ILLINOIS

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Campus Bike Plan

by Morgan Johnston
Transportation Demand Management
Facilities & Services
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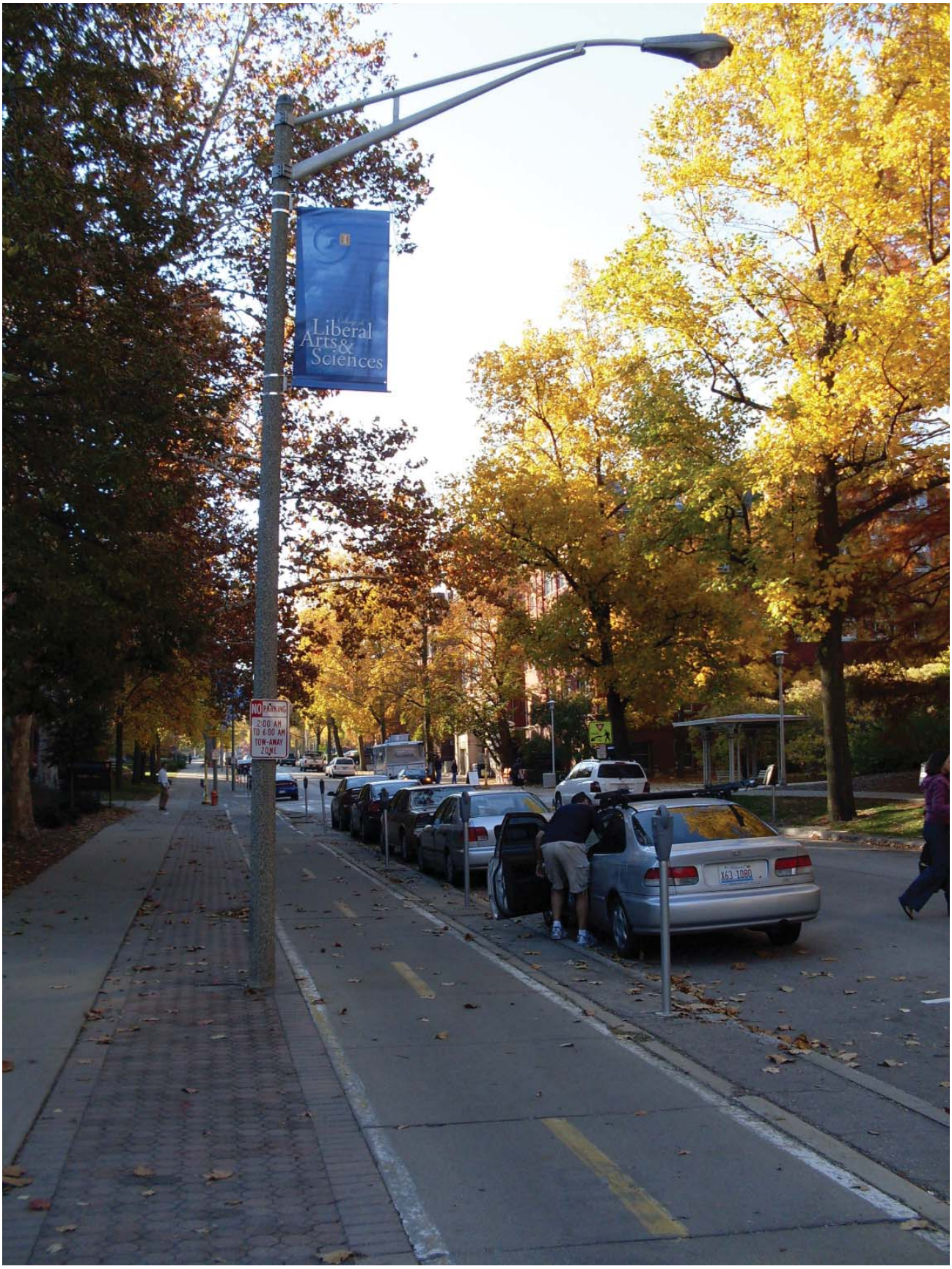

Existing two-way bike path along Mathews Avenue
Photo by Morgan Johnston

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BACKGROUND

"Be visible and predictable at all times."
– League of American Bicyclists

The safest way to commute with a bicycle is by being visible and predictable and having a safe bicycle infrastructure that is also visible and predictable. If you are riding on a bike way, there should never be a point where you do not know which way to continue. If you are walking near a bike way, you should be well aware that there are bicyclists nearby, so that you do not step into a bicyclist's travel path unexpectedly.

The bicycle network on the University of Illinois main campus has existed for decades with little improvement. While the national standards for bicycle facilities have been updated for safety and consistency, and the cities of Urbana and Champaign have updated their planning documents for bicycles, the campus infrastructure still needs a lot of work.

This document, referred to as the Campus Bike Plan, maps out the implementation plan for bike ways within the campus area, documents new standards for campus bicycle facilities, and describes additional bicycle needs. Additional needs include policy updates, parking upgrades, enhanced services for bicyclists, enhanced education programs, and continued efforts for transportation demand management.

Bendy rides a folding bike with full visibility attire at the Caterpillar Health and Wellness Day
Photo by Morgan Johnston

Relationship to Campus Transportation Plan

The March 2007 Multi-Modal Transportation Study for the University of Illinois at Urbana-Champaign addressed pedestrian safety and general mobility issues for campus. The study presented a number of recommendations related to parking, transit, streets, bicycling, and transportation demand management. The Multi-Modal Study was adopted by campus and is being implemented by the Transportation Demand Management department in the Facilities & Services Division.

This document addresses four specific recommendations from the Multi-Modal Study:

- Recommendation 3.18: Commission a comprehensive campus bicycle plan to plan for upgrading existing facilities and developing new facilities.
- Recommendation 3.19: Implement bike lanes on campus streets as part of "complete streets" program. Bike paths should supplement street system in areas inaccessible by street and in areas used for recreational purposes.
- Recommendation 3.22: Implement a comprehensive bicycle education and promotion program.
- Recommendation 3.23: Provide other amenities to accommodate existing bicyclists and attract new ones.

The Multi-Modal Study notes that complete streets are designed to safely integrate multiple transportation modes (pedestrians, bicycles, buses, cars) in the same right-of-way. A successful campus street will accommodate multiple modes on-street in a safe and efficient manner, utilize landscaping and other design treatments to enhance the streetscape and campus character, give low priority to cars and highest priority to pedestrians, and create a memorable sense of place. This plan incorporates the complete street philosophy whenever possible.

Coordination with Other Agencies

Campus property is located at the city line with part of the campus in Urbana and part in Champaign. As shown on page four, the streets within the campus property are owned by various agencies, including the University, the City of Urbana, the City of Champaign, and the Illinois Department of Transportation (IDOT).

Philo Road Bike Lane Ribbon Cutting in Urbana
Photo by Rick Langlois

Comprehensive transportation planning is coordinated by the Champaign-Urbana Urbanized Area Transportation Study (CUUATS). CUUATS is the transportation entity of the Champaign County Regional Planning Commission (CCRPC), which is the Metropolitan Planning Organization responsible for administering the federally mandated transportation planning process for the Champaign-Urbana-Savoy-Bondville Urbanized Area. Additionally, the Champaign-Urbana Mass Transit District (MTD), Urbana, Champaign, and the University focus on campus transportation issues through a CUUATS subcommittee, the Campus Area Transportation Study (CATS).

A number of plans and programs in Champaign County facilitate bicycling. CCRPC has created a Greenways and Trails map which identifies existing bicycle facilities throughout Champaign County. The MTD is coordinating a Mobility Implementation Plan (miPLAN), which is examining the potential for multi-modal corridors in Champaign and Urbana. The City of Urbana is implementing the Urbana Bicycle Master Plan. The City of Champaign also recently updated their master plan with a transportation segment called Champaign Moving Forward, including the bicycle vision "to provide for a seamless, comprehensive network to encourage bicycling." All of these plans were reviewed and considered during development of this Bike Plan.

Figure 1 on page 3 shows the sections from the city bike plans that are in the campus.

First Street Bike Lane
Ribbon Cutting in Champaign
Photo by Gary Cziko

Champaign Bicycle Vision *Urbana Bike Plan*

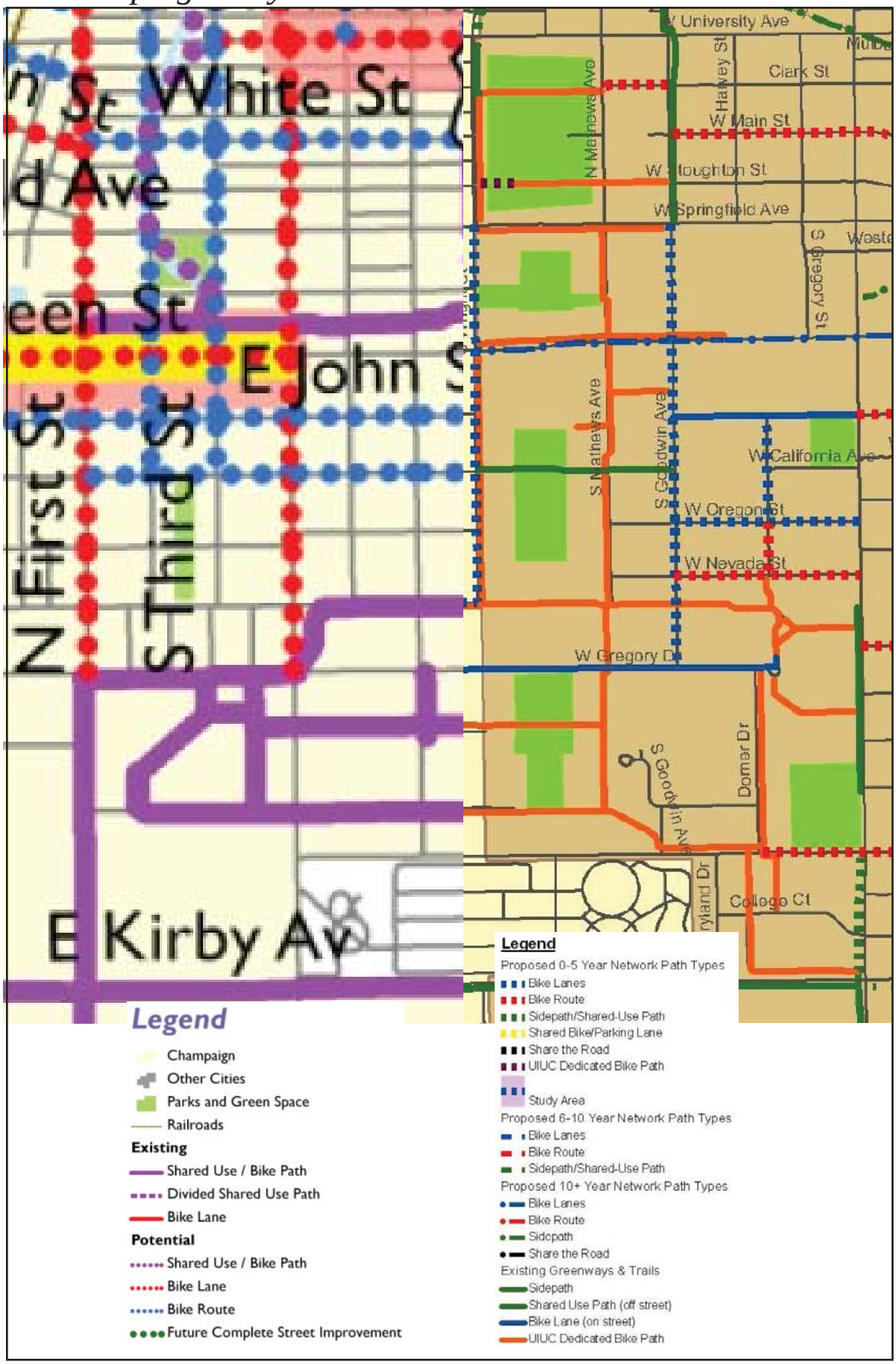


Figure 1. City bike plans within the campus area

Street Ownership on Campus

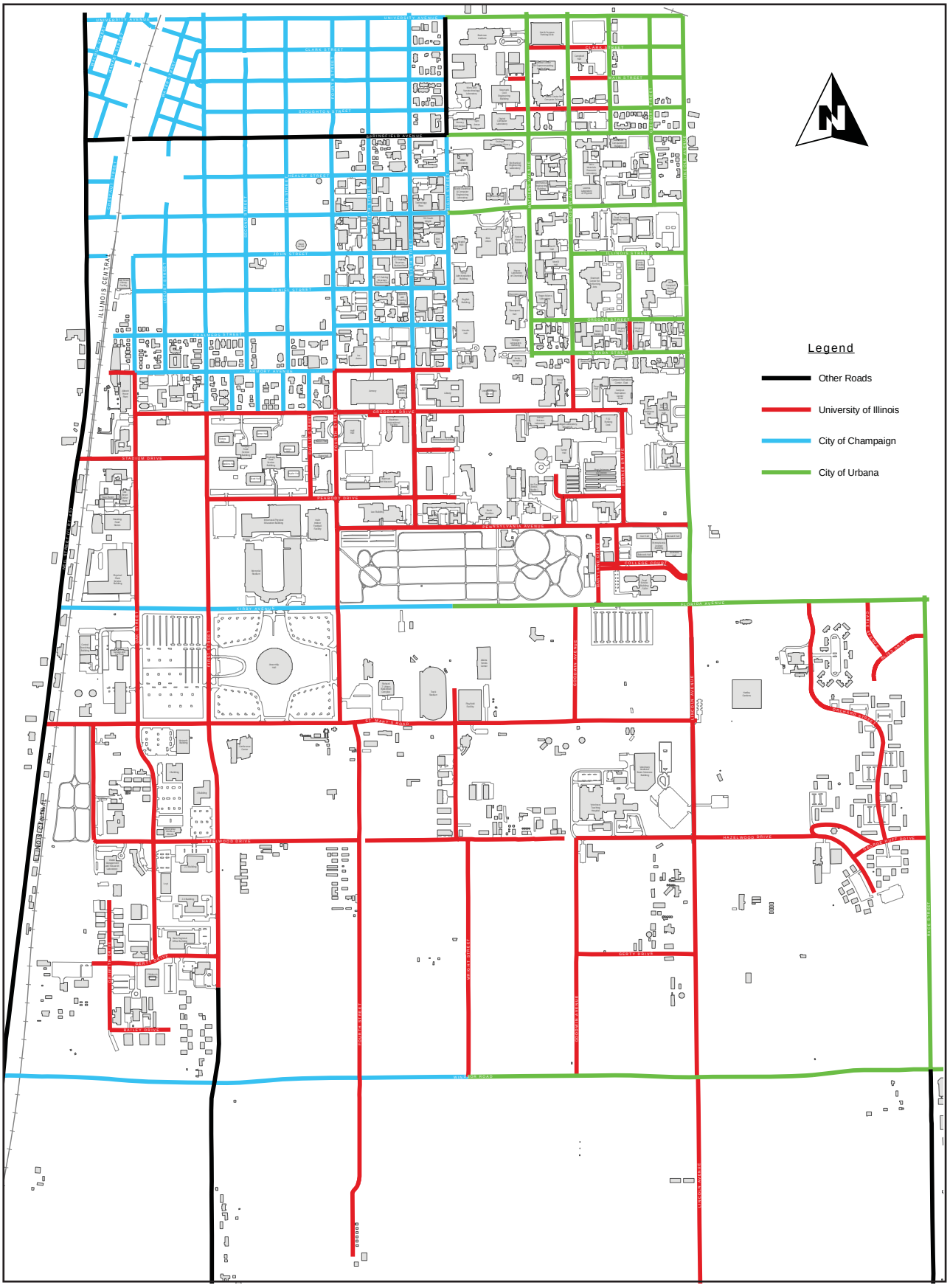


Figure 2. Street Ownership Map

Existing System Issues

Vehicle traffic has standard behaviors which are strongly enforced by law. Without these consistent traffic behaviors, driving a car would be just as unpredictable and hazardous as bicycling is perceived to be. Because many bicycles on campus are ridden on the sidewalks and off-road bike paths, the public safety officers are unable to enforce vehicle safety laws, such as stopping at intersections and moving with traffic. This lack of legal authority to enforce traffic laws for off-road bike paths creates a common misconception that bicycles are not required to follow traffic laws, even on standard streets. Thus, bicyclists are often found riding the wrong way on one-way streets, ignoring stop signs, running red lights, and weaving in and out of traffic with little regard for safety.

