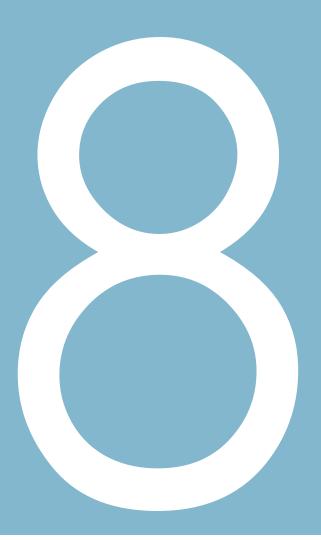
8 OPPORTUNITIES AND CONSTRAINTS

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8.1 OVERVIEW

8.1.1 OPPORTUNITIES FOR CONNECTIONS

Although the City of Urbana has made great strides in expanding and improving its bicycle network (see Chapter 2), there are many opportunities for further expansion. Figures 102-103 show that there is a high need to install bikeways in Urbana's northern and eastern areas. It is also important to establish bikeway connections with surrounding jurisdictions, including the City of Champaign. Additionally, there are plenty of opportunities to install neighborhood bikeway connections to further improve the bicycle network's connectivity, which is a primary attraction for people to bike.

8.1.2 FORCES AND CONSTRAINTS

Forces are the existing conditions shaping decisions about bicycle infrastructure. Several bikeway improvements are dependent on three of Urbana's largest forces. The University of Illinois (U of I) and Carle Hospital are the largest employment hubs in Urbana. Bikeway improvements on the U of I Campus are the responsibility of the U of I Facilities and Services Department. The City of Urbana will have to coordinate with Carle to maintain bikeway improvements to and around the Carle campus.

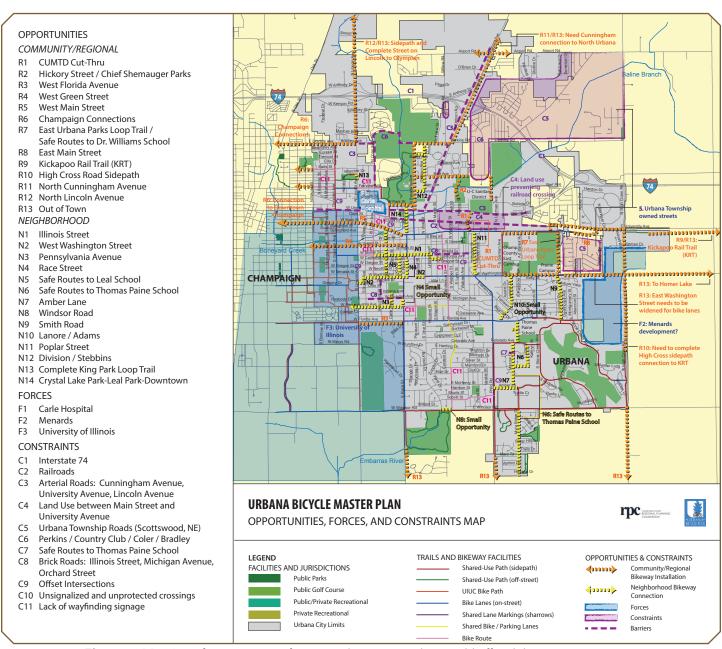


Figure 102 Map of opportunities, forces, and constraints that would affect bikeway improvements



Menards purchased a large amount of land along the High Cross Road/IL 130 corridor in East Urbana for commercial and residential development in 2005, but since delayed development indefinitely. Trails are planned, but will not be constructed until development begins.

Beyond these forces, there are more challenges that may constrain the expansion of Urbana's bicycle network. These constraints can be characterized as: physical barriers, difficult crossings, difficult corridors, land uses, and roads owned by Urbana Township.

