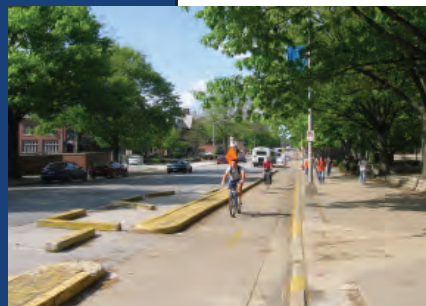




ILLINOIS

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN



Multi-Modal Transportation Study

FINAL REPORT

March 2007

prepared for

The University of Illinois at
Urbana-Champaign

by

**MARTIN
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SECTION 1: INTRODUCTION

Background and Project Approach

The University of Illinois at Urbana-Champaign (UIUC) is a thriving campus of more than 50,000 students, faculty and staff. Uniquely situated within two cities (Urbana and Champaign), the University is the region's economic and cultural center. Like many college campuses, the University of Illinois faces tremendous transportation challenges. The essence of the challenge is finding ways to move people to and around campus as safely and efficiently as possible, without compromising personal safety, the quality of campus life, the environmental setting of the campus, and the academic mission of the University.

Pedestrian safety issues have been at the forefront of the University and community consciousness for several years. Most recently, two students were killed while walking on campus, and numerous others have been injured. This study aims to enhance pedestrian safety on and around campus through a two-pronged approach: 1) a series of system-level improvements to promote the use of alternative modes and reduce modal conflicts, and 2) street-level improvements specifically targeted at improving pedestrian safety at intersections and street crossings. These approaches are based on the recognition that making the campus safer and friendlier for pedestrians requires a broad vision of the entire campus transportation system, and possibly fundamental changes to the way people expect to get to and around campus.

Project Purpose

The project's Steering Committee defined a three-fold purpose for this study:

1. To provide specific solutions to make the campus safer and friendlier for pedestrians.
2. To provide guidance for making transportation and safety improvements and changes over the coming years.
3. To address the broader transportation needs of the campus.

These general purposes created the framework for the study's analytical approach and final recommendations.

Key Issues

As the project purpose was developed, a number of key issues were identified specific to this study. These key issues are summarized as follows:



- Creating a safe, walkable, and healthy campus environment.
- Reducing conflicts between pedestrians and other modes of travel.
- Becoming less reliant on the automobile by encouraging the use of alternative modes.
- Moving automobiles out of the campus core.
- Improving bicycle safety.
- Enhancing the efficiency and effectiveness of the transit system.

Stakeholder Involvement

Stakeholder involvement was key in developing the Multi-Modal Transportation Study. A Steering Committee composed of University staff, faculty, students, and a representative of the University Police Department, as well as representatives of the cities of Champaign and Urbana and the Champaign County Regional Planning Commission, met monthly to review work and provide valuable input and feedback. University administrators were also consulted.

A campus Open House was held on November 1, 2006, at the Illini Union to solicit input from the University community. Nearly 200 faculty, staff, students and visitors attended and provided written and verbal comments. Written comments from the Open House are summarized in Attachment 1.

Other Studies

A number of other ongoing, and completed, transportation studies in the Champaign-Urbana area informed this *Multi-Modal Transportation Study*. Campus studies include the *University of Illinois at Urbana-Champaign Master Plan* (ongoing), *Campus Parking Master Plan* (2001), and the *Comprehensive Crosswalk Assessment* (ongoing) being prepared by the Department of Civil Engineering at UIUC. Other ongoing studies regionally include the *Campus Area Transportation Study* (CATS), Champaign-Urbana Mass Transit District's *Mobility Implementation Plan* (miPLAN), the City of Champaign's *Champaign Moving Forward*, Champaign County's *big.small.all*, and various corridor studies and regional transportation planning projects that are part of the Champaign Urbana Urbanized Area Transportation Study (CUUATS), the transportation entity of the Champaign County Regional Planning Commission. The University is an active partner in all of these projects.

SECTION 2: OBSERVATIONS

General Observations

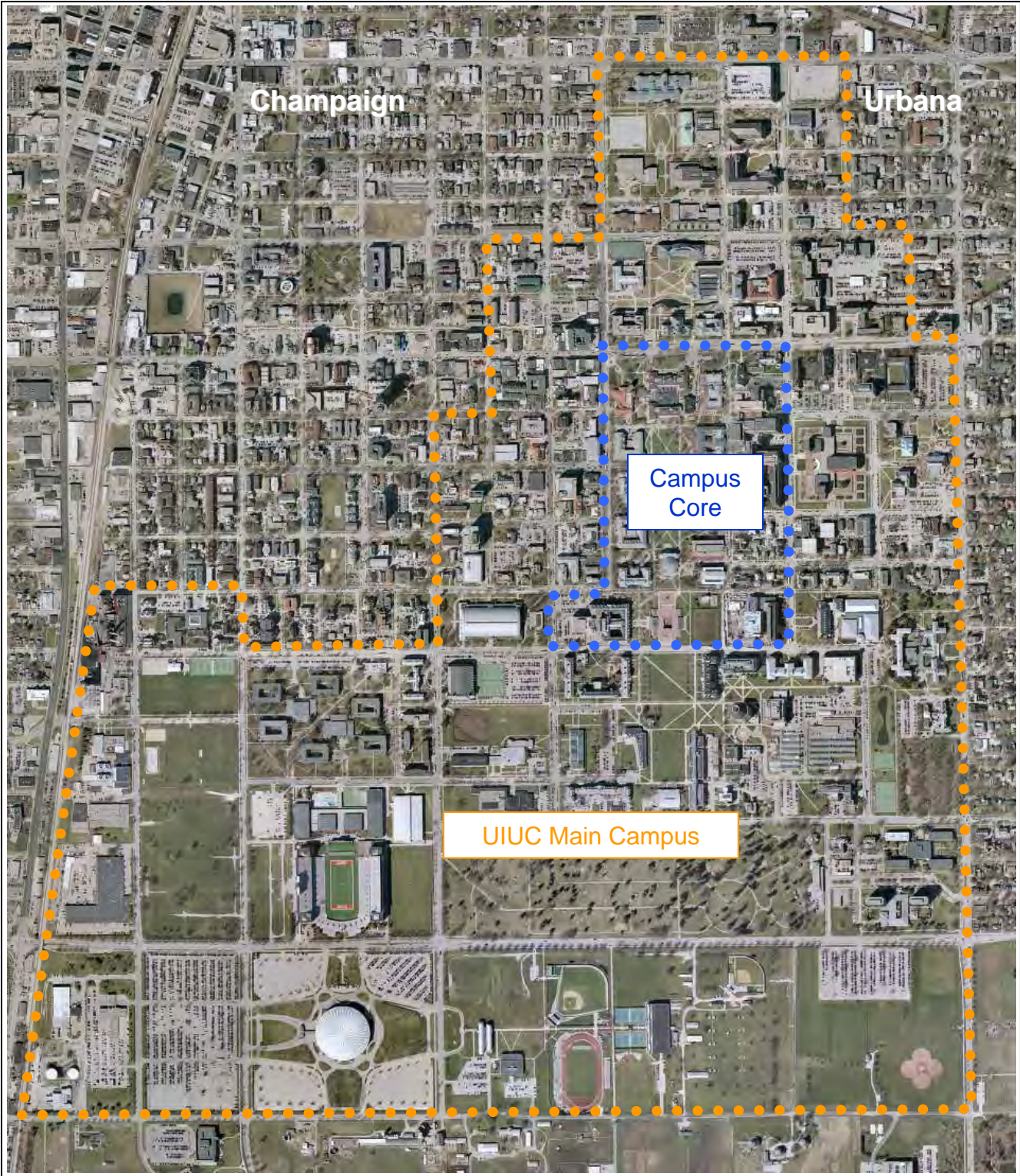
The student population at UIUC has increased steadily over the last 5 to 10 years, but this growth trend is not expected to continue. The University does not plan to grow much past the current student population of approximately 42,000. The *Campus Master Plan* calls for most new buildings to be located within the existing campus boundaries, and further development of the research park in the southern part of campus is envisioned and planned.

The campus' location, split between two adjoining cities (Urbana and Champaign), presents a number of challenges (see Figure 2.1). One of the major challenges is coordination of improving and maintaining local streets, which are separately owned by either the University, Urbana or Champaign. The *Campus Area Transportation Study* (CATS) outlines a comprehensive plan for improving streets and intersections in the University District. While a number of projects have been implemented, lack of funding has made full implementation difficult. Another related challenge is that the University does not employ a full-time transportation planner. Because of the high-level of coordination required to carry out local transportation planning with the two cities and the mass transit district, various University staff members currently split transportation planning duties. Many major universities employ a full-time transportation planner. The person in this position becomes the single point-person for local transportation planning, has expertise in University transportation planning issues, advocates for University transportation needs, and also can administer programs to encourage use of alternative modes of transportation.

Pedestrian Environment

The UIUC campus, with over 40,000 students, is inundated daily with pedestrians. One-quarter of undergraduate and graduate students live on-campus, making walking to and from campus an easy and efficient mode choice. Also, the main campus' relatively compact urban form (compared to other large, suburban campuses), contributes to its walkability.

Pedestrian safety has been a primary concern on campus for a number of years. Recent fatalities and accidents have heightened concern and led campus and community planners to plan for, and implement, numerous pedestrian safety improvements, principally as part of the *Campus Area Transportation Study* (CATS). The University has also undertaken a *Comprehensive Crosswalk Assessment*, surveying campus pedestrians and drivers about specific problematic safety locations, as well as gauging attitudes about sign types and other safety treatments. The final results of the *Comprehensive Crosswalk Assessment* are anticipated to be published after completion of the *Multi-Modal Transportation Study*. Preliminary data and



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**Figure 2.1:
Campus Study Area**



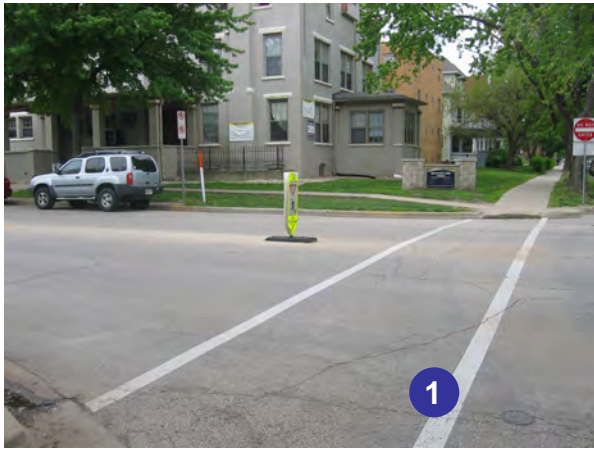
information from the assessment was useful in developing this study.

