2014 Campus Bicycle Plan

Campus Bicycle Network Master Plan
University of Illinois at Urbana-Champaign
Facilities and Services
Transportation Demand Management

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Prepared by Facilities & Services, Engineering and Transportation Services, Transportation Demand Management

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Definitions

For the purposes of this plan, the following terms have been defined to coincide with definitions provided by the Illinois Department of Transportation, [1] and the American Association of State Highway and Transportation Officials (AASHTO).[2] Each recommended facility type is described in further detail in Chapter 5.

Bikeway – a generic term for any road, street, path or way, which is somehow designated for bicycle travel, regardless of whether designated for exclusive use of bicycles or shared with other transportation modes

Bicycle Lane – on vehicular streets, a striped lane intended for exclusive bicycle use

Bicycle Route – a street or road noted for higher bicycle volumes, to be shared by vehicles and bicycles, which provide connections to the overall bicycle system

Shared Use Side Path – parallel to but physically separated from a street, a wide path intended to be shared by pedestrians, bicycles, and other non-motorized transportation (e.g. wheelchairs).

Dedicated Bicycle Side Path – parallel to but physically separated from a street, a path intended for the exclusive use of bicycles.

Off-Road Shared Use Path – completely separate from a street, a path intended to be shared by pedestrians, bicycles, and other non-motorized transportation

Off-Road Dedicated Bicycle Path – separate from a street or sidewalk, a path intended for exclusive bicycle use

Off-Road Trail – unpaved trail to be shared by cyclists, walkers, joggers, and other non-motorized transportation

[1] http://www.dot.il.gov/desenv/bde%20manual/bde/pdf/chapter%2017%20bicycle%20and%20pedestrian.pdf
[2] http://www.transportation.org/Pages/default.aspx

Terms & Acronyms

AASHTO – American Association of State Highway and Transportation Officials
ACES – The College of Agricultural, Consumer, and Environmental Sciences
ACUPCC – American College and University Presidents' Climate Commitment
ADT – Average Daily Traffic
APBP – Association of Pedestrian and Bicycle Professionals
BFU – Bicycle Friendly University
BIF – Business Instructional Facility
BPAC – Urbana's Bicycle and Pedestrian Advisory Commission
CATS – Campus Area Transportation Study
CCB – Champaign County Bikes
CCRPC – Champaign County Regional Planning Commission
CSE – The Center for a Sustainable Environment
CUUATS – Champaign-Urbana Urbanized Area Transportation Study
FAR – Florida Avenue Residence Hall
F&S – Facilities & Services
iCAP – Illinois Climate Action Plan
IDOT – Illinois Department of Transportation
KCH – Department of Kinesiology and Community Health
LAB – League of American Bicyclists
LCI – League Cycling Instructor
LEED – Leadership in Energy and Environmental Design
LIB – League of Illinois Bicyclists
LINC – Learning in Community
miPLAN – Mobility Implementation Plan
MTD – Champaign-Urbana Mass Transit District
MUTCD – Manual on Uniform Traffic Control Devices
NTA – Notice to Appear
PDO – Property Damage Only
RSO – Registered Student Organization
SECS – Students for Environmental Concerns
SRTS – Safe Routes to School
SSC – Student Sustainability Committee
TDM – Transportation Demand Management
UI – University of Illinois at Urbana-Champaign
UDTCS – University District Traffic Circulation Study
UIPD – University of Illinois Police Department
VMT – Vehicle Miles Traveled

Executive Summary

A bicycle friendly campus has many benefits. As a mode of transportation, bicycles provide solutions in the areas of safety, sustainability, cost savings, mobility, health, and well-being. The University of Illinois at Urbana-Champaign was one of the first campuses in the nation to adopt a bikeway network when the first bicycle paths were constructed here in the 1950s. Since that time, funding cutbacks have led to degraded and disconnected pathways, outdated and insufficient bicycle parking, and limited support for bicycle services and programs. Despite these setbacks, bicycle ridership has grown at the University of Illinois in the last decade and is expected to continue to grow in the future, creating a great need for reemphasis on engineering, education, enforcement, encouragement, and evaluation for bicycle-friendly improvements.

The 2014 Campus Bicycle Network Master Plan (Bicycle Plan) explains the various ways in which this campus should improve for bicycling in the coming years. The goals of the Bicycle Plan are five-fold:

1) Increase safety for all campus users, including pedestrians, bicyclists, transit riders, and motorists
2) Increase sustainability of campus transportation, in support of the Illinois Climate Action Plan
3) Improve mobility and convenience for cyclists on campus
4) Identify funding needs and secure funding for future improvements of campus bicycle facilities, services, and programming
5) Improve the university's standing as a national leader in bicycle friendliness

The primary focus of this plan is on infrastructure improvements to the university's network of bikeways. Wherever possible, this plan recommends removing existing dedicated bicycle side paths and replacing them with on-street bicycle lanes or routes. These recommendations are based on the best available research on bicycle safety, [3] which have shown significant safety improvements through on-street facilities compared to parallel, off-street facilities. As ongoing research in the field continues to evaluate best practices, future infrastructure plans and improvements on campus should continue to reflect the best available research at the time. Chapter 6 describes the specific recommendations for each segment of the bikeway network. The majority of infrastructure improvements included in this plan include rough cost estimates, totaling nearly $4 million in 2013 dollars. While the focus of this plan is primarily on the engineering infrastructure improvements, Chapter 7 makes a number of additional recommendations on other key topics for bicycles such as improved education, encouragement, enforcement, and evaluation.

To share input or feedback for future versions of the Campus Bicycle Plan, as well as for ongoing bicycle efforts on campus, please visit **http://go.illinois.edu/bikefeedback.**

[3] http://www.fhwa.dot.gov

Chapter 1. Introduction

In 2011, the University of Illinois at Urbana-Champaign was recognized as a bronze-level Bicycle Friendly University by the League of American Bicyclists. As an institution committed to the safety of its students, employees, and visitors and to the sustainability of its campus, the university continually strives for excellence in promoting and improving active transportation options. University policies currently prioritizes walking, bicycling, and transit over automobiles in the core campus area. As a result, bicycling is a primary form of transportation on campus. Providing improved bicycle facilities for the university's 42,605 students and 10,838 full time employees[4] is critical to improving public safety, reducing injuries and fatalities resulting from crashes, ensuring efficiency and ease of movement, improving livability and quality of life, improving energy efficiency and meeting sustainability targets, and promoting active lifestyles. Research shows that in the cost-benefit analysis of bicycle infrastructure, "the benefits of increased cycling are worth approximately four to five times the cost of investing in new cycling infrastructure."[5]

The 2014 Campus Bicycle Plan was developed to provide a road map for the university to become more bicycle friendly and to achieve the necessary goals of improved safety, sustainability, and health. The previous draft of this plan, written in 2009, introduced the proposed bikeway network to improve connectivity and convenience in the University District. This updated document includes specific prioritized projects to implement the recommended network, including updates where new information or guidelines are available, as well as specific, measurable goals. The primary focus of this plan is improving the infrastructure of the campus bikeway network, though additional recommendations are made in the areas of education, enforcement, encouragement and evaluation for bicycle transportation.

Much of the campus bikeway network has existed for several decades. However, it has not been consistently maintained and upgraded as the campus has grown and changed around it. The result is a discontinuous, outdated, substandard series of bikeway segments.[6] This plan describes how to bring the university's bikeways up to current national standards, with a well-connected bikeway network throughout campus. These bikeways will improve the campus in three major areas: safety of bicycling through better visibility and predictability; reduction of conflict with other transportation modes; and increased convenience for cyclists.

[4] http://illinois.edu/about/overview/facts/facts.html
[5] Reynolds, et al.
[6] Multi-Modal Study, page 13

Background & Context

Stakeholders

Governmental Agencies

University property is nestled within two cities, with the east side of campus in the City of Urbana and the west side in the City of Champaign. As seen in Map 1, the streets within the University District are under the jurisdiction of various agencies, including the university, Urbana, Champaign, and the Illinois Department of Transportation (IDOT). Comprehensive transportation planning for the greater urbanized area is coordinated by the Champaign-Urbana Urbanized Area Transportation Study (CUUATS). [7] CUUATS is the transportation arm 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 Urbanized Area.

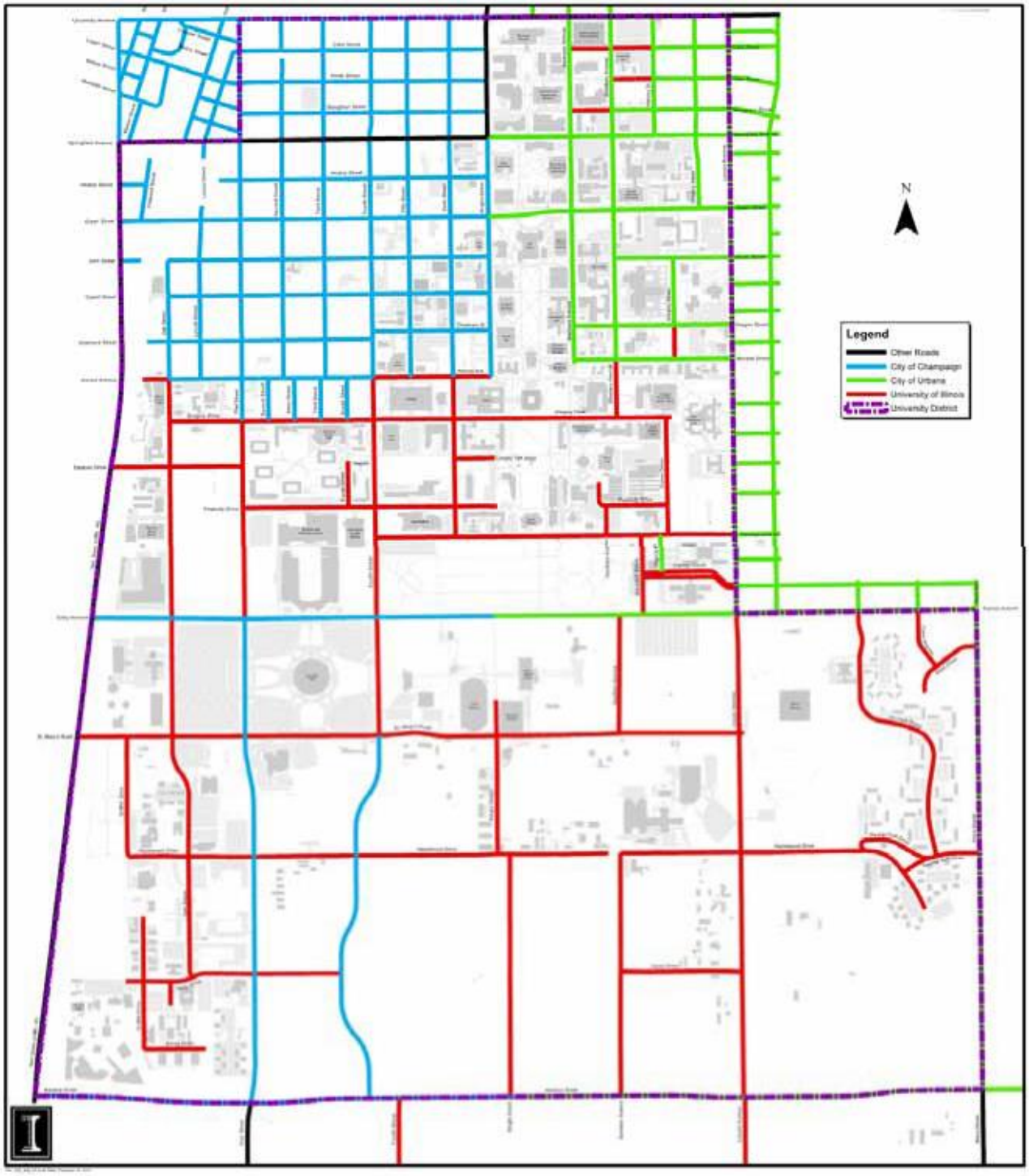
The Campus Area Transportation Study (CATS), coordinated by CUUATS staff, was a planning initiative focused on transportation issues in the University District.[8] The four CATS member agencies were Urbana, Champaign, the Champaign-Urbana Mass Transit District (MTD), and the university. CCRPC/CUUATS received grant funding from the Illinois Department of Transportation (IDOT) in 2011 to conduct a traffic circulation study for the University District. The CATS Technical Advisory Committee was the study steering committee. The University District Traffic Circulation Study (UDTCS) [9] results have informed the prioritization of the recommendations in this plan.

Each of the four CATS agencies have their own programs and plans to guide bicycle-related transportation decisions within their jurisdictions:

- **University of Illinois:** The Transportation Demand Management (TDM) department in Facilities & Services (F&S) at the university is responsible for coordinating the overall transportation network for all modes of travel on campus, including walking, bicycling, transit, and vehicles. F&S is the author of this plan and is responsible for encouraging bicycle use in a number of ways, such as exploring bicycle sharing options for campus, supporting the Campus Bike Center, installing and maintaining bicycle parking and storage, arranging bicycle education opportunities, and promoting the use of bicycles through encouragement events and programs. TDM also works with the Campus Transportation Committee, the Division of Public Safety, and other key campus stakeholders to make improvement recommendations to campus leadership.

[7] http://www.ccrpc.org/transportation
[8] http://www.ccrpc.org/CATS/index.php
[9] http://www.cuuats.org/udtcs

STREET JURISDICTION MAP



Map 1: Street Jurisdiction Map, University District

- **City of Urbana:** Planning and Public Works staff from the City of Urbana are responsible for developing and implementing the *Urbana Bicycle Master Plan*,[10] which was originally adopted in 2008. Urbana's Bicycle and Pedestrian Advisory Commission was established in 2006 with the primary purpose of advising the City Council on how to make bicycling and walking more viable modes of transportation in Urbana.[11]

- **City of Champaign:** Champaign created a transportation plan called *Champaign Moving Forward*,[12] which includes the bicycle vision: "to provide for a seamless, comprehensive network to encourage bicycling."

- **Champaign-Urbana Mass Transit District (MTD):** As the provider of public transportation in the greater Champaign-Urbana area, MTD strives to improve mobility and promote excellence in transportation. MTD coordinated the Mobility Implementation Plan (miPLAN)[13] to find out what mobility options Champaign, Urbana, and Savoy want as a community and how to bring those options to fruition. The first phase of miPLAN was an extensive public input period and market analysis done by asking students, employees, and residents what mobility options they want now and in the future. Surveys conducted in 2007 as part of the miPLAN Phase One research helped inform the Campus Bicycle Plan.

There are also plans, studies, and programs in the greater region that facilitate bicycling. The Champaign County Greenways and Trails Plan is an effort led by CUUATS staff in coordination with local agencies to develop the county's greenways and trails system. The plan will "provide guidance and a framework to ensure Champaign County's desire to create a bikeable, walkable, and environmentally aware and active community."[14] The public was included throughout the Greenways and Trails planning process via workshops, resident surveys, comment cards, and focus groups. The Greenways and Trails Design Guidelines have been used by many jurisdictions in Champaign County as the common standard for pedestrian and bicycle facilities in both urban and rural areas.

The IDOT Office of Planning and Programming houses all non-motorized transportation plans for the State of Illinois. IDOT is currently in the process of developing a State Bikeway Plan with the support of an outside vendor. The plan will become a component of IDOT's Long Range State Transportation Plan, which is also currently underway.[15] All of the plans described above were reviewed and considered during development of the Campus Bicycle Plan.

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[10] http://urbanaillinois.us/bicycle-master-plan

[11] http://urbanaillinois.us/BPAC

[12] http://ci.champaign.il.us/departments/planning/long-range-planning/champaign-moving-forward-transportation-master-plan

[13] http://ihavemiplan.com/shared/pdfs/student_report_spring07.pdf

[14] http://www.ccrpc.org/greenways

[15] http://www2.illinois.gov/gov/green/Pages/AgencyBicyclingInitiatives.aspx

University Entities

In addition to the Transportation Demand Management team under F&S, a number of university entities play a role in improving bicycling on campus:

Campus Transportation Committee

The Campus Transportation Committee advises TDM regarding campus transportation policies and other major decisions on behalf of the university. The committee covers many aspects of surface transportation on campus, including pedestrian safety, bicycle facilities, transit agreements, automobile traffic, and the interaction of all modes of travel on campus. Members of the Campus Transportation Committee include staff from F&S, the University of Illinois Police Department (UIPD), the Wellness Center, and the Parking Department, as well as student, staff, and faculty representatives.

Parking Department

The Parking Department, within Auxiliary Services, is responsible for coordinating automobile parking in university-owned facilities. The Parking Department sells employee parking permits, student permits, temporary passes, and prepaid meter cash keys. This department formerly handled bicycle registration, until it was moved to an online system in 2012 under TDM. Parking staff are responsible for impounding bicycles that pose safety hazards during the school year. Parking also manages the annual collection of abandoned bicycles left on campus each summer. They donate the abandoned bicycles to The Bike Project of Urbana-Champaign, to be reused locally, donated to other organizations internationally, or recycled.

University of Illinois Police Department

The UIPD in the Division of Public Safety is responsible for pedestrian, bicycle, motorcycle, and vehicle public safety. This includes coordination of the Public Safety Advisory Committee, Safe Walks, and Public Safety Day. Officers participate in various bicycle related events, such as Light the Night and C-U Bike to Work Day. UIPD officers enforce transportation laws, including citing pedestrians and bicyclists when appropriate. The Assistant Chief of Police is a member of the Campus Transportation Committee. UIPD participates in discussions about infrastructure safety improvements and is involved in updating the Campus Bicycle Code in partnership with TDM.

UI Wellness Center

The UI Wellness Center encourages active living for students, employees, and visitors on campus. The UI Wellness Center supports bicycling initiatives on campus and is a strong advocate for active transportation.

The Institute of Sustainability, Energy, and Environment (iSEE)

The iSEE encourages sustainable transportation and the reduction of greenhouse gas emissions. They coordinate various sustainability programs and projects throughout campus, including some related to transportation. The iSEE is responsible for tracking the implementation of the iCAP, which includes sustainable transportation goals. One such goal is "to complete and implement the Campus Bicycle Plan as soon as possible."

Faculty and Student Senates of the Urbana-Champaign Campus

The Senate on the Urbana-Champaign Campus is a legislative body comprised of 200 faculty, 50 students, and eight other academic staff members. The Senate Committee on Campus Operations works with F&S to provide guidance on facilities and infrastructure. Upon request, TDM provides annual updates to the Committee on Campus Operations regarding bicycles. The Illinois Student Senate (ISS) president meets with TDM staff as needed to provide support from the ISS and the ISS Environmental Stewardship Committee.

Student Sustainability Committee

The Student Sustainability Committee (SSC) is a student-led organization charged with the distribution of two student fees – the Sustainable Campus Environment Fee and the Clean Energy Technologies Fee. With the ultimate goal of making the University of Illinois at Urbana-Champaign a leader in campus sustainability, SSC reviews, recommends, and funds projects that increase environmental stewardship, inspire change, and impact students. SSC has provided financial support for a number of bicycle programs and projects, such as bicycle parking upgrades, installation of bicycle fix-it stations, start up for the Campus Bike Center, and the 2013–2014 Bicycle Education Campaign.

Engineering 315: Learning in Community (LINC)

From Fall 2011 to Fall 2013, the LINC class had a section entitled *UI Bikes*, with TDM acting as the project partner, to engage students in a number of bicycle-related efforts on campus. LINC students in the UI Bikes section have helped conduct market research on the feasibility of bicycle sharing, developed social media platforms through which to share bicycle safety educational information, helped compile information for this document, and led bicycle registration encouragement events.

Registered Student Organizations

There are a number of Registered Student Organizations (RSOs) at the university that are engaged in cycling or bicycle advocacy. The racing team, Illini Cycling, aims "to introduce and assist students into the sport of bicycle racing."[16] Illini 4000 organizes cross-country bicycle rides to raise money

[16] https://illinois.collegiatelink.net/organization/illinicycling

and awareness for cancer support programs. [17] Another group, BikeFace, "[acts] as an all encompassing, inclusive group for bicyclists at the University of Illinois Urbana-Champaign and concurrently function as a liaison between students and the local cycling community."[18] Beyond Oil, a student group affiliated with the Sierra Club's Campuses Beyond Oil Campaign, aims to help reduce the use of oil at the University of Illinois by supporting active transportation, particularly bicycles.[19] Members from the Beyond Oil Campaign have reached out to TDM staff and have voiced strong support for any improvements to the bicycling infrastructure and culture on campus.

Non-University Entities

There are a number of nonprofit organizations that advocate for bicycles and work to improve bicycling in the Urbana-Champaign area and beyond. Locally, Champaign County Bikes (CCB) works to make Champaign County the most bicycle friendly county in the Midwest through advocacy and education. The CCB Steering Committee has representatives from most bicycling groups in the area, including The Bike Project, Prairie Cycle Club, the League of Illinois Bicyclists, Illini Cycling, and the CATS agencies, among others. CCB supports an active email listserv discussing various bicycling topics. Additionally, The Bike Project of Urbana-Champaign is a volunteer-run organization that offers members a space, tools, and community to repair bicycles, share knowledge, hold classes, and advocate for bicycles in Urbana-Champaign. Since 2010, the university has collaborated with The Bike Project to run the Campus Bike Center, an on-campus location using the same model of hands-on bicycle repair and maintenance education.

At the state and national scale, the League of Illinois Bicyclists (LIB) and the League of American Bicyclists (LAB) are strong advocates for bicycling. LIB is a not-for-profit organization dedicated to improving bicycling conditions in the State of Illinois, promoting bicycle access, education, and safety. Among many other resources, the LIB website offers a wealth of information for communities about creating, funding, and implementing bicycle plans.[20] Similarly, the mission of LAB is "to promote bicycling for fun, fitness and transportation and work through advocacy and education for a bicycle-friendly America."[21] Indeed, the Bicycle Friendly University status granted to the university by LAB is a motivating factor to becoming a more bicycle friendly campus, and LAB's guidance on how to improve the university's standing helped influence this plan and related efforts to become more bicycle friendly.

[17] https://illinois.collegiatelink.net/organization/illini4000/about
[18] http://www.bikeface.org
[19] https://illinois.collegiatelink.net/organization/beyondoil
[20] http://www.bikelib.org/bike-planning/municipal-bikeped-planning-guide
[21] http://www.bikeleague.org/about

Ridership Data

The actual number of bicycles or bicycle riders on campus at any given time is unknown. Over the last fifteen years, various methods have been used to estimate the total volume, with estimates ranging from ten to twenty thousand. Although the estimates varied greatly, it is clear from direct observation that there are many cyclists on campus and the number is on an upward trend.

- Between 1987 and 2012, there were 20,517 bicycles registered on campus through the Parking Department's in-person registration system, averaging 789 registrations per year during the 26-year period. Due to changes in the registration process and enforcement, actual annual bicycle registration has fluctuated from 2,500-3,500 registrations per year in the 1990's, 600-700 per year in the early 2000's, and only 300-400 per year in the late 2000's. The new online bicycle registration system had 1,055 registrations from August 20, 2012 to May 7, 2014. Because bicycle registration is not currently enforced, nor has it been strongly promoted to the campus, the number of bicycles currently registered is not representative of the number of bicycles on campus. However, with improved promotion and enforcement going forward, bicycle registration could potentially be used to estimate the number of bicycles on campus in the future.

- In 1999, the CATS Phase 1 report estimated 12,500 bicycles on campus, or roughly 21 percent of the total campus employee and student population of 59,000.[22]

- In 2007, the Mobility Implementation Plan (miPlan) survey included questions about bicycle ridership. About half of the students had access to a bicycle, and 42 percent reported 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 owned a bicycle. At the time of the survey, there were 41,495 students and 11,676 employees on campus which implies there were 17,428 student bicyclists and 467 employee bicycle commuters. [23]

- From 2000 to 2008, there were over 140 bicycle counts at specific sites in the University District. For example, a bicycle count conducted in 2008 showed an average of 250 bicycles per hour per location at peak travel times. In September 2009, the university participated in the National Bicycle and Pedestrian Documentation Project sponsored by the Institute of Transportation Engineers Pedestrian and Bicycle Council.[24]

- In 2011, CUUATS completed a University District Traffic Circulation Study (UDTCS), using information from a campus-wide statistically relevant survey. The survey was

[22] http://www.ccrpc.org/CATS/pdf/CATSIFinalReport.pdf
[23] http://ihavemiplan.com/shared/pdfs/student_report_spring07.pdf Page 54.
[24] http://bikepeddocumentation.org

conducted in May–April 2011 and included both students and faculty. It found that 6% of staff, 18% of faculty, and 12% of students use a bicycle as their primary form of transportation.[25]

- Facilities and Services, in partnership with Champaign County Bikes, have conducted two bicycle censuses. The first count took place on Wednesday, October 23, 2013. The University District was divided into 25 quadrants, and 30 volunteers were assigned to a quadrant. From 10AM–11AM, volunteers counted both on and off-rack bicycles (i.e., bicycles locked to lamp posts, fences, railings, the bicycle itself, etc.). 5,574 bicycles were counted, and of those 17% were found off-rack. The second census took place on Wednesday, April 23. It was conducted in a similar fashion to the first count, with the same quadrant designations and timing. With only 23 volunteers, some participants counted multiple quadrants. Volunteers counted 4,739 bicycles (11% of which were off-rack).[26]

Estimated bicycle ridership levels for existing bikeway segments on campus were used to develop the prioritization of facility improvements recommended in Chapter 6. While the exact number of bicycles on campus is not currently known, there are methods available for future counts to better understand the level of ridership going forward, which will contribute to continued evaluation and planning for bicycle facilities. See Chapter 7 for recommendations on conducting regular counts and participating in nation-wide bicycle and pedestrian counting efforts. Increased use of the university's bicycle registration system will also help to track ridership levels on campus.

Crash Analysis

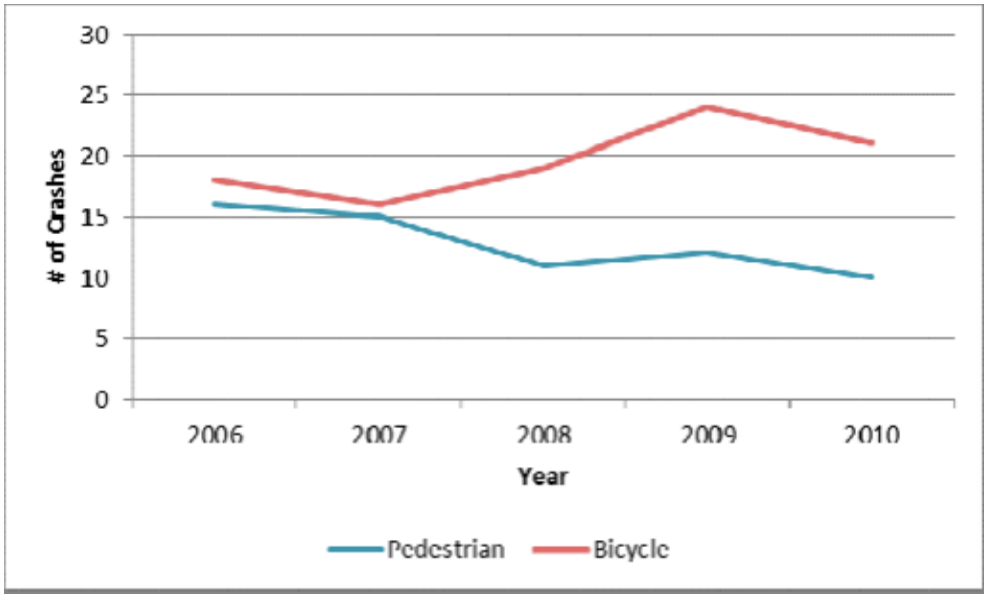
As part of the University District Traffic Circulation Study (UDTCS), CUUATS has conducted an extensive analysis of pedestrian, bicycle, and motor vehicle crashes within the University District from 2006-2010. The crash data, obtained from the IDOT Division of Traffic Safety, were analyzed for trends over time, accounting for changes in traffic volume, to identify safety issues related to existing infrastructure.

According to the UDTCS Existing Conditions Report, there were 162 crashes involving either a pedestrian or bicycle in the University District between 2006 and 2010, and "bicycle crashes exceeded the number of pedestrian crashes each year."[27] Graph 1 shows the trend in number of crashes per year, broken down by pedestrian and bicycle, and

Table 1 shows the breakdown of crash severity for all bicycle and pedestrian crashes by year. The levels of severity range from fatal crashes, injury crashes ranked from most severe (A-Injury) to least severe (C-Injury), and Property Damage Only (PDO) crashes. It is notable that only six PDO crashes were reported. There is likely a high volume of unreported bicycle crashes.

[25] http://icap.sustainability.illinois.edu/project-update/mode-shift-update
[26] http://icap.sustainability.illinois.edu/project/bicycle-counts
[27] UDTCS, http://www.cuuats.org/udtcs/documents/UDTCS_Existing_Conditions_Report.pdf/view, 68

Map 2 on page 18 shows the locations of bicycle crashes reported to police from 2006 to 2010, symbolized by crash severity. According to the UDTCS, "out of the 162 (bicycle and pedestrian) crashes, 108 crashes occurred at intersections along the Green Street, Springfield Avenue, Sixth Street, Lincoln Avenue and Fourth Street corridors, which is not surprising given the high pedestrian and bicycle crossing volumes at those intersections." [28] This data and the analysis included in the UDTCS Existing Conditions Report were considered heavily when assigning priority to infrastructure improvement recommendations included in Chapter 6.

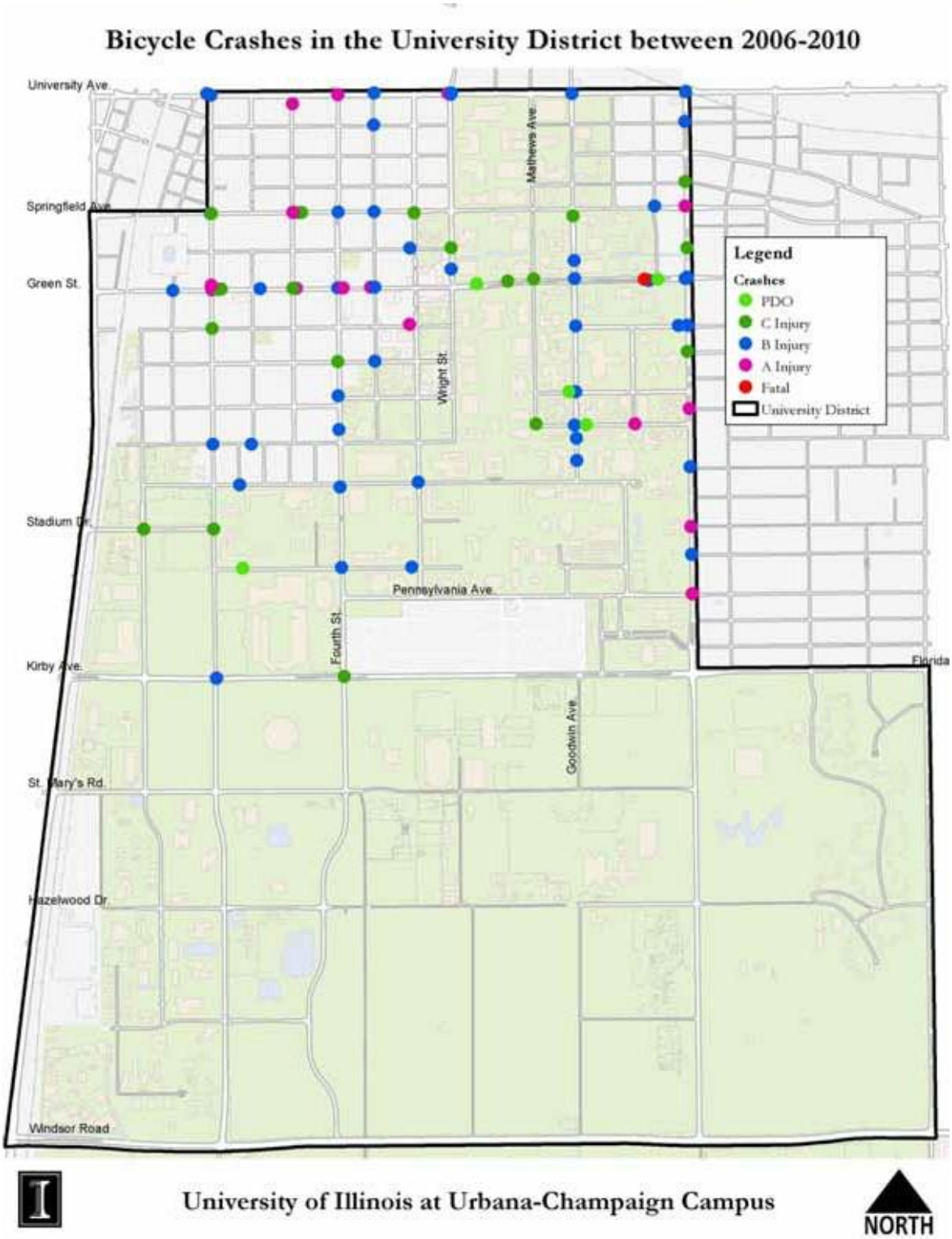


Graph 1: Pedestrian and Bicycle Crash Trends. Source: UDTCS Existing Conditions Report, page 71

Year	Fatalities	Crashes		
		A-Injury	B-Injury	C-Injury
2006	0	8	18	8
2007	0	4	17	9
2008	0	6	15	6
2009	1	8	17	9
2010	0	5	16	9

Table 1: Pedestrian and Bicycle Crash Severity. Source: UDTCS Existing Conditions Report, page 68

[28] UDTCS, http://www.cuuats.org/udtcs/documents/UDTCS_Existing_Conditions_Report.pdf/view, 72



Map 2: Bicycle Crashes Reported to Police in the University District between 2006-2010. Source: Champaign County Regional Planning Commission PDO = Property Damage Only; C-Injury = least severe; A-Injury = most severe

Chapter 2. Planning Process

Scope

There was a five-step planning process for this document.

1. The preliminary existing conditions report was the 2007 Multi-Modal Study. That study identified a number of issues about the campus bike paths and held 2 public input sessions.
2. A draft plan was developed in 2009 by TDM which incorporated the related plans from both cities and the principles laid out in the Multi-Modal Study.
3. The CATS Technical Committee created a CATS Bike Plan working group to finalize the Bicycle Network for the University District. There was a public input session in October 2010 during Sustainability Week.
4. In 2011 and 2012, a number of items were addressed concurrently: the map was refined to include conceptual layouts for University-owned segments, T.Y. Lin was hired by MTD to evaluate bus-bike safety needs, and CUUATS began the University District Traffic Circulation Study.
5. This document incorporates the results of the previous four steps as the 2014 Campus Bike Plan, as well as a public input period during Spring 2013.

While there are many issues to address to make this campus more bicycle friendly, the primary focus of this plan is on bikeway infrastructure. This plan recommends specific improvements for each unique segment of the campus bikeway network, as well as implementation considerations and conceptual cost estimates for those changes. The segments have been prioritized based on safety and volume data, as well as cost and feasibility of implementation, or "shovel readiness." Many important bikeways in the University District are located on streets that do not belong to the university. The bikeway segments included in this plan only cover streets and bikeways under university jurisdiction, rather than every segment in the full University District. Those bikeways, although in need of improvements, are not included in this plan because the university does not have jurisdiction (see Map 1).

Additional topics beyond bikeway infrastructure, such as bicycle parking, bicycling encouragement and incentives, educational programs, and enforcement needs, are each covered briefly in Chapter 7. Recognizing that infrastructure improvements alone will not solve every issue faced by campus cyclists, these non-infrastructure recommendations should be addressed concurrently with the implementation of the bicycle network. Every effort has been made to build a comprehensive list of the issues and considerations needing to be addressed, although future updates to this plan may identify new issues, or shift the plan's emphasis to other, more pressing needs at that time.

Related Plans & Studies

The following is a list of University of Illinois plans, studies, recommendations and achievements that relate to bicycles since 2007. These resources have all been instrumental in the development of this plan, and effort has been made to ensure consistency between this plan and the resources listed below. For a complete list of the additional off-campus studies and plans that influenced this plan, see the Literature Review in the University District Traffic Circulation Study Existing Conditions Report.[29]

2007 Campus Master Plan

The 2007 Campus Master Plan provides a framework for fitting the expansion program, a long-term guide for campus growth, into the fabric of the Urbana-Champaign campus in a way that builds upon existing patterns of land use, circulation, infrastructure, and open space, while making wise use of limited land resources. These visionary development guidelines allow administrators to make informed, coordinated, and cost-effective decisions. [30] The Campus Master Plan includes a recommendation to "de-emphasize automobile traffic … giving the highest priority to transportation strategies that emphasize pedestrian, bicycle, & transit movement."[31] The plan also recommends that the university adopt the Campus Area Transportation Study (CATS) mission statement "to better accommodate pedestrian, bicycle, transit, and vehicle movements in a more user-friendly environment" as a basic planning objective to be applied to all campus transportation planning and design efforts.[32]

2007 Multi-Modal Transportation Study

The 2007 Multi-Modal Transportation Study for the university addressed pedestrian safety and general mobility issues for campus. The study presented a number of recommendations related to parking, transit, streets, bicycling, walkability, and transportation demand management. The Multi-Modal Study was adopted by campus in 2007 and the TDM department was formed to implement the recommendations.

This document addresses four specific bicycle 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 bicycle lanes on campus streets as part of a "complete streets" program. Bicycle paths should supplement street system in areas inaccessible by street and in areas used for recreational purposes.

[29] UDTCS, http://www.cuuats.org/udtcs/documents/UDTCS_Existing_Conditions_Report.pdf/view, 2
[30] http://www.uocpres.uillinois.edu/resources/uiucplan
[31] 2007 Campus Master Plan Recommendation B.3. page 4
[32] 2007 Campus Master Plan page 43

- *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.[33]

2008 Parking System Review Committee Recommendations

In 2008, Chancellor Richard Herman charged the 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."[34]

The PSRC's final report recommended the formation of a bicycle committee to resolve issues related to bicycle paths, parking, and services and identify a revenue stream to fund and maintain bicycle facilities. The committee would be charged with identifying a revenue stream and resolving issues for bicycle paths, parking, and services, such as a bicycle shop, bicycle sharing on campus, and educational programs. This bicycle plan modifies that recommendation to propose a Campus Bicycle Coordinator who will work with the Campus Transportation Committee for review of programs.

The PSRC's recommendations also included removing all on-street parking, in favor of off-street parking. In some cases, this bicycle plan recommends bicycle lanes on streets that will only accommodate bicycle lanes if some or all of the on-street parking spaces are removed. The table in Appendix B 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 234 university parking spaces that will be removed from streets through the implementation of new bicycle lanes recommended in this plan.

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[33] 2007 Multi-Modal Transportation Study, Final Report page 18, 20. https://icap.sustainability.illinois.edu/files/project/34/Multi-Modal%20Study.pdf

[34] Parking System Review Committee Recommendations, Appendix I: Charge Letter, http://www.senate.illinois.edu/co_psrc.pdf

2009 University District Bikeway Network and Draft Campus Bicycle Plan

In 2009, the university released a map of the University District Bikeway Network, accompanied by the 2009 Draft Campus Bicycle Plan, which was the basis of this document. The University District Bikeway Network is a map delineating the proposed type of bikeway facility for each segment within the University District. The CATS Bicycle Plan Working Group discussed the individual segments as they relate to their jurisdiction's proposed network and its relationship to the rest of the CATS agency plans. This collaborative process was a vital step in creating this final document.

2010 iCAP: A Climate Action Plan

In February 2008, the university committed to becoming carbon neutral when it signed the American College and University Presidents' Climate Commitment (ACUPCC). To reach this ambitious goal of net-zero greenhouse gas emissions, the university developed the Illinois Climate Action Plan (iCAP), which outlines strategies and interim targets to help campus achieve carbon neutrality by 2050. A major target set by the iCAP is to reduce transportation emissions by 50 percent of 2008 levels by 2025. Transportation emissions, including those from commuter, air travel, and fleet emissions, accounted for roughly ten percent of the university's total greenhouse gas emissions when the iCAP was written. As part of the efforts to reduce these transportation emissions, the iCAP clearly states "the university will implement the campus bicycling master plan."[35] This document fulfills the iCAP commitment to develop such a plan, and will help reduce commuter-based greenhouse gas emissions by enabling higher rates of bicycle use on campus and encouraging the existing trend in mode shift away from single-occupancy vehicles.

In 2012, Facilities & Services partnered with the Office of Sustainability (now iSEE) and the Office for Mathematics, Science, and Technology Education (MSTE) to launch the iCAP Portal.[36] The iCAP Portal is an online resource to track and share information about sustainability-related efforts on the campus. The iCAP Portal has been and will continue to be instrumental in informing the campus community about bicycle initiatives on campus and seeking feedback from the public.

2011 University District Bicycle/Transit Safety Study

T.Y. Lin International was hired by MTD to conduct the 2011 University District Bicycle/Transit Safety Study to offer guidance on bicycle facilities in the University District, specifically as related to safety near bus routes. The study reviewed a number of specific areas within the University District, as well as the various local plans, policies, and design guidelines for pedestrian and bicycle facilities existing at the time, including the 2009 plan. As part of the study, the facility designs recommended in the Campus Bicycle Plan were vetted by the professional bicycle design team of T.Y. Lin

[35] http://sustainability.illinois.edu/pdfs/Climate%20Action%20Plan.Final.pdf, Page 15.
[36] http://icap.sustainability.illinois.edu

International. The team concluded that all proposed projects met or exceeded typical design standards. Their final report was completed in August 2011, and is available online.[37]

2011 Bicycle Friendly University Feedback

In 2011, this campus was awarded bronze-level recognition as a Bicycle Friendly University (BFU). The BFU program is organized by the League of American Bicyclists (LAB) to recognize institutions of higher education for promoting and providing a more bicycle-friendly campus for students, employees and visitors. In response to BFU applications, LAB also provides a detailed roadmap and technical assistance to further improve campuses for bicycle friendliness. According to the feedback provided to this campus by LAB, among the top "most significant measures the University of Illinois Urbana-Champaign should take to improve cycling on campus" includes ensuring that "new and existing bicycle facilities conform to current best practices and guidelines – such as the NACTO Urban Bikeway Design Guide, AASHTO Guide for the Development of Bicycle Facilities and your DOT's own guidelines." [38] The LAB's recommendations have been incorporated into this updated plan, both in the areas of bikeway infrastructure and as it relates to bicycle parking, education, enforcement, and more. BFU status is renewed every four years, and the university hopes to achieve silver-level status or higher during the next submittal in 2015.

2011 University District Traffic Circulation Study

In 2011, the Champaign County Regional Planning commission (CCRPC) received a grant from the Illinois Department of Transportation (IDOT) to conduct a traffic circulation study for the University of Illinois at Urbana-Champaign's University District. The study intends to provide transportation systems, which would contribute to a pleasing environment for individuals who attend, work at, and visit the University, as well as those who live in the adjacent neighborhoods. Providing a clearly organized system of pedestrian, bicycle, transit, and vehicular facilities is vital for creating this environment. Improving traffic circulation and way finding, increasing the use of active travel modes (e.g., walking, biking), encouraging modal connectivity and securing funding are essential to meet the transportation needs in the University area.

2012 CATS Complete Streets Commitment

In February 2012, the CATS Policy Committee approved "A resolution setting forth CATS's commitment to Complete Streets."[39] The university's Facility Standards require that "streets on campus shall be developed as Complete Streets, which are designed to enable safe access for all users. Pedestrians, bicyclists, buses, and motor vehicles can all safely cross and move along a complete street."[40] A successful campus street accommodates multiple traffic modes in a safe and

[37] http://www.cumtd.com/content/pdfs/bike/ui_bike_transit_august_2011.pdf
[38] League of American Bicyclists, Feedback- Bicycle Friendly University Status- University of Illinois at Urbana-Champaign, Fall 2011. https://icap.sustainability.illinois.edu/project/bicycle-friendly-university-status
[39] https://icap.sustainability.illinois.edu/files/project/49/CATS_Complete_Streets.pdf
[40] U of I Facilities Standards: Streets Sidewalks Page 1

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 bicycle plan incorporates the complete streets philosophy and strives to accommodate multiple traffic modes on campus roads and pathways. As a result, some of the recommended include facilities such as curb bump outs and pedestrian-only sidewalks, despite the fact that these facilities may not directly serve bicyclists.

Public Input

The university has a rich history of public engagement since its founding in 1867, and this bicycle plan was developed in the same tradition. From the 1999 Campus Area Transportation Study to the 2013 University District Traffic Circulation Study, there have been many public input opportunities which have all helped guide the university's decision-making related to bicycle infrastructure and programs.

In 1999, the CATS Phase I report recorded numerous issues and concerns with the bicycle infrastructure on campus.[41] That study included regular input from a Citizens Advisory Committee and public input opportunities throughout the study, including surveys, workshops, focus groups, a web page with email input, and newsletters/project bulletins. The 2005 CATS Phase II report included two public input sessions during 2001. CATS Phase III began in 2011 and CUUATS staff along with CATS member agencies organized a public workshop for the University District Traffic Circulation Study in March 2013. Additionally, all CATS and CUUATS committee meetings follow the Open Meetings Act and allow public input during each meeting.

As part of the 2007 Multi-Modal Study, a campus open house was held in November 2006 to solicit input from the campus community about transportation recommendations. Nearly 200 students, staff, faculty, and visitors attended the open house, and written comments are included in that final report.[42] Also, the Parking System Review Committee held multiple focus group meetings with various campus representatives, including students, faculty, staff, and cyclists.

The 2009 University District Bikeway Network and draft Campus Bicycle Plan were posted online and reviewed at a public workshop during Sustainability Week 2010. The network was also reviewed by the Campus Transportation Committee, the Urbana Bicycle and Pedestrian Advisory Commission, and the local cycling community via meetings with Champaign County Bikes.

The 2010 iCAP was created through an open dialog with campus and the public at large. The transportation section was developed in cooperation with local cycling advocates from the CATS agencies and non-profit organizations. The 2011 University District Bicycle/Transit Safety Study

[41] http://www.ccrpc.org/CATS/pdf/CATSIFinalReport.pdf
[42] Multi-Modal Study, page 2

consisted of a workshop and guided bicycle tour of existing infrastructure in the University District, as well as a survey of MTD bus operators.[43]

The bicycle plans and studies from other agencies in this community have collected numerous comments related to the University District. Through the collaborative planning approach under CATS, the TDM staff have kept informed on comments related to campus bikeways that were collected from other studies, including Greenways and Trails and the bicycle and transportation plans from both cities.

In December 2012, TDM initiated the web-based Campus Bicycle Feedback Form,[44] to help inform this bicycle plan as well as to continually guide future efforts to improve and enhance bicycle facilities and programs. Eighty-six responses were received within the first two weeks of the form's release date, and the form remains online to receive ongoing input. Initial feedback submitted via this online form was used to help determine the order in which recommendations should be prioritized for implementation, as well as to gain insights into the problems that the Campus Bicycle Plan must address and potential solutions.

In addition to this feedback and the feedback collected through various historical documents, studies, and reports listed above, there was a four-week public comment period for this plan in March 2013, during which time anyone could review and submit feedback on the plan through the online form, or in person at a number of hosted events during the four-week period. The draft was posted online to the iCAP Portal and announced through a number of communications channels. The draft was also shared directly with a number of student groups, university entities, local governmental agencies, and local bicycle groups and organizations.

Comments received between December 2012 and May 2013 are included in Appendix C.

