs, demand-actuated overhead flashing beacons could be used. Better yet would be both overhead and side-mounted warning beacons,

as well as beacons in advance of the intersection. Off-road pedestrians and on-road bicyclists would activate the beacons with a push-button accessible to each.

6) Whether PHB, RRFB, warning beacon, or none; motorist warning signage should be placed in advance of the intersection (W11-15 or W11-2 crossing warning signs, with W16-9p "AHEAD" plaques) and at the intersection (W11-15 or W11-2 with W16-7p diagonal downward arrows), all in MYP color. Pedestrian (and bicyclist) signage should be added to warn about looking both ways – and using the pushbutton activation, if relevant.

7) Especially for crossings of multi-lane roads, use advanced stop lines, 30 to 50-ft in advance of the crossing, with Stop Here for Pedestrians signs (R1-5b or R1-5c). This distance helps reduce "multiple threat" crashes from inner lane traffic.

In addition to these NHCRP Report recommendations, IDOT will soon be releasing guidelines for uncontrolled (mid-block) crossings.

Appendix 2
Public Brainstorming Workshop Results

On April 11, 2018, a "Public Brainstorming Workshop" was attended by roughly 50 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 four geographic regions of the City were discussed and reported. These include:

Table 1, Northwest (north of Western, west of CN railroad tracks):

- Western Avenue
- 19th Street
- DeWitt Avenue
- 33rd Street

Table 2, Northwest (north of Western, west of CN railroad tracks):

- Western Avenue
- Between 19th and 33rd, north of DeWitt Avenue
- North 19th Street
- 43rd Street

Table 1, Southwest (south of Western, west of CN railroad tracks):

- Path to Lytle Park along old railroad right-of-way, from existing Lincoln Prairie Trail
- North from that path to Riddle School (32nd Street and Western Avenue)
- South from that path to the high school (26th Street)
- Connect to Lake Paradise, via two options (from 33rd Street)

Table 2, Southwest (south of Western, west of CN railroad tracks):

- 33rd Street north to Marshall
- Western Avenue to Riddle School to rural area
- Illinois 16 west from town and on Marshall Avenue
- Dole Road

Table 1, Northeast (north of Broadway, east of CN railroad tracks):

- Broadway Avenue bike lanes and signage, downtown to Peterson Park/2nd Street
- Access spurs from Lincoln Prairie Trail by hotel area (in ITEP grant)

- Flashing lights by Douglas-Hart trail spur
- Signage on DeWitt Avenue, west from Logan Street

Table 1, Southeast (south of Broadway, east of CN railroad tracks):

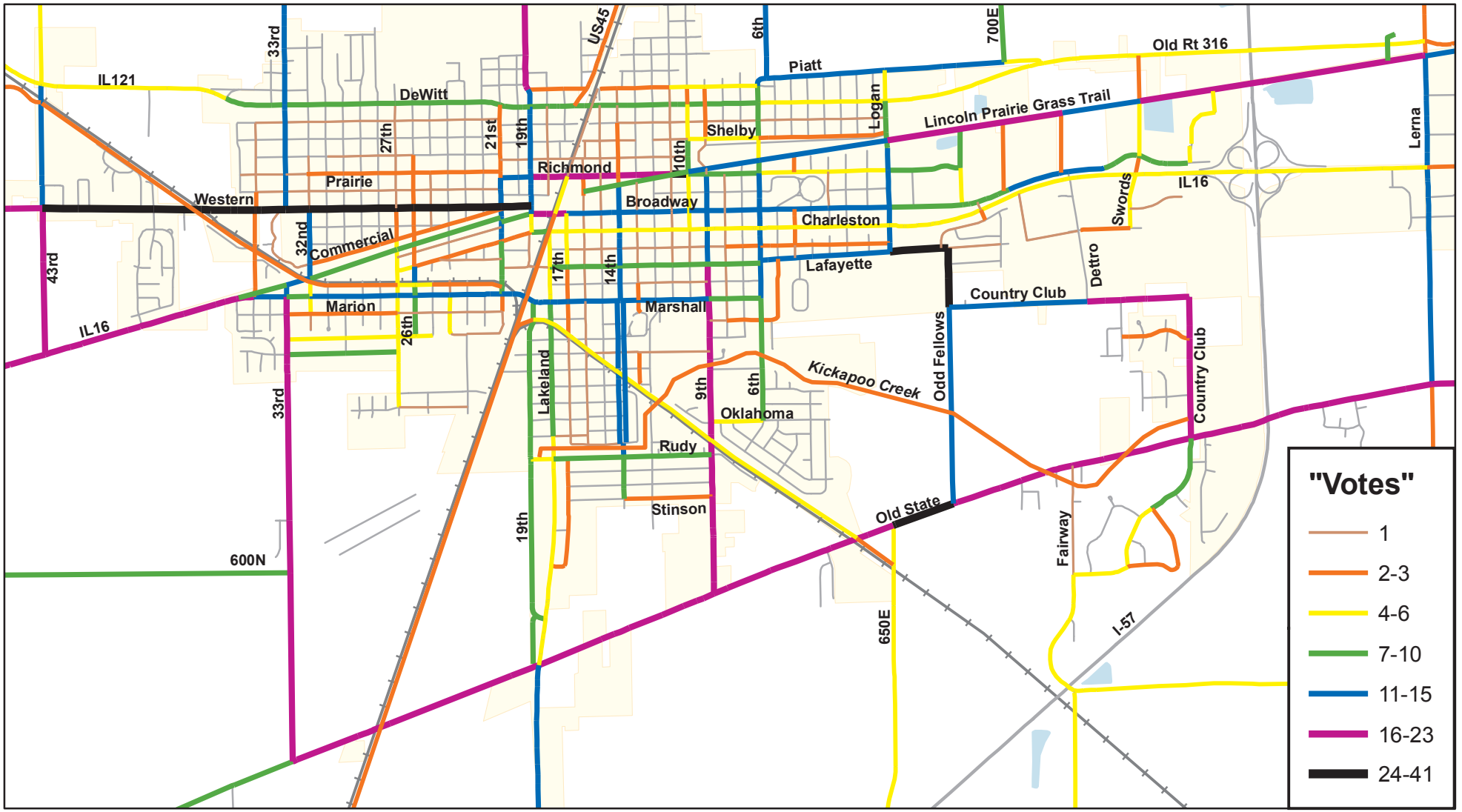
- 6th Street from Sports Complex to middle school to Oklahoma to 9th to Williams School
- That route to Lawson Park and 13th Street, via Edgar or Marshall
- Walmart and strip mall commercial area, via Lafayette, Odd Fellows, Country Club (fast!), Dettro
- 9th Street from Lincoln Prairie Trail all the way south

Table 2, East (east of CN railroad tracks):

- Access to Lincoln Prairie Trail
- Old State Road is too fast
- Other access points to trail by the hotels and commercial area
- Lerna Road too fast, especially by Old State
- Trail by Kickapoo Creek

Mattoon Bicycle Plan - Public Input on "Routes to Study"

Public Brainstorming Workshop 4/11/2018 - Individual Mapping Exercise



Appendix 3: 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:

Segment Definition	
Street	Street name of road segment
From (W/N)	West or North segment end
To (E/S)	East or South segment end
Existing Conditions	
Lanes	Number of through lanes (excludes center/other turn lanes)
Traffic ADT	Traffic count in vehicles/day. Gray or blue indicate estimates.
Speed Limit	Posted speed limit
Lane Width	Width from lane edge (often the gutter seam/pavement edge) to next lane, in feet
Extra Width	Pavement width from outer lane edge to gutter seam/pavement edge. May include paved shoulders, parking areas, bike lanes.
Gutter Pan	Width of cement gutter pan in feet
Parking 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 Recommendation	Description of the recommendation (if any) considered best for this segment.
Notes and other options	Either further detail on the primary recommendation, or "fallback" recommendation(s) if the primary cannot be achieved.
New BLOS	Shown only if an on-road, primary recommendation bikeway is implemented.
Implementation	
Public "Votes"	Number of 4-11-2018 public brainstorming workshop attendees suggesting this segment
Priority	Recommended implementation priority of segment

Street	From (N/W)	To (S/E)	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 Score	Public input votes	Priority
Douglas-Hart trail access	Douglas-Hart Nature Center	Lincoln Pr. Trail													No change (Off-road trail)			8	
(McFall)	Lincoln Pr. Trail	N-end											From current north end of paved McFall, a dirt road heads north and east. This point is 500' from the trail.		Off-road trail	Pave or otherwise improve the existing dirt road section. Acquire a 500' long easement to construct 10' trail linking Lincoln-Prairie Trail and the north end of McFall. Should be built to allow crossing of farm equipment.		6	High
(Swords)	Lincoln Pr. Trail	Broadway											Electric utility (Ameren) property 50' wide and 1/4 mile long, just E of Swords.		(Backup) Off-road trail	As a backup to the McFall trail, seek a trail easement from Ameren to construct 10' trail linking Lincoln-Prairie Trail and Broadway. Should be built to allow crossing of farm equipment.		6	
(Swords)	IL316/Dewitt	Lincoln Pr. Trail													None			2	
(Dettro trail access)	Lincoln Pr. Trail	Broadway													(Backup) Off-road trail	Only as a backup for the Ameren easement trail proposal. Seek 1/4-mile long trail easement along west part of Anamet property, to construct 10' trail linking Lincoln-Prairie Trail and the north end of Dettro. Should be accompanied by a mid-block crossing of Broadway.		2	
(Dettro extension)	Broadway	Charleston													Sidewalk	As part of an upcoming project, Dettro will be extended north to Broadway, and sidewalk constructed Broadway to Walmart.			High
(Mall E-side trail access)	Lincoln Pr. Trail	Broadway													(Backup) Off-road trail	As a (distant) backup for a Holiday and trail link route on the west side of the Rural King property, consider something similar on the east side.		2	
(Holiday trail access)	Lincoln Pr. Trail	N-end of Holiday													Off-road trail	Seek 320' trail easement from Rural King to construct a 10' trail linking to the Lincoln-Prairie Trail.		7	High
Holiday	N-end	Richmond											Just after Richmond, just a mall driveway with no separation from parking lot.	None	(Conditional) Shared Lane Markings	If trail link is built, use signage and Shared Lane Markings, possibly with striping to delineate "travel lanes" from parking lot.		7	(High)
4th	Lincoln Pr. Trail	Richmond													None			3	
(9th)	Lincoln Pr. Trail	Richmond												Not existing	Add trail link	Add an 85' trail link extending the softball complex trail and connecting the Lincoln-Prairie Trail to Richmond.		1	Medium
softball complex trail	(N 9th link)	(S 9th link)											Existing trail curves around ballpark to E-W trails on either side, but neither Shelby nor Richmond reached.	Trail - existing	No change (Off-road trail)			1	
(9th)	Shelby	softball complex trail												Not existing	None			1	
(13th)	future trail	Broadway											Blocked by building		None			1	
(26th)	Commercial	Charleston											Blocked by homes		None			2	
(27th)	Charleston	IL16/Marshall											Blocked by railroad, buildings		None			5	
(Oak)	14th	9th											Ameren property is most of this.		None	Unless Ameren property is redeveloped.		1	
(Walnut)	23rd	21st											City, school, and one more property between.		None	Building a trail is feasible, but low priority at this location.		1	
(Remington)	Charleston	Dettro													Future improvments	Include sidepath (or at least a sidewalk) when developed. If many crossings and driveways, add bike lanes, instead.		1	
(Lafayette)	19th	US45/Lakeland													None	Would require bridge over railroad.		1	
1000N (CH18)	Dole (CH13)	33rd /400E	2	1700	55	12	1	none	0	4	3.69	D	County road. Also, 3' more of stone shoulders.	None	Paved shoulders	Pave 4' shoulders, or use the same as 33rd-US45.	2.67	1	Low
1000N (CH18)	33rd /400E	19th/500E	2	1700	55	12	4	none	0	4	2.67	C	County road. New shoulders and rumble strips (1.5' off fogline, 8" wide, 3.5' clear zone) added.	None	No change (paved shoulders)	Traffic-tolerant cyclists accommodated.		1	
1000N (CH18)	19th/500E	US45 access	2	2350	55	12	4	none	0	4	2.83	C	County road. New shoulders and rumble strips (1.5' off fogline, 8" wide, 3.5' clear zone) added.	None	No change (paved shoulders)	Traffic-tolerant cyclists accommodated.		4	
1000N (CH18)	US45 access	Progress	2	2350	55	12	3	none	0	4	3.21	C	County road. Wider paved shoulders by I-57. Also, 3' more of stone shoulders.	None	Widen paved shoulders	Widen to 4', or use the same as 33rd-US45.	2.83	4	Low
1000N (CH18)	Progress	700E	2	3200	55	12	3	none	0	4	3.37	C	County road. Also, 3' more of stone shoulders.	None	Widen paved shoulders	Widen to 4', or use the same as 33rd-US45.	2.99	2	Low
1000N (CH18)	700E	1100E/Loxa	2	3050	55	12	3	none	0	4	3.34	C	County road. Also, 3' more of stone shoulders.	None	Widen paved shoulders	Widen to 4', or use the same as 33rd-US45.	2.96	1	Low
900N	Dole (CH13)	43rd/300E	2	100	55	9	0	none	0	1	2.08	B		None	None			3	
900N	43rd/300E	33rd /400E	2	100	55	9	0	none	0	1	2.08	B		None	None			4	
900N	33rd /400E	19th/500E	2	50	55	9	0	none	0	1	1.73	B		None	None			5	
900N	700E	Lerna/870E	2	250	55	10.8	0	none	0	1	2.37	B	10.5' by 870E.	None	None			4	
IL316/900N	Lerna/870E	1100E/Loxa	2	2200	55	10.7	0	none	0	2	3.71	D	Few feet of stone shoulders.	None	None			1	
Hayes	33rd	32nd	2	375	30	14	0	1	10	0	1.83	B		Both SWs	Bike Route wayfinding signage	Lower-traffic alternative to 33rd.		0	Medium
Piatt	19th	US45	2	275	30	15	0	0-pvd	40	0	1.91	B		S-SW	None			2	
Piatt	15th	14th	2	250	30	14	0	1	0	0	1.49	A	Yields both streets.	None	None			3	
Piatt	14th	12th	2	250	30	9.5	0	none	0	0	2.02	B	Yields every street.	None	Bike Route with wayfinding signage	Especially if Dewitt not added, then Bike Route wayfinding signs here. As much as possible, move yields to N-S roads.		3	Low
Piatt	12th	11th	2	300	30	9.5	0	none	0	0	2.11	B	Yields both streets.	None	Bike Route with wayfinding signage	Especially if Dewitt not added, then Bike Route wayfinding signs here. As much as possible, move yields to N-S roads.		3	Low
Piatt	11th	9th	2	350	30	9.5	0	none	0	0	2.19	B	Yields 10th, 11th.	None	Bike Route with wayfinding signage	Especially if Dewitt not added, then Bike Route wayfinding signs here. As much as possible, move yields to N-S roads.		5	Low
Piatt	9th	6th	2	400	30	9.5	0	none	0	0	2.26	B		None	Bike Route with wayfinding signage	Especially if Dewitt not added, then Bike Route wayfinding signs here. As much as possible, move yields to N-S roads.		6	Low
Piatt	6th	Logan	2	650	30	11.5	0	none	0	0	2.29	B		None	Bike Route with wayfinding signage	Especially if Dewitt not added, then Bike Route wayfinding signs here. As much as possible, move yields to N-S roads.		11	Low