This unpredictable behavior from cyclists is compounded by the lack of connectivity in the current system. Even if a bike rider is planning to follow standard vehicle traffic laws, there are many locations where a campus path will end without forewarning and without any indication of where the cyclist is expected to go next. The bike rider is then forced to make a sudden decision while in motion, which can be very dangerous. A similar dangerous situation occurs because most existing bike paths run parallel to pedestrian walkways. There is little to indicate whether the pavement is intended for cyclists or pedestrians, which allows pedestrians to walk on the bike paths. This in turn pushes the cyclists to use any available path and frequent conflicts between bicyclists and pedestrians occur, both on and off the existing bike paths.

Above, bike path ends in bushes with no direction for cyclist and path runs parallel to a sidewalk
Photo by Morgan Johnston

Below, bike path used as sidewalk
Photo by Gary Cziko

Just as there are connectivity issues within the campus bicycle system, the existing connections between the campus bike ways and the community bike ways are rare and hard to find. In some instances, the bicycling community has mapped out their own bike route, like a path that links Orchard Downs with the Research Park along Hazelwood Drive. In other cases, the routes are forthcoming for the communities with a simple hope that the Campus Bike Plan will provide connections to future community routes. For example, the Urbana Bike Plan indicates a lengthy east-west bike way along Main Street, heading into campus, and the Champaign Moving Forward plan shows White Street as a multi-modal corridor. However, there is not an existing bike path through campus connecting these city routes.

Number of Bicycles on Campus

The exact number of bicycles on campus at any given time is unknown. Over the last ten years, various methods have been used to estimate the total volume.

- 12,500 bicycles on campus - In 1999, the CATS Phase 1 report estimated 12,500 bicycles on campus or roughly 21% of the total campus faculty/staff and student population of 59,000.

- 17,428 student bicyclists and 467 employee bicycle commuters - In 2007, the Mobility Implementation Plan (miPlan) conducted a survey, which included questions about bicycle ridership. About half of the students have access to a bike, and 42 percent report using a bicycle at least once a week. Additionally, four percent of employees reported using a bicycle as their primary mode of transportation, while 70 percent own a bike. There are currently 41,495 students and 11,676 employees.

- 351 bicycles registered with Parking Department from July 2008 to June 2009. The number of bicycles registered in the Parking Department database is not representative of the number of bikes on campus because there is not a direct correlation between the number of bikes registered and the number of bikes ridden on campus.

- The 2025 Long Range Transportation Plan, completed in 2005 included the following table for bicycle counts.

Table 1. Highest volume bicycle intersections from the Long Range Transportation Plan 2025. Source: Selected Crash Intersection Locations Report, 1999-2000

Bike Rank	N-S	E-W	# of Bikes	Date Counted
1	Goodwin	Green	473	9/5/2001
2	Goodwin	Illinois	288	8/30/2001
3	Wright	Green	197	9/4/2002
4	Wright	Springfield	160	9/25/2002
5	Goodwin	Springfield	160	10/1/2002
6	Sixth	Green	156	10/3/2002
7	Fourth	Green	122	9/30/2002
8	Wright	Armory	120	9/18/2002
9	Sixth	Springfield	104	9/9/2002
10	First	Kirby	91	8/26/2002

- 250 bicycles per hour at peak times - Bicycle counts were conducted at Fourth and Gregory, Goodwin and Illinois, and the bike path to Lincoln Avenue at the south end of Mathews by the Observatory. The average is 250 bikes per hour during peak travel times, with the height of class changes equivalent to nearly 500 bikes per hour through the intersections.

Consistent bike counts performed annually at selected intersections can be done in future years to track the increase or decrease in bicycling on campus. Recommended intersections include Fourth and Gregory, Goodwin and Illinois, and the bike path to Lincoln at the south end of Mathews.

While the exact number of bicycles on campus is not currently known, there are methods available for future counts. As one option, the Transportation Demand Management department can hire students to conduct an annual bike count, as currently done at the University of Minnesota. The student employees would be tasked with a full campus count during a single class period. Volunteers can supplement the large staffing that will be needed for this type of counting process. As another option, bicycle registration could become required annually. This would create a correlation between the number of registered bikes on campus and the actual number of bikes on campus.

Origin of Potential Bicycle Commuters

To ascertain the origins of potential bicycle commuters, the home addresses of all students and employees within five miles of campus were plotted and summarized in 14 zones on and around campus. The results are shown below. The majority of commuters reside within the campus boundaries, on the southern end, and the largest group of commuters from outside the campus district is approximately 6,000 people coming from the east side of campus between Springfield and Florida. The next largest group is coming from the southwest corner of campus, south of Kirby and west of Neil Street. This indicates the need to prioritize the bicycle facilities on campus in Champaign and into campus for people entering from the east side of campus in Urbana.

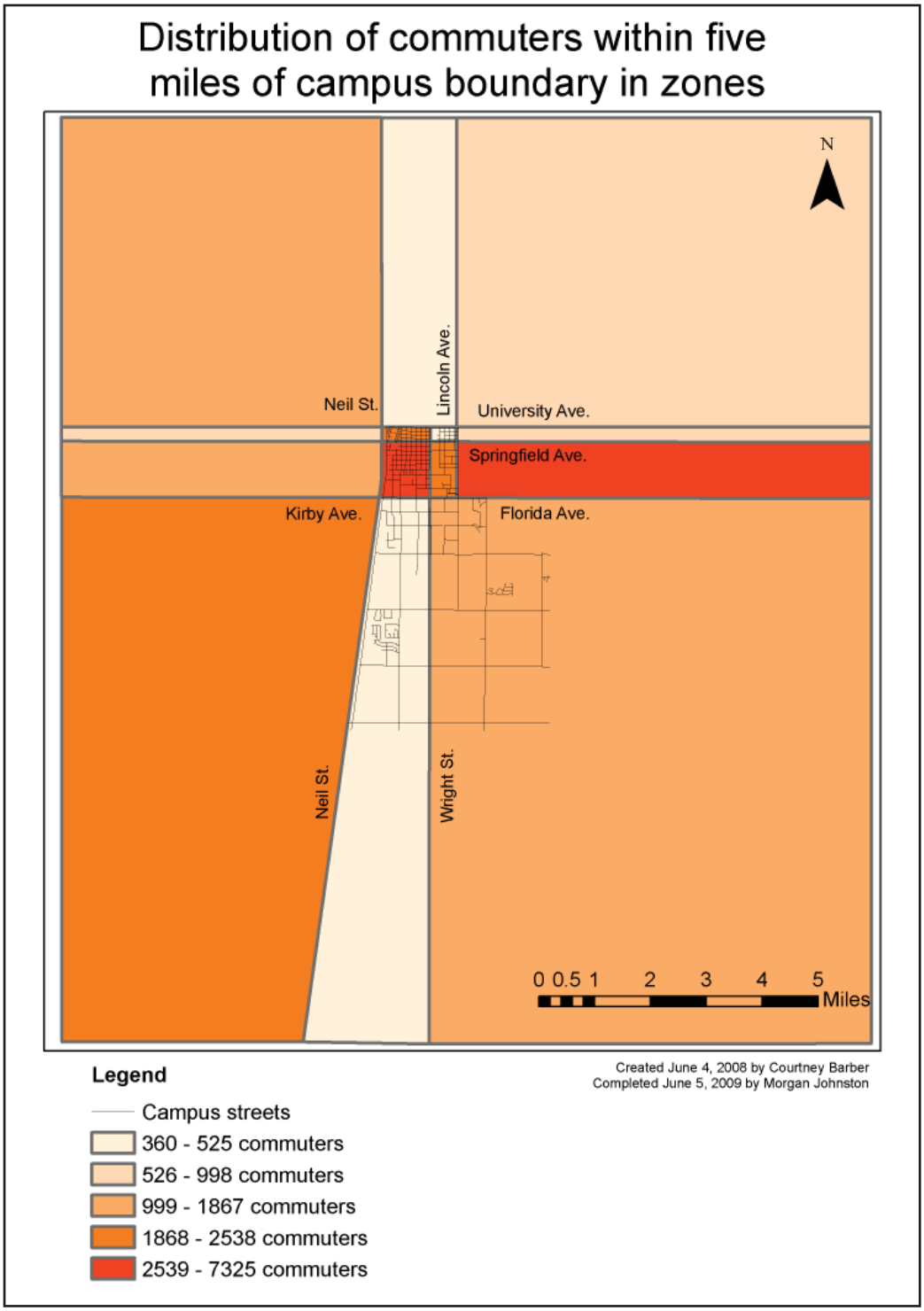
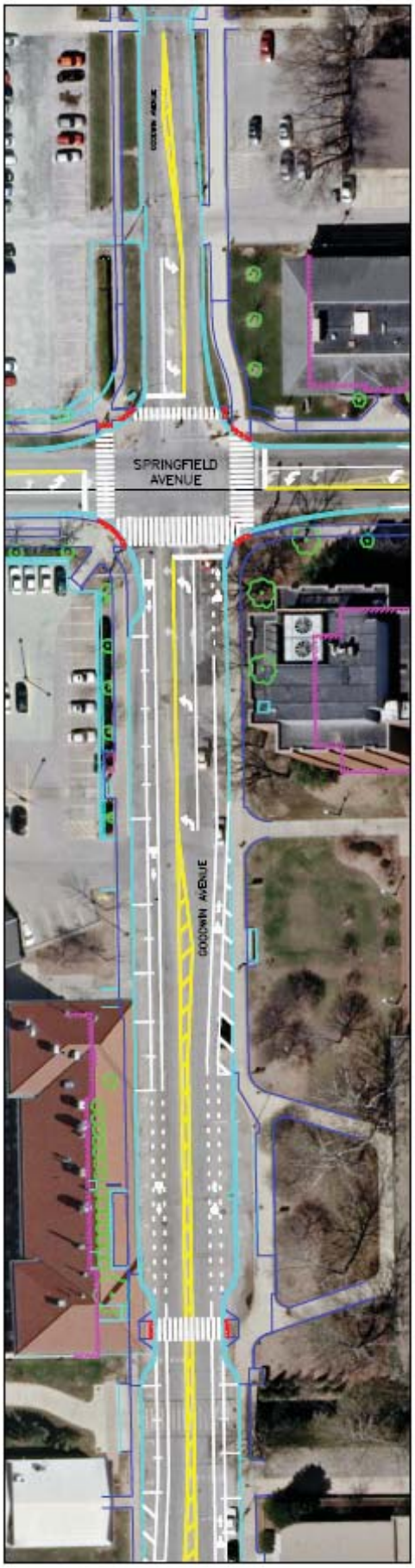


Figure 3. Distribution of home addresses of University students, faculty, and staff living within five miles of campus boundary. Source: University EDW 2006 data.



Goodwin Avenue Pedestrian and Bicycle Safety Improvement Project Site Layout, Illinois St. to Springfield Ave
City of Urbana Project Site design by Jennifer Selby

Proposed Bikeway Network

Proposed Bicycle Facilities

- Bike Lanes – on vehicular streets, a striped lane intended for only bicycle use
- Bike Routes – a street noted for higher bicycle volumes, and providing connections for bicycles
- Shared Use Paths – separate from a street, a path intended to be shared by pedestrians and bicycles
- Off-Road Bike Paths – separate from a street or sidewalk, a path intended for only bicycle use

When cyclists are placed on side paths instead of in the roadway, they cannot operate as vehicles in most intersections, causing unpredictability and introducing conflicts with pedestrians and vehicles. Thus, the proposed network for bike ways on campus is primarily on-street bike lanes.

This plan identifies the campus streets that should be restriped to include bike lanes or designated as bike routes, shared-use paths that should be maintained or developed, and locations selected for enhanced off-road bike paths. Design standards for each type of bike way are included in the following section, with images of recommended markings and signs.

Explanation of Bike Lanes

Bike lanes on roads will change the overall transportation network so that pedestrians have safer and more predictable walkways, while bicyclists will share the road with motor vehicles. Bikes are legal vehicles, and they have the same rights and responsibilities as other vehicles when on the roadways. A 1997 study by William Moritz concluded that "Streets with bicycle lanes or marked bicycle routes appear to have less than half the risk of local streets." They also serve as an educational tool reminding campus that bikes are permitted in the roadway, motorists should watch out for bicyclists, and cyclists must follow the rules of the road.

The existing bicycle network is intermingled throughout the pedestrian walkway network, which creates a number of dangerous situations for pedestrians where the paths cross over sidewalks, are close to building entrances, or are adjacent to bus stops. Additionally, the existing facilities are often poorly marked with little or no separation from pedestrian paths, making it difficult to distinguish between bikeways and walkways. Moving the bikes out of the walkways and onto the streets will dramatically decreases the risk of pedestrian and bicycle conflicts throughout campus.

Additionally, bike lanes are safer for the cyclists because they are more visible and predictable when following vehicle rules of the road. As noted in the Urbana Bike Plan, "Using the road often improves safety by increasing cyclist visibility, particularly at intersections, where most crashes occur. On-road bikeways are especially appropriate on moderate to lower speed roads with more than a few intersections, driveways, and entrances."

In a few locations, a bike lane is combined with a bus only lane, as a shared bus/bike lane. In 2008, a Transit Analysis reported over 60 buses per hour on Wright Street. The existing configuration of Wright Street includes a substandard two-way bike path separated from the street by a concrete curb. Anticipating continued high volume of buses on Wright, a shared bus/bike lane is recommended on the east side of Wright Street from Armory Avenue to Green Street. Likewise, on Green Street from Wright Street to Lincoln Avenue, a shared bus/bike lane is recommended on the north and south sides, due to high bus traffic, combined with high pedestrian traffic. There is not enough motor vehicle traffic on this segment to warrant the current four lane configuration, and designating the outer lanes as bus/bike lanes would provide traffic calming in this very high pedestrian segment of campus.

Explanation of Bike Routes

In some locations, the streets will simply be marked as a Bike Route instead of being striped with bike lanes. These are streets that are too narrow for bike lanes or streets that have been designated by Urbana or Champaign as a Bike Route. Bike Routes are helpful pieces of the full bicycle network because they provide continuity when the street is not suitable for engineered bike lanes. The Bike Route sign is meant to encourage bicyclists to use these streets and to remind motorists to share the road and watch for bikes.

MUTCD sign D11-1 for Bike Routes

Explanation of Shared Use Paths

A shared use path is a sidewalk designed to accommodate bicycle use along with the pedestrians. There are certain locations in town where bicyclists are not allowed to ride on sidewalks, but in all other locations bicycles are permitted on sidewalks. The design guidelines for the shared use paths include a sign that reminds cyclists to yield to pedestrians. While there are some shared use paths recommended in the proposed network, riding on sidewalks is extremely dangerous (Moritz 101) so cyclists must use caution.

One study of bicycle-motor vehicle collisions found that riding on the sidewalk increases the risk of an accident by 1.8 times. The authors noted that "sidewalk bicyclists can cross driveways and enter intersections at high speed, and they may enter from an unexpected position and direction—for instance, on the right side of overtaking right-turning traffic. Sidewalk bicyclists are more likely than roadway bicyclists to be obscured at intersections by parked cars, buildings, fences, and shrubbery; their stopping distance is much greater than a pedestrian's, and they have less maneuverability."