General observations about the campus pedestrian environment include the following, some of which are illustrated in Figure 2.2:

- The campus currently has a number of different crosswalk types. The different types, coupled with the bike path crossing markings, creates confusion and ambiguity at intersections and crossings.
- Crosswalks are typically poorly maintained leading to decreased visibility.
- A number of different pedestrian signage types are in place throughout campus.
- A variety of innovative pedestrian treatments have been implemented at spots on campus, such as the lighted crosswalk on Springfield Avenue at the Grainger Library and supplemental in-street pedestal signs.
- The campus bike path system creates numerous conflict points with pedestrians where the paths cross over sidewalks, and in front of building entrances. Conflicts with motor vehicles are common at driveways.
- Jaywalking is common throughout campus. Lack of landscaping between the sidewalk and the street, and lack of other channelization treatments, makes it easy for pedestrians to cross streets at virtually any point.
- The sidewalk system in the interior of the campus core serves pedestrians well and is safer than the sidewalks and crossings at the edge of the campus core, mainly because fewer vehicles pass through the campus core, reducing the number of potential conflict points.
- Intersection improvements, such as the all-pedestrian phase signals at Sixth St/Green St and Wright St/Green St, implemented as part of the CATS, function well and give pedestrians priority at key locations. The pedestrian crossing times designated for these signals, especially at Wright St/Green St, may be inadequate for safe crossing, however.
- In addition to improving safety, these intersection improvements also enhance the visual environment at those locations.

Parking

Like most campuses, parking is a prime commodity at UIUC. Faculty, staff and students want to be able to park as near to their campus destinations as possible at minimal cost. Not surprisingly, the spaces closest to the campus core are in highest demand, with long wait lists for many of these lots and decks, while many of the lots on the periphery of campus are underutilized. Many of the prime



Common Pedestrian Safety Issues

- 1 Different crosswalk types
- 2 Poor crosswalk maintenance
- 3 Conflicts with bikes and transit
- 4 Jaywalking; lack of channelization
- 5 Ambiguity and conflicts at intersections

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Figure 2.2:
Pedestrian Safety Issues

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parking lots circle the campus core (see Figure 2.3).

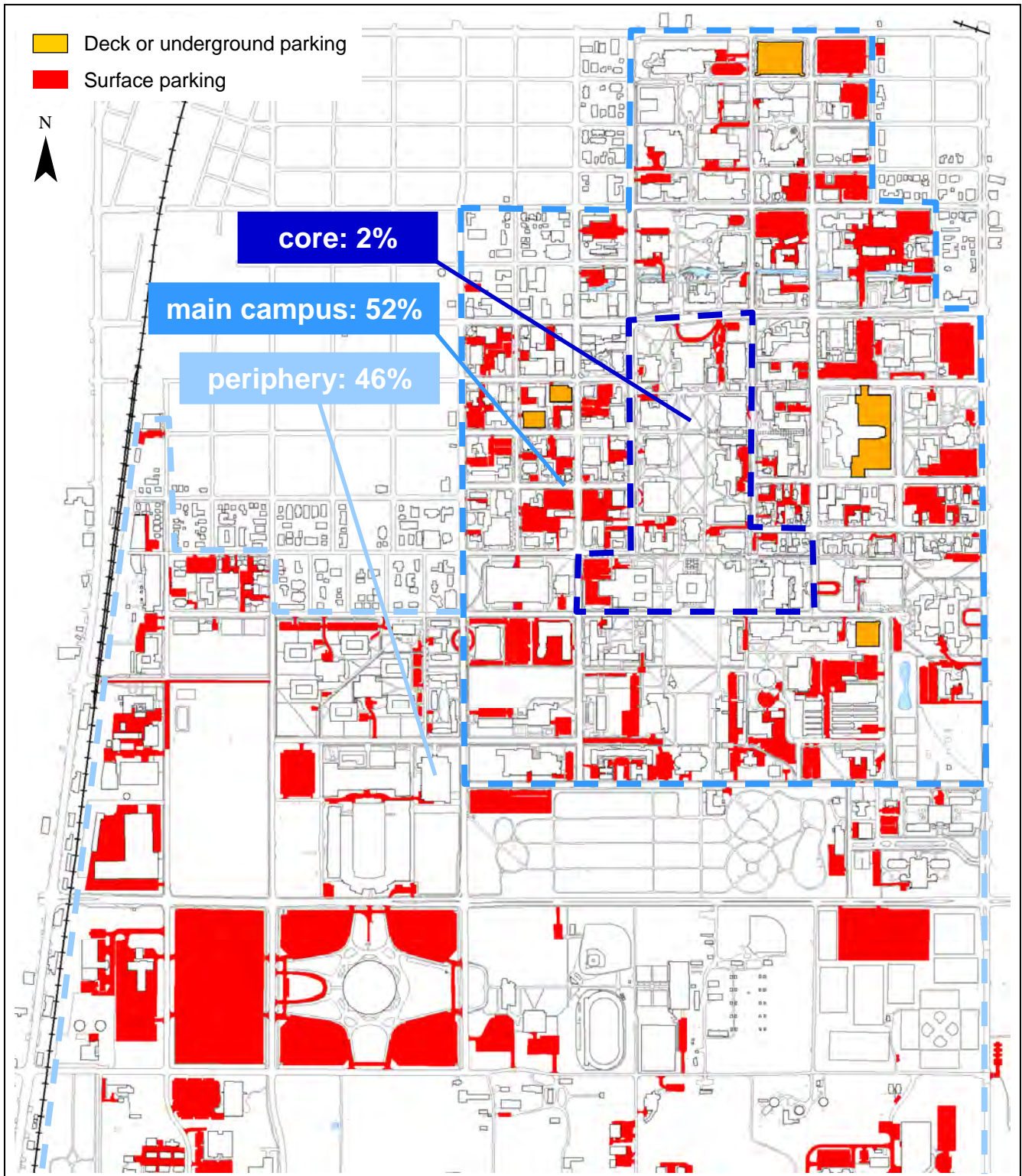
There are currently over 16,200 spaces serving a total campus population of approximately 50,000, for a ratio of .32 spaces/person. This ratio is about average compared to other Big 10 schools (for example, Univ. of Michigan = .43; Ohio State Univ. = .37; Penn State Univ. = .31; and University of Wisconsin, Madison = .22).

Of the 16,200 spaces, 12,750 are rentals (8,000 for faculty/staff, 4500 for students), and 2,300 are metered spaces. Five parking decks serve the campus, including the recently opened North Campus Parking Deck on University Avenue with 1,500 spaces. Resident students typically park in one of two lots on the south side of Kirby Ave/Florida Ave (Lots E14 and F23), and a portion of Lot E14 provides shuttle parking. The Athletics Department owns and operates a significant number of spaces around Assembly Hall for athletic and special event parking. There are currently no park-and-ride lots on or off campus. Finally, the cities of Urbana and Champaign own streets within the University district and own and operate parking meters for on-street parking spaces.

Figure 2.3 divides the campus into three general parking areas: the core, main campus, and the periphery. Just 2 percent of existing spaces are within the central core of the campus, but 52 percent of spaces are within the main campus area surrounding the core. The periphery of campus holds 46 percent of existing parking spaces. As the campus continues to build out according to the *Campus Master Plan*, as many as 50 percent of the more than 8,000 spaces in the main campus area will be lost to new buildings and open space. These spaces will have to be relocated to the periphery area of campus.

Other general parking observations include:

- The *Campus Parking Master Plan* recommended construction of a number of new parking decks and several sites have been considered (the North Campus Parking Deck was recently completed). A deck on the site of Lot E14 has also been discussed.
- Parking permits are distributed for specific lots, rather than general zones or categories. The benefit of this system is that it cuts down on people driving between parking lots on campus, “hunting” for spaces. The drawback is that it is less efficient than zone-based systems; permits cannot be over sold at the same rate as zone-based systems, causing more vacancies.
- Parking permit fees are uniform across permit type, without regard for location. For example, a faculty/staff permit costs the same in the campus core as it does on Oak Street. The result is wait lists for the high demand lots. Many universities are adopting market-based pricing systems that price permits in the high-demand lots significantly higher than permits in the lower-demand lots.



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**Figure 2.3:
Existing Campus Parking**

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Streets and Traffic

The UIUC campus, and the areas immediately adjacent to it in Urbana and Champaign, are laid out in a grid pattern, providing for efficient vehicular movement (see Figure 2.4). As noted previously, one of the ongoing transportation challenges for the University is that the University, the City of Urbana, and the City of Champaign all own and maintain streets within the campus boundaries.