Street	From (N/W)	To (S/E)	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 Score	Public input votes	Priority
Piatt	Logan	700E	2	900	55	11.5	0	none	0	1	2.94	C		None	None	Could add Bike Route wayfinding signage to get to 700E, if desired.		12	
Piatt	700E	IL316/Dewitt	2	250	55	11.5	0	none	0	1	2.29	B		None	None			6	
IL121	W-end	43rd	2	4350	55	12	3.3	none	0	3	3.15	C	IDOT road.	None	None	As a low priority, widen to 4' paved shoulders.		4	
IL121/Dewitt	43rd	Piatt	2	7350	45	12	0	2	0	3	4.29	D	IDOT road. 36' + 2' gutters, 3 lanes w/ CLTL.	None	None			4	
IL121/Dewitt	Piatt	33rd	2	7350	40	12	0	2	0	3	4.21	D	IDOT road. 36' + 2' gutters, 3 lanes w/ CLTL.	None	None			7	
IL121/Dewitt	33rd	27th	2	9000	35	12	0	2	0	3	4.20	D	IDOT road. 36' + 2' gutters, 3 lanes w/ CLTL.	Both SWs	None			10	
IL121/Dewitt	27th	21st	2	10000	35	12	0	2	0	3	4.25	D	IDOT road. 36' + 2' gutters, 3 lanes w/ CLTL.	Both SWs	None			9	
IL121/Dewitt	21st	19th	2	9950	35	12	0	2	0	3	4.25	D	IDOT road. 36' + 2' gutters, 3 lanes w/ CLTL 21st to 20th. Transitions 20th to 19th.	Both SWs	None			10	
US45/Dewitt	19th	US45 N	4	8000	35	12	0	2	0	3	3.79	D	IDOT road.	Both SWs	Road diet with buffered bike lanes	The traffic levels make it a good candidate for a 4-to-3 road diet (12-12-12) with buffered bike lanes (4' bike lanes, 2' travel side buffer).	*2.22*	8	Medium
Dewitt	US45 N	14th	4	7800	35	12	0	2	0	3	3.78	D	City road.	Both SWs	Road diet with buffered bike lanes	The traffic levels make it a good candidate for a 4-to-3 road diet (12-12-12) with buffered bike lanes (4' bike lanes, 2' travel side buffer).	*2.20*	8	Medium
Dewitt	14th	10th	2	7800	35	14.7	0	0-pvd	0	3	3.77	D	City road.	Both SWs	(Conditional) Bike Route with wayfinding and 3-Ft Law signage	Conditional - if road diet with buffered bike lanes 21st-14th done. Striping 4' from curbs possible, but 10.7' lanes and gutter seam issue. Widening to 32' curb-curb would allow 5' bike lanes and 11' travel lanes, but possible impact to some trees(?). Shared Lane Markings would have to be centered 4' out, perhaps too far here. Minimum is Bike Route signage, and 3-Ft Law sign at start in each direction.		8	(Low)
Dewitt	10th	6th	2	6300	35	18.7	0	0-pvd	0	3	2.99	C	City road. No parking.	Both SWs	(Conditional) Buffered bike lanes	If road diet with buffered bike lanes 21st-14th done, then 4' bike lanes and 2' travel side buffers here.	1.93	7	(Low)
Dewitt	6th	Logan	2	5600	35	18.7	0	0-pvd	0	3	2.93	C	City road. No parking.	Both SWs	(Conditional) Buffered bike lanes	If road diet with buffered bike lanes 21st-14th done, then 4' bike lanes and 2' travel side buffers here.	1.87	6	(Low)
IL316/Dewitt	Logan	Piatt	2	4050	45	10.7	0	none	0	3	4.14	D	IDOT road. Stone shoulders.	None	None	Lincoln-Prairie Trail is good alternative, for most.		4	
IL316/Dewitt	Piatt	N of Swords	2	3500	55	10.7	0	none	0	3	4.19	D	IDOT road. Stone shoulders.	None	None	Lincoln-Prairie Trail is good alternative, for most.		6	
IL316/Dewitt	N of Swords	Lerna	2	3500	55	10.7	0	none	0	3	4.19	D	IDOT road. Stone shoulders. By trail spur to Douglas-Hart, W11-1 Ahead, then w/ Trail Xing and simple Xwalk.	None	None	Lincoln-Prairie Trail is good alternative, for most.		5	
800N	Lerna	Loxa	2	1450	55	11	0	none	0	2	3.47	C	Shorter route from Lincoln-Prairie Trail to hospital than Loxa.	None	None			2	
800N	Dole (CH13)	43rd	2	125	55	9	0	none	0	2	2.42	B		None	None			3	
Moultrie (E-bd)	34th	21st	1	375	30	29.5	0	0-pvd	30	0	0.00	A	Parking on both sides, one travel lane. Very few stops, but many crossroads don't have stops either.	Both SWs	None			1	
Shelby	6th	Logan	2	900	30	9	0	none	0	0	2.71	C	S sidepath trail is NOT the Lincoln Prairie Trail, which is further S. This one on N side of park, curls to 10th link.	S-SP	None	Signage from 10th to this SP?		2	
Champaign	21st	19th	2	800	30	15	0	1	40	0	2.45	B	46' + 1' gutters. W-bd parallel parking, some E-bd diagnonal and parallel parking.	Both SWs	None			1	
Champaign	19th	10th	2	600	30	15	0	0-pvd	20	0	2.07	B	Stops every street. Bridge over railroad. Parking lower W of 14th. 19th Xing uncontrolled.	Both SWs	None			1	
Richmond	35th	32nd	2	*150*	30						2.21	B			None			1	
Richmond (W-bd)	32nd	25th	1	275	30	29.5	0	0-pvd	30	0	0.00	A	Parking on both sides, one travel lane. Very few stops, but many crossroads don't have stops either.	Both SWs	None			3	
Richmond (W-bd)	25th	21st	1	700	30	29.5	0	0-pvd	30	0	0.00	A	Parking on both sides, one travel lane. Very few stops, but many crossroads don't have stops either.	Both SWs	None			3	
Richmond	21st	19th	2	1700	30	16	8	1	5	0.5	0.00	A	E-bd parallel parking; W-bd 15-9 diagnoal parking (should be more) probably used only during church. Jog at 21st.	Both SWs	E-bd bike lane, W-bd Shared Lane Markings	E-bd: Stripe 5' bike lane. W-bd: place SLMs in center of lane. If diagonal parking can be converted to parallel, use same configuraiton (with bike lane) as E-bd. Test on-road bike triggering of green lights; add marking to detector corner and add R10-22 sign if so.		12	Medium
Richmond	19th	18th	2	2600	30	14.7	0	none	0	0.5	2.65	C	R turn lane, stoplight at 19th. No parking (except wider W-bd part).	Both SWs	"Paved shoulders"	Stripe paved shoulders (narrower than 5' bike lanes), choosing a width between 4.0-4.7'. Use Shared Lane Marking in right part of W-bd straight-ahead lane at 19th. Test on-road bike triggering of green lights; add marking to detector corner and add R10-22 sign if so.	1.98	17	High
Richmond	18th	CN railroad	2	2600	30	13	0	0-pvd	0	0.5	2.88	C	Concrete. No parking.	Both SWs	Bike Route wayfinding and warning signage	Also add E-bd W11-1 Bicycle Warning sign, just east of 18th. Could also add Shared Lane Markings centered 4' from curbs.		17	High
Richmond	CN railroad	16th	2	2800	30	13	0	0-pvd	0	0.5	2.92	C	Concrete. No parking.	Both SWs	Bike Route wayfinding and warning signage	Also add W-bd W11-1 Bicycle Warning sign, just west of 16th. Could also add Shared Lane Markings centered 4' from curbs.		18	High
Richmond	16th	14th	2	2800	30	14.6	0	0-pvd	0	0.5	2.70	C	No parking.	Both SWs	"Paved shoulders"	Stripe paved shoulders (narrower than 5' bike lanes), choosing a width between 4.0-4.6'.	2.04	18	Low
Richmond	14th	12th	2	2350	30	14.6	0	0-pvd	0	0.5	2.61	C	No parking.	Both SWs	"Paved shoulders"	Stripe paved shoulders (narrower than 5' bike lanes), choosing a width between 4.0-4.6'.	1.95	20	Low
Richmond	12th	11th	2	2350	30	11.2	0	none	0	0.5	3.05	C		None	Bike Route wayfinding signage			20	Low
Richmond	11th	10th	2	2000	30	11.2	0	none	0	0.5	2.97	C		None	Bike Route wayfinding signage			24	Low