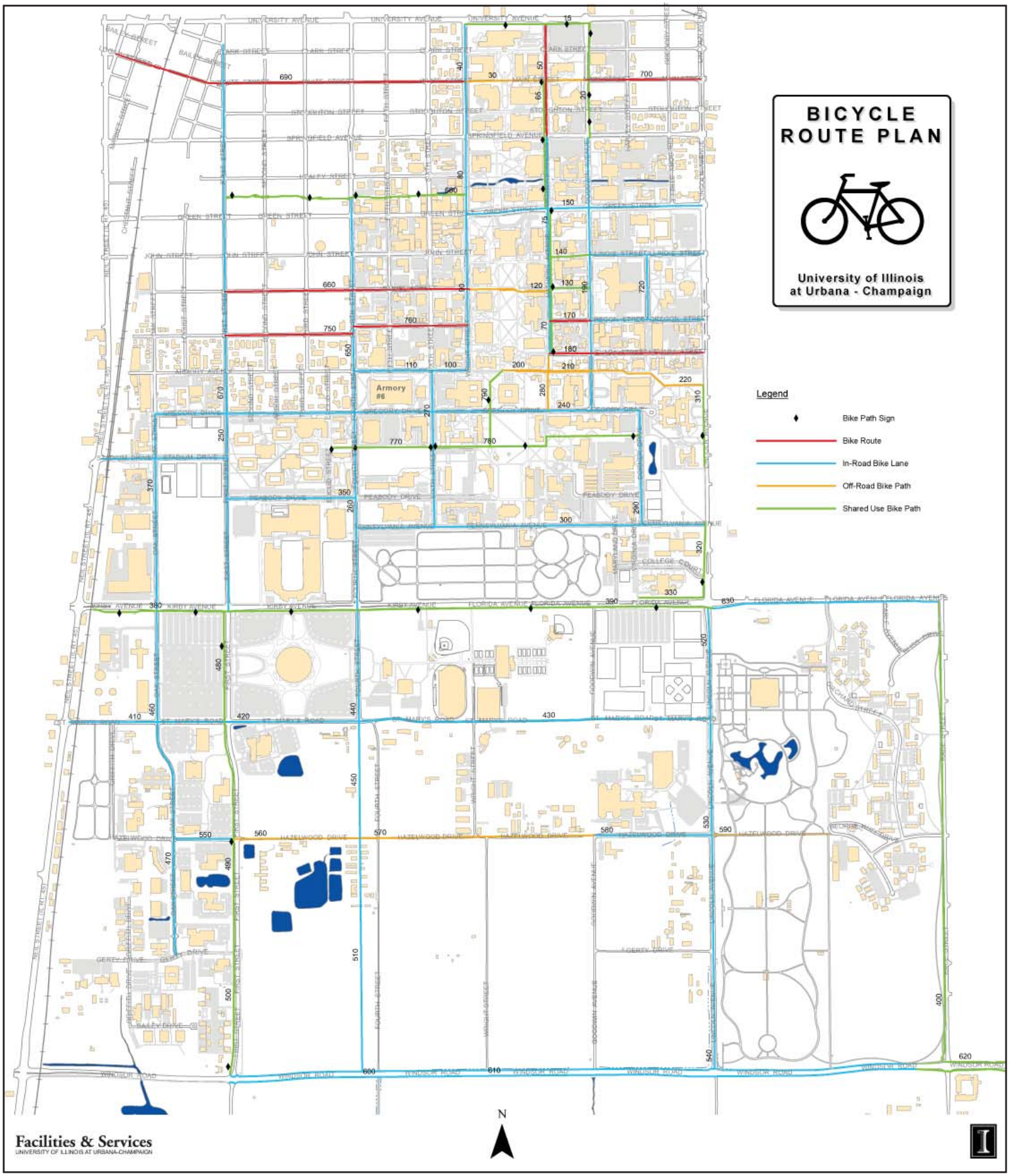
AASHTO notes that shared use paths should be used rarely "to provide bikeway continuity along high speed or heavily traveled roadways having inadequate space for bicyclists, and uninterrupted by driveways and intersections for long distances." This coincides with the Urbana Bike Plan which notes they "may be better choices than on-road bikeways for faster, busier roads with few access points and with well-designed intersections." Thus, new campus shared use side paths should only be installed on arterial roads.

Explanation of Off-Road Bike Paths

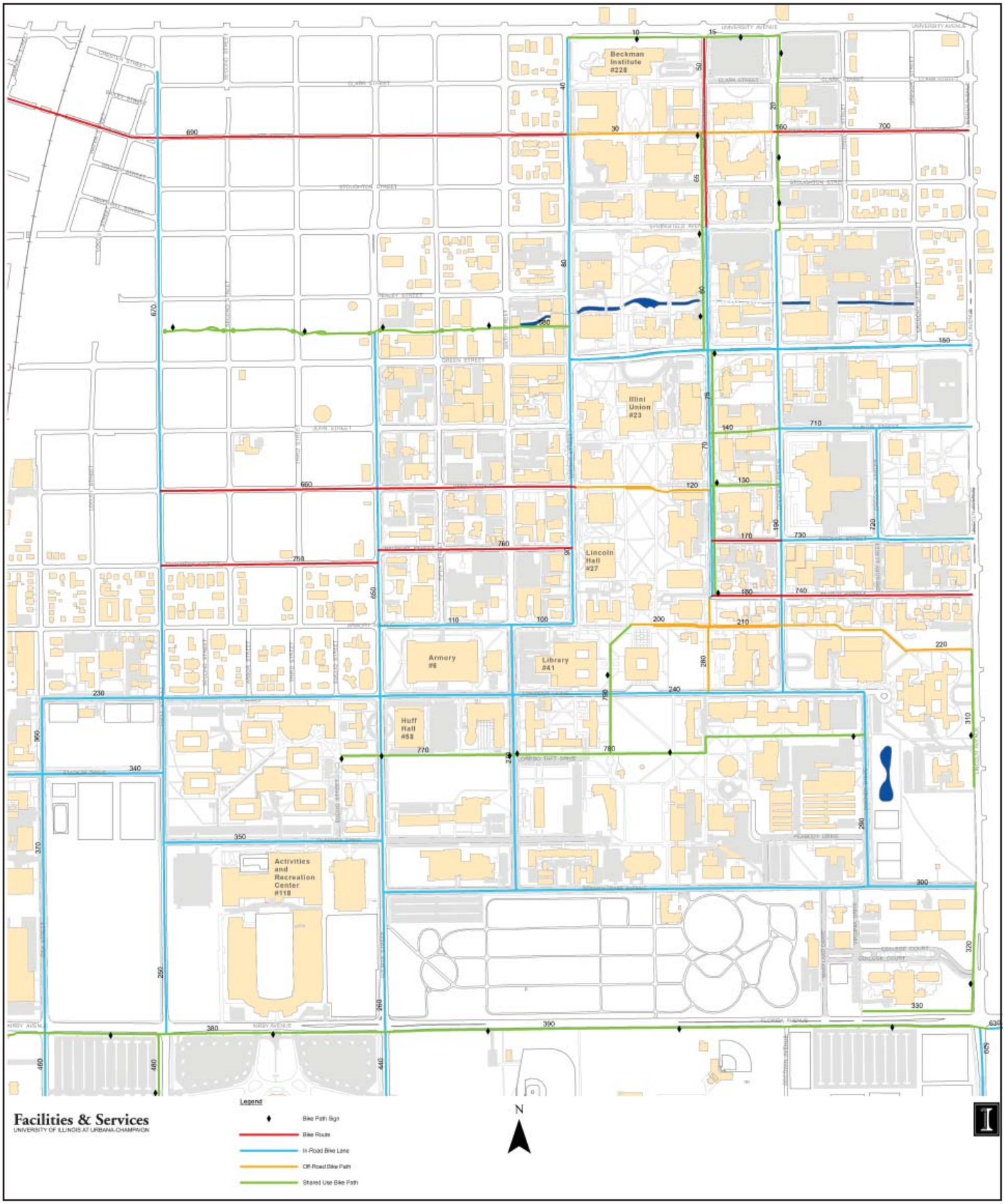
As the University has grown, some streets have been closed to traffic. Because bike paths should supplement the street system in areas inaccessible by street, there will continue to be some off road bike paths through the pedestrian areas. Off-road bike paths supplement the on-street facilities when the bike lanes are more than 1,000 feet apart.

The off-road bike paths will also improve safety for pedestrians and bicyclists through clear delineation as bikeway facilities. They will be designed using the AASHTO recommendations for bike lane designs on streets with no curb and gutter. The bike lane markings on the bike paths will indicate the proper use of the paths and minimize the number of pedestrians walking upon the bike path. The potential for conflicts at pedestrian and street crossings will be also be minimized through appropriate markings and signage for all users.

Proposed Bike Network - Full Campus



Proposed Bike Network - Main Campus



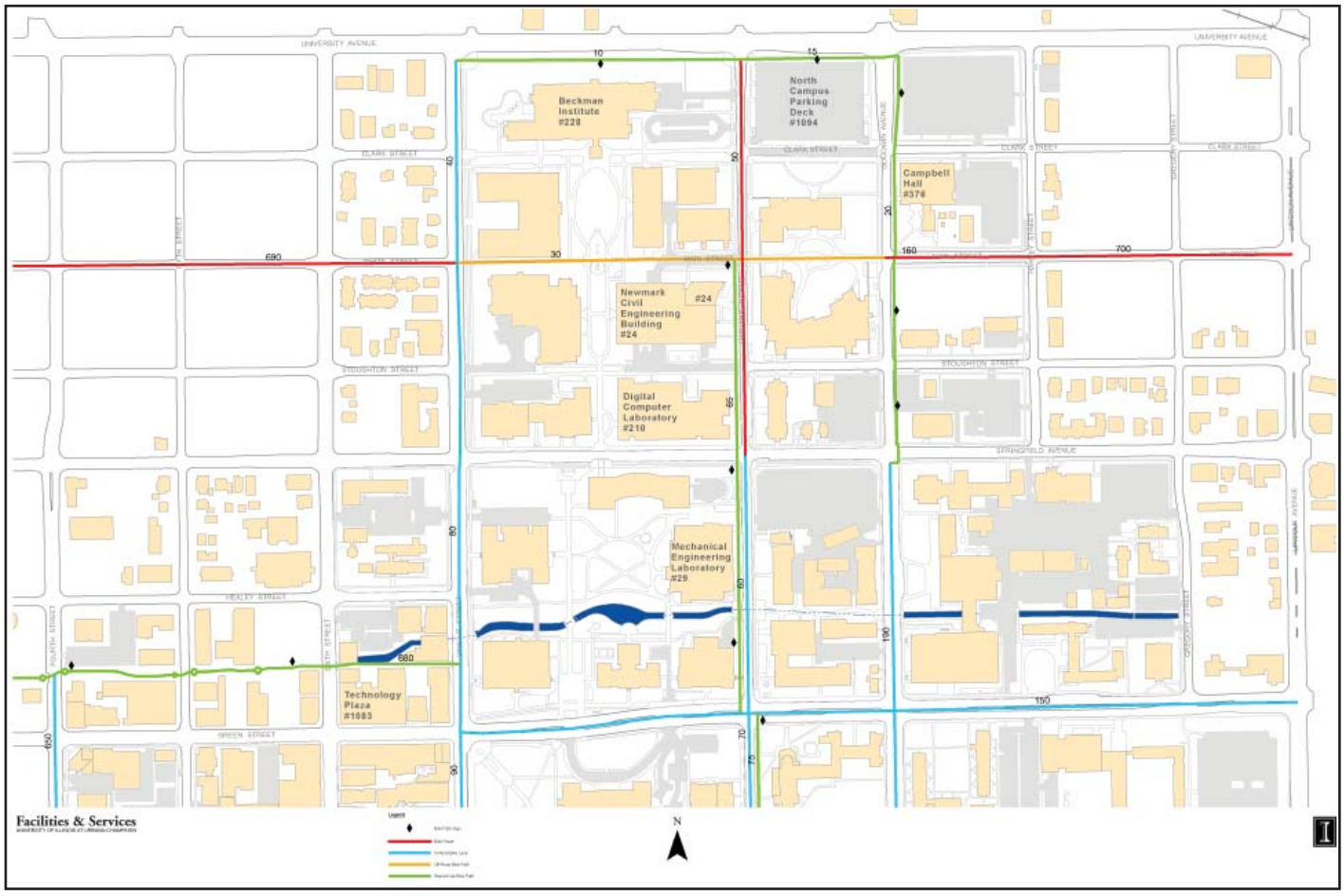
North of Green

North of Green is the Engineering Campus. The northern boundary of campus is University Avenue, which is currently the subject of a corridor study by CUUATS. University is a major arterial connecting downtown Urbana with downtown Champaign, and it is a state route. It has high volumes of automobile traffic and the existing sidewalk is large enough to be designated as a shared use path. Goodwin Avenue also has an existing sidewalk large enough to be designated as a shared use path. In fact, the Urbana Bike Plan identifies this path as an existing shared use path. There is also an existing shared use path along the Boneyard Creek in Champaign.

Goodwin south of Springfield will have bike lanes installed this summer, as part of the Goodwin Avenue Highway Safety Improvement Project by the City of Urbana. The CATS report recommends a shared bike/bus lane system on Green from Wright to Lincoln, so that is shown here. The Wright Street Bike Path Feasibility Study, recommends bike lanes on Wright Street from Armory to Springfield. The extension of bike lanes on Wright, north of Springfield, will need to be coordinated with IDOT because it is a state route in that section.

The off road bike path shown in this section can be called the Engineering Bike Path. It provides a connection for bicycles traveling between Main Street in Urbana and White Street in Champaign, and it will provide continuity for the community bike network.

Mathews Avenue is a northbound one way street from Green to Stoughton. It belongs to Urbana and has parking on both sides of the street. Because of the limited street width, the proximity to Uni High, and the block of one-way traffic, this section of Mathews should be marked as a Bike Route. Because bicyclists cannot ride against traffic on a one-way street, they need a facility for southbound bicyclists on Mathews, a shared use path on the west of the street should also be developed, and it should connect up to the Engineering Bike Path.

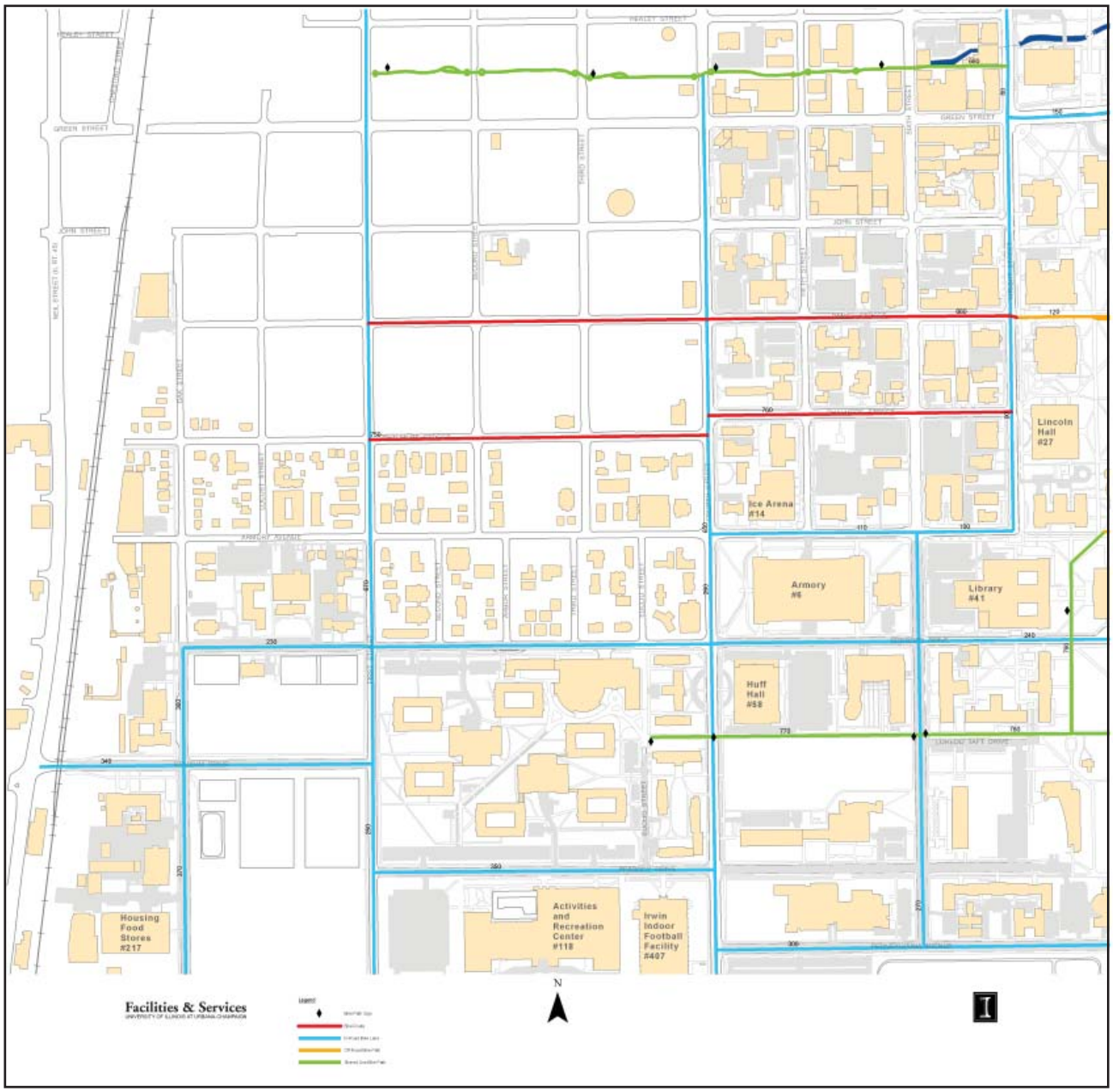


Green to Pennsylvania, Champaign

Bike lanes are existing on First Street, north of Armory, and these should be extended south to Kirby. Champaign plans bikes lanes for Fourth Street from Green to Armory, and these should be extended to Kirby as well. There are existing bike lanes on Gregory Drive, which should be extended to Oak, when that section of Gregory is reconstructed. Bike lanes should be installed on Wright, Armory, Oak south of Armory, Stadium Drive, the section of Peabody from First to Fourth, and Pennsylvania Avenue. On Sixth Street, south of Armory, bike lanes are tentatively recommended, pending a study of pedestrian safety enhancement options for that corridor.