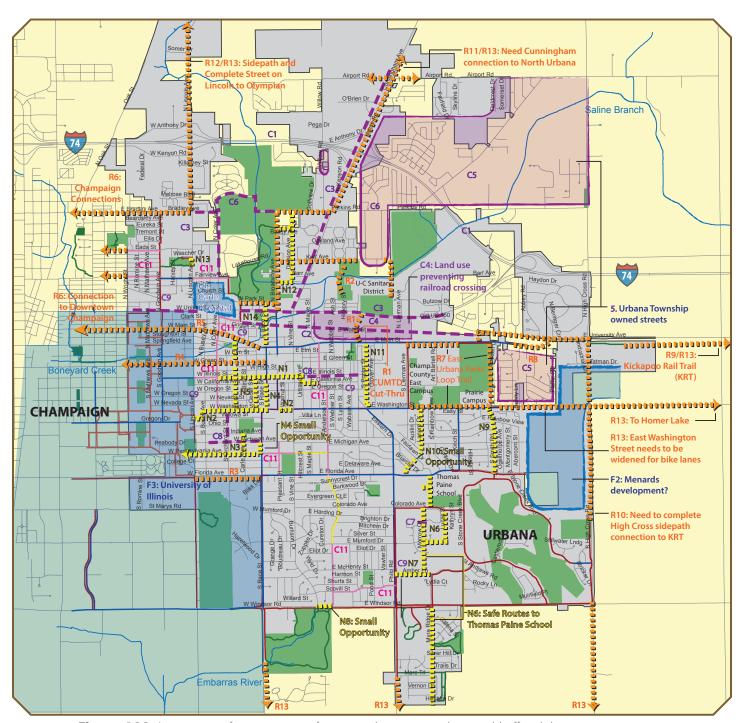


Figure 103 Large map of opportunities, forces, and constraints that would affect bikeway improvements

8.2 OPPORTUNITIES

8.2.1 COMMUNITY/REGIONAL CONNECTIONS

- 1. CUMTD Cut-Thru: There are no road crossings of the Norfolk Southern Railroad between Maple Street and Smith Road, a distance of approximately 1.25 miles. The east parking lot of the Champaign-Urbana Mass Transit District (CUMTD) Administrative Offices at 1101 East University Avenue on the north side of the tracks lines up with Poplar Street on the south side of the tracks. Directly north of CUMTD's offices is AMBUCS Park. This creates an opportunity to connect Victory Park to AMBUCS Park via Cottage Grove Avenue (0.35 miles east of Maple Street), a shared-use path crossing of the Norfolk Southern Railroad, use of the CUMTD parking lot as a Bike Route, and a mid-block crossing of University Avenue (US 150). Cooperation with CUMTD, Norfolk Southern Railroad, and IDOT would be required. AMBUCS and Victory Parks are only 1/4 mile apart, but there is no direct bikeway between them. CUMTD is also a Silver Level Bicycle Friendly Business (BFB), but there is currently no safe bikeway for employees to bike to work.
- 2. Hickory Street / Chief Shemauger Parks: The Urbana Park District owns two pieces of property that are adjacent to each other, but separated by the Saline Branch: the undeveloped Hickory Street Park Site on the south, and Chief Shemauger Park on the north. There are no bridges over the Saline Branch between Cunningham Avenue (US 45) and Interstate 74. The Urbana Park District has an opportunity to connect these two parks with a bridge. However, considerations need to be made for a bridge shared by bicyclists, vehicles, and trail users; and to ensure security regarding Urbana Park District facilities at the Hickory Street Park Site (see Figure 104). Further connections to AMBUCS Park, the CUMTD Path, and the Perkins Road Park Site would be made possible with such a bridge. This, coupled with the CUMTD Path (see above), would provide bicycle access from the large amount of residences south of Main Street and the North Urbana parks.



Figure 104 The Urbana Park District Storage Facility at the Hickory Street Park Site prohibits public access to the site

3. West Florida Avenue: The only gap in bike facilities on Florida Avenue is 1/2 mile from Race Street to Lincoln Avenue. Closing this gap would create a corridor of nearly 4 miles of bike lanes and sidepaths from the east terminus of Florida Avenue to Kirby Avenue at Neil Street in Champaign. When the Florida Avenue sidepath is extended to High Cross Road/ IL 130, this bikeway corridor will be almost 4.5 miles, and will connect to the proposed High Cross Road sidepath and Kickapoo Rail-Trail. This would be one of the longest bikeways in Urbana-Champaign.

This segment was also one of the most requested bikeway projects in the 2014 Champaign County Greenways & Trails Plan (see Section 7.2), the Sustainable Choices 2040 Long Range Transportation Plan (LRTP) (see Section 7.3), and UBMP Public Workshop #2 (see Section 7.5.2).

The University of Illinois owns this road from the centerline to the south, giving the City of Urbana little control over this area. Long street blocks and few cross-streets create the need to retain on-street vehicle parking for adjacent residences. Also, moderate traffic volumes and limited street width here results in high BLOS scores. Considering these factors, this segment is not ideal for on-street bikeway installation. The City of Urbana should coordinate with the University of Illinois to investigate the feasibility of sidepath installation that does not direct bicyclists away from the Florida Avenue corridor.