Street	From (N/W)	To (S/E)	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 Score	Public input votes	Priority
Richmond	10th	9th	2	1850	30	11.2	0	none	0	0.5	2.93	C	Some stone parking bays.	None	(Conditional) Bike Route wayfinding signage	If trail link N from 9th/Lincoln Prairie Trail not built.		8	(High)
Richmond	9th	6th	2	1850	30	11.2	0	none	0	0.5	2.93	C	4-way stop at 6th.	None	None			7	
Richmond	6th	Logan	2	1850	30	11.2	0	none	0	0.5	2.93	C	4-way stop at Logan.	None	None			6	
Richmond	Logan	Holiday	2	2000	30	18.5	0	1	0	0.5	1.88	B	E area is at mall. No parking.	N-SW	Buffered bike lanes	4' bike lanes with 2' travel-side buffers.	0.83	7	Medium
Prairie	34th	21st	2	550	30	17.5	0	0-pvd	40	0	1.96	B	Yields or no traffic control on cross streets.	Both SWs	Bike Route wayfinding signage	Lower-traffic alternative to Western. Where yield signs or no traffic control, add stop signs to cross streets.		1	Medium
Western	Dole (CH13)	43rd	2	550	55	11	0	none	0	1	2.75	C	30mph close to 43rd	None	None	Could add another W-bd 3-Ft Law sign just after 43rd, or just stick with the W11-1 sign further east.		22	
Western	43rd	railroad	2	1900	30	11.5	0	none	0	1	2.98	C	School zone. No parking E-bd. Sidewalks (4') start E from school. Skewed railroad Xing.	Most S, some N	Bike Route wayfinding signage; and long-term improvement	Ideally (long-term?), widen pavement 4-5' each side to add 5' bike lanes, with striped shoulders/parking areas as a backup. In the interim, add Bike Route wayfinding sigange.		39	High
Western	railroad	33rd	2	2900	30	11.5	0	none	0	1	3.20	C	Segments w/ 10' striped, curbed parking just W of 34th to 33rd, low occupancy.	S-SW, most N	Bike Route wayfinding signage; and long-term improvement	Ideally (long-term?), widen pavement 4-5' each side to add 5' bike lanes, with striped shoulders/parking areas as a backup. In the interim, add Bike Route wayfinding sigange with a W-bd 3-Ft Law sign where the lane narrows west of 33rd.		41	High
Western	33rd	32nd	2	4150	30	11.8	6.3	0-pvd	5	1	1.50	B	Striped parking 6'3" W-bd, 6'6" E-bd. On-road bike seen.	Both SWs	Combined bike/parking lanes	For parked cars' sake, narrow lanes and widen parking to at least 7' at next resurfacing. Add E-bd W11-1 Bicycle Warning sign, due to higher traffic and bikes often riding in the travel lane where there are parked cars here and east.		36	High
Western	32nd	21st	2	4450	30	12	8	0-pvd	30	1	1.85	B	No stops. Parking % lower E. 4-way stop at 21st.	Both SWs	Combined bike/parking lanes	Especially in west part, bikes will ride in travel lane due to a moderate parking occupancy. Study the possible removal of parking on one side of the road and narrowing of travel lanes to 11-ft, to allow for 5-ft bike lanes on both sides. If not, then simply add a W-bd W11-1 Bicycle Warning sign, due to this and higher traffic, just west of 21st. For any segments with consistently high parking, use Shared Lane Marking(s) centered 11' from curb.		36	High
Western	21st	19th	4	4650	30	11.5	0	1	0	2	3.24	C	46' for four lanes between (lightly used) diagonal parking of 14' width each side. Stoplight at 19th.	Both SWs	None	Difficulty at the 19th jog (and W-bd proposed trail connection) makes 21st and Broadway the preferred option. However, if Western used, buffered bike lanes possible if parallel parking, else Shared Lane Markings are a much lesser alternative.		25	
Lytle Park	Western	32nd	1	*500*	25						3.02	C	Frequent speed bumps.		Spot improvements	Make cuts in speed bumps, for bicyclists.		1	Low
Commercial	32nd	28th	2	450	30	9.5	0	0-pvd	0	1	2.46	B	Off-road parking	S-SW poor	None			3	
Commercial	28th	27th	2	750	30	13.7	0	0-pvd	10	1	2.37	B	2-way stop at 27th.	S-SW poor	None			3	
Commercial	27th	Western	2	750	30	17.3	0	0-pvd	5	1	1.76	B	Difficult at Western/21st area. Some perpendicular parking directly off the road.	S-SW poor	None			3	
33rd/Broadway	IL16/Marshall	32nd	2	100	30	14	0	0-pvd	0	0	1.02	A	Jogs S at 21st. More like an alley. Stone shoulders, small setback, sidewalk condition poor.	S-SW	Bike Route wayfinding signage			11	Medium
Broadway	27th	21th	2	300	30	9	0	none	0	0	2.16	B	Jogs S at 21st. More like an alley. Stone shoulders, small setback, sidewalk condition poor.	S-SW	None			1	
Broadway	21st	19th	2	1200	25	17	0	1	0	1	1.78	B	20mph. Diagonal parking (used) w/ 34' between ends, but cars longer - should be <28'. Bus depot. Est. 60' total.	Both SWs	Buffered bike lanes	Would require change to parallel parking: each side 9' parking - 5' bike lane - 2' buffer - 14' travel lane. If diagonal parking kept, much lesser backup is Shared Lane Markings centered in travel lane. Add Shared Lane Marking in right part of straight-ahead E-bd lane at 19th. Test on-road bike triggering of green lights; add marking to detector corner and add R10-22 sign if so.	0.00	7	High
Broadway	19th	17th	2	3150	25	18	0	1	0	1	2.09	B	20 mph. CLTL + diagonal parking, used where no off-street parking (most). 49' between parking stalls, but cars longer - should be <44'. Stoplight at 19th. Amtrak station.	Both SWs	Shared Lane Markings	Centered in travel lanes, except right part of straight-ahead W-bd lane at 19th. Could stripe 5' bike lanes on the 200' bridge segment - if not, center 4' from curb there.		18	High
Broadway	17th	14th	2	3250	25	17	0	1	0	1	2.28	B	20mph. CLTL + diagonal parking, used where no off-street parking (most). 46' between parking stalls, but cars longer. Stoplights at 14th, 15th, 16th. L and R turn lanes at 14th.	Both SWs	Shared Lane Markings	Centered in travel lanes, except right part of straight-ahead W-bd lane at 19th and left part of right-turn lane E-bd at 14th.		15	High
Broadway	14th	13th	2	3250	25	18	0	1	0	1	2.11	B	20 mph. 54'+1' curbs. L and R turn lanes at 14th take up most of this one block segment. Plentiful off-street parking. Stoplights at 13th, 14th.	Both SWs	Combined bike/parking lanes	Remove W-bd right-turn lane at 14th. Stripe 8' CBPLs. Omit striping at perpendicular parking bays; add Shared Lane Markings centered in travel lanes there. Add W11-1 sign E-bd past 14th - or before heavier parking pockets.	1.08	15	High
Broadway	13th	9th	2	3250	30	20.2	0	0-pvd	5	1	1.97	B	20mph W of 12th, 30mph E.	Both SWs	Combined bike/parking lanes	Stripe 8' CBPLs. Omit striping at perpendicular parking bays; add Shared Lane Markings centered in travel lanes there.	0.90	15	High
Broadway	9th	6th	2	3350	30	20.2	0	0-pvd	40	1	2.62	C	30-50% cluster of on-street parking 6th-8th. Perpendicular parking bays *should* handle most (not all?) of this.	Both SWs	Combined bike/parking lanes	Stripe 8' CBPLs. Omit striping at perpendicular parking bays; add Shared Lane Markings centered in travel lanes there. Perhaps place the W11-1 signs before these heavy parking pockets instead of at the CBPL ends.	1.93	13	High

Street	From (N/W)	To (S/E)	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 Score	Public input votes	Priority
Broadway	6th	2nd	2	3200	30	19.2	0	1	3	1	2.12	B	Some perpendicular parking bays, w/ 5' from parking stripes to travel lane.	N-SW, most S	Combined bike/parking lanes	Stripe 8' CBPLs. Omit striping at perpendicular parking bays; add Shared Lane Markings centered in travel lanes there.	1.07	12	High
Broadway	2nd	Logan	2	2900	30	19.2	0	1	1	1	2.03	B	4' N-SW w/ big setback. Parking "only on parade days".	N-SW	Combined bike/parking lanes	Stripe 8' CBPLs. Omit striping at perpendicular parking bays; add Shared Lane Markings centered in travel lanes there.	0.96	11	High
Broadway	Logan	Holiday	2	4450	30	11.5	1.5	none	0	1	3.02	C	Paved. E-bd 12-(1 to 1.6 shoulder); W-bd 11-(1.8 to 2.4 shoulder). 4' N-SW w/ buffer.	N-SW	Future possibility	Could widen pavement, re-stripe to 11' travel lanes and 4' (without gutters) bike lanes.		7	
Broadway	Holiday	E-side of mall	2	4000	35	11.5	0	1	0	1	3.47	C	W-bd 18.5+1 curb, E-bd 11.5+1 shoulder. Carriage N-SW.	N-SW	Future possibility	Could re-configure for 11' travel lanes and 5' (with gutter) bike lanes.		10	
Broadway	E-side of mall	Anamet	2	1800	35	11	0	1-N	0	1	3.12	C	Concrete, worse condition. S: no curb; dropoff. Bad drains. No access (and gully) to Dettro's light at IL16. Carriage N-SW, saw bike on sidewalk.	N-SW	Future possibility	Might be able to widen street for 11' travel lanes and 5' bike lanes. Minimum 10' lanes and/or 4' "shoulders".		11	
Broadway	Anamet	E of Swords	2	1800	35	15	0	0	0	1	2.60	C	Concrete w/ curbs. Carriage S-SW.	S-SW	Future possibility	Could stripe for 10' travel lanes and 5' bike lanes - or 11' travel lanes and 4' "shoulders".		10	
Broadway	E of Swords	E-end	2	1900	35	12.5	0	2-N	0	2	3.15	C	W-bd 13+2 curb, E-bd 12+1 shoulder (no curb). 5' carriage N-SW.	N-SW	Bike Route wayfinding signage	If McFall trail spur from the Lincoln Prairie Trail is built, add wayfinding signs at least and possible Shared Lane Markings centered 4' from the curbs. In the future, might be able to widen street for 11' travel lanes and 5' bike lanes. Minimum 10' lanes and/or 4' "shoulders".		10	High
Charleston	27th	26th	2	1200	30	10	1	1	0	1	2.69	C	Gutter drops off.	S-SW	Bike Route wayfinding signage	Adding Shared Lane Markings centered 4' from curb is a feasible enhancement.		6	Medium
Charleston	26th	21st	2	1750	30	9.8	1	0-pvd	0	1	2.91	C	E-bd wider w/ left-turn lane by 21st. No stops. Also: 50% occupied 9.5' W-bd striped parking. E-bd 2' shoulder.	Both SWs	None			2	
Charleston	21st	19th	2	6700	35	12	0	2	0	2	3.85	D	IDOT road. 3 lanes w/transitions.	Both SWs	None			2	
IL16/Charleston	19th	US45/Lakeland	4	13400	35	12	0	2	0	2	3.85	D	IDOT road. 5 lanes w/ CLTL.	Both SWs	None			7	
IL16/Charleston	US45/Lakeland	17th	4	12500	35	12	0	2	0	2	3.82	D	IDOT road. 5 lanes w/ CLTL.	Both SWs	None			6	
IL16/Charleston	17th	10th	4	14000	35	12	0	2	0	2	3.88	D	IDOT road. 5 lanes w/ CLTL.	Both SWs	None			5	
IL16/Charleston	10th	6th	4	15000	35	12	0	2	0	2	3.91	D	IDOT road. 5 lanes w/ CLTL.	Both SWs	None			5	
IL16/Charleston	6th	Logan	4	15000	40	13	0	0-pvd	0	2	3.88	D	IDOT road. 35mph, both sidewalks W of 6th.	None	Sidewalk or Sidepath	Add a sidewalk, or 10' sidepath, on at least one side - likely the south, since Broadway on the north has a sidewalk.		5	High
IL16/Charleston	Logan	Crestview	4	14700	40	13	0	0-pvd	0	2	3.87	D	IDOT road.	None	Sidewalk or Sidepath	Add a sidewalk, or 10' sidepath, on at least one side - likely the south, since Broadway on the north has a sidewalk.		6	High
IL16/Charleston	Crestview	Dettro	4	15200	45	12	3.7	none	0	2	2.92	C	IDOT road. Divided. Shoulders in poor condition.	None	Sidewalk or Sidepath	Add a sidewalk, or 10' sidepath, on at least one side - likely the south, since Broadway on the north has a sidewalk. Crestview to Dettro is highest priority.		6	High
IL16/Charleston	Dettro	Swords	4	15200	45	12	3.7	none	0	2	2.92	C	IDOT road. Divided. Shoulders in poor condition.	None	Sidewalk or Sidepath	Add a sidewalk, or 10' sidepath, on at least one side - likely the south, since Broadway on the north has a sidewalk.		6	Medium
IL16/Charleston	Swords	Lerna	4	15600	45	12	10	none	0	2	1.17	A	IDOT road. Divided.	None	Sidepath	Wide shoulders serve cyclists, but an off-road facility is the longer-term ideal.		4	Low
IL16/Charleston	Lerna	Loxa	4	16100	55	12	10	none	0	2	1.30	A	IDOT road. Divided.	None	Sidepath	Wide shoulders serve cyclists, but an off-road facility is the longer-term ideal.		3	Low
Wabash (W-bd)	17th	8th	1	650	30	27	0	1.5	40	0	0.66	A	Brick E of 12th, paved W. Uncontrolled at 9th, 14th, 15th. 39' 8" total W of 15th.	Both SWs	None	Could be a 1-way signed Bike Route couplet with Lafayette, but brick sections and uncontrolled Xings not ideal.		1	
Wabash (W-bd)	8th	6th	1	450	30	27	0	1.5	20	0	0.00	A	Brick, 1-way W. Parking both sides, 30' total.	Both SWs	None	See above		2	
Wabash	6th	Logan	2	225	30	25.5	0	2	20	0	0.00	A	Brick, 29' 6" total.	Both SWs	None	See above		3	
Lafayette (E-bd)	US45/Lakeland	17th	1	250	30	18	0	0-pvd	60	0	2.10	B		Both SWs	None	Could be a 1-way signed Bike Route couplet with Wabash, but brick sections and uncontrolled Xings not ideal.		8	
Lafayette (E-bd)	17th	14th	1	600	30	15	0	0-pvd	60	0	2.86	C	Uncontrolled Xing at 14th.	Both SWs	None	See above		9	
Lafayette (E-bd)	14th	11th	1	350	30	15	0	0-pvd	60	0	2.59	C	Brick.	Both SWs	None	See above		9	
Lafayette (E-bd)	11th	9th	1	400	30	15	0	0-pvd	30	0	2.34	B	Uncontrolled Xing at 9th.	Both SWs	None	See above		8	
Lafayette (E-bd)	9th	6th	1	275	30	15	0	0-pvd	20	0	2.02	B	Uncontrolled Xing at 6th.	Both SWs	None	See above		9	
Lafayette	6th	Logan	2	2450	30	10	0	none	0	1	3.27	C	No stops. Utilities, trees close enough to hinder widening. Heavy bike use (per Strava) to head southeast of town.	Both SWs	3-Ft Law sign	Add 3-Ft Law sign E-bd past 6th. If maintained (including vegetation), low-pedestrian use sidewalk can (unofficially) serve less traffic-tolerant cyclists. No other great options, so priority raised on Charleston Ave sidepath on south side.		15	Medium
Lafayette	Logan	Odd Fellows	2	3500	30	11.5	0	none	0	2	3.45	C	Both sidewalks W of church.	S-SW; most N-SW	3-Ft Law sign	If maintained (including vegetation), low-pedestrian use sidewalk can (unofficially) serve less traffic-tolerant cyclists. No other great options, so priority raised on Charleston Ave sidepath on south side.		24	Medium
Crestview Dr	Lafayette	Crestview Rd	2	550	30	13	0	1	0	2	2.33	B	Stoplight at IL16.	Both SWs	None			1	
Remington	Dettro	Swords	2	*500*	30	14.4	0	0	0	2	2.09	B	Concrete.	None	Sidewalk or sidepath	Higher priority to have at least one continuous sidewalk or sidepath; other side lower priority.		3	Medium
IL16	W-end	Lake	2	3750	55	12	4	none	0	2	2.55	C	IDOT road.	None	Off-road trail	Hard-surfaced (paved?), ideally. Right-of-way or easement not secured.		8	Low
IL16	Lake	43rd	2	4150	55	12	4	none	0	2	2.61	C	IDOT road. City-owned old railroad ROW on north.	None	Off-road trail	Hard-surfaced (paved?), ideally. Right-of-way or easement not secured.		18	Low
IL16	43rd	35th	2	4300	45	12	4	none	0	2	2.51	C	IDOT road. 55mph W of Briar, 35mph E of 36th. City-owned old railroad ROW on north.	None	Off-road trail	Hard-surfaced (paved?), ideally.		17	Medium
IL16/Marshall	35th	33rd	2	5400	35	13.5	0	0-pvd	0	2	3.55	D	IDOT road.	S-SW	None			12	
IL16/Marshall	33rd	32nd	2	5400	35	12	0	0-pvd	0	2	3.74	D	IDOT road. 3 lanes with CLTL.	Both SWs	None			10	
IL16/Marshall	32nd	24th	2	7100	35	12	0	0-pvd	0	2	3.88	D	IDOT road. 3 lanes with CLTL. Sidewalk gaps both sides.	Most SWs	None			12	
IL16/Marshall	24th	21st	2	8600	35	12	0	0-pvd	0	2	3.98	D	IDOT road. 3 lanes with CLTL.	Most SWs	None			14	