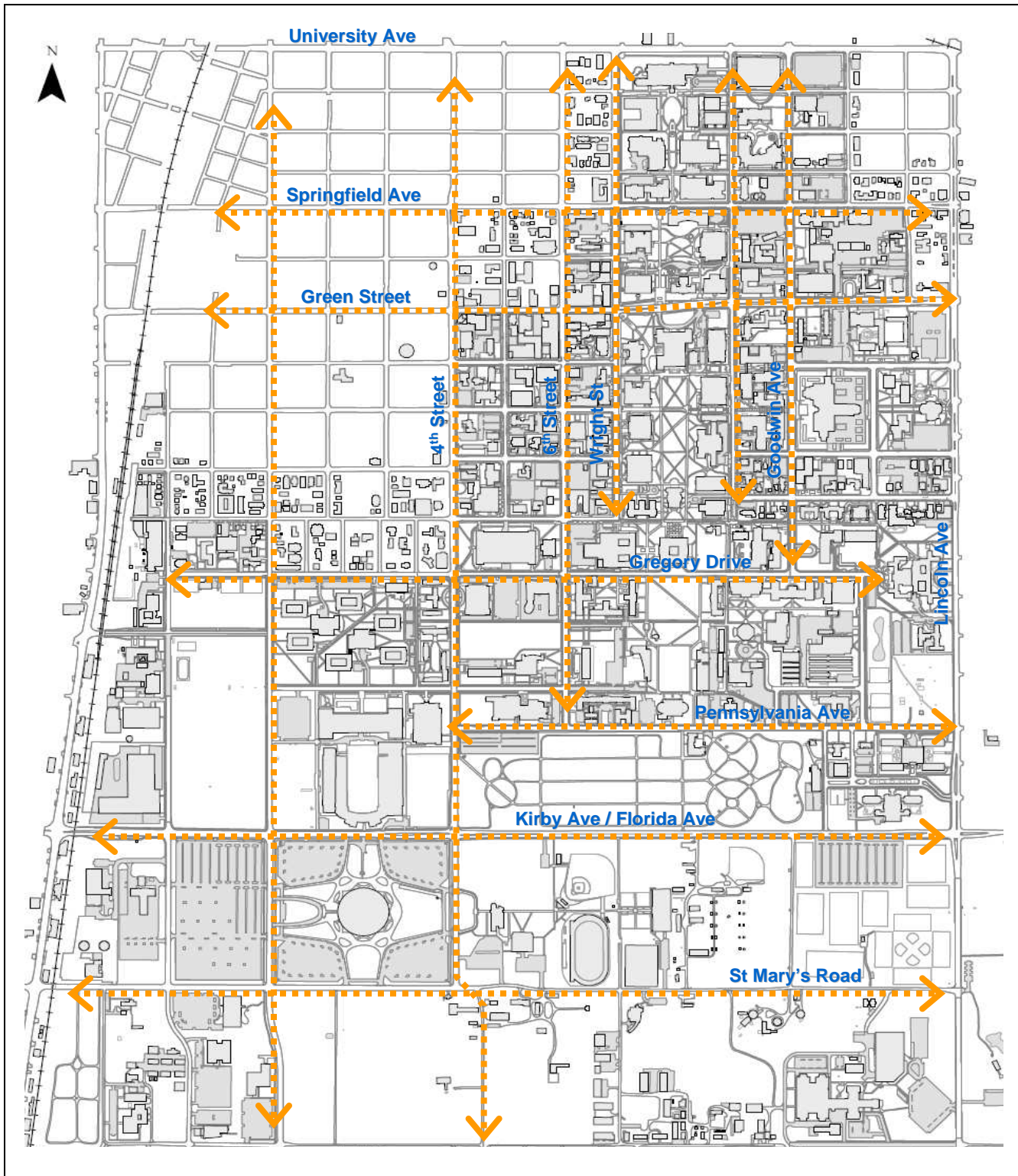
In general, serious traffic congestion was not observed on and around campus. Low levels of service at major intersections is common at many major college campuses. Many communities accept lower levels of service in exchange for maintaining the character, aesthetics and environment of campus streets. Also, many streets and intersections with lower levels of service are safer and friendlier for pedestrians and bicyclists. A 25 mph speed limit was recently adopted for the University District.

Currently, Gregory Drive is the only street on campus that is closed to motor vehicle traffic throughout the day (although buses and emergency and service vehicles are permitted). It is not gated, however, so violations are common throughout the day. The University should consider a gate system to formalize the street closure.

Lincoln Avenue, in the City of Urbana and on the eastern edge of campus, was restriped and narrowed to three lanes (two travel lanes and a center left turn lane) during the summer of 2006. Representatives of the University and the City of Urbana agree that the new lane configuration is functioning well and could serve as a model for other roadway improvements.

Green Street is the principle east-west route through campus, connecting the cities of Champaign and Urbana, and is one of the most congested areas of campus. Improvements were recently made to the section of Green Street between Wright Street and Mathews Street to enhance pedestrian safety, including median and signage improvements and repainting crosswalks. Green Street west of campus in Champaign is a principle commercial corridor and carries very high pedestrian volumes. Two intersections (Sixth Street and Wright Street) were improved with intersection bumpouts, pavers, streetscape amenities, and all-pedestrian phase signals as part of the improvements recommended by the CATS. However, these intersections are not marked and signaled properly, according to the *Manual on Uniform Traffic Control Devices* (MUTCD) published by the Federal Highway Administration, to allow for diagonal pedestrian movements across the intersection during the all-pedestrian phase. Concerns have also been raised that the crossing timing may not be adequate to allow for safe pedestrian crossing.

The University currently has a policy prohibiting semi-trucks and large delivery vehicles in the campus core. The policy is not regularly enforced, however, leading to traffic congestion and safety concerns, especially on already heavily-trafficked streets, such as Green Street.



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**Figure 2.4:
Campus Street Map and
Grid System**

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Transit

The transit system serving the campus community is operated by the Campaign-Urbana Mass Transit District (MTD). Students, faculty and staff of the University have unlimited access to all MTD routes and services with proper identification. There are four campus routes that provide high frequency and volume service to students: 21 Quad/21 Quad Limited; 22 Illini; 23 Shuttle West; and 26 Pack. These routes connect student residence halls, and other residential clusters to the heart of campus. In addition, over 80 percent of MTD's weekday routes serving the greater Champaign and Urbana area run through campus, many of them going down Wright Street and Green Street (see Figure 2.5). MTD routes access many points on campus in response to passenger (student) demand. As many as 70 buses per hour pass through Wright Street during weekday hours, and nearly all streets on campus carry buses throughout the day.

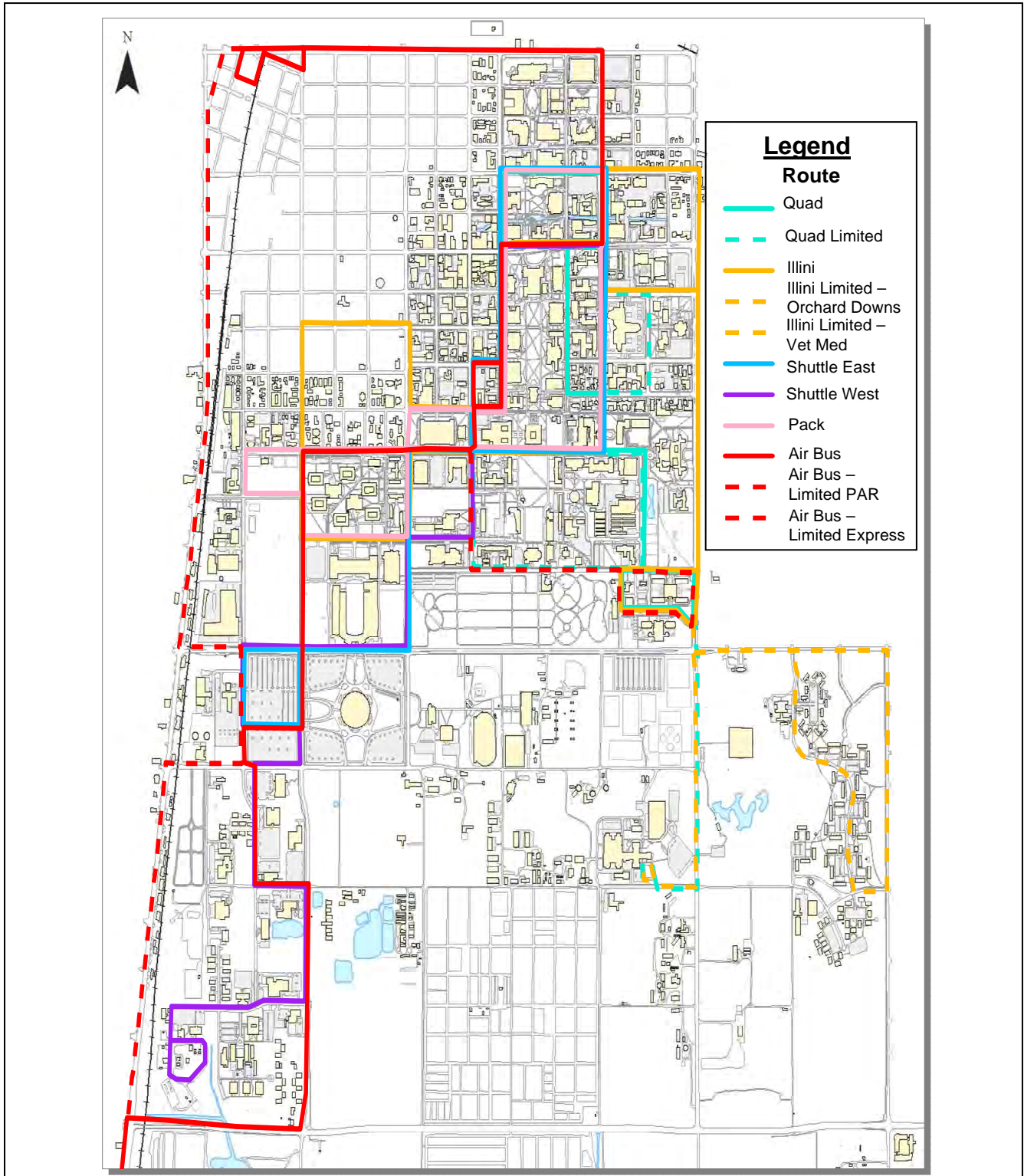
The high number of routes serving, and passing through, campus results in a number of duplicated routes. For example, the 23 Shuttle East Weekday route coincides almost exactly with the northern half of the 1 Yellow route (see Figure 2.6). These areas of duplicated service are opportunities to condense routes and reduce the number of buses passing through campus.

Because of the high number of routes passing through campus, and the variety of customer-serving destination points, there is a high concentration of bus stops on campus, especially around the campus core. Figure 2.7 shows the relative number of boardings and alightings at campus stops. Many of these stops are underutilized. Opportunities exist to cluster stops to enhance system efficiency and reduce the number of conflict points with pedestrians.