The Champaign Bicycle Vision shows bike routes on Chalmers and Daniel from First to Wright. These will connect with the bike lanes planned for Wright Street and with the Quad Bike Path, which aligns with Daniel St.

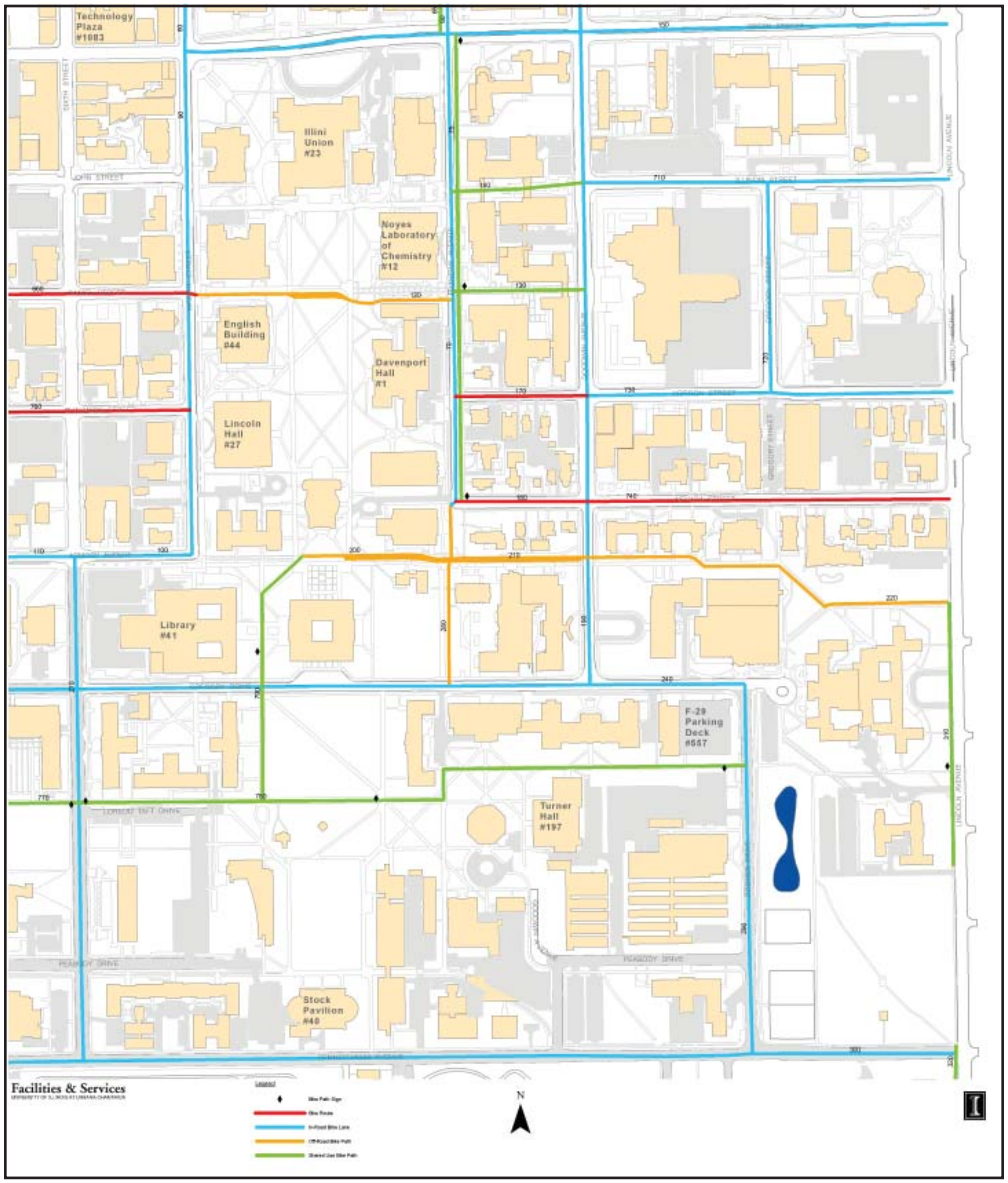
To link students living in the Ikenberry Commons residence halls to the South Quad, a shared use path is proposed from Euclid to the ACES Library.



Green to Pennsylvania, Urbana

The shared use path from Ikenberry Commons continues to Dorner Drive in Urbana. There should be a shared use path connection northward to the Lincoln Bike Path. There is also a shared use path along Lincoln Avenue from the Lincoln Bike Path to McKinley Health Center. To account for bicyclists heading west from Illinois Street, a shared use path is recommended between Morrill and Burrill Halls. Likewise, to account for bicyclists heading east from the Quad Bike Path, a shared use path is recommended north of the Chem Life Science Lab.

The one way streets of Nevada and Oregon between Mathews and Goodwin should be marked as Bike Routes, with clear indication that they are one-way for bicycles, just like they are one-way for automobiles.



The bike lane on Mathews should reflect the configuration north of Green. That is, there should be one bike lane in the street, for southbound cyclists. It should be the western lane, on the right of automobile traffic, with a shared use path for northbound cyclists on the left of traffic, east of the street.

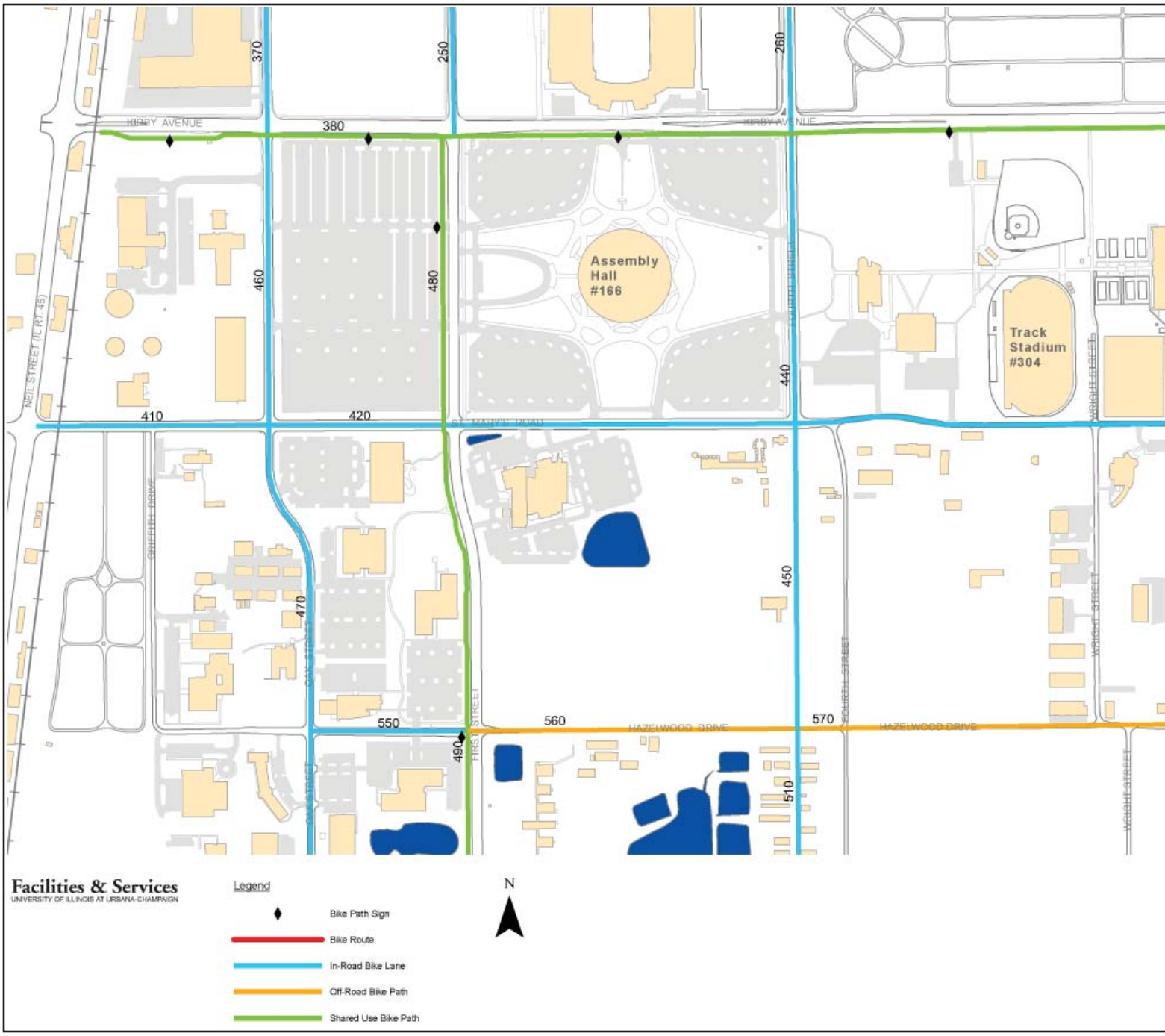
The Quad Bike Path and the Lincoln Bike Path will remain in place, with upgrades to bring them to standards. The Lincoln Bike Path will connect Lincoln Avenue with the Quad area. Due to safety limitations at the intersection with Armory and Wright, this path will end at the link with the shared use path to the south.

Bike lanes are existing on Gregory Drive and Illinois Street. They will be installed this summer on Goodwin Avenue, and they should be installed on Oregon, Gregory Street, Dorner Drive, and Pennsylvania Avenue, as well.

Kirby / Florida to Hazelwood

While bike lanes are recommended for the majority of campus streets, four lane arterials, like Kirby / Florida and First Street, south of Kirby, should have shared use side paths instead of bike lanes. Lincoln Avenue is also a major arterial, so shared use side paths are preferred. In this section, a shared use path is shown along Lincoln at the residence halls. It runs south from Pennsylvania Avenue to Florida, then turns west to connect cyclists with the bicycle parking area to the west of Florida Avenue Residence Hall.

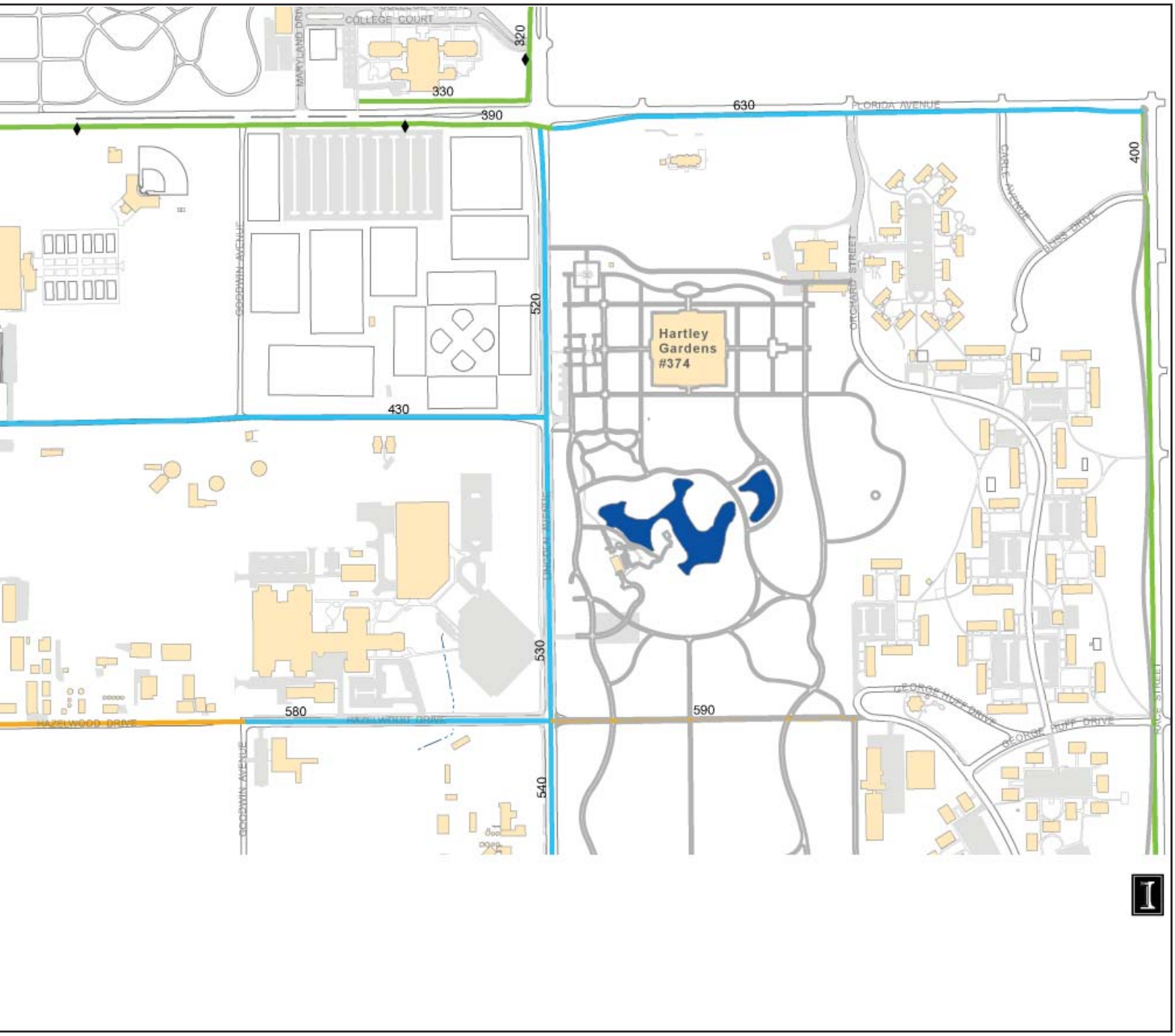
The St. Mary's Road Corridor Study recommended a road diet for Fourth Street between Kirby and St. Mary's Road. This will change the current four lane configuration to two lanes with a center left turn lane and it will allow for bike lanes to be installed within the current street width. When Fourth Street is extended south from St. Mary's, it should be built to include bike lanes as well. St. Mary's Road itself should have bike lanes



added. The Corridor Study recommended a side path for the section from Fourth to Lincoln due to right of way restrictions. However, this plan shows bike lanes along that section, with the intention to address any width limitations for the street reconstruction, when reconstruction is scheduled.