Street	From (N/W)	To (S/E)	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 Score	Public input votes	Priority
Marshall	21st	19th	2	6500	30	13	0	0	0	2	3.58	D	Concrete. 3 lanes, 40' total.	N-SW	Sidepath	Street ROW has 22' off-road avaiable. Would need railroad/ICC approval. Backup: removal of center lane would enable buffered bike lanes to be added.		12	High
Marshall	19th	US45/Lakeland	2	6250	30	13	0	0	0	2	3.56	D	Concrete. 3 lanes, 40' total.	N-SW	Sidepath	Street ROW has 22' off-road avaiable. Would need railroad/ICC approval. Backup: removal of center lane would enable buffered bike lanes to be added.		12	High
Marshall	US45/Lakeland	14th	2	4950	30	14.8	0	0-pvd	0	0.5	2.96	C	No parking. Transition to 40', 3 lanes 17th to Lakeland (stoplight).	Both SWs	"Paved shoulders"	Stripe paved shoulders (narrower than 5' bike lanes), choosing a width between 4.0-4.8'. To transition to south-side sidepath proposed west of Lakeland, one Shared Lane Marking could be added to the right part of the W-bound turn lane, and another centered 4' from curb E-bound just past Lakeland.	2.29	11	Medium
Marshall	14th	9th	2	4500	30	14.8	0	0-pvd	0	0.5	2.91	C	No parking.	Both SWs	"Paved shoulders"	Stripe paved shoulders (narrower than 5' bike lanes), choosing a width between 4.0-4.8'.	2.24	11	Medium
Marshall	9th	6th	2	3150	30	15	0	0	0	0.5	2.70	C	Concrete. No parking.	Both SWs	"Paved shoulders"	Striped paved shoulders of width 4'-5' including gutter. If 5', could be marked and signed as bike lanes, but possibly don't, for consistency.	2.02	8	Medium
Country Club	Odd Fellows	Dettro	2	3100	40	11.3	0	none	0	2	3.64	D	55 mph in unincorporated (west), 30mph east	None	Paved shoulders or sidewalk/sidepath later.	As this segment is further developed, add either an off-road (sidewalk or sidepath) or on-road (4' paved shoulders, 11' travel lanes). For now, rely on the 3-Ft Law sign S-bd on Odd Fellows. Raises to high priority if rail-with-trail proposal to the southeast is not constructed.	2.47	14	Medium
Country Club	Dettro	Hallmark	2	1600	30	11.3	0	none	0	2	3.08	C	Between Country and Hallmark, S/W side and some N side has 12' lanes and 29'6" total, with very narrow shoulder and rolled gutter combination with bad drains and seam location. Grading makes extra shoulder width tough.	None	Paved shoulders or sidewalk/sidepath later.	Add either an off-road (sidewalk or sidepath) or on-road (4' paved shoulders, 11' travel lanes) facility. Where there are rolled gutters now, narrow travel lanes to 11', pave over gutter/shoulder seam, and switch to bike-friendly drain grates. Raises to high priority if rail-with-trail proposal to the southeast is not constructed.	1.91	17	Medium
Country Club	Hallmark	Old State (CH7)	2	1300	30	11.3	0	none	0	2	2.97	C		None	3-Ft Law sign now; paved shoulders or sidewalk/sidepath later.	Add either an off-road (sidewalk or sidepath) or on-road (4' paved shoulders, 11' travel lanes) facility. Where there are rolled gutters now, narrow travel lanes to 11', pave over gutter/shoulder seam, and switch to bike-friendly drain grates. Until shoulders are in place, add a 3-Ft Law sign N-bd past Old State. Raises to high priority if rail-with-trail proposal to the southeast is not constructed.	1.81	16	Medium
Country Club	Old State (CH7)	Greenbriar N	2	650	30	11.8	0	none	1	0	2.27	B		None	None			8	
Country Club	Greenbriar N	Greenbriar S	2	200	30	11.8	0	none	1	0	1.67	B		None	None			6	
Marion	33rd	27th	2	275	30	10.3	0	none	0	0	1.99	B	Parking off-road in gravel bays. 2-way stops at almost every cross street.	N-SW	Bike Route wayfinding signage	Switch stop signs to N-S roads, for cross-streets with lower (<600 ADT?) traffic. Backup: switch Marion stop signs to yields.		2	Medium
Marion	27th	21st	2	250	30	10.3	0	none	0	0	1.94	B	Parking off-road in gravel bays. 2-way stops at almost every cross street.	N-SW	Bike Route wayfinding signage	Switch stop signs to N-S roads, for cross-streets with lower (<600 ADT?) traffic. Backup: switch Marion stop signs to yields.		1	Medium
Marion	9th	8th	2	350	30	15	0	0	30	0	1.92	B		N-SW, some S	None			1	
Walnut	33rd	27th	2	325	30	10	0	none	0	0	2.10	B	No parking except gravel bays.	Both SWs	None			6	
Walnut	27th	26th	2	500	25	16	9	1	100	0	1.39	A	By high school. E-bd 9' parking + 1' gutter; W-bd 13' diagonal parking (need more). 20 mph.	S-SW	None			5	
Walnut	24th	23rd	2	550	30	13	0	1	1	0	2.04	B	Stops every street.	Both SWs	None			1	
Oak	33rd	27th	2	350	30	9	0	none	0	0	2.23	B	No parking except gravel bays.	Both SWs	None	If added to network, use Bike Route wayfinding signage.		9	
Essex	27th	E-end	2	*200*	30	13	0	1	10	0	1.64	B		Both SWs	None			1	
Oklahoma	9th	Illinois	2	1900	30	17.5	0	1	5	0	2.05	B	Boulevard (separated).	Both SWs	Bike Route wayfinding signage			6	Low
Oklahoma	Illinois	6th	2	1900	30	15.5	0	1	20	0	2.59	C	1' E-bd, 5' W-bd gutters. E-bd gutter turns into carriage sidewalk, used by parked cars.	Both SWs	Bike Route wayfinding signage			6	Low
Olive	US45/Lakeland	18th	2	*400*	30	15	0	0	10	0	1.73	B	Concrete.	S-SW	None			1	
Palm	17th	14th	1	*50*	30	10	0	none	0	0	1.50	B	9-12' alley on N side of drainage ditch.	None	None			1	
Rudy	19th	US45/Lakeland	2	600	30	11.1	9.2	0-pvd	0	2	0.02	A		N-SW	Combined Bike/Parking Lanes	Striping already in place, just add Bike Route wayfinding signs.		4	Medium
Rudy	US45/Lakeland	9th	2	2550	30	11.1	9.2	0-pvd	5	0.5	0.69	A	Already a CBPL. 4-way stop at 14th only. Stoplight (need on-road activation) at Lake Land. Saw on-road bike.	Both SWs	Combined Bike/Parking Lanes	Striping already in place, just add Bike Route wayfinding signs.		9	Medium
Stinson	14th	12th	2	550	30	13.7	0	0	10	0	2.06	B	Concrete, rolled gutter.	Both SWs	None			3	
Stinson	12th	9th	2	550	30	13.7	0	0	10	0	2.06	B	Concrete, rolled gutter W; asphalt E.	Both SWs	None			2	
600N	Dole (CH13)	Lake	2	25	55	8	0	0	0	1	1.47	A		None	None			6	
600N	Lake	33rd /400E	2	50	55	8	0	0	0	1	1.82	B		None	None			8	
Old State (CH7)	W-end	380E	2	2100	55	11.8	1	none	0	2.5	3.43	C	County road.	None	None	Ideally, pave 4' shoulders in the future.		7	
Old State (CH7)	380E	33rd/400E	2	2100	55	11.8	1	none	0	2.5	3.43	C	County road. 1400' from 400E to 380E gets more bike use, towards lakes.	None	Paved shoulders	4' paved shoulder width. If rumble strips added, use IDOT narrow strips with gaps and ensure at least 3' of rumble-free clear zones to the outsides of the rumbles.	2.42	7	Medium
Old State (CH7)	33rd/400E	US45/Lakeland	2	2700	55	11.8	1	none	0	2.5	3.56	D	County road.	None	None	Ideally, pave 4' shoulders in the future. See above regarding rumble strips.		18	