Bicycling

The University has a unique bike path system that was initiated more than 30 years ago and has been further developed since. While bike paths on college campuses are common, the bike path system at UIUC is somewhat unique in that it is a two-way facility. Paths typically run parallel to the street and are located either between the street and the sidewalk, or between the sidewalk and campus buildings. Most paths are intended for exclusive bicycle use and are not intended for shared use with pedestrians. There are currently only a few hundred feet of on-street two-way bike paths on campus, located on Virginia Drive in Urbana. There are no standard one-way on-street bike lanes or designated shared road facilities on campus at this time.

While the campus bike paths are well-used, there are a number of safety issues inherent in the system that impact not only the safety of the bicyclists, but of pedestrians and motorists as well. The main safety issues with the bike path system are:



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**Figure 2.5:
Existing MTD Transit Routes
(Campus Area Routes)**

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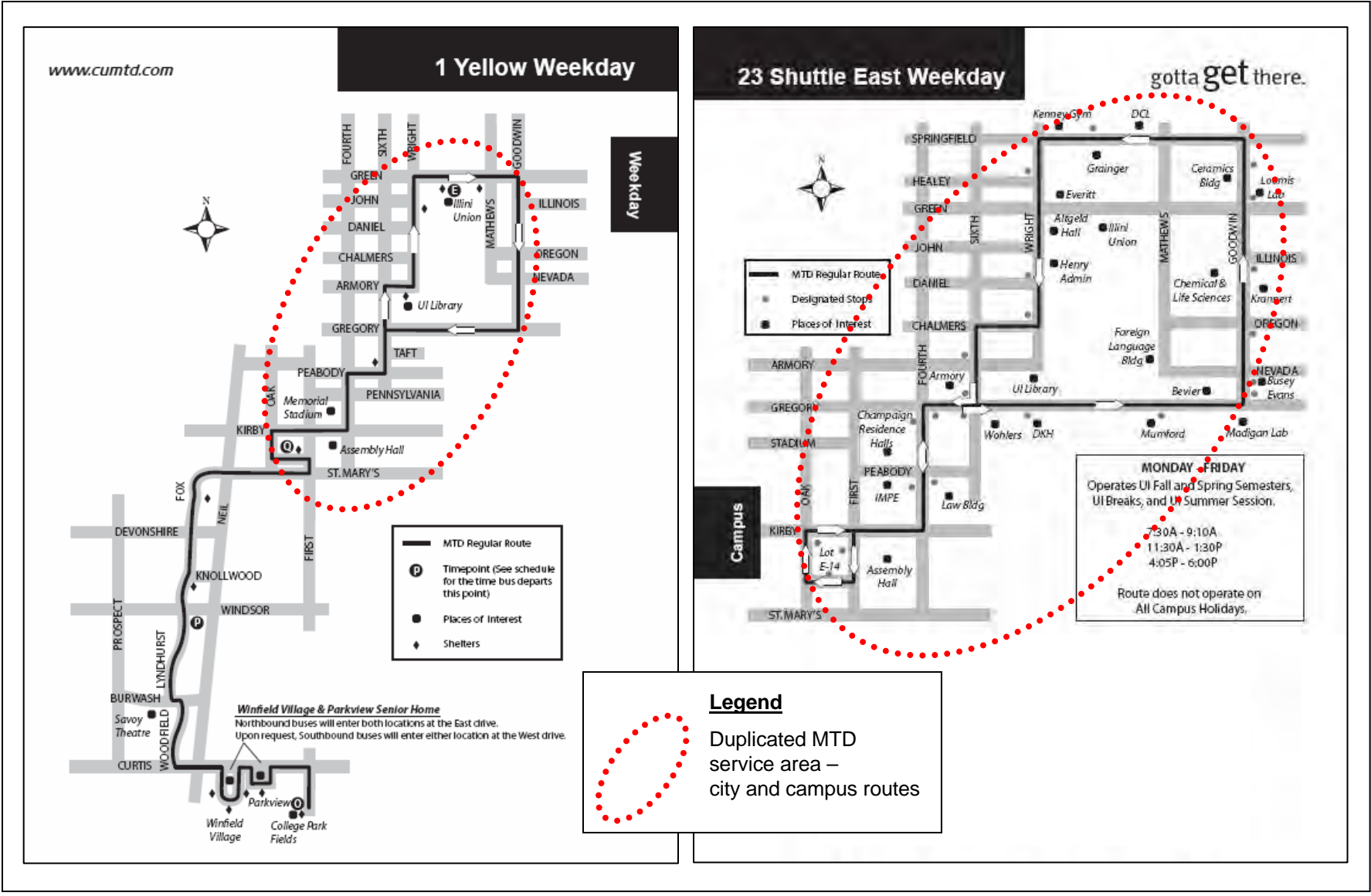
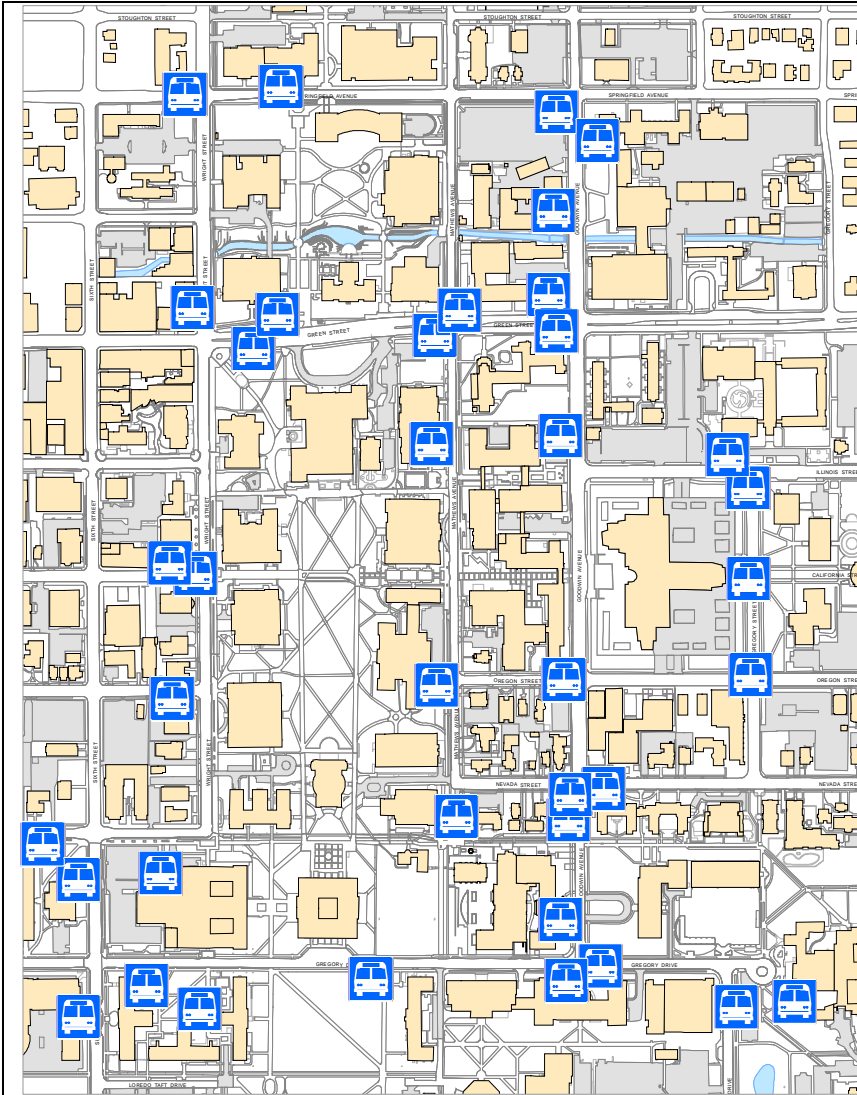
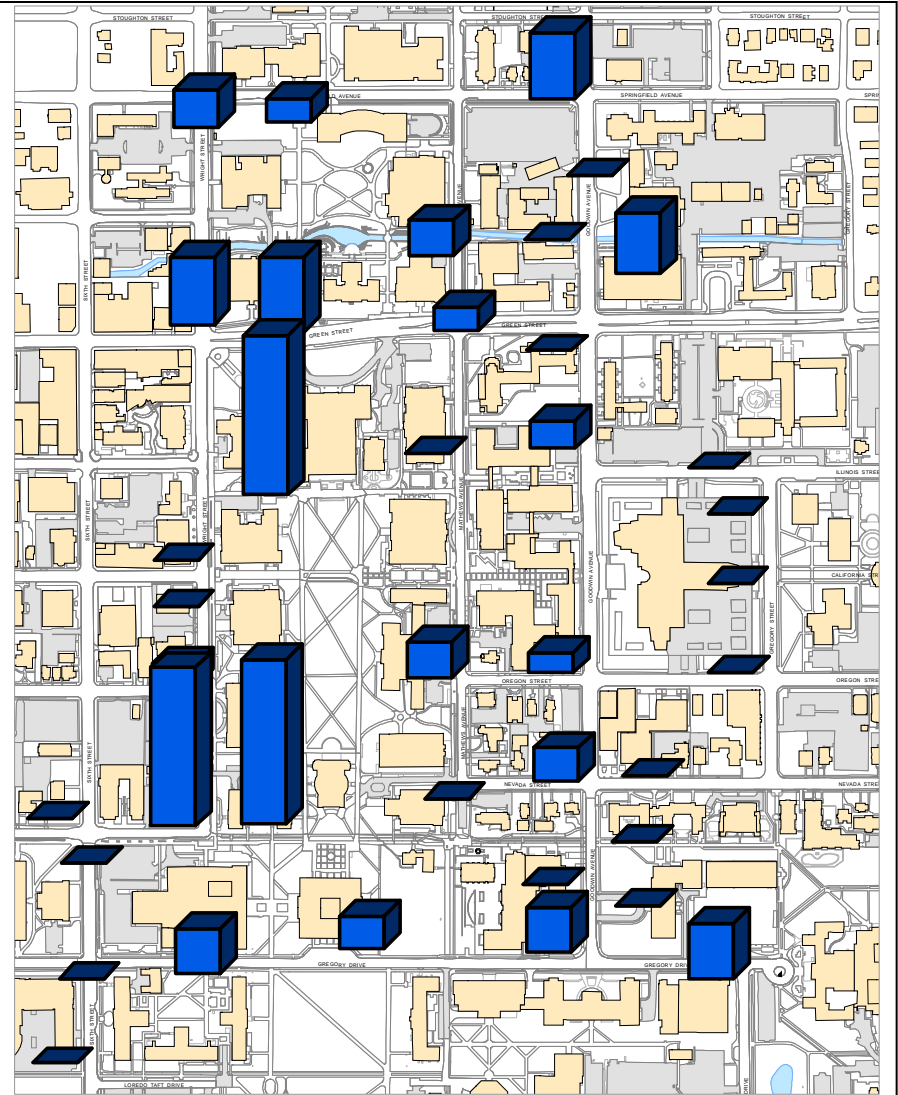