A similar space limitation was encountered for Florida Avenue, east of Lincoln, during the writing of the Urbana Bike Plan. The Urbana plan recommends an off road bike path behind the University President's House along Florida. However, this campus bike plan shows on street bike lanes on Florida, because they would only require a slight widening of the street, within the Urbana right of way. Bike lanes are recommended for Lincoln, south of Florida. Also, bike lanes should be added on Oak Street and on the existing roadway sections of Hazelwood.

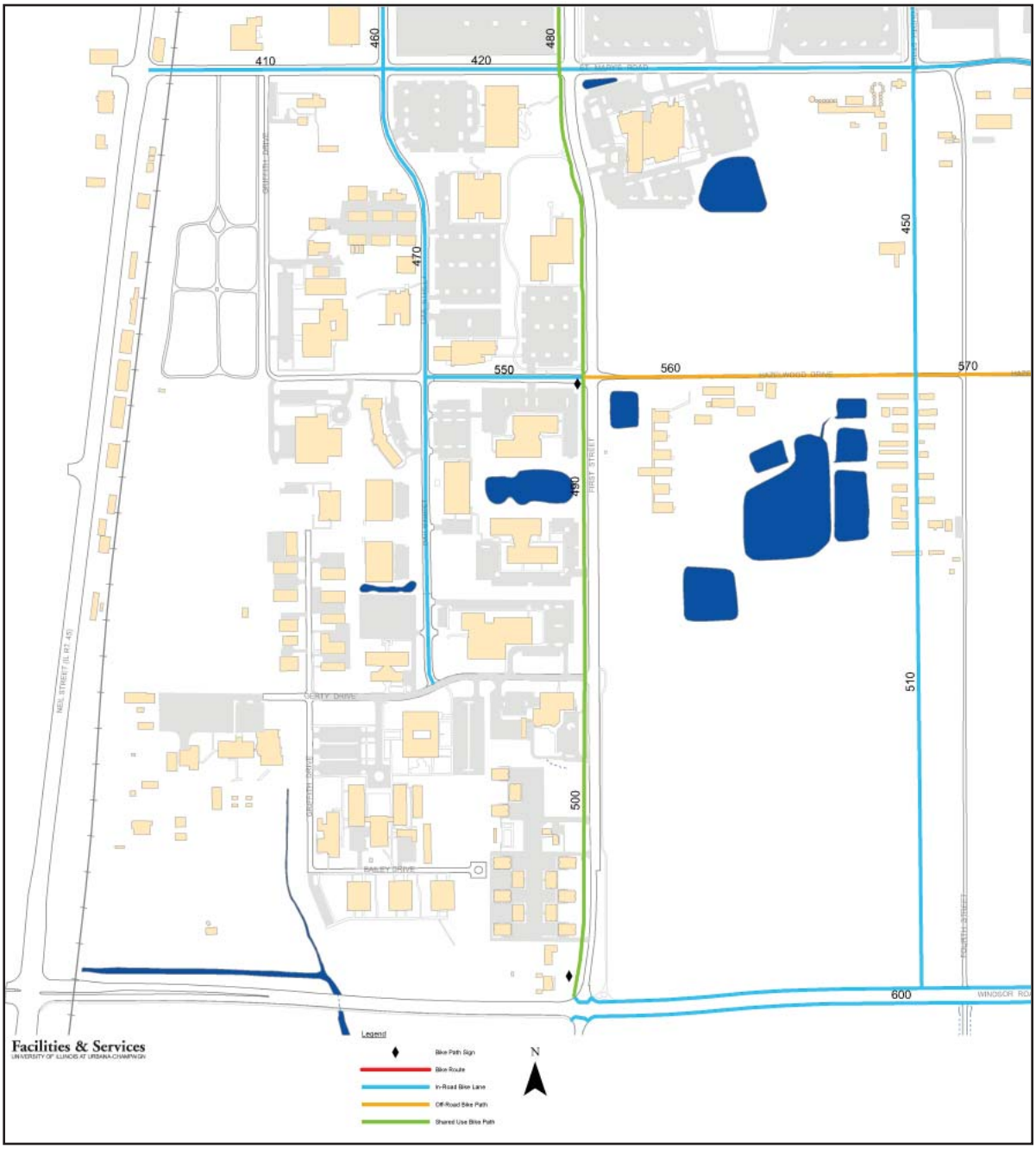
To provide a connection from Orchard Downs to the Research Park, an off road bike path should be constructed along Hazelwood from First St. to Goodwin Ext. and from Lincoln Ave. to George Huff Drive.



Research Park

Within the Research Park, bike lanes are proposed on Hazelwood Drive and Oak Street. The other streets in this area have low traffic volumes, so they are easily used by bicyclists without delineated bike facilities. The bike lanes on Fourth Street should be installed when that street is constructed south of St. Mary's Road. This view also shows the Hazelwood Bike Path and existing bike lanes on Windsor Road.

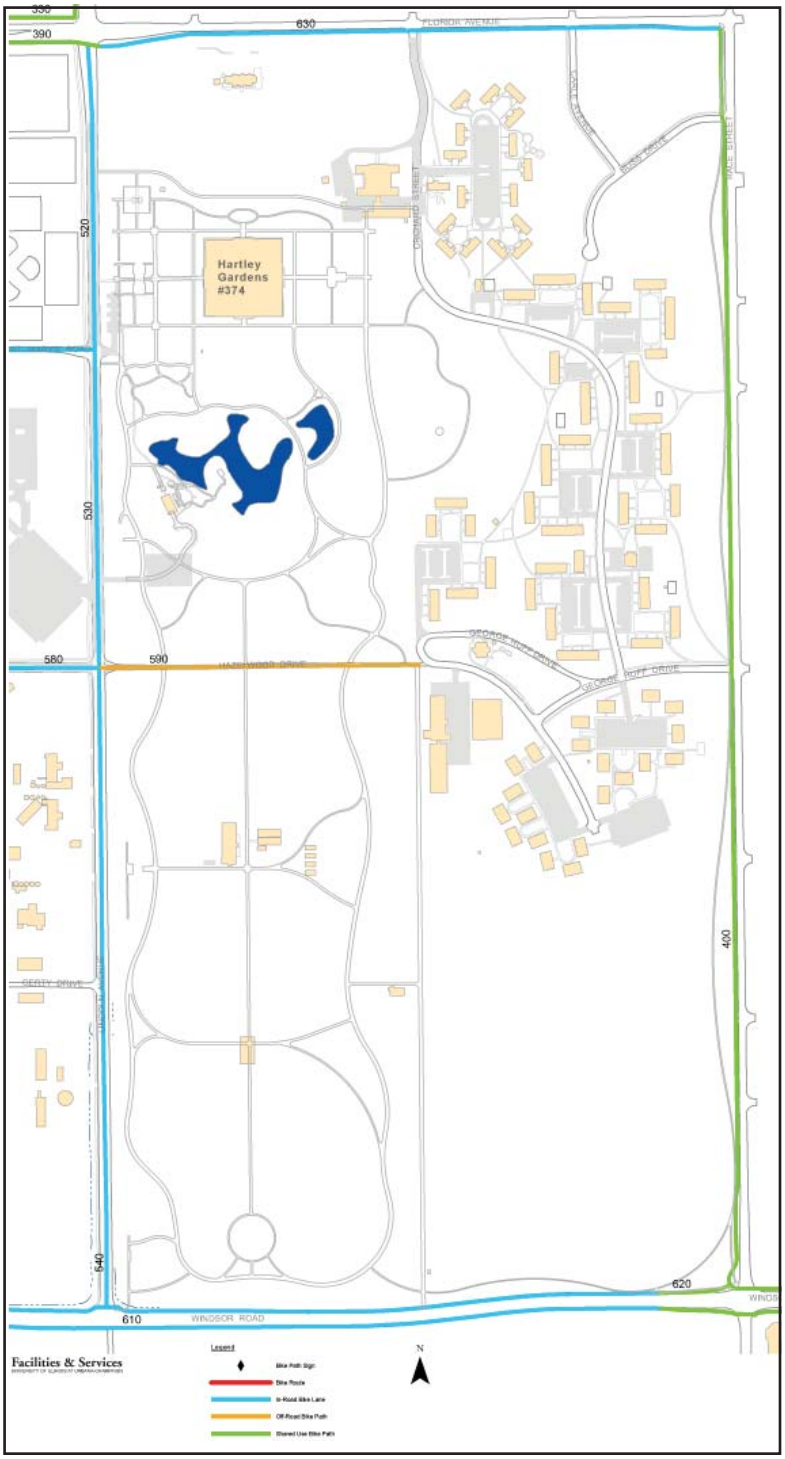
The Research Park would also benefit from the addition of a full network of sidewalks.



Orchard Downs

This section shows an existing shared use path along Race Street. Also shown is the eastern segment of the Hazelwood Bike Path, which connects Orchard Downs to the Research Park. An enhanced crosswalk, which includes a median island with enough space for a bicycle to pause for traffic, is recommended for the Lincoln crossing at Hazelwood.

Any update to the master plan for Orchard Downs will need to accommodate bicycle traffic and connect to the Hazelwood Bike Path, as shown here. The Hazelwood Bike Path will also connect cyclists to the recreational trails at the Arboretum, shown here in grey.



Changes from Existing Bicycle Network

The resulting campus bicycle network will be very different from the hodgepodge of old bike paths currently in place. This table shows the changes in mileage of each type of bicycle facility.

All two-way bike paths along the side of the road will be removed, with the majority of them being replaced with bike lanes on streets. In some cases, they will be changed to shared use paths, and in other cases they will be discontinued. The table to the right lists two-way side paths replaced with bike lanes.

Additionally, some existing paths will be discontinued. These have alternate routes available in the future system, as listed in the table below.

Type of Facility	Existing miles	Proposed miles
Bike lane	4.9	16.6
Bike route	0.0	2.7
Two-way side path	2.8	0.0
Shared use path	6.1	8.7
Off-road bike path	1.9	2.2
Total	**15.7**	**30.2**

Table 2. Mileage changes for each type of bike way on campus, existing compared to proposed miles

Two-way side paths replaced with bike lanes	From	To
Armory	Fourth	Wright
Dorner	Pennsylvania	Gregory Dr.
First	Gerty	Gregory
Fourth	Kirby	Armory
Gregory St.	Oregon	Illinois
Illinois	Lincoln	Mathews
Lincoln	Florida	Windsor
Mathews	Nevada	Clark
Peabody	First	Fourth
Pennsylvania	Fourth	Lincoln
Sixth	Peabody	Armory
Stadium	First	Neil
Wright	Armory	University

Table 3. Two-way side paths replaced with bike lanes

Table 4. Discontinued two-way bike paths, with current locations and alternate routes

Discontinued paths	Location	From	To	Alternative Route
Altgeld Path	off street	Wright	Illini Union	Quad Path
Armory Shortcut Path	off street	Fourth and Gregory	Armory and Fifth	street system
Clark Street Path	off street	Goodwin	Wright	Engineering Bike Path
Gregory Street Path	off street	Gregory Drive	Illinois	street system
Illinois Path	off street	Goodwin	Mathews	shared use path extension of Illinois
McKinley Center Path	off street	McKinley parking lot	Dorner Drive	Lincoln Bike Path
Orchard Downs Path	next to street	Race	Lincoln	street system
Peabody Path	next to street	Fourth	Mathews Ext.	Loredo Taft shared use path
Six Pack Path	off street	Gregory and Fourth	Pennsylvania and First	sidewalk system
Springfield Ave.	next to street	Gregory Street	Grainger Library	Engineering Bike Path and street system
Stoughton Street	on street / off street	Goodwin	Fourth	street system and Engineering Bike Path
Union Path	off street	Mathews	Illini Union	Quad Path
Virginia Drive	on street	Pennsylvania	Florida	street system

Impact on Parking

In 2008, Chancellor Richard Herman charged a Parking System Review Committee (PSRC) with recommending "*comprehensive parking policies that address the following:*

- *salary-based rate concerns;*
- *price differentiated parking options; safety enhancements that support current efforts to reduce vehicular traffic on campus;*
- *optimize existing parking space;*
- *promote green transportation; and*
- *give consideration to expanded parking services such as*
  - » *satellite parking with high frequency shuttle access,*
  - » *access to occasional parking for those who choose not to park on campus on a regular basis (e.g., transit riders, cyclists and car/van pool users),*
  - » *access to multiple parking facilities, and*
  - » *demand related pricing for high demand parking areas.*"

The PSRC's final report recommended moving metered parking from streets to lots and garages, as well as other transportation demand management recommendations.

This bike plan recommends bike lanes on a few streets that will only accommodate bike lanes if some or all of the parking spaces are removed. Table 5 lists transportation segments that will impact parking spaces when implemented. This table also makes recommendations for alternative parking options for each of these segments.

There are a total of 318 parking spaces that will be removed from streets through the implementation of this plan.

Table 5. Segments of Bicycle Network that will impact parking on campus, with recommendations for alternative parking options

Seg. #	Street/Path Name	From	To	Proposed Path Type	Street Width (feet)	Current Parking Configuration	# UI parking spots	# UI spaces removed	Recommendations for Alternative Parking options
110	Armory	Fourth	Sixth	Bike Lanes	31	parking on both sides	12	12	vehicles can use Library lot E-3
290	Dorner	Gregory Drive	Pennsylvania	Bike Lanes	35	parking on east side	35	35	vehicles can use existing meters in lot F-28
300		Fourth	Lincoln	Bike Lanes	40	parallel parking on both sides, 149 meters	149	75	vehicles can park on north side only
340	Stadium	Neil	First	Bike Lanes	40	parallel parking on both sides, 18 E-8 permits, 41 meters	59	32	vehicles can park on south side only. 25 spaces on south = 18 permits + 7 meters.
350	Peabody	First	Fourth	Bike Lanes	35	parallel parking on north side, 29 meters	29	29	vehicles can use lot E-24 by ARC
360	Oak Street	Gregory Drive	Stadium	Bike Lanes	38	parallel parking on east side	10	5	move these meters into lot E-7
370	Oak Street	Stadium	Kirby	Bike Lanes	42	parallel parking on both sides	100	50	move these permits into E-14
520	Lincoln	Florida	St. Mary's Road	Bike Lanes	43	parallel parking on both sides - 81 meters	81	41	change meters to be only on one side of road, from Florida to Hazelwood. Move permit spaces south of St. Mary's to other parking lots
530	Lincoln	St. Mary's Road	Hazelwood	Bike Lanes	43	parallel parking on both sides - 76 permit spaces = 49 student permits + 0 employee permits	76	38	move all these student permit spaces to other lots in Vet Med area. 21 to F32, 15 to F27, 10 to F25 - lose 4 or add them to F22 or F26

Implementation Costs

To implement these changes, actual site layouts for each facility will be needed. Each site design will need an engineering design completed before a construction estimate can be calculated accurately. Thus, only a very rough estimate can be included here.

This estimate is based on the installation of bike lanes on existing pavement, new concrete for the off-road paths, and an average cost per installed sign.

Item	Cost	Per	Quantity	Cost
Signs for Shared Use Paths	$125.00	sign	68	$8,500
Pavement for Off-Road Paths	$7.50	square foot	94,216	$706,617
Striping Off-Road Paths	$5.00	square foot	11,777	$58,885
Striping Bike Lanes	$5.00	square foot	60,495	$302,473
Signs for Bike Routes	$125.00	sign	20	$2,500
			Total	**$1,078,974**

Table 6. Rough Estimate of Implementation Costs

There are usually going to be additional needs with additional costs, when the bike way engineering is complete. Here are three examples of additional costs, based on site layouts and engineering designs.

- Goodwin Avenue from Gregory to Springfield - The estimate for striping bike lanes along this 3,094 foot corridor is $15,469. However, the actual project includes curb bump outs, new street lights, updates to sidewalk ramps and crosswalks, enhanced bus shelters, and new pavement. Thus, the total project cost is close to two million. The striping for the bike lanes is only a small part of the full project.
- Off-Road Bike Path between Goodwin and Mathews, north of Bevier and IGB - The estimate for this 948 foot path is $61,594. However, the actual project includes new trees, adjustments to utilities, removal of the old paths, and new bike parking. Thus, the total project cost is estimated at $96,100.
- Wright Street from Green to Springfield - The estimate for striping bike lanes on this 849 foot corridor is $4,246. However, the actual project includes restriping the street center lines, adding bus pull outs, restriping parking stalls, moving parking meters, and milling and resurfacing the pavement, for a total project cost of $158,200.