- **4. West Green Street:** This is a main entryway to the University of Illinois campus, Downtown Urbana, and Campustown in Champaign. The existing bike path ends abruptly east of Goodwin Avenue, and is substandard width by current standards. The Multimodal Corridor Enhancement (MCORE) Project will allow the City of Urbana to coordinate with CUMTD, the University of Illinois, and the City of Champaign to improve bicycling and transit on West Green Street over the next several years.
- **5. West Main Street:** Main Street is part of a corridor that directly connects Downtown Urbana, the University of Illinois



Figure 105 Bicyclists eastbound on Main Street crossing Lincoln Avenue on a weekday afternoon

Engineering Campus, and Downtown Champaign. It allows bicyclists to avoid the arterial roads of University Avenue and Springfield Avenue to traverse the core of the community. It is also a mostly on-street alternative to the proposed Kickapoo Rail Trail extension across Urbana to Champaign, which could take decades to complete. This is a major bicycle entryway to the University of Illinois, with approximately 250 bicyclists crossing Lincoln Avenue on Main Street daily (see Section 6.3).

6. Champaign Connections: Downtown Urbana, the University of Illinois campus, and Downtown Champaign are three of the most vibrant areas of the metropolitan area. The Main Street corridor in Urbana directly aligns with the White/Logan Street corridor in Champaign, and connects all three of these areas. Wayfinding signage and bicycle facilities along this corridor can increase bicyclist awareness of Downtown Urbana, and also show motorists and pedestrians that Downtown Urbana is accessible by bike from points west. Additionally, seniors should have bicycle access to the Osher Lifelong Learning Institute (OLLI) at the University of Illinois, located in the M2 building on Neil Street in Downtown Champaign.

Bradley Avenue, Eads Street (continuing as Grove Street in Champaign), and Fairview Avenue/Beslin Street (continuing as Washington Street in Champaign) provide three more connections from North Urbana to North Champaign spaced about 1/4 mile apart. Eads Street, Fairview Avenue, and Beslin Street already have bike facilities. Bradley Avenue in Urbana is scheduled for bike lane installation in 2016.

7. East Urbana Parks Loop Trail / Safe Routes to Dr. Williams School: Completion of a 2.25 mile loop shared-use path along Lierman Avenue, Main Street, Bakers Lane, and Washington Street in East Urbana would have multiple benefits. It would provide a bikeway loop around an Urbana Park District (UPD) signature park (Weaver Park) and three UPD community parks (Prairie Park, Brookens Sports Complex, and Canaday Park). These parks are some of the largest in the UPD system, and are intended to accommodate community and regional use.

Shared-use paths along Washington Street and Bakers Lane would also provide students with safe walking and bicycling routes to Dr. Williams Elementary School and the Urbana Early Childhood School (UECS), also known as the Prairie Campus.

Washington Street has sidewalks on both sides of the street, but they are not currently wide enough to accommodate the many walkers and bikers coming from the Lierman Neighborhood and Country Squire subdivision west of the Prairie Campus, and from the Scottswood subdivision east of the Prairie Campus. There are few road crossings on the north side of Washington Street, making it ideal to widen the sidewalk to a shared-use sidepath.

The City of Urbana owns undeveloped, tree-lined right-of-way (ROW) along the Smith Road corridor between Washington and Main Streets called "Bakers Lane." A road was intended to be built on this corridor, but those plans have been abandoned. This is a good opportunity to install an off-street trail that would connect to Smith Road, Weaver Park, Main Street, and potentially the Kickapoo Rail Trail. This would also provide walking and biking access for students traveling between the Prairie Campus and the unincorporated Scottswood subdivision, the western half of which has no sidewalks.

The Champaign County East Campus is also contained within this loop, and a trail would provide commuting and health opportunities for many County employees. This loop would also bring trail exercise opportunities to low-income neighborhoods in East Urbana, such as the Lierman Neighborhood, Prairie Green apartments, Rainbow View apartments, and the Scottswood subdivision.

Sidepaths exist along Lierman Avenue, and Main Street along Weaver Park. Sidewalk widening to sidepath width along the rest of Main Street and all of Washington Street, as well as shared-use path installation on Bakers Lane is needed to complete the loop. The City of Urbana should coordinate with the Urbana Park District and Champaign County to pursue opportunities to construct the trail.

8. East Main Street: There is a gap between the Main Street bike lanes and the proposed Kickapoo Rail Trail. Construction on the Kickapoo Rail Trail from High Cross Road/IL 130 in Urbana to St. Joseph will begin in 2016. The Champaign County Forest Preserve District (CCFPD) owns the former railroad ROW south of University Avenue/US 150 from High Cross Road to 900 feet east of Smith Road. The only street crossing between those two locations is Main Street. The City of Urbana will have to coordinate with CCFPD and the Urbana Park District to determine the most appropriate alignment to connect the Kickapoo Rail Trail to the Main Street bike lanes and sidepath, Weaver Park, and the City of Urbana.