[43] University District Bike/Transit Safety Study, page 6
[44] https://illinois.edu/fb/sec/1328698

Chapter 3. Goals and Objectives

The following goals and objectives are meant to direct planning efforts, independently of time frame and individual projects. A goal is defined as an end state that will be brought about by implementing the Campus Bicycle Plan. Objectives are sub-goals that help organize the implementation of the plan into measurable and manageable parts. Implementation measures are specific activities that must be completed in order to achieve goals. Transportation Demand Management worked with the CATS Campus Bicycle Plan Working Group to develop five principal goals for the Campus Bicycle Plan. These goals were created based on public input and a variety of planning efforts. Below each goal, objectives, implementation measures, and benchmarks for completion are listed that will guide efforts in the implementation process.

Campus Bicycle Plan Goals:

1) Increase safety for all campus users, including pedestrians, bicyclists, transit riders, and motorists
2) Increase sustainability of campus transportation
3) Improve mobility and convenience for cyclists on campus
4) Identify funding needs and prioritize funding for improvement of bicycle facilities, services, and programming on campus
5) Improve the university's standing as a national leader in bicycle friendliness

1) Increase safety for all campus users, including pedestrians, bicyclists, transit riders, and motorists

a) Plan and implement a safe, contiguous network of bikeways throughout campus that adhere to campus facility standards and bikeway design guidelines included in Appendix A.

i) 100% of proposed network installed and up to standard by June 30, 2025.

b) Develop a plan and identify funding for the ongoing maintenance of the bikeway network.

i) Funding allocated to repainting 50% of all in-road bicycle lanes each year by June 30, 2014.

ii) Funding allocated to repainting 20% of off road bicycle paths each year by June 30, 2014.

c) Educate cyclists, pedestrians, motorists, and transit riders about rules of the road and promote safe cycling behavior.

   i) Double the annual number of bicycle safety classes available by June 30, 2015 compared to fiscal year 2013.

   ii) Provide information packets about bicycle safety to new students by June 30, 2014.

   iii) Participate in at least 8 bicycle-related engagement events annually starting by July 1, 2014.

d) Update and enforce the university's Bicycle Code, in addition to enforcing state and local traffic laws to ensure safe and legal behavior of cyclists.

   i) Adopt updated code by June 30, 2014.

e) Encourage proper maintenance of bicycles by supporting the Campus Bike Center, mechanics courses, and campus fix-it stations.

   i) Secure continual funding for the Campus Bike Center by June 30, 2014.

   ii) Increase Campus Bike Center memberships by 5% per year.

2) Increase sustainability of campus transportation

a) Reduce motor vehicle trips in the community and associated emissions by increasing mode shift toward bicycles.

   i) Reduce average daily trips in the University District by 20% by June 30, 2021 compared to 2011, as cited in the UDTCS Existing Conditions Report.

b) Increase the share of trips taken by bicycle.[45]

   i) Increase the percentage of faculty and staff using bicycles as their primary mode of transportation on campus by 30% from the 2011 survey to the 2015 survey.

   ii) Increase the percentage of students using bicycles as their primary mode of transportation on campus by 20% from the 2011 survey to the 2015 survey.

c) Increase incentives and services that encourage bicycle commuting.

   i) Provide information packets about occasional parking options to new employees by June 30, 2015.

   ii) Implement a Guaranteed Ride Home program on campus for users who do not purchase an annual parking permit by June 30, 2015.

d) Improve and increase the quality and quantity of bicycle parking on campus, including long-term parking & storage for bicycles to increase security from theft and inclement weather, and thus encourage bicycle ownership on campus.

[45] http://icap.sustainability.illinois.edu/project/increase-bicycle-use

i) Ensure 100% of university-owned buildings in CATS Zones 1 and 2 have bicycle parking available within 150 feet by June 30, 2020.

ii) Bring 100% of short-term bicycle parking up to current facilities standards by June 30, 2025.

iii) Implement long-term bicycle parking at key locations by 2020.

iv) Implement seasonal storage for students living in Housing facilities by 2020.

3) Improve mobility and convenience for cyclists on campus

a) Establish a bikeway network that is convenient and accessible for a range of ridership skill levels, by providing an integrated mix of facility types.

i) Bring 50% of existing bikeway facilities up to campus standards by June 30, 2020.

ii) Bring 90% of existing bikeway facilities up to campus standards by June 30, 2030.

iii) Bring 100% of existing bikeway facilities up to campus standards by June 30, 2050.

b) Increase user friendliness of the campus bikeway network with improved signage and markings on all bikeway segments.

i) Bring 50% of bikeway facilities to have proper signage and markings by June 30, 2015.

ii) Bring 100% of bikeway facilities to have proper signage and markings by June 30, 2020.

c) Improve connectivity within and beyond the University District by working with the Cities of Champaign and Urbana and the Village of Savoy to implement bicycle facilities that connect the campus with the greater community.

i) Continue collaborative planning efforts through CUUATS and other opportunities as they occur.

4) Identify funding needs and prioritize funding allocations for improvement of bicycle facilities, services, and programs on campus

a) Define specific budgets for the projects described in this plan

i) Select the appropriate funding and project requests each year, starting with fiscal year 2015.

ii) Request funding for at least two bikeway project phases per year.

b) Secure funding for ongoing bicycle improvements and programming.

i) Include bicycle needs in the Facilities & Services Annual Report for fiscal year 2015 and future years.

ii) Include related bicycle infrastructure needs in project scope and budget for all Capital Construction Projects.

c) Identify an on-going source of funding for continued maintenance and upkeep of the bikeway network and other bicycle infrastructure and programs.

i) Investigate funding options, including fees and donor support.

5) Improve the university's standing as a national leader in bicycle friendliness

a) Achieve silver-level status the next time the Urbana campus applies for Bicycle Friendly University recognition from the League of American Bicyclists.

i) Apply for and achieve silver-level status during fiscal year 2015.

b) Update the Campus Bicycle Plan once every ten years at a minimum to reflect best practices and existing opportunities.

i) Publish next updated Campus Bicycle Plan no later than 5/1/2024.

c) Increase bicycle registration

i) Develop sticker system and synchronized process with Champaign and Urbana by 2016.

ii) Register at least 600 new bicycles per year starting fiscal year 2015.

d) Implement a bicycle sharing program on campus for short term use.

i) Offer departmental bicycle sharing by September 1, 2014.

ii) Increase the number of departmental bicycle sharing bicycles to 40 by June 30, 2016.

iii) Increase the number of departmental bicycle sharing bicycles to 60 by June 30, 2020.

iv) Offer bicycle rentals by 2020.

e) Hire a bicycle coordinator for the campus to oversee continual improvements, evaluation, and future planning.

i) Hire full time campus bicycle coordinator by June 1, 2015.

Chapter 4. Existing Conditions

The existing bicycle infrastructure on campus is shown in Map 3. The network includes a mixture of dedicated and shared use side paths, a number of off-road dedicated and shared use paths, as well as some on-street bicycle lanes. Many low volume campus streets are not specifically marked for bicycle traffic, but the Illinois Vehicle Code allows cyclists to ride on any street, whether or not that street contains designated bicycle lanes or bicycle route signage.[46] There is currently no designated & marked corridor running north-south or east-west to clearly direct cyclists across campus.

The majority of bikeways on campus were constructed in the 1960's and 1970's and have not been consistently maintained or repaired in well over a decade, due to funding cutbacks. Additionally, piecemeal changes over time have resulted in disconnections and unclear directions for travel. As a result, the campus contains many degraded and interrupted bicycle paths in need of improvement. The 2007 Multi-Modal Transportation Study identified a number of specific issues with the current bicycle system, listed here:

- The bicycle paths are most problematic at intersections. Typically, the paths end before they reach the intersection, leaving bicyclists to mix with pedestrians at street corners.
- Since the bicycle path system is often segregated from the roadway, bicyclists cannot operate as vehicles in most intersections, causing unpredictability and introducing conflicts with pedestrians and vehicles.
- The bicycle paths are poorly marked and difficult to distinguish in many areas from the sidewalk since there is no physical separation.
- Most paths are of sub-standard width for two-way paths.
- Many paths are partially blocked with potentially hazardous obstructions.
- Poor geometric design at some locations makes turning precarious.[47]

These issues are re-examined in this chapter and can be summarized as four major problems: safety, maintenance, connectivity, and user-friendliness.

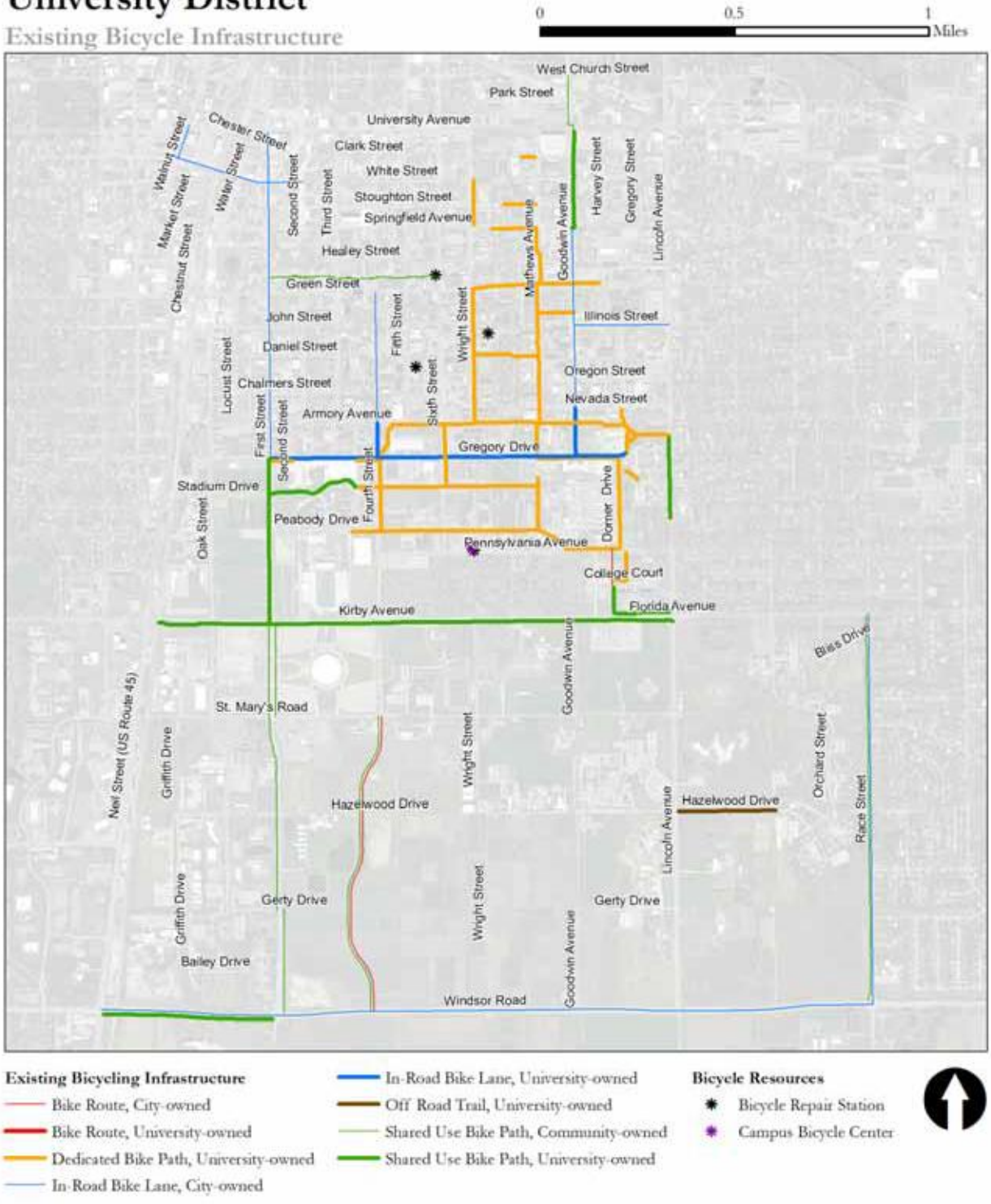
[46] 625 ILCS 5/Ch. 11 Art. XV

[46] http://www.ilga.gov/legislation/ilcs/ilcs4.asp?DocName=062500050HCh%2E+11+Art%2E+XV&ActID=1815&ChapterID=49&Se qStart=125200000&SeqEnd=127100000

[47] 2007 Multi-Modal Transportation Study, Final Report, 2-13

University District

Existing Bicycle Infrastructure



Map 3: Existing Campus Bicycle Network in 2014, University District

Summary of Problems

1. Safety

The safety of bicyclists, as well as that of nearby pedestrians, motorists, and transit users, is a top priority for the university. The poorly marked, inconsistent and unpredictable bikeways pose difficulties for cyclists trying to navigate campus. This commonly leads to unpredictable riding behavior, which not only puts cyclists at risk, but also adversely affects other users of paths and roadways. Even when a cyclist is trying to follow the traffic laws, there are many locations where a campus path ends without forewarning and without any indication of where the cyclist is expected to go next. The cyclist is then forced to make a sudden decision while in motion, which can be very dangerous for the rider and surrounding passersbys.

Many existing bikeways on campus are intermixed with pedestrian walkways, with little or no distinction between a path intended for pedestrian use and one intended for bicycle use. The paint has worn off from most dedicated bicycle paths, making them indistinguishable from pedestrian-only paths, as well as from old bicycle paths where the paint was intentionally removed. The previous facility standards for bicycle paths required a darker pavement, but over time the darkness fades and is no longer distinguishable from sidewalk concrete. Due to faded or degraded markings, there is little to indicate whether the pavement on these paths is intended for cyclists or pedestrians, which causes pedestrians to unknowingly walk on bicycle paths. This in turn pushes cyclists to use any available route, resulting in frequent conflicts between bicyclists and pedestrians across campus, both on and off bikeways. During 2013, the majority of comments submitted by bicyclists via the Campus Bicycle Feedback Form pointed to the bicycle/pedestrians conflicts that result from poorly maintained bicycle paths. [48] The high number of existing bi-directional side paths intended for bicycles poses a danger as well, due to the low visibility that motorists have of bicycles on these paths when approaching intersections to turn. According to AASHTO's Guide for the Development of Bicycle Facilities, "In general it is undesirable for bicycles to ride on sidewalks. There is significantly higher incidence of bicyclist-motor vehicle crashes with bicyclists riding on the sidewalk than with bicyclists operating on the roadway. The issue with sidewalk bicycle riding is compounded by bicyclists riding against the

Deteriorated bike path near Burnsides Research Laboratory north of Pennsylvania Avenue. Photo by Geoff Merritt

[48] A summary of this feedback can be found in Appendix C.

flow of adjacent traffic, as motorists crossing or turning left or right at driveways and intersections usually do not look for bicyclists traveling on the sidewalk."[49]

The original design of most outdated paths also poses a danger to cyclists, with sharp turns, narrow widths, and curbed edges. Among the few dedicated bicycle paths being kept under the updated bicycle plan, the majority will need to be widened or resurfaced to meet safety standards. Nearly all of the bi-directional dedicated bicycle paths are only six feet wide, rather than eight feet (as recommended by The Guide for the Development of Bicycle Facilities [AASHTO, 2012]), while some one-way dedicated paths are as narrow as two feet wide.

2. Maintenance

As mentioned previously, many existing bikeways on campus have fallen into disrepair as a result of funding cuts and budget limitations. Without regular upkeep over the years, many of the dedicated bicycle paths have fallen victim to degraded concrete, faded paint, and edge drop offs. Broken and crumbling concrete poses a danger to cyclists, particularly on poorly lit pathways where the rugged terrain may not be visible at night. Yellow painted dash marks are often the only indication of whether an off-road path is designated for bicycles or pedestrians. Where these painted markings have faded, conflicts regularly arise because pedestrians walk on dedicated bicycle paths and cyclists ride on pedestrian pathways. In many instances, painted "yield" signs intended to indicate the intersections of dedicated bicycle paths have faded to only vaguely show the original triangle outline. To newcomers and visitors, these remaining triangles look like directional arrows, incorrectly telling cyclists to ride on the left side of the path.

Leaf and debris pile up on Mathews Avenue side path. Photo by Geoff Merritt

3. Connectivity

As the original bikeway system has slowly been changed and moved over time, from a cohesive network to a disconnected series of bikeway segments. The lack of connectivity makes it difficult to travel across campus by bicycle in an efficient, lawful manner, and it encourages cyclists to take dangerous or illegal alternatives such as bicycling on pedestrian-only sidewalks or traveling the wrong direction on one-way streets.

[49] AASHTO Guide for the Development of Bicycle Facilities, 4th Edition. 3-9.

Just as there are connectivity issues within the campus bicycle system, existing connections between the campus bikeways and the community bikeways are hard to find. The university is nestled within the city limits of Urbana and Champaign and the bikeways on campus must connect with city-owned streets and bikeways to offer true connectivity. While the Multi-Modal Study recommends "the campus bicycle plan should be closely coordinated with bicycle planning for Champaign and Urbana to enhance regional connectivity and promote uniformity within the University District,"[50] most of the actual connections between campus bicycle paths and community bicycle paths have yet to be built. Maps 4 and 5 show related city plans, while street jurisdictions are shown on page 10.

Former dedicated bike path along Gregory Drive that has not been removed since new bike lanes were installed on the street. Photo by Geoff Merritt

Because the university only owns roughly a third of the streets in the University District, many of the improvements needed to upgrade the overall University District bicycle network fall under the jurisdiction of Champaign or Urbana, rather than the university. While this plan does not specifically call out solutions for the city-owned bikeways, TDM has worked closely with those planning and implementing the city-owned bikeways to coordinate efforts and ensure that a well-connected network is put into place. In several instances, coordination is particularly needed where the university owns the sidewalks or off-road bicycle paths, while another jurisdiction owns the adjacent street where an on-street bicycle lane or bicycle route is recommended. Examples of this include Green Street from Wright Street to Goodwin Avenue, and Mathews Avenue south of Springfield Avenue.

4. User-friendliness

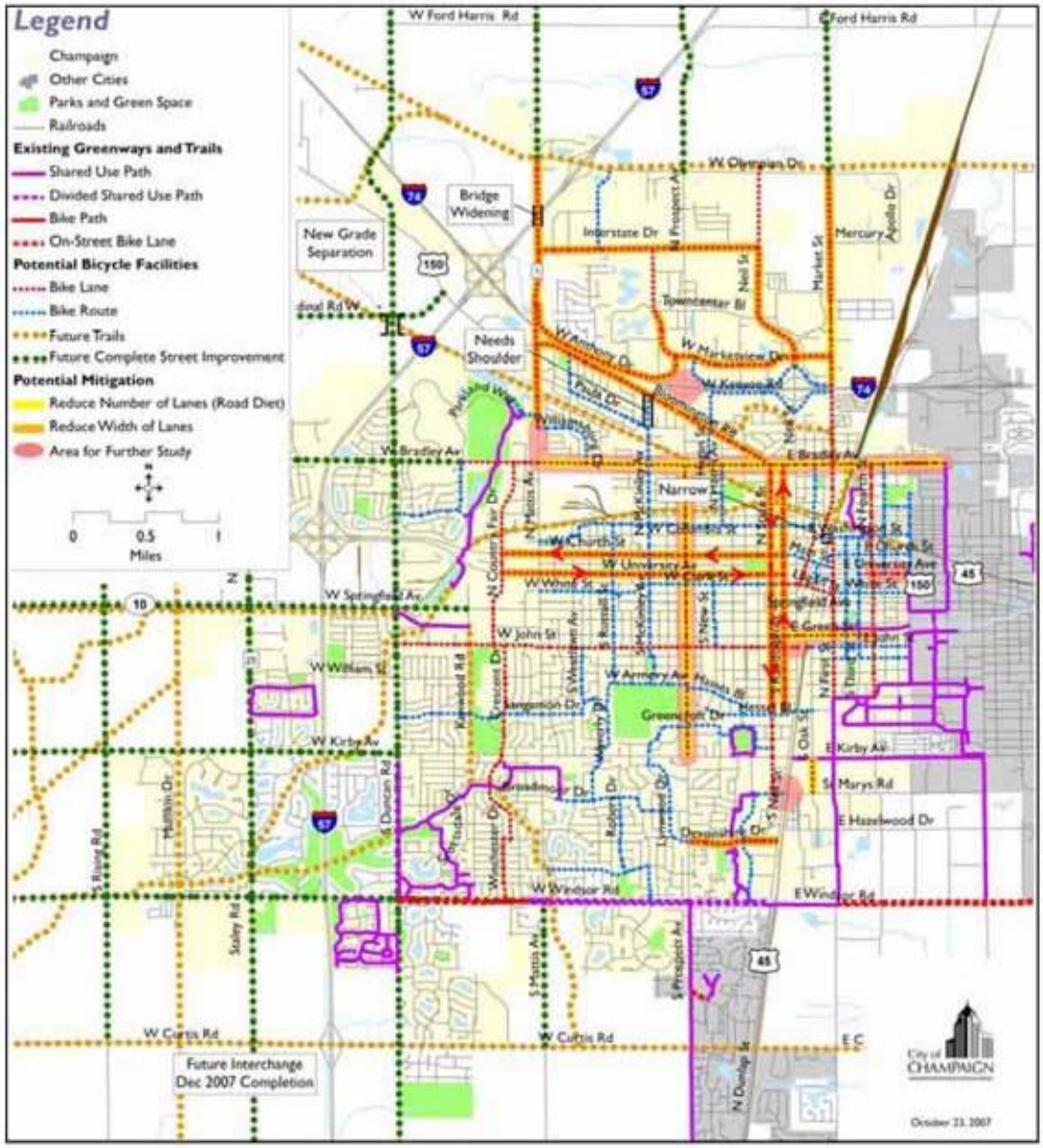
Each of the aforementioned problems results in a lack of user-friendliness among the existing bikeways. Poorly maintained and disconnected routes are unsafe and are often confusing and discouraging for new or potential riders. In order to make bicycling an attractive mode of transportation for campus residents and visitors, the university must provide a clean, convenient, and efficient network of bikeways on which to travel.

Crisscrossing bike and pedestrian paths at the intersection of Mathews Avenue and the existing Armory Avenue Path. Photo by Geoff Merritt

[50] Multi-Modal Study, 3-16

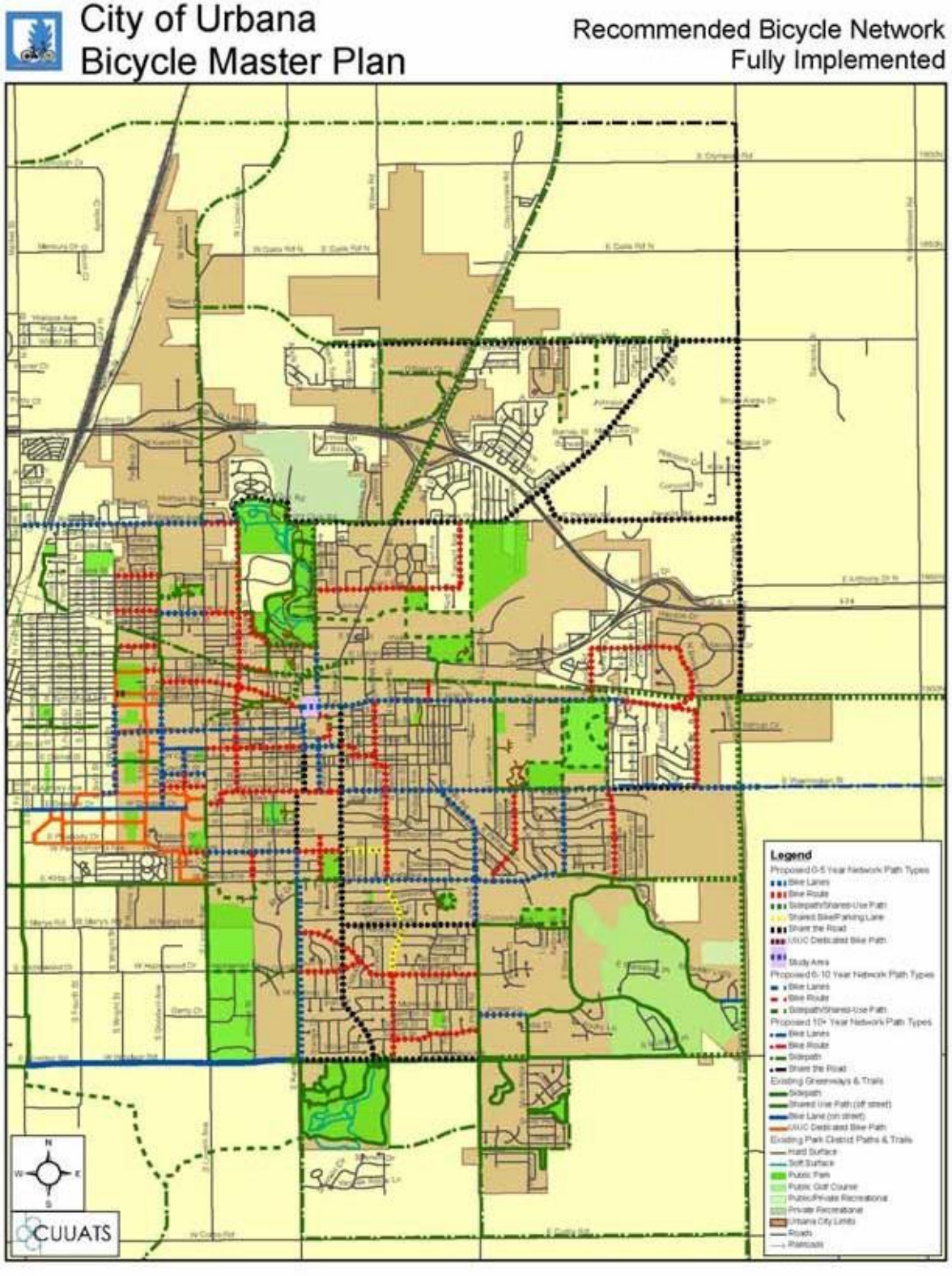
CHAPTER 6: BICYCLE VISION

FIGURE 19: BICYCLE VISION PLAN



Map 4: 2008 Bicycle Vision Plan, City of Champaign

CAMPUS BIKE PLAN



Map 5: 2008 Bicycle Master Plan, City of Urbana

Chapter 5. Network Recommendations

Summary of Solutions

The recommendations provided in this plan seek to address the four major problems described in Chapter 4. By implementing the following general changes to the campus bikeway network, safety, maintenance, connectivity, and user-friendliness will be improved.

1. Improved Safety

A 2009 literature review of the impact of transportation infrastructure on bicycling injuries and crashes found that "purpose-built bicycle-specific facilities reduce crashes and injuries among cyclists." [51] To reduce the number of dangerous interactions between bicyclists, motorists, and pedestrians, the Campus Bicycle Plan recommends replacing most existing side paths with on-street bicycle lanes or designated on-street bicycle routes. Bicycle lanes are safer for cyclists because cyclists are more visible and predictable when following the Rules of the Road.[52] In the absence of dedicated bicycle lanes, clearly marked designated bicycle routes provide additional safety measures for on-street cycling.[53] As noted in the Urbana Bicycle 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."[54]

2. Improved Maintenance

While the initial bikeway improvements recommended in this plan are critical to ensuring the safety of cyclists and others, continuing to maintain the new and improved network is essential to the ongoing success of the plan. Because many existing side paths will be replaced by on-street bicycle lanes, the maintenance of these new bikeways will vary from historical needs of the old off-street paths. Although the plan effectively reduces the number of dedicated bicycle paths requiring upkeep, on-street bicycle lanes will likely have an increased need for striping maintenance due to the added wear caused by vehicle traffic crossing over painted bicycle lanes. This will be particularly apparent where bicycle lanes are along bus routes, so buses must cross through the bicycle lane to pull into bus stops. Most significantly, on-street bicycle lanes will mean that the maintenance of bicycle lanes will be paired with the maintenance of streets. Pavement upgrades for the street will mean pavement upgrades for the bicycle lane, and funding limitations for road maintenance will adversely affect maintenance of on-street bicycle lanes and routes.

For off-road shared use and dedicated bicycle paths, occasional motor traffic from service vehicles, as well as normal wear from daily use and inclement weather will continue to result in faded paint and degraded pavement over time. To prevent the future network from falling into the same state of

[51] Reynolds, et al.
[52] http://www.ilga.gov/legislation/ilcs/ilcs5.asp?ActID=1815&ChapterID=49
[53] Brady, et al.
[54] Urbana Bicycle Master Plan – Bikeway Types, Page 6.1 (http://www.ccrpc.org/bike/pdf/6BikewayTypes.pdf

disrepair that is found on campus today, a regular maintenance plan will need to be followed upon implementation of this bicycle plan. Potential funding sources for the ongoing maintenance of bikeways include:

- Increasing the annual F&S budget to support bikeway network repairs;
- Creating a UI Foundation fund for bicycle-related projects and programming, including ongoing maintenance of the bikeway network;
- Creating a campus "Adopt a Path" program that would allow departments, student groups, or local businesses to provide funding to sponsor the ongoing upkeep of specific segments of the bikeway network; and,
- Creating a student fee specifically for bicycle programs and maintenance.

Additional needs for all bikeways include ongoing regular maintenance such as sweeping of leaves and landscaping debris as well as snow removal.

3. Improved Connectivity

Although this plan does not make recommendations for the cities on specific bikeways to implement or change, it does recognize the need for the university to continue to work closely with the cities to ensure that campus bikeways are aligned with the greater area's bicycle network. This plan intends to connect and coordinate the campus bikeway network with facilities constructed and planned in the municipal jurisdictions of Champaign, Urbana, and Savoy. Every effort has been made to ensure that the recommendations included in this plan provide connectivity with non-university-owned bikeways.

Additionally, many of the plan's recommendations are designed to improve connectivity throughout the existing and proposed network. Bicycle lanes and bicycle routes are often recommended because they take advantage of existing road infrastructure, though significant capital improvements are necessary with some proposed projects. The proposed bicycle network will create a more cohesive and coherent network, allowing cyclists to move across campus with ease.

4. Improved User-friendliness

To make the bikeway network not only more safe but also more appealing and user-friendly for experienced and novice cyclists alike, this plan includes recommendations for improved signage and markings that would guide cyclists through campus. More consistent bikeways that are well maintained and clearly marked will help cyclists navigate the campus by bicycle. This will also encourage more predictable riding behavior for the benefit and safety of all transportation modes.

Recommended Bicycle Facility Types

This plan identifies the campus streets that should include bicycle lanes or be designated as bicycle routes, shared-use paths that should be maintained or developed, and locations selected for enhanced dedicated bicycle paths. Design guidelines for each type of bikeway are included in Appendix A, with images of recommended markings and signage.

Bicycle Lanes

Increasing the number of on-street bicycle lanes on campus roads will change the overall transportation network so that pedestrians have safer walkways with more predictable behavior from other users, while bicyclists will share the road with motor vehicles in most cases. Bicycles are legally designated as vehicles by the State of Illinois, and they have the same rights and responsibilities as motor vehicles when using roadways. When a bicycle lane is present on a street, bicyclists are not limited to riding in the bicycle lane according to the Illinois Vehicle Code.

Bicycle Routes

In some locations, rather than painting designated bicycle lanes, campus streets will simply be marked as a Bicycle Route using wayfinding signs. Bicycle Routes will be implemented on streets that have lower traffic volumes, are too narrow for bicycle lanes, or connect with streets that have been designated by Urbana or Champaign as a Bicycle Route. Bicycle Routes are helpful pieces of the full bicycle network because they provide continuity when the street is not suitable for engineered bicycle lanes. The Bicycle Route wayfinding sign is meant to encourage bicyclists to use these streets and to remind motorists to share the road and watch for bicycles. Painted shared lane markings, or "sharrows" are also recommended on certain Bicycle Routes. Sharrows are recommended to "be used to guide bicyclists to a safe position within the lane, alert motorists to the potential presence of bicyclists, encourage safe passing by motorists, and reduce the incidence of wrong-way bicycling."[55]

Shared Use Side Paths

A shared use side path is a wide sidewalk parallel to a street designed to accommodate bicycle use along with pedestrians. There are certain locations in Urbana and Champaign where bicyclists are not allowed to ride on sidewalks, but in all other locations bicycles are permitted, though not usually encouraged, on sidewalks.[56] There will be a limited number of shared use side paths implemented as part of this plan, where on-street bicycle lanes or routes are not feasible, and off-road paths are not available to offer alternative routes. The design guidelines for shared use paths include a sign that reminds cyclists to yield to pedestrians, but there are no associated pavement markings.

AASHTO notes that shared use side paths should only be used rarely due to potential conflicts, such as motor vehicles crossing at intersections or entering driveways, and they should give signage for

[55] Brady, et al. page 33

[56] Urbana Municipal Code/Champaign Municipal Code.

contra-flow riders.[57] The AASHTO guide recommends that "although paths in independent rights-of-way are preferred, side paths may be considered" in a number of cases, such as when the adjacent roadway has relatively high-speed and high-volume motor vehicle traffic and where few roadway and driveway crossings exist.[58] This coincides with the Urbana Bicycle Master Plan, which notes that side paths "may be better choices than on-road bikeways for faster, busier roads with few access points and with well-designed intersections."[59]

Dedicated Bicycle Side Paths

In very few instances dedicated bicycle side paths are recommended on campus. The adjacent street should have low traffic frequency and speed, and on-street bicycle facilities must have been considered unfeasible in order for dedicated bicycle side paths to be acceptable. An example of such a path is the path along Peabody Drive, from Euclid Avenue to Sixth Street.

Off-Road Shared Use Paths

As the university has grown, various streets have been closed to traffic and converted to pedestrian areas. Because bicycle paths should supplement the street system in areas inaccessible by street, there will continue to be some off-road bicycle paths through pedestrian areas of campus. Off-road paths supplement the on-street facilities when on-street facilities are more than 1,000 feet apart. In some instances, a single shared-use path wide enough to accommodate bicyclists, pedestrians, and other non-motorized transportation will be the most appropriate facility type. The minimum paved width for a bi-directional shared use path is 10 feet.[60]

Off-Road Dedicated Bicycle Paths

The off-road dedicated bicycle paths will improve safety for pedestrians and bicyclists through clear delineation of exclusive bikeway facilities. They will be designed using the AASHTO recommendations for bicycle lane designs on streets with no curb and gutter, with a minimum of four feet in width for each directional travel lane. The bicycle lane markings on the dedicated bicycle paths will indicate the proper use of the paths and minimize the number of pedestrians walking on bicycle paths. The potential for conflicts at pedestrian and street crossings will also be minimized through appropriate design, markings, and signage for all users.

Off-Road Trails

The off-road trails are unpaved paths to be shared by cyclists, walkers, joggers, and other non-motorized transportation users.

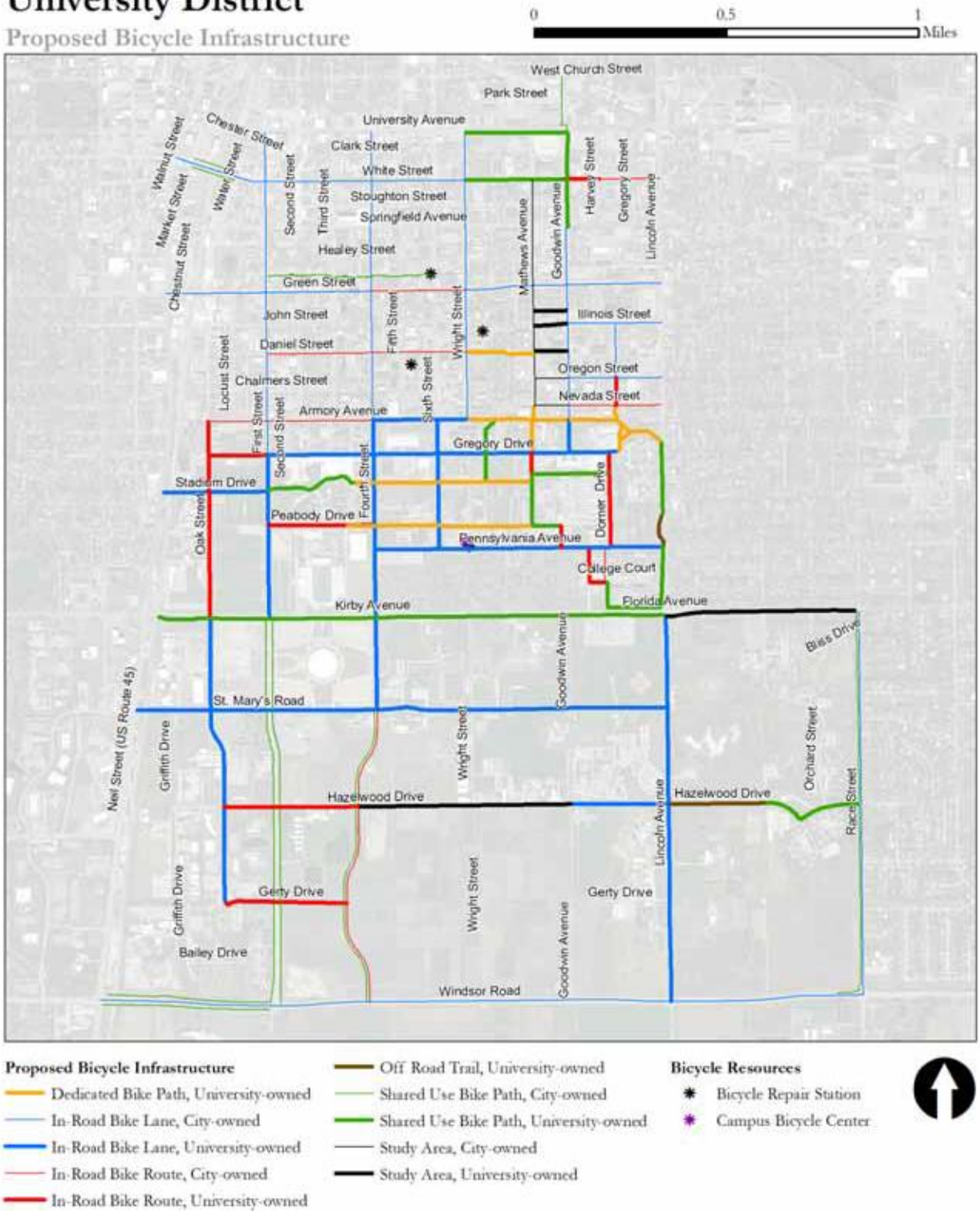
Overview of Changes

The resulting campus bicycle network will be very different from the disjointed collection of existing bicycle paths currently in place. Map 6 shows the proposed full network of campus bikeways.

[57] AASHTO 2012 Guide, pages 5-8 and 5-9
[58] AASHTO 2012 Guide, page 5-10
[59] Urbana Bicycle Master Plan, page 6-15
[60] AASHTO 2012 Guide, page 5-3.

University District

Proposed Bicycle Infrastructure



Map 6: Proposed Campus Bicycle Network, University District

Chapter 6. Implementation

Cost Estimates

The total project cost of implementing these bicycle network recommendations is estimated to be roughly **$4 million** in 2014 dollars, excluding areas that are still under study. Each facility will need an engineering design completed before a construction estimate can be accurately calculated. Thus, only rough conceptual estimates have been included in this plan. These estimates are based on the installation of bicycle lanes on existing pavement, new concrete for the off-road paths, and an average cost per installed sign, using the per-item construction cost estimates shown in Table 2. In the projects estimates, a 30% overhead has been added to account for additional costs that include staff time, engineering fees, and construction/bid contingencies.

Item	Unit of Measure	Unit Cost
Sign	Each	$125.00
Off-Road Pavement	Square foot of new pavement	$7.50
Pavement Removed	Square foot of pavement removed	$3.00
Landscaping Added	Square foot of new landscaping	$4.14
Bicycle Lane Striping	Foot of bicycle lane striping	$5.00
Bicycle Lane Marking	Each	$55.00
Shared Lane Marking (Sharrow)	Each	$60.00
New Curb Ramp	Unit	$3,000.00

Table 2: List of Cost Estimates

There are usually going to be additional needs with added costs, when the bikeway engineering is complete. For example, when Goodwin Avenue from Gregory Drive to Springfield Avenue was reconstructed in 2010, the original estimate for striping bicycle lanes along this 3,094 foot corridor was $15,469. However, the actual project included curb bump outs, new street lights, updates to sidewalk ramps and crosswalks, enhanced bus shelters, new pavement, and all the required design and oversight. Thus, the total project cost was close to $2 million. In many remaining projects similar to this one, the bikeway signage and markings are only a small part of the full project.

Funding

While the actual cost to the university for each of these recommended bikeways will depend on many variables, including engineering details, grant opportunities, and partnership with other jurisdictions, the following three recommendations will help ensure that this plan can be implemented in a timely manner.

1. The total cost to implement all the pathways defined in this plan is estimated at $4M for infrastructure.

2. Additionally, there needs to be recurring funding for maintenance.

3. The University should place a priority on funding capital projects that assist with implementation of this plan. This includes support for complete street facilities when upgrading street pavement. This also includes providing enough funding to building projects, so the adjacent bikeway(s) can be upgraded with the building upgrades.

There is currently no campus funding dedicated to maintenance of the bicycle network. The TDM department has funding for traffic sign upkeep and crosswalk and street painting maintenance, but not for bikeways, bicycle parking, or bicycle programs. The university should fully support the implementation of the Campus Bicycle Plan, including the initial construction, ongoing maintenance, and support for related programs. A summary of anticipated costs is shown in Table 3.

Task	Status	Timing	Long-term Funding Needs
Approve Campus Bicycle Plan	Final edits underway, then routing for approval from F&S and Campus	June 30, 2014	Use existing staff time
Improve bikeway network	Integrating some of these with street and capital projects, seeking grants	Five to ten years	Approximately $4 Million
Upgrade bicycle parking	Over 150 parking locations are not up to acceptable standards	Three to five years	Approximately $400K
Adopt Campus Bicycle Code and bicycle registration system	Final edits underway, then routing for approval; costs include tracking citations, and handling registration	Approve by June 30, 2014	$5-$20k/year recurring
Campus Bicycle Coordinator to oversee programs such as bicycle sharing and ambassadors	No funding available, currently managed part-time by a team of F&S	Currently Needed	$45k/year recurring
Bicycle Education maps, materials and classes	Currently offered by the Campus Bike Center and Champaign County Bikes	Ongoing	$5-$10k/year recurring
Campus Bike Center advocacy, education, and encouragement	Recurring events, in collaboration with Champaign County Bikes and student advocacy groups	Currently Needed	$50k/year recurring

Table 3 Bicycle Funding Needs

Potential Funding Sources

One potential source for funding is to work with the University of Illinois Foundation to develop and promote a *Campus Bikes* designated fund. This is an unusual approach to funding system-wide campus infrastructure and services, and it has the potential to bring in funding to support cycling initiatives on campus. In FY11, the Foundation met with staff from the Office of Sustainability (now iSEE) seeking opportunities to offer a sustainability-related designated fund, and the Campus Bicycle Plan was identified as a valid and reasonable choice.

Another potential source for funding is to apply for bicycle infrastructure grants. The known grant programs are highly competitive with very limited funding availability, so it is not a guaranteed source of funding. However, there are many possibilities that can be sought as listed on the CUUATS website.[61] The grant applications will require additional staff time, which would be handled by the proposed Campus Bicycle Coordinator.

While the source of funding is still unclear for the implementation of this plan, the need for such funding is urgent. The changes that have occurred on campus property in recent years were supported from one-time allocations by campus administration, occasional allocations from the Illinois Student Senate and the Student Sustainability Committee, and in combination with capital projects such as the Ikenberry Commons upgrades. Consistent funding needs to be identified and provided to implement the improvements and meet the plan goals.

Prioritization Process

The projects making up this plan are ranked in order of priority, and each project has been broken into one or more phases. Projects were prioritized using a number of criteria:

- **Safety needs** using data of bicycle crashes from 2006-2011
- **Traffic volume** using traffic rates recorded from 2000-2012
- **Difficulty** of completion by the university, considering jurisdiction of the segments included in and/or connecting to the project.

Projects that fall entirely under the jurisdiction of the university have received priority over projects that need assistance or cooperation from another local governmental agency or where connectivity relies heavily on additional upgrades by neighboring jurisdictions. There will be a number of stakeholders and responsible parties involved in each project, even for projects that are entirely under university jurisdiction.

Using the above criteria, projects were categorized in high, medium, and low priority levels. A fourth category, Study Areas, includes projects that do not yet have recommended designs. Some of the high-priority projects have already been funded and are in the process to be implemented. Table 3 outlines the full implementation plan by priority.

Because many of the projects recommended will not be completed for a number of years, TDM took an interim step to make some initial improvements during 2013. With funding support from the Illinois Student Senate, work included repainting several existing dedicated bicycle off-road and

[61] http://www.ccrpc.org/greenways/pdf/CCGT_Funding_List_10-21-08.pdf

side paths, and adding stop signs for bicycle traffic at key intersections on existing paths. This step does not bring the existing bikeways up to acceptable safety standards; however, this is expected to reduce bicyclist/pedestrian conflicts.

Project Summaries

The following pages contain information about specific project recommendations. Projects are listed in priority order. A *Study Area* designation is used when there are concerns that need further study in order to be fully addressed.

Full Implementation List

High Priority Projects
• Dedicated Path Removal • Armory Avenue/ Wright Street/ Green Street • Fourth Street • First Street • Armory Avenue Path • Sixth Street
Medium Priority Projects
• Gregory Drive • Peabody Drive and Path • Lorado Taft Path • Stadium Drive • St. Mary's Road • Lincoln Avenue • Main Street Path
Low Priority Projects
• Oak Street • Florida/Kirby Avenue Path • Race Street Path • Pennsylvania Avenue • University Avenue Path • Goodwin Avenue Path • Dorner Drive • Mathews Avenue Path • FAR/PAR Paths • Gregory Street • Gerty Drive
Study Areas
• Quad Path • Mathews Avenue • Hazelwood Drive

Table 4: Full Implementation List

High Priority Projects

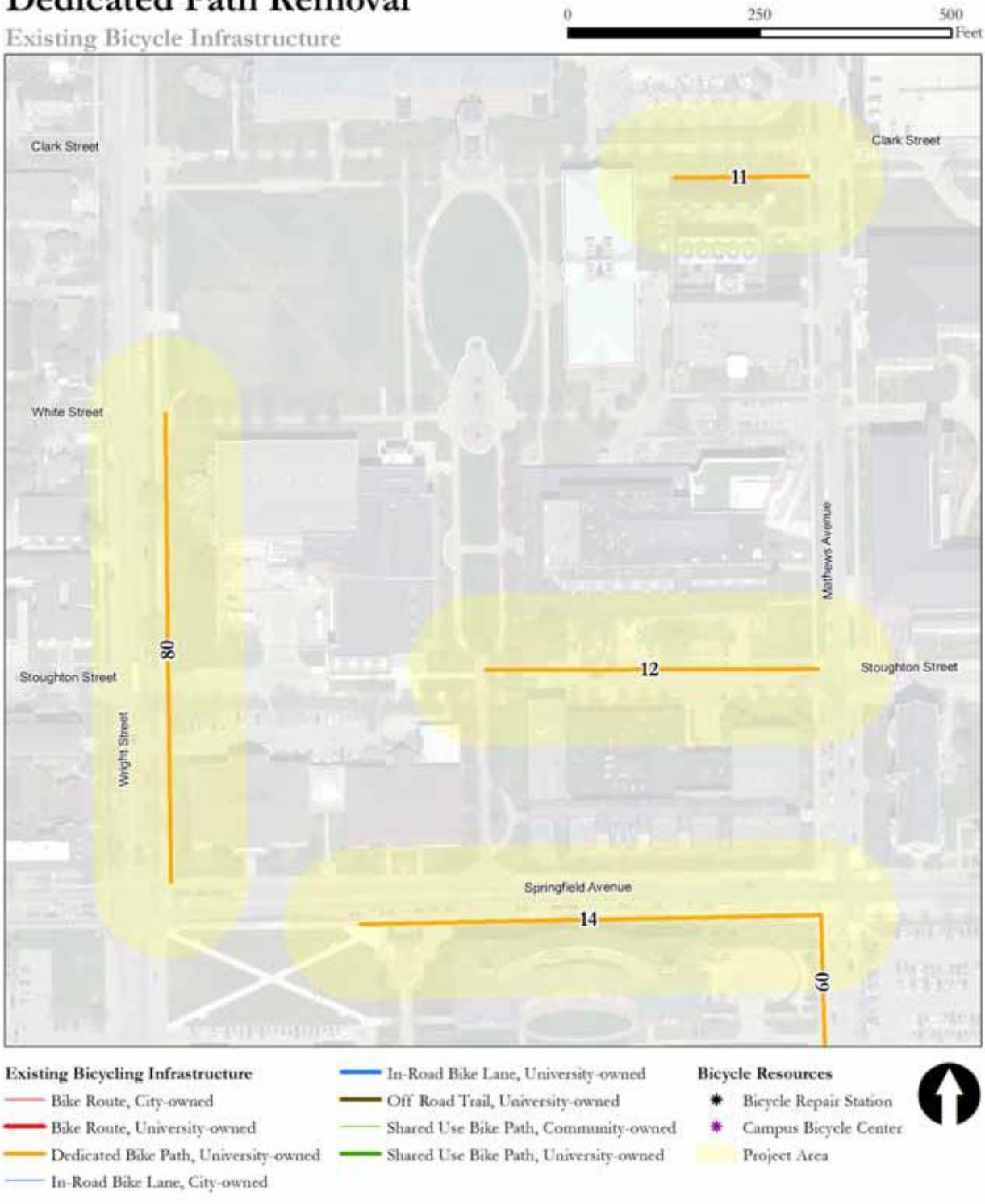
Dedicated Path Removal

There are a group of dedicated bicycle paths located in the northern engineering campus between Springfield Avenue to the south, University Avenue to the north, Wright Street to the west, and Mathews Avenue to the east. Although these paths were once a part of the greater campus bicycle network, they have long since been left in a state of disrepair, disconnected from the rest of the network.