Street	From (N/W)	To (S/E)	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 Score	Public input votes	Priority
Old State (CH7)	US45/Lakeland	9th	2	5800	55	11.8	1	none	0	2.5	3.94	D	County road.	None	None	Ideally, pave 4' shoulders in the future. See above regarding rumble strips.		19	
Old State (CH7)	9th	650E	2	5300	55	11.8	1	none	0	2.5	3.90	D	County road.	None	None	Ideally, pave 4' shoulders in the future. See above regarding rumble strips.		22	
Old State (CH7)	650E	Odd Fellows	2	5400	55	11.8	1	none	0	2.5	3.91	D	County road.	None	None	Ideally, pave 4' shoulders in the future. See above regarding rumble strips.		25	
Old State (CH7)	Odd Fellows	Country Club	2	3600	50	11.8	1	none	0	2.5	3.65	D	County road. Some stone shoulder width - 3.5' most of road? 45mph E of Fairway.	None	None	Ideally, pave 4' shoulders in the future. See above regarding rumble strips.		23	
Old State (CH7)	Country Club	Lerna/870E	2	3700	50	11.8	1	none	0	2.5	3.66	D	County road. Some stone shoulder width. By homes, 45mph, 1' asphalt + 2' rolled gutters. High bicycle use (per Strava) now.	None	3-Ft Law sign	Add E-bd 3-Ft Law sign just east of Country Club. Ideally, pave 4' shoulders in the future. See above regarding rumble strips.		23	High
Old State (CH7)	Lerna/870E	E-end	2	1550	55	11.8	1	none	0	2.5	3.27	C	County road.	None	None	Ideally, pave 4' shoulders in the future. See above regarding rumble strips.		22	
Greenbriar	Fairway	Country Club S	2	*200*	30	11.8	0	none	1	0	1.67	B		None	None			5	
Greenbriar	Country Club S	Country Club N	2	*200*	30	11.8	0	none	1	0	1.67	B		None	None			2	
550N	Fairway/720E	Lerna/870E	2	125	55	10	0	none	0	1	2.10	B		None	None			5	
550N	Lerna/870E	E-end	2	500	55	10	0	none	0	1	2.81	C		None	None			5	
Dole (CH13)	1000N (CH18)	Western	2	300	55	9.5	0	none	0	1	2.60	C	County road. Pebbly (not yet sealed?) when observed.	None	None			2	
Dole (CH13)	Western	600N	2	500	55	9.5	0	none	0	1	2.85	C	County road. Pebbly (not yet sealed?) when observed.	None	None	One of two routes to Lake Paradise.		4	
Dole (CH13)	600N	S-end	2	300	55	9.5	0	none	0	1	2.60	C	County road. Pebbly (not yet sealed?) when observed.	None	None	One of two routes to Lake Paradise.		3	
Lake	IL16	600N	2	1500	55	10.5	1	none	0	1	3.08	C	Melting tar seen. Stone shoulders could be paved(?).	None	None	Use 400E, Old State, 380E, Paradise for lake.		8	
Lake	600N	S-end	2	1500	55	10.5	1	none	0	1	3.08	C	Melting tar seen. Stone shoulders could be paved(?).	None	None			9	
300E/43rd	1000N (CH18)	900N	2	325	55	9.5	0	none	0	1	2.64	C	Melting tar seen when observed.	None	None			4	
300E/43rd	900N	IL121	2	850	55	9.5	0	none	0	1	3.12	C	Melting tar seen when observed.	None	None			6	
43rd	IL121	Western	2	2150	35	10	0	none	0	1	3.32	C	Grading would be needed before shoulders added.	None	None	Ideally, pave 4' shoulders in the future.		13	
43rd	Western	IL16	2	1900	35	10	0	none	0	1	3.25	C		None	(Conditional) paved shoulders	If old railroad ROW trail along IL16 built, pave 4' shoulders, as a low priority.	2.13	17	(Low)
34th	Moultrie	Prairie	2	250	30	10	0	0-pvd	1	0	1.98	B		Some W-SW	None			1	
34th	Prairie	Western	2	550	30	11.8	0	1	1	0	2.18	B		None	Bike Route wayfinding signage	End of Prairie's alternative to Western.		2	Low
Park	Western	IL16/Marshall	2	1000	30	10.5	0	0	0	0	2.62	C	N-bd 1' asphalt + 2' gutter adjacent to carriage SW. N of RR, N-SW set back. S-bd no curb.	N-SW	None			3	
400E/33rd	1000N (CH18)	900N	2	1150	55	12	0	none	0	1	3.01	C	Grading would be needed before shoulders feasible.	None	None	Ideally, pave 4' shoulders, in the future.		11	
33rd	900N	Hayes	2	1350	55	12	0	none	0	1	3.09	C	Grading would be needed before shoulders feasible. 30mph at north end, inside city limits.	None	3-Ft Law sign	Add a N-bd 3-Ft Law sign north of Hayes. Ideally, pave 4' shoulders, in the future.		15	Medium
33rd	Hayes	IL121/Dewitt	2	1350	30	13	0	none	5	1	2.69	C		Most E-SW	None			15	
33rd	IL121/Dewitt	Western	2	1950	30	10.3	0	0-pvd	0	1	3.13	C	No parking. Unusual gutter. Unprotected IL121 Xing.	W-SW, some E	None			12	
33rd	IL16/Marshall	Marion	2	1850	30	13	0	2	0	1	2.78	C	No parking.	Both SWs	"Paved shoulders"	Stripe 5' from curbs (2' gutter, 3' paved), with 10' travel lanes. Don't mark as bike lanes.	2.35	17	Medium
33rd	Marion	Oak	2	1850	30	13	0	2	0	1	2.78	C	No parking.	Both SWs	"Paved shoulders"	Stripe 5' from curbs (2' gutter, 3' paved), with 10' travel lanes. Don't mark as bike lanes.	2.35	19	Medium
33rd	Oak	600N	2	1350	55	11	0	none	0	1	3.20	C	Melting tar on hot day	none	3-Ft Law sign	Add a S-bd 3-Ft Law sign south of Oak. Ideally, pave 4' shoulders, in the future.		22	High
400E/33rd	600N	Old State (CH7)	2	1200	55	11	0	none	0	1	3.14	C	Melting tar on hot day	none	None	Ideally, pave 4' shoulders in the future.		20	High
32nd	Hayes	Piatt	2	375	30	14	0	1	10	0	1.83	B		Both SWs	Bike Route wayfinding signage	Lower-traffic alternative to 33rd.		0	Medium
32nd	Piatt	Champaign	2	375	30	9.5	0	none	0	0	2.22	B	2-way stop at DeWitt. No traffic control at 1-way Moultrie, Shelby.	W-SW	Bike Route wayfinding signage	Lower-traffic alternative to 33rd. Add stops to Moultrie and Shelby. For both Dewitt directions, add W11-1/W16-2P in advance and W11-1/W16-7P at the intersection.		0	Medium
32nd	Champaign	Western	2	150	30	9.5	0	none	0	0	1.76	B	Yields at Richmond, Champaign. 2-way stop at Western.	W-SW	Bike Route wayfinding signage	Lower-traffic alternative to 33rd. For Richmond and Champaign, add W11-1/W16-7P signs at the intersection. For both Western directions, add W11-1/W16-2P in advance and W11-1/W16-7P at the intersection.		1	Medium
32nd	Western	railroad/ Broadway	2	1750	30	11.2	8.2	0-pvd	10	1	0.94	A	Striped parking 8' N, 8.5' S.	W-SW	Combined Bike/Parking Lanes	Striping already in place, just add Bike Route wayfinding signs.		13	Medium
32nd	railroad/ Broadway	IL16/Marshall	2	1800	30	11.2	8.2	0-pvd	10	1	0.95	A	Striped parking 8' N, 8.5' S.	W-SW	None			5	
32nd	IL16/Marshall	Marion	2	400	30	9.5	0	none	0	0	2.26	B		Both SWs	None			4	
27th	IL121/Dewitt	Prairie	2	900	30	10	8	0-pvd	10	0	0.76	A		W-SW	Combined Bike/Parking Lanes	Striping already in place, just add Bike Route wayfinding signs.		1	Low
27th	Prairie	Western	2	1100	30	10	8	0-pvd	10	0	0.87	A		W-SW	Combined Bike/Parking Lanes	Striping already in place, just add Bike Route wayfinding signs.		1	Low
27th	Western	Pine	2	950	30	10	8	0-pvd	10	0	0.79	A		W-SW	Combined Bike/Parking Lanes	Striping already in place, just add Bike Route wayfinding signs.		3	Low
27th	Pine	Commercial	2	950	30	10	1.5	0.7	0	0	2.30	B	No parking. Gutter dropoffs.	W-SW	Bike Route wayfinding signage	Adding Shared Lane Markings centered 4' from curb is a feasible enhancement.		3	Low
27th	Commercial	Charleston	2	1100	30	10	1.5	0.7	0	0	2.38	B	No parking. Gutter dropoffs.	W-SW	Bike Route wayfinding signage	Adding Shared Lane Markings centered 4' from curb is a feasible enhancement.		5	Medium
27th	IL16/Marshall	Marion	2	1650	30	11	0	none	0	0.5	2.89	C	Some cars parked in gravel bays.	Some SWs	None			5	
27th	Marion	Walnut	2	1650	30	11	0	none	0	0.5	2.89	C		Some SWs	None			6	
27th	Walnut	Dakota	2	1200	30	11	0	none	0	0.5	2.73	C	Perpendicular parking well off-road by high school.	Some SWs	None			4	
27th	Dakota	Essex	2	700	30	13	0	1	10	0.5	2.34	B		Both SWs	None			5	
26th	Champaign	Commercial	2	225	30	9	0	none	0	0	2.01	B	Intersections with busier 1-way cross-streets have no traffic controls.		None			2	