Figure 106 East Main Street



9. Kickapoo Rail Trail:

The Champaign County Forest Preserve District (CCFPD) and Vermilion County Conservation District (VCCD) acquired the 24.5 mile former CSX Railroad right-of-way (ROW) that parallels US 150 (University Avenue in Urbana) to Kickapoo State Park in Vermilion County. Wal-Mart constructed a 1/4 mile section of shared-use path on its property adjacent to this right-of-way when it opened its store in 2006. This piece could be used as 2014 groundbreaking ceremony part of the Kickapoo Rail



Figure 107 Kickapoo Rail Trail

Trail, or be a connection to Wal-Mart's store and parking lot. This opportunity will give Urbana bike access to a state park, since Champaign County lacks a state park. This can also bring visiting cyclists into Urbana to dine and shop. The City of Urbana should coordinate with CCFPD and others to connect the Kickapoo Rail Trail with the heart of Urbana.

10. High Cross Road Sidepath: The City of Urbana received an Illinois Transportation Enhancement Program (ITEP) grant to install a sidepath on High Cross Road/IL 130 from Windsor Road to University Avenue/US 150. However, funding only enabled the construction of 0.6 miles of the sidepath from Windsor Road to Wendl's Sports Complex. This leaves a 1.4 mile gap that would connect the 7 mile Windsor Road Trail across Champaign-Urbana to the Kickapoo Rail Trail. If development of the Menards owned property in East Urbana (see Section 8.3) occurs before sidepath construction, the sidepath will not incur damage from construction vehicles.

11. North Cunningham Avenue: Cunningham Avenue (US 45) is one of five road crossings of Interstate 74 in Urbana, and one of Urbana's two underpasses crossing I-74. The road connects north to employers such as Napleton's Auto Park (see Figure 108), shopping areas such as Farm 'n' Fleet (see Table 8), and residential areas such as the Landis Farms and Somerset subdivisions. High speed limits and traffic volumes warrant a sidepath as the best facility to install.

South of I-74, sidepaths on Country Club Road and Broadway Avenue should be installed to connect bicyclists to Downtown Urbana, as right-of-way on Cunningham Avenue south of Country Club Road is limited.



Figure 108 Bicyclist entering Napleton's Auto Park

12. North Lincoln Avenue: Lincoln Avenue is one of five road crossings of Interstate 74 in Urbana, and one of Urbana's three overpasses crossing I-74. The road connects north to existing employers such as SuperValu (see Table 8), and future employers. High speed limits and traffic volumes warrant a sidepath as the best facility to install. The bridge over I-74 is owned by IDOT; should it be replaced, a sidepath should be installed. Otherwise, installation of a separate bicycle/pedestrian bridge should be pursued. Complete Street construction should be considered for future road work on North Lincoln Avenue.

South of I-74, many student residential apartment complexes exist along Lincoln Avenue. Wayfinding signage should be installed to direct students to the University of Illinois campus via the Bradley Avenue bike lanes planned for installation in 2016, and the existing Goodwin Avenue sidepath.

13. Out of Town: Opportunities should be taken advantage of to improve the bicycling experience for riders leaving Urbana for rural areas on the north, east, and south. The Kickapoo Rail Trail being built by CCFPD and VCCD will create an off-street bikeway east to Kickapoo State Park in Vermilion County. The Washington Street corridor leads to CCFPD's Homer Lake Forest Preserve, and bike lanes within the City of Urbana can be extended east from Dodson Drive to High Cross Road/IL 130.

Sidepaths should be installed across I-74 along Lincoln and Cunningham Avenues. The High Cross Road crossing of I-74 should be improved whenever the bridge is slated for reconstruction. IL 130 provides a corridor for a potential sidepath south to the Village of Philo. Coordination with IDOT is required for these projects.

Existing sidepaths along Philo Road and Race Street should be extended as development occurs. Bicyclists riding between Urbana and rural areas would benefit from accommodations such as good pavement, rumble strips with gaps, and wayfinding signage.

8.2.2 NEIGHBORHOOD CONNECTIONS

1. Illinois Street: This is one of the gaps between the Anderson/Grove Street bike route, Downtown Urbana, and the University of Illinois campus. On the east, Bike Route wayfinding signage should be installed, as the route jogs south one block to California Avenue via Urbana Avenue to avoid the brick pavement on Illinois Street. Illinois Street allows bicyclists to cross Vine Street at a traffic signal to access Market at the Square, the second most accessed bicyclist destination in Urbana (see Section 7.5.1). The pavement west of Race Street has recently been repaved, and Illinois Street becomes a bike route at Coler Avenue. It then becomes the highest bicycle count entryway to the University of Illinois, with over 800 bicyclists crossing Lincoln Avenue at Illinois Street daily (see Section 6.3 and Figure 109). Bike lanes should be installed between Vine and Race Streets, and a Bike Route with wayfinding signage should be installed between Race Street and Coler Avenue.