This plan calls for the removal of most dedicated bicycle paths on campus (with some notable exceptions like the Quad Path, Lorado Taft Path, and Armory Avenue Path), and most path removals will be performed in conjunction with other infrastructure improvements. The segments included in this project are found in places where this plan does not recommend specific bicycle network improvements, including Springfield Avenue, Stoughton Street, Clark Street, and Wright Street. See Table 5 for table of associated costs.

Dedicated Path Removal

Existing Bicycle Infrastructure



Map 7 Existing Bicycle Infrastructure, Dedicated Path Removal

CAMPUS BIKE PLAN

Dedicated Path Removal

Proposed Bicycle Infrastructure

Map 8 Proposed Bicycle Infrastructure, Dedicated Path Removal

Segment Number	Description	Estimated Cost
#11	Remove existing dedicated bicycle path north of Coordinated Science Laboratory	$11,862.49
#12	Remove existing dedicated bicycle path along north side of Stoughton Street from Mathews to the center of the quad to the west	$24,847.02
#14	Remove existing dedicated bicycle path along south side of Springfield Avenue from Grainger Library to Mathews Avenue	$33,478.74
#80	Remove existing dedicated bicycle path along east side of Wright Street from Springfield to White Street	$36,892.07
	Total Cost:	$107,080.32

Table 5 Dedicated Path Removal Phases and Costs

Armory Avenue/ Wright Street/ Green Street

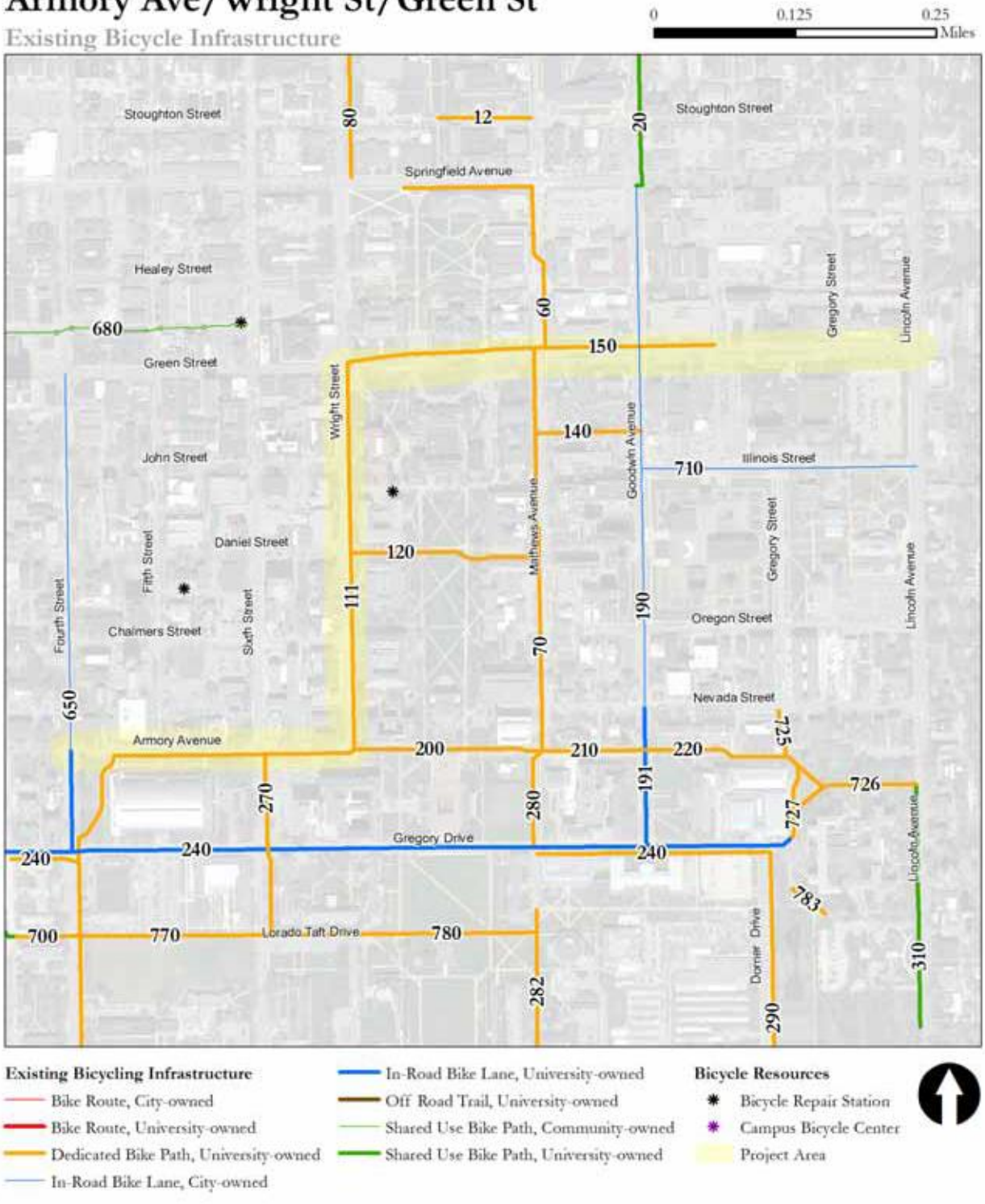
A grant proposal is being spearheaded by the MTD for a segment of high-traffic streets in the center of campus, which would require a cost-sharing component by all the CATS member agencies. Within the University District, this grant proposal includes bicycle lanes on White Street, Wright Street, Green Street from Wright Street to Lincoln Avenue, and Armory Avenue from Wright Street to Fourth Street. Within the proposed improvements, the university has jurisdiction over Armory Avenue from Wright Street to Fourth Street, the Wright Street existing bicycle path to the east of the roadway from Armory Avenue to Green Street, and the Green Street existing bicycle path to the north of the curb from Wright Street to east of Goodwin Avenue.

The Green Street bicycle path removal should occur when the City of Urbana installs bicycle lanes on Green Street. The Wright Street bicycle path removal will need to happen in conjunction with the installation of bicycle lanes on Wright Street, which is under City of Champaign jurisdiction. The bicycle lanes on Armory Avenue should occur when the Wright Street and Armory Avenue intersection is reconfigured. That reconfiguration will include shifting the street and sidewalk southern edges farther to the south, so it will be primarily under the jurisdiction of the university. However, this work will require careful coordination with the City of Champaign, and the intersection should be done in conjunction with the bicycle lane installation on Wright Street.

The projects in this grant proposal are the top priority safety concerns for the university. Every effort should be made to assist the MTD in obtaining this grant to address these safety issues. Additionally, because the grant will require some matching funds from the member agencies of CATS, the university should be diligent in helping to meet the required match. Table 6 provides a summary of each phase and the associated cost estimate.

Armory Ave/Wright St/Green St

Existing Bicycle Infrastructure



Map 9: Existing Bicycle Infrastructure, Armory Avenue/Wright Street/Green Street

Map 10: Proposed Bicycle Infrastructure, Armory Avenue/Wright Street/Green Street

Segment Number	Description	Estimated Cost
#150	Remove side path on Green Street from Wright Street to east of Goodwin Avenue	$95,901.62
#90	Remove side path on Wright Street from Armory Avenue to Green Street	$41,464.80
#100	Bus/bicycle lanes on Armory Avenue from Sixth Street to Wright Street	$29,247.87
#110	Bicycle lanes on Armory Avenue from Fourth Street to Sixth Street	$62,127.73
	Total Cost:	$228,742.02

Table 6: Armory Avenue/Wright Street/Green Street Phases and Costs

Green Street east of Goodwin Avenue, where existing side path ends mid-block (#150) Photo by Geoff Merritt

Green Street at Mathews Avenue, where existing side path goes through a bus stop (#150) Photo by Geoff Merritt

West end of Green Street Side Path (#150) Photo by Geoff Merritt

Intersection of Wright Street and Green Street (#90 and #150) Photo by Geoff Merritt

Inconsistent markings on Wright Street side path (#90) Photo by Geoff Merritt

Pedestrian conflicts at Wright Street and Armory Avenue (#90 and #100) Photo by Geoff Merritt

End of side path along Armory Avenue (#100) Photo by Geoff Merritt

Armory Avenue between Wright Street and Sixth Street (#110) Photo by Holly Nelson

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Fourth Street

The university has jurisdiction over Fourth Street from Armory Avenue to St. Mary's Road. To the north of Armory Avenue, Fourth Street is under the jurisdiction of the City of Champaign. Bicycle lanes are currently installed on Fourth Street, north of Gregory Drive, with a parking lane along the west edge. South of St. Mary's Road, Fourth Street is again under the jurisdiction of the City of Champaign. At St. Mary's Road the on-street bicycle lanes will transition to a bicycle route from St. Mary's Road to Windsor Road.

The Fourth Street project involves three phases. The first phase, from Armory Avenue to Kirby Avenue, is scheduled for summer 2014. It will include bicycle lanes on the street which will connect to the bicycle lanes on Fourth Street to the north. This segment will also include pavement and signal improvements, which are not included in the cost estimates in table 5. The second phase will be the removal of the off-road bicycle path along the east edge of Fourth Street from Armory Avenue to Peabody Drive. The third phase, from Kirby Avenue to St. Mary's Road, includes a road diet and bicycle lanes on the street. This segment will also require new pavement construction and coordination with the City of Champaign at the intersection with St. Mary's Road. In the future, if traffic volumes warrant addition traffic controls, a roundabout is recommended for the intersection of Fourth Street and St. Mary's Road. The cost of a roundabout is not included in these estimates.

Additionally, the east edge of the street, from south of Parking Lot E15 at Pennsylvania Avenue to Kirby Avenue is an unincorporated area. This plan recognizes that a sidewalk is needed along that space to make this a fully complete street; however, discussions have not been initiated with the owner of the associated right-of-way, so a solution has not been finalized. Table 7 provides a summary of each phase and the associated cost estimate.

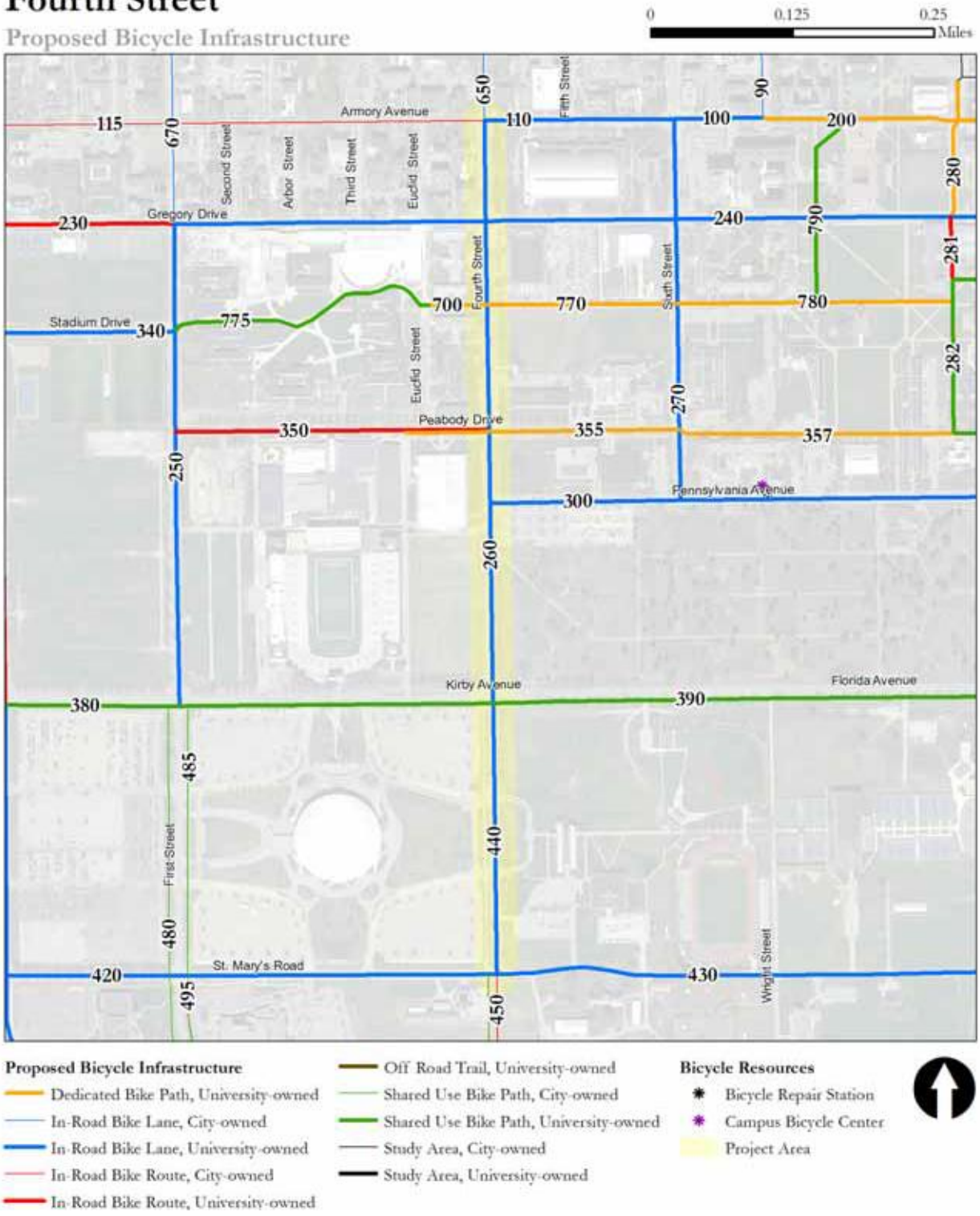
Fourth Street

Existing Bicycle Infrastructure

Map 11: Existing Bicycle Infrastructure, Fourth Street

Fourth Street

Proposed Bicycle Infrastructure



Map 12: Proposed Bicycle Infrastructure, Fourth Street

Segment Number	Description	Estimated Cost
Phase 1		
#260	*Bicycle lanes on Fourth Street from Armory Avenue to Kirby Avenue – covered by capital project, Summer 2014*	*$44,405.09*
Phase 2		
#260	Remove side path on Fourth Street from Armory Avenue to Peabody Drive	$33,299.50
Phase 3		
#440	*Bicycle lanes on Fourth Street from Kirby Avenue to St. Mary's Road and new sidewalk on east side – covered by IDOT funded project scheduled for Summer 2016*	*$93,515.50*
	Total Cost:	**$171,220.09**

Table 7: Fourth Street Phases and Costs

Existing Bicycle Lane along Fourth Street north of Gregory Drive (#260). Photo by Holly Nelson

Pedestrian Crossing at Kirby Avenue (#390) and Fourth Street (#260/440) Photo by Holly Nelson

Existing Dedicated Bicycle Side Path along Fourth Street (#260). Photo by Holly Nelson

First Street

The university has jurisdiction over First Street from Gregory Drive to Kirby Avenue. To the north of Gregory Drive and to the south of Kirby Avenue, First Street is under the jurisdiction of the City of Champaign. Bicycle lanes are currently installed on First Street to the north of Gregory Drive.

The First Street project involves a two phases. The first phase includes bicycle lanes and new sidewalks. The bicycle lanes will be installed from Gregory Drive to Kirby Avenue. A sidewalk is needed along the east edge of the street from Peabody Drive to Kirby Avenue, and a connecting sidewalk is needed along Peabody Drive to provide pedestrian access to the Activities Recreation Center. Additionally, the traffic control along this street segment should be reviewed during this project to assess the traffic flow as it relates to the corresponding CATS Zone.

The second phase adds shared use path signage on the city paths between Kirby Avenue and St. Mary's Road.

This project should be scheduled to occur in conjunction with the construction of the new Ikenberry Residence Hall #3 at the southeast corner of First Street and Gregory Drive, which began construction in Spring 2014.

In the future, when the temporary service drive to the east of First Street at Stadium Drive is removed during the continued build-out of Ikenberry Commons, an accessible crosswalk ramp will need to be installed at the northeast corner of First Street and Stadium Drive. Table 8 provides a summary of each phase and the associated cost estimate.

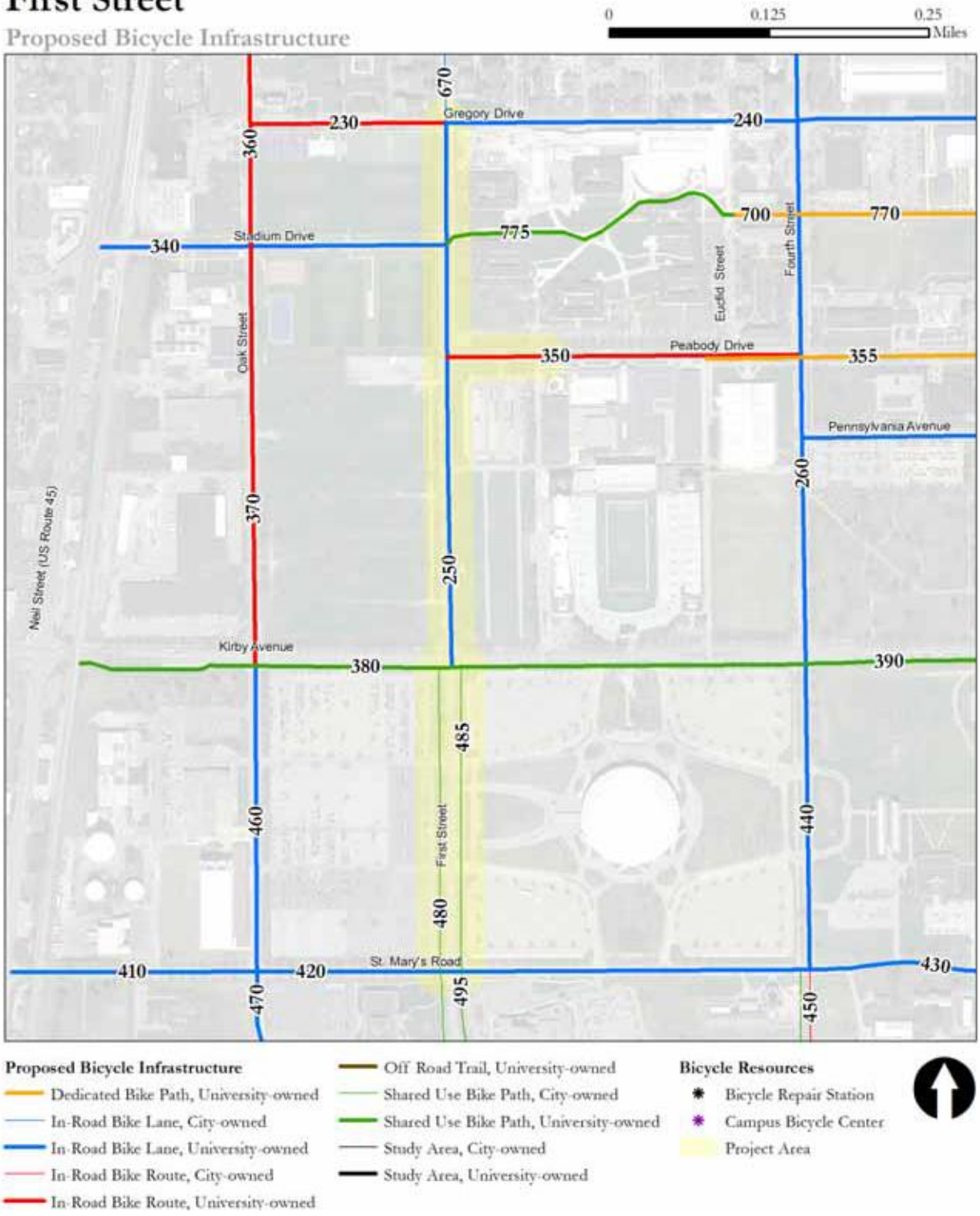
First Street

Existing Bicycle Infrastructure

Map 13: Existing Bicycle Infrastructure, First Street

First Street

Proposed Bicycle Infrastructure



Map 14: Proposed Bicycle Infrastructure, First Street

Segment Number	Description	Estimated Cost
Phase 1		
#250	*Bicycle lanes and a new sidewalk on First Street from Gregory Drive to Kirby Avenue – covered by IDOT funded project scheduled for Summer 2016*	*$123,379.75*
Phase 2		
#480 #485	Add shared use path signage between Kirby Avenue and St. Mary's Road	$1,300.00
	Total Cost:	**$124,679.75**

Table 8: First Street Costs and Phases

Intersection of First Street (#250) and Gregory Drive (#230) Photo by Holly Nelson

Shared Use Side Path along First Street south of Kirby Avenue from the north (#480) Photo by Andy Kopp

Existing Bicycle Lanes on First Street north of Gregory Drive (#670) Photo by Holly Nelson

Armory Avenue Path

The Armory Avenue Path is an off-road dedicated bicycle path aligned with the bikeway facilities on Armory Avenue. It continues the east-west route from where Armory Avenue ends at Wright Street, to the east edge of the University District at Lincoln Avenue. At the west end of the Armory Avenue Path, the university has jurisdiction over Armory Avenue heading to the west and the City of Champaign has jurisdiction over Wright Street heading to the north. Both Armory Avenue and Wright Street are included in a grant application, which would install bicycle lanes on both of those roadways. The east end of the Armory Avenue Path is at Lincoln Avenue, which is under the jurisdiction of the City of Urbana.

Also included in the eastern-most stretch of this path is a north-south segment from the Allen Hall circle drive to the planned bicycle route heading north on Gregory Street from Nevada Street to the north, which is under the City of Urbana's jurisdiction. The City of Urbana plans to sign Nevada Street as a bicycle route.

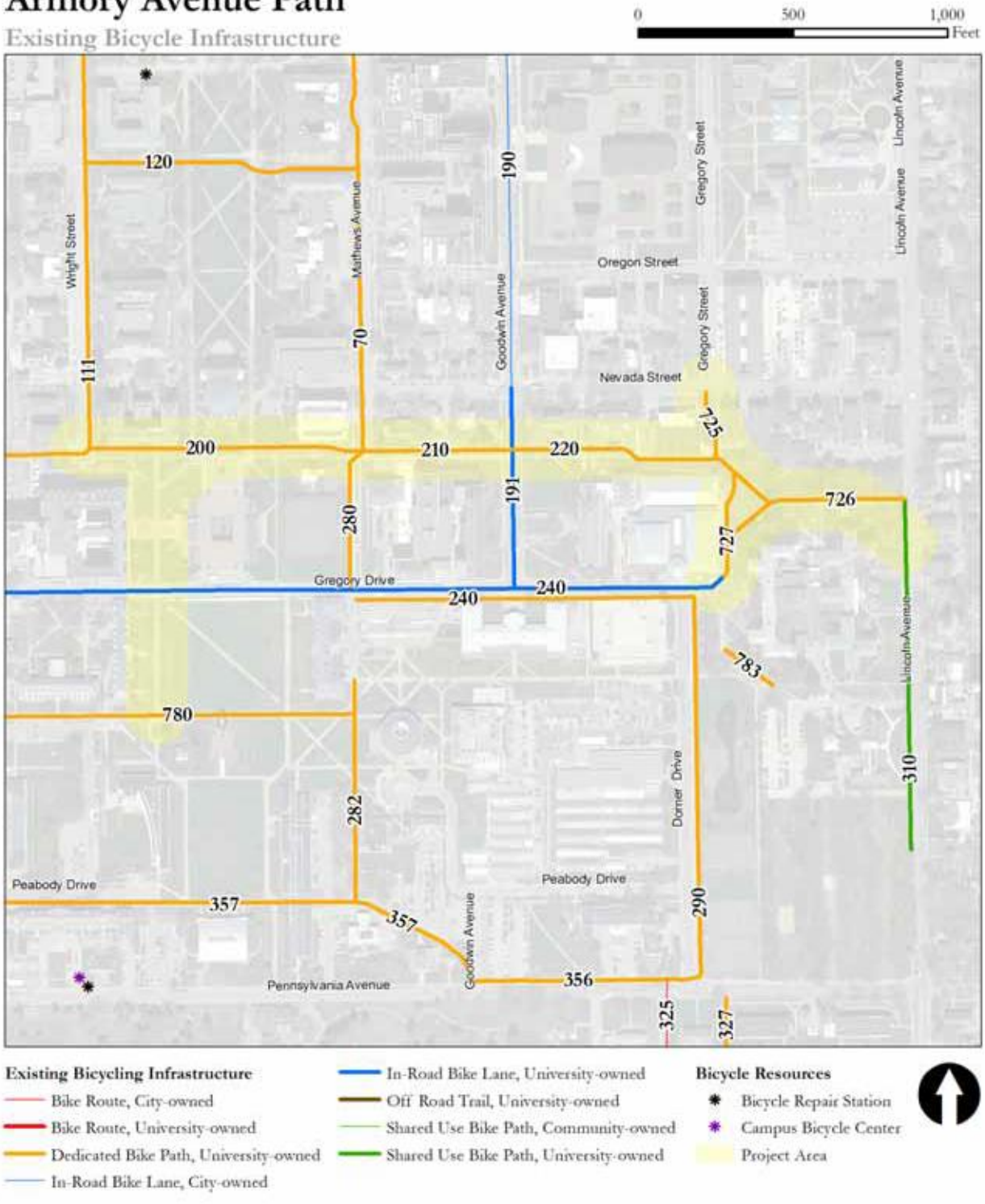
Phase One of the Armory Avenue Path includes the east-west segment from Lincoln Avenue to Goodwin Avenue, and the north-south segment from Nevada Street to the Allen Hall circle drive. This project includes reconstruction for widening of the existing off-road bicycle path for the entire length. The north-south segment of this path that runs between the Armory Avenue Path and Nevada Street will require some grading work which is not included in the current estimate.

Phase Two should consider intersection safety improvements for pedestrians and cyclists at the off-road intersection with the Mathews Avenue Path. It would be beneficial to implement phase two after the proposed Bevier Hall modifications are complete. When addressing this pathway, campus should also consider possible improvements for ADA access to Smith Music Hall from the parking on Mathews Avenue.

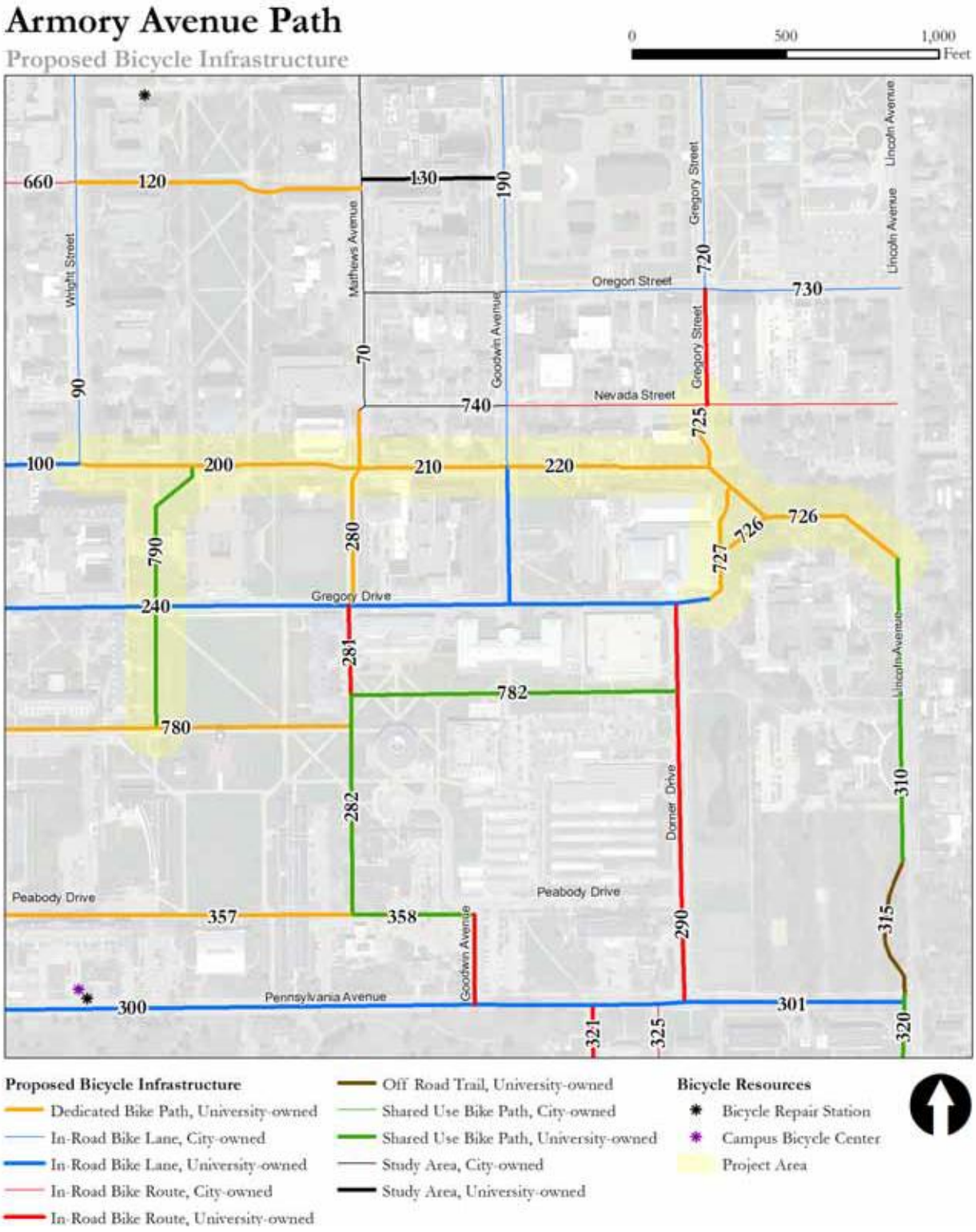
Phase Three will replace one of the oldest bicycle paths on campus. The existing bikeway is made up of two parallel 30-inch strips of pavement with mature trees between them. The proposed bikeway will be eight feet wide, and to the south of the tree line, adjacent to and north of the broadwalk. There is one section of the current path that is six feet wide, near Foellinger Auditorium. This segment of the path will remain where it is, and be replaced with an eight-foot wide path. The reason to keep it slightly to the north is to provide a buffer between the pedestrians and the cyclists, where possible. It also creates a natural speed reduction for cyclists when they approach high-pedestrian crossings. This portion of the path will be linked to the Lorado Taft Path and Gregory Drive to the south by a shared use path that runs just west of the Undergrad Library (#790). Table 9 provides a summary of each phase and the associated cost estimate.

Armory Avenue Path

Existing Bicycle Infrastructure



Map 15: Existing Bicycle Infrastructure, Armory Avenue Path



Map 16: Proposed Bicycle Infrastructure, Armory Avenue Path

Segment Number	Description	Estimated Cost
Phase 1		
#220	Dedicated bicycle path from Goodwin Avenue to Armory Av Path (#725)	$72,077.20
#725	Dedicated bicycle path from Nevada Street to Armory Avenue Path (#220)	$23,353.20
#726	Dedicated bicycle path from Armory Avenue Path (#220) to Lincoln Avenue	$100,462.02
#727	Dedicated bicycle path from Armory Avenue Path to Allen Hall circle drive	$41,364.70
Phase 2		
#210	Dedicated bicycle path from Goodwin Avenue to Mathews Avenue Path	$64,321.66
Phase 3		
#200	Dedicated bicycle path from Mathews Avenue Path to Wright Street	$118,225.74
#790	Shared use path by Undergraduate Library from Lorado Taft Path to Armory Avenue Path	$325.00
	Total Cost:	**$420,129.53**

Table 9: Armory Avenue Path Costs and Phases

Armory Avenue Path where it connects to Lincoln Avenue (#726) Photo by Holly Nelson

Armory Avenue Path crossing Goodwin Avenue (#220/#210) Photo by Holly Nelson

Armory Avenue Path, currently two single-direction paths, between Goodwin Avenue and Mathews Avenue (#210) Photo by Holly Nelson

Armory Avenue Path, currently two single-direction paths, south of the Quad (#200) Photo by Holly Nelson

Armory Avenue Path, near Allen Hall and CRCE (#726) Photo by Andy Kopp.

Armory Avenue Path, near Allen Hall and CRCE (#727) Photo by Andy Kopp.

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Sixth Street

The university has jurisdiction over Sixth Street from Armory Avenue to Pennsylvania Avenue. To the north of Armory Avenue, Sixth Street is under the jurisdiction of the City of Champaign and is one-way southbound. The City of Champaign does not have plans to add bicycle facilities on Sixth Street north of Armory Avenue. The south boundary of this project is Pennsylvania Avenue, which is also under university jurisdiction, and will have on-street bicycle lanes in the future (see the Pennsylvania Avenue project). This project will connect bicycle lanes on Armory Avenue to bicycle lanes on Pennsylvania Avenue.

This project will be done in three phases (see Table 10): bicycle lanes from Armory Avenue to Gregory Drive, removal of the off-road bicycle path from Armory Avenue to Lorado Taft Drive and bicycle lanes from Gregory Drive to Pennsylvania Avenue, with removal of the off-road bicycle path from Gregory Drive to Lorado Taft Drive. Phase One is scheduled for construction in summer 2014, with removal of parking on the east side of the road, on street bicycle lanes, and new traffic signals at both intersections.

In August 2013, Facilities and Services applied for funding for Phases Two and Three from the Illinois Department of Transportation through the Illinois Transportation Enhancement Program (ITEP). ITEP "provides funding for community based projects that expand travel choices and enhance the transportation experience by improving the cultural, historic, aesthetic and environmental aspects of our transportation infrastructure."[62] Unfortunately, the grant was not awarded funding. TDM plans to re-apply for funding in 2014.

[62] http://www.dot.il.gov/ITEP

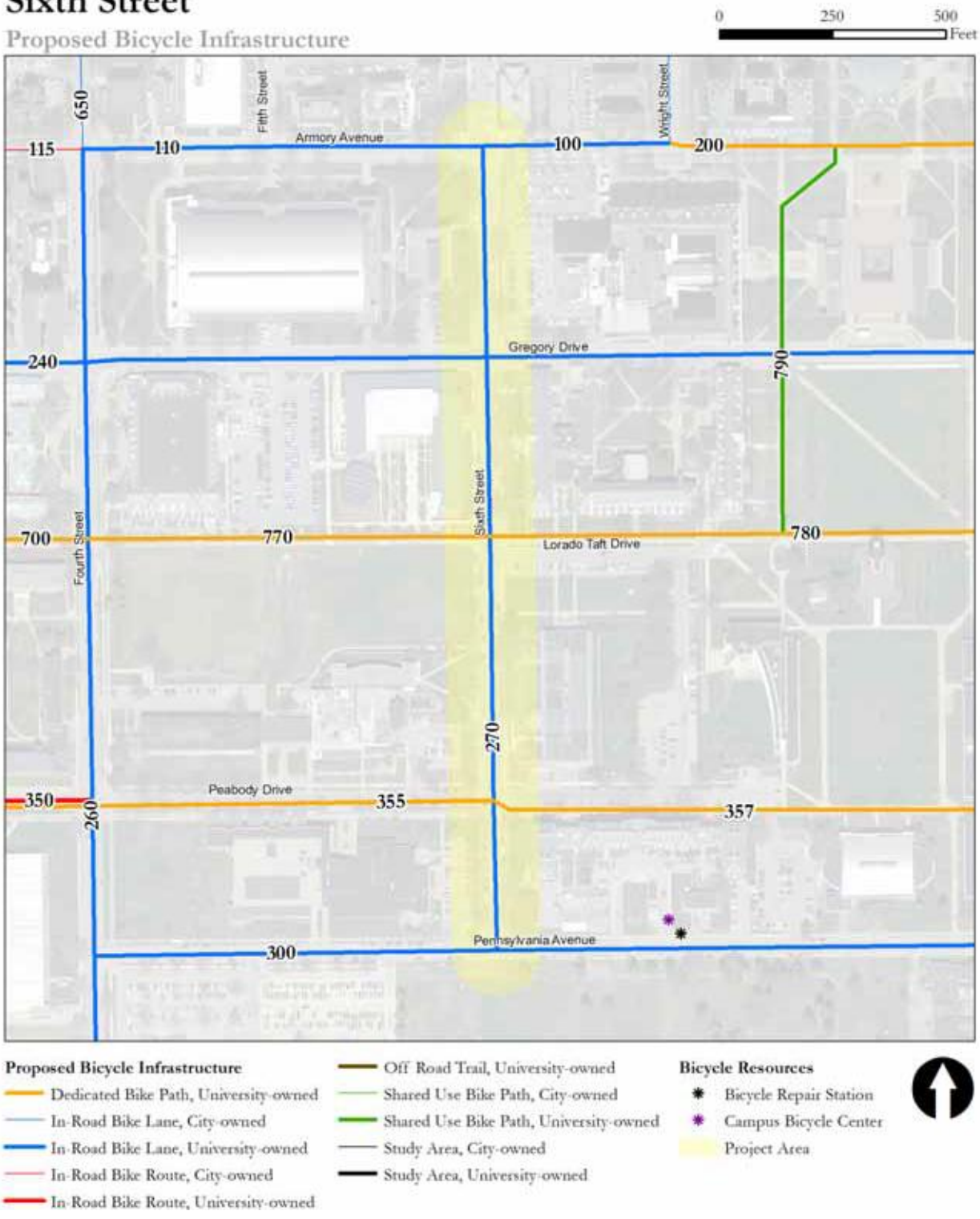
Sixth Street

Existing Bicycle Infrastructure

Map 17: Existing Bicycle Infrastructure, Sixth Street

Sixth Street

Proposed Bicycle Infrastructure



Map 18: Proposed Bicycle Infrastructure, Sixth Street

Segment Number	Description	Estimated Cost
	Phase 1	
#270	Bicycle lanes on Sixth Street from Armory Avenue to Gregory Drive	$6,136.00
	Phase 2	
#270	Removal of off-road bicycle path from Armory Avenue to Lorado Taft Drive	$47,171.12
	Phase 3	
#270	Bicycle lanes from Gregory Drive to Pennsylvania Avenue	$19,747.00
	Total Cost:	**$73,054.12**

Table 10: Sixth Street Phases and Costs

Sixth Street (#270) Photo by Holly Nelson

Existing dedicated bicycle path (#270) Photo by F&S

Existing dedicated bicycle path located along Sixth Street Photo by F&S

Existing dedicated bicycle path crossing located along Sixth Street (#270) and Peabody Drive (#355) Photo by F&S

Existing dedicated bicycle path along Sixth Street at Gregory Drive (#270) Photo by F&S

Sixth Street and Armory Avenue looking south (#270) Photo by Andy Kopp

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Medium Priority Projects

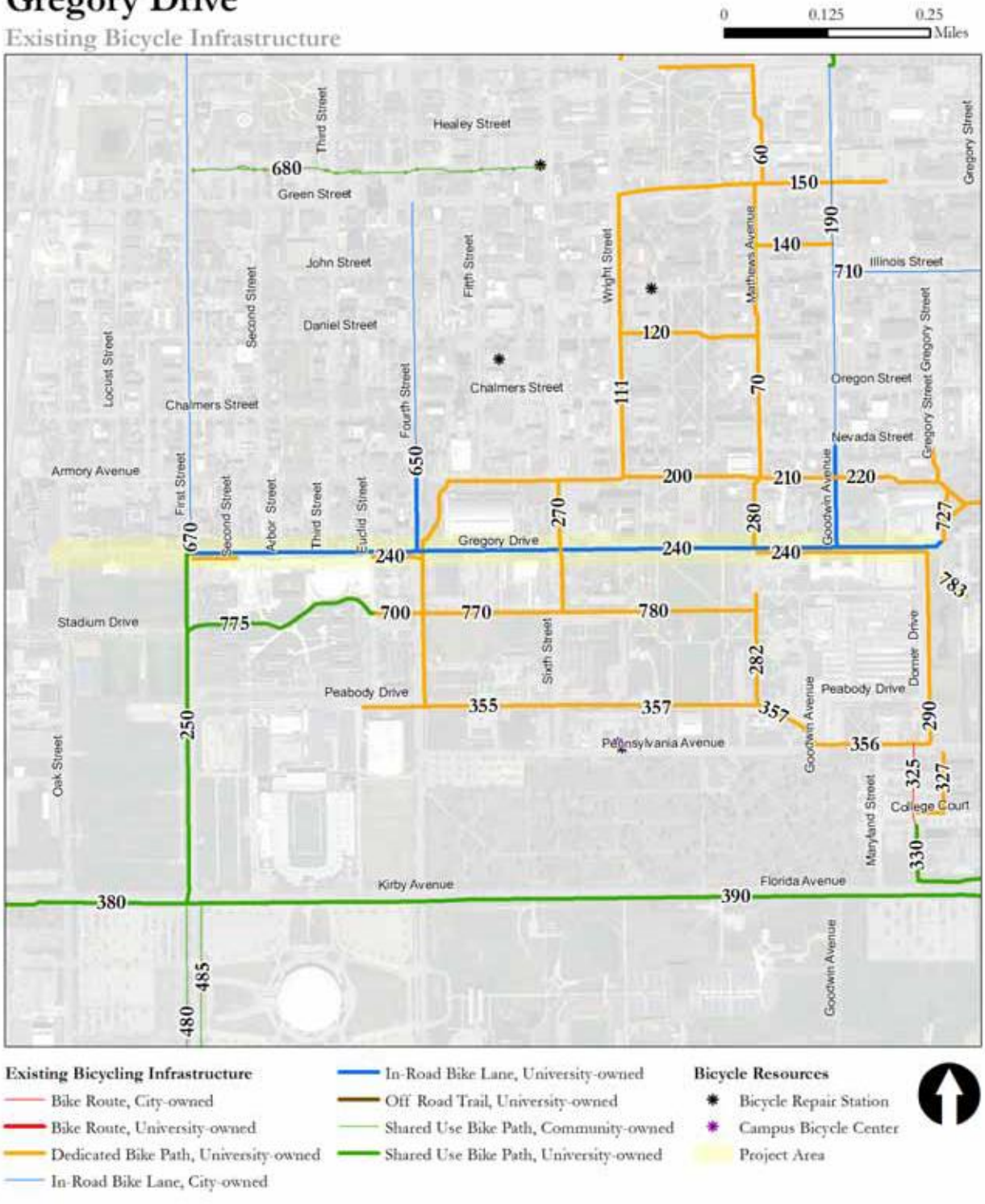
Gregory Drive

Gregory Drive is an east-west roadway that is under university jurisdiction from end to end and is generally bordered by university-owned land. There are existing bicycle lanes on Gregory Drive from First Street to Dorner Drive, which were installed in 2007 along with the removal of on-street parking. This was the first bicycle lane installation in Champaign-Urbana.

This project includes four phases. Phase One is a bicycle route from Oak Street to First Street and bicycle lane signs from First Street to the Allen Hall circle drive. Finally, to complete the phase, bicycle lane signs should be added along Gregory where bicycle lanes already exist. Signage should also be installed to help clarify that bicycles are allowed on Gregory Drive between Sixth Street and Goodwin Avenue, at all times. Phase Two is the removal of the off-road bicycle path along the south side of the road from Euclid Avenue to Fourth Street. Phase Three is the removal of the off-road bicycle path along the south side of the road from the Mathews Avenue Path to Dorner Drive. Phase Four is the placement of bicycle lane signs from First Street to Dorner Drive. Table 11 summarizes phases and associated cost estimates.