Street	From (N/W)	To (S/E)	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 Score	Public input votes	Priority
26th	Charleston	IL16/Marshall	2	1600	30	17.2	0	0.7	0	0	1.93	B	W-side perpendicular parking by IL16 sticks out too far.	Both SWs	Buffered bike lanes	Stripe buffered bike lanes (4' including gutter, 2' travel lane buffer), except S-bound near IL16/Marshall - where a Shared Lane Marking centered in the lane would keep bikes away from perpendicular parking there. If parking must be retained, striped Combined Bike/Parking Lanes of width 7-7.9'.	0.95	13	Medium
26th	IL16/Marshall	Marion	2	500	30	17.2	0	0.7	0	0	1.34	A	No parking. Bad drains.	Both SWs	Buffered bike lanes	Stripe buffered bike lanes (4' including gutter, 2' travel lane buffer).	0.36	8	Medium
26th	Marion	Walnut	2	500	30	17.2	0	0.7	0	0	1.34	A	No parking, but bad compliance during major events at high school. Bad drains.	Both SWs	Combined Bike/Parking Lanes	Stripe Combined Bike/Parking Lanes of width between 7 and 7.9-ft. Sign to allow parking only during those major event times.	0.36	8	Medium
25th	Richmond	Commercial	2	*150*	30						2.21	B						1	
24th	railroad	IL16/Marshall	2	*50*	30						1.65	B						1	
24th	IL16/Marshall	Marion	2	1900	30	10.5	0	none	0	0	2.95	C	No parking S-bd.	None	None			4	
24th	Marion	Walnut	2	550	30	10.5	0	none	0	0	2.32	B	Divided, w/ sidewalks, briefly at S-end.	None	None			4	
21st	IL121/Dewitt	Moultrie	2	1350	30	19	0	1	50	1	2.49	B	Uncontrolled Xing at DeWitt.	Both SWs	None	If added to network, could striped Combined Bike/Parking Lanes if parking is usually below 10%, or add Shared Lane Markings centered 11' from curbs if parking averages more than 30-50%. In between, only Bike Route signs would work.		3	
21st	Moultrie	Champaign	2	2000	30	19	0	1	50	1	2.69	C		Both SWs	None	If added to network, could striped Combined Bike/Parking Lanes if parking is usually below 10%, or add Shared Lane Markings centered 11' from curbs if parking averages more than 30-50%. In between, only Bike Route signs would work.		2	
21st	Champaign	Richmond	2	2000	30	14	0	0-pvd	0	1	2.69	C	54' total. Diagonal parking marked and used, 28' between.	Both SWs	None	If added to network, either repeat cross section below, or center Shared Lane Markings in travel lane, if diagonal parking needs to be kept.		2	
21st	Richmond	Western	2	3100	30	14	0	0-pvd	0	1	2.91	C	Bad intersection at Western, Commercial. 54' total. A bit of diagonal parking marked and used, 28' between; otherwise 27' lanes.	Both SWs	Buffered bike lanes	Remove N-bd right-turn lane at Richmond. Where diagonal parking now, would require change to parallel parking: each side 8' parking - 2' buffer - 4' bike lane - 13' travel lane. If diagonal parking kept, much lesser backup is Shared Lane Markings centered in travel lane (where diagonal), 4' from curb where no parking.	1.69	14	High
21st	Western	Broadway	2	4200	30	19.6	0	0-pvd	0	1	2.12	B	Widens for diagonal parking, just S of Commercial: 1.5 gutter - 13 N-diagonal - 21 N-bd - 14 S-bd - 15 S-diagonal.	Both SWs	Buffered bike lanes	Where diagonal parking now, would require change to parallel parking: each side 8' parking - 2' buffer - 4' bike lane - 2' buffer - 15.2' travel lane (or skip buffer on travel lane side). Where narrower, 5' bike lane - 2' buffer - 12.6' travel lane. If diagonal parking kept, much lesser backup is Shared Lane Markings centered in travel lane (where diagonal), 4' from curb where no parking.	0.61	12	High
21st	Broadway	Charleston	2	4200	30	19.6	0	0-pvd	0	1	2.12	B	S-bd L turn lane at Charleston.	Both SWs	None			12	
IL16/21st	Charleston	Marshall	2	6150	30	14	0	0-pvd	0	2	3.42	C	IDOT road. 13' N-bd, 11' CLTL, 15' S-bd. Light at Marshall.	Both SWs	None	Not enough room for bike lanes, which would be needed at this traffic level.		10	
21st	Marshall	Marion	2	325	30	12	0	none	0	0	1.88	B	Park off-road.	Both SWs	Bike Route wayfinding signage	Includes crosswalk at S-face of Marshall intersection.		3	High
19th (CH14)	1000N (CH18)	900N	2	750	55	10	0	none	0	1	3.01	C	County road.	None	None			15	
19th (CH14)	900N	Evergreen	2	750	55	10	0	none	0	1	3.01	C	County road.	None	None			19	
19th (CH14)	Evergreen	Piatt	2	1550	30	10.8	0	0-pvd	0	1	2.96	C	County road. No parking.	Some E-SW	3-Ft Law sign	Add N-bd 3-Ft Law sign, 1-2 blocks past Piatt.		19	Medium
19th (CH14)	Piatt	IL121/Dewitt	2	1450	30	18	0	0-pvd	0	1	1.89	B	Stoplight at DeWitt. S-bd no parking.	W-SW	(Conditional) Combined Bike Parking Lanes	If Dewitt road diet 21st-14th done, add Combined Bike/Parking Lanes striping between 7-8' from curbs.	0.86	15	(Medium)
US45/19th	IL121/Dewitt	Richmond	4	6800	30	11	0	0-pvd	0	2	3.49	C	IDOT road. 55' total, 5 lanes w/ CLTL.	Both SWs	None			13	
US45/19th	Richmond	Western	4	7100	30	11	0	0-pvd	0	2	3.52	D	IDOT road. 55' total, 5 lanes w/ CLTL.	Both SWs	None			14	
US45/19th	Western	Broadway	4	10800	30	11	0	0-pvd	0	2	3.73	D	IDOT road. 55' total, 5 lanes w/ CLTL.	Both SWs	None			14	
US45/19th	Broadway	Charleston	4	8400	30	11	0	0-pvd	0	2	3.60	D	IDOT road.	Both SWs	None			6	
19th	Marshall	Olive	2	1400	30	10.3	6.8	1.2	5	1	1.17	A	Parking unused except 20% by homes near Essex.	None	Combined Bike/Parking Lanes	Striped already, just add Bike Route wayfinding signs.		7	Medium
19th	Olive	US45/Lakeland	2	700	30	11.5	0	none	0	1	2.48	B	Not good access to US45 businesses.	None	Bike Route wayfinding signage	Some driveways to US45 businesses, encourage others.		7	Medium
19th	19th	S-end	2	100	30	11.5	0	none	0	1	1.49	A	Access road dead-ends near Old State/US45.	None	Link and intersection improvements	Provide short trail link from S-end of 19th to US45/Old State intersection, with crosswalks.		7	Medium
US45	N-end	Dewitt	2	3700	40	12	0	none	9	2.5	3.85	D	Some 2-3' paved shoulder N-bd. 55mph further north.	None	None	Rail w/ trail looks tough due to grading.		2	
US45/Lakeland	Charleston	Lafayette	4	8900	35	11	0	2	0	2	3.76	D	IDOT road. 5 lanes, 55' + 2' gutters, first block narrower.	Both SWs	None			4	
US45/Lakeland	Lafayette	Marshall	4	8500	35	11	0	2	0	2	3.74	D	IDOT road. 5 lanes, 55' + 2' gutters.	Both SWs	None			6	
US45/Lakeland	Marshall	Olive	4	10100	35	11	0	2	0	2	3.83	D	IDOT road. 5 lanes, 55' + 2' gutters.	Both SWs	None			7	
US45/Lakeland	Olive	Rudy	4	10100	35	11	0	2	0	2	3.83	D	IDOT road. 5 lanes, 55' + 2' gutters.	Both SWs	None			6	
US45/Lakeland	Rudy	19th	4	7700	35	12	0	2	0	2	3.57	D	IDOT road. 5 lanes, 60' + 2' gutters. Saw bike using adjoining business parking lots.	None	Add sidewalks	Prioritize east sidewalk, especially where commercial parking lots do not connect.		6	High
US45/Lakeland	19th	Old State (CH7)	4	7700	45	12	10	none	0	2	0.81	A	IDOT road. Divided.	None	Link and intersection improvements	Provide short trail link from S-end of 19th to US45/Old State intersection, with crosswalks.		6	Medium
US45/Lakeland	Old State (CH7)	Athletic	4	7650	45	12	10	none	0	2	0.81	A	IDOT road. Divided. 55mph 1/2 mi S of Old State to 1/2 mi N of I-57.	None	Shoulder improvements	Unless an off-road sidepath is possible, use paved shoulders. Add narrow rumble strips, regularly sweep. W11-1 Bicycle Warning signs. Perhaps lower speed to 45mph.		12	Medium

Street	From (N/W)	To (S/E)	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 Score	Public input votes	Priority
17th	Broadway	IL16/Charleston	2	950	25	11.5	0	0-pvd	0	1	2.44	B	Diagonal both sides 14', with 100% occupancy.	Both SWs	Shared Lane Markings	Placed in centers of lanes. Test for on-road bike detection at IL16, adding markings and R10-22 signs if needed.		5	Low
17th	L16/Charleston	Wabash	2	700	30	17.5	7	1	40	0.5	0.01	A	S-bd 18' w/ 7+1 parallel parking. N-bd 17 w/ 13+1 diagonal.	Both SWs	Shared Lane Markings	Place in center of N-bd lane and centered 11' from S-bd curb.		4	Low
17th	Wabash	Lafayette	2	700	30	20	0	0-pvd	20	0	1.37	A		Both SWs	Bike Route wayfinding signage			4	Low
17th	Lafayette	Marshall	2	650	30	20	0	0-pvd	20	0	1.33	A	Uncontrolled Xing of Marshall.	Both SWs	Bike Route wayfinding signage			2	Low
17th	Marshall	railroad	2	650	30	20	0	0-pvd	20	0	1.33	A		Both SWs	None	Bike Route wayfinding signage, if added to network.		2	
17th	railroad	Palm	2	350	30	14.9	0	0-pvd	30	0	1.93	B	Almost no traffic Olive-Palm. No sidestreet controls.	Both SWs	None	Bike Route wayfinding signage, if added to network.		1	
17th	Rudy	Stinson	2	1650	30	11.2	0	none	0	1	2.94	C	Some stone shoulder. Good access to backs of US45 businesses.	None	Bike Route wayfinding signage; 3-Ft Law sign	Supplement wayfinding signage with a S-bd "State Law - 3 Feet Min To Pass Bicycles" sign just south of Rudy.		2	Medium
17th	Stinson	US45/Lakeland	2	850	30	11.2	0	none	0	1	2.61	C	Named "Warren" on E-W block. Some stone shoulder. Good access to backs of US45 businesses.	None	Bike Route wayfinding sign			2	Low
16th	Shelby	Richmond	2	*500*	30	14	0	1	30	0	2.22	B	40$ S-bd parking, perpendicular N.	Both SWs	None			1	
16th	Richmond	future trail	2	800	30	11.2	8	1	60	0	1.71	B		Both SWs	Shared Lane Markings	Centered 11' from curb.		3	Medium
16th	future trail	Richmond	2	800	30	13.2	0	0	0	1	2.33	B	54'4" total incl. 14' (w/ gutter) diagonal parking 80-100% - longer vehicles stick way out in lane. Stoplight at Broadway.	Both SWs	Shared Lane Markings	Centered in travel lanes, to avoid diagonal parking.		1	Medium
16th	Richmond	IL16/Charleston	2	1600	30	13.2	0	0	0	1	2.68	C	54'4" total incl. 14' (w/ gutter) diagonal parking 80-100% - longer vehicles stick way out in lane. Stoplight at Broadway, Charleston.	Both SWs	None			1	
16th	IL16/Charleston	Wabash	2	1050	30	16.8	0	0	0	1	1.93	B	Parking 100% incl. S-bd 9' striped, N-bd 14' diagonal.	Both SWs	None			1	
16th	Wabash	Palm	2	700	30	15.3	0	0-pvd	5	1	2.04	B	No parking until S of Marion, then 5%. Uncontrolled Xings of Wabash, Lafayette, Marshall.	Both SWs	None			1	
15th	DeWitt	future trail	2	1400	30	17.4	0	0.6	10	1	2.14	B		Some SWs	None			1	
15th	future trail	Broadway	2	2250	30	16.5	8	1	50	1	1.08	A		Most SWs	None			1	
15th	Broadway	IL16/Charleston	2	2000	30	16	8	1.3	40	1	0.84	A	No parking S part - turn lane. Stoplights at Broadway, IL16.	Both SWs	None			1	
15th	IL16/Charleston	Wabash	2	1450	30	19.5	0	0-pvd	100	1	3.05	C	No parking N part - turn lane	Both SWs	None			1	
15th	Wabash	Lafayette	2	1450	30	15	0	0-pvd	40	1	2.90	C	No parking N part. S 100%.	Both SWs	None			1	
14th	Piatt	IL121/Dewitt	2	600	30	15	0	0-pvd	50	0.5	2.48	B		W-SW	Bike Route wayfinding signage			1	Low
14th	IL121/Dewitt	Moultrie	2	2450	30	17	0	1	1	0.5	2.27	B	Concrete. 4-way stop at DeWitt.	Both SWs	Combined bike/parking lanes	Stripe 8' CBPLs - or as low as 7' - including gutters.	1.30	1	Medium
14th	Moultrie	future trail	2	2450	30	17	0	1	1	0.5	2.27	B	Concrete N of Champaign.	Both SWs	Combined bike/parking lanes	Stripe 8' CBPLs - or as low as 7' - including gutters.	1.30	2	Medium
14th	future trail	Broadway	2	3450	30	13	0	1	0	0.5	3.03	C	54'5"+1' gutters. Diagonal parking (some S-bd use, no N-bd) leaving 26' for lanes, just N of Broadway.	Both SWs	Combined bike/parking lanes	Stripe 8' CBPLs on entire segment, and use in place of diagonal parking near Broadway. If parking occupancy is/becomes significant by Broadway, Shared Lane Markings centered 11' out could be used (outside of the CBPLs), or there is enough room for 5' bike lanes between the parking and travel lanes.	0.99	12	Medium
14th	Broadway	Charleston	2	3450	30	13	0	1	0	0.5	3.03	C	54'5"+1' gutters. N-bd right-turn lane at Broadway, L and R turn lanes at Charleston. Stoplights at both.	Both SWs	Bike lanes	If it is desired to keep all current turn lanes, and knowing that off-road lots address parking needs, the configuration at Broadway could be: (S-bd) 5' bike lane, 2' buffer, 21' lane; (N-bd) 11' lane, 5' bike lane, 12' right-turn lane. At IL16: (S-bd) 11' right-turn lane, 5' bike lane, 11' lane, 11' left-turn lane; (N-bd) 13' lane, 5.5' bike lane. Use dashed lines per AASHTO for transitions.	1.45	12	High
14th	Charleston	Marshall	2	3650	30	14.7	0	0-pvd	0	0	2.75	C	No parking. Left-turn lane by Charleston.	Both SWs	"Paved shoulders"	Stripe paved shoulders (which would be narrower than 5' bike lanes). Width between 4.0-4.7'. No parking signs to prevent confusion. Shared Lane Markings centered in straight-ahead N-bd lane at IL16.	2.08	12	High
14th (S-bd)	Marshall	Oak	2	3300	30	10.3	8	0-pvd	30	0	1.90	B	Bike seen on sidewalk. Lawson Park.	Both SWs	Shared Lane Markings	Centered 11' from curb. Add 3-Ft Law sign shortly after Marshall		15	High
14th (N-bd)	Marshall	Oak	2	3300	30	10.3	0	0.8	0	0	3.25	C	Bike seen on sidewalk. Lawson Park.	Both SWs	Shared Lane Markings	Centered 4' from curb		15	High
14th (S-bd)	Oak	Maple	2	2700	30	10.3	8	0-pvd	30	0	1.79	B		Both SWs	Shared Lane Markings	Centered 11' from curb.		12	High
14th (N-bd)	Oak	Maple	2	2700	30	10.3	0	0.8	0	0	3.15	C		Both SWs	Shared Lane Markings	Centered 4' from curb		12	High
14th (S-bd)	Maple	Palm	2	2700	30	10	9	2	30	0	1.72	B	36' total.	Both SWs	Shared Lane Markings	Centered 11' from curb.		11	High
14th (N-bd)	Maple	Palm	2	2700	30	11	2	2	0	0	2.55	C	36' total. No N-bd parking.	Both SWs	Shared Lane Markings	Centered 4' from curb. Add 3-Ft Law sign shortly after Palm.		11	High
14th	Palm	Rudy	2	2700	30	10.5	6.5	1	1	0	1.28	A		Both SWs	Combined Bike/Parking Lanes	Striped already, just add Bike Route wayfinding signs.		11	Medium
14th	Rudy	Stinson	2	750	30	14	0	1	1	0	2.06	B			None			7	
13th	Lawson Park	railroad	2	*150*	30	8	0	none	0	0	1.89	B		Both SWs	None			2	
10th	Piatt	IL316/Dewitt	2	800	30	9.5	0	none	0	0	2.61	C	Uncontrolled DeWitt Xing.	W-SW	None			2	
10th	IL316/Dewitt	Shelby	2	1050	30	11.5	0	0-pvd	1	0	2.55	C		Both SWs	None			5	
10th	Shelby	Champaign	2	1600	30	11.5	0	0-pvd	1	0	2.76	C		Both SWs	None			7	
10th	Champaign	Richmond	2	1600	30	11.5	0	0-pvd	1	0	2.76	C		Both SWs	(Conditional) Bike Route wayfinding signage	If trail link from 9th and Richmond to Lincoln Prairie Trail not added.		8	(Medium)
10th	Richmond	Broadway	2	1400	30	11.5	0	0-pvd	1	0	2.69	C		Both SWs	None			4	
10th	Broadway	IL16/Charleston	2	1400	30	15	0	1	1	0	2.23	B	N-bd gutter, S-bd stone shoulder for parking. Uncontrolled IL16 Xing.	Both SWs	None	No, because of uncontrolled IL16 intersection.		4	