Figure 109 Bicyclists on Illinois Street crossing Lincoln Avenue

- **2. West Washington Street:** The only sections without bike facilities between East Urbana and the University of Illinois campus are Vine Street to Walnut Street, and Race Street to Lincoln Avenue (via Busey Avenue and Iowa Street). Low traffic volumes, and connections to bike lanes on the east and a bike path on the west make this a good corridor to complete bikeway installation.
- **3. Pennsylvania Avenue:** There is a gap between the bike facilities and neighborhoods east of Race Street and the University of Illinois campus. According to the CUUATS Online Bike Route Survey, this is the most used route by surveyed bicyclists into the University of Illinois campus (see Section 7.1). Pavement improvements, and Bike Route and wayfinding signage installation would improve bicyclists' rides and increase motorist awareness of bicyclists.

- **4. Race Street:** The only sections without bike facilities between Downtown Urbana and Meadowbrook Park are California Avenue to Washington Street, and Michigan Avenue to Pennsylvania Avenue, a total of four blocks. If facilities cannot be installed on the former, wayfinding signage should direct bicyclists to Broadway Avenue to navigate between Illinois and Washington Streets.
- **5. Safe Routes to Leal School:** Bike routes along Illinois and Washington Streets proposed in the 2008 UBMP would bring students within 2 blocks of Leal Elementary School. Neighborhood Opportunity #4 described above would also provide a bikeway on Race Street one block east of the school. Adding McCullough Street to the proposed Urbana Green Loop would provide a bike route one block west of the school. If a bike route is installed on Cedar Street on the east side of Leal School, it should extend from Illinois Street to Washington Street to connect to proposed bike routes. Cedar Street is also one block west of Race Street.

The West Urbana neighborhood surrounding Leal School consists of a grid street pattern with low-traffic streets, enabling bicycling without many additional facilities. The City of Urbana should coordinate with Leal School staff and families should additional traffic calming ideas surface in the future. Additionally, the Champaign-Urbana Public Health District (CUPHD) was able to replace unacceptable bike racks with Inverted U bike racks on the east side of the school in 2013 (see Figure 110). Opportunities for partnerships like this should continue to be sought to improve all aspects of bicycling.



Figure 110 Inverted U bike racks on the east side of Leal Elementary School (Credit: CUPHD)

6. Safe Routes to Thomas Paine School: The safe walking and biking boundary for Thomas Paine Elementary School is east of Philo Road, and extends north about 1/2 mile to Michigan Avenue, and over 1.5 miles south to the

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South Ridge subdivision.¹⁵ However, the only safe route from the south is Philo Road and Florida Avenue, both minor arterial streets. While they do have bike facilities, 1/2 mile of those facilities are bike lanes, which some parents do not feel comfortable letting their elementary school children use. For years, parents have requested a safer walking and bicycling route to Thomas Paine Elementary School, as noted in surveys received by CCRPC.

Directly west of Thomas Paine School are the Tennyson Courtyard Apartments, but students must use a circuitous route going north to Florida Avenue and back south to get to school. A shared-use path between the two locations would create a direct, off-street connection to school for students.

South of Thomas Paine School, a shared-use path around Lohmann Park would connect Thomas Paine School to the existing Colorado Avenue sidepath, and thus the Stone Ridge Square Apartments. These apartments are also adjacent to the school but have no dedicated bikeway to the school.

Off-street bikeway opportunities are possible south of Colorado Avenue, but challenges also exist (Constraint #7). The best opportunity to extend the bikeway is using Lucas Street, and creating bikeways as Lucas Street is extended south and the Eagle Ridge subdivision develops east. From there, there is public ROW along the Morrow Court corridor that connects to an existing sidewalk to Amber Lane. South of there, Myra Ridge Drive can be used to cross Windsor Road and access the Myra Ridge, Deerfield Trails, and South Ridge subdivisions. All facilities should be shared-use paths where possible, and should include wayfinding trail signage (see Section 5.3.1) to direct families to Thomas Paine School.

- **7. Amber Lane:** Installing a bikeway on 1/4 mile of Amber Lane would connect the Amber Lane Sidepath east of Myra Ridge Drive to the Philo Road Sidepath. This section also passes Meijer, and would create bike facilities on all four streets surrounding Meijer. The road is wide enough for bike lanes, and has less traffic than nearby Philo and Windsor Roads.
- **8. Windsor Road:** Widening the sidewalk to a sidepath on the north side of the road would complete a small connection from the majority of Urbana to Meadowbrook Park. The entire length of the Anderson Street corridor now has bike facilities, stretching two miles north to Main Street through many neighborhoods. A median refuge island at Vine Street provides an enhanced crossing to the many trails in Meadowbrook Park, which have the highest park trail bike counts in Urbana (see Section 6.3).