Gregory Drive

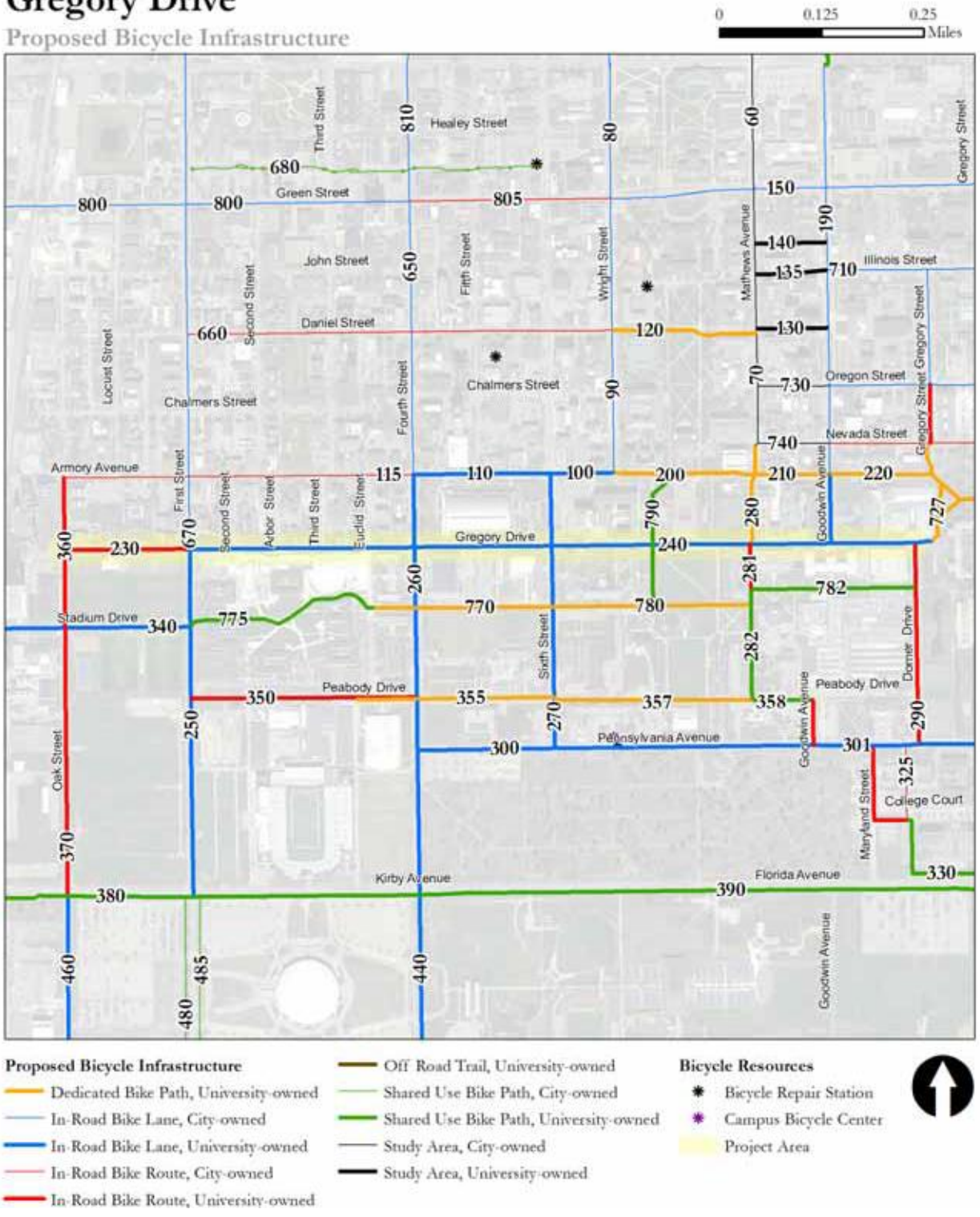
Existing Bicycle Infrastructure



Map 19: Existing Bicycle Infrastructure, Gregory Drive

Gregory Drive

Proposed Bicycle Infrastructure



Proposed Bicycle Infrastructure

- Dedicated Bike Path, University-owned
- In-Road Bike Lane, City-owned
- In-Road Bike Lane, University-owned
- In-Road Bike Route, City-owned
- In-Road Bike Route, University-owned
- Off Road Trail, University-owned
- Shared Use Bike Path, City-owned
- Shared Use Bike Path, University-owned
- Study Area, City-owned
- Study Area, University-owned

Bicycle Resources

- Bicycle Repair Station
- Campus Bicycle Center
- Project Area

Map 20: Proposed Bicycle Infrastructure, Gregory Drive

Segment Number	Description	Estimated Cost
Phase 1		
#230	Bicycle route on Gregory Drive from Oak Street to First Street	$1,118.00
Phase 2		
#240	Removal of the off-road bicycle path from Euclid Street to Fourth Street	$33,799.98
Phase 3		
#240	Removal of the off-road bicycle path from the Mathews Avenue Path to Dorner Drive	$60,732.10
Phase 4		
#240	Add bicycle lane signage from First Street to Dorner Drive	$1,625.00
	Total Cost:	**$97,275.08**

Table 11: Gregory Drive Phases and Costs

Existing Bicycle Lane on Gregory Drive near Ikenberry Commons (#240) Photo by Holly Nelson

Eastbound on Gregory Drive from Oak Street (#230) Photo by Andy Kopp

Existing Bicycle Lanes on Gregory Drive at Goodwin Avenue (#240) with side path along south edge. Photo by Holly Nelson

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Peabody Drive and Path

Peabody Drive is under university jurisdiction from First Street to Dorner Drive. The proposed bicycle facilities for this roadway include three phases. Phase One is a bicycle route with sharrows from First Street to Fourth Street. Phase Two is a dedicated bicycle side path on the south side of the curb from Euclid Street to Sixth Street and a dedicated bicycle path continuing east to the Mathews Avenue Path. Phase Three is a shared use path from the Matthews Avenue Path to Goodwin Avenue and a bicycle route on Goodwin Avenue from Peabody Drive to Pennsylvania Avenue. See Table 12 for associated cost estimates.

Peabody Drive and Path

Existing Bicycle Infrastructure

Map 21: Existing Bicycle Infrastructure, Peabody Drive

Peabody Drive and Path

Proposed Bicycle Infrastructure

Map 22: Proposed Bicycle Infrastructure, Peabody Drive

Segment Number	Description	Estimated Cost
Phase 1		
#350	Bicycle route with sharrows on Peabody Drive from First Street to Fourth Street	$1,989.00
Phase 2		
#355	Dedicated bicycle side path along Peabody Drive from Euclid Avenue to Sixth Street	$139,874.80
Phase 3		
#357 #358 #359	Dedicated path from Peabody Drive and Sixth Street to Goodwin Avenue and Pennsylvania Avenue	$188,204.90
	Total Cost:	**$330,068.70**

Table 12: Peabody Drive and Peabody Drive Path Phases and Costs

Existing Dedicated Bicycle Side Path along Peabody Drive (#357) Photo by F&S

Existing Dedicated Bicycle Side Path along Peabody Drive (#357) Photo by Holly Nelson

Existing Dedicated Bicycle Path along Peabody Drive near the ARC (#355) Photo by F&S

Existing Dedicated Bicycle Path (#355) Photo by F&S

Segment #355 as seen from #357 Photo by F&S

Existing Dedicated Bicycle Path near the Law Building (#357) Photo by F&S

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Lorado Taft Path

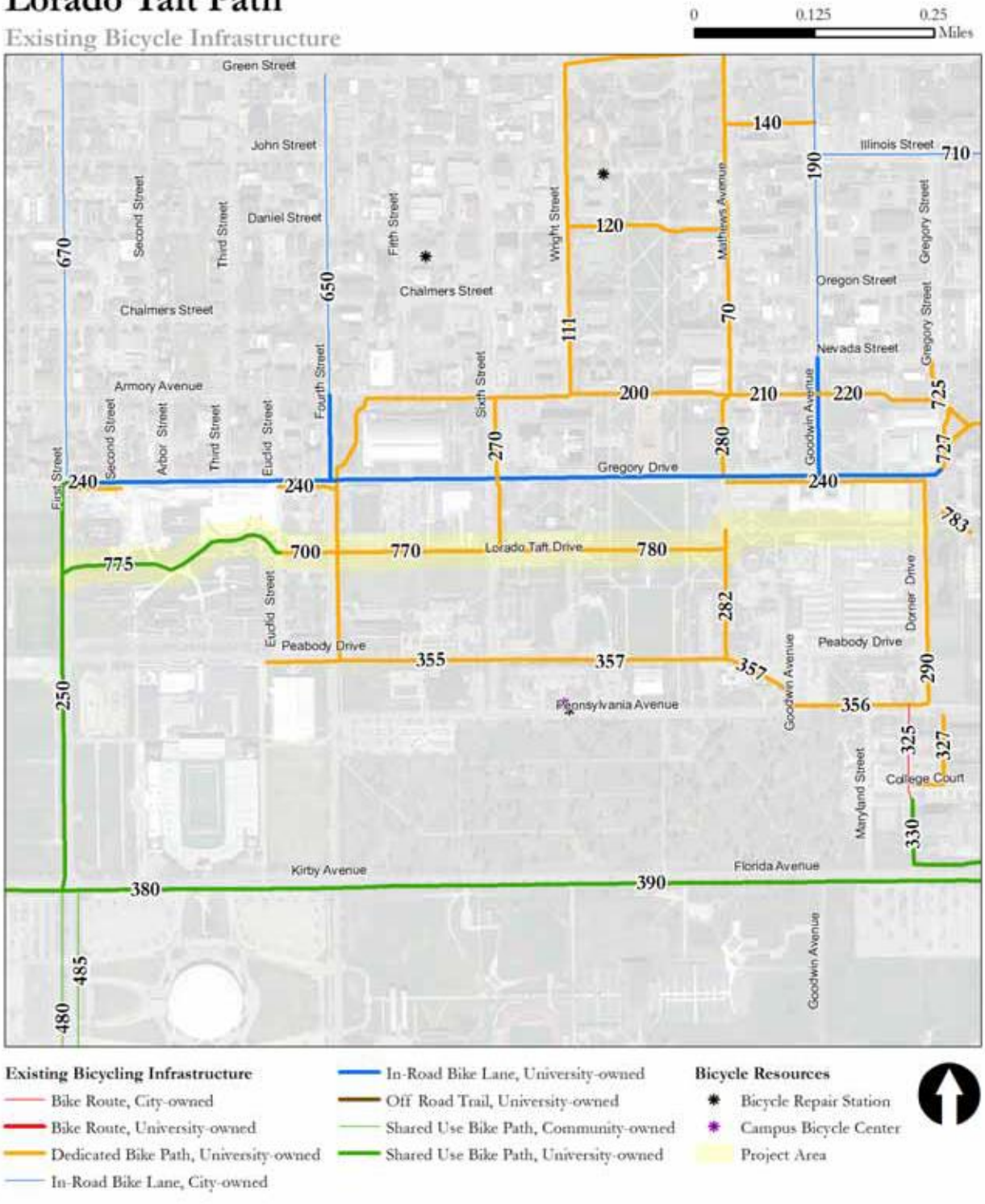
The Lorado Taft Path begins where Stadium Drive intersects with First Street. It continues across the University District to Dorner Drive. This project is separated into three phases. Phase One is an off-road shared use path through Ikenberry Commons, from First Street to Euclid Street. Phase Two is an off-road dedicated bicycle path from Euclid Street to Sixth Street, on the north edge of the Military Axis. Phase Three is a shared use path from the Mathews Avenue Path to Dorner Drive.

Phase One is the portion of this path that travels through Ikenberry Commons, between First Street and Euclid Street. The University Housing Division is responsible for this phase of the path, and because this area is a student residential space, this bikeway is not intended for cross-campus travelers, though it will be highly utilized by Housing residents. Cross-campus travelers are encouraged to use Gregory Drive to the north of Stadium Drive and Peabody Drive or Kirby Avenue to the south. Portions of this pathway are in place, and portions will be installed or modified as the Ikenberry Commons build-out continues.

Phase Two of the Lorado Taft Path is parallel to the north edge of the Military Axis from Euclid Street to Sixth Street. The existing dedicated bicycle path should be widened to eight feet wide, and street intersections should be improved to better align with the bicycle path. This phase needs to be coordinated with the proposed Law School building site, and Campus Master Plan proposal for the Military Axis. Phase Three includes an upgrade of the existing dedicated bicycle path on the north side of Lorado Taft Drive, and on the northern portion of the east edge of parking lot E-2, to widen the path to eight feet. This phase also includes the addition of signs along the existing shared use path between the Mathews Avenue Path and Dorner Drive. See Table 13 for associated cost estimates.

Lorado Taft Path

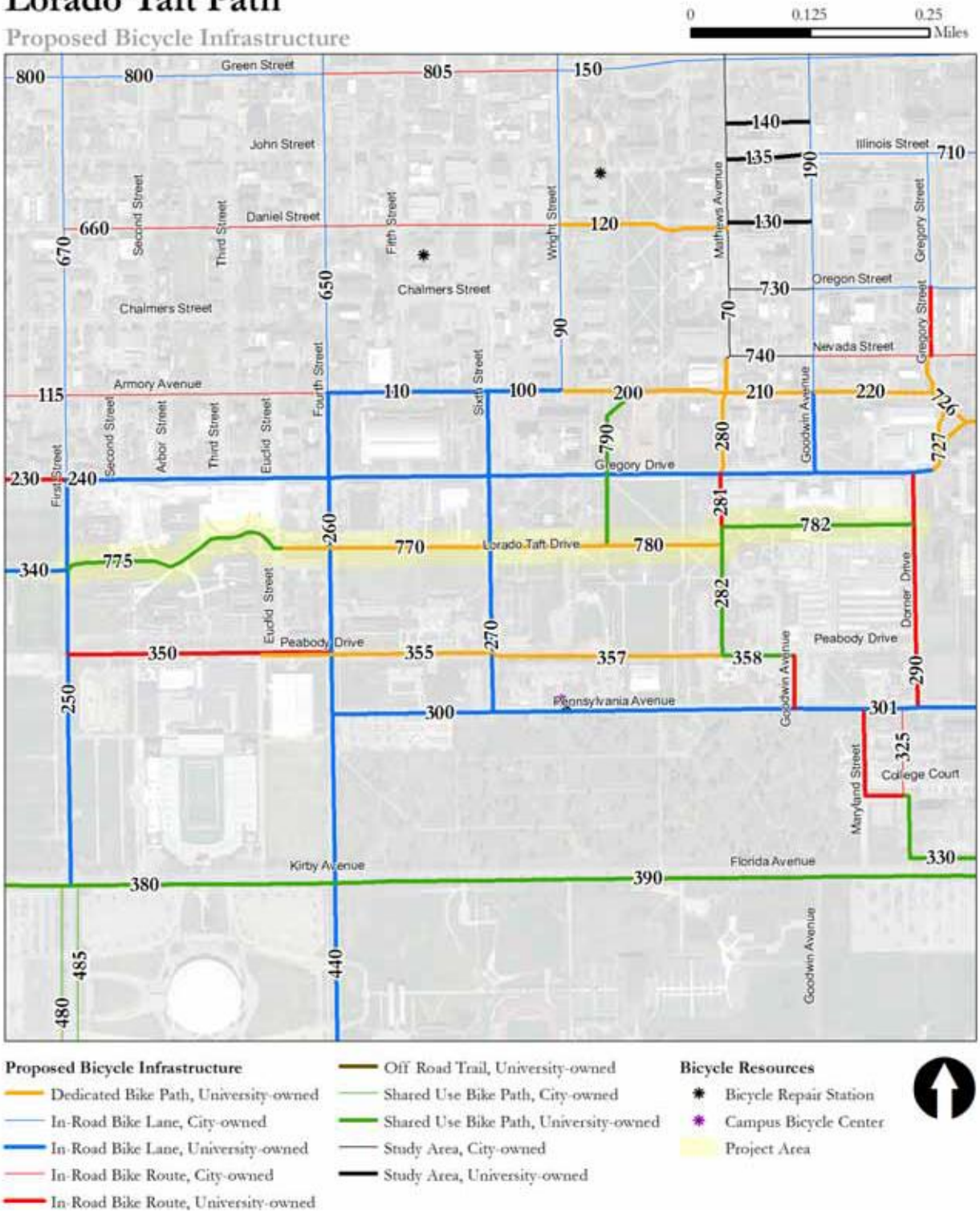
Existing Bicycle Infrastructure



Map 23: Existing Bicycle Infrastructure, Lorado Taft Path

Lorado Taft Path

Proposed Bicycle Infrastructure



Map 24: Proposed Bicycle Infrastructure, Lorado Taft Path

Segment Number	Description	Estimated Cost
Phase 1		
#775	Shared use path from First Street to Euclid Street	$975.00
Phase 2		
#700 #770	Dedicated bicycle path from Euclid Street to Sixth Street	$120,503.50
Phase 3		
#780	Dedicated bicycle path from Sixth Street to Mathews Avenue Path	$139,552.40
#782	Shared use path from Mathews Avenue Path to Dorner Drive	$650.00
	Total Cost:	**$261,680.90**

Table 13: Lorado Taft Path Phases and Costs

Existing Dedicated Bicycle Path Lorado Taft Path (#780) Photo by Holly Nelson

Existing Shared Use Path Lorado Taft Path in Ikenberry Commons (#780) Photo by Andy Kopp

Existing Dedicated Bicycle Path Lorado Taft Path (#780) Photo by Holly Nelson

Existing Shared Use Path near the Animal Sciences Laboratory and Mumford Hall (#782) Photo by F&S

Existing Dedicated Bike Path runs through the Huff Hall parking lot, with little to no separation from cars (#770) Photo by F&S

Dedicated Bike Crossing connecting #770 and #780 Photo by F&S

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Stadium Drive

Stadium Drive starts at Neil Street in Champaign and ends at First Street, where it will connect to the proposed bicycle lanes on First Street. Stadium Drive provides a key connection to campus bicycle commuters between the City of Champaign and the University District, with a railroad viaduct and a traffic signal for crossing US Route 45 / Neil Street. The pavement under the railroad viaduct is scheduled to be replaced in summer 2014, which will bring the full extent of the pavement on this roadway up to good condition.

This project is a single phase (see Table 14 for associated cost estimates) that will install bicycle lanes, remove metered parking on the north side, and install a south sidewalk from Oak Street to First Street. In order for this project to proceed, the Parking Department will need to be contacted, and the current permit holders will need to be permanently relocated. This project should be discussed with the Parking Department to begin that process after the First Street complete street project is implemented.

The City of Champaign plans to install a bicycle route with sharrows on Hessel Boulevard, which is aligned with Stadium Drive on the west side of Neil Street.

Map 25: Existing Bicycle Infrastructure, Stadium Drive

Stadium Drive

Proposed Bicycle Infrastructure

Map 26: Proposed Bicycle Infrastructure, Stadium Drive

Segment Number	Description	Estimated Cost
Phase 1		
#340	Bicycle lanes on Stadium Drive from Neil Street to First Street and new sidewalk from Oak Street to First Street	$67,138.50
	Total Cost:	**$67,138.50**

Table 14: Stadium Drive Phases and Costs

Stadium Drive (#340) Photo by Holly Nelson

Existing dirt path on the north side of Stadium Drive (#340) Photo by Andy Kopp

St. Mary's Road

In 2008 the University commissioned a St. Mary's Road Corridor Study to evaluate current and future traffic conditions on St. Mary's Road and nearby roadways over the coming decades, as the Research Park grows. The study was completed by CUUATS, and it identified recommended treatments for St. Mary's Road and the adjacent streets, in near, medium, and long-term timeframes.

This project has three phases: Neil Street to Oak Street, Oak Street to Fourth Street, and Fourth Street to Lincoln Avenue. Table 15 provides the associated cost estimates. Phase One, from Neil Street to Oak Street, includes on-street bicycle lanes and a new sidewalk from the Waste Transfer Station access drive to Neil Street. Phase Two, from Oak Street to Fourth Street, includes a road diet, on-street bicycle lanes, and new sidewalks. Phase Three, from Fourth Street to Lincoln Avenue, includes reconstruction from a rural cross section to an urban cross section with bicycle lanes, sidewalks, street lights, and a traffic signal at Lincoln Avenue.

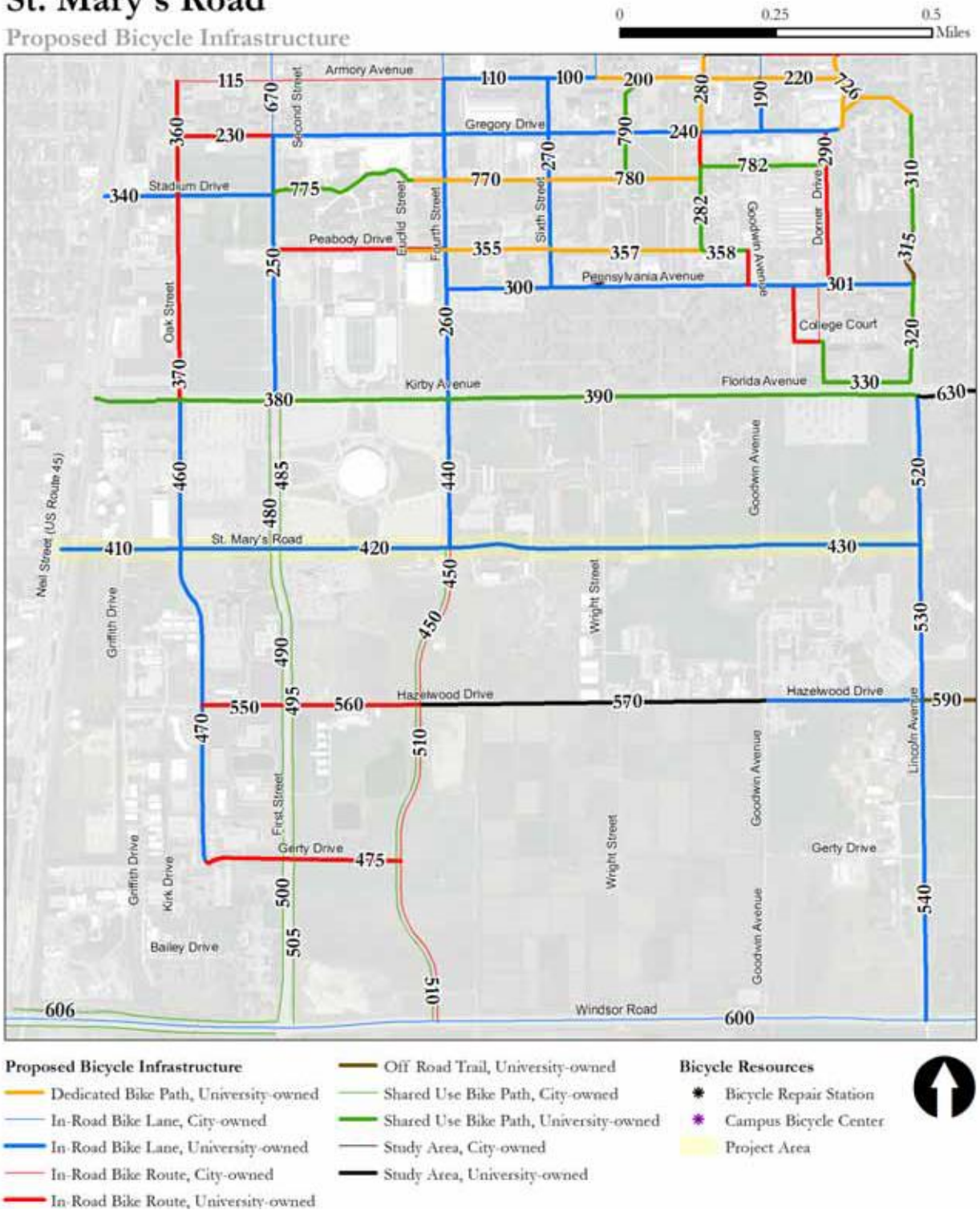
St. Mary's Road

Existing Bicycle Infrastructure

Map 27: Existing Bicycle Infrastructure, St. Mary's Road

St. Mary's Road

Proposed Bicycle Infrastructure



Map 28: Proposed Bicycle Infrastructure, St. Mary's Road

Segment Number	Description	Estimated Cost
Phase 1		
#410	Bicycle lanes, road diet, and sidewalks on St. Mary's Road from Neil Street to Oak Street	$50,170.25
Phase 2		
#420	Bicycle lanes, road diet, and sidewalks on St. Mary's Road from Oak Street to Fourth Street	$237,701.75
Phase 3		
#430	Bicycle lanes, road diet, and sidewalks on St. Mary's Road from Fourth Street to Lincoln Avenue	$501,510.75
	Total Cost:	**$789,382.75**

Table 15: St. Mary's Road Phases and Costs

A view of the State Farm Center from the corner of First Street and St. Mary's Road (#420) Photo by CCRPC

St. Mary's Road (#430) Photo by CCRPC

St. Mary's Road passes under the railroad and intersects with Neil Street (#410). Photo by CCRPC

The tree-lined western portion of St. Mary's Road, south of research park (#410). Photo by CCRPC

Fourth Street and St. Mary's Road, looking south (#420) Photo by Andy Kopp

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Lincoln Avenue

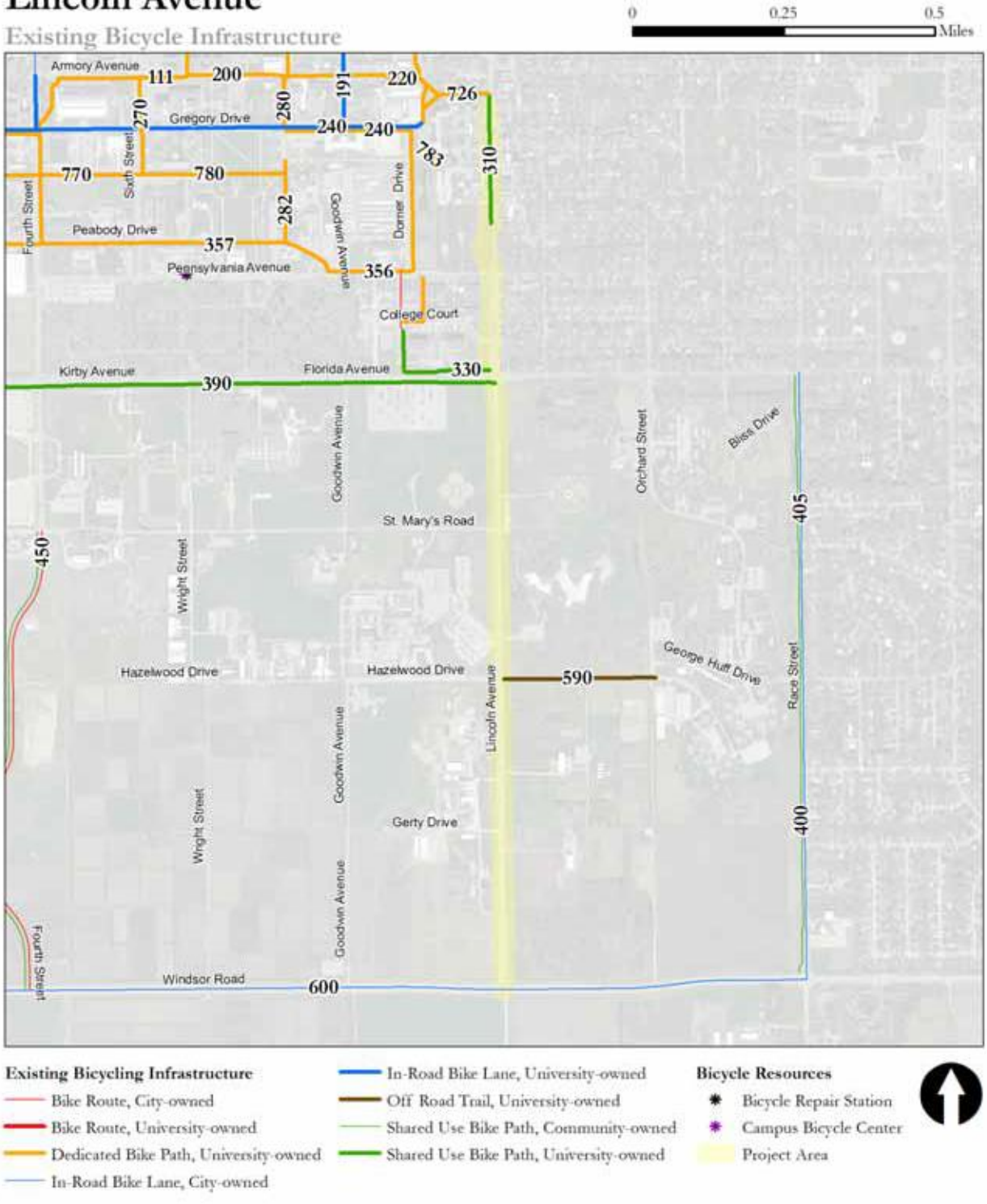
From Florida Avenue to Windsor Road, Lincoln Avenue is under university jurisdiction. Lincoln Avenue is under the City of Urbana's jurisdiction from the north end of the University District to Florida Avenue. This project will provide connections from the Armory Avenue Path to Florida Avenue and on-street bicycle lanes from Florida Avenue to Windsor Road.

The five phases of this project are summarized in Table 16 along with corresponding cost estimates. Phases One, Two, and Three are the off-road connections for cyclists traveling north or south along Lincoln Avenue. Phase One adds signs to the existing shared use path from Ohio Street to Michigan Avenue. While the street here is Urbana's responsibility, the side path is the responsibility of the university. Phase Two is the replacement of an existing sidewalk with a wider shared use path from Pennsylvania Avenue to Florida Avenue. Phase Three is an off-road trail through the Illini Grove to allow cyclists to safely move from Michigan Avenue to Pennsylvania Avenue along Lincoln Avenue; the current sidewalk along Lincoln becomes too thin to accommodate bicycles as it approaches Pennsylvania Avenue. Phase Four is a road diet, bicycle lanes, and a sidewalk on the east side from Hazelwood Drive to Windsor Road.

Phase Five is bicycle lanes and a sidewalk along the east side from Florida Avenue to Hazelwood Drive. These bicycle lanes will require removal of a parking lane, so discussions with the Parking Department should be initiated when this segment is ready to move forward. With the reduction in parking permit sales throughout the University District, it is anticipated that the on-street parking spaces can be shifted to an off-street parking lot, as recommended by the Parking System Review Committee.

Lincoln Avenue

Existing Bicycle Infrastructure

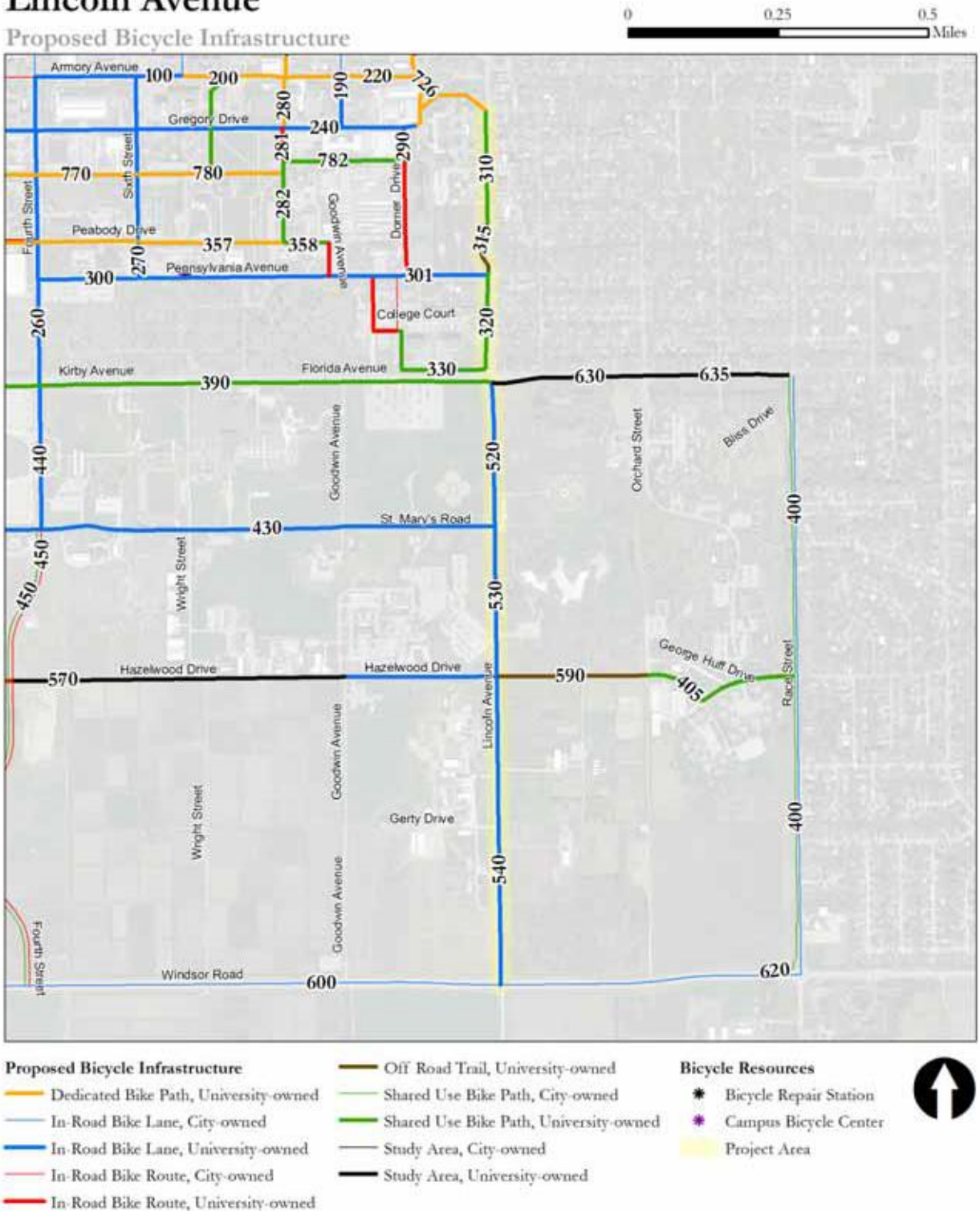


Map 29: Existing Bicycle Infrastructure, Lincoln Avenue

CAMPUS BIKE PLAN

Lincoln Avenue

Proposed Bicycle Infrastructure



Map 30: Proposed Bicycle Infrastructure, Lincoln Avenue

Segment Number	Description	Estimated Cost
Phase 1		
#310	Shared use path on Lincoln Avenue from Ohio Street to Michigan Avenue	Completed
Phase 2		
#320	Shared use path on Lincoln Avenue from Pennsylvania Avenue to Florida Avenue	$87,934.60
Phase 3		
#315	Off-road trail along Lincoln Avenue from Michigan Avenue to Pennsylvania Avenue	$19,743.26
Phase 4		
#540	Bicycle lanes on Lincoln Avenue from Hazelwood Drive to Windsor Drive	$40,326.00
Phase 5		
#520	Bicycle lanes on Lincoln Avenue from Florida Avenue to St. Mary's Road	$19,064.50
#530	Bicycle lanes on Lincoln Avenue from St. Mary's Road to Hazelwood Drive	$19,851.00
	Total Cost:	**$186,919.36**

Table 16: Lincoln Avenue Phases and Costs

CAMPUS BIKE PLAN

Existing Shared Use Side Path on Lincoln Avenue (#530) Photo by Holly Nelson

Existing Shared Use Side Path on Lincoln Avenue (#520) Photo by Holly Nelson

Existing Shared Use Side Path along Lincoln Avenue (#310) Photo by Holly Nelson

Looking North on Lincoln Avenue near the Arboretum (#540) Photo by F&S

Intersection of Lincoln Avenue and Florida Avenue, looking southbound (#520) Photo by F&S

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Main Street Path

The Main Street Path will be the primary connection for cross-town bicycle commuters through the north side of the University District. Main Street from Goodwin Avenue to Harvey Street has been purchased by the university, but it remains under the maintenance of Urbana until all properties belong to either the university or the Foundation. This path connects the White Street bicycle facilities in the City of Champaign to the Main Street bicycle facilities in the City of Urbana. It crosses the Engineering Quadrangle and runs through the art sculpture water feature at the Oval Allee.

This project has two phases: path enhancements from Wright Street to Goodwin Avenue, and a bicycle route on Main Street between Goodwin Avenue and Harvey Street. Phase One includes changes to curb cuts along the path at Wright Street and at Mathews Avenue. Phase Two should be completed after the maintenance of Main Street has transitioned to the university's responsibility. Cost estimates are provided in Table 17.

Main Street Path

Existing Bicycle Infrastructure

Map 31: Existing Bicycle Infrastructure, Main Street Path

Main Street Path

Proposed Bicycle Infrastructure

Map 32: Proposed Bicycle Infrastructure, Main Street Path

Segment Number	Description	Estimated Cost
Phase 1		
#30	Shared use path from Wright Street to Goodwin Avenue, including curb modifications	$58,170.37
Phase 2		
#160	Bicycle route on Main Street from Goodwin Avenue to Harvey Street	$325.00
	Total Cost:	**$58,495.37**

Table 17: Main Street Path Phases and Costs

Existing Bike Route (#160) Photo by Andy Kopp

Existing Shared Use Path (#30) Photo by F&S

Low Priority Projects

Oak Street

The Oak Street project runs from Armory Avenue on the north to Gerty Drive on the south. The entire length of this project is under University jurisdiction. To the north of the project, Oak Street is under the jurisdiction of the City of Champaign. This project has five phases, which are summarized along with estimated costs in Table 18.

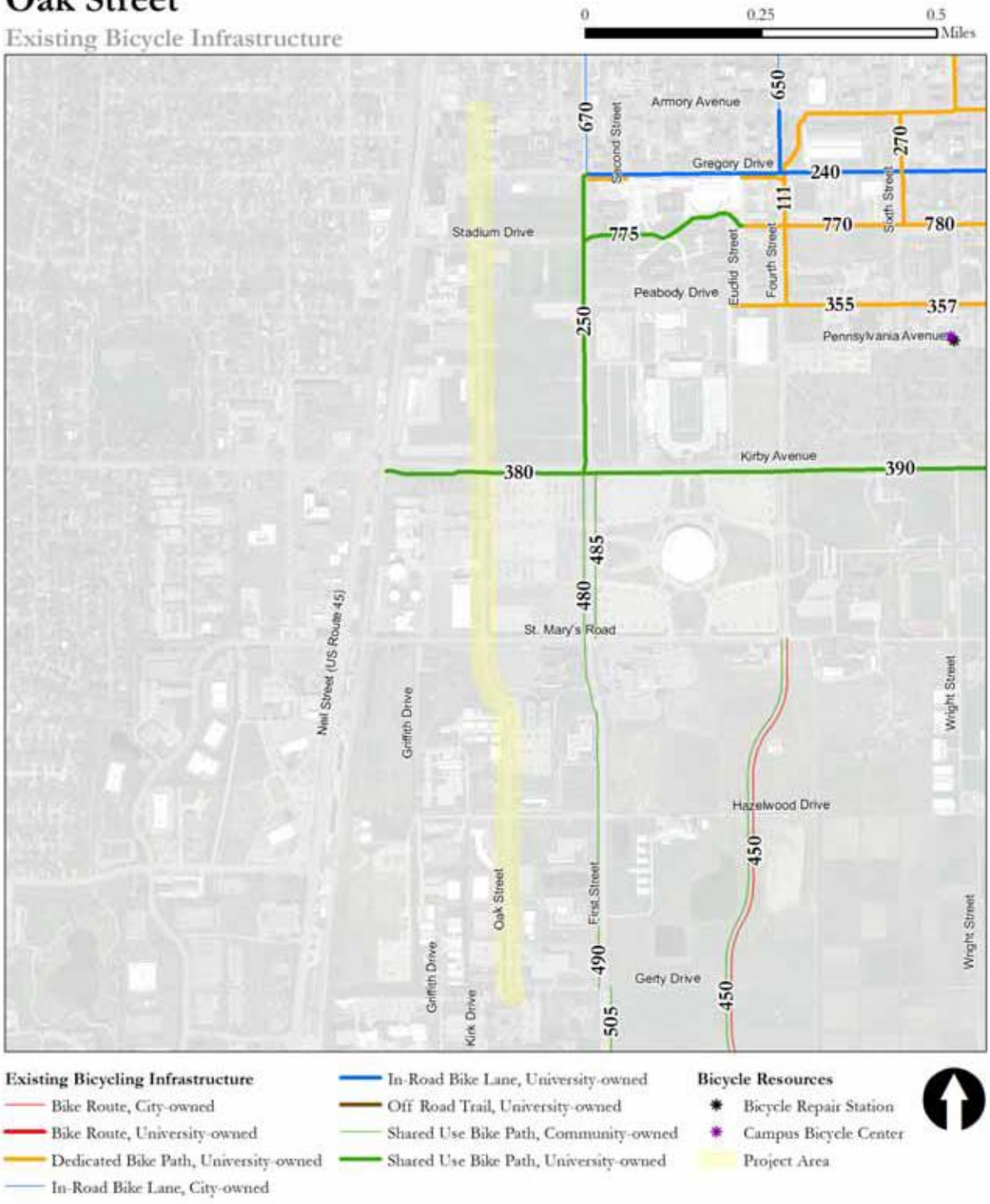
Phase One is bicycle lanes from Kirby Avenue to St. Mary's Road which will also include a road diet. The road diet was recommended in the 2008 St. Mary's Road Corridor Study, and it will reduce some of the safety concerns for pedestrians crossing mid-block to access the E-14 Parking Lot. The east side of this roadway is lacking a sidewalk, which will need to be installed as Phase Two of this project to make a complete street. It also will need a sidewalk access point from the new sidewalk to the parking area.

Phase Three is a bicycle route from Stadium Drive to Kirby Avenue. Parking Lot E-22 along both sides of this street is not expected to be removed for the bicycle facilities. The cyclist volume is relatively low in this street segment, so a marked bicycle route with sharrows is recommended. Additionally, a sidewalk along the east side of the street will be needed for this to be a complete street. The sidewalk will need to accommodate the existing trees and potentially shift the existing post and chain fence. Phase Four continues this bicycle route and sidewalk between Armory Avenue and Stadium Drive.

Phase Five is the addition of bicycle lanes from St. Mary's Road to Gerty Drive, as well as completion of a number of missing sidewalks. The portion of Oak Street between Hazelwood Drive and Gerty Drive is funded for bicycle lanes and a portion of the missing sidewalk. This phase has been completed.

Oak Street

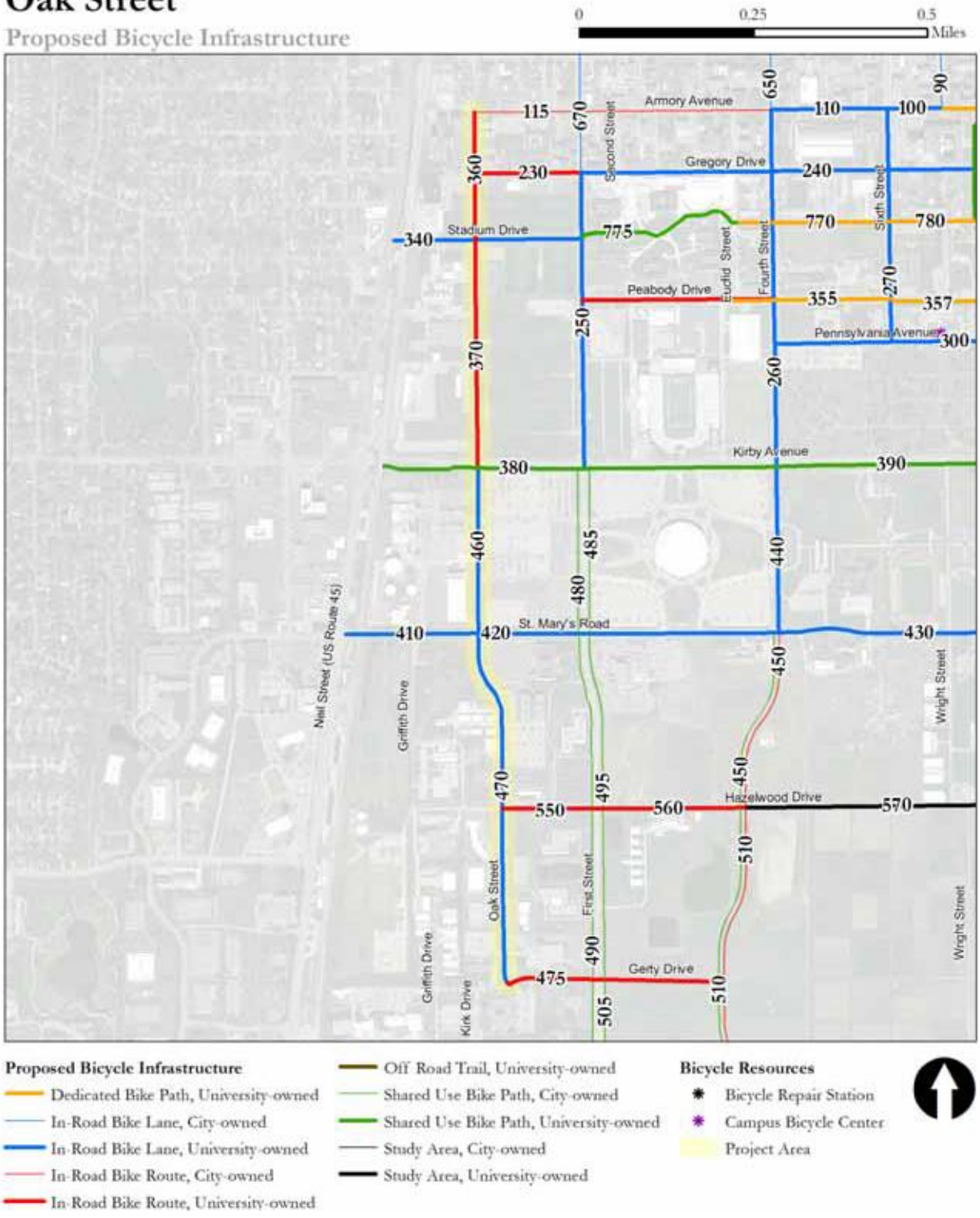
Existing Bicycle Infrastructure



Map 33: Existing Bicycle Infrastructure, Oak Street

Oak Street

Proposed Bicycle Infrastructure



Map 34: Proposed Bicycle Infrastructure, Oak Street

Segment Number	Description	Estimated Cost
Phase 1		
#460	Bicycle lanes and road diet on Oak Street from Kirby Avenue to St. Mary's Road	$18,954.00
Phase 2		
#460	Sidewalk along Oak Street from Kirby Avenue to St. Mary's Road	$73,827.00
Phase 3		
#370	Bicycle route with sharrows and a sidewalk on Oak Street from Stadium Avenue to Kirby Avenue	$103,447.50
Phase 4		
#360	Bicycle route and a sidewalk on Oak Street from Armory Avenue to Stadium Avenue	$57,382.00
Phase 5		
#470	Bicycle lanes and sidewalks on Oak Street from St. Mary's Road to Gerty Drive	$98,832.50
	Total Cost:	**$352,443.00**

Table 18: Oak Street Phases and Costs

Oak Street between Armory Avenue and Stadium Avenue (#360) Photo by Holly Nelson

Oak Street between Stadium Avenue and Kirby Avenue (#370) Photo by Holly Nelson

Looking South on Oak Street (#460) Photo by F&S

Looking North on Oak Street (#470) Photo by F&S

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Florida/Kirby Avenue Path

Kirby and Florida Avenue (in Champaign and Urbana, respectively) has one of the highest traffic volumes of the streets in the University District. The university owns and maintains a side path that currently runs along this road from Neil Street in Champaign to Lincoln Avenue in Urbana across the University District. This path provides a convenient cross-campus path for bicycle commuters on the south side of the University District. To the east of Lincoln Avenue, the university owns property along the south side of Florida Avenue, but there is not currently any sidewalk or bicycle infrastructure in this area.

This path is divided into four phases. Phases One and Two will add signs to the existing side path along Kirby/Florida Avenue, from Neil Street to Lincoln Avenue. Phase Three is Florida Avenue between Lincoln Avenue and Orchard Street. This segment passes the university President's House, and there is a highly manicured front lawn area for that building. The solution for this connection is undetermined. Phase Four will probably connect Orchard Street and Race Street on Florida Avenue with a shared use side path, but it should be determined when phase three is resolved. Phase summaries and cost estimates for the Florida/Kirby Avenue Path are in Table 19.