Figure 2.6: Example of Duplicated MTD Routes



MTD Bus Stops (Campus Area)



Relative Bus Stop Usage (boardings/alightings)

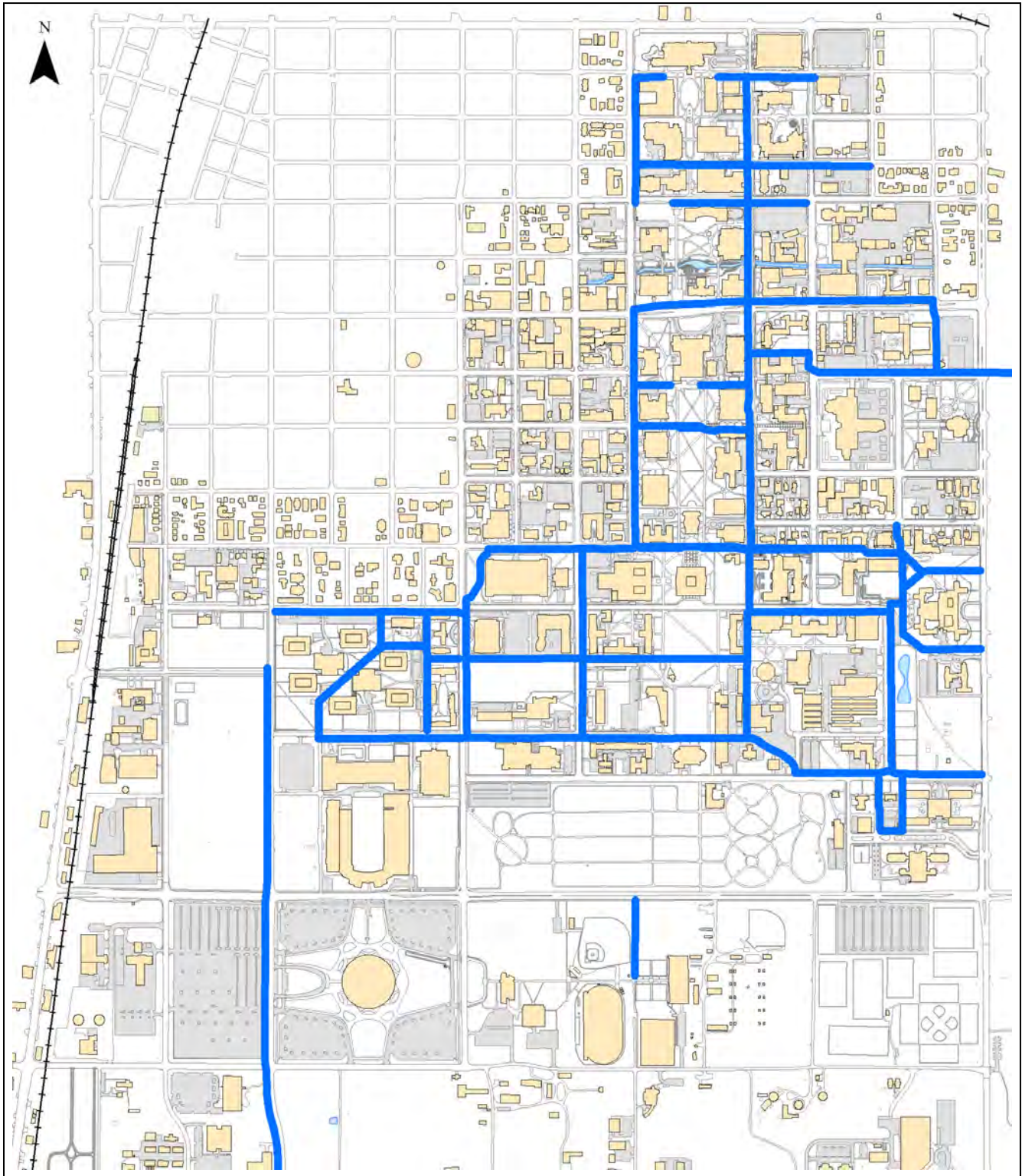
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Figure 2.7: Existing MTD Bus Stop Locations and Stop Usage



- The bike paths are most problematic at intersections (see Figures 2.8 and 2.9). At some intersections the bike path crossing is marked with “zebra” striping, which can easily be confused with pedestrian crosswalks. Typically, the paths end before they reach the intersection, leaving bicyclists to mix with pedestrians at street corners.
- Since the bike path system is segregated from the roadway, bicyclists cannot operate as vehicles in most intersections, causing unpredictability and introducing conflicts with pedestrians and vehicles.
- The bike 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. The *Guide for the Development of Bicycle Facilities* (AASHTO, 1999) recommends a width of 10 feet for two-way shared-use paths. Many of the paths on campus are 8 feet, and some are as narrow as 6 feet.
- Many paths are partially blocked with potentially hazardous obstructions.
- Poor geometric design at some locations makes turning precarious.

As at other universities, there is a diverse group of bicyclists at UIUC. Some commute to campus by bicycle and consider the bicycle their primary mode of transportation. These commuter bicyclists generally ride on the street (although some ride on the bike paths), are well-versed in the rules of the road, wear protective gear, and prefer to park their bike in a secure area that offers protection from theft and the elements. Others ride their bike occasionally to campus, depending on their schedule and the weather, generally prefer to ride on the bike paths or sidewalks, and probably have not made the same investment in equipment and gear as commuter bicyclists. And there are also recreational riders – those who look for areas to ride for exercise or pleasure – who typically do not use their bicycle for daily travel. The challenge with developing a campus bicycle system is to accommodate the different needs of each group without compromising the value of the system as a whole. People who do not currently ride should be encouraged to do so, and safe and convenient facilities should be in place to meet new demand.



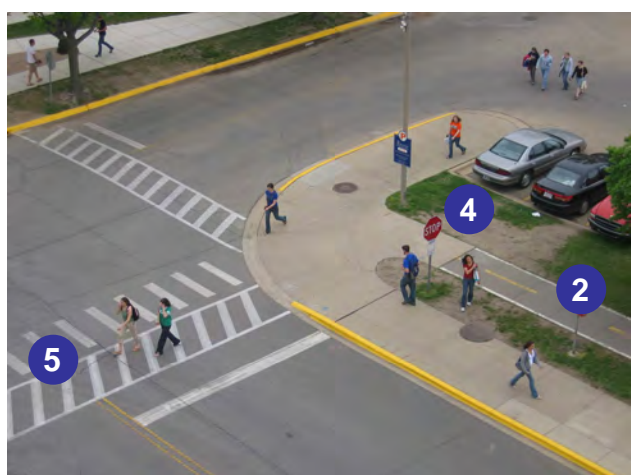
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**Figure 2.8:
Existing Bike Path System**

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Common Bike Path Issues

- 1 Debris build-up
- 2 Substandard width
- 3 Obstructions and hazards in path
- 4 Ambiguous terminus at intersection
- 5 Confusing intersection markings
- 6 Driveway and building entrance conflicts

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**Figure 2.9:
Issues and Conflicts With
Current Bike Paths**

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SECTION 3: SYSTEM-LEVEL PLAN

The system-level plan approaches pedestrian safety and general mobility from a macro perspective. A key question is how can pedestrian safety be enhanced while still moving people efficiently to and around campus? What systemic choices need to be made, and what are the impacts and trade-offs of those choices?

The system-level plan is built around the following parameters:

- Additional parking should be built on the periphery of campus, instead of in and around the campus core.
- Transit system improvements are needed to improve service and enhance the quality of the campus.
- Streets within the campus should be developed as “complete streets.”
- The bicycle facility network on campus should be improved to enhance safety.
- Use of alternative modes of travel should be encouraged.

Parking

Parking and its management are important factors in the success or failure of campus life. People who drive to campus and around the campus rely on the parking system to provide a space as conveniently and reliably as possible. But parking also has wider impacts: on the university’s finances, on students’ and employees’ finances, and on the environmental quality and overall ‘livability’ of the campus.

One of the most effective ways of enhancing pedestrian safety is to reduce the number of potential pedestrian/car conflicts, and one simple way to reduce the number of conflicts is to reduce the number of cars on campus. Currently, surface parking lots and parking decks are interspersed within and around the campus core. While this system provides a high degree of convenience to users, it brings cars into the core where pedestrian volumes are the highest.

Shift to Peripheral Parking

As the campus continues to develop, new parking should be located on the periphery of campus. The *Campus Master Plan* calls for some interior surface parking lots in the campus core to be converted to buildings or campus green space. These displaced spaces (as many as half the existing spaces) should also be relocated to the periphery of campus. Clearly, there is a need to maintain some parking spaces within the campus core, especially for disability and service vehicle parking.