- **9. Smith Road:** Installing a bikeway on 1/2 mile of Smith Road would connect the Washington Street bike lanes, Florida Avenue sidepath, Smith Road sidepath south of Florida Avenue, and the Stone Creek Boulevard Path. This would also create a bikeway through the Savannah Green subdivision, the low-income Rainbow View and Prairie Green apartments, directly connect to the new Urbana Early Childhood School (UECS), and also provide an additional access to Dr. Williams Elementary School.
- **10. Lanore/Adams:** In 2013, a 0.04 mile shared-use path was installed on public ROW connecting Lanore Drive and Adams Street in East Urbana. Bike Route and wayfinding signage should be installed on these two streets to connect the Washington Street and Florida Avenue bike lanes, which in turn connects the Brookens Center, Gym, and Sports Complex, and the Philo Road Business District. Signs would direct bicyclists to this low-traffic route that avoids Philo Road.
- **11. Poplar Street:** Philo Road has bike facilities from the south city limits to Washington Street. It then turns into Cottage Grove Avenue, which is not wide enough for bike lanes, and has too much traffic to designate it a bike route. Poplar Street is one block east of Philo Road, has low traffic, and is very close to the Philo Road/Washington Street intersection. A bike route here would connect Philo Road to Main Street, and further north to North Urbana parks via the proposed CUMTD Path.



Figure 111 Poplar Street

12. Division/Stebbins: Sections of Broadway Avenue along Crystal Lake Park are brick, which is not recommended for bicycling. The west sidewalk is also recommended to be expanded to a sidepath, through a partnership between the City of Urbana and Urbana Park District. However, with the redevelopment of Crystal View Townhomes, Stebbins Drive and Division Avenue provide an alternate, low-traffic bike route along the Broadway Avenue corridor. This route provides an alternate way to access the new Crystal Lake Park Family Aquatic Center via Thompson Street. Even with the removal of the brick pavement surface on Broadway Avenue in 2015,

^{15.} CCRPC. Safe Walking Route Maps. Champaign County Regional Planning Commission, Urbana, IL, 2014. https://www.ccrpc.org/transportation/projects/safe-routes-to-school/



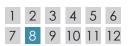




Figure 112 Division Avenue looking south towards Stebbins Drive along the Crystal View Townhomes

the Division/Stebbins bike route would create a bike facility directly in North Central Urbana neighborhoods. Stebbins Drive could also act as the first leg of the Saline Branch Trail east of Crystal Lake Park, as it has sidewalks, good pavement, and low traffic.

13. Complete King Park Loop Trail: The Urbana Park District widened sidewalks and installed shared-use paths around King Park in 2012. The only segment improvement needed to make this a loop shared-use path is widening 275 feet of the sidewalk on the west side of Lincoln Avenue to sidepath width. The City of Urbana should coordinate with the Urbana Park District to widen this short piece of sidewalk.

14. Crystal Lake Park to Leal Park to Downtown

Urbana: Opportunities should be sought to connect Crystal Lake Park, Leal Park, and Downtown Urbana. These three places are in close proximity to each other, and provide opportunities for walking and bicycling to green spaces, eateries, and services, but are not intuitively linked. Leal Park is a small, underutilized park, as its main access is on University Avenue. Recent reconstruction projects have installed concrete pavement on Race Street, bike lanes on Broadway Avenue, and wider sidewalks along both streets, improving conditions for bicycling on these streets between all three destinations. Both streets also have signalized crossings of University Avenue. A shared-use path connection between Race Street and Leal Park is still needed. McCullough Street also has a sidepath, as well as a signalized crossing of University Avenue, and opportunities should be sought to develop a Rail-with-Trail to allow the thousands of Carle Hospital employees (see Section 8.3) to bike or walk to eateries and services in Downtown Urbana.

8.3 FORCES

Forces are the existing conditions shaping decisions about bicycle infrastructure.

1. Carle Hospital: The Carle Hospital campus along West University Avenue continues to grow, and is the second largest employer in Urbana. Opportunities should be utilized to enable and encourage Carle employees to bike to work, and/or bike to lunch or nearby destinations. This would encourage healthy lifestyles for employees of this health facility, and reduce the number of vehicles circulating the Carle campus.

Opportunities to improve safe crossings of University Avenue in this area should also be utilized, as the McCullough Street/ University Avenue intersection had the highest number of bicycle/vehicle crashes in Urbana (see Section 6.4). Coler Avenue no longer traverses the Carle campus, thus reducing one crossing option of University Avenue (see Figure 111).