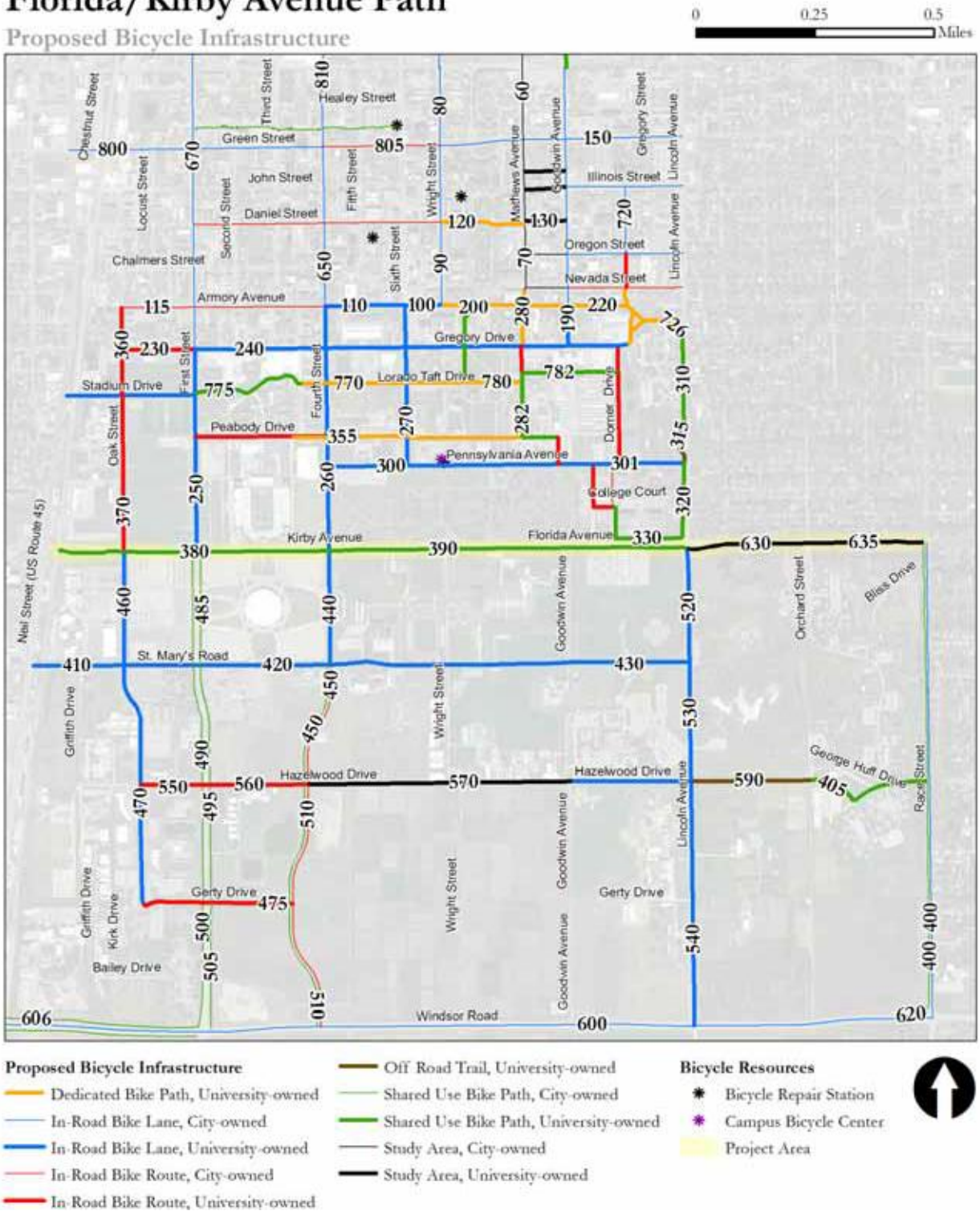
Florida/Kirby Avenue Path

Existing Bicycle Infrastructure

Map 35: Existing Bicycle Infrastructure, Florida/Kirby Avenue Path

Florida/Kirby Avenue Path

Proposed Bicycle Infrastructure



Map 36: Proposed Bicycle Infrastructure. Florida/Kirby Avenue Path

Segment Number	Description	Estimated Cost
Phase 1		
#380	Adding signs along the existing shared use side path along Kirby Avenue from Neil Street to Wright Street	$1,300.00
Phase 2		
#390	Adding signs along the existing shared use side path along Florida Avenue from Wright Street to Lincoln Avenue	$975.00
Phase 3		
#630	Study Area on Florida Avenue from Lincoln Avenue to Orchard Street	Unknown
Phase 4		
#635	Study area along Florida Avenue from Orchard Street to Race Street	Unknown
	Total Cost:	**$2,275.00**

Table 19: Florida/Kirby Avenue Path Phases and Costs

Existing Shared Use Side Path along Florida Avenue (#390) Photo by Holly Neson

Florida Avenue (#630) Photo by F&S

Existing Shared Use Path along Florida Avenue (#390)

Florida Avenue by the President's House (#630) Photo by Andy Kopp

Race Street Path

Race Street belongs to the City of Urbana, and the City maintains the shared use path along the west side of the street from Florida Avenue to Windsor Road. This road also currently includes bicycle lanes on the street, which connect to the existing bicycle lanes on Windsor Road to the west of Race Street. The shared use path is on university property, and shared use path signs will be installed and maintained by the university. This project includes a single phase to install 6 new signs, as shown in Table 20.

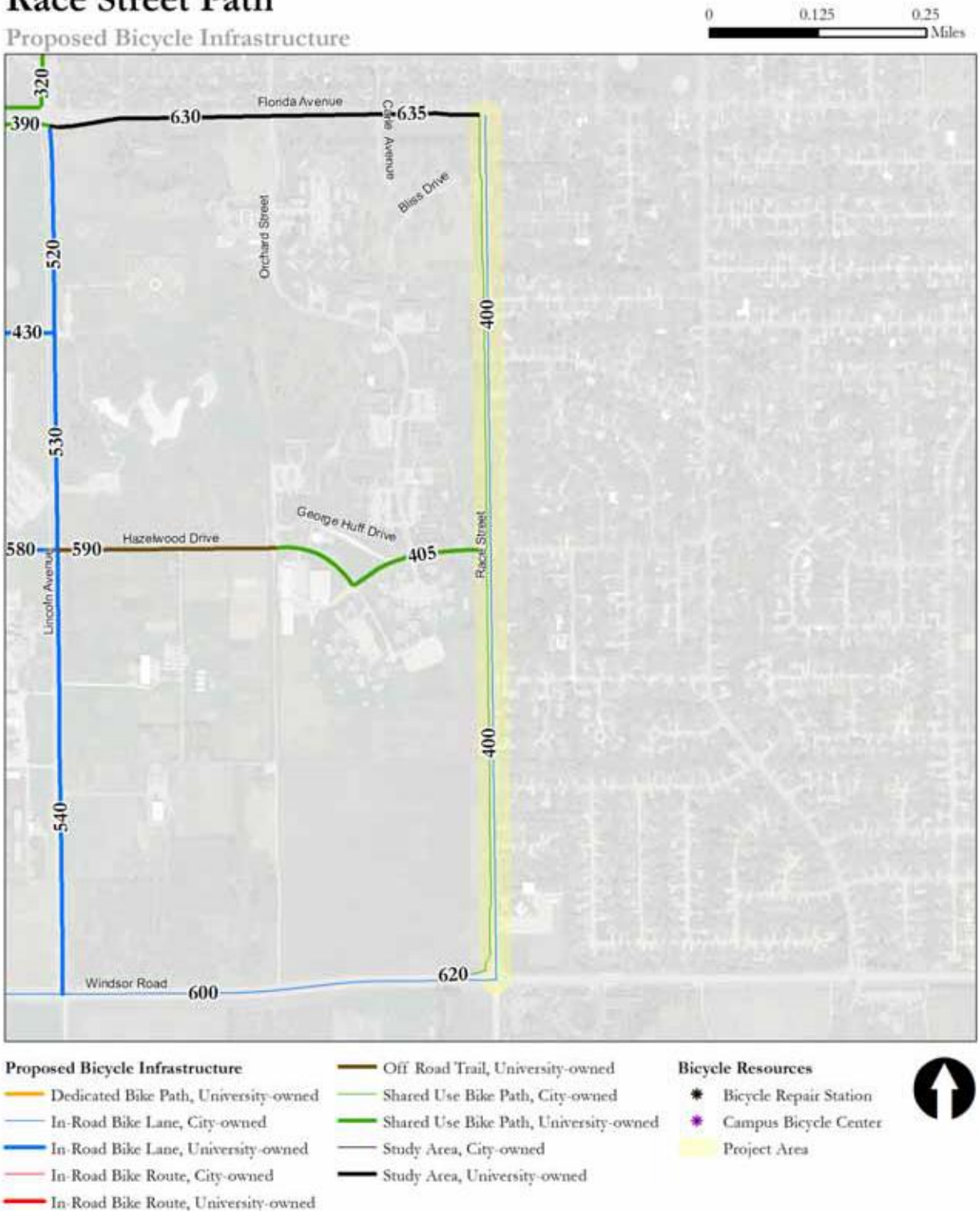
Race Street Path

Existing Bicycle Infrastructure

Map 37: Existing Bicycle Infrastructure, Race Street Path

Race Street Path

Proposed Bicycle Infrastructure



Map 38: Proposed Bicycle Infrastructure, Race Street Path

Segment Number	Description	Estimated Cost
Phase 1		
#400	Adding signs along the existing shared use path on Race Street from Florida Avenue to Windsor Avenue	$487.50
	Total Cost:	**$487.50**

Table 20: Race Street Path Phases and Costs

Existing Shared Use Path along Race Street (#400) Photo by F&S

Existing Shared Use Path along Race Street (#400) Photo by F&S

Existing Shared Use Path along Race Street (#400) Photo by F&S

Existing Shared Use Path along Race Street (#400) Photo by F&S

Pennsylvania Avenue

In the University District, Pennsylvania Avenue is a university owned street that runs from Fourth Street on the west and to the east edge of the University District at Lincoln Avenue. The street continues to the east under City of Urbana jurisdiction. The City plans to install bicycle infrastructure on Pennsylvania Avenue, east of Lincoln Avenue. This project should be completed in two phases, as indicated in Table 21.

Phase One includes removal of the north on-street parking spaces and the installation of bicycle lanes from Fourth Street to Goodwin Avenue. Phase Two will install bicycle lanes from Goodwin Avenue to Lincoln Avenue, remove the off-road bicycle path from Goodwin Avenue to Dorner Drive, and add a sidewalk on the south side from Maryland Drive to Dorner Drive. The addition of this sidewalk will require an agreement with the property owners between Maryland Drive and Dorner Drive. In addition, Phase Two should include safety modifications to the offset intersections of Pennsylvania Avenue, Dorner Drive, and Virginia Drive, which are currently undetermined.

Although there is no sidewalk along the south side of this roadway from west of Sixth Street to Maryland Drive, it is an unincorporated area that the university has no jurisdiction over. If an opportunity arises to add a southern sidewalk from Sixth Street to Maryland Drive, and make this road a complete street, then it should be pursued.

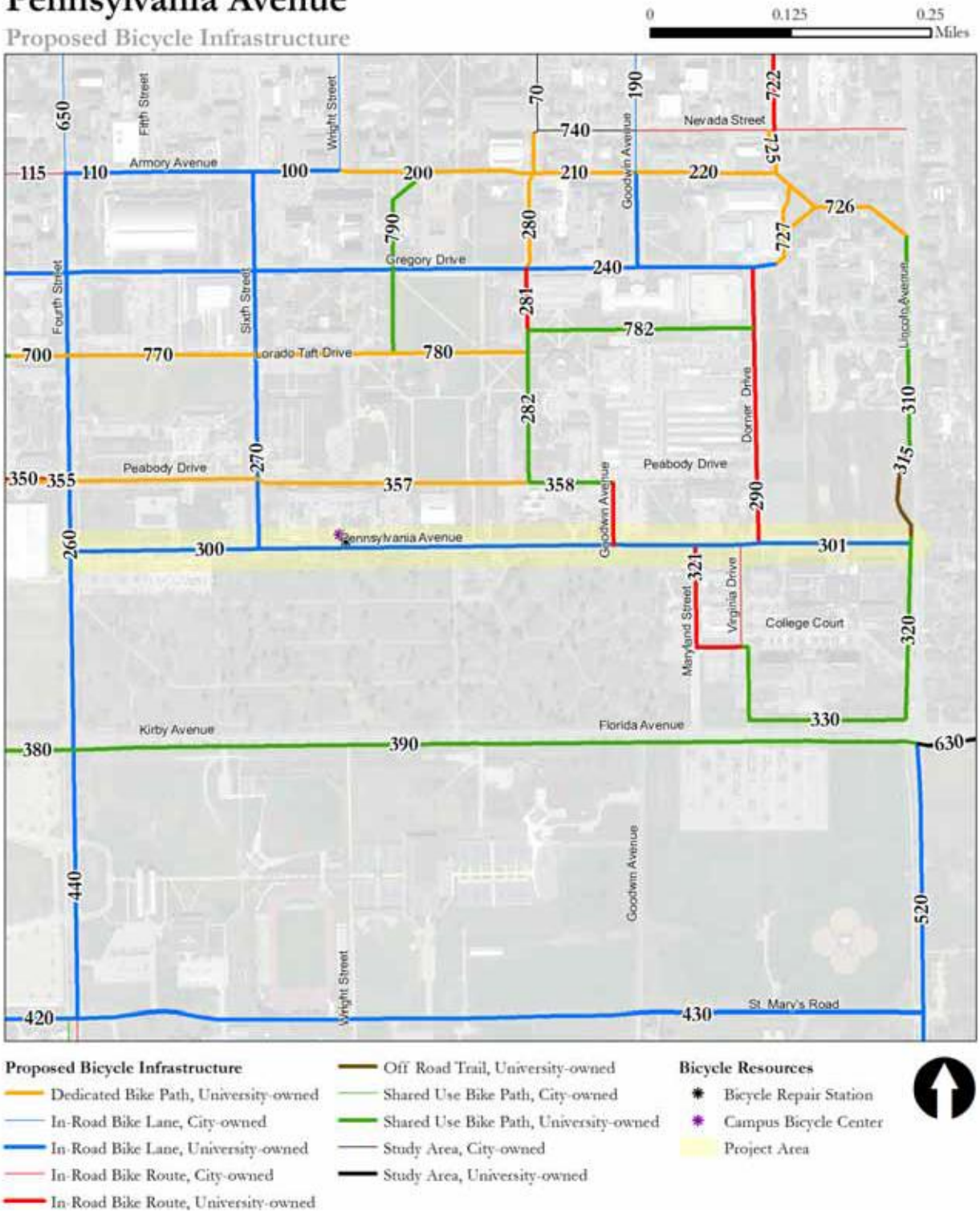
Pennsylvania Avenue

Existing Bicycle Infrastructure

Map 39: Existing Bicycle Infrastructure, Pennsylvania Avenue

Pennsylvania Avenue

Proposed Bicycle Infrastructure



Map 40: Proposed Bicycle Infrastructure, Pennsylvania Avenue

Segment Number	Description	Estimated Cost
Phase 1		
#300	Bicycle lanes on Pennsylvania Avenue from Fourth Street to Goodwin Avenue– *partially covered by IDOT funded project scheduled for Summer 2017 (Fourth Street to the city limit)*	$38,421.50
Phase 2		
#301	Bicycle lanes on Pennsylvania Avenue from Goodwin Avenue to Lincoln Avenue and removal of off-road bicycle path	$62,026.69
	Total Cost:	**$100,448.19**

Table 21: Pennsylvania Avenue Phases and Costs

Pennsylvania Avenue (#300) Photo by Holly Nelson

Pennsylvania Avenue (#301) Photo by Holly Nelson

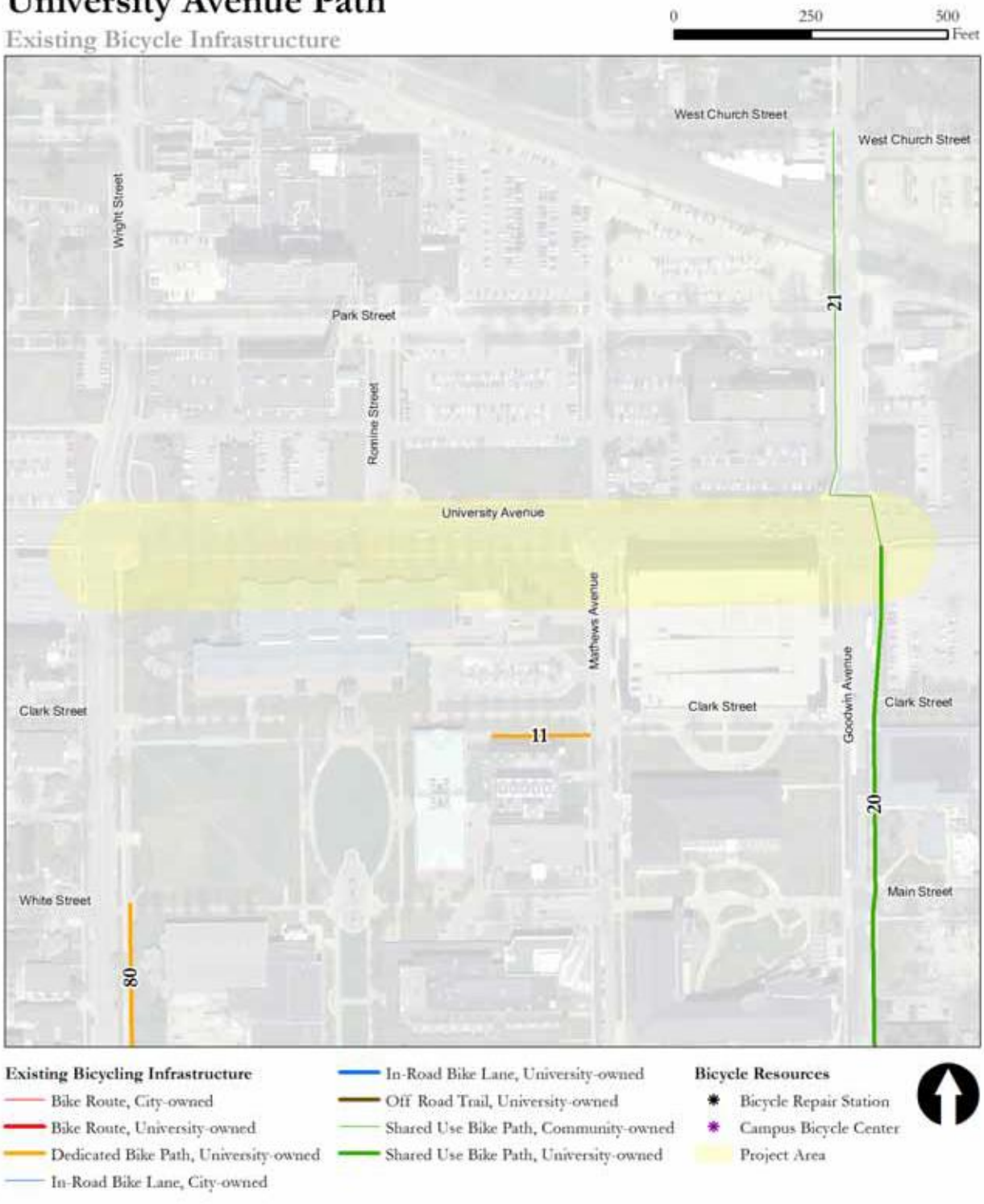
Pennsylvania Avenue (#300) Photo by Holly Nelson

University Avenue Path

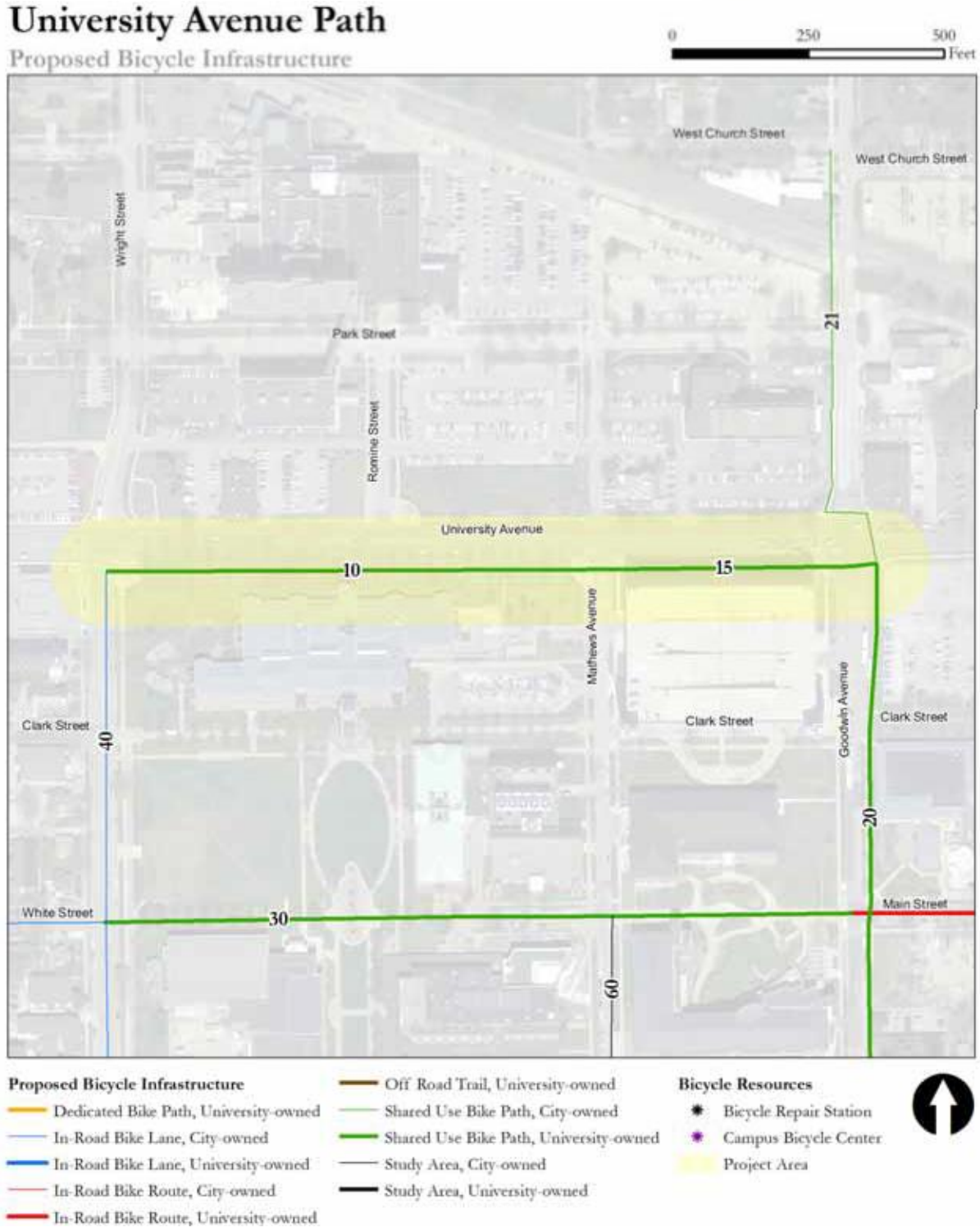
The shared use path on the south side of University Avenue is in good condition from Wright Street to Mathews Avenue. However, it needs to be extended east at Mathews Avenue to Goodwin Avenue. This project should be completed in conjunction with the planned housing facility in the City of Urbana, north of University Avenue on Goodwin Avenue. Phases are as noted in Table 22.

University Avenue Path

Existing Bicycle Infrastructure



Map 41: Existing Bicycle Infrastructure, University Avenue Path



Map 42: Proposed Bicycle Infrastructure, University Avenue Path

Segment Number	Description	Estimated Cost
Phase 1		
#10	Adding signs along the existing shared use side path along University Avenue from Wright Street to Mathews Avenue	$325.00
#15	Shared use side path along University Avenue from Mathews Avenue to Goodwin Avenue	$51,734.80
	Total Cost:	**$52,059.80**

Table 22: University Avenue Path Phases and Costs

Shared Use Side Path along University Avenue, looking east across Goodwin Avenue (#10 and #15) Photo by Holly Nelson

Existing Shared Use Side Path along University Avenue (#10) Photo by Holly Nelson

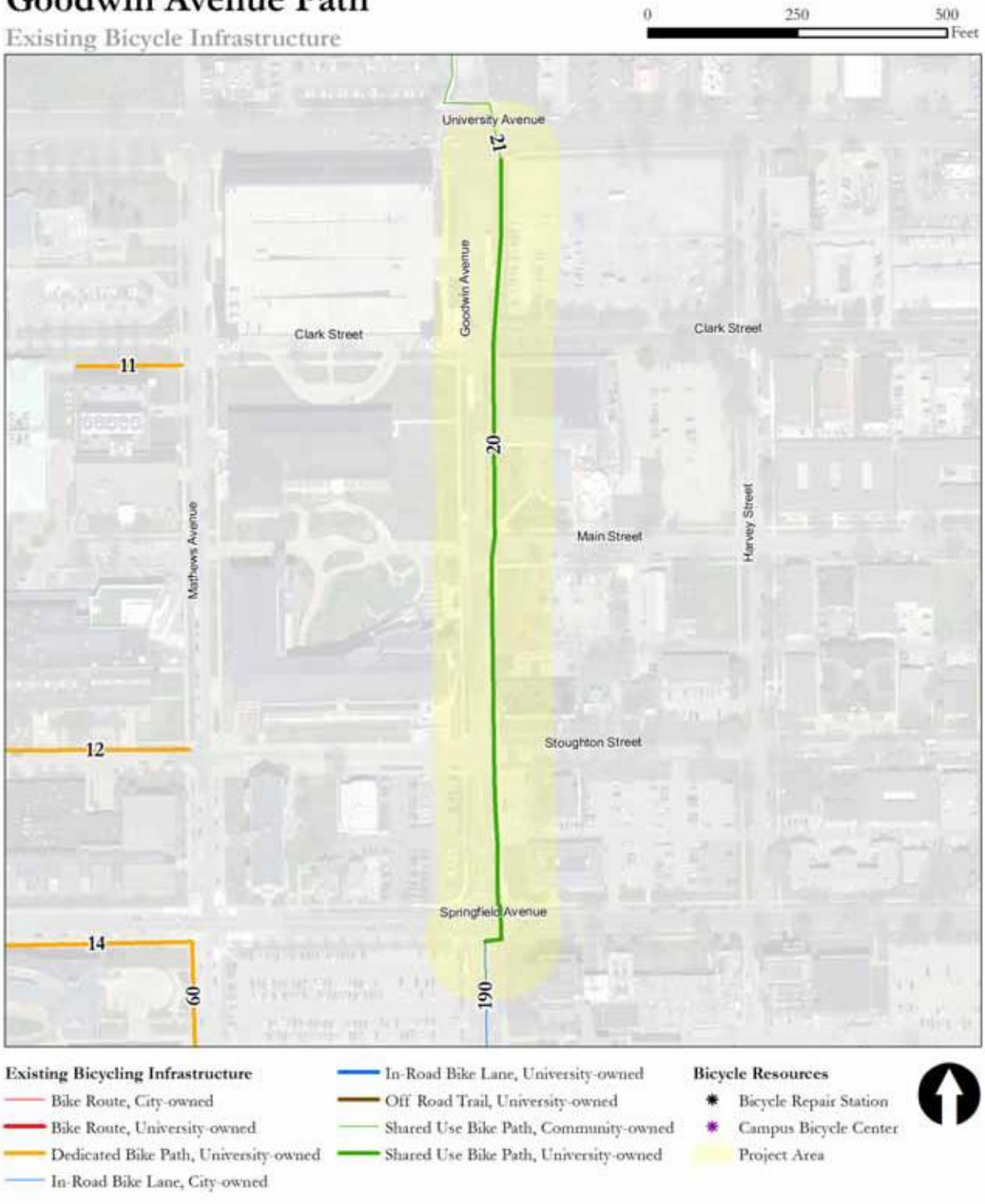
Existing Shared Use Side Path along University Avenue (#10) Photo by Holly Nelson

Goodwin Avenue Path

Goodwin Avenue between Springfield Avenue and University Avenue belongs to the City of Urbana, and the shared use side path along the east side of the street is maintained by the university, where adjacent to university property. To the south, this shared use side path connects to existing bicycle lanes on Goodwin Avenue at Springfield Avenue. Goodwin Avenue is owned and maintained by the City of Urbana from Springfield Avenue to Nevada Street. The street and existing bicycle lanes are under the university jurisdiction from Nevada Street to Gregory Drive. This path continues north of University Avenue under City jurisdiction, connects to the existing and planned shared use side path along University Avenue, and intersects with planned bikeways on Main Street. This project involves a single phase to install shared use path signs (see Table 23).

Goodwin Avenue Path

Existing Bicycle Infrastructure



Map 43 Existing Bicycle Infrastructure, Goodwin Avenue Path

Goodwin Avenue Path

Proposed Bicycle Infrastructure

Map 44 Proposed Bicycle Infrastructure, Goodwin Avenue Path

Segment Number	Description	Estimated Cost
Phase 1		
#20	Add signs along the existing shared use side path on Goodwin Avenue from Springfield Avenue to University Avenue	$975.00
	Total Cost:	**$975.00**

Table 23: Goodwin Avenue Path Phases and Cost

Existing Shared Use Path along Goodwin Avenue (#20) Photo by F&S

Existing Shared Use Path along Goodwin Avenue (#20) Photo by F&S

Existing Shared Use Path along Goodwin Avenue (#20) Photo by F&S

Dorner Drive

Dorner Drive is under the jurisdiction of the university, and it is bounded on both sides by university property from Gregory Drive to Pennsylvania Avenue. The off-road bicycle path ends at a new enhanced MTD bus stop outside of Allen Hall, and the path does not provide clear direction to cyclists trying to follow the appropriate rules of the road. This project is a single phase to install an on-street bicycle route with sharrows and remove the off-road bicycle path (see Table 24).

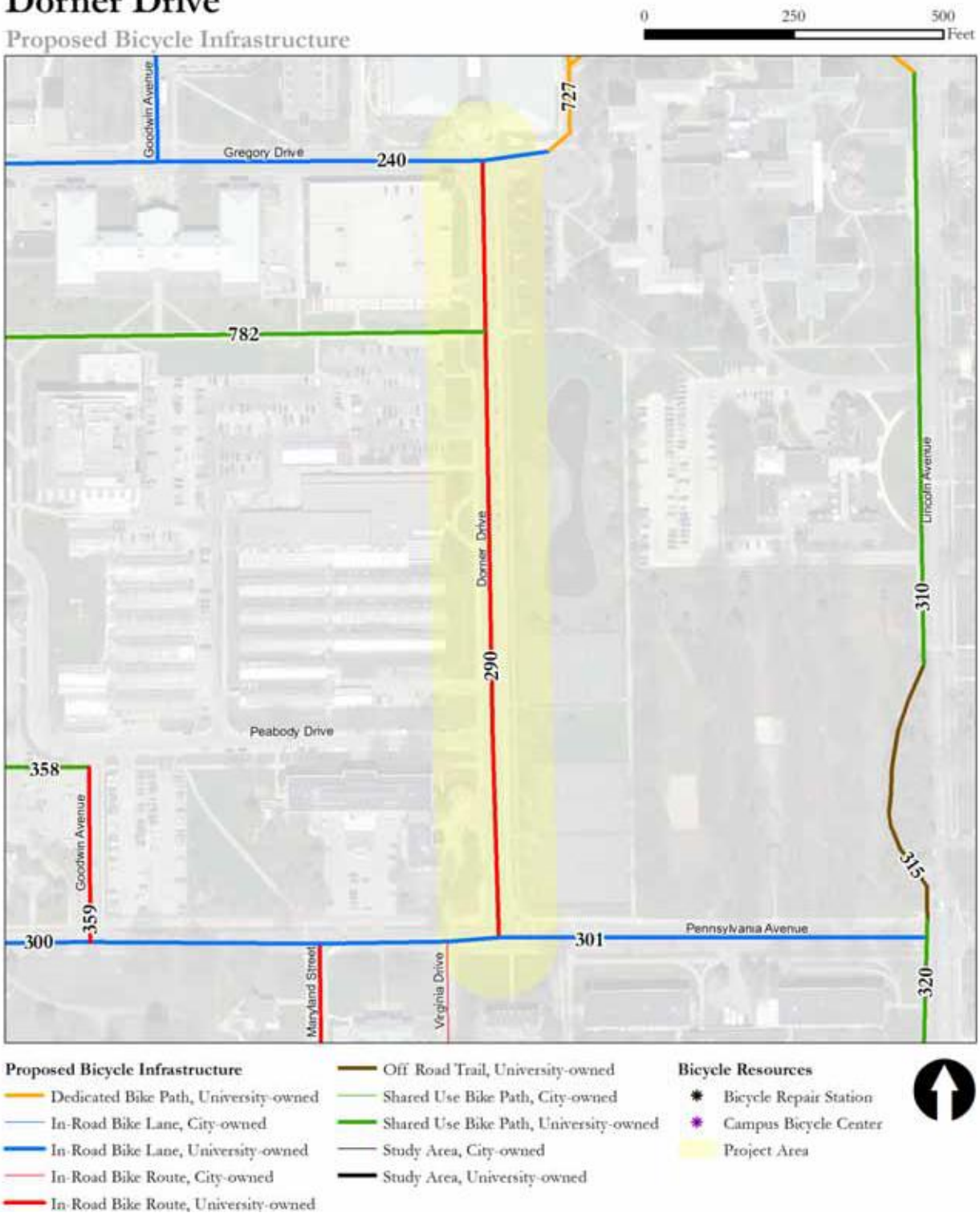
Dorner Drive

Existing Bicycle Infrastructure

Map 45 Existing Bicycle Infrastructure, Dorner Drive

Dorner Drive

Proposed Bicycle Infrastructure

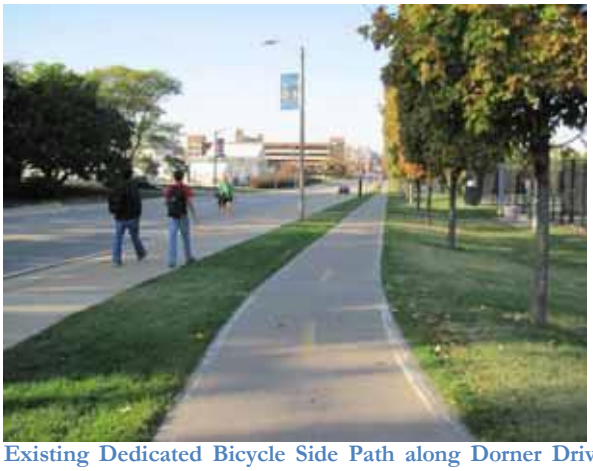


Map 46 Proposed Bicycle Infrastructure, Dorner Drive

Segment Number	Description	Estimated Cost
Phase 1		
#290	Bicycle route on Dorner Drive from Gregory Drive to Pennsylvania Avenue, and removal of dedicated side path, and removal of dedicated side path	$69,231.40
	Total Cost:	**$69,231.40**

Table 24: Dorner Drive Phases and Costs

Existing Dedicated Bicycle Side Path along Dorner Drive (#290) Photo by Holly Nelson



Existing Dedicated Bicycle Side Path along Dorner Drive (#290) Photo by Holly Nelson

Bus Stop outside of Allen Hall (#290) Photo by Andy Kopp

Mathews Avenue Path

The Mathews Avenue Path is a north-south connection from Nevada Street to Peabody Drive. This project is multi-phase to delineate a safe route for cyclists traveling north-south through this part of campus. See Table 25 for phasing and associated costs.

Phase 1 of the project will involve reconstructing the existing dedicated bicycle path that runs between Nevada Street and Gregory Drive.

Phase 2 will help make motorists aware that the parking lot between Mumford Hall and the Animal Sciences Laboratory is a bicycle route. There will be sharrows painted and signage instructing automobiles to "Share the Road."

Phase 3 will transform the existing dedicated bicycle path that runs south towards the Peabody Drive Path into a shared use path. There is a sidewalk that currently runs alongside the existing dedicated bicycle path, and the two will be combined to make a wider, path for both bicyclists and pedestrians.

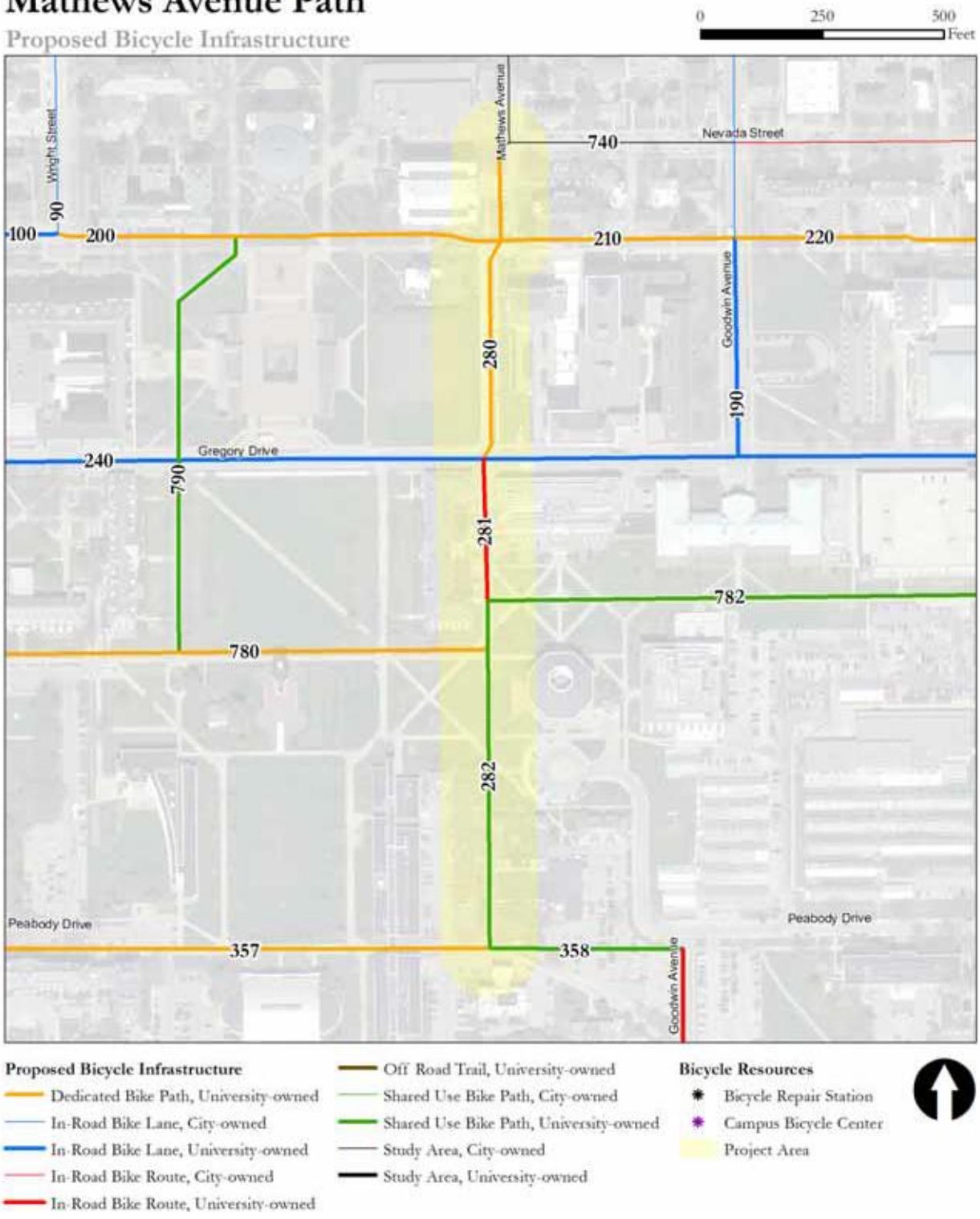
Mathews Avenue Path

Existing Bicycle Infrastructure

Map 47 Existing Bicycle Infrastructure, Mathews Avenue Path

Mathews Avenue Path

Proposed Bicycle Infrastructure



Map 48 Proposed Bicycle Infrastructure, Mathews Avenue Path

Segment Number	Description	Estimated Cost
Phase 1		
#280	Reconstruct off-road bicycle path from corner of Mathews Avenue and Nevada Street to Gregory Drive	$13,747.50
Phase 2		
#281	Bicycle Route with sharrows from Gregory Drive to Lorado Taft Path (in parking area to the east of Mumford Hall)	$4,537.00
Phase 3		
#282	Shared use path from Lorado Taft Path to Peabody Drive Path	$104,585.94
	Total Cost:	**$122,870.44**

Table 25: Mathews Avenue Path Phases and Costs

Existing Dedicated Bicycle Path extending south from parking area east of Mumford Hall (#282 and #281) Photo by Holly Nelson

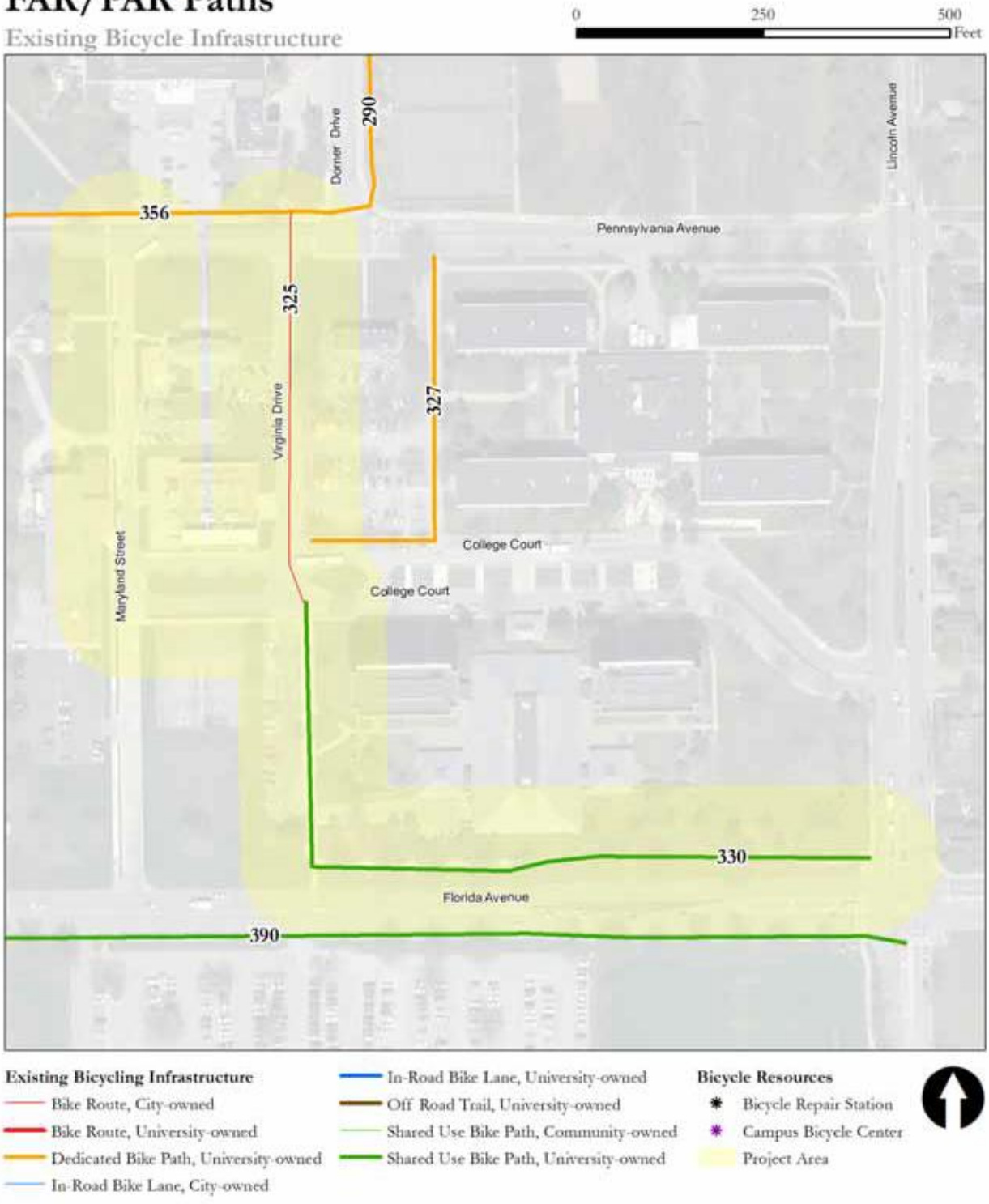
Existing Dedicated Bike Path (#280) crossing Gregory Drive to connect with #281. Photo by F&S

FAR/PAR Paths

The FAR/PAR Paths is an existing shared use side path located to the south of the Florida Avenue Residence (FAR) Hall. This project has two phases. Phase One is to add signs along the existing shared use path on the north side of Florida Avenue from Virginia Drive to Lincoln Avenue. Phase Two is to create bicycle route by painting sharrows on Maryland Drive, Virginia Drive, and College Court. Table 26 provides a summary of each phase and the associated cost estimate.