Park-and-Ride Lots

New peripheral parking should be provided in either parking decks or park-and-ride lots (in some locations it may be appropriate to build a parking deck at the park-and-



ride lot). Park-and-ride lots should be free of charge (or very inexpensive) and located strategically to capture commuters from outlying areas. Convenient access to campus can be maintained from park-and-ride lots with an efficient express shuttle transit system (see *Transit* recommendations in next section). The following general locations should be investigated for use as park-and-ride lots (see Figure 3.1):

- Lot E14 (southwest campus)
- Lot B22 (north campus)
- 1st St/Curtis St (southwest)
- Windsor Rd/Lincoln Ave (southeast)

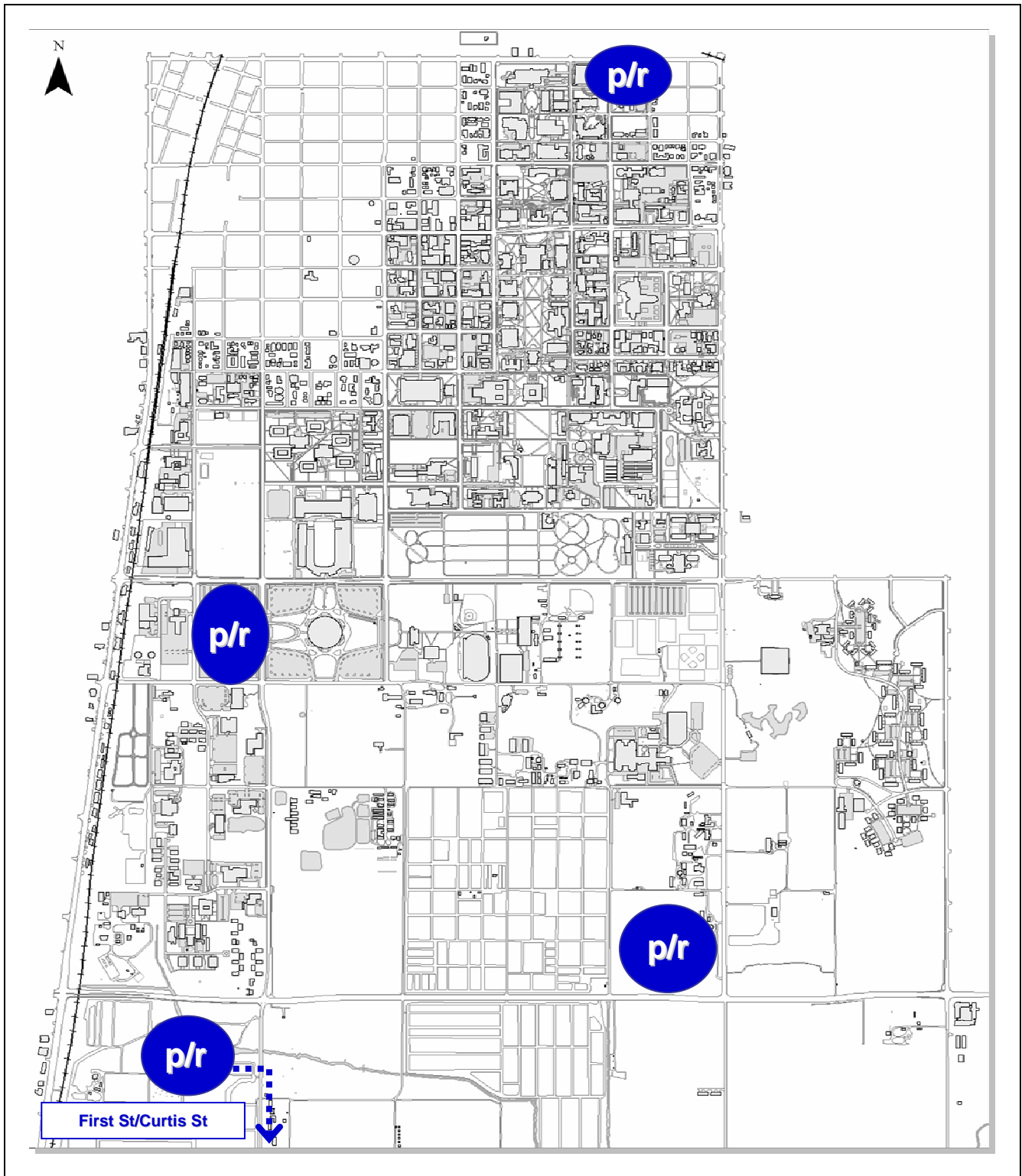
These locations will effectively capture incoming commuters and are located on major transit corridors, providing direct access to campus for express shuttles. Lots E14 and B22 are existing campus parking lots and could be converted easily to park-and-ride. Lot E14 could be further intensified through construction of a parking deck. A park-and-ride lot near the intersection of 1st Street and Curtis Street would capture commuters off the new interchange at that location, and a lot near the intersection of Windsor Road and Lincoln Avenue would serve commuters southeast of campus.

Resident Student Parking

Resident students currently park principally either in Lot E14 or Lot F23. Since many resident students do not need daily access to their vehicles, these spaces should be relocated to remote storage lots. These remote storage lots for resident student parking could be combined with park-and-ride lots in some locations to take advantage of transit access and economies of scale. Because students would not be accessing the vehicles daily, these remote storage lots must be secure and safe. The remote student storage lot at the University of North Carolina at Chapel Hill, for example, is fenced and gated (access by card only), well lit, and is regularly patrolled by security. It is also critical that the remote student storage lots be easily accessible to student housing by direct transit and on-demand services.

Reducing Parking Demand

A major factor behind people's travel choices is the cost – or perceived cost – of each option. While locating new parking on the campus periphery and introducing park-and-ride and resident storage lots will help reduce the number of cars in the campus core, other policies related to parking pricing can be implemented to reduce demand for parking in the core. For example, universities across the country are shifting to market-based pricing structures that charge considerably higher permit fees for the highest demand spaces. While this type of policy may introduce equity issues into the parking system (ie, higher-salaried employees may be more able to afford the best spaces), the introduction of free or very inexpensive spaces on the periphery of campus provides opportunities for lower-salaried employees to park that may not currently exist.



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**Figure 3.1:
Potential Park-and-Ride
Locations**





Universities and cities are also implementing flexible pay-per-use parking systems that charge users every time they park. For example, the University of Wisconsin-Madison employs electronic hang tag meters that track parking time and charge accordingly. The rationale behind these systems is that parking users will be more cognizant of the cost of parking if they are charged every time they park. It may be an incentive to use alternative modes, or to park for shorter periods of time, freeing up spaces. With a blanket annual or semester permit, users have little incentive to use other modes. Once the permit is bought (and that cost is “sunk”), parking is effectively “free” each time users park. Initially, pay-per-use parking could be introduced as an additional parking option, aimed at the people who are not on campus every day. Over time, it could become increasingly the norm.

Some universities are implementing parking “cash-out” programs, or other similar financial incentive programs, where people who choose not to purchase a parking permit are financially compensated. In essence, people are paid not to park. For example, Stanford University offers employees who do not purchase parking permits up to \$160 per year. An alternative to cash-out is a “transportation allowance” program. Staff (and potentially also students) would receive an allowance to cover their commuting needs. For many people, this would simply be used to pay for parking, thus returning the funds to the University, but they could also spend it on alternative modes of transportation. This would create a ‘level playing field’ between the modes. Like cash-out, it would reward not just transit users but also people who walk or bicycle.

The University should investigate these alternative parking pricing structures for appropriate implementation at this campus. These options should be explored in conjunction with implementing a comprehensive Travel Demand Management (TDM) program, described below.

Summary of Parking Recommendations

Recommendation 3.1: Minimize the need for constructing additional parking facilities on campus.

Recommendation 3.2: Concentrate future parking on the periphery of campus in hubs and park-and-ride lots.

Recommendation 3.3: Develop park-and-ride lots that are free and easily accessible (via express transit service) to and from campus. The following general locations should be investigated for park-and-ride lots:

- Lot E14 (southwest campus)
- Lot B22 (north campus)
- 1st St/Curtis St (southwest)
- Windsor Rd/Lincoln Ave (southeast)

Recommendation 3.4: Minimize development of new surface lots in core campus. Consistent with the Campus Master Plan, convert surface lots in core campus to academic buildings or open space.

Recommendation 3.5: Continue to provide adequate disability and service parking.

Recommendation 3.6: Require resident students to park in remote resident storage lots that are secure and easily accessible by transit.

Recommendation 3.7: Investigate other parking permit price structures, including market rate pricing (high demand spaces near core priced considerably higher than periphery spaces), flexible pay-per-use parking, and parking cash-out, or similar financial incentives, to reduce parking demand.

Transit

An effective and efficient transit system is the key to a balanced and sustainable campus transportation system. Students, in particular, rely on the transit system to get them to and around campus, as well as to off-campus destinations. The system currently operated by the MTD provides a high level of service to students, accessing most areas of campus from student residential areas. But the high degree of access to the campus core has come at the expense of the campus environment, campus aesthetics, and possibly pedestrian safety. The recommendations in this study are aimed at improving the quality of the campus-serving bus system. The main goal is to improve mobility and pedestrian safety, and the secondary goal is to improve the overall service quality and attract new riders.

Transit Hubs

As described in Section 2, while the MTD provides a high level of service to the campus, a majority of the MTD's routes run through campus, even though it may not be the primary destination for all routes. Wright Street serves as a central transit hub for the MTD system. Also, many of the non-campus routes duplicate service areas in many locations, leading to an overall increase in the number of buses on campus.

It is recommended that the University work with the MTD to shift the route structure to move MTD routes that do not primarily serve the campus to the periphery of campus. University Avenue, Florida Avenue/Kirby Avenue, Lincoln Avenue, and 4th Street border the campus and have the capacity to serve the edge of campus without bringing buses into the heart of campus.

In conjunction with shifting non-campus routes to the periphery of campus, a series of transit hubs should be developed at the same locations as the proposed park-

and-ride lots (see Figure 3.2). City and regional transit routes would feed into the hubs, and express shuttles would feed into the campus core from the hubs. These express shuttles would provide a direct connection to the campus core, serving only the hubs, and possibly residence halls en route. Commuters parking at the park-and-ride lots will have an easy transfer to an express shuttle that will take them directly to campus. Riders on the city and regional routes wanting to get to campus would have two options: 1) transfer at the hub and take an express shuttle to the campus core, or 2) continue on the city or regional route to the periphery of campus and walk the short distance to the campus core or other campus destination. In order to minimize transfer delays at the hubs, it is critical that the shuttles be express routes (ie, few stops) and that the fleet of express shuttles be large enough to provide short headways (5 minutes maximum) at the hubs.