Figure 113 Bike Route signage installed by Carle Hospital directing bicyclists from Coler Avenue to Broad Alley

2. Menards: In 2005, Menards purchased a large amount of land along the High Cross Road/IL 130 corridor in East Urbana for commercial and residential development. However, development has been delayed indefinitely. Offstreet trails have been sited in plans for when development occurs. If development resumes, opportunities may also arise to construct the Florida Avenue and High Cross Road sidepaths.



Figure 114 Menards outlot for sale sign on East Washington Street

3. University of Illinois: The University of Illinois owns a lot of land on the west and southwest sides of Urbana. Therefore, they have jurisdiction over many roads and rights-of-way in Urbana, the latter of which determines the ability to install shared-use trails. While the University is a major destination and employer in Urbana, the City of Urbana does not have control of bikeways on University-owned land. Please see the 2014 Campus Bike Plan for bikeway recommendations on University-owned land.

8.4 CONSTRAINTS

1. Interstate 74: There are five road crossings of Interstate 74 in Urbana: three overpasses (Lincoln Avenue, Brownfield Road, High Cross Road), and two underpasses (Oak Street, Cunningham Avenue/US 45). All crossings are under the jurisdiction of the Illinois Department of Transportation (IDOT).

The Lincoln Avenue bridge is wide, but does not have extra space for bike lanes or a sidepath under its current configuration. The High Cross Road bridge is narrow, also with no space for separated bike facilities, although it is not an interchange. The Brownfield Road bridge is also not an interchange, and has shoulders, but the approaches do not.

The Oak Street underpass is on the west edge of Urbana, is not adjacent to any residential areas or destinations, and accommodates heavy vehicles. The Cunningham Avenue/ US 45 underpass does not have much extra width for bicyclists, but the approaches have a lot of space. However, many destinations are north of I-74 along the Cunningham Avenue corridor (see Section 8.2.1). The City of Urbana should coordinate with IDOT and look at the approach of the Village of Mahomet, who just received an ITEP grant to install a sidepath along the IL 47 underpass connecting parts of Mahomet north and south of I-74.

Figure 115 Bicyclist riding contraflow on Cunningham Avenue/US 45 under I-74

2. Railroads: The Norfolk Southern Railroad runs southeast along the University Avenue corridor from Champaign to East Urbana. There is one spur south to the DART Solo Cup factory. This creates 10 at-grade road crossings, 1 at-grade sidepath crossing, and 1 railroad bridge in Urbana. Most of these are angle crossings. Crossings must be designed to prevent bicyclists from falling on train tracks. Railroad tracks also prevent bicyclists from crossing where there is no road or bikeway, which limits access to/from North Urbana (see Section 8.2.1). Designing additional railroad crossings will need significant study and coordination to gain railroad company approval.

Rail corridors provide an opportunity for a shared-use trail, but trail developers will have to coordinate with Norfolk Southern Railroad regarding Rails-with-Trails opportunities as long as it owns this rail corridor. If the rail corridor cannot be used to extend the Kickapoo Rail Trail west through Urbana and Champaign, the Main Street corridor should continue to be developed for bicyclists (see Section 8.2.1).



Figure 116 Norfolk Southern Railroad west of Downtown Urbana towards Carle Hospital

3. Arterial Roads: Cunningham Avenue (IDOT jurisdiction), University Avenue (IDOT jurisdiction), and Lincoln Avenue (City of Urbana jurisdiction) are arterial roads that are difficult to bike along and across. High traffic volumes, heavy vehicle (i.e. trucks) volumes, and limited right-of-way prevent opportunities for on-street bikeway installation, and sometimes off-street bikeway installation. Where off-street bikeway installation is not feasible or safe, bikeways should be installed on adjacent corridors (see Section 4.5) to accommodate the target audience of this plan. The NACTO Urban Bikeway Design Guide should be used to find intersection treatments that can improve crossings, including but not limited to bike boxes, intersection crossing markings, and two-stage turnqueue boxes.

4. Land Use between Main Street and University

Avenue: Approximately 1/4 mile separates the east-west thoroughfares of Main Street and University Avenue. However, there are no north-south road crossings between these two streets for 1.25 miles between Maple Street and Smith Road. 1.5 miles separate the existing bike lanes on Broadway Avenue and the proposed bike route on Smith Road.

Additionally, existing land uses prevent off-street bikeway connections between Main Street and University Avenue. Between Main Street and the Norfolk Southern Railroad are many residential streets that dead-end at the railroad (see Figure 116). However, between the Norfolk Southern Railroad and University Avenue are industrial land uses such as Emulsicoat, institutional land uses such as CUMTD offices and maintenance facilities, and commercial land uses such as Illini FS that block thru street access and limit bikeway access. All of these factors limit bikeway access to/from North Urbana.