FAR/PAR Paths

Existing Bicycle Infrastructure



Map 49 Existing Bicycle Infrastructure, FAR/PAR Paths

FAR/PAR Paths

Proposed Bicycle Infrastructure

Map 50 Proposed Bicycle Infrastructure, FAR/PAR Paths

Segment Number	Description	Estimated Cost
Phase 1		
#330	Add signs along the existing shared use path on the north side of Florida Avenue from Virginia Drive to Lincoln Avenue	$325.00
Phase 2		
#321 #322 #325	Bicycle route routes and sharrows on Maryland Drive, Virginia Drive, and College Court	$2,405.00
	Total Cost:	**$2,730.00**

Table 26: FAR Path Phases and Costs

Existing Shared Use Side Path along Florida Avenue near FAR (#330) Photo by Holly Nelson

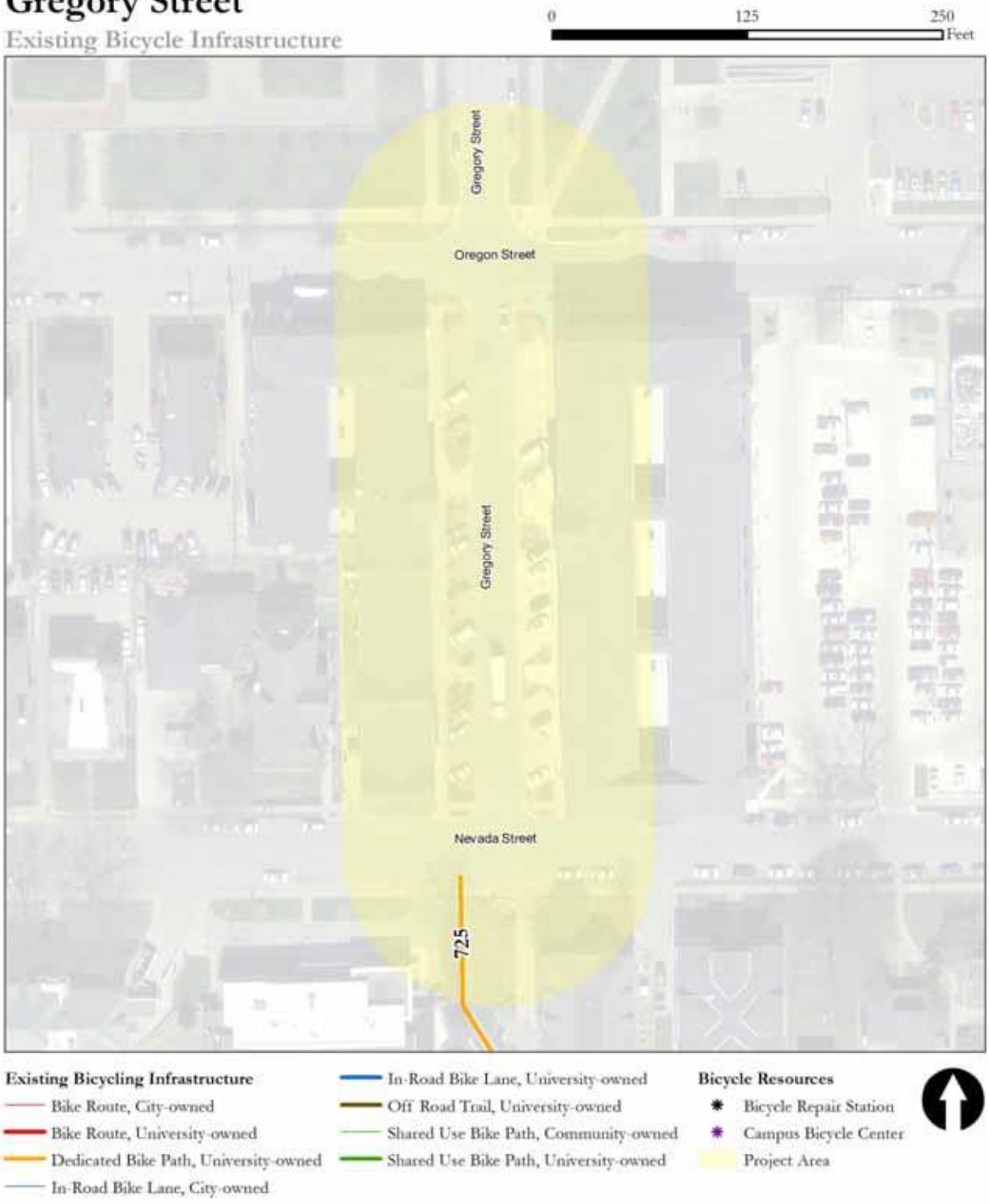
Existing Shared Use Side Path along Florida Avenue near FAR (#330) Photo by Holly Nelson

Gregory Street

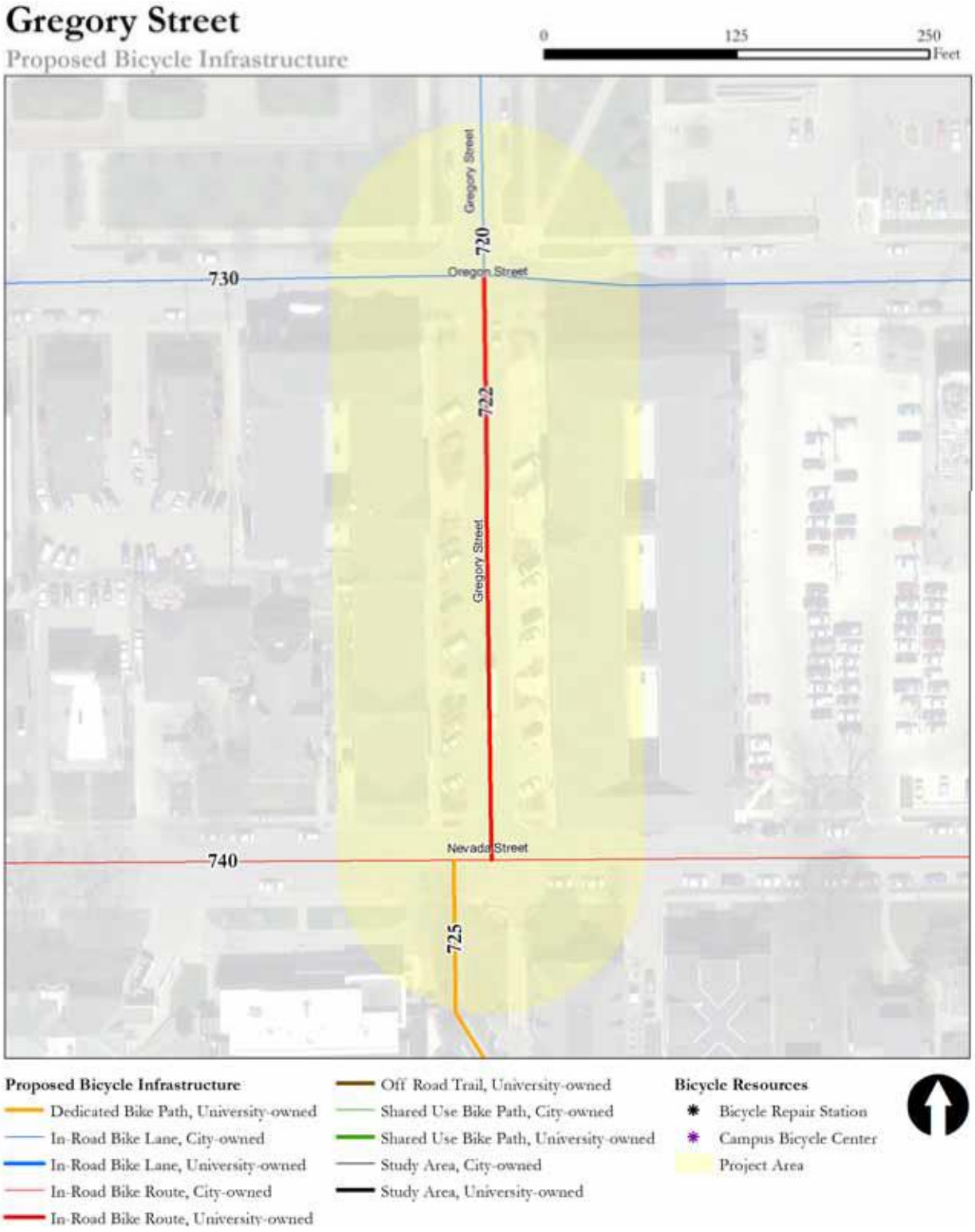
Gregory Street is under university jurisdiction from Nevada Street to Oregon Street. To the north, Gregory Street is under City of Urbana jurisdiction. The City plans to install bicycle lanes on Gregory Street from Oregon Street to Illinois Street. This project is a single phase project to install bicycle route signs and sharrows (see Table 27).

Gregory Street

Existing Bicycle Infrastructure



Map 51 Existing Bicycle Infrastructure, Gregory Street



Map 52 Proposed Bicycle Infrastructure, Gregory Street

Segment Number	Description	Estimated Cost
Phase 1		
#722	Bicycle Route on Gregory Street from Oregon Street to Nevada Street	$962.00
	Total Cost:	**$962.00**

Table 27: Gregory Street Phases and Costs

Gregory Street between Illinois Street and Oregon Street (#720) (City of Urbana jurisdiction) Photo by Holly Nelson

Gregory Street between Oregon Street and Nevada Street (#722) Photo by Holly Nelson

Gerty Drive

Gerty Drive is under University jurisdiction from Oak Street to Fourth Street. This project is a single phase project to install bicycle route signage and sharrows from Oak Street to Fourth Street. See table 28 for associated cost estimates.

Gerty Drive

Existing Bicycle Infrastructure

Map 53 Existing Bicycle Infrastructure, Gerty Drive

Gerty Drive

Proposed Bicycle Infrastructure

Map 54 Proposed Bicycle Infrastructure, Gerty Drive

Segment Number	Description	Estimated Cost
#475	Bicycle route on Gerty Drive from Oak Street to Fourth Street	$1,430.00
	Total Cost:	**$1,430.00**

Table 28 Gerty Drive Table of Phases and Costs

Study Areas

Quad Path

The Quad Path crosses the Main Quadrangle in line with Daniel Street in Champaign. The study area is bounded on the west by Wright Street, which is under City of Champaign jurisdiction, and the east by Goodwin Avenue, which is under City of Urbana jurisdiction. This path also crosses Mathews Avenue, which is under City of Urbana jurisdiction.

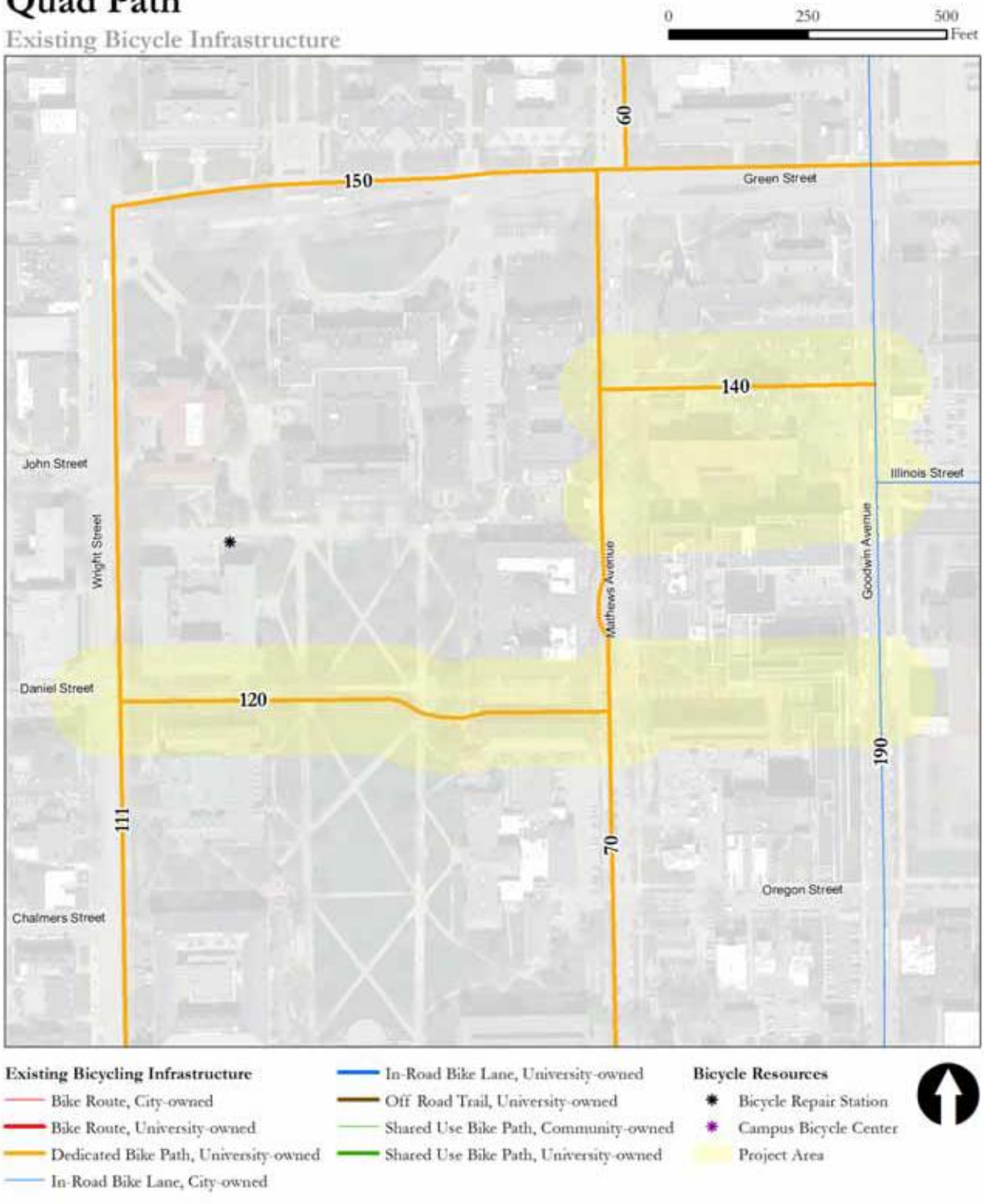
Phase One of this project extends from Wright Street to Mathews Avenue. On the west end, the Quad Path will intersect with the proposed Wright Street bicycle lanes. Additionally, the City of Champaign is investigating options for cyclists that want to continue west on Daniel Street. Daniel Street is currently one-way eastbound at that location, such as a contra flow bicycle lane. On the east end of Phase One, the Quad Path intersects with Mathews Avenue. The future design of bicycle facilities on Mathews Avenue is undetermined at this time, so the Quad Path Phase One will be designed to connect with the existing facilities on Mathews Avenue at the time of installation.

Phase Two of this project is a connection between Mathews Avenue and Goodwin Avenue. The Quad Path is a key connection for cyclists heading from the City of Champaign to the east end of the University District. This is the only bicycle facility across the Main Quadrangle, and it continues the bicycle access from Daniel Street to Mathews Avenue. Once a cyclist reaches Mathews Avenue, they may need to continue eastbound to Goodwin Avenue. At this time, there are few options for cyclist wanting to continue west to Goodwin. The existing walkways along segments 130 and 135 are not wide enough to incorporate dedicated bicycle infrastructure. Segment 140 is an existing dedicated bicycle path that connects Goodwin Avenue to Mathews Avenue, but its distance from Segment 120 discourages its use.

Illinois Street is under City of Urbana jurisdiction, and has bicycle lanes installed from Goodwin Avenue to Lincoln Avenue. The connection for cyclists heading to the Main Quadrangle from the Illinois Street bicycle lanes is undetermined. There is an existing dedicated off-road bicycle path to the north of Burrill Hall. There is also a wide pedestrian path aligned with Illinois Street. This is a dangerous area to ride a bicycle because of the tight spacing between buildings, the planter areas, and the lack of clear direction for cyclists heading to the Quad from the intersection of Goodwin Avenue and Illinois Street. Table 29 provides a summary of each phase and the associated cost estimate.

Quad Path

Existing Bicycle Infrastructure



Map 55 Existing Bicycle Infrastructure, Quad Path

Quad Path

Proposed Bicycle Infrastructure

Map 56 Proposed Bicycle Infrastructure, Quad Path

Segment Number	Description	Estimated Cost
Phase 1		
#120	Off-road bicycle path from Wright Street to Mathews Avenue	$101,315.50
Phase 2		
#130 #135 #140	Study area between Mathews Avenue and Goodwin Avenue	Unknown
	Total Cost:	**$101,315.50**

Table 29: Quad Path Phases and Costs

Quad Path from the east (#120) Photo by Holly Nelson

Existing Path east of the Quad connecting to Mathews Avenue (#130) Photo by Holly Nelson

Quad Path from the east (#120) Photo by Holly Nelson

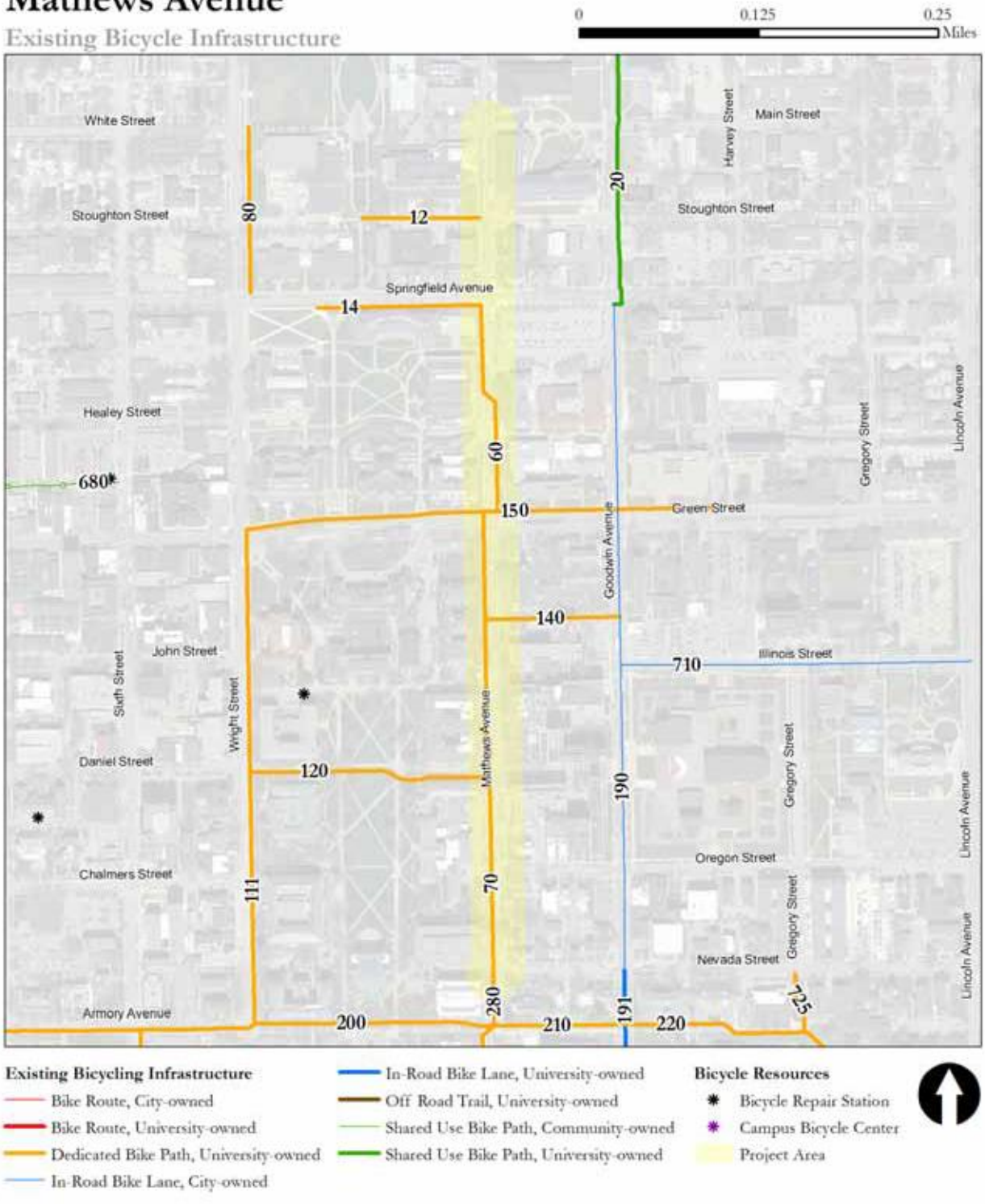
Possible Quad Path connection to Illinois Street, looking east (#135) Photo by Andy Kopp

Mathews Avenue

Mathews Avenue is a high volume street for pedestrians and bicyclists. This street, with its on-street parking, belongs to the City of Urbana, and the existing dedicated bicycle side path belongs to the university. The options for safe bicycle facilities along this street have not yet been determined (see Table 30 for associated cost estimates).

Mathews Avenue

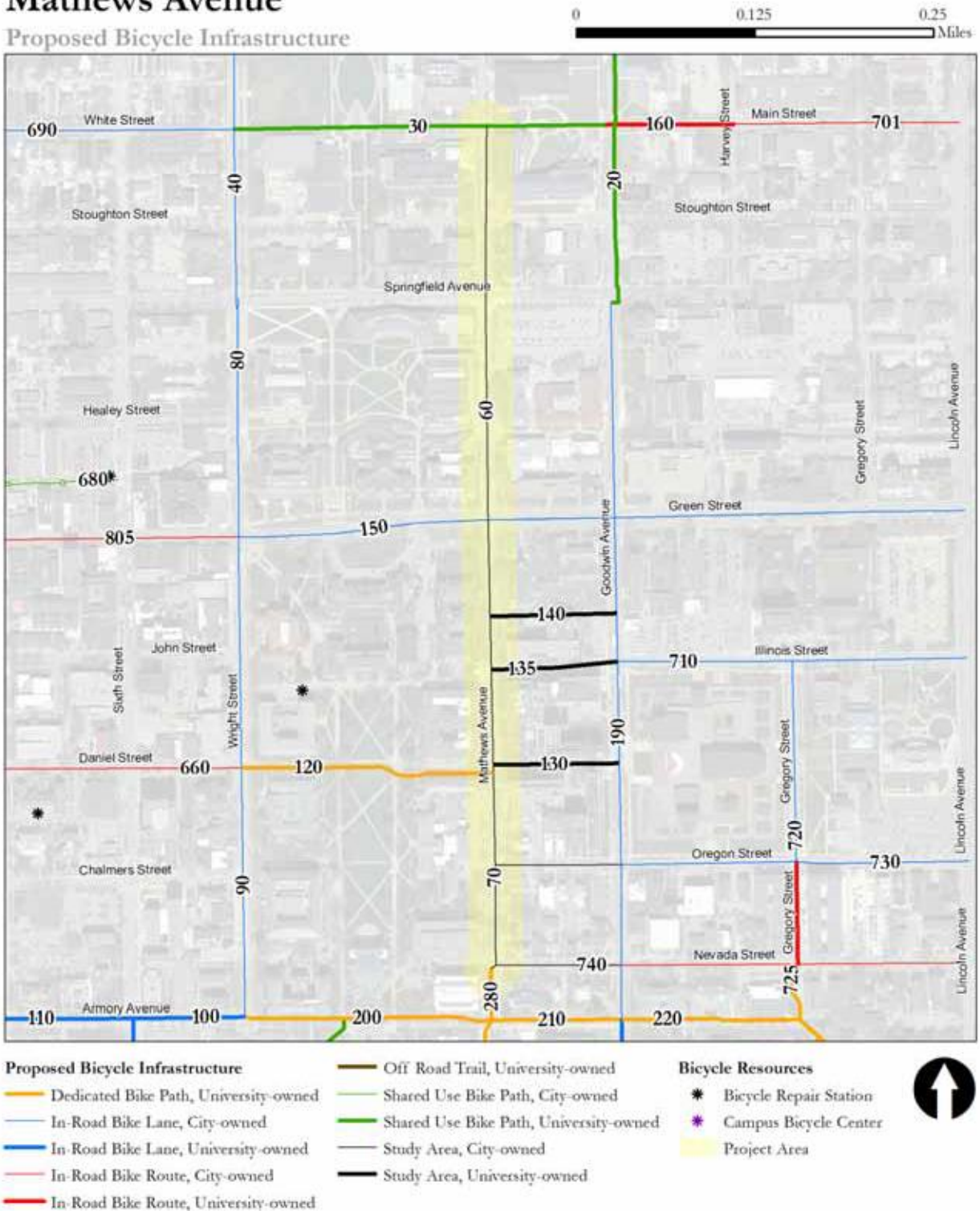
Existing Bicycle Infrastructure



Map 57 Existing Bicycle Infrastructure, Mathews Avenue

Mathews Avenue

Proposed Bicycle Infrastructure



Map 58 Proposed Bicycle Infrastructure, Mathews Avenue

Segment Number	Description	Estimated Cost
#70	Study Area- treatment to be determined along Mathews Avenue from Nevada Street to Green Street	unknown
#60	Study Area- treatment to be determined along Mathews Avenue from Green Street to Main Street	unknown
	Total Cost:	**Unknown**

Table 30: Mathews Avenue Phases and Costs

Existing Dedicated Bike Path along Mathews Avenue (#70) Photo by F&S

Mathews Avenue north of Green Street (#60)
Photo by Geoff Merritt

Hazelwood Drive and Path

Hazelwood Drive and the Hazelwood Drive Path run from Oak Street to Race Street. This southern cross-campus route is currently interrupted between Fourth Street and Goodwin Avenue Extended by an area controlled by the College of Agricultural, Consumer, and Environmental Sciences (ACES) for crop science research plots. This project is in six phases as shown on Table 31.

Phase 1 involves making improvements to the existing dirt trail connecting Orchard Downs to Lincoln Avenue. This path serves as an important connection between George Huff Drive and Hazelwood Drive.

Phases 2 and 3 involve adding signage and painting sharrows, formally designating Hazelwood Drive from Oak Street to Fourth Street as a bicycle route.

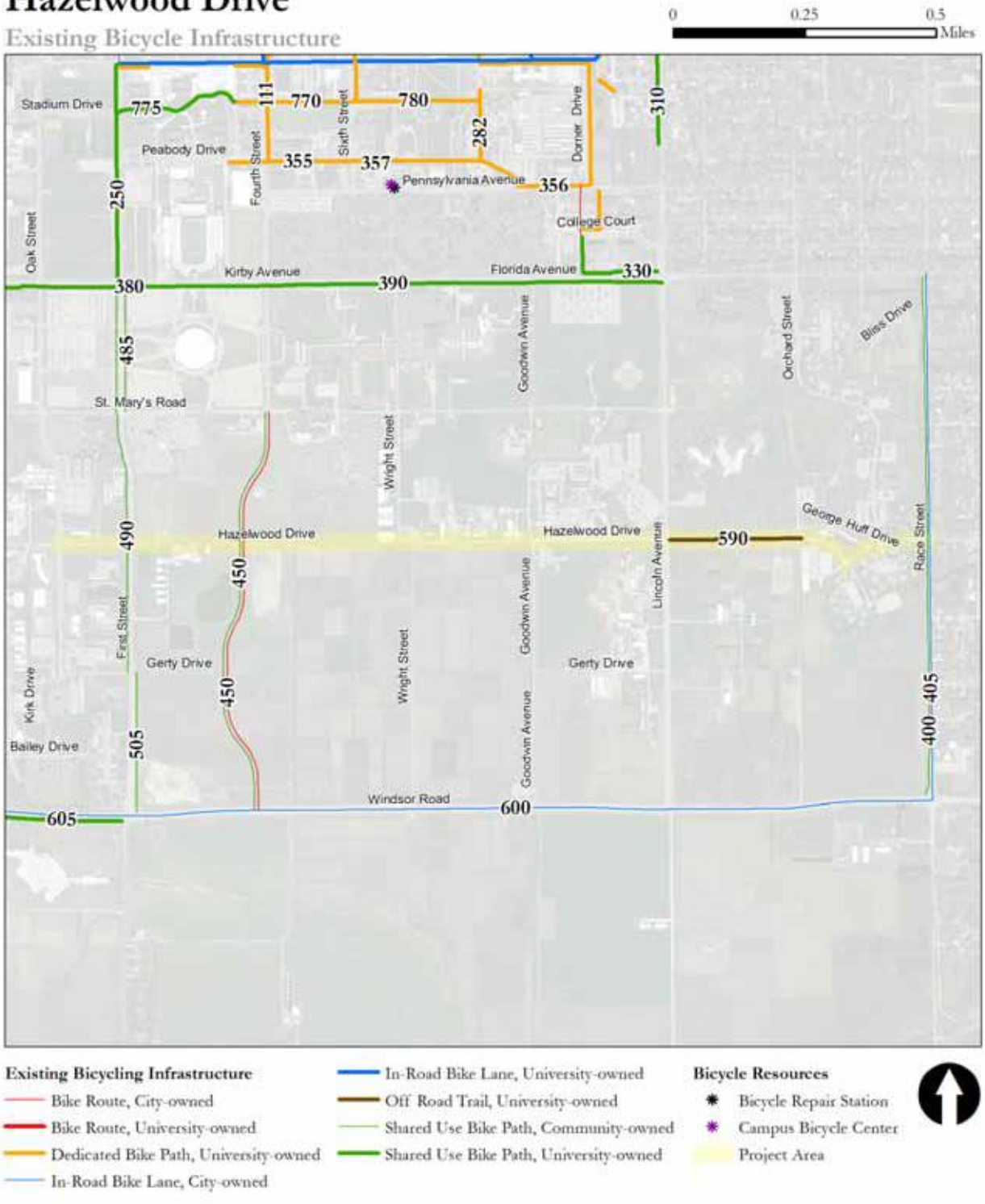
Phase 4 would install bicycle lanes along Hazelwood Drive from Goodwin Avenue Extended to Lincoln Avenue.

The costs for Phase 5 are unknown. An informal dirt path currently exists and is used for the research that takes place on the southern half of the campus. Ideally, a bicycle path would link the eastern and western portions of the project.

The installation of a shared use path along George Huff Drive from Hazelwood Drive to Race Street is the main goal of Phase 6. Currently, there is a only a thin sidewalk linking the trail from Race Street.

Hazelwood Drive

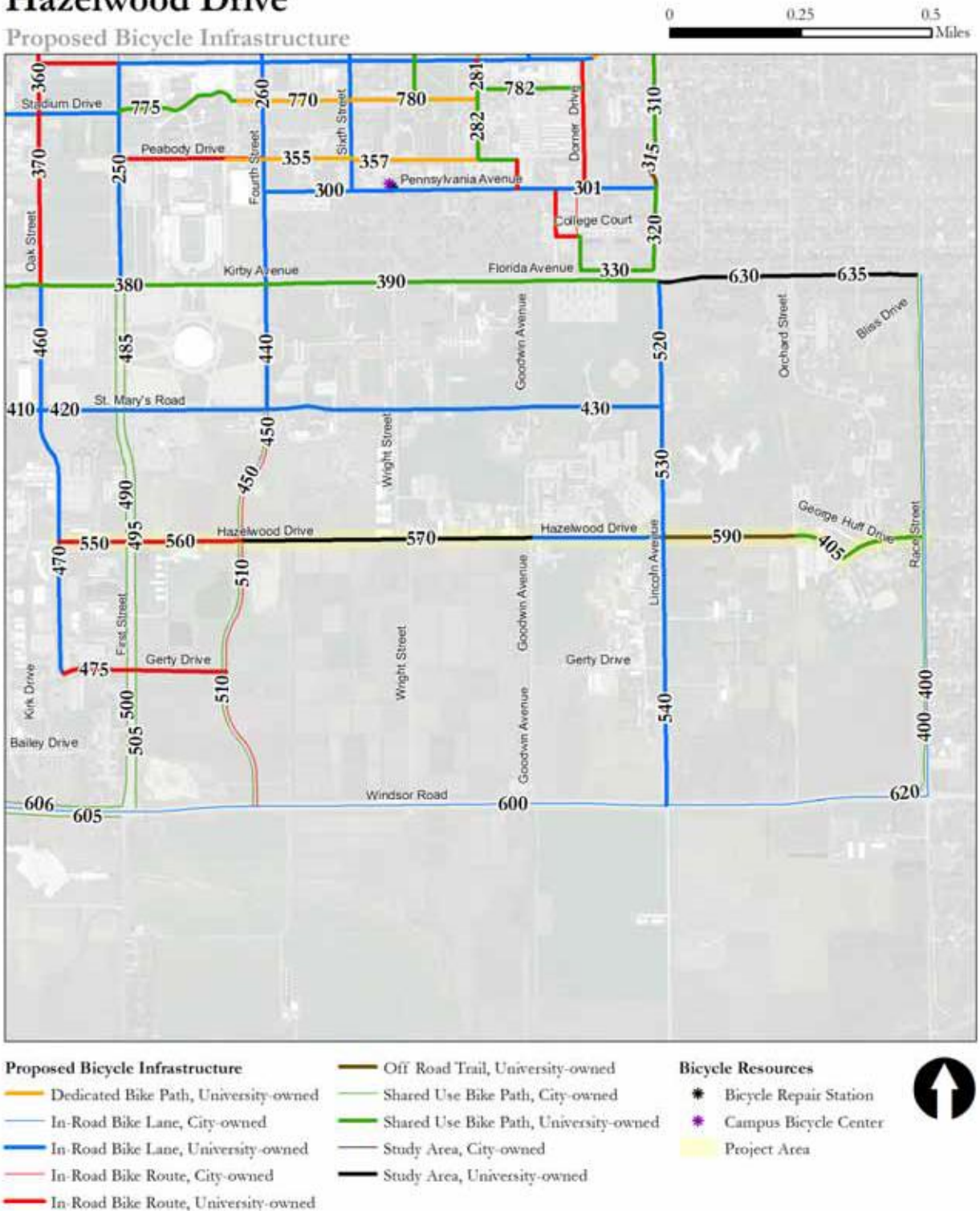
Existing Bicycle Infrastructure



Map 59 Existing Bicycle Infrastructure, Hazelwood Drive

Hazelwood Drive

Proposed Bicycle Infrastructure



Proposed Bicycle Infrastructure

- Dedicated Bike Path, University-owned
- In-Road Bike Lane, City-owned
- In-Road Bike Lane, University-owned
- In-Road Bike Route, City-owned
- In-Road Bike Route, University-owned
- Off Road Trail, University-owned
- Shared Use Bike Path, City-owned
- Shared Use Bike Path, University-owned
- Study Area, City-owned
- Study Area, University-owned

Bicycle Resources

- Bicycle Repair Station
- Campus Bicycle Center
- Project Area

Map 60 Proposed Bicycle Infrastructure, Hazelwood Drive

Segment Number	Description	Estimated Cost
Phase 1		
#590	Off-road trail on Hazelwood Bicycle Path from Lincoln to George Huff Drive	$43,662.94
Phase 2		
#560	Bicycle route on Hazelwood Drive from First Street to Fourth Street	$793.00
Phase 3		
#550	Bicycle route on Hazelwood Drive from Oak Street to First Street	$637.00
Phase 4		
#580	Bicycle lanes on Hazelwood Drive from Goodwin Avenue Extended to Lincoln Avenue	$18,317.00
Phase 5		
#570	Off-road trail on Hazelwood Bicycle Path from Fourth Street to Goodwin Avenue Extended	Unknown
Phase 6		
#405	Shared use side path on George Huff Drive from Hazelwood Drive to Race Street	$126,854.00
	Total Cost:	**$190,263.94**

Table 31: Hazelwood Drive and Path Phases and Costs

Map 61 Hazelwood Drive (#560) Photo by Holly Nelson

Hazelwood Path crossing Lincoln Avenue (#580) Photo by Holly Nelson

Conclusion

Updating the bicycle network should be a high priority for the campus. Providing improved bicycle facilities is critical to improving public safety, reducing injuries and fatalities resulting from crashes, ensuring efficiency and ease of movement, improving livability and quality of life, improving energy efficiency and meeting sustainability targets, and promoting active lifestyles. With safer, better-connected infrastructure, bicycling will be become more attractive for a larger portion of the campus community.

Improved bicycle infrastructure will pave the way for other bicycle-related projects, such as campus-wide bicycle sharing. It will improve our standing among other universities in terms of bicycle-friendliness and attract active students.

While projects in this plan are rated by priority, available funding often varies significantly. Many projects will be completed along with other major infrastructure projects; when streets are rebuilt, proposed bicycle lanes should be added regardless of that project priority. Types of phases can be grouped together for funding requests. For example, projects that require only signage can be accomplished together through one funding request.

Chapter 7. Additional Considerations

Updating the bikeway network is a necessary and top-priority step for encouraging more bicycle trips and improving safety and ease of use for campus cyclists. However, there are additional issues to be considered. These considerations can be organized around the 5 E's of cycling: Engineering, Education, Encouragement, Enforcement, and Evaluation. To increase the bicycle-friendliness of campus, the university must invest in improvements in all five of these areas.

Engineering

Chapters 5 and 6 outlined the specific infrastructure improvements needed for the bikeway network. Coinciding with the bikeway network, additional engineering investments are needed for bicycle parking/storage and other bicycle-related facilities. These recommendations are described below.

Bicycle Parking and Storage Facilities

The 2007 Multi-Modal Study highlighted the need for better bicycle parking facilities, and concerns about bicycle parking have frequently been raised by various departments, facilities managers, campus committees, and bicyclists.

As of May 2014, there are an estimated 8,602 university-owned bicycle parking spaces in roughly 410 bicycle parking areas on campus property. Of these areas, only 53% meet current facility standards for bicycle parking. Some outdated bicycle parking areas on campus are currently being upgraded thanks to funding provided by the Student Sustainability Committee, and Facilities & Services intends to request additional funds in the coming years to upgrade additional locations. The October 2013 bicycle census count found 5,573 bicycles parked on campus during a single hour of a school day. In that sample, there were 129 more bicycles than bicycle parking spaces, and as described in Chapter 1, the actual volume of bicycles on campus on a typical day could be as high as 20,000. In the census, 17% of the counted bicycles were parked on structures other than bicycle racks such as trees, fences, parking meters, and sign posts. Not only is there a shortage of bicycle parking spaces compared to bicycles on campus, but the inadequate quality of many existing racks leads to a campus-wide trend of parking off-rack.

In addition to upgrading non-standard existing bicycle racks, new locations for additional bicycle parking should be identified to ensure there is adequate parking available for all campus cyclists, particularly as the number of bicycles on campus continues to increase.

Bicycle Parking Facility Standards

Going forward, the university should update the facility standards so that bicycle parking is required for all new building construction on campus. Many recent construction projects have included bicycle parking and other bicycle facilities in pursuit of LEED certification, but a firm university requirement should be formalized within the standards. The bicycle parking Facility Standards

should define the minimum bicycle parking spaces per building, provide guidance on locations for new bicycle parking areas, and require temporary solutions for bicycle parking areas closed by construction projects. Furthermore, the bicycle parking Facility Standards should incorporate guidance from the most current Bicycle Parking Guidelines set by the Association of Pedestrian and Bicycle Professionals (APBP).[63]

Indoor/Covered Bicycle Parking

In addition to standard outdoor bicycle parking, the university should consider providing sheltered bicycle parking throughout campus, particularly near residence halls. The community of Champaign-Urbana experiences all types of weather, and many cyclists continue to ride in inclement weather. Current campus policies prohibit bringing bicycles into university-owned buildings, including offices, academic buildings, and residence halls, unless approved by authorized a facility or departmental manager. This policy most negatively impacts students who live on campus and own bicycles because they are left with no option but to leave their bicycle outside in rain, snow, and ice storms that are damaging to bicycles. Additionally, some campus residents who own valuable, expensive bicycles have requested more secure bicycle parking to help deter theft and vandalism. Policies preventing bicycles inside of buildings should be assessed to ensure they are necessary. Where possible, exceptions may be considered to allow indoor bicycle parking.

Covered bike parking at Bousfield Hall

Where indoor bicycle parking is not an option or does not provide enough storage for the number of bicycles needing protection, sheltered bicycle parking should be considered. The only current instance of covered bicycle parking can be found at Ikenberry Commons, a university Residence Hall Complex. Bicycle lockers could also be installed in select locations on campus and rented to users each semester to cover the costs. Aside from funding, the primary hurdles to sheltered bicycle parking and bicycle lockers are getting the designs approved by the Architecture Review Committee, which oversees the allowance of the structures to be built on campus property. Aesthetic concerns may pose a barrier to their approval in many areas, but the useful function of these campus enhancements would benefit many students, as well as faculty, staff, and visitors.

Seasonal Bicycle Storage

[63] See http://www.apbp.org/?page=Publications

For students who live on campus and do not continue to use their bicycle during winter months or who leave for the summer and have nowhere to store their bicycle while away, there is a clear need for long-term, protected storage of bicycles. The university should consider identifying a space where bicycles can be safely stored for several months in the summer and winter, and develop a system for students to utilize the storage program. This effort will also require solidifying the programmatic details including the process by which bicycles are dropped off and picked up, any fees associated to cover the cost of storage and staff time, and inventorying requirements to keep the program well organized. It is also important to recognize that many students rely on their bicycles for transportation year-round, and would not necessarily be willing to give up access during the entire winter. For these students, sheltered bicycle parking or bicycle lockers would most likely be the ideal solution, allowing them to protect their bicycles from the elements and still have access to their bicycles whenever needed.

Temporary Parking During Construction

Currently, construction projects on campus often results in neighboring bicycle parking areas being blocked for staging areas and dumpster or equipment storage. Facilities & Services is authorized to prohibit parking and work with the Parking Department to remove bicycles in any bicycle parking area during designated periods for building construction, ground maintenance and improvements, university functions, or for other business reasons. While the new Bicycle Code will require notice of such special regulations to be posted in the regulated parking area at least two weeks in advance, there are currently no requirements to provide replacement parking. As a result, these temporary projects often remove large volumes of bicycle parking, resulting in high off-rack bicycle parking, as seen in the photo on this page. In the future, any unit responsible for blocking or temporarily removing bicycle parking should be required to provide temporary replacement racks to serve the building or area.

Bikes parked on chain fence outside of construction area in front of the Chemistry Annex Building, Fall 2013

Showers and Lockers for Bicycle Commuters

To encourage bicycle commuting, the university should consider offering shower and locker facilities to allow commuters to clean up for work or class after arriving by bicycle. Currently, 15-25 buildings on campus have showers, but few of these showers are accessible to most commuters. As part of their Platinum LEED Certification, some new and renovated buildings on campus, such as the Business Instructional Facility (BIF) and Lincoln Hall are constructed with shower facilities for cyclists. The showers are accessible only by swiping an i-Card, and can be locked from the inside once in use. Campus Recreation has also considered offering shower-only memberships at their

exercise facilities, and the TDM department should work with them to implement and promote the program. The university should continue to include shower and locker facilities in new and reconstructed buildings, and also work to make the existing showers on campus more easily accessible to cyclists.

Bicycle Repair Stations

In 2011, Champaign, Urbana, MTD, and the University purchased bicycle repair stations to be strategically placed around the Champaign-Urbana community. There are now nine repair stations in the community, including three on campus. The Campus Bike Center maintains two of the on-campus repair stations, and an academic unit installed and maintains the third. Maintaining the stations includes posting stickers on each station with instructions for use, with a phone number to report broken or missing parts, and then dispatching a staff person to replace or repair missing or broken parts. The picture to the right is an example bicycle repair station. The university should consider adding 3-4 additional repair stations across campus, particularly in high-density bicycle parking areas such as residence halls.

Bicycle Repair Station with Sticker, near the Illini Union and Henry Administration Building

Education

The university should consider expanding educational efforts to reach a broader audience concerning roadway rules, safe cycling behavior, and how cyclists, pedestrians, and motorists can most safely interact with one another on campus. With over 7,000 new students each year, there is a consistent need to reinforce key messages on an ongoing basis, with particular focus at the beginning of each fall semester and again when ridership increases with warm weather in the spring. Educational efforts should take many forms and be pervasive in the daily lives of campus users. Because bicycle safety is not currently required in driver's education or high school curriculum in Illinois, many people are unaware that the Illinois Vehicle Code applies to cyclists when riding in the street. Additionally, approximately twenty percent (20%) of the student body is from international origin, reinforcing that bicycle education should be made available in several languages, and that a primary goal of bicycle education should be to educate those who are less familiar with national, state, and local traffic laws for all roadway users.[64]

Just as cyclists need to be made aware of their rights and responsibilities as lawful roadway users, there is a general lack of awareness among motorists and pedestrians about rules relating to cyclists. Due to lack of knowledge, it is not uncommon to see conflicts on campus between bicyclists and vehicle drivers, or pedestrians using dedicated bicycle paths. As part of bicycle education, the university should continue to improve traffic safety education for all transportation modes. While there have been many efforts toward improved bicycle education in Champaign-Urbana in recent

[64] http://www.dmi.illinois.edu/stuenr/abstracts/SP14_ten.htm

years, the following sections outline existing efforts and recommendations for future improvements to achieve greater awareness of the rights and responsibilities of cyclists.

Incoming Students

At the start of each academic year, Public Safety officers speak at student orientation about campus safety including traffic safety for bicycles. Attendance at the orientation sessions is not required, and often the parents of incoming students, rather than the students themselves, attend these informational events. In the summer of 2013, bicycle information was included for the first time in *On Campus*, an annual publication released each August, which features content as well as maps, calendars, sports and performance information, and general campus facts and news. This is provided to all new students.

The university should assess the effectiveness of the current programming and look into new ways to make bicycle safety information more accessible to or even mandatory for incoming students. Potential alternatives include bicycle tours of campus for incoming students, info sessions at residence halls organized through Housing, integrating the information into other well-attended events during Welcome Week, such as Quad Day and the Campus Rec Block Party, or through the Bicycle Ambassadors program. Educational materials can also be better incorporated into existing welcome packets given to accepted and incoming students, and general information could be included in walking tours for visiting students. TDM should work with Public Safety, the Office of the Dean of Students, University Housing, New Student Programs, Admissions, International Student and Scholar Services, and other campus units to identify specific opportunities to reach incoming students so that bicycle education is introduced to students starting at the initial campus visit.

Educational Events

There are a number of events throughout each academic year at which the university provides and promotes bicycle safety education. The Campus Bike Center already hosts a table during Quad Day every year during Welcome Week in late August. With better planning and coordination, more can be done to improve the effectiveness of the message at this event. Every September, the Division of Public Safety hosts Public Safety Day on the Quad. At the event in 2013, TDM handed out bicycle information and registered bicycles on-site. Public Safety Day features safety information related to all modes of transportation, particularly focusing on bicycling, motorcycling, and walking. TDM should continue assisting the promotion and staffing at Public Safety Day, and perhaps incorporate more bicycle safety components, such as mechanics from the Campus Bike Center.

Also in September is Light the Night, an annual bicycle light giveaway event coordinated by MTD in collaboration with community agencies and The Bike Project of Urbana-Champaign. Since 2008, Light the Night volunteers have installed 800-1,200 sets of bicycle lights on bicycles each year free of charge. This has been proven to be effective at educating riders that using a front light and back reflector on your bicycle at night is required by law in the State of Illinois. Volunteers also share

information about the importance of following rules of the road when cycling, encourage and help cyclists to register their bicycles, and provide additional resources for riders about safe cycling behavior. The success and popularity of this event is evidence that the event could be held more than once a year, or that more lights could be given out at the event. In addition to looking for ways to expand Light the Night, the university should explore ways to use the same model for promoting the use of helmets, reflective gear, bells, locks and other safety accessories for cyclists.

During Sustainability Week in the fall and Earth Week in the spring, the university normally sponsors a bicycle safety course to be offered for free. Attendance for these courses has been relatively low, and the organizers of these events should put more resources into promotion and advertising, or toward understanding how to make the courses more appealing.

The Campus Bike Center usually offers mechanics classes ever two weeks during fall and spring semesters. These courses cost about $10 and give participants hands-on experience with various facets of bicycle repair. Each class focuses on one type of repair, e.g. shifting and derailleurs, brakes, or general maintenance.

Materials, Campaigns, & Multi-Media

Over the years, the university and its partners have conducted public service announcements, promoted safe cycling concepts through campus newsletter and local newspaper articles, and produced a number of educational materials to promote cycling and raise awareness about the rights and responsibilities of cyclists. Key partners in the community include the CATS agencies, the Champaign-Urbana Safe Routes to School (SRTS) Project, The Bike Project of Urbana-Champaign, and especially Champaign County Bikes.

The *bike@illinois* visual identity

During the summer of 2013, TDM developed a visual identity for bicycle education, under the name bike@illinois.

As the primary cycling advocacy group in the community, Champaign County Bikes (CCB) developed the C-U Area Bicycle Map. This contains a detailed map of recommended bicycle routes in the Champaign-Urbana area, as well as safety information for cyclists and tips for drivers interacting with cyclists. The routes are rated for comfort level by active cyclists in the community. The bicycle map is updated every two-to-three years, and the Office of the Dean of Students funds roughly 10,000-15,000 prints per year to distribute to students. The C-U Area Bicycle Map includes information on state traffic laws, rules of the road, safe cycling techniques, and tips such as how to use a bicycle lock and proper helmet fitting. As revisions of the map are produced, the university should continue to engage with CCB to ensure that the maps remain relevant and useful.

TDM has also worked with CCB to produce a series of educational posters highlighting important bicycle safety messages (see the examples on this page). The posters were developed out of a larger design theme created by Surface 51, who was hired to design a coordinated bicycle safety campaign. Although only the poster designs have been used to date, the university should pursue the

Safety Education Posters produced by Champaign County Bikes in partnership with Facilities & Services

production of additional coordinating materials, such as billboards and external bus boards. The university should also further promote the existing posters by updating the content, printing new runs each year, and encouraging campus units to hang them in high traffic areas such as academic buildings, residence and dining halls, campus recreation facilities, and the Illini Union.

Funding obtained from the Student Sustainability Committee for bicycle education programming has been used to purchase digital signage around campus. Digital signage can be found in many places around campus, including residence halls, dining halls, and the Illini Union. Digital signage is useful because messages can be specific and targeted. For example, signage could be shown in a residence hall that has experienced a high amount of bicycle theft. Signage advertising for programming can be displayed at strategic times to attract the most students, faculty, and staff.

Image from MTD Bee Scene Campaign

Outside of the university, a number of past and ongoing efforts have promoted bicycle and traffic safety in the community at large. In 2008, CCB 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 bicycle safety literature at over 50 public events during the campaign. CCB also raised funds to print a bus wrap saying "Same Road, Same Rights" in cooperation with the MTD, which provided the bus exterior. The "Share the Road" campaign initiated the highly-successful C-U Area Bicycle Map. Through a number of grants over the years,

the CU-SRTS Project has displayed educational information on billboards, bus cards, and interior bus posters for motorists and cyclists about roadway safety and laws. In late 2012, the MTD launched a new safety campaign titled 'The Bee Scene' targeting pedestrians, transit riders, cyclists, and drivers, emphasizing the importance of visibility and awareness. The university should build on the existing efforts and work to maximize their impact by coordinating similar efforts targeting university students, employees, and campus visitors.

Bicycle Courses

Currently, there is a limited number of bicycle safety classes offered annually on campus and in the community, taught by experienced instructors certified by national bicycle organizations including the League of American Bicyclists. As of May 2014, Champaign County has four League Cycling Instructors (LCIs) who are certified by the League of American Bicyclists to teach formal bicycle safety courses, such as Traffic Skills 101. In addition to partnering with the existing LCIs in the community to offer safety courses on campus regularly, at least one university staff or faculty member associated with the campus bicycle program or Public Safety should also receive LCI certification to be able to offer courses by university staff.