Bus Stop Consolidation

It is recommended that bus stops within the University District be consolidated to maximize efficiency and minimize the number of conflict points. A sample bus stop consolidation scheme is illustrated in Figure 3.3. This plan shows that the walkability of the campus is not diminished with the consolidated stops, as major campus destinations are still within a 5 minute walk from the stops.

Other Transit Improvements

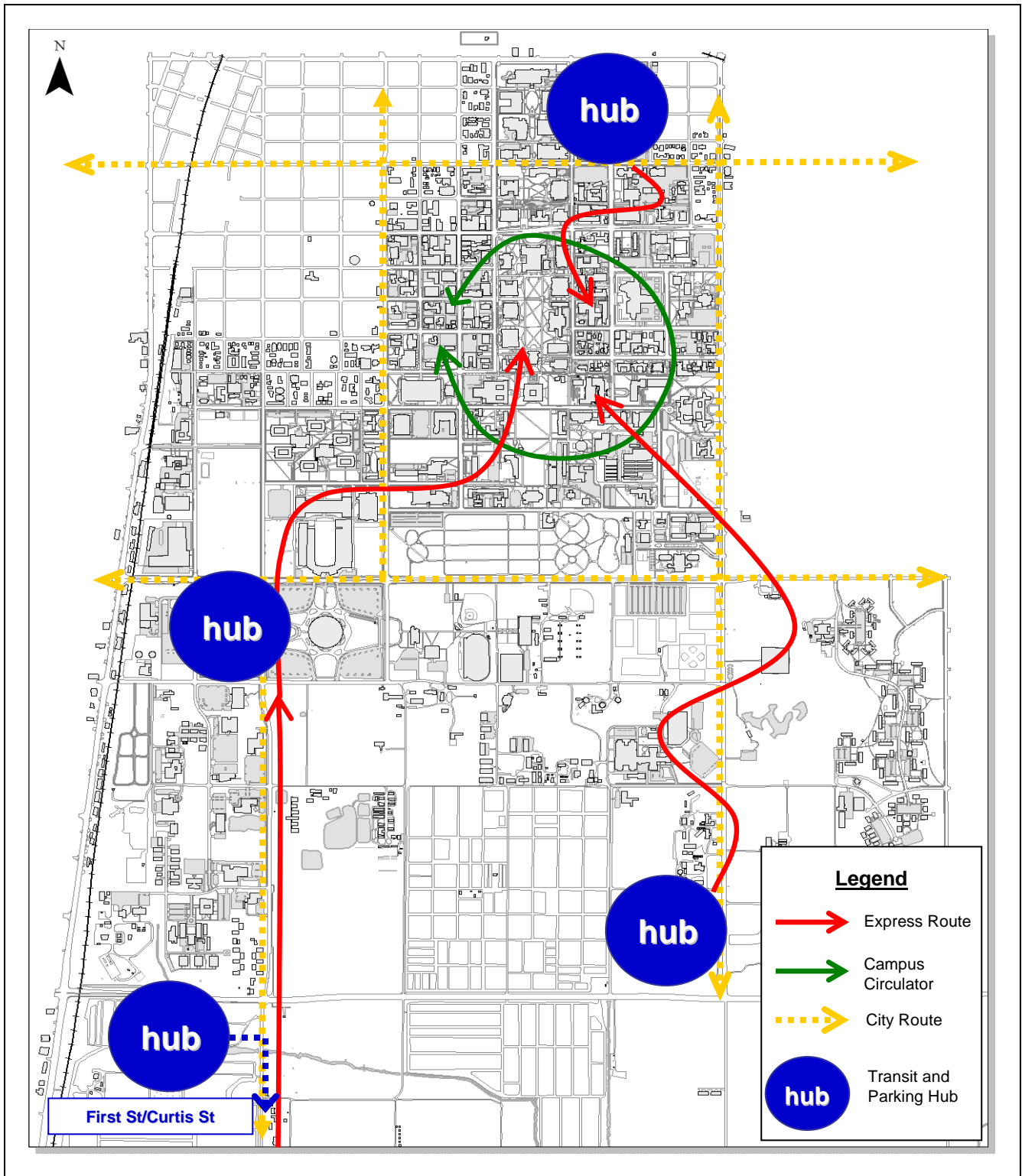
The MTD's STOPwatch GPS-based bus route information system has been implemented at a number of locations on campus, and is a successful way of making transit an accessible and convenient mode choice. The University should continue to work with the MTD to roll-out the program campus-wide.

New campus-serving buses added to the fleet, and especially buses serving as express shuttles in the transit hub plan, should be designed to promote the University brand and image, possibly displaying the school's colors and name prominently. This practice is common at many universities, even at those that do not operate their own transit system, such as Rutgers (see Figure 3.4). Buses should also be low-floor, high-capacity buses that allow for easy boarding and alighting and emphasize standing room for short trips.

Summary of Transit Recommendations

Recommendation 3.8: Move city MTD routes that do not primarily serve campus to the periphery of campus; reduce the number of buses passing through the heart of campus, especially on Wright Street.

Recommendation 3.9: Develop a transit/parking hub system in conjunction w/park-and-ride lots. Elements of the concept include:



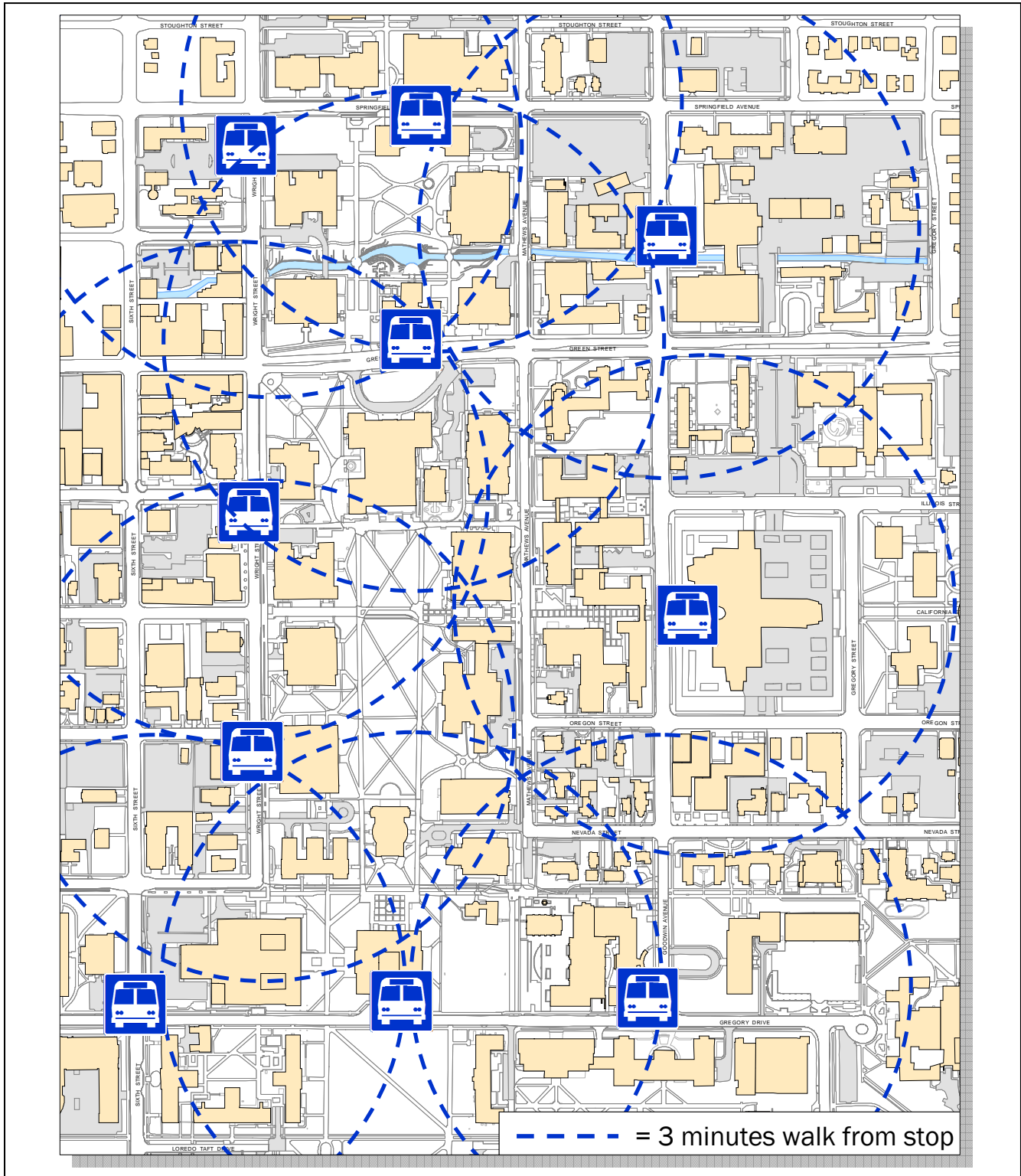
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**Figure 3.2:
Transit and Parking Hub
Concept**

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**Figure 3.3:
Consolidated Bus Stop
Scheme**

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Rutgers, The State University of
New Jersey
Campus Bus



University of Minnesota
Campus Shuttle



University of North
Carolina, Greensboro
Park and Ride Shuttle

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**Figure 3.4:
Branded Buses at Other
Campuses**

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- City and regional transit routes would feed the hubs and the periphery of campus. Transit users would have the option of taking transit directly to the edge of campus, or transferring at a hub to an express shuttle that delivers them directly to the campus core.
- Express shuttles would feed the campus core.
- Short headways would minimize the transfer delay at hubs.

Recommendation 3.10: Consolidate bus stops on campus, especially in the campus core. Maintain 5-minute walk zones to main campus destinations.

Recommendation 3.11: Convert existing fleet of campus-serving buses to low-floor, high-capacity buses that are more efficient and promote the University brand.

Recommendation 3.12: Work with MTD to continue implementation of STOPwatch GPS information system campus-wide.