Figure 117 East University Avenue



Figure 118 Cottage Grove Avenue dead-end at Norfolk
Southern Railroad



- **5. Urbana Township Roads:** East and Northeast Urbana contain sections outside of City of Urbana municipal limits. Roads in these areas are maintained by Urbana Township. This includes the Scottswood subdivision in East Urbana; parts of Kerr Avenue, Perkins Road, Country Club Road, Coler Avenue, and Airport Road in North Urbana; and Eastern Avenue, Carroll Avenue, Brownfield Road, and surrounding residential streets in Northeast Urbana. Without jurisdiction over these roads, the City of Urbana cannot improve or widen pavement for bicycle facilities, mark bikeways, or install bike signage. However, the East Main Street corridor will connect to the Kickapoo Rail Trail, and Northeast Urbana has a lot of rural residential subdivisions. The City of Urbana should coordinate with Urbana Township on improving bikeways in these areas when possible.
- **6. Perkins/Country Club/Coler/Bradley corridor:** The east-west corridor comprised of Perkins Road, Country Club Road, Coler Avenue, and Bradley Avenue (east of Lincoln Avenue) is difficult to bike along. Road width is too narrow to install bike lanes. A 15 MPH speed limit is posted where the corridor jogs around Busey Woods, but this does not slow vehicles along the whole corridor. Parts of this corridor are owned by Urbana Township (see above). The BLOS scores for this corridor do not make this an on-street corridor attractive to casual cyclists. Opportunities to install an off-street trail along this corridor should be utilized, working with Urbana Township and the Urbana Park District to provide east-west bike access in North Urbana.



Figure 119 Country Club Road southbound towards east

- **7. Safe Routes to Thomas Paine School:** An off-street bikeway from the south to Thomas Paine Elementary School that avoids Philo Road does not exist. Section 8.2.2 describes an alignment to connect many residential neighborhoods to the school. Prairie Winds Drive and public ROW along Morrow Court are aligned directly north-south leading to/from Thomas Paine School, but a fence prevents the connection of these two corridors. If a connection cannot be constructed here, the Lucas Street corridor described in Section 8.2.2 should be utilized.
- **8. Brick Roads:** As described in Section 4.3, brick roads are not recommended for bikeway installation. This prevents the following roads from being used as bikeways:
 - Busey Avenue between Main and Elm Streets, and Green and Illinois Streets
 - Clark Street
 - High Street from Race Street to Busey Avenue
 - Illinois Street from Urbana Avenue to Cottage Grove Avenue. This is why it is recommended to jog the Illinois Street bike route one block south to California Avenue via Urbana Avenue.
 - Indiana Avenue
 - Michigan Avenue from Race Street to Busey Avenue.
 - Nevada Street from Race Street to Lincoln Avenue
 - Orchard Street from Washington Street to Michigan Avenue (see Figure 118). This is why the Coler Avenue bike route cannot be extended south along this corridor.



Figure 120 Orchard Street brick pavement north of Michigan Avenue



9. Offset Intersections: Many intersections exist in Urbana where a street is not directly aligned across a road. This can be especially challenging for bicyclists at unsignalized or unprotected intersections.

Offset intersections in Urbana include:

- Amber Lane and McHenry Street at Philo Road
- Church Street at Goodwin Avenue
- Fairview Avenue and Beslin Street at Goodwin Avenue
- Johnson and Wabash Avenues at Oregon Street
- Oregon Street at Lincoln Avenue
- McCullough Street at Main Street

10. Unsignalized and unprotected crossings: As

discussed in Section 4.3, ideal roads for bikeway installation cross major streets where the cross-traffic stops, all traffic stops, or there is a traffic signal. Where this is not the case, the amount of traffic on the cross-street should be considered, or bikeway crossing treatments should be considered. This includes median refuge islands, intersection crossing markings, and two-stage turn-queue boxes.

11. Lack of wayfinding signage: In 2013, the City of Urbana installed the first Bike Routes in decades in Champaign-Urbana. Urbana also has many trails and other bikeways. However, none of these facilities have wayfinding signage that includes information on distance and direction to nearby destinations. Wayfinding signage should be installed along all existing and proposed bike routes (see Section 5.2.2), bike lanes (see Section 5.2.1), and shared-use paths (see Section 5.3.1). The City of Urbana has an adopted but unfunded Signage and Wayfinding Study.

The benefits of installing bicycle wayfinding signage include (see also Section 5.2.2):

- Identifies lower traffic routes to destinations
- Overcomes a "barrier to entry" for infrequent bicyclists
- Signage that includes mileage and travel time to destinations may help minimize the tendency to overestimate the amount of time it takes to travel by bicycle
- Visually indicates to motorists that they are driving along a Bike Route and should use caution
- Passively markets the bicycle network by providing unique and consistent imagery throughout the City of Urbana