Additionally, bicycle education can be incorporated into introductory courses already offered through several of the university's colleges. Programs such as the *Share the Road* and *bike@illinois* campaign and distribution of materials at public events that have worked in the past should be repeated and improved upon for the future. Additional programs should be developed, such as special presentations at residence halls and student life forums or guest lecturers at related academic courses.

In spring 2013, the Campus Bike Center began offering bicycle mechanics classes. These should be expanded in future semesters to include one-off classes as well as multi-day series, focusing on a range of different bicycle repair and mechanics topics. This curriculum could also be incorporated into the more general bicycle safety courses proposed above.

Social Media and Online Resources

In 2010, the cities partnered with support from other bicycling groups in the area, the university, and the League of Illinois Bicyclists to produce a video titled "C-U Sharing the Road." That video is now broadcasted through various media on a regular basis, and it is available online via YouTube.[65] The university should continually identify new opportunities to produce and air educational videos, particularly those focused on educating the campus community about new bicycle infrastructure or programming. In addition to airing education videos online and through local media, existing information monitors throughout campus could regularly show short, silent videos throughout the year.

[65] http://www.youtube.com/watch?v=m3IsA8XZWko

Since 2012, TDM has worked with a LINC class to develop a social media presence under the branding *Illini Bikes*. In 2013, this was re-branded as *bike@illinois*. Using Facebook, Twitter, Reddit, and YouTube, students are helping to disseminate bicycle safety messages and promote bicycling to an audience of several hundred followers. In future semesters, TDM should continue to work with students to build this audience base, and TDM should encourage responsible bicycle usage on campus.[66] There are a large number of additional social media accounts managed by university entities such as Facilities & Services and the iSEE, as well as student groups and local agencies and organizations, which can be utilized to leverage the educational content generated for the *bike@illinois* social media accounts.

Bicycle Ambassadors Program

The Bicycle Ambassadors Program was developed to bring together students, faculty, and staff to promote bicycle safety and encouragement. Bicycle Ambassadors are bicycling enthusiasts who care deeply about bicycles, and how bicycles affect individuals and communities as a whole. Bicycle Ambassadors can be students, staff, or faculty – anyone with an I-Card. The Bicycle Ambassadors program is overseen by TDM.

Bicycle Ambassadors should meet regularly with TDM staff and help out at events such as Quad Day and New Student Resource Fairs to share bicycle information with a range of audiences. Bicycle Ambassadors plan special events to promote bicycles on campus and encourage new bicycle ridership. They promote bicycle registration and compliance with the Bicycle Code. They also educate other cyclists about bicycles to increase confidence and encourage ridership.

Currently, the Bicycle Ambassadors are planning a program to encourage incoming freshman to register their bicycles while they are moving into University Residence Halls. The program is planned to be implemented in fall 2014.

Additional Educational Tactics

In addition to merely expanding and improving the existing tactics described above, the university should also consider pursuing new, engaging, and creative tactics such as residence hall challenges and safety pledges to reach students. Best practices by other colleges, universities, and communities around the country should periodically be assessed for new ideas to be implemented on this campus. For these educational opportunities to be successful, the university must dedicate funds toward the development and execution of bicycle education. The initial investment to get many of these programs off the ground will be most significant for planning, design, and content strategy for the materials, events, programs, and resources proposed. Once developed, consistent funding toward ongoing bicycle education would allow the university to continually inform the high turnover in student population.

[66] https://www.facebook.com/Bike.Illinois and https://twitter.com/bikeatillinois

Encouragement

As bicycle programs and services are implemented on campus, additional incentives and benefits for bicycling should be implemented to further promote and encourage cycling as a transportation mode.

Campus Bike Center

The Campus Bike Center—a collaboration between the University of Illinois and The Bike Project of Urbana-Champaign—is dedicated to empowering individuals with knowledge about how to repair and maintain bicycles and encouraging mode-shift away from single-occupancy vehicles. This educational center offers hands-on experiential learning that students cannot get in a classroom. By empowering people with the ability to fix a bicycle and providing a connection between the campus and the community, the Campus Bike Center promotes bicycling, collaboration, and community spirit.

The Campus Bike Center distributes UI bicycle registration stickers; maintains the campus Bicycle Fix-it Stations; provides a central base for the bicycling community on campus; encourages mode-shift through various events and classes throughout the year; distributes and explains educational information and resources regarding bicycling; educates students, faculty, staff, and campus visitors about basic bicycle maintenance; and collaborates with campus and community partners in bicycle-related programs.

During open hours each weekday, the Campus Bike Center provides tools, parts, refurbished bicycles for sale, and dedicated volunteers to help shop members and the larger community with their bicycle maintenance needs. This is a hands-on, educational space meant to provide knowledge and experience about fixing bicycles, not a "drop it off for repair" bicycle shop.

Membership in The Bike Project at Urbana-Champaign is valid at both the Campus Bike Center and the Downtown Urbana location, and costs $25 annually for students and low-income individuals, $40 general public, or 8 hours of work-equity.

Bicycle Sharing

In 2011, the Student Sustainability Committee funded a study to assess the feasibility of a wide-scale bicycle sharing program at the university. The feasibility study was published in November 2012, and recommended that before the university pursues a public bicycle sharing system, the campus must first address its degraded infrastructure and the need for better bicycle safety education. The Campus Bicycle Plan aims to resolve these issues, and will play an important role in preparing the campus for wide-scale bicycle sharing. The final report of the bicycle sharing feasibility study recommended a three-tiered approach to answer the call for bicycle sharing in Urbana-Champaign:

- Departmental Bicycle Sharing for Employees
- Short Term Bicycle Rentals for Visitors

- Bicycle Solutions for Students and the Public

In fall 2013, a graduate student was hired through the Administrative Information Technology Services (AITS) department to work with TDM to research options for bicycle sharing programs and their feasibility for the campus.

I. Departmental Bicycle Sharing for Employees

Departmentally-owned bicycles for employees should be expanded to additional departments. There is currently an existing six-bicycle departmental bicycle sharing program maintained by the Department of Kinesiology and Community Health (KCH). There are various models which are being explored to see what would be the most effective bike share program for departments and students. The models which are being explored are do-it-yourself programs where departments would purchase a small number of bicycles, either new or used, and they would be responsible for maintaining the bicycles, either by contracting with a local bicycle shop or handling maintenance in-house. The bicycles would then be available to check-out free of charge to departmental employees during working hours. The KCH program began as a pilot for research purposes in 2008, and it continues today as a successful example of small-scale bicycle sharing on campus. This same model could be adopted by many departments in different locations around campus, and it would be available to all staff, faculty, and graduate employees of the respective participating departments. This system should be centrally coordinated by iSEE to allow for streamlined purchasing and maintenance efforts, and to make marketing the system across departments more efficient.

Another bicycle sharing option being explored is to work with an outside vendor. This program would offer departments a hands-off approach because the vendor would take care of all bicycle needs. The vendor would hire someone in the local area to take care of maintenance, redistribution of bicycles, and replacing broken or stolen bicycles. The vender would also offer liability insurance and implement a GPS system to track bicycle usage. This option could encompass many different departments and possibly be expanded to include all of campus depending on student and faculty interest.

Select departments are being approached to consider pilot programs, which will help determine the feasibility of departmental bicycle sharing programs on campus. AITS is the lead advocate for this project and will identify departments to collaborate with on this project. iSEE is an interested advocate. Additionally, Champaign, Urbana, and MTD might become involved in the project. This is an option that should be pursued because of the strong relationship between the campus and the surrounding communities.

II. Short-Term Bicycle Rentals

Although campus is not yet prepared to handle a full-scale public bicycle sharing program, there is an unmet demand for the temporary use of shared bicycles. To address this demand, the campus

should explore the possibility of expanding the existing small-scale bicycle rental program that is currently offered at Campus Recreation. Campus Recreation would first need to increase the number of bicycles available, identify space and staffing needs, and develop a business model to make the program financially self-sufficient. Once ready to launch, Campus Recreation could partner with TDM and others to market the program to visitors, conference attendees, faculty, staff, and students. If a bicycle rental solution cannot be met through Campus Recreation, alternative locations and partners for a bicycle rental facility on campus could be explored. An alternative version of this model could be semester-long rentals for students, faculty and staff, and day- or week-long rentals for visitors.

III. Bicycle Solutions for Students and the Public

Many different bicycle sharing solutions are being explored. The ideas of bicycle libraries, kiosk systems, or GPS-enabled community bicycles are being discussed as research progresses. A survey should be distributed to students, faculty and staff to evaluate bicycle sharing needs and determine whether or not there is truly a demand on campus for it. Infrastructure issues identified in this bicycle plan must first be addressed before an effective bicycle sharing program can be implemented. This final stage of bicycle sharing will remain on hold until the majority of the Campus Bicycle Plan has been implemented or is underway.

C-U Bike Month

In May 2010, Champaign-Urbana hosted its first ever C-U Bike to Work Day, in conjunction with the annual National Bike Month. The university has been involved in planning C-U Bike to Work Day each year since it started, including playing the lead role of organizing the event in 2012. Each year, TDM partners with other local agencies on the planning committee for Bike to Work Day to organize bicycle stations on campus. Student Affairs and the Campus Bike Center have repeatedly hosted bicycle stations on Bike to Work Day; Housing has donated food and beverages to the three on-campus stations each year; and in 2012, the Illinois Student Senate became the first Platinum level sponsor of Bike to Work Day with a $1,000 donation. Bike to Work Day is an important initiative to encourage people to commute by bicycle. The university should continue to engage employees and students in this encouragement effort. In 2013, the event was expanded to an entire Bike Month and included a series of events throughout the month of May. As the event grows to a larger scale and audience, the university should continue to participate and to encourage staff, faculty, and students to take advantage of C-U Bike Month activities to learn about cycling and to build new habits by bicycling for transportation and wellness.

Sustainability and Earth Weeks

Each fall semester, the iSEE hosts Sustainability Week on campus, featuring a series of events highlighting numerous sustainability efforts and concerns, both locally and globally. Similarly, Students for Environmental Concerns (SECS) hosts Earth Week every spring, in partnership with iSEE. Bicycle events at Sustainability and Earth Weeks have historically included bicycle tune-ups on

the Quad, an open house at the Campus Bike Center, free bicycle education courses, and guest speakers from bicycle organizations such as Working Bikes Cooperative in Chicago. These biannual events encourage new ridership and help foster a strong bicycling community. The university should continue to provide these resources during Sustainability and Earth Weeks and should look for ways to expand these opportunities to larger audiences each year.

Seasonal and Occasional Parking Passes

The Parking System Review Committee report states, "Campus should encourage people to use active transportation options by improving bicycle safety, facilitating carpooling and offering occasional parking passes. Alternatives to an annual parking permit would allow employees to choose active modes of transportation and decrease the demand for annual parking spaces. Updating the bicycle system on campus would boost ridership which will positively impact the health and safety of campus citizens as well as benefit the environment."[67]

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 is accustomed to paying the standard automobile ownership costs like gasoline, insurance, and upkeep, then the immediate benefit of 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.

Already there are seasonal parking permits available in non-waitlisted lots, which is simply the annual permit pro-rated by number of months. Although this option is available to any employee, it is currently not well advertised and should be more heavily promoted in combination with active transportation. Metered parking provides an additional alternative to the annual parking permit and can be paid for with coins ($1.00 per hour), cash key, or through day meter permits, with a 2014 cost of $13.00 per day.[68] Some university-owned meters also offer a credit card payment option through mobile phones. The Parking Department should expand and promote these temporary parking options through an occasional parking packet advertised to employees, which could potentially encourage employees to give up their parking permit for the summer.

Guaranteed Ride Home Program

The Guaranteed Ride Home Program would provide direct transportation home in the event of an emergency, inclement weather, or other unplanned events. With support from the MTD, this program could 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.

[67] Page 8, PSRC Recommendation V: Active Transportation http://www.senate.illinois.edu/co_psrc.pdf
[68] http://www.parking.illinois.edu/parking_items/rates

From the miPlan 2007 Student Survey report by the MTD:

> "In other markets, the guaranteed ride home program is often found to be popular in surveys and, while rarely used, provides a sense of security for some people. Twenty-nine percent (29%) said that the guaranteed ride home would convince them to use an alternative mode, or to use it more often than they now do. Another 29% said that the guaranteed ride home would address some of their concerns. These responses do not mean that these respondents would necessarily begin taking the bus, walking or bicycling because of the guaranteed ride home, but it does mean that the idea is appealing to them and can be one aspect of a program promoting the use of alternative modes."[69]

Enforcement

Enforcement of legal and safe bicycle riding behavior is an important step to educating the cycling community and normalizing responsible bicycling practices. According to UIPD Deputy Chief of Police Skip Frost, the UIPD normally begins each academic year with "educational" enforcement, consisting primarily of warnings intended to inform and educate cyclists about their rights and responsibilities. Over the course of the year, as they work to establish a culture of safety, the UIPD enacts a stricter enforcement approach through written citations for traffic violations by cyclists under the Illinois Vehicle Code, local municipal ordinances, or the University Bicycle Code.

State and Local Ordinances

According to Article XV of the Illinois Vehicle Code, with only a few exceptions, bicycles upon roadways "shall be granted all of the rights and shall be subject to all of the duties applicable to the driver of a vehicle."[70] Citations written under the Illinois Vehicle Code are normally associated with fees ranging from $50-$200, owed to the State of Illinois, and they are included on the offender's driving record. Additionally, the Cities of Champaign and Urbana each have municipal ordinances under which traffic citations can be written for cyclists. Although many of the specific rules for cyclists in the municipal laws overlap with state laws, having local versions of the ordinances allows the cities to publish local citation schedules and diversion alternatives to traffic citations, to ensure that bicycle enforcement can serve as an educational tool for the community.

University Bicycle Code

Bicyclists on university-owned paths, streets, or sidewalks are subject to the University Bicycle Code, updated and approved in May 2014. The University Bicycle Code provides enforcement options to encourage safety-oriented behavior on sidewalks, shared use paths, or dedicated bicycle paths on university property.

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[69] http://ihavemiplan.com/shared/pdfs/student_report_spring07.pdf

[70] http://www.ilga.gov/legislation/ilcs/ilcs4.asp?DocName=062500050HCh%2E+11+Art%2E+XV&ActID=1815&ChapterID=49&SeqStart=125200000&SeqEnd=127100000

In 2013, a committee was formed with representatives from the Chancellor's Office, UIPD, F&S, University Counsel, Parking, Housing, and Student Affairs, to revise the 1989 University Bicycle Code to better reflect the ongoing enforcement needs for bicycles on campus. A revised University Bicycle Code was released for public comment in September 2013. The final, revised code provides a clear and consistent method of enforcement, including warnings, citations, and educational diversion alternatives. The updated University Bicycle Ordinances Code places primary emphasis on safety-related rules for cyclists on campus property, with additional attention on non-safety issues such as bicycle registration and proper bicycle parking. The new University Bicycle Code will be well promoted throughout campus so that all students, employees, and campus visitors are made aware of it.

Diversion Alternatives

In early 2013, the Urbana Police Department began working to establish alternatives to traffic citations by bicyclists through a Notice to Appear (NTA) diversion program. Under the NTA diversion program, bicyclists would have the option to either pay the full citation fee, or pay a partial fee and attend a safe bicycling course offered through the city. In August 2013, Champaign adopted a similar program using the League of Illinois Bicyclists' Online Illinois bicycle safety quiz challenge (http://www.bikesafetyquiz.com) which Urbana is now using for their diversion program as well. In both cities, when a cyclist receives a traffic citation, they are given a pamphlet about the diversion program in addition to their citation. The pamphlet includes instructions for accessing and completing the online quiz and turning in their certificate of completion to the right authority to have citation fee waived or reduced. The diversion option is only available for the first offense in Champaign, Urbana, or the university. A second offense, regardless of jurisdiction, will require full payment. Table 31 shows the fines and diversion reductions for each jurisdiction.

This program has been adopted by the UIPD as well, and is included in the new University Bicycle Code. The university should partner with both Urbana and Champaign to coordinate consistent educational options for cited bicyclists, and all three jurisdictions should offer the diversion program safety courses as part of regular, year-round bicycle enforcement.

	Illinois Vehicle Code	Champaign	Urbana	University
Citation amount	$50-$200	$185	$100	$25-40
Amount of first citation, after successful completion of education requirement	n/a – not an option.	$0	$30	$0

Table 32 Bicycle Citation Fines and Diversion Program Discounts, by Jurisdiction

Bicycle Registration

The university manages a free (at this time), mandatory, online bicycle registration system for anyone who operates a bicycle on campus. Bicycle registration serves a number of important roles that benefit the bicycle owner as well as the university. First and foremost, it helps identify the owner of a bicycle that has been abandoned, lost, impounded, or recovered after theft. When the Parking Department collects abandoned bicycles annually in the spring or is asked to remove a bicycle that is

improperly parked, the registration system is used to identify and contact the owner of each bicycle. If the bicycle is not registered, Parking has no way of knowing who the bicycle belongs to and there is very little chance of the owner recovering their bicycle. Similarly, when the UIPD investigates the report of a stolen bicycle, having the bicycle already in the registration system with its serial number and description recorded, makes it much easier to identify the bicycle if it is found or recovered. In addition, university bicycle registration information can potentially be used to leverage funding to maintain and improve bicycle infrastructure throughout campus

Bicycle registration can also provide the university with contact information for the owners of all registered bicycles on campus—which could be utilized to communicate important policy changes affecting bicyclists or announcements about new bicycle-related infrastructure, programs, events, and resources. Although the contact information for registered bicycles has never been used for general communication with bicyclists before, it does provide the university with an important opportunity to reach anyone who registers a bicycle and gives consent.

After registering their bicycle online, each bicycle owner is notified with instructions on how to retrieve a bicycle registration sticker from the Campus Bike Center. Bicycle registration should not be considered complete until the registration sticker is on the bicycle, so as to aid in the identification of registered bicycles. In the future, the university could invest further in the registration system to purchase higher-quality stickers and to offer a service to mail registration stickers to the current address listed for each bicycle owner, rather than relying on bicycle owners to pick up their own sticker. Additionally, the university should work with the community agencies to streamline bicycle registration across the community and develop a single online system to connect the databases for each jurisdiction.

Finally, there is a significant need to better promote and incentivize bicycle registration. The program should emphasize the benefits of registering a bicycle. The current registration system is underused by students, employees, and visitors, largely because it is not well-known. In the summer of 2013, bicycle registration information was included in welcome packets for incoming students for the first time, which resulted in a significant increase in registrations. Throughout the fall 2013 semester, several events were held through the *bike@illinois* program and the LINC class to promote bicycle registration and to help bicycle owners find their serial numbers. More events like this can happen regularly in the future through the Bicycle Ambassadors, or interested student groups or classes. The university should remind & encourage every incoming student and employee to register their bicycle at the beginning of each school year, and it should continually promote bicycle registration to bicycle owners throughout the year using many communication channels including events, newsletters, posters, social media and advertisements.

Bicycle Parking Enforcement

As long as the campus has a shortage of up-to-standard bicycle parking, cyclists on campus will continue to secure their bicycles to other structures such as lamp posts, signs, parking meters, hand

railings, fences, and trees. As the available bicycle parking is increased and improved, greater efforts should be made to encourage cyclists to only lock their bicycles to designated bicycle racks. Improper bicycle parking is a visual nuisance, can pose a physical danger when blocking railings, stairs, ramps, or doorways, and it can prevent staff from doing their work when blocking parking meters, campus grounds, or building entrances.[71]

The university should consider a number of options to enforce proper bicycle parking, once up-to-standard parking facilities are available. One option would be to create a tag to notify owners of illegally parked bicycles. These could be affixed to the bicycles in violation by facility managers, volunteers, Public Safety officers, or student patrols. If a tagged bicycle is still in violation after a certain number of days, the Parking Department can impound the bicycle, and charge a fee for the owner to retrieve it. The downsides of bicycle impoundment are that it takes time and effort for staff to cut the owner's lock and move the bicycle to a secured storage space, plus the cost of the storage space itself and the destruction of the owner's original lock. They also must attempt to contact the owner, which can be impossible if the bicycle is not registered. If the owner of the bicycle does not know their bicycle was impounded for improper parking, they may assume the bicycle was stolen, and rather than being retrieved by its original owner, the bicycle will likely be abandoned.

An alternative to impounding bicycles is for authorized personnel to add an additional lock to the bicycle along with the tag, so that the owner must contact the entity identified on the tag in order to unlock their bicycle. This saves time and storage space for facility managers, and also better ensures that the owner of the bicycle is educated on proper parking procedures. The time required for the owner to get the additional lock removed from their bicycle along with the possibility of a small fee associated with the removal of the lock, will act as a deterrent for bicycle owners, and will likely change habits in bicycle pdesignated bicycle parking is not available. Instead the university should focus its efforts on providing adequate parking facilities for bicycles in those locations.

Abandoned Bicycles

Every year, the Parking Department collects between 400-600 bicycles that have been abandoned on campus at the end of the school year. Bicycles that remain parked on campus bicycle racks are marked typically with a tag that must be removed by the owner within a week's time or the bicycle will be impounded.

These bicycles are stored in a warehouse designated by the Parking Department, where they are inventoried and checked for registration. If the bicycle is registered, a notification letter is sent to the registered owner so they can retrieve the bicycle. If the bicycle is not registered, there is no way for the Parking Department to know whom to contact. If the owner inquires and is able to give an adequate description of the bicycle or proof of ownership and where it was last left, they will likely be able to retrieve the bicycle.

[71] 4/14 and 10/13 census results

Abandoned bicycles that have not been claimed within 60 days are donated to The Bike Project of Urbana-Champaign. Many of the donated bicycles are then repaired and sold or disassembled for parts. Remaining bicycles that are unwanted are normally donated to a third party nonprofit organization, such as Working Bikes Cooperative, which will repair the bicycles and send them to communities in need. Although the abandoned bicycles on campus are ultimately used for sustainable and worthy causes, the process by which these bicycles come to be collected is largely inefficient, and has led to a number of problems:

- Because the system of handling abandoned and impounded bicycles may not be well known by students, most students would likely assume their bicycle was stolen rather than collected by the university, and they do not know how to retrieve their bicycle. If the bicycle is registered, the owner would be contacted, but if not, it is unlikely that the owner would ever find out what happened to their bicycle under the current system. In addition to encouraging more people to register their bicycles, TDM should work to better communicate how to retrieve impounded and abandoned bicycles.

- Currently, the collection of abandoned bicycles only happens once annually, at the end of the spring semester, after commencement. As a result, many bicycle racks on campus contain unwanted, unused bicycles for several months throughout the year, wasting valuable space for much-needed bicycle parking. If abandoned bicycles could be identified and collected at regular intervals throughout the year, the demand for bicycle parking on campus could more closely met. The university should consider developing a system to identify and remove abandoned bicycles several times throughout the school year.

- The staff time to collect and the physical space required to store up to 600 bicycles at the same time could be greatly reduced if people were able to easily donate their unwanted bicycles directly to The Bike Project or other organization. A donation system would eliminate the need to check for registration and store bicycles for 60 days before they get donated, saving staff time and storage space. The system could have highly advertised donation events at specific times throughout the year, and an ongoing, year-round drop-off option. Such an event was piloted in May 2014.

Evaluation and Planning

While every effort has been made to ensure this plan contains a comprehensive list of the current needs and issues related to bicycling at the University of Illinois at Urbana-Champaign, continuous evaluation and planning will be needed to ensure that recommendations identified can adapt to a growing campus. With continuous evaluation and planning of bicycle improvement efforts, the university will also be able to assess whether efforts achieve the stated goals and objectives of this plan. Additionally, the Campus Bicycle Plan should be updated at least once every ten years to incorporate new guidelines and best practices, as well as the evolving needs of the campus community. The following steps are important in continuing to understand the issues facing bicycles

on campus and to help ensure that the progress toward planning a more bicycle-friendly campus does not end with this document.

Bicycle Counts

The university should initiate annual bicycle counts, both to maintain a better sense of the total number of cyclists on campus from year to year, and to identify the intersections, streets, and areas of the campus with the highest regular bicycle traffic. Consistent bicycle counts conducted annually can help track the increase or decrease in bicycling on campus. The counts will aid with budget requests and allocations and decision-making, as well as identify priority areas of the campus for infrastructure upgrades. Recommended intersections for regular bicycle counting include Fourth and Gregory, Goodwin and Illinois, and the Armory Avenue Path at the intersection with the Mathews Avenue Path.

A recurring bicycle census of all parked bicycles on campus should be coordinated each semester to track the total estimated number of bicycles on campus, as well as identifying the demand for bicycle parking. Led by TDM and CCB, the first campus-wide bicycle census count was conducted in October 2013, with the help of almost 30 volunteers, who were each assigned a segment of the campus and asked to count all the parked bicycles in their segment within the same hour. The count revealed 5,574 bicycles parked on campus, as well as a comparison of bicycle parking supply and demand by location. A student organization called the GIS Group volunteered their time to analyze and map the data. A second count conducted in April 2014 counted 4,739 bicycles.[72]

Moving bicycle counts can be conducted in a number of different ways, but consistent methodologies should be used from year to year for more accurate data comparisons. Potential methods include enlisting volunteers or students to participate in a manual counting program, or using electronic bicycle counters. CUUATS owns two electronic counters and can be hired to conduct formal counts for the university. The university should also consider purchasing its own counters as well to allow for permanent, ongoing counts at intersections of interest.

The university could participate in the National Bicycle and Pedestrian Documentation Project.[73] The project includes four count dates per year in January, May, July, and September. The organizers for this nationwide effort provide local agencies with materials and directions to conduct counts and surveys in a consistent manner, including standard dates and times for the counts, and then collects all the information centrally and makes it available to the public.

Additional Bicycle Metrics

Additional data, such as bicycle thefts, crashes, and Campus Bike Center metrics can also support bicycle-friendly improvements. To better be able to rely on this data, however, the university will need to put a greater effort into encouraging cyclists to self-report thefts, crashes and near-misses.

[72] https://icap.sustainability.illinois.edu/project/bicycle-counts
[73] http://bikepeddocumentation.org

At a minimum, the non-emergency phone number for the UIPD should be promoted to cyclists in order to raise awareness about where to call in the event of a bicycle theft or crash that occurs on campus. The required process for reporting a stolen bicycle could also be streamlined to make it easier and more accessible for victims of bicycle theft to file their report. For crashes, a self-reporting online form has been drafted and should be finalized and published following approval from University Counsel. The self-reporting crash form can be promoted to students, staff, faculty and visitors for the purpose of reporting all bicycle-pedestrian, bicycle-bicycle, and bicycle-vehicle incidents. The form can help identify and track potentially problematic infrastructure or modal conflicts as well as trends in behavior that could be improved through education. The self-reporting form would not be meant to replace UIPD official reporting processes, but would provide a simple mechanism to report incidents that may be considered too minor to officially report to the police. Promotion for the form should follow all the normal bicycle marketing and education efforts, as well as through public safety and student health services.

Surveys and Feedback

Feedback from bicyclists and those who interact with cyclists is an important part of evaluation and planning for bicycles. Although there have been many surveys as part of various transportation studies in the past, there has not been a consistent effort to collect and compare similar data over time. The university should conduct annual bicyclist surveys to gauge the needs and concerns of campus cyclists, as well as to assess the success of efforts to educate cyclists and improve relations between users of different transportation modes. This survey could be released each spring, and would ideally cover a broad range of topics, including bikeway and bicycle parking infrastructure, education, and rules of the road. By asking consistent questions year after year, survey administrators would be able to look for trends over time, and assess where progress is being made and what areas need greater efforts toward improvement. Surveys can also be given to graduating seniors and alumni to assess the long-term impact of bicycle education and encouragement efforts.

In December 2012, TDM released an online feedback form where anyone can submit campus-specific feedback about any bicycle-related topics. Initial feedback on the form has reinforced the recommendations in this plan, and the form was used to collect input about the draft plan during a four-week input period in spring 2013. Ongoing feedback collected in the future can be used to set priorities in the implementation of the plan, as well as to develop new ideas for infrastructure enhancements, bicycle safety programs, and bicycle services to make the campus more bicycle-friendly.

Campus Bicycle Coordinator

In order to accomplish the many recommendations made in this plan, as well as to stay informed of the needs of bicyclists on campus and best practices across the country, the university should invest in a full-time Campus Bicycle Coordinator position. A position description was developed in spring 2013 for this role in TDM. See Appendix E for the position description. To attract and retain well-

qualified candidates for the position going forward, every effort should be made to fund it as a permanent, full-time Academic Professional position, with benefits and recurring funding.

The Campus Bicycle Coordinator would work with the TDM Coordinator to oversee the implementation of this plan's recommendations, in addition to the development of new programs and services for bicycles. The Coordinator should be expected to stay up to date on national research and current best practices, and would be responsible for updating the Campus Bicycle Plan as needed.

In addition, the university should annually provide training about accommodating bicyclists for engineering and planning staff in Facilities & Services, as well as for bicycle-related enforcement for UIPD officers. By making a greater effort to understand the needs and concerns of bicyclists, the university's staff will be better able to meet those needs and provide the campus with the services, programs, and infrastructure that will make this a truly bicycle friendly campus.

Chapter 8. Conclusion

The University of Illinois at Urbana-Champaign has developed a strong relationship with the surrounding community, working together for increased safety, sustainability, and wellness through promotion of active transportation modes. With support and collaboration from the Cities of Champaign and Urbana, the Champaign-Urbana Mass Transit District, the Champaign-Urbana Urbanized Area Transportation Study, the Champaign Urbana Public Health Department and CCB, the university is poised to change the central core of campus into a well-connected bicycle network that is safe and predictable for bicyclists, motorists, and pedestrians.

By providing appropriate infrastructure for bicycles, along with additional bicycle programs and services, the university will encourage cycling as a means of transportation for the betterment of both the individual cyclist and the general public. The additional considerations recommended in this plan will amplify the benefits of the infrastructure improvements by increasing the level of awareness for the rights and responsibilities of cyclists, by improving relations and perceptions between cyclists and users of other transportation modes, and by promoting bicycling as a form of transportation.

Bicycling has many benefits: increased activity and health improvements for cyclists; reductions in automobile pollution and greenhouse gas emissions; decrease in cost for governmental agencies by reducing the need for road and parking lot maintenance, and for individuals by reducing the cost of commuting; and safety increases as cycling rate rises and vehicle congestion decreases on campus. The implementation of the 2014 Campus Bicycle Plan will help bring these and many other benefits to the University of Illinois at Urbana-Champaign and renew the university's standing as a national leader in bicycle friendliness.

Appendices

Appendix A. Design Guidelines

The design of campus bicycle facilities should follow recommendations in the AASHTO Bicycle Guide, and signage should follow the standards established in the Manual on Uniform Traffic Control Devices (MUTCD). Additionally, the campus bikeways should fit into local standards established in the Urbana Bicycle Master Plan, Champaign Moving Forward, and the Champaign County Greenways and Trails Design Guidelines.

Bicycle Lane Signs

Sign images from the Manual of Traffic Signs <http://www.trafficsign.us/>
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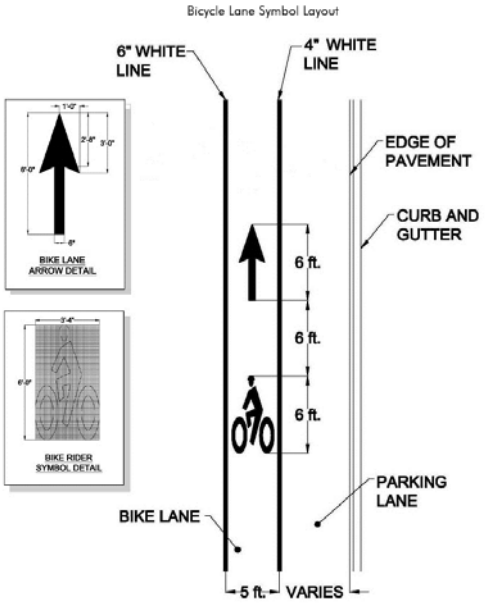
- The "Bike Lane" sign (MUTCD R3-17) should be placed at the beginning of each block along bicycle lanes within the University District.
- "Ahead" signs (MUTCD R3-17a) should be placed on a separate sign directly below a "Bike Lane" sign at the beginning of a bicycle lane.
- "Ends" signs (MUTCD R3-17b) should be placed on a separate sign directly below a "Bike Lane" sign at the end of a bicycle lane.
- Sign placement on bicycle lanes shall follow the MUTCD clearance requirements.

Bicycle Lane Striping



- On-street bicycle lanes should be a minimum of five feet wide. When adjacent to parking, bicycle lanes should be 5-7 feet wide.
- A six-inch solid white stripe should run between the bicycle lane and the motor vehicle lane.
- The white stripe should be dashed with two-foot-long stripes separated by six-foot-long breaks for the length of any bus stops along the bicycle lane.
- Bicycle lanes next to parking lanes should be separated with a four-inch solid white stripe.

- If there is a parking lane adjacent to a bicycle lane, the bicycle lane should be between the parking lane and the travel lane.

- If there is parallel parking next to the bicycle lane, the parking stalls should be marked with ticks that extend two feet into the bicycle lane to warn bicyclists to watch for opening doors. Where space allows, a striped buffer should be placed between the parking lane and the bicycle lane to move bicyclists away from parked cars.

- The minimum width of parallel parking lanes should be seven feet.

- Diagonal parking next to a bicycle lane should be back-in parking only.

Bicycle Lane Symbol Markings

- The bicycle lane symbols shall be white.

- All bicycle 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.

- Bicycle lane markings should be used as frequently as necessary to clearly delineate the bicycle lane. Recommended placement includes at major driveways, at bus stops, and at least once mid-block.

Bicycle Lanes at Intersections

- A through bicycle lane may not be placed to the right of a right turn only lane.

- The white stripe should be dashed with two-foot-long stripes separated by six-foot-long breaks for approximately 50-200 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. If there is no stop bar at the intersection, the first section closest to the intersection should be the two foot white stripe.

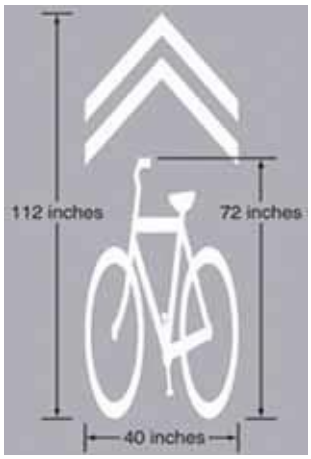
- Bicycle lane markings should not extend into an intersection.

- The bicycle lane symbol should be placed immediately after an intersection.

- No markings should extend through a marked continental pedestrian crosswalk.

Bicycle Route Markings

- The bicycle and chevron marking is known as a "sharrow" and is used to indicate a shared route with vehicular traffic.



- When on-street parking is present, each marking should be at least 11 feet from the curb or edge of pavement. When on-street parking is not present, each marking should be placed at least 4 feet from the curb or edge of pavement.
- Sharrows should be reserved for roadways with a speed limit no greater than 35 miles per hour.
- Sharrows should be placed immediately after an intersection and spaced no more than 250 feet apart.

Bicycle Route Signs

- Bicycle route signs shall be placed according to MUTCD requirements along all street segments designated as a Bicycle Route.
- Way-finding signage is preferred in addition to "Bicycle Route" signs (MUTCD D11-1).

Shared Use Paths

- Shared use paths shall be a minimum of ten feet wide.

Shared Use Path Signs

- The "Bicycles Yield to Peds" sign (MUTCD R9-6) should be placed mid block along each block of a shared use path within the University District.
- On shared use side paths, 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 clearance requirements.

R9-6

- 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.

Shared Use Path Markings

- No paint markings are required on shared use side paths. Existing paint markings on shared use paths should be removed.

Dedicated Bicycle Paths

- Dedicated bicycle paths should be designed to AASHTO standards for bicycle lanes on streets with no curb and gutter.
- Dedicated bicycle paths shall be a minimum of eight feet wide. This follows the AASHTO guidelines for a bicycle lane on a street with no curb or gutter.

Dedicated Bicycle Path Center Lines

- A four-inch wide yellow center line shall separate bicycles 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 within 20 feet of intersections to indicate a no passing zone.

Dedicated Bicycle Path Markings

- The dedicated bicycle paths will follow the marking recommendations for on-street bicycle lanes.
- The bicycle lane symbols shall be white.
- All bicycle 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.
- Bicycle 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.

Dedicated Bicycle Paths at Street Crosswalks

- Bicycle 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 bicycle crossing will be indicated with two 12-inch white parallel lines, spaced eight feet apart.
- The bicycle lane symbol shall be placed in the center of the street intersection.
- At a mid-block bicycle crossing, without a marked pedestrian crosswalk adjacent, a bicycle warning sign with downward pointing arrow (MUTCD W11-1 and W16-7p) should be installed at the bicycle crossing.
- When a bicycle warning assembly is installed to indicate a mid-block bicycle crossing not adjacent to a marked pedestrian crosswalk, an advance warning sign should be installed approximately 25 feet prior to the bicycle crossing, with an "AHEAD" plaque (MUTCD W11-1 and W16-9p).

Dedicated Bicycle Paths at Minor Walkway Intersections

- At minor walkway intersections, the bicycle 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.

Dedicated Bicycle Paths at Major Walkway Intersections

- At major walkway intersections, the bicycle 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 bicycle lane symbol shall be placed in key locations at major walkway intersections.

Other Signage considerations

- One-way streets should have "Bicycles Wrong Way" (MUCTD R5-1b) and "Ride with Traffic" (MUCTD R9-3c) signs discouraging contra-flow riders.
- Streets without bicycle lane or sharrow markings may include "Bicycles May Use Full Lane" (MUCTD R4-11) signs to inform drivers.

Appendix B. Parking Spot Removal Table

Segment #	Street/Path Name	From	To	Current Parking Configuration	# UI Parking Spots	# UI Spaces Removed	Recommendations for Alternative Parking Options
270	Sixth Street	Armory	Pennsylvania	Parallel parking on both sides, 88 permits	88	**37**	Vehicles can park on west side only, as well as lots E19 off of Peabody and E21 off of Sixth
300	Pennsylvania Avenue	Fourth	Lincoln	Parallel parking on both sides, 149 meters	149	**75**	Vehicles can park on North side only
340	Stadium Drive	Neil	First	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
520	Lincoln Avenue	Florida	St. Mary's	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 Avenue	St. Mary's	Hazelwood	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
580	Hazelwood Drive	S. Goodwin	Lincoln		12	**12**	
					Total	**235**	

Appendix C. Public Participation

Q1: General Topic:	Q2: Does your feedback involve a specific location? If so, please enter the closest address, building name, or intersection.	description of your comments to help us better understand your feedback.	do you ride a bike on campus?
Fix-It Stations	Both stations (Pennsylvania Ave and Illini Union) are damaged.	The air pumps no longer work. Please fix them!	Several times per week
Bike Lanes/Bike Paths		While there are some lanes on campus, these could use a fresh coat of paint and better signaling.	
Enforcement	PAR	Students constantly blow through stop signs.	Never
Bike Lanes/Bike Paths	Wright and Green	I commute daily through campus from my apartment in Urbana, to my workplace in downtown Champaign. It's the quickest route. However, I am constantly yielding to pedestrians walking in the bike path that runs along Green Street between Wright and Goodwin. This is a real problem for cyclists. If not for my constant wariness, I could have several times hit and injured a pedestrian (or myself) walking in the bike path.	Daily
Rules of the Road	3 & 4 way stops	I constantly see bikes going through 3 and 4 way stops without any care to the rules of the road. They go through diagonally, don't stop, and do not care to the order of traffic. I'm scared I'm going to hit (with my car) a student on a bike, especially as the evening commute is now in the dark and most bikes do not have lights. I don't have a solution to this, except maybe better enforcement.	Only seasonally
Bike Lanes/Bike Paths	6th south of Wright, maybe a few other places	the issue of getting off the bus into a bike path without being able to see if bikes are flying down the street. They could see the bus stopped to let people get off but just kept going. I just stopped coming over there. I hope it's changed.	Never

Rules of the Road	Goodwin and Oregon	Bikers do not stop at the posted signs. A bus was stopped at the intersection waiting for me to cross in the crosswalk and I was almost struck by a cyclist who ignored the stop sign while driving between the bus and the curb. This is not the only intersection where this problem occurs. Most cyclists do not seems to obey traffic laws.	Never
Bike Lanes/Bike Paths		Wow, the older bike paths are not only in such poor condition as to make them almost unrideable, but the markings are warn off. This means that pedestrians are unaware than bikes may be using the bike lane.	Only seasonally
Bike Safety/Education	U of I Quad	I have almost been run over by agressive cyclists on the quad and at the intersection of Green and Wright at least once a week. I have seen two actual accidents in that same vicinity. We need to so some real education and we need enforcement while the students learn the rules!	Several times per month
Bike Lanes/Bike Paths	Green St from Neal to Wright	Need much better bike lanes on Green from Neal to Wright, especially the Neal to 1st stretch under the viaduct before the pedestrian walkway starting between Green & Healey on 1st. Neal & Springfield not much better.	Daily
Bike Lanes/Bike Paths	yes - first and Windsor.	1. Provide a bike lane on the north side of Windsor between First and Neil. 2. There is poor drainage on the path on the south side of Windsor between First and Neil (just east of the railroad tracks). This leads to a large ice/mud puddle in the spring.	Several times per week

Enforcement		It is impossible to walk along sidewalks or get into buildings without having to dodge parked bicycles. These bikes block everything from normal right-of-ways to stairs and I have seen both able and disabled members of this campus struggling to navigate around them. Picture being blind or in a wheelchair and trying to get around a bike in your path, or trying to move out of the way of someone who needs more space when there is no where to go. Various signs posted by departments outside buildings asking people not to park bikes there go unheeded as everyone knows they are not enforced.	Several times per month
Bike Lanes/Bike Paths		The bike lanes that are adjacent to sidewalks are poorly marked at times because the paint is fading. I would name a location, but this is way too common for me to list all locations. Students constantly walk on the bike paths and when I say/scream excuse me, the give me a look like 'what the hell?' I actually had a student walk directly walk on the bike lane, look directly at me, and stop. I don't get mad when I'm on the sidewalk and students are walking all over, because that's the point. Also, bike lanes are very inconsistent and sometimes abruptly end. Again, I can't name locations because there are too many to list. I think consistent lanes would make my ride easier along with educating students where not to walk.	Almost daily

Enforcement	Morrow Plots	On several occasions I have seen university police officers lacking awareness about bicycle regulations and appropriate enforcement. For example, I have been asked to ride on a sidewalk (not a bike lane) as opposed to the road, when I was traveling near traffic speeds (> 20mph in a 30mph zone), and it would have been unsafe for me to ride on the sidewalk with pedestrian traffic. I have also seen officers park in bike lanes while trying to enforce car traffic, particularly at the stop sign by the Morrow Plots. This creates potentially unsafe situations, as it required switching from bike lane to sidewalk and back. I realize there are many cyclists breaking rules and riding unsafely, but enforcement should increase safety, not create potentially dangerous situations for those of us who do respect traffic laws and try to ride safely. I also realize there are some efforts to increase officer awareness (I've seen them training around campus), and think these efforts should be continued and expanded, as they will help improve traffic safety.	Several times per week
Enforcement	Multiple intersections around ikenberry	Multiple occasions of bicyclists and skateboarders completely disregarding traffic signals while working on campus.	Never
Bike Lanes/Bike Paths	routes from Lincoln Ave to the Armory	The much used bike path is in terrible shape on its last Eastern section; the transition across Lincoln is non-existent/dangerous. Throughout the path is much too narrow. Often bikes are parked/chained potruding into the path. The area around the Library, Greg Hall, Armory Ave is a lawsuit waiting to happen. Alternate routes (Nevada Street. or past Circe to South Library) do not go through or switch to one way.	Daily

Bike Lanes/Bike Paths	No.	The bike paths, AT VERY LEAST, need to be re-painted. People walking do not understand that they are walking in the bike path because they cannot distinguish it from the sidewalk and this is dangerous! New paint is the first thing that needs to be done	Daily
Bike Parking	DKH, Gregory, Library, Foellinger, Speech and Hearing Science, ISB	These buildings have wayyyyy too little parking for bikes or the racks are out of the way. Hence the illegally chained bikes everywhere. Take a good look at how these problems are tackled at other pro-bike campuses before acting. This problems needs to be fixed on a long-term basis.	Daily
Bike Lanes/Bike Paths	Armory	Armory has inconsistent paths for bikes with poor markings, people are consistently found walking in the path, standing in the path waiting for a bus, or riding in the wrong lane. Signs and repainting/marking the path along armory as well as leading down Wright street would greatly help efficiency.	Almost daily
Bike Lanes/Bike Paths	Undergrad Library	Bike paths through campus NEED better signage. Many people, pedestrians and bikers alike, seem to have no idea that the bike paths are bike paths. I'm thinking especially of the paths between the undergrad library and the quad. They are narrow and completely unmarked.	Several times per week
Enforcement		Please educate and enforce bike safety. All too often the bikers don't look at stop signs and bike through the cross walks - running over pedestrians that are crossing.	Never

Bike Safety/Education		I truly think that since we have such a diverse campus with students from many different states and countries that improved Bike Safety/Education for incoming students is important. Having been both a cyclist and a driver of a vehicle, I know that many students and drivers need to understand what cyclists are allowed to do and should not do and be more aware of the dangers of sharing the road. Many times I see students put themselves in dangerous situations and I believe if they had been educated about proper road rules and safety, they wouldn't be doing this. An example of a dangerous situation would be a car waiting to turn right as a light, the crosswalk has cleared, and a cyclist comes from behind that car without stopping to cross through the crosswalk (while riding the bike). I am aware enough to check my mirrors before turning, but many times I have seen near misses of accidents where the student or vehicle stops suddenly. No matter who has the right of way, cyclists need to know the dangers of certain situations they put themselves in every day they ride on the street or the sidewalk.	Only seasonally

Other:general comments about all of the sub topics	no comments pertain throughout campus area	There are no safe, meaning traffic friction separation bike paths on campus. The one by the graduate library is an accident waiting to happen. It is time for the university to significantly separate bike, pedestrian, and car traffic along with skate boarders and other means of transportation. In addition, the university must have a budget line to regularly repaint both bike and pedestrian lanes and lines. These become obliterated within 6 months of installation. Last and most important, this urging to use bikes without any form of incentive so students actually learn how to safely ride whether on or off campus area. I have actually seen students bike through the six pack and across 4th riding no handed and texting on the cell phone and doing so at times when it is dark and without lites on the bike. Simply put this is dumb on the part of the student and university to not step in and modify this type of behavior. I am simply amazed a student has not been killed yet while bike riding throughout the campus area. I can go on for pages with examples of the total disregard that students display when bike riding to rules of the road, courtesy and just plain common sense. Just today a student walked right in front of my car while talking on her cell phone. I happened to see her at the Illini Union where I had a chance to mention the situation to her. She just laughed. The campus administration has a major job changing the culture on this campus. And the job simply is not being done.	Never

Bike Lanes/Bike Paths	Armory & Wright bus stop (among others)	Better designed, more obviously marked bike paths are needed around campus in general but especially around the quad. Some bike lanes have such faded lines (or are simply not marked at all) that unaware pedestrians walk in them. The intersection of Armory and Wright,in particular, needs to be fixed; currently, bikers must share a path with passengers boarding and alighting buses. This situation becomes especially problematic during the morning and afternoon on weekdays. I'd also like to see some sort of bike path leading from the edge of the quad to Daniel St (the area near the psychology building and Kam's is a one-way street, and bikes always travel against traffic here).	Almost daily
Bike Lanes/Bike Paths		The majority of the bike paths are in need of serious repair. Repainted with paint that you can see at night with minimal light. Symbols of bikes and not just lanes. Signs that clearly express that this is a bike path and pedestrians shouldn't be walking on them. Some of the paths like the one by Huff Hall and by the Art and Design building are the same lanes used by the buses. How can bikers uses these lanes if people need to stand in the path to catch buses that come by frequently. It's worse near the library where not only do buses stop there but the paths are narrow or require extreme turns. These paths are very unsafe.	Daily

Bike Lanes/Bike Paths		Half of them cut off at random locations or make us go onto streets in the wrong direction. Behind Noyes the construction and general lack of paint forces bikers to ride into oncoming traffic. Also by the armory it just cuts off if you don't feel like turning towards the six pack	Almost daily
Rules of the Road		I think it is true that there are a lot of reckless bikers but at the same time there are certain rules that don't seem to make sense for bikers. Like stop signs. If I'm riding to class and there are clearly no cars at or near an intersection, I am not going to stop completely. Do you know how tiring that would get? That being said, if there are cars I always follow right of way, and I think it is acceptable to hold bikers to obey rules of lights at intersections	Almost daily
Enforcement		If they are going to ticket bikers for not following rules of the road, it is important to ticket pedestrians for walking in bike lanes (when there is a sidewalk right next to it) or when they just run across them without looking. It is a huge danger, and makes me not want to ride on the bike lanes.	Almost daily
Fix-It Stations		These are awesome. Although some of the tools like the bike pump especially get damaged pretty quickly. But i understand if this upkeep is too expensive to maintain. Also, I definitely smacked my head on the metal bar even after reading the caution sign...is it possible to make that sign bigger? I'm just kidding... I deserved that one.	