Street	From (N/W)	To (S/E)	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 Score	Public input votes	Priority
10th	IL16/Charleston	Lafayette	2	350	30	15	0	1	10	0	1.66	B	Uncontrolled IL16 Xing.	Both SWs	None	No, because of uncontrolled IL16 intersection.		1	
9th	Piatt	Shelby	2	*250*	30	8	0	none	0	0	2.15	B	2-way stop at DeWitt.	None	None			2	
9th	Richmond	Broadway	2	550	30	9	0	none	0	0.5	2.53	C	2-way stop at Broadway. Must jog W on Richmond for trail access.	Most E-SW	Bike Route Wayfniding Signage	70' link could provide trail access.		11	Medium
9th	Broadway	IL16/Charleston	2	1250	30	22.5	0	0-pvd	30	0.5	1.45	A	Concrete. Municipal off-road parking could be used instead of N-bd?	Both SWs	Bike Route Wayfniding Signage	Shared Lane Markings centered in straight-ahead S-bd lane at IL16. Test on-road bike triggering of green lights; add marking to detector corner and add R10-22 sign if so.		14	Medium
9th	IL16/Charleston	Lafayette	2	3900	30	10	9	0-pvd	10	1	1.45	A	Left-turn lane, stoplight at Charleston.	Both SWs	Combined Bike/Parking Lanes	Striped already, just add Bike Route wayfinding signs. Due to higher traffic, also add a S-bd W11-1 Bicycle Warning sign, just south of IL16. Shared Lane Markings centered in straight-ahead N-bd lane at IL16.		14	High
9th	Lafayette	Marshall	2	4050	30	10	9	0-pvd	10	1	1.47	A	Saw bike on shoulder.	Both SWs	Combined Bike/Parking Lanes	Striped already, just add Bike Route wayfinding signs.		16	High
9th	Marshall	Oklahoma	2	5000	30	10	9	0-pvd	5	1	1.42	A		Both SWs	Combined Bike/Parking Lanes	Striped already, just add Bike Route wayfinding signs.		21	High
9th	Oklahoma	Stinson	2	3900	30	10	9	0-pvd	5	1	1.29	A		Both SWs	Combined Bike/Parking Lanes	Striped already, just add Bike Route wayfinding signs.		22	High
9th	Stinson	school	2	2850	30	10.2	7.2	1.3	0	1	1.34	A	No parking seen during day, but dropoff/pickup heavy?	Both SWs	Combined Bike/Parking Lanes	Striped already, just add Bike Route wayfinding signs. Due to higher traffic, also add a N-bd W11-1 Bicycle Warning sign, just north of school.		23	High
9th	school	Old State (CH7)	2	2850	30	11	0	none	0	1	3.24	C		None	None			23	
6th/600N	N-end	Piatt	2	375	55	11.5	0	none	0	1	2.50	B	Some melted tar.	None	None			11	
6th	Piatt	IL121/Dewitt	2	950	30	10.5	0	none	0	1	2.74	C		None	Bike Route wayfinding signage			10	Low
6th	IL121/Dewitt	Shelby	2	2300	30	15	0	0-pvd	0	1	2.62	C	Concrete. No parking. 4-way stop at Dewitt.	E-SW	"Paved shoulders"	Striped paved shoulders of width 5' including gutter. Could be marked and signed as bike lanes, but possibly don't, for consistency.	1.74	10	Medium
6th	Shelby	Lincoln Pr. Trail	2	3050	30	15	0	0-pvd	0	1	2.76	C	Concrete. No parking. Trail Xing had advance W11-1 then D11-1 w/ arrows but no Xwalk at trail.	E-SW	"Paved shoulders"	Striped paved shoulders of width 5' including gutter. Could be marked and signed as bike lanes, but possibly don't, for consistency. See trail crossing recommendations.	1.88	6	Medium
6th	Lincoln Pr. Trail	Richmond	2	3050	30	15	0	0-pvd	0	1	2.76	C	Concrete. No parking. On-road cyclists.	E-SW	"Paved shoulders"	Striped paved shoulders of width 5' including gutter. Could be marked and signed as bike lanes, but possibly don't, for consistency.	1.88	10	Medium
6th	Richmond	Prairie	2	4000	30	15	0	0-pvd	0	1	2.90	C	Concrete. No parking.	Both SWs	"Paved shoulders"	Striped paved shoulders of width 5' including gutter. Could be marked and signed as bike lanes, but possibly don't, for consistency.	2.02	12	Medium
6th	Prairie	Wabash	2	4000	30	14.8	0	0-pvd	0	1	2.93	C	Turn lanes at IL16: R, L N-bd; L S-bd. Broadway-Prairie N-bd parallel parking. Saw N-bd cyclist switch from sidewalk to road N of IL16.	E-SW, some W	"Paved shoulders"	Stripe paved shoulders (narrower than 5' bike lanes), choosing a width between 4.0-4.8'. Shared Lane Markings centered in straight-ahead lanes at IL16.	2.10	12	Medium
6th	Wabash	Lafayette	2	5100	30	14.8	0	0-pvd	0	1	3.05	C	No parking	E-SW	"Paved shoulders"	Stripe paved shoulders (narrower than 5' bike lanes), choosing a width between 4.0-4.8'.	2.22	14	Medium
6th	Lafayette	Marshall	2	5100	30	14.8	0	0-pvd	0	1	3.05	C	No parking	E-SW	"Paved shoulders"	Stripe paved shoulders (narrower than 5' bike lanes), choosing a width between 4.0-4.8'.	2.22	11	Medium
6th	Marshall	Oklahoma	2	3200	30	15	0	1	0	1	2.78	C	No parking. No stop signs.	W-SW, some E	"Paved shoulders"	Striped paved shoulders of width 4'-5' including gutter. If 5', could be marked and signed as bike lanes, but possibly don't, for consistency.	1.91	9	Medium
Lafayette Meadows/5th	Lafayette	6th	2	325	30	14.2	0	0	20	0	1.86	B	Concrete.	Both SWs	None			2	
4th	Broadway	Wabash	2	*200*	30	8	0	none	0	0	2.04	B	Uncontrolled Xings at IL16, Wabash.	None	None	No due to IL16 Xing.		2	
4th	Wabash	Lafayette	2	*200*	30	8	0	none	0	0	2.04	B	Uncontrolled Xings at IL16, Wabash.	None	None			1	
2nd	Richmond	Broadway	2	*200*	30						2.36	B			None			1	
Logan	Piatt	IL316/Dewitt	2	900	30	10	0	none	0	0	2.62	C		None	Bike Route wayfinding signage			4	Low
Logan	IL316/Dewitt	Moultrie	2	3650	30	11.8	2	1.2	0	1	2.73	C	No parking. 4-way stop at DeWitt.	Some W-SW	"Paved shoulders"	Restripe for 11' travel lanes, 4' shoulder space including gutter pan. A slight improvement creating 3' of shoulder from edgeline to gutter seam would require 10.8' lanes.	2.60	7	Medium
Logan	Moultrie	Lincoln Pr. Trail	2	3800	30	11.8	2	1.2	0	1	2.75	C	No parking. Trail Xing: W11-1 only, no Xwalk. W-SP trail to Shelby.	Most W-SW/SP	"Paved shoulders"	Restripe for 11' travel lanes, 4' shoulder space including gutter pan. A slight improvement creating 3' of shoulder from edgeline to gutter seam would require 10.8' lanes. See trail Xing improvement section.	2.62	8	Medium
Logan	Lincoln Pr. Trail	Broadway	2	4600	30	11.8	2	1.2	0	1	2.84	C	No parking. Trail Xing: W11-1 only, no Xwalk. Saw on-road bike in the narrow shoulders.	Some E,W-SW	"Paved shoulders"	Restripe for 11' travel lanes, 4' shoulder space including gutter pan. A slight improvement creating 3' of shoulder from edgeline to gutter seam would require 10.8' lanes.	2.71	11	Medium
Logan	Broadway	IL16/Charleston	2	4800	30	13	0	0	0	1	3.27	C	Stoplight, S-bd right-turn lane at IL16. 2-3 lane transition.	None	Shared Lane Markings, and sidewalk.	Two per direction. Centered 4' out N-bd., and S-bd past Broadway. Also, right part of S-bd straight-ahead lane at IL16. Add a sidewalk. Ideally, widen during reconstruction, so 5' bike lanes can be added.		13	High
Logan	IL16/Charleston	Wabash	2	3150	30	13	0	0	0	1	3.05	C	Concrete. Light at IL16.	None	Shared Lane Markings, and sidewalk.	Two per direction, centered at least 4' from curb. Add a sidewalk. Ideally, widen during reconstruction, so 5' bike lanes can be added.		14	High