Funding the Bike Plan

The actual cost to the University for each of these bike ways will depend on many variables, including engineering details, grant opportunities, and partnership with other jurisdictions.

- To implement these projects in the next few years, the University should allocate $1.5 million for immediate improvements and engineering designs.
- To address these projects as funding permits, the University should increase the TDM department funding by $100,000 per year for bike network improvements.
- To contribute as projects are recommended, the University should place a high priority on funding projects that assist with implementation of this plan.

Design Guidelines

The design of campus bicycle facilities should follow recommendations in the AASHTO guide, and signage should follow the standards established in the MUTCD. Additionally, the campus bikeways should fit into the community and county standards established in the Urbana Bicycle Master Plan, the Champaign Transportation Plan, and the Champaign County Greenways and Trails design guidelines.

Bike Lane Striping

- On-street bike lanes should be five feet wide.
- A six inch solid white stripe should run between the bike lane and the motor vehicle lane.
- The white stripe should be dashed with two feet long stripes separated by six feet long breaks for approximately 50 feet before any street intersection with right turning motor vehicles. If there is a stop bar at the intersection, the first section of the dashed stripes closest to the stop bar should be the six foot break, with the solid white line beginning 54 feet from the stop bar. If there is no stop bar at the intersection, the first section closest to the intersection should be the two foot white stripe, with the solid white line beginning 48 feet from the intersection.

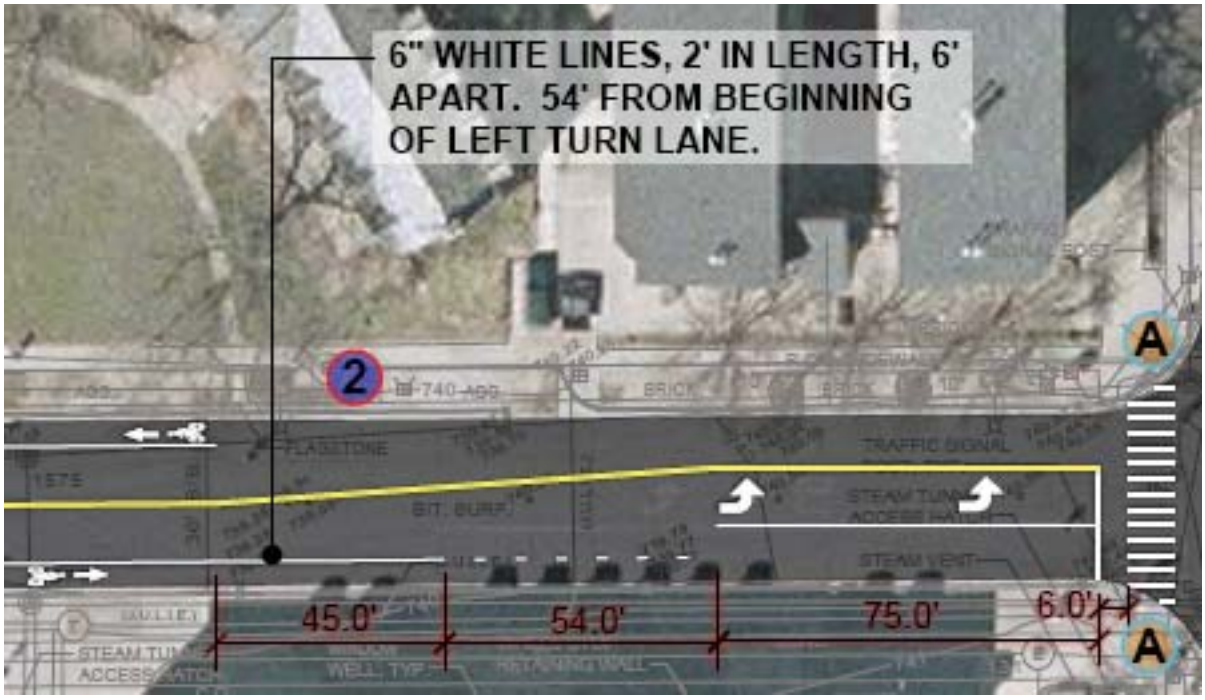


Figure 4. Bike Lane striping layout at intersection with spacing dimensions
Figure by Tiffany Williams

- The white stripe should be dashed with two feet long stripes separated by six feet long breaks for the length of any bus stops along the bike lane.
- Bike lanes next to parking lanes should be separated with a four inch solid white stripe.
- If there is a parking lane adjacent to a bike lane, the bike lane should be between the parking lane and the motor vehicle lanes.
- If there is parallel parking next to the bike lane, the parking stalls should be marked with ticks that extend two feet into the bike lane to warn bicyclists to watch for opening doors.
- The minimum width of parallel parking lanes is seven feet.
- Diagonal parking next to a bike lane shall be back-in parking only.

Bike Lane Symbol Markings

- The bike lane symbols shall be white.
- All bike lane markings will include the standard MUTCD riding cyclist, followed by the arrow in the direction of travel. The riding cyclist marking will be six feet long, followed by six feet of blank pavement, followed by an arrow six feet long.
- Bike lane markings should be used as frequently as necessary to clearly delineate the bike lane. Recommended placement includes at major driveways, at bus stops, and at least once mid-block.

Bike Lanes at Intersections

- A through bike lane may not be placed to the right of a right turn only lane.
- Bike lane markings should not extend into an intersection.

Illinois Street Bike Lane at T-intersection with Gregory Street, includes bike lane sign, bike rider symbol marking and crosswalk markings
Photo by Morgan Johnston

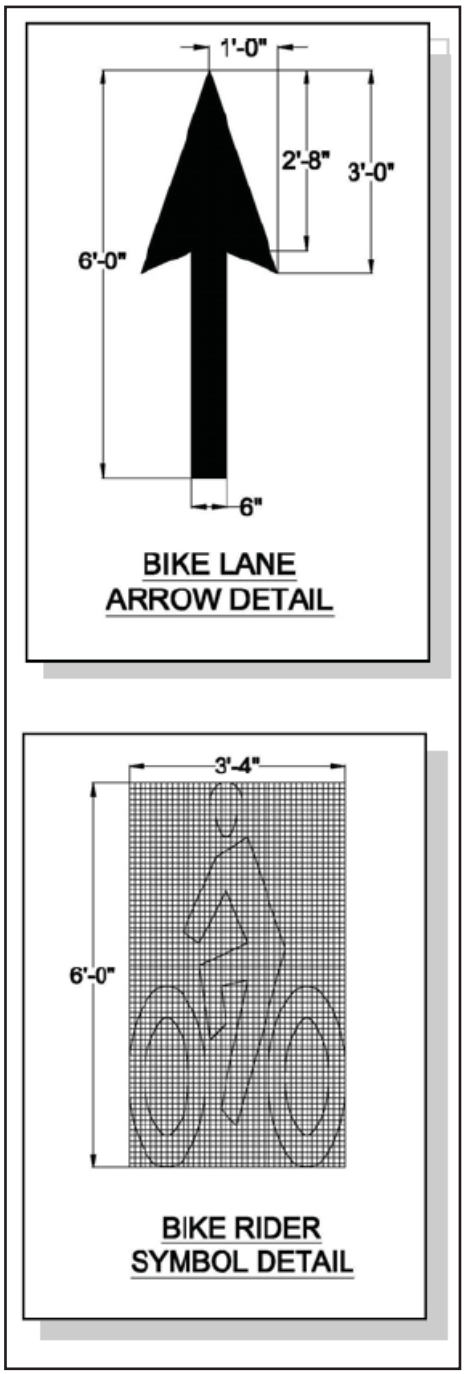


Figure 5. Bike Lane arrow and bike rider detail drawings with dimensions
Source: CUUATS Greenways and Trails Design Guidelines, 2008

- The bike lane symbol shall be placed immediately after an intersection.
- No markings should extend through a marked continental pedestrian crosswalk in a street.

Bike Route Signs

- Bike route signs shall be placed according to the MUTCD requirements, along all street segments designated as a Bike Route.

Shared Use Side Paths

- Shared use side paths should only be installed where there is not room to accommodate bike lanes on the roadway.
- Shared use side paths shall be a minimum of ten feet wide.

Shared Use Path Signs

- The “bikes yield to peds” sign (MUTCD R9-6) should be placed mid block along each block of a shared use path within the University District.
- There should be two signs on one post, facing each direction along the shared use side path.
- The sign post shall be placed on the far side of the path, away from the street.
- Sign placement on shared use paths shall follow the MUTCD requirements. The clearance information listed here is from the 2003 edition, but these requirements are expected to change in the next edition of the MUTCD.
- Lateral sign clearance shall be a minimum of three feet and a maximum of six feet from the near edge of the sign to the near edge of the path.
- Mounting height for ground-mounted signs on shared-use paths shall be a minimum of four feet and a maximum of five feet, measured from the bottom edge of the sign to the near edge of the path surface.

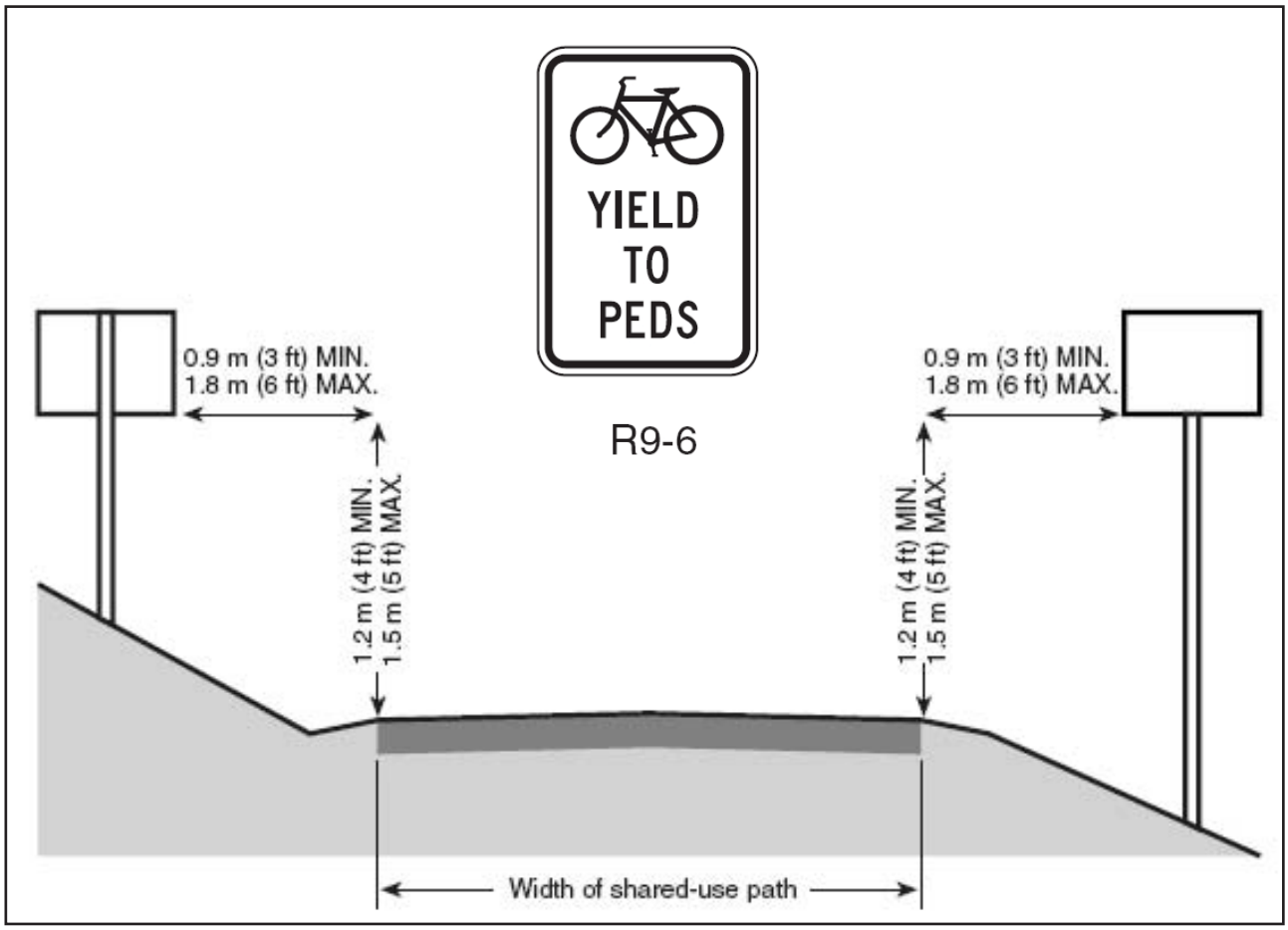


Figure 6. Dimensions for shared use path signs and MUTCD sign R9-6 for shared use paths on campus
Source: MUTCD

Shared Use Path Markings

- No paint markings are required on shared use side paths. Existing paint markings on shared use paths should be allowed to deteriorate.

Off-Road Bike Paths

- Off-road bike paths will be designed to AASHTO standards for bike lanes on streets with no curb and gutter.

- Off-road bike paths shall be a minimum of eight feet wide. This follows the AASHTO guidelines for a bike lane on a street with no curb or gutter.

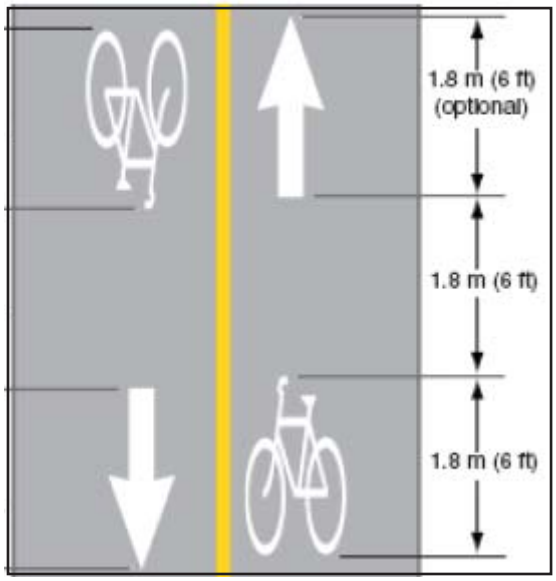


Figure 7. Dimensions of bike lane symbols for off-road bike paths, Source: MUTCD

Off-Road Bike Path Center Lines

- A four inch wide yellow center line shall separate traffic traveling in opposite directions.

- The center line should be dashed when passing is permitted. Dashes should be three feet long, followed by a nine foot break.

- Center lines should be solid to indicate no passing within 20 feet of intersections.

Off-Road Bike Path Markings

- The off road bike paths will follow the marking recommendations for on-street bike lanes.

- The bike lane symbols shall be white.

- All bike lane markings will include the standard MUTCD riding cyclist, followed by the arrow in the direction of travel. The riding cyclist marking will be six feet long, followed by six feet of blank pavement, followed by an arrow six feet long.

- Bike lane markings should be used as frequently as necessary to clearly delineate the bikeway. Recommended placement includes at building entrances, at service drive crossings, and at least every 500 feet.

Off-Road Bike Paths at Street Crosswalks

- Bike Path street crossings should follow the University District Crosswalk Guidelines standards. These currently state “Use standard two white parallel lines with a bicycle stencil marked in the center of the section.”

- A bike crossing will be indicated with two 12 inch white parallel lines, spaced eight feet apart.

- The bike lane symbol shall be placed in the center of the street intersection.