Bike Lanes/Bike Paths	Wohler's Hall	In many areas, the bike path is closest to the road and the sidewalks are more towards the inside. It puzzles me how in front of Wohler's Hall it is the opposite. People tend to walk on the bike paths anyway in that area because of its placement (the bike crosswalk is used as well), which may cause some issue during high traffic times.	Never
Bike Lanes/Bike Paths	Armory	The bike path in this location has a lot of potholes that make it unusable for bikes. This causes riders to go onto one side of the bike regardless of what direction they are going in. One of my friends had an accident in this location because of this and I've almost had a couple myself.	Daily
Bike Lanes/Bike Paths	Green Street, near Loomis Physics Lab	The bike lane on the North side of the street abruptly ends. I often have to dodge pedestrians and bikers alike in the vicinity of the end of the bike lane.	Several times per week
Fix-It Stations	All of them that I checked	The bike pumps were broken. Yes, each and every one that I checked.	Daily
Bike Lanes/Bike Paths		1. Please repaint all of the bike paths. Some are so faded that people treat them as sidewalks (sometimes even when bikers are clearly using them). 2. Regarding the bike paths on the road, e.g. on Gregory, I have nearly been hit by buses when riding on the bike paths in the street. 3. Also, where the bike path segments end, it would be nice to know where I should go next. As an example: It took me 4 months to realize when biking west on the north side of the Armory that the bike path continues on the west side of the armory to the 4th and Gregory intersection (I used to awkwardly bike	Daily

		on the now-sidewalk and cross to the west-side of sixth heading towards Gregory). The bike path there just ends... Also the double-bike-path lines still on Wright street near Lincoln Hall. Why? Another example, out of many many more: There is no good way of going, say, from the Ike to Allen Hall. It's a very dangerous and awkward combination of sort-of-bike-paths, sidewalks, edges-of-roads, and both (where nearer to Goodwin and Gregory on the south side there are two parallel bike paths). This, and the rest of the system, is all kinds of messed up. 4. What are the tape triangles for? Direction? Yield? ?? 4. Please, in LAS 101 or some intro course, make a point of telling people things like: A) Don't walk on the bike path. B) When biking: If you are on the sidewalk, you are a pedestrian and should walk your bike. If you are on the street, you are a vehicle and need to obey all lights and signs. C) Don't walk on the bike path.	
Bike Lanes/Bike Paths	Bike Path on North side of Green Street	First off, I understand that the local police are starting to ticket people biking on sidewalks.It is dangerous. Period. But it still happens because many are uneducated that it is wrong, and the bike paths are not exactly in the greatest shape. Many bike paths are very poorly marked, and few people know that it is a bike path. And few of those that do know it exists are careful when they cross one. I would think a new paint job on bike paths would	Daily

		help and maybe mentioning it on the tour of campus freshman receive when visiting. Just a quick 'We're pretty bike friendly here, but in order to maintain that, watch your step around bike paths!' goes a long way. Then there is the general condition of the paths. Along the bike path that is parallel with Wright Street, there are some pretty significant pot holes. Filling those up would be much appreciated. Last but not least, there is the issue of bikes, buses and pedestrians colliding. At the location indicated there's the issue of buses loading and unloading directly off of the bike path. The Engineering side Illini Union stop, while it isn't directly on the bike path, has this same issue. People don't look when a bus is unloaded. I've seen way too many close calls of bikers not watching out for people getting off the bus, or vice versa. The same goes for the bike path along Goodwin. Buses must cross into the bike lane in order to pick up passengers. It is only a matter of time until bike and bus collide in this lane. Unrelated to bike paths, I think the new larger U bike racks are MUCH nicer! Keep up the good work on those! The fix it stations are nice as well, but often I find that the air pump is unusable.	

Bike Lanes/Bike Paths	Armory and Wright	The presence of a bike lane right in the middle of the Armory and Wright bus stop makes it, in my opinion, one of the most dangerous places to cycle on campus. In general, however, I have found that the bike lanes are poorly indicated and are often counterintuitive - they start and stop in the middle of the block, with continuations that either appear on the other side of the street, in the street, or not at all with no signage indicating what has happened. Often times these continuations lead on an unwanted detour, so I end up taking the sidewalk to avoid adding a quarter mile to my trip.	Only seasonally
Bike Lanes/Bike Paths	Pennsylvania and Lincoln	Bike lanes should be established on east and west bound Pennsylvania Ave. Bicyclists frequently are forced into the curb or cut off by vehicles because the lanes are too narrow for cars and bicycles to exist side-by-side. Additionally, street parking on the southeast corner of Penn-Lincoln (on Pennsylvania Ave) often creates unsafe conditions for bicyclists traveling east on Pennsylvania, since they have to veer around parked cars on the street.	Daily
Enforcement	Goodwin Ave, Urbana	It's bad enough you set up all these stupid crosswalks for students to just walk out whenever (verse actually teaching them to cross the street), now bikes think they can us them. Bikes are NOT pedestrians, should NOT be treated like pedestrians and cops should do more to make them follow the rules of the road.	Never

Enforcement		The bike paths need to be more clearly marked and repaired. More paths would be nice as well. Enforcement of the laws regarding bike travel as well as pedestrian laws would make it safer on Campus. Clearly stating where bikes can and can't be ridden would be helpful. I am tired of being nearly run down by bikes on sidewalks.	Only seasonally
Bike Lanes/Bike Paths		I'm not sure if there are ways to fix this, but as a whole, the bike paths on campus are awkward. For instance, on Mathews, we have to cross the street to stay on the bike path. From green and Mathews down to around the main library stop on Wright and Armory, the bike path and the bus stop are at points the same thing and makes it hard for both groups to be safe going through them. But I realize those may be hard to fix just because of the way campus is set up, but if anything many of the bike lanes need to be repaved as they can sometimes be rough to ride on. Thank you for your consideration.	Almost daily

Bike Lanes/Bike Paths	4011 BIF	Riding on campus is confusing because bike lanes occasionally and inconsistently exist on sidewalks. Generally it is illegal to ride on sidewalks, so cars and pedestrians do not anticipate bikes in these 'sidewalk bike lanes.' Further, these lanes may last for only a few blocks, may not be clearly indicated, or may not exist at all, depending upon where you are. This makes it even more likely that a bike rider will ride anywhere they please. Much more important is that pedestrians often walk in the 'sidewalk bike lanes.' These can be very dangerous. Further, cars may be unaware of these lanes and may not anticipate bikes in these areas when turning into parking lots. My suggestion is to eliminate any 'sidewalk bike lanes' that parallel streets and instead make bike lanes in the street. Bikes in (nice, clean) bike lanes is where cars and pedestrians expect to encounter bikes. It can be implemented throughout campus uniformly, avoiding confusion. 'Sidewalk bike lanes' could be retained where they cut across non-drive-able areas (such as the quad).	Several times per week
Bike Lanes/Bike Paths	All bike paths on campus	The bike paths on this campus are inconsistent and don't have any specific locations. They randomly end, causing bikes to either ride in the road on the wrong side, or on the sidewalk full of pedestrians. Its extremely dangerous for pedestrians, bikers, and motorists. It would be nice if all the bike paths had a distinct boundary between sidewalk and road. As an example, the path on Green street on the Engineering side is bad because pedestrians constantly walk on the lanes, because there is no physical barrier. The bike lane on Wright st from Gregory to Green is an example of what all the lanes on campus should	Daily

		look like, including the bus stops. The bike lane on Gregory near the corner of Wright street is extremely dangerous. The bike path suddenly turns into a sidewalk where people wait for the bus. This needs to be a high priority. It would be better if the bike lane routed behind the stop, making a clear, physical difference (ie having curbs) between it, the sidewalk, and the bus stop. In general, there needs to be more paths to help route bike traffic from specific locations. I should be able to ride my bike around campus in a loop without ever leaving a path. This will help safety of all people, lower congestion, and bring a better relationship between bikers and pedestrians, who now have a very adversarial type relationship. I implore you to study the town of Amsterdam. The city revolves around bikers unlike anything I have ever seen before. Biking is so apart of the culture that at almost every stop light there is a bike only light, on top of car traffic lights and pedestrian lights. This is the direction I see best fit if this campus wishes to become much more bike friendly. Having this better infrastructure will encourage people to bike more, take the bus less, and more importantly, drive less. This leads to a more environmentally friendly campus, and bring the campus closer together.	

Bike Sharing		We need a bike sharing program at UIUC. My bike has been stolen twice and I've only been here a semester. Giving people the option to ride a bike one way, drop it off, and pick up another one later is not only really convenient, it's great to help prevent theft since a lot of these systems (my favorite is the BICING system in Barcelona) have way stronger locks than anything we as students can reasonably afford.	Only seasonally
Bike Lanes/Bike Paths	General Campus	The bike lanes are poorly designed on campus. It is hard to avoid pedestrians and some bike lanes just fade away. I believe the campus needs a complete overhaul of the bike lane system we have.	Almost daily
Bike Lanes/Bike Paths		I completely agree that bicyclists should follow the rules of the road; however, if bicyclists are going to be considered as vehicles, drivers have to also respect that. I have seen people get nearly clipped by cars going around bicyclists because they are too slow and there are not any bike lanes. The streets with bike lanes work well against cars because there is enough room for both but the streets that do not have bike lanes cause a dangerous environment for bikers. Bike lanes tend to interfere with bus stops, which can cause collisions with pedestrians and buses. Pedestrians walk in the bike paths, putting themselves and the biker in danger. If the people on this campus want to treat bicycles as vehicles, they should stop and look both ways when crossing bike paths and refrain from walking down the middle of the path as they would a street.	Several times per week

Bike Lanes/Bike Paths	Lincoln Ave	A bike path down Lincoln Ave. from Green St. south to Florida Ave. would be very useful and easy to do. There is easily enough room along the sides of the street for a bike path, so adding it should be a matter of reworking the paint. It would be useful because there are a limited number of ways to get south of campus, so this opens up a new route to Orchard downs and the Research Park. It would also connect to the existing path on Lincoln between Kirby and Windsor.	Several times per year
Bike Lanes/Bike Paths		There's already issues with pedestrians walking for extended periods down bike paths, and I think the issue is exacerbated by the fact that many of the paths have few or no markings distinguishing them. Many of the painted lines have since faded, and the paths look like simple walk ways. Common sense would dictate that paths running adjacent to wider sidewalks are meant for bikes, but people are...well, you know. In addition, bicyclists need to be held more accountable for riding safely and lawfully. I can't count how many times I've seen one blow through intersections or fail to yield to others. Actual enforcement would help cut down on such dangerous riding.	Only seasonally

Bike Parking	All campus locations	There simply is not enough bike parking on campus. The proof of this statement lies in how people are forced to park their bikes. I'm sure you notice that many people park their bikes on lamp posts, railings, and many other poles/fences. People are forced to be creative because there simply isn't bike parking where there needs to be some. If you want to encourage people to bike, and stop people from parking illegally, I implore you to add more bike racks at key locations. These locations are fairly obvious, but I will list a few: Grainger Library, Undergraduate Library, Mechanical Engineering Building, Newmark Civil Engineering Building, Engineering Hall, The Union, Follinger Hall, Gregory Hall, Foreign Language Building.	Daily
Fix-It Stations	Every single one	These are a joke. They have all been broken since they have been added. The concept of this idea is fantastic, but its obvious the university has done NOTHING to maintain them. The idea is good, but the fact that they are not maintained at all is a huge problem. Please do this, rather than add more.	Daily
Rules of the Road	everywhere, but maybe Green St. is a good example	When I am driving a car, I notice some bicyclists drive in the center of the lane, as though they are cars, at about 5MPH, forcing cars to pass them, while others stay close to the shoulder and then pass a string of cars while waiting for a light to change. Neither solution seems right, or safe. When I bike, I don't feel at all safe and don't know what the safest approach is.	Several times per month
Bike Lanes/Bike Paths	Wright and Green	The bike path on Wright is horribly maintained. I don't even bother taking it anymore, my wheels would get murderd.	Daily

Bike Parking		Can we please have more parking areas with some kind of roof? Doesn't have to be fancy, enough to keep bikes out of weather would be awesome. Thanks!	Almost daily
Bike Lanes/Bike Paths	Matthews street, south of green	The lanes are of a bad quality, and are structured in a way that practically requires I cross the street multiple times, putting myself in the way of traffic.	Several times per week
Other:Road work	1st street near the ARC	Gigantic pot holes make it impossible to stay right on first street	Daily
Bike Lanes/Bike Paths		The bike lanes are VERY poorly marked, and are extremely dangerous due to pedestrians walking in them (presumably because they are poorly marked).	Daily
Bike Lanes/Bike Paths		I think it would greatly benefit the campus if bike lines were repainted and clearly outlines as bike lanes. I ALWAYS see people walking in the bike lanes, not realizing where they are and I've definitely see near accidents on almost a daily occurrence. Also, if there were some way to make bikers aware of the rules of biking on campus, I think it would also be greatly beneficial to the safety of bikers, pedestrians, and drivers alike on campus.	Several times per month
Bike Parking	Talbot Labs	More parking is needed particularly on the East side.	Daily
Bike Parking	Seibel Center	More parking is needed!	Daily
Bike Parking		Please remove abandon bikes in a timely fashion.	Daily
Bike Lanes/Bike Paths		The discontinuous nature of the separate bike paths is bad. It encourages riders to ride bridge the gaps by riding on narrow sidewalks, the wrong way on streets, etc. In places bike paths are needed, but they need to be better marked and leading to and from somewhere without numerous dead ends.	

Enforcement		Yes, cyclists, drivers and pedestrians need to follow the rules and the enforcement effort seemed to help.	
Bike Safety/Education		Cycling Savvy was really nice. It is great that it is offered for free almost every semester! Perhaps the on-bike portions (Parts 2 and 3) could be offered for a discount through the university.	
Bike Safety/Education		In my experience, bicyclists frequently ignore the rules of the road when it is convenient for them. It is not uncommon to see them speeding through stop signs, going from the sidewalk to the street in the middle of a block, even crossing the street randomly and without warning. I believe these people (most of whom appear to be University or high school students) are not fully aware of how dangerous this is. I am always very careful driving through campus because I know there are always pedestrians and bicyclists around, but there are times when I barely avoid making contact with someone on a bike, either because they make an illegal move without warning, or because they are nearly invisible in the dark.	Never
Bike Lanes/Bike Paths	Green and Mathews	The MTD bus stop at Green and Mathews (and probably other places too) unloads passengers directly in the bike path. This creates a hazard for pedestrians and bikers. I had a friend break his arm after a passenger step out without looking.	Daily
Bike Lanes/Bike Paths	Stoughton Avenue by the Uni High	There is a barely marked bike path along Stoughton Avenue just north of Uni High. Is it a bike path or is it not?	Daily
Other:List of ideas		Visit here for a long list of problems with infrastructure: http://bicyclefriendlyuiuc.tumblr.com/	Daily

Bike Lanes/Bike Paths		The bike lanes are bad and are not continuous. There need to be more of them.	Daily
Rules of the Road	Green and Wright	Very few people on bicycles obey the rules of the raod when traveling on the road. I hardly ever see them stop at intersections. very few of them signal thier intent to turn. Lane usage doesn't seem to matter to them either. If they approach the red light I see them jump a curb then cross on the crosswalk or bike path	Never
Bike Lanes/Bike Paths	Oak St and St Mary's Road	The 'bike lanes' on both the north and south sides of the stretch of St. Mary's Road between Oak Street and Neil Street are basically just one long pot hole. I ride this route every weekday spring, summer and fall.	Daily
Bike Lanes/Bike Paths		If you can afford it, take a trip to UC Davis and see how they handle everything. That is the definition of a bike-friendly campus. I know that it isn't possible to do everything they've done, but what would help immensely is more bicycle lanes, and better notification/enforcement for what bikes can and can not do, and what their rights are.	Almost daily
Bike Lanes/Bike Paths	Coordinates according to Google Maps: 40.100981, -88.224474	There is a giant hole in the middle of the bike path here that has existed for several years.	Daily
Bike Parking	Siebel Center	There is never enough bike parking at Siebel Center.	Daily
Bike Lanes/Bike Paths	Wright Street between Green and Armory	The bike lane on Wright St. definitely needs to be repainted. Walking students constantly walk into the bike while texting lane without even a glance in either direction. I have not hit anyone while biking, but there have been a few close calls. I feel that by repainting the curb and the stripes, students will take more notice and be a lot safer on the street.	Daily

Rules of the Road	Florida Ave, Lincoln and Illinois, Lincoln and Green	I used to live for three years on High st and commute to campus daily. I have witnessed multiple accidents and near accidents on the corners of Lincoln and green and Lincoln and Illinois from drivers turning on red into bikers going straight. This could easily be avoided by enforcing the existing no turn on red signs with a cop or a camera and putting them in where they are not already present. Additionally I am now living further south and must commute across both lincoln and florida avenues to vet med each day. On many occasions I have been cut off by cars, even when signalling in good time for a response to cross florida. I once even had a car go around me on the left as I was waiting to turn L onto orchard ave., they even passed into oncoming traffic to do so. I find that driver seem to think that those of us who bike there have no right to be there, even though we are, and need to do so. More space for bikes (such as a delineated bike lane) and better signage about bikes using the lane, most specifically for left hand turns would be easy and could help many of us get to and from class each day.	Daily
Enforcement		If an driver of a automobile runs a stop sign, drives down the wrong side of the road law enforcement would not hesitate to pull over and write tickets. You can not drive across campus without witnessing 6-10 laws being broke by bicylist and our law enforcement does nothing.	Only seasonally

Bike Lanes/Bike Paths	308 Oakvale Dr	Bike paths: many are in disarray, poorly marked, or cross intersections dangerously. In order for these to be useable, potholes should be fixed, they should be marked so that pedestrians don't wander into them and so that cars are aware of where bike crossings are. Bike lanes: Do not design bike lanes within the 'dooring zone' of parked cars. Period. This is incredibly dangerous for the cyclists riding there. On roads with on-road parking, sharrows should be used.	Daily
Enforcement	1201 Philo Rd	I greatly appreciate the recent efforts to curb unsafe behaviors by cyclists, such as biking the wrong way down a one-way street, blowing stop signs, and biking without lights. This makes these safer for those of us who bike and obey traffic laws, as well as for motorists.	Daily

Rules of the Road	Goodwin and Green (on Goodwin bike path)	Hello, I bike on the goodwin bike path every day and my feedback is about clarifying the correct behavior when there is a bike path and cars are stopped at the traffic light. The signals are unclear and I could not find clear information on what is the expected behavior. When cars are stopped at the traffic light, can bike use the bike lane to pass cars or should they stop in line with the rest of the cars? I believe that bikes should go in line with cars to avoid problems when a car turns right and a bike comes at the same time, but because the bike lane is generally open and no signals are present, bike generally skip the line creating a potentially dangerous situation. Maybe more clear marking would simplify the situation. Thanks!	Daily
Bike Lanes/Bike Paths	The bike path in front of the main library	The bike path runs directly in front of a bus stop, and this causes increased difficulty for both bikers and walkers trying to exit / enter the bus. There is always confusion, and this results in injuries, accidents and a bad rapport between cyclists, walkers, bus drivers and other bystanders. Some precaution should be taken with this part of the bike path - either redirecting cyclists, or alerting both cyclists and bus riders as to the danger of this particular crossing.	Daily

Campus Bicycle Shop	no	Now that the bike shop has FT personnel I think it would be beneficial to provide some bike repair classes, bike commuting classes for the University. I think more employees would bike commute if they had some basic bike repair classes. It seems like potential bike commuters worry 'What happens if I have a flat tire?' A basic bike repair class would help to alleviate some of potential bike commuters concerns.	Only seasonally
Rules of the Road		Based on my experience both as a pedestrian and a cyclist (until my bike was stolen), cyclists around C-U have zero regard for traffic rules. Cyclists never stop at red light or stop sign or before a crosswalk. Never. They don't even slow down or show caution. They never show signals when turning, either. I have witnessed quite a few very dangerous situations during the few months I have lived here and I, too, have only narrowly avoided getting hit by a bike. Also very few bikes have equipment that is (I believe) required by the law - a bell and when it's dark also lamp. I don't know what the solution would be. Enforcement is of course needed, at least.	
Rules of the Road	Virginia and Pennsylvania & Nevada and Gregory st	Bicyclist dart out of both of these locations with no regard for cars, pedestrians or the rules.	Never
Bike Lanes/Bike Paths	Multiple locations throughout campus	Bike lanes and paths are not well maintained or marked. This creates conflicts and confusion for both bikes and pedestrians in heavy traffic areas	Daily

Rules of the Road	Sharrows or shared roads such as Stadium Drive, Gregory Drive, Oak Street from Gerty Drive to Armory	Automobiles are routinely attempting to pass within inches of bikes and forcing them into parked cars in rush to merge back into narrow lanes prior to completing pass. Speed limits are not being observed by cars and stop signs are not being obeyed by many bicyclists. Education and enforcement are required for both groups.	Daily
Bike Lanes/Bike Paths	quad, bit concept applies all over campus.	We need to clearly define pile lanes as separate from pedestrian walks, and then enforce the usage. Behind Foelinger, there are bike lanes that have been there for over 30 years, but the markings are fading. I see pedestrians walking in the bike lane and bikers on the pedestrian walk. On the main quad walks, there are no bike lanes. In would be nice if I could walk across down the side walk and not get run over by a bike, and I'm sure that the considerate bikers would appreciate a place where they could ride and not have to watch for pedestrians.	Never
Rules of the Road	Biker etiquette in general	Someone mentioned to me recently that bikes should not be allowed on campus at all; they felt that bicyclists constituted a hazard to not only pedestrians but bikers themselves. As someone who does ride a bike I will have to say that I agree that bikers do create a hazard to themselves and pedestrians on the UI campus. Biking behavior toward pedestrians and automobiles has become absolutely atrocious on this campus. I did notice a vast improvement after the enforcement of traffic laws by the police. I think enforcement should continue; not only does enforcement make the roads safer for everyone, it	Only seasonally

		could even be an additional revenue stream for the UI. (The great State of Illinois is broke as I am sure you are aware) Given the congestion on this campus the last thing needed is more cars. Bikes do belong on campus. Personally, I have noticed a visible increase in bicylces being used on campus (a good thing). In my opionion, more education is needed on what is expected and what behavior will not be tolerated. Maybe some type of University outreach program to grade schools to instill safe biking skills would be beneficial???	
Fix-It Stations	green and sixth, behind penn station	the bike pump was unusable (the locking mechanism was broken). It made the walk to/from home with a flat frustrating.	Daily
Bike Lanes/Bike Paths	daniel street between wright and 6th	daniel street goes one way, and there's no bike path to let bikers bike against traffic toward GSLIS. thus i always have to improvise something weird, and once i got a warning from a police officer just for biking one block in the street against traffic. but there's no good option! it would be great if there was a bike path on the sidewalk there.	Daily
Bike Lanes/Bike Paths	1st Avenue	I really appreciate the addition of bike lanes on 1st. This enables me to bike past campus without going through the high traffic pedestrian areas. This significant improves safety and convenience. The Goodwin bike lanes are also wonderful.	Several times per week

2013 Draft Campus Bike Plan		I am disappointed by this plan. the lack of urgency suggests there is little interest in actually making changes. This suggests that half of the pathways will be up to standard in 7 years, and it will take 17 to fully standardize them. as a student who will not see the long term benefits, this frustrates me. this COULD be done quicker, with appropriate support. I do support the stronger indication of bike paths with signage and paint. the painted yield signs (white triangles) need to go- they are more confusing than helpful. Additionally, I think it would be beneficial to alert pedestrians when they are entering/ crossing a bike path. though I am not educated to know if a grade separation or plastic posts would help. I think education is a key component that can be brought into existence as soon as next year.	Daily
Bike Lanes/Bike Paths	Wright street between Armory and Green	The stripes on the bike lane definitely need to be repainted.	Daily
Bike Lanes/Bike Paths	everywhere	I read the Campus Bike Plan, and for me the most important (and possibly easiest) item to address is maintaining the bike paths. I strongly agree that we have many bike paths on campus, but the paint is worn off and they are indistinguishable from pedestrian paths. This causes pedestrians to spread out and occupy both pedestrian and bike paths, leaving cyclists to dangerously navigate zig-zagging between pedestrians.	Almost daily

Bike Safety/Education		In Poland, where I used to visit my family every summer, I was required to get a bike license if I wanted to ride my bike on roadways. Nowadays, I use this knowledge on campus. If there is anything I've noticed in my years of riding a bike everywhere, it's that narrow, physically separated bike paths (like on Wright St.) are more dangerous than bike lanes. This is mostly because there is nowhere for bicyclists to swerve if a pedestrian or something else is in the path of said cyclist. Most of the time, pedestrians don't bother to look both ways when crossing these dedicated bike paths. A better education for both pedestrians and bicyclists would do wonders.	Daily

2013 Draft Campus Bike Plan		Three items: 1. I strongly agree with the comments on pp. 97-98 of the draft plan that the campus must revisit policies about indoor bike parking. To the extent possible, indoor storage areas need to be pursued. It is not clear why the campus continues to object to indoor parking in private spaces provided bikes do not block access or cause problems. 2. At present there is unsightly gravel ground cover on the east side of Wright Street between Green and Springfield. This space should be considered for a major north-south bike corridor. 3. With respect to the intermittent parking issues raised on p. 107, certain high-capacity lots (e.g. B4, E14, etc.) could be equipped with a 'day pass' dispenser so university employees and students could swipe an I-card and obtain a one-day parking pass, initially at a reduced rate. This need not be free, and could have a rising scale, such that if used more than a number of times per term (e.g. 10 times a term), the fee rate goes up to match meter or regular campus one-day rates.	Several times per year
2013 Draft Campus Bike Plan		Thanks for making the 2013 Draft Plan available for review! It seems thorough, detailed, and nicely presented with photos and diagrams. I appreciate the section explaining the needed changes to prepare for bike sharing, and the current alternatives and ways we might increase bike sharing programs in the mean time. Keep up the great work!	Several times per year

2013 Draft Campus Bike Plan		1. Short-term priorities should include not only striping and signage, but at least some simple and basic repairs. As a bicyclist on campus, I frequently ride on pedestrian paths because of the poor condition of the bike paths. 2. Striped bike lanes on streets so arranged that parking lies between the lanes and the curb pose serious dangers. This arrangement exposes bicyclists and those in cars to the risk of collision when a vehicle door is opened. Although the law does not require bicyclists to remain in the striped lanes, yet I believe the lanes encourage drivers to suppose that bicyclists should remain in the lanes and thus leaves drivers unprepared for situations in which bicyclists have cause to leave the lanes. Many vehicles, particularly but not exclusively those making deliveries or letting passengers on or off, are large, and frequently park or stand along the curb but at the same time block the bike lanes altogether; they thus force bicyclists further into the street. Finally, as lanes approach intersections, and the solid striping gives way to either 'dashes' or no striping at all, it becomes unclear to both drivers and bicyclists just where bicyclists should best place themselves, and that uncertainty will foster collisions.	Daily

2013 Draft Campus Bike Plan		Overall what you are doing is fantastic, and long overdue. The Armory Avenue Path is of highest importance to me. My daily commute uses the following segments: #726, 220, 210, 70. The paths are in bad shape, and there are numerous conflicts with poorly placed drains, signs, pedestrians, and driveways. The portion #70 along Mathews is especially bad in terms of conflicts with people using the parking meters, with drivers pulling in and out of parking lots without looking for bikes, and with pedestrians wandering all over the bike path. Intersections: the existing bike paths seem to have been designed by someone who does not ride a bike. In particular, the corners are often constructed awkwardly, with right angles instead of curves. For example, just try riding west on #726 and taking the fork to the right where it heads northwest. The camber is wrong, the angle is wrong, and there is a big drain cover in the middle of the bike path.	Daily
Bike Lanes/Bike Paths	Orchard Downs	Have you considered a pathway extending along the E-W roadway between PAR/FAR, crossing Lincoln onto Delaware to Orchard, and the proceeding on Orchard into Orchard Place, Orchard Downs, and Hazelwood Court?? This route has minimal auto traffic as riders would only cross main arterial streets instead of competing with cars on them. I rode this route daily as a grad student in the late 1960s, and found it an enjoyable commute from Orchard Downs to campus.	Never

Bike Lanes/Bike Paths		It is all appreciated but unless the univeristy roads are fully maintained and swept clean regularly the roads will continue to be hazardous to bikes. The bike lanes near the edge if the road have small pot holes, progressive cracks, or gavel/broken glass that make little or no difference to car travel but lead to terrible bike riding conditions. Take a look at first street or Gregory for an example.	Several times per week
Rules of the Road/Enforcement		I am tired of almost being run down by speedy bike riders on the Quad. They go too fast, and try to worm through the pedistrians. The Quad should be a ride-free zone, and it should be enforced with tickets. Someone is going to be seriously injured, and the University will enevitably be sued if we don't get a handle on this!	Never

Bike Lanes/Bike Paths		The 2013 plan in general was good with a focus on restoring a connected bike route system. I think this was mentioned in parts throughout the plan but I would like to add support for the notion that on street bike lanes are best suited for lower speed streets and streets with a lot of closely spaced cross streets and busy parking lot entrances. On higher speed streets and streets with few intersections between cars and bikes, I much prefer off-street shared use paths in low pedestrian density areas or off-street dedicated bike paths in higher pedestrian density areas. For instance, off-street bike paths along Wright Street work well because there are few cars heading east from University to Armory due to the University buildings and limited cross streets. On street bike lanes are worrisome on streets with speeds over 30 because of the suction that can occur as cars pass much faster than the cyclist and because the injury is much greater if the car drifts into the bike lane or the cyclist veers into a traffic lane to avoid an obstacle.	Only seasonally
2013 Draft Campus Bike Plan		The proposed Campus Bike Plan map looks amazing! But I really do feel strongly that you need to keep the cross-quad bike path OPEN. I know it's difficult sometimes, but otherwise the quad bisects the campus too much in a north-south direction. We need a way to ride bikes across this area. I think one path is enough, but there really does need to be at least ONE.	Several times per week

2013 Draft Campus Bike Plan	appendix c: segments 520 & 530	The proposed to-be-removed parking spaces are adjacent to the Complex Sports Fields. Typically every parking space is used whenever those fields are open (evenings and event weekends). The onerous parking rules for Lot F23 (Closed to non-lot parking 8 am Monday through 5 PM Friday) prevent use of the only other nearby lot during weekdays. Solution: Change lot F23 to more standard 8am to 5pm lot-sticker parking, which would not affect lot users greatly and provide the needed extra parking spaces.	Several times per week
Bike Lanes/Bike Paths		there's lots of stuff in your current & proposed documents, so please bear with me if my suggestion has already been addressed. my suggestion is to provide a bike-way along first street as we leave campus to savoy. that is, having a dedicated pathway along first street between windsor road and, i believe, curtis road. this dedicated pathway could be placed onto what appears to be U.I. agriculture property. as it ways, this first street corridor is very heavily traveled with motor vehicles, and in my mind, not feasible for riding a bike (at least not safely).	Never
Rules of the Road/Enforcement	Campus-wide	Not all, but many bicyclists either don't know or don't care about rules of the road or safety. They weave in/out of traffic, both vehicle and pedestrian, don't signal, don't look, expecting vehicles to be able to stop in an instant.	Never

2013 Draft Campus Bike Plan	Henry Adm.	While I can appreciate the need for a better system, my experiences on a regular basis with bikers is extremely frustrating. I personally have been struck twice by a bicyclist - once coming out of our office door when on Green St. and crossing John by a cyclist heading the wrong way on the one way street. Since at Henry, have witnessed two ambulance calls involving pedestrian downed from cyclist weaving and bobbing through the main Quad (one was a broken leg). My side mirror was scratched when a cyclist came up on my passenger side and turned at no turn on red sign. Better controls are what is needed mostly around campus. A college campus should have students/employees able to bike, but rules and regs need to be followed and if not, citations need to be written to both the cyclists and the motorists. A different mindset needs to be in place as to entitlement by the bikers. Pedestrians should not have to yield or constantly be on the look out for a cycle when walking campus sidewalks.	Never
2013 Draft Campus Bike Plan		I think you should raise safety considerations in your rankings of priority. For example, S Lincoln is one of the highest bike accident areas from what I remember, but is only medium priority. And there is currently no connectivity to Orchard Downs, yet a pathway in front of the president's house is low priority.	Almost daily

2013 Draft Campus Bike Plan	Matthews along quad, and Illinois & Goodwin	I'm glad to see so much strong endorsement of the idea that bike lanes should generally be on roads rather than mixed higgledy-piggledy in with pedestrian areas, but with that in mind I'm a little disappointed that Matthews Avenue along the quad and the Illinois Street path connection are both left as study areas. I think these two areas are central campus's prime poster children for the hazards of trying to keep bike paths kinda-but-not-really separated; they're certainly the places I personally experience the most bicycle-pedestrian conflict. Matthews Avenue is clearly a difficult case--high traffic, lots of existing structures, usually gridlocked, no room for new dedicated lanes--and I realize there may not be any obviously good solutions. The draft identifies Matthews as a heavily used corridor and gives numerous examples of how badly the current mixture of bike paths functions, yet does not even include any substantive discussion of what possible approaches are being studied. That absence weakens my estimation of the University's commitment to bike safety. In the case of the Illinois street connection, I don't think there's any question: Krannert is large and blocks all eastbound routes between Illinois and Oregon. The Illinois street path is the only tenable route from the main quad to points east; I agree that the current path is dangerous for cycles, but there is simply no alternative route.	Almost daily

Bike Lanes/Bike Paths	Mathews Ave., between Green and Springfield	The shared-use path along Mathews seems incredibly unsafe as of right now. The bike lane markings on this portion of the path are almost completely gone, and pedestrians typically do not stay clear of the path. Additionally, as one bikes north, the path switches from the east side to west side of the road at Boneyard Creek. There is no dedicated bike crossing lane, merely a crosswalk. Cyclists cross at this intersection diagonally while pedestrians usually cross perpendicular to the road, creating a potentially dangerous crossing. Additionally, although Mathews has low, one-way traffic, the frequent use of on-street parking along the corridor often makes it difficult for cyclists to judge whether they will need to brake for approaching cars at the street crossing. I would press for the Mathews Avenue corridor improvement to be moved to a higher priority level because of the poor current design. On a side note, I feel that the current network coverage favors the areas of campus south of Green Street. I'm happy to see the proposed plan featuring so many improvements to the bike network on the engineering campus. Please do make these improvements, and soon!	Daily
2013 Draft Campus Bike Plan	Many locations.	Please see http://uibikeplan2013.notlong.com for my comments and recommendations concerning planned on-street bicycle facilities.	Almost daily

2013 Draft Campus Bike Plan		I am happy to see the university taking an organized approach to bicycle planning and incorporating complete streets. Although I have a fond place in my memory of the old narrow dangerous bike paths, it probably is sensible to see them go away.	Several times per week
2013 Draft Campus Bike Plan	No	Many of the plans are contingent on the City of Champaign or Urbana's plans. Beyond the statement, "This plan intends to connect and coordinate the campus bikeway network with facilities constructed and planned in the municipal jurisdictions of Champaign, Urbana, and Savoy.' very little is detailed in the plan on how the University will work with the cities to improve bicycle safety. Since cyclist safety is reliant on all three entities coordinating efforts, this seems like it should consume a much larger portion of the document than it already does. A plan for efforts to work with the cities should be elaborated upon. The scope of possibilities for potential funding could be expanded. At the end of the document, new enforcement for cycling may be added to the student code. If revenue is generated from this enforcement, it should be allocated to improving safety and education of cyclists. Because campus is concerned with sustainability, and thus mode shift, increasing the price of parking spaces owned by the University could allocate funding. The bike plans of the three entities (the University, City of Champaign, and City of Urbana)should be overlaid in order to determine if any proposed changes are not coherent. Plans should be proposed for study areas instead of waiting for observations. Specifically, Matthews avenue is a strong area of concern and deserves having a plan generated	Daily

		despite possible barriers to implementation of that plan.	
2013 Draft Campus Bike Plan	University High School/Siebel Center	I want to get a specific issue mentioned and will provide additional general comments separately. There is no single good route across the north end of campus between Springfield and University. Current construction has closed 2 of the 3 usual routes, from Main to White or along Clark Street (using a combination of sidewalk and multiuse depending on direction). Once construction is completed, the 'Main Street' route is still unsatisfactory as it negotiates curbs and sculpture in several locations as well as intersecting pedestrian traffic in less than ideal locations. Similarly following the Clark street route, one has to negotiate sidewalk to work your way around one way streets and sidewalk entrances. For years, I've found the best access by using Stoughton to be the least complicated. With the essential removal of the bike lane on the one way section between Siebel and University HS, I'm forced to use the sidewalk. However, this is an 8 foot sidewalk that can be designated as MultiUse. Frankly, this access needs to be maintained as there are a great number of students that cross through here between the supermarket at 4th and the Urbana side. Note the bike racks at the SW corner of Seibel and just north of DCL. Bicyclists aren't going to use Main Street to access these various locations, they are going to go by the most direct route. If a contraflow lane can't be established on Stoughton, please setup the 8 foot sidewalk as the bike route through here with signage at both ends (and an improved ramp at the western end of this block).	Almost daily

Bike Lanes/Bike Paths	Those dual-lanes between Goodwin and Wright	I'm mainly focused on the viability of these paths. First of all, the cement used to construct them is cracked and subsiding haphazardly along the whole route. Not does this pose problems on wet days when the path floods (and then accumulate sediment when they dry up) but it is physically damaging to the bikes that ride over them. The sharp bumps can ruin rims, pop tubes, and in some cases throw a cyclist. Second of all, they're VERY narrow. This poses a few problems, especially because pedestrians walk in the lanes constantly and some students insist on riding in the wrong direction. There is no tolerance distance built in to protect cyclists in the event of an issue, thus driving them into the mud or into the bike rack or fence or hedge (depending on where we're looking). It's this kind of situation which characterizes basically every path on campus. I would really appreciate some effort put into the upkeep of the paths if you aren't going to replan the pathway network. The best solution, however, would be a re-do of the network plan with the addition of more pathways. I'm actually doing a connectivity study in the geography department of the pathways on campus and I've found that only 9.5% of buildings are accessible by designated pathway, and this technically excludes FAR/PAR. It's ridiculous, and dangerous not only for cyclists but for pedestrians too: if pathways are unridable then bikes are legally able to ride on the sidewalk, and cyclists in pedestrian traffic cause a lot of problems for both parties. Please solve these problems, and soon, before someone gets seriously injured.	Daily

2013 Draft Campus Bike Plan	Florida Ave between Lincoln and Race	The segment on Florida Avenue between Lincoln and Race is a really important connection for Orchard Downs residents and for commuters getting over to the Race Street sidepath. I see that the draft plan says, 'this segment passes the University Presidents House and there is a highly manicured front lawn area for that building. The solution for this connection is undetermined.' Somehow we need to work towards a solution here and work on how to adjust the shrubs and manicured lawn, if necessary. The safety of Orchard Downs residents and Southeast Urbana commuters is more important than a few shrubs. Let's work together on making this key connection.	Only seasonally
Bike Lanes/Bike Paths	Wright and Green	Wright and Green is a terrible intersection for bikes. Bikes must switch from dedicated bike-lane use to street use or vice versa in a majority of the possible scenarios (10 out of 11 to be precise). It is unclear in those cases whether the pedestrian traffic controls or the automotive traffic controls apply.	Daily

Appendix D. Sources

American Association of State Highway and Transportation Officials. (2012). *Guide for the Development of Bicycle Facilities, Fourth Edition*. Washington, D.C.

Block, Ben. (2009). *In Amsterdam, the Bicycle Still Rules*. Worldwatch Institute. Retrieved from http://www.worldwatch.org/node/6022.

Brady, John et al. (2011). *Effects of Shared Lane Markings on Bicyclist and Motorist Behavior*. ITE Journal. Retrieved from http://www.ite.org/membersonly/itejournal/pdf/2011/JB11HA33.pdf

Campus Area Transportation Study Policy Committee. (2012). *A Resolution Setting Forth CATS'S Commitment to Complete Streets*. Retrieved from https://icap.sustainability.illinois.edu/files/project/49/CATS_Complete_Streets.pdf

Champaign County Regional Planning Commission. (2008). *Urbana Bicycle Master Plan*. Urbana, IL. Retrieved from http://www.ccrpc.org/bike/report.php

Champaign-Urbana Urbanized Area Transportation Study. (2004). *Long Range Transportation Plan 2025*. Urbana, IL.

Champaign-Urbana Urbanized Area Transportation Study. (2010). *Greenways and Trails Design Guidelines, Logos and Signage*. Urbana, IL.

Champaign-Urbana Urbanized Area Transportation Study. (2012). *University District Traffic Circulation Study*. Urbana, IL. Retrieved from http://www.cuuats.org/udtcs/documents

Champaign-Urbana Urbanized Area Transportation Study. (2008). *Urbana Bicycle Master Plan*. Urbana, IL.

Champaign-Urbana Urbanized Area Transportation Study. (2011). *University of Illinois University District Crosswalk Markings and Signage*. Urbana, IL.

Clark, H. M., & Barlow, S. (2007). *UIUC Student e-Survey Report*. miPlan. CJI Research Corporation & Transit Marketing, LLC.

Clark, H. M., & Barlow, S. (2007). *Champaign-Urbana area Employee e-Survey Report*. miPlan. CJI Research Corporation & Transit Marketing, LLC.

Federal Highway Administration. (2009) *Manual on Uniform Traffic Control Devices (MUCTD)*. U.S. Department of Transportation. Retrieved from http://mutcd.fhwa.dot.gov/htm/2009/part9/part9_toc.htm

League of American Bicyclists. (2011). *Feedback, Bicycle Friendly University Application, University of Illinois at Urbana Champaign*. Washington, D.C. Retrieved from:

https://icap.sustainability.illinois.edu/files/project/509/bfu_fall2011_UniversityofIllinoisUrbanaChampaign.pdf

LSA Catalyst Consulting. (2008). *Champaign Moving Forward.* Champaign, IL.

Martin / Alexiou / Bryson. (2007). *University of Illinois Multi-Modal Transportation Study*. Raleigh, NC. Retrieved from https://icap.sustainability.illinois.edu/files/project/49/MultiModalTransportStudy.pdf

Martin / Alexiou / Bryson. (2008). *University of Illinois Transit Analysis*. Raleigh, NC.

Moritz, William. (1997). Survey of North American Bicycle Commuters: Design and Aggregate Results. Transportation Research Record: Journal of the Transportation Research Board, 1578.

National Center for Transit Research. (2013). *Commuter Tax Benefits: Qualified Transportation Fringe Benefits Summary Table.* Center for Urban Transportation Research at the University of South Florida. Retrieved from http://www.nctr.usf.edu/programs/clearinghouse/commutebenefits/

Reynolds, Conor CO, et al. (2009). *The Impact of Transportation Infrastructure on Bicycling Injuries and Crashes: a review of the Literature.* Environmental Health 8, 47. Retrieved from http://www.ehjournal.net/content/8/1/47

TY Lin International. (2011) *University District Bike/Transit Safety Study.* Retrieved from http://www.cumtd.com/content/pdfs/bike/ui_bike_transit_august_2011.pdf

University of Illinois Board of Trustees. (2006). *Enterprise Database Warehouse (EDW).* Urbana, IL: University of Illinois.

University of Illinois Board of Trustees. (2007). *Urbana Campus Master Plan.* Urbana, IL: University of Illinois. Retrieved from http://www.uocpres.uillinois.edu/resources/uiucplan

University of Illinois Board of Trustees. (2008). *Facilities & Services Strategic Plan.* Urbana, IL: University of Illinois.

University of Illinois Board of Trustees. (2012). *Facts 2011-12: Illinois by the Numbers.* Urbana, IL: University of Illinois. Retrieved from: http://illinois.edu/about/overview/facts/facts.html

University of Illinois Board of Trustees. (2012). *Student Code.* Urbana, IL: University of Illinois. Retrieved from http://admin.illinois.edu/policy/code/Full_Code_web2012.pdf

Appendix E. Campus Bicycle Coordinator Position Summary

Primary Position Summary

The Campus Bicycle Coordinator will be responsible for supporting the facilities and services which make the University of Illinois at Urbana-Champaign a Bicycle Friendly University. The coordinator serves as an advocate for bicyclists on campus, and works toward improving the infrastructure, programs, and services that are available to cyclists. The Coordinator will partner with various entities across the campus and the community to focus on all five E's of bicycling: education, encouragement, enforcement, engineering, and evaluation. Responsibilities will include building internal and external partnerships, coordinating projects, securing funding, implementing education programs, working directly with the campus community, and conducting research on best practices.

Major Duties and Responsibilities (detailed duties):

1. Promote and encourage bicycling as a mode transportation on campus
2. Advocate for the rights and responsibilities of campus bicyclists
3. Manage the development and updates to the Campus Bicycle Plan
4. Monitor implementation of the Campus Bicycle Plan, measure and track progress toward stated goals and objectives
5. Work with TDM Coordinator to help initiate bicycle infrastructure projects, ensuring their timely implementation, and communicating with stakeholders
6. Engage student groups, faculty, staff, and volunteers to participate in bicycle events, education, and outreach
7. Develop and implement bicycle-related educational and promotional resources, programs, campaigns and events
8. Seek funding for bicycle infrastructure, programming, and services, through grant writing and other means
9. Work with the Campus Bike Center staff to improve and promote cycling culture on campus
10. Work with UIPD to promote safe and responsible cycling through education and enforcement efforts for campus cyclists
11. Coordinate the logistics for donating bicycles abandoned on campus from the Parking Department to The Bike Project of Urbana-Champaign
12. Explore future improvements and new programming opportunities such as bicycle sharing for the campus
13. Select, train, and manage student interns to assist in various bicycle-related initiatives for course credit
14. Represent the university in regional bicycle planning and advocacy discussions, including Champaign County Bikes, the Champaign County Greenways and Trails Technical Committee, and the City of Urbana's Bicycle and Pedestrian Advisory Commission
15. Other duties as assigned