Street	From (N/W)	To (S/E)	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 Score	Public input votes	Priority
Logan	Wabash	Lafayette	2	3150	30	14.7	0	0	0	1	2.82	C	Concrete.	Both SWs	"Paved shoulders"	Stripe shoulders (narrower than 5' bike lanes), choosing a width between 4.0-4.7'.	2.15	13	Medium
650E	Old State (CH7)	S-end	2	750	55	9.6	0	none	0	1	3.05	C		None	None	If rail-with-trail built between 14th and 650E, 3-Ft Law sign could be added S-bd.		6	
Odd Fellows	Lafayette	Country Club	2	2850	30	10	0	1.7	0	2	3.51	D	Rolled gutter pans.	None	3-Ft Law sign	Add S-bd 3-Ft Law sign just south of Lafayette.		24	High
Odd Fellows	Country Club	Old State (CH7)	2	2750	55	9.5	0	none	0	2	3.95	D	County road. Grading drops off some.	None	None			14	
Holiday	Richmond	Broadway	2	1400	30	12.8	0	1	0	2	2.83	C	29' total, inner mall road. S-bd has 1.8' shoulder + 6" gutter.	None	None			5	
Crestview Rd	Broadway	IL16/Charleston	4	4000	30	12	0	1	0	1	2.95	C	3 lanes S-bd, 2 lanes N-bd. Just short segment w/ turn lanes.	None	None			1	
Crestview Rd	IL16/Charleston	Crestview Dr	2	600	30	12	0	1	0	1	2.34	B			None			2	
700E	1000N (CH18)	900N	2	750	55	11	0	none	0	2	3.13	C	23' near 1000N.	None	None			8	
700E	900N	Piatt	2	800	55	11	0	none	0	2	3.17	C	Saw cyclist riding to work.	None	3-Ft Law sign	Add N-bd 3-Ft Law sign, just past Piatt.		10	Low
Dettro	Charleston	Remington	2	3700	30	12	0	1.7	0	1	3.26	C	Concrete. 3 lanes includes CLTL, 40' 4" total. Over 10K ADT N-end.	None	Sidewalk or sidepath	Higher priority to have at least one continuous sidewalk or sidepath; other side lower priority. A west sidewalk will be added soon from Broadway to Walmart.		0	High
Dettro	Remington	Country Club	2	3700	35	12.2	1.6	none	0	1	2.91	C	Drops off after shoulders.	None	(Conditional) Sidewalk or sidepath	If developed, higher priority to have at least one continuous sidewalk or sidepath; other side lower priority.		0	(Medium)
Fairway	Old State (CH7)	Greenbriar	2	600	45	10	0	none	0	1	2.81	C		None	None			1	
Fairway	Greenbriar	550N, railroad	2	275	55	10	0	none	0	1	2.50	C		None	None	Could add a S-bd 3-Ft Law sign, unless rail-with-trail built between 14th and 650E.		6	Low
720E	550N, railroad	S-end	2	125	55	9.5	0	none	0	1	2.15	B		None	None			4	
Swords	Broadway	IL16/Charleston	2	3400	30	12	0	2	0	2	3.38	C	Concrete. 3 lanes includes left-turn lane.	W-SW	None			2	
Swords	IL16/Charleston	Holiday Inn	2	3550	30	12	0	2	0	2	3.40	C	Concrete. 38' 9" total. 3 lanes includes CLTL.	W-SW	Sidewallk or sidepath	Lower priority, since west sidewalk in place.		4	Low
Swords	Holiday Inn	Remington	2	850	30	12	0	2	0	2	2.68	C	Concrete. 38' 9" total. 3 lanes includes CLTL.	None	Sidewalk or sidepath	Higher priority to have at least one continuous sidewalk or sidepath; other side lower priority.		4	Low
McFall	N-end	Broadway	2	*500*	30	11.5		none	0	2	2.47	B	Striped, concrete. N-end splits into two roads, E-side ends at gravel driveway	none	Bike Route wayfinding signage	If McFall extension to Lincoln Prairie Trail is built.		6	High
Lerna/870E	1000N (CH18)	900N	2	1050	55	11.5	0	none	0	1	3.02	C		none	None			3	
Lerna/870E	900N	Lincoln Pr. Trail	2	2900	55	11.7	0	none	0	2	3.74	D	5' stone shoulders. Trail Xing: advance W11-1 then another w/ W16-7p at parallel Xwalks.	none	None			3	
Lerna/870E	Lincoln Pr. Trail	IL16/Charleston	2	3200	55	11	4	none	0	2	2.67	C	Paved shoulders go away near IL16, S-bd L turn lane.	none	Sidepath or sidewalk	East side of road is the priority now, sidepath preferred with sidewalk as a backup. Add west side, too, as it develops.		14	Medium
Lerna/870E	IL16/Charleston	Hurst	2	4700	55	11.5	0	none	0	2	4.01	D	N-bd L and R turn lanes, then 3 lanes w/ CLTL. Gravel shoulders.	none	Sidepath or sidewalk	East side of road is the priority now, sidepath preferred with sidewalk as a backup. Add west side, too, as it develops.		12	Medium
Lerna/870E	Hurst	Old State (CH7)	2	5000	55	11	1	none	0	2	3.85	D	3' stone shoulders N of Old State.	none	None	If Old State W of Lerna gets paved shoulders, then add them on this segment, too. If developed, add sidepath or sidewalk.		11	
Lerna/870E	Old State (CH7)	S-end	2	3350	55	11	1	none	0	2	3.65	D		none	None			3	
Lincoln Prairie Grass Trail	10th	6th											To be paved in 2019.		No change (Off-road trail)			14	Existing
Lincoln Prairie Grass Trail	6th	Logan											To be paved in 2019.		No change (Off-road trail)			13	Existing
Lincoln Prairie Grass Trail	Logan	(Dettro)											To be paved in 2019.		No change (Off-road trail)			17	Existing
Lincoln Prairie Grass Trail	(Dettro)	(Swords)											To be paved in 2019.		No change (Off-road trail)			15	Existing
Lincoln Prairie Grass Trail	(Swords)	Lerna											To be paved in 2019.		No change (Off-road trail)			17	Existing
Lincoln Prairie Grass Trail	Lerna	E-end											To be paved in 2019.		No change (Off-road trail)			13	Existing
Lincoln Pr. Trail extension	16th	10th											To be paved in 2019.		No change (Off-road trail)			8	High
Old railroad ROW to WSW	36th	33rd											City-owned right-of-way.		Off-road trail	Hard-surfaced (paved?), ideally.		8	Medium
Old railroad ROW to WSW	33rd	32nd											City-owned right-of-way.		None	See 33rd/Broadway, an on-road connector Bike Route. Also, jogs on 32nd.		11	
Old railroad ROW to WSW	32nd	27th											City-owned right-of-way.		Off-road trail	Hard-surfaced (paved?), ideally.		10	High
Old railroad ROW to WSW	27th	21st											City-owned right-of-way.		Off-road trail	Hard-surfaced (paved?), ideally.		9	High
CN railroad	Piatt	Richmond											Between DeWitt and Marshall, railroad owns ROW west (90'?) and east (70'?) of tracks, but severe grading issues especially on north part.		None			1	
CN railroad	Richmond	Broadway											See above.		None			4	
CN railroad	Broadway	Marshall											See above.		None			2	
CN railroad	Marshall	S-end													None			3	
NW-side railroad	43rd	27th											Some segments have possible right-of-way along the tracks, but most do not.		None	If the track is abandoned sometime in the future, consider railbanking with a trail.		2	
NW-side railroad	27th	26th											Some segments have possible right-of-way along the tracks, but most do not.		None	If the track is abandoned sometime in the future, consider railbanking with a trail.		5	
NW-side railroad	26th	25th											Some segments have possible right-of-way along the tracks, but most do not.		None	If the track is abandoned sometime in the future, consider railbanking with a trail.		4	
NW-side railroad	25th	21st											Some segments have possible right-of-way along the tracks, but most do not.		None	If the track is abandoned sometime in the future, consider railbanking with a trail.		3	

Street	From (N/W)	To (S/E)	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 Score	Public input votes	Priority
SE-side railroad	CN railroad	Marion											50' ROW northwest of 14th, w/ 22' from tracks.		None			3	
SE-side railroad	Marion	9th											50' ROW northwest of 14th, w/ 22' from tracks. Privately-owned, lightly-used.		None			5	
SE-side railroad	9th	Old State (CH7)											65' ROW southeast of 9th, w/ 30' from tracks. Privately-owned, lightly-used.		Explore rail-with-trail	Trail to 650E, or even 720E, solves the difficulty to getting southeast. A 10' trail and 2' buffer at ROW edge leaves 18' to track edge - a good setback for low-frequency, low-speed trains. Fencing needed.		4	Medium
SE-side railroad	Old State (CH7)	550N											65' ROW southeast of 9th, w/ 30' from tracks. Privately-owned, lightly-used.		Explore rail-with-trail	Trail to 650E, or even 720E, solves the difficulty to getting southeast. A 10' trail and 2' buffer at ROW edge leaves 18' to track edge - a good setback for low-frequency, low-speed trains. Fencing needed.		2	Medium
Kickapoo Creek	Rudy	6th													Off-road trail	Trail along creek. Would require easements from numerous parcels.		3	Low
Kickapoo Creek	6th	Country Club													Off-road trail	Trail along creek. Would require easements from numerous parcels and mid-block crossing(s) of Old State.		3	Low

Appendix 4
Summary of Major Funding Sources

Some of the most commonly used funding sources for bicycle projects are listed below.

Illinois Transportation Enhancements Program (ITEP)

- Federal source with 80% federal/state, 20% local cost shares.
- Administered by IDOT. Calls for applications are now every two years, in Fall during odd-numbered years.
- ITEP is one component of the federal Surface Transportation Block Grant Program (STBGP), along with Safe Routes to School, Recreational Trails Program, and sub-allocated STBGP dollars administered by Illinois' five largest urbanized regions.
- IDOT's 2017-2018 ITEP program funded 53 projects for $35.7M. There are other eligible uses, but the most of funding has been used for bicycle-related projects.
- High funding demand to supply ratio (6:1 to 10:1, on average).
- 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, medium-sized projects are usually funded more than very large projects. Almost all ITEP bikeway grants have funded off-road trails and sidepaths, and this is recommended here, too. However, in at least two recent examples – including Effingham – a single ITEP grant is funding implementation of a significant fraction of the planned on-road bikeway network in a town. This could be an opportunity for Mattoon in the future.

Illinois State Bike Grant Program

- State source for off-road trails and bikeways, 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. **However, the grant program has once again been put on hold due to the state's financial situation.**

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. However, the likelihood of this grant program returning soon looks low.

Recreational Trails Program

- Federal source with 80% federal/state, 20% local cost shares.
- Administered by IDNR. 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, for small trail projects.

Illinois Safe Routes to School program

- Federal source (usually) with 80% federal/state, 20% local cost shares; reimbursable grants. SRTS is a component of Surface Transportation Block Grant Program funding.
- Most funds go to pedestrian and/or bicycle infrastructure improvements within two miles of schools serving any K-8 grades, with some funding for education and encouragement programs for the same grades.
- Administered by IDOT.
- The 2018 application cycle, to be announced in spring 2019, is expected to fund $8.9M in projects. This cycle is unusual in that it is 100% federal/state cost share and will only fund final engineering and construction. The next cycle should return to 80/20.
- Past demand to supply ratio was 2:1, although the 2018 cycle's 100/0 cost split is expected to generate much more interest. Non-infrastructure grants have been much less competitive and will most likely continue to be so.

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 Lumpkin Family Foundation has actively supported future trail access to Fox Ridge State Park near Charleston – as well as this plan. In nearby Effingham, at least $500K in private, community donations have served as the 20% local agency match for millions of ITEP and other dollars building the TREC trail system.

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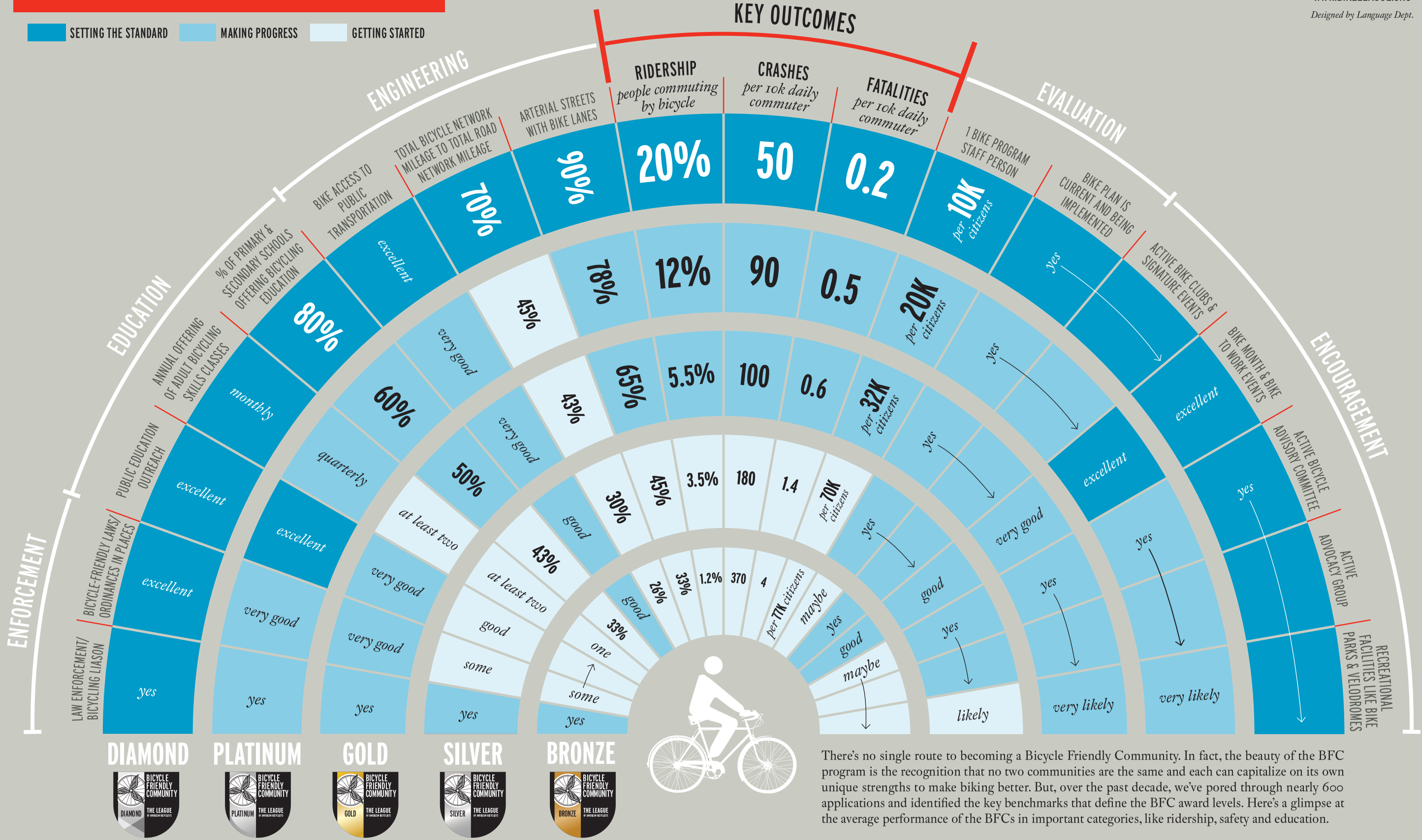

There's no single route to becoming a Bicycle Friendly Community. In fact, the beauty of the BFC program is the recognition that no two communities are the same and each can capitalize on its own unique strengths to make biking better. But, over the past decade, we've pored through nearly 600 applications 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.