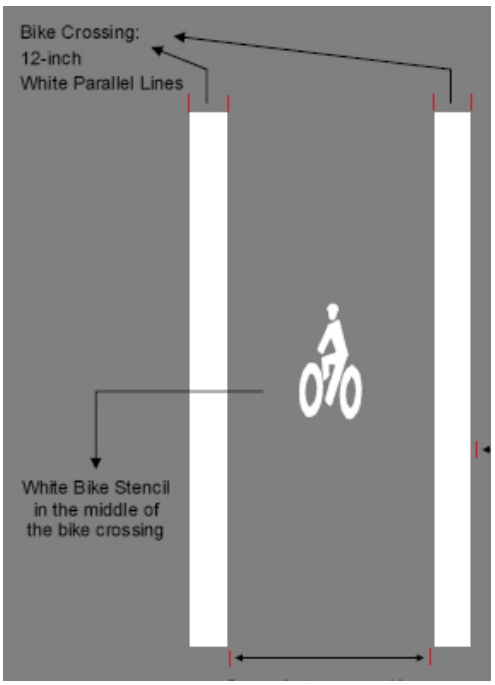
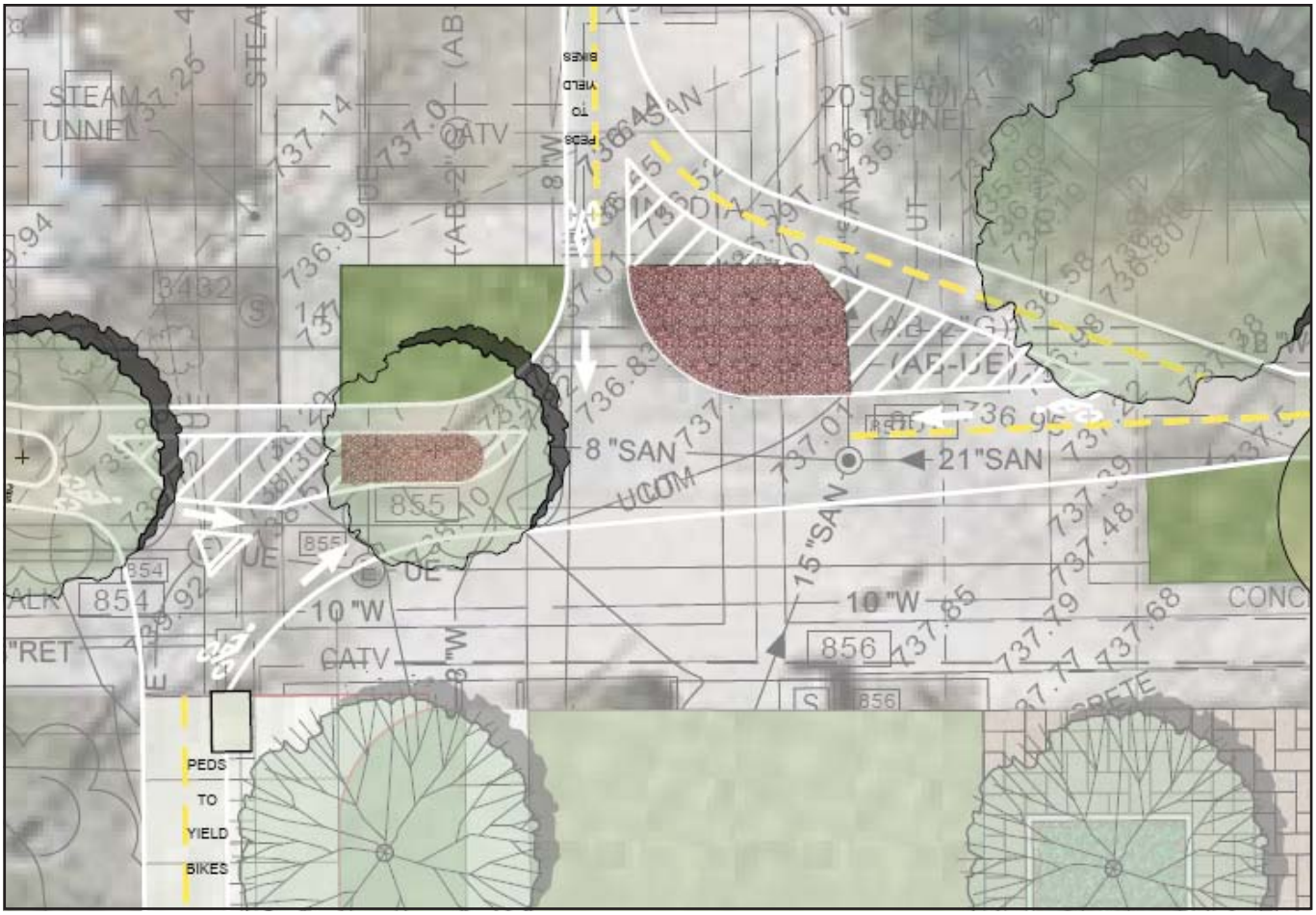


Figure 8. Dimensions of bike way crossings at streets. Source: CUUATS University District Crosswalk Markings and Signage, 2009

- At a mid-block bike crossing, without a marked pedestrian crosswalk adjacent, a bike warning sign with downward pointing arrow (MUTCD W11-1 and W16-7p) should be installed at the bike crossing.

- When a bike warning assembly is installed to indicate a mid-block bike crossing not adjacent to a marked pedestrian crosswalk, an advance warning sign should be installed approximately 25 feet prior to the bike crossing, with an "AHEAD" plaque (MUTCD W16-9p).



Markings design for an off-road bike path intersection with a major walkway, at south end of Mathews Avenue by IGB Site Layout by Tiffany Williams

Off-Road Bike Paths at Minor Walkway Intersections

- At minor walkway intersections, the bike path shall have two white parallel lines four inches wide and eight feet apart, denoting the location of the path across the walkway.

- The yellow center line should continue through the minor walkway intersection with the same style as leading up to it.

Off-Road Bike Paths at Major Walkway Intersections

- At major walkway intersections, the bike crossing shall be indicated with white parallel lines six inches wide and eight feet apart, denoting the location of the path across the walkway

- The yellow center line should not be extended across major walkway intersections.

- The bike lane symbol shall be placed in key locations at major walkway intersections.

Bicycles and pedestrians on the Quad
Photo by Morgan Johnston

Additional Considerations

While updating the bicycle infrastructure for paths and bike lanes is a necessary step for encouraging more bicycle trips, there are additional issues to be considered, as follows:

- Lack of appropriate bicycle parking facilities, in terms of location, quantity, and type
- The need for systematic bicycle education covering safe riding techniques, basic rules of the road, share the road concepts, and benefits of bicycles
- Options for incentives and benefits for bicycle commuters, such as a bicycle commuter tax benefit, a guaranteed ride home program, occasional parking passes for cyclists, and shower facilities for cyclists
- Requests for special bicycle services, including bike sharing for employees and students, a bicycle fix-it shop on campus, and better registration processes

Bike Parking Facilities

There are 18 bicycle parking areas in the Quad are of campus, within the boundaries of Green–Mathews–the Lincoln Path–Wright. Of these, only four are up to current standards for campus bicycle parking facilities. The remaining bicycle parking areas on campus are being inventoried this summer, so priorities for upgrades and additional locations can be determined.

The Multi-Modal Study highlighted the need for better bicycle parking facilities, and concerns about bike parking have been raised by various departments, facilities managers, campus committees, and bicyclists. Additionally, the provision of bike parking is being addressed by the cities of Champaign and Urbana through efforts to require bicycle parking at new developments and educational outreach to existing developments about the benefits of providing bike facilities.

Portable bike racks, located at Siebel Center, at Mathews Street and Stoughton Street
Photo by Courtney Barber

The University should update the building standards so that bicycle parking is required for all new building construction on campus. There is some movement toward that outcome through the University goals for LEED certified buildings, and it should be formalized within the standards. In conjunction with the bike parking inventory, a bicycle parking construction policy should be developed. This policy should include minimum bicycle parking spaces per building, guidance on locations for new bicycle parking areas, and a process for bicycle routes or parking areas impacted by construction zones.

In addition to simple bike parking, the University should provide sheltered bicycle parking. The campus does experience winter weather, and there are some cyclists who continue to ride in inclement weather. There are also some bicycles on campus that are worth hundreds or even thousands of dollars. The owners of these bicycles have requested sheltered and secure bike parking. Bike lockers can be installed in select locations on campus and rented to specific users each semester to recover the costs. Additionally, sheltered bike parking areas can be installed throughout campus.

Bicycle Education Needs

There have been many positive efforts in bicycle education efforts in Champaign-Urbana recently. In 2008, Champaign County Bikes volunteers organized a highly successful bicycle education program called "Share the Road." Through partnerships with governmental agencies, local and state bicycle groups, and various businesses, they created and distributed a community bike map with safety tips, distributed literature at over 50 public events, and raised funds for a bus wrap advertising share the road principles. Also, the CATS agencies partnered to organize and fund a "Light Up the Night" bike light giveaway and education event during Fall 2008, and C-U Safe Routes to School Project was able to fund a "Train the Trainer" session through the League of Illinois Bicyclists in 2009.

Ed Barsotti, in green, pauses on the Quad for discussion during a bike tour for the Illinois American Planning Association conference. Photo by Morgan Johnston

Yet, there is still much to be done. Campus needs to offer an educational seminar in bike safety. As a start, this can be offered during Welcome Week for incoming students. Programs that have worked in the past need to be repeated and improved upon in the future, including the Light Up the Night giveaway, and distribution of materials at public events. Additional programs need to be developed, such as special presentations at residence halls and student life forums or guest lecturers at related academic courses.

The Transportation Demand Management (TDM) website currently links to ChampaignCountyBikes.org (CCB) for bicycle related content. To avoid duplication further development of online materials should be related only to campus information, with the continued connection to community resources through CCB. The website should include this bike plan, a map of existing bike facilities and parking, instructions for registering bikes, instructions for renting bike lockers, campus bicycle education events, and similar campus focused bicycle information.

Incentives and Benefits for Bicycling

Because the University is committed to reducing automobile traffic in the campus core to increase pedestrian safety, incentives and benefits for bicycling will assist with this goal. To encourage more people to ride a bike to campus, these programs should be implemented.

Bicycle Commuter Tax Benefit

IRS Tax Code Section 132(f) allows employers to offer a subsidy of $20.00 per month to their employees who ride their bicycles to work to pay for bicycle commuting costs. Bicycle commuting costs include the cost of bicycles, bicycling equipment, accessories, and bicycle storage costs. The current version cannot be offered in conjunction with a transit or parking tax benefit, so this campus is not currently able to offer this benefit. However, the

Association for Commuter Transportation (see ACTweb.com) is lobbying to remove this restriction. When that is accomplished, the bike tax benefit should be pursued for campus employees.

Guaranteed Ride Home program

This program provides direct transportation home in the event of an emergency, inclement weather, or other unplanned events. With support from the MTD, this program can be offered free of charge to campus employees who do not purchase an annual parking pass. The TDM department should work with the Parking Department and the MTD to implement this program.

Occasional Parking Passes

The concept of a "sunk cost" applies to an employee's choice in commute modes. If a person owns a car, has paid for a full year of parking, and are accustomed to paying the standard automobile ownership costs like gasoline, insurance, and upkeep, then the immediate benefit to choosing a different transportation mode is not readily apparent. One method for breaking through this barrier is to provide an alternative to the annual parking permit, so there is a specific economic choice every time an employee drives to work.

The TDM department should work with the Parking Department to offer occasional parking passes to employees willing to give up their annual parking permit, as recommended by the Parking System Review Committee.

Shower Facilities for Bicycle Commuters

To allow commuters to clean up for work or class, shower facilities should be identified that bicycle commuters can use when needed. Campus Recreation has considered offering shower-only memberships at their exercise facilities, and the TDM department should work with them to implement and promote the program.

- Shower only members would bring all their shower items with them (soap, towel, etc.)
- At the entrance, they would be given a wrist band that indicates they have a shower only membership. Thus, they would not be permitted to use the other facilities when wearing the wrist band.
- The wrist band would be put on them by the attendant, and it would be the type that has to be cut off and is not reusable. The user would also leave their ID card with the attendant.
- The shower only member would then take their shower, and use the locker room.
- They would return to the attendant. If they have their wrist band, then the attendant can cut it off for them, and return their ID card. If they have removed their wrist band, then they would need to pay the attendant the day pass rate before they get their ID card back.
- The membership could be pre-paid by semester or year, and there could be a one day option for occasional users.

Volunteers install bike lights while explaining safe riding techniques to recipient at Light Up the Night event. Photo by Morgan Johnston

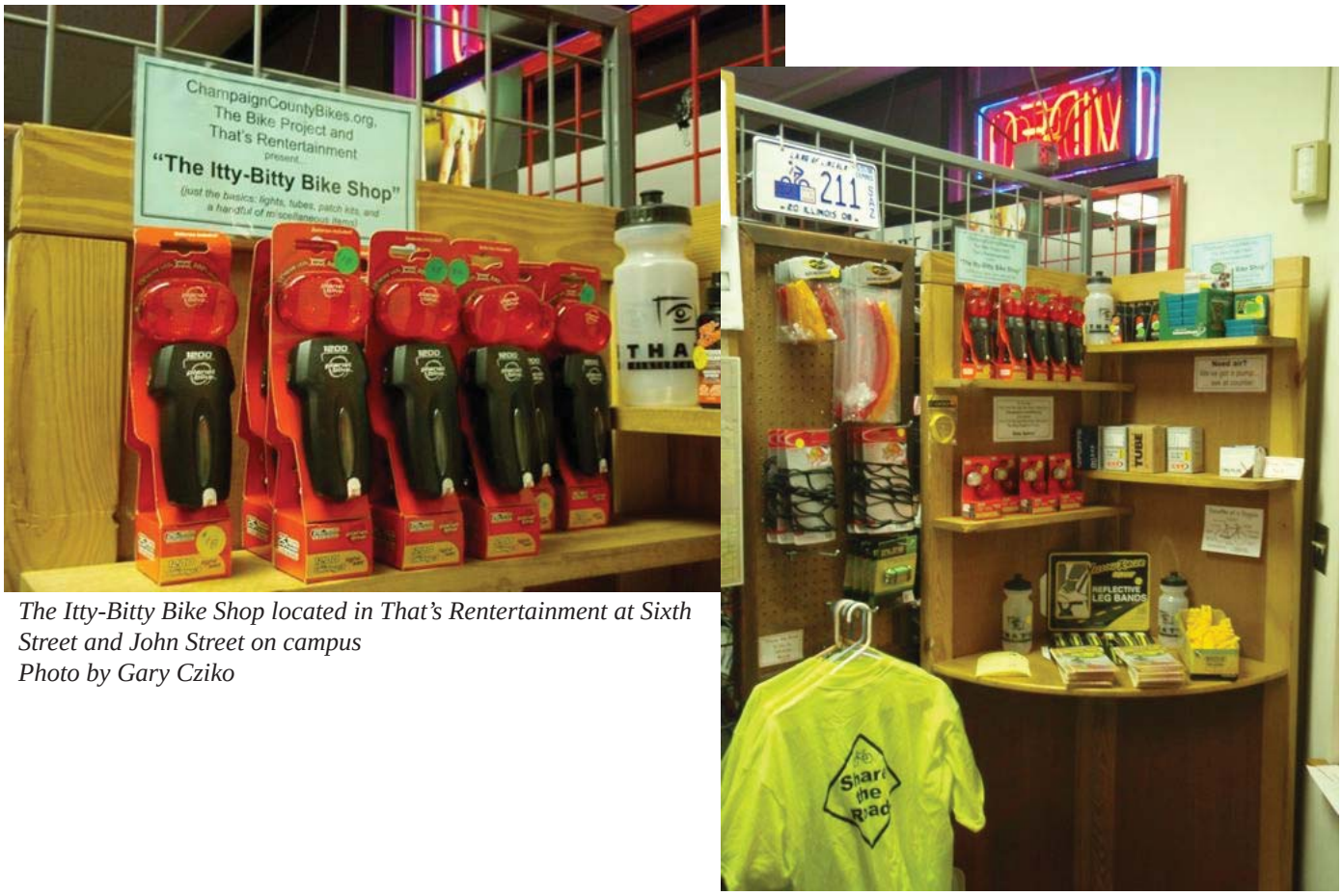
As other programs and services are implemented on campus, additional incentives and benefits for bicycling can be authorized. The education programs should highlight the benefits to health, wealth, and community, and rewards programs should be pursued.

Special Bicycle Services

The Department of Kinesiology and Community Health is running a pilot bike sharing program called the Illinois Cross-Campus Bicycle Project (ICCB) for department employees. The ICCB is specifically designed to get faculty and staff onto a bike for short trips during the work week, to improve their overall wellness. Initial results are positive, showing an increase in employees who ride in the first three month trial of the program. The ICCB bike sharing is good for increasing bike ridership among campus faculty and staff because it uses systems they are already familiar with and is very easy to access.

A different type of bike sharing is recommended for students. This is the idea of bike kiosks where a student or member of the public can check out a bicycle from any kiosk, ride it to their destination, and return the bicycle to any kiosk. It is a form of bike sharing that has been implemented in Paris and New York. The MTD has a student intern this summer, responsible for reviewing the options for setting up a system of bike sharing kiosks throughout the transit district. The University should work with the MTD to identify the options.

Through the efforts of community bicycle organizations, there are bicycle parts sold in the heart of campus in a corner of That's Rentertainment at Sixth and John Street. It is called "The itty-bitty Bike Shop" and they sell low cost repair parts for simple bike maintenance. They also supply an air-pump upon request. This service is valuable and additional similar shops should be implemented other locations on campus.



The Itty-Bitty Bike Shop located in That's Rentertainment at Sixth Street and John Street on campus
Photo by Gary Cziko

Another special bicycle service that should be implemented is a bike fix-it shop on campus. An example of a well run volunteer based fix-it shop is The Bike Project in downtown Urbana. The University should work with the leaders of The Bike Project to set up a similar shop within the campus area. The Office of Sustainability can work with the TDM department and the Student Sustainability Committee to implement such a program. It should provide the tools and knowledge to teach students how to maintain and repair their bicycles. This type of program helps the students become invested in bicycle commuting and provides experience to students in

volunteerism. It will also encourage bicycling by removing some of the barriers caused by simple maintenance needs.

Bicycle Enforcement Needs

The issues with bicycle enforcement are targeted by a few recommendations in this plan. Engineering of bike lanes on campus to reflect their place in the larger transportation network will provide adequate infrastructure and signage to indicate the proper behavior of cyclists. Education programs ranging from Share the Road informational campaigns to Bicycling 101 courses will assist by spreading awareness of proper behavior and creating a culture of compliance from all roadway users. And provision of adequate bicycle parking facilities at existing and future buildings will lead to parking compliance, as shown by the changes at the Penn State University.

A volunteer and officer prepare bike light sets with educational information for the Light Up the Night bike light giveaway event at Fourth and Armory.
Photo by Morgan Johnston

To handle bicycle parking enforcement in the short term, the TDM department should create a universal hang tag to use on illegally parked bikes. These can be affixed to the bikes in violation by facility managers, volunteers, or the public safety student patrol. Once the cyclists have been notified that bicycle parking has rules which they need to follow, the Parking Department should impound any bicycles that continue to park in violation of the University Bicycle Code. An draft update to the University Bicycle Code is included in the next section.

Bicycles parked incorrectly at the Illini Union. Bike on handrail creates safety hazard for people with disabilities. Non-standard bike parking facilities encourage incorrect bike parking.
Photos by Morgan Johnston

Cyclist walks bicycle on Quad, during a time with high pedestrian traffic
Photo by Morgan Johnston

Updates to University Policies

There are a few policies at the University related to bicycle use and registration. This section has recommended updates for three key policies. These are drafts of updates, and they need to be taken through the official update process for each policy with appropriate input from stakeholders.

Housing Hallmarks Bike Policy

- Students must register their bicycles with the Parking Department at 1110 West Springfield, Urbana (Springfield at Goodwin). Bikes may only be parked in designated bicycle parking facilities. Students should use the bike racks located near the halls and not stair railings, sign posts, trees, or entrances to any buildings. A bike parked illegally may be impounded (or a University Police lock may be placed on it), and the student will need to prove ownership, pay a fine, and register it before the bike can be released.
- Bicycles in buildings are prohibited, except in designated bicycle parking facilities. Storage of bicycles within rooms or hallways is not permitted because of space in the residence halls, potential damage to buildings, and the blockage of escape routes during a fire or emergency. Residents may bring a detachable bike tire to their room as long as it is properly stored.

Student Code §2-6 Motor Vehicles and Bicycles

§ 2-601 Operation of Motor Vehicles and Bicycles

(a) The parking or storage of a motor vehicle, motorcycle, or bicycle in any University building or structure other than a designated parking structure is prohibited without the prior written authorization of the Facilities and Services Parking Department. Such unauthorized parking or storage shall be considered abandonment, and the motor vehicle, motorcycle, or bicycle shall be removed at the owner's expense.

(b) Complete information concerning parking limitations and other details of the student automobile regulations, including monetary and other penalties for noncompliance or violations, is available from the Facilities and Services Parking Department, 1110 West Springfield, Urbana, or visit the department's Web site at www.fs.uiuc.edu/parking.

§ 2-605 Operation of Bicycles

(a) Any bicycle that is operated or parked on the campus by any student must be registered with the Facilities and Services Parking Department. There is no fee for this registration.

(b) Bicycles must be operated in accordance with the University Bicycle Code. A complete copy of the regulations may be obtained from the Facilities and Services Parking Department, 1110 W. Springfield, Urbana.

(c) Bicycles shall be parked on campus only in designated bicycle parking areas.

(d) If your bicycle is stolen on campus, you should report the theft immediately to the University Division of Public Safety (333-1216).

University Bicycle Code

This Code applies to persons who use or park a bicycle on the University of Illinois Urbana campus. This includes all students, faculty, staff, employees of Allied Agencies, and all other persons who use or park a bicycle on the campus whether or not they are associated with the University.

These regulations are now in effect as of _____ and are administered by the Facilities & Services Parking Department, in cooperation with the Transportation Demand Management department and the Division of Public Safety.

§ 1 Definitions

1.1. Short Title. This set of regulations shall be known as the "University Bicycle Code" and may hereafter be referred to by that designation.

1.2. Legislative Body. The power to change, modify, or amend this code shall be vested in Facilities & Services subject to approval by the Chancellor.

1.3. Administrating Agency. Facilities & Services, in cooperation with the Division of Public Safety, is vested with the powers, duties, and jurisdiction to administer and enforce the University Bicycle Code.

1.4. Definitions of Words and Phrases. The following words and phrases, when used in this Code, shall have the meanings respectively ascribed to them in this chapter, except when the context clearly requires otherwise.

1.5. Bicycle means every device propelled by human power upon which any person may ride and supported by either two tandem wheels or three wheels. It includes any trailer or extension pulled by the device.

1.6. Bike Lane means an on-street lane for bicycles, clearly marked as a bicycle lane, and delineated by painted stripes.

1.7. Off Road Bike Path means an off-street avenue of transportation, maintained for the exclusive use of bicycles.

1.8. Shared Use Path means an off-street avenue of transportation shared with pedestrians, bicyclists, and skaters.

1.9. Code, when unmodified, means the "University Bicycle Code."

1.10. Operator means any person who operates or is in physical control of a bicycle.

1.11. Parking means the standing of a bicycle, other than for loading or unloading merchandise or passengers.

1.12. Pathway means any avenue of transportation other than a street.

1.13. School Day means a day or a fraction of a day on which academic classes or finals are officially in session.

1.14. State, when unmodified, means State of Illinois.

1.15. Stop means complete cessation from forward motion.

1.16. Traveled Way means any avenue, area, or region where automobiles or bicycles are permitted to be operated or parked, or where pedestrians traverse.

1.17. University means the University of Illinois at Urbana-Champaign.

§ 2 Registration of Bicycles

2.1. Registration.

a. All bicycles which are operated or parked on campus must be registered with Facilities & Services. Bicycles on which ownership is changed must be re-registered by the new owner.

b. If the owner is unavailable, then the person having custody of the bicycle may register it for the owner upon a satisfactory showing that they have the owner's consent to do so.

2.2. Registration Sticker.

a. At the time of registration, each registrant shall be furnished a numbered registration sticker. The registration sticker is nontransferable (either between persons or bicycles) and shall be affixed only to the bicycle for which it was assigned and shall be affixed

(1) with the sticker's own adhesive,

(2) with the numerals upright, and

(3) to the forward half of the rear upright frame bar which supports the seat.

b. If a registration sticker becomes damaged or broken, or if the owner acquires a new bicycle, then the owner must acquire a replacement sticker from Facilities & Services.

2.3. Effective Period. Bicycle registration shall be effective from July 1 to June 30 each year.

2.4. Application Form. The application for registration shall be on a form provided by the University and shall include:

a. The owner's name, University Identification Number or State Identification Number, mailing address, phone number, and email address.

b. A photo of the registered bicycle.

c. Make, color, and serial number of bicycle.

d. Other pertinent information.

§ 3 Equipment Required

3.1. Unsafe Bicycles Prohibited. No person shall operate or park on the campus a bicycle which is in such an unsafe condition as to endanger any person or property, or which is not equipped as required by this Code, or the equipment of which fails to meet with or is not adjusted to prescribed standards.

3.2. Compliance with Vehicle Code. All bicycles operated on campus shall comply with the Illinois Vehicle Code bicycle equipment requirements.

§ 4 Operation of Bicycle

4.1. Required Obedience to Traffic Laws. Every person operating a bicycle shall do so in obedience to

a. traffic control devices

b. rules of the road applicable to all vehicles under Illinois State Laws, and as specifically detailed in the Bicycle Rules of the Road, and

c. regulations included in this Code.

4.2. Where Permitted to Operate. Bicycles are permitted on all vehicular traveled ways, whether in a designated bike lane or a standard vehicle lane. Bicycles are permitted on any off-road bike path. Bicycles may be used on shared use paths, taking caution to yield to pedestrians. Bicycles may be used on sidewalks, provided there is enough room to safely travel without causing danger to pedestrians or other cyclists.

4.3. Where Not Permitted to Operate. Bicyclists may not ride on any sidewalk that is overly congested with pedestrians. In these areas, the operator must walk the bicycle.

4.4. Operator Riding Requirements. An operator shall at all times follow the Illinois Vehicle Code rules for operators

4.5. Cell phone usage. No operator may use text messaging or dial a phone number while riding a bicycle on the campus. The operator shall stop the bicycle, out of the traveled way, to text or dial a cell phone.

4.6. Headphone usage. All bicycle operators must be able to hear their surroundings.

4.7. Passenger Riding Requirements. No bicycle shall be used to carry more persons at one time than the number for which it is designed and equipped.

4.8. Carrying Objects. Both feet and at least one hand of the operator of a bicycle shall at all times be free for the operation of the bicycle, and no bicycle shall be so loaded as to obstruct the operator's clear view of the road (in all directions) or interfere with operation of the bicycle.

§ 5 Operation on Bike Paths

5.1. Rules Applicable to Bicycle Paths. Rules of the road applicable to automobiles on the highways shall apply to bicycles operated on bicycle paths in the same manner as they apply to bicycles operated on streets.

5.2. Traffic Control Devices on Bicycle Paths. Traffic control devices on bicycle paths shall be in conformance with the Manual on Uniform Traffic Control Devices and an operator of a bicycle is required to obey the mandate of these devices at all times.

5.3. Traffic Control Devices on Shared Use Paths. Traffic control devices on shared use paths shall be in conformance with the Manual on Uniform Traffic Control Devices and an operator of a bicycle is required to obey the mandate of these devices at all times, including the pedestrian signals at intersections.

5.4. Yielding to Pedestrians. Whenever a bicycle path crosses a pathway used for pedestrian travel, the operator of a bicycle shall yield the right-of-way to any pedestrian using such pathway.

5.5. Crossing Yellow Line Prohibited. No person shall operate a bicycle on or across any yellow line.

§ 6 Rules of the Road

6.1. Vehicle Code Applies. All bicycles on campus shall be operated within the rules set forth in the Illinois Vehicle Code, regardless of the traveled way the bicycle is on.

6.2. Share the Road. Bicycles shall use the appropriate travel lanes for turning, just like a motor vehicle. When designated bike lanes are provided on a street, bicycles should use the bike lanes, except for turning left or when impractical.

6.3. Direction of Travel. No person shall operate a bicycle upon a roadway other than in the direction of the traffic flow. This includes bicycles on one-way streets. In some campus locations, a shared use path is

provided for contra-flow bicyclists.

6.4. Speed Restrictions. No person shall operate a bicycle at a speed which is greater than that which is reasonable and proper with regard to the traffic conditions at the time or which endangers the safety of any person or property.

6.5. Riding next to parked vehicles. Bicycles riding next to parked vehicles should watch for vehicle passengers opening doors and exiting into the bike lane.

§ 7 Bicycle Parking

7.1. Where Bicycle Parking Is Permitted. Bicycles shall be parked on campus only in an area which is designated by the presence of bicycle parking facilities or which is specifically designated by sign (which is posted at the time of parking) as a Bicycle Parking Area.

a. Lack of available space within a specific bicycle parking area is not a valid excuse for violation of this regulation.

b. Parking a bicycle in any location other than on a designated bicycle rack is prohibited, and subject to impoundment.

7.2. Methods of Parking.

a. Within any bicycle parking area, a bicycle must be parked in a manner which uses / obstructs only one of the positions provided by the bicycle rack.

b. Within a bicycle parking area, parking which obstructs entrance or exit shall be prohibited.

c. Parking on anything other than a designated bicycle parking structure is prohibited.

d. Parking a bicycle in such a way that obstructs a travelled way or building entrance or exit is prohibited, and such bicycles are subject to immediate impoundment.

e. No person shall leave a bicycle unattended without first locking it securely to a bicycle rack.

7.3. Impounding.

a. Any bicycle may be impounded if

(1) such bicycle is parked in an unauthorized place or manner; or

(2) such bicycle is not properly registered; or

(3) such bicycle appears to have been abandoned.

b. In the case of any registered bicycle so impounded, notice shall be sent within 30 days after such impounding to the registered owner at the place of residence designated on the latest registration form on file with Facilities & Services.

c. In the case of an unregistered bicycle being impounded, the owner may contact Facilities & Services to provide acceptable proof of ownership and register the bicycle at that time.

d. Any impounded bicycle which is not redeemed within 30 days after notice shall be considered abandoned and will be disposed of by the University as abandoned property.

§ 8 Penalties

8.1. Parking Violations, Any person parking a bicycle in violation of the Parking section of this code may be subject to a citation fee as defined by the Parking Department.

8.2. Operator Violations. Any person whose actions result in a violation of the Operations sections of this code may be subject to a traffic ticket, as determined by the University Division of Public Safety.

8.3. Payment of Assessments. Failure to satisfy the penalties assessed may result in billing and collection by the University Business Office, and/or may result in denial of University parking privileges, and may be enforced by impounding of the bike or other University enforcement options.

8.4. Responsibility. An owner in whose name the bicycle is registered with the University is responsible for any parking violation issued to the bicycle, unless that bicycle was reported stolen before the violation was issued.

8.5. Appeals. Any person who desires to appeal the imposition of any assessed citation hereunder may submit a written appeal to the Parking Department. All appeals will be decided by the Parking Appeals Board.

Conclusion

The University of Illinois has a strong relationship with the cities of Urbana and Champaign, working together for increased safety, sustainability, and wellness through promotion of active transportation modes on campus and in the community at large. With support and encouragement from other agencies, like the cities, the Mass Transit District, and the Regional Planning Commission, the University is poised to change the central heart of this area into a bicycle hub, safe and predictable for bicyclists.

When this plan is fully implemented, there will be 30 miles of bike ways on and around campus. By providing appropriate infrastructure for bikes and additional bicycle programs and services, the University will encourage cycling as a means of transportation. Bicycling has many benefits: activity and health increase for cyclists, automobile pollution decreases, costs decrease for governments and individuals, and safety increases as cycling becomes common practice and congestion decreases in the heart of campus.

There was a recent article about bike trips in Holland; for thirty years, Holland has added bicycle infrastructure and implemented policies encouraging bicycling, much like the recommendations in this bike plan. For the first time in record, through persistence and constancy, Holland was able to report more average bicycle trips per day than vehicle trips. With similar persistency and constancy to the CATS mission statement, this campus can have the same excellent results.

To better accommodate pedestrian, bicycle,
transit, and vehicle movements in a more user-friendly environment.
– CATS Mission Statement

Students on the University of Illinois Campus Spring 2009
Photo by Morgan Johnston

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