Streets

Creating “Complete Streets”

Campus streets are key contributors to creating a memorable sense of place on college campuses. Streets should function at a much higher level than simply moving vehicles. They should enhance the pedestrian friendliness of the campus, provide safety for users of all modes, and add to the aesthetic and environmental qualities of the campus. One of the objectives of this study is to create the framework for developing great campus streets. Great campus streets:

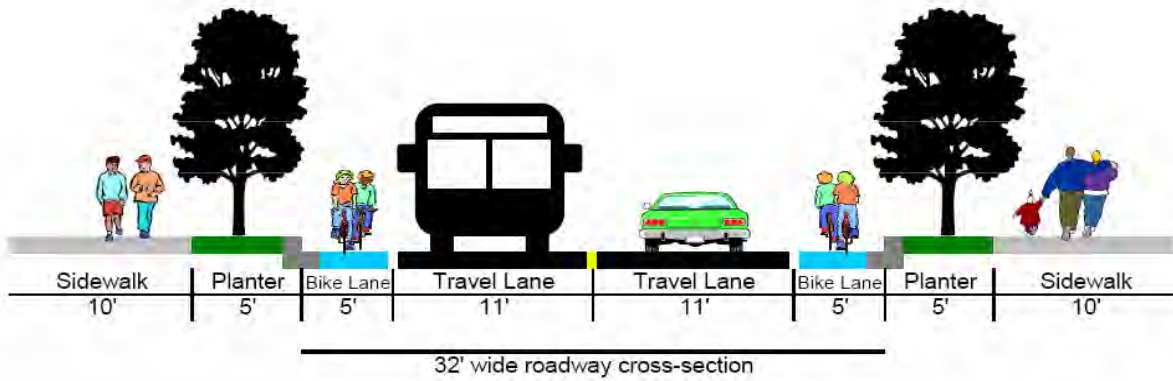
- Accommodate multiple modes on-street in a safe and efficient manner;
- Utilize landscaping and other design treatments to enhance the streetscape and campus character;
- Give low priority to cars and highest priority to pedestrians; and
- Create a memorable sense of place.

Great campus streets are also “complete streets” – streets that successfully and safely integrate multiple modes (pedestrians, bicycles, buses, cars) in the same right-of-way. Figure 3.5 illustrates a typical cross-section of a “complete campus street” that can be applied to future street improvement projects. This cross-section is flexible in that it allows for varying lane widths and other design features to fit the street into the existing context.

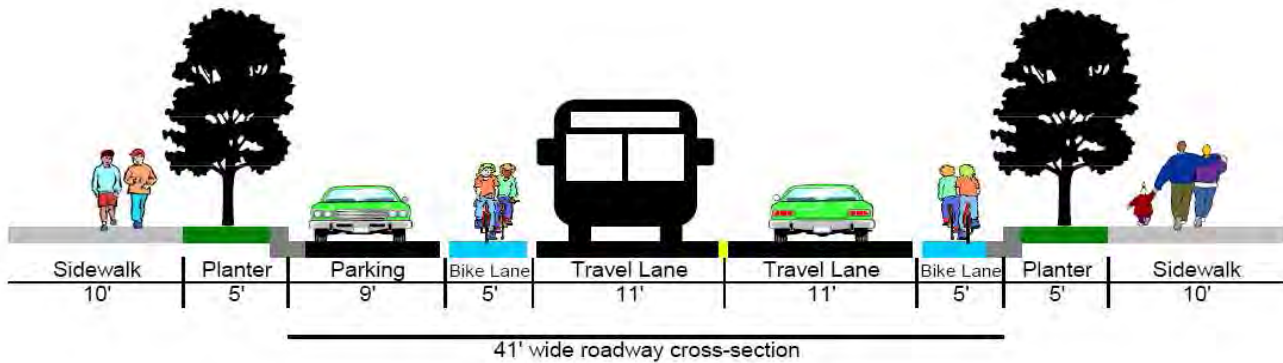
Wright Street

Figure 3.6 illustrates a proposed concept plan for improving the Wright Street corridor through campus, from Springfield Avenue at the north to Armory Avenue at the south. In many ways, Wright Street is a principal gateway into campus. Other gateways include Gregory Drive, Springfield Avenue, and Goodwin Avenue. Gateway streets are

Complete Campus Street (No On-Street Parking)



Complete Campus Street (With On-Street Parking)



Note: Lane widths may vary depending on available right-of-way. Bike lanes should be at least 5 ft wide, but not more than 6 ft. On-street parallel parking, when adjacent to a bike lane, should be wide enough to provide clearance for door openings. Diagonal parking adjacent to bike lanes should be discouraged.

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Figure 3.5:
Typical Cross-Sections
(Complete Campus Streets)

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critical components of the campus' landscape and aesthetic appeal. They also typically handle heavy volumes of traffic of all modes.

The concept plan for Wright Street illustrated in Figure 3.6 can serve as a model for other street improvement projects. The figure is annotated with comments on specific elements of the plan. The basic elements of the concept plan include:

- Elimination of the bike path running parallel to the street; bikes are on the street in striped and marked bike lanes.
- A single travel lane for cars and buses in each direction.
- In some locations, bus pullouts may be appropriate to improve traffic flow and safety.
- Landscaping between the street and the sidewalk to add visual appeal and create a buffer between pedestrians and vehicles on the street.
- Clearly marked pedestrian crossings.
- Reduced (or eliminated) on-street parking. In some locations diagonal parking is replaced with parallel parking to reduce back-out conflicts with bicycles.

It is recommended that the Wright Street corridor be redesigned to incorporate the elements of the "complete streets" concept, and that the concept be further applied to Gregory Drive, Springfield Avenue and Goodwin Avenue. Planning is currently underway for improvements to Goodwin Avenue that include many of these elements.

Another policy recommendation is to limit delivery trucks on campus. The University currently has a policy in place that restricts deliveries that is not actively enforced. This policy should be enforced more aggressively to reduce congestion and enhance safety.

Summary of Street Recommendations

Recommendation 3.13: Create great campus streets that are pedestrian-friendly and visual amenities for the campus.

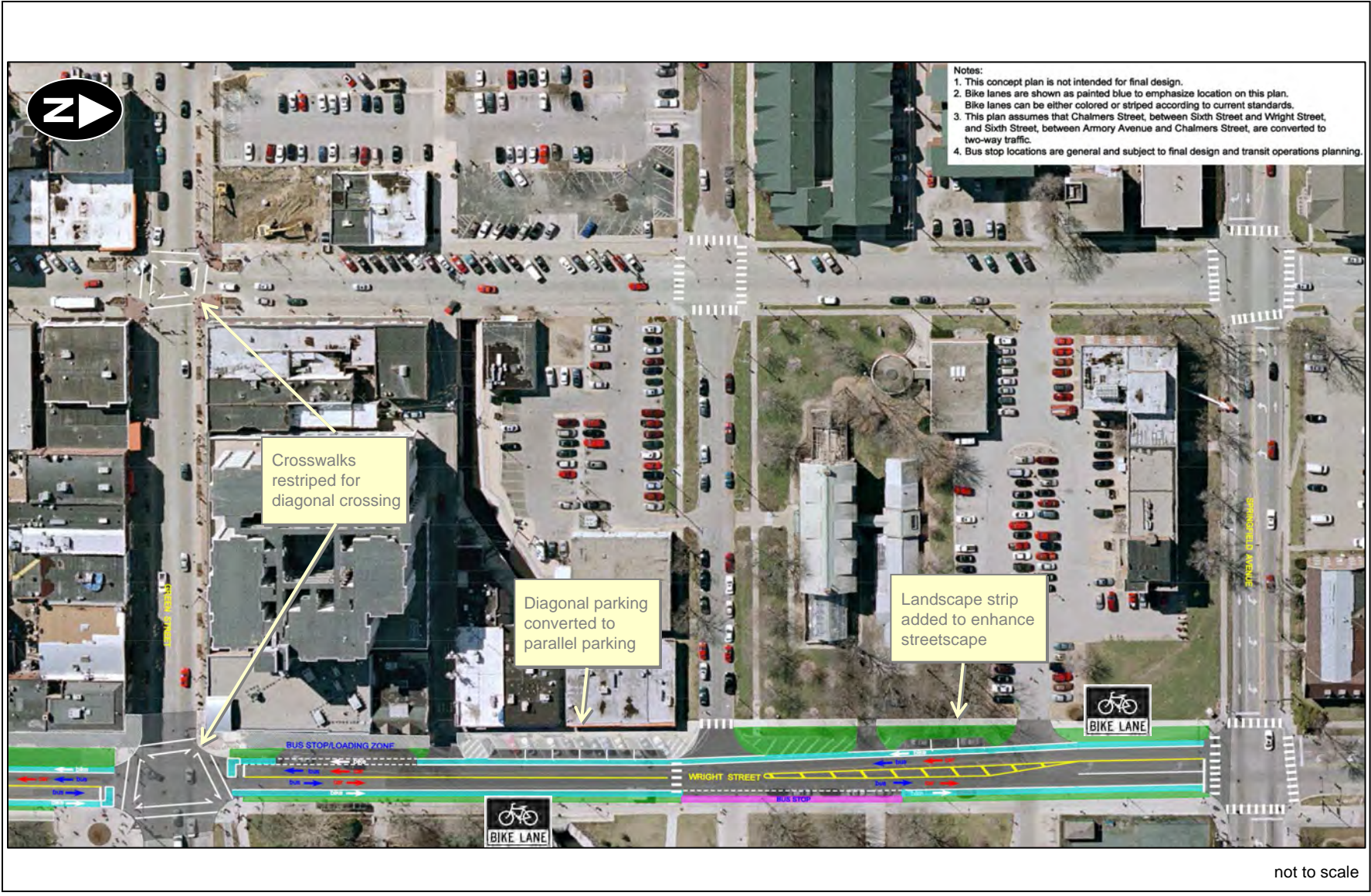
Recommendation 3.14: Create "complete streets" – streets that successfully and safely integrate multiple modes (pedestrians, bicycles, cars, buses) – across campus.

Recommendation 3.15: Develop the following streets as campus gateways:

- Wright Street
- Gregory Drive
- Springfield Avenue
- Goodwin Avenue

Recommendation 3.16: Develop Wright Street as a model for other campus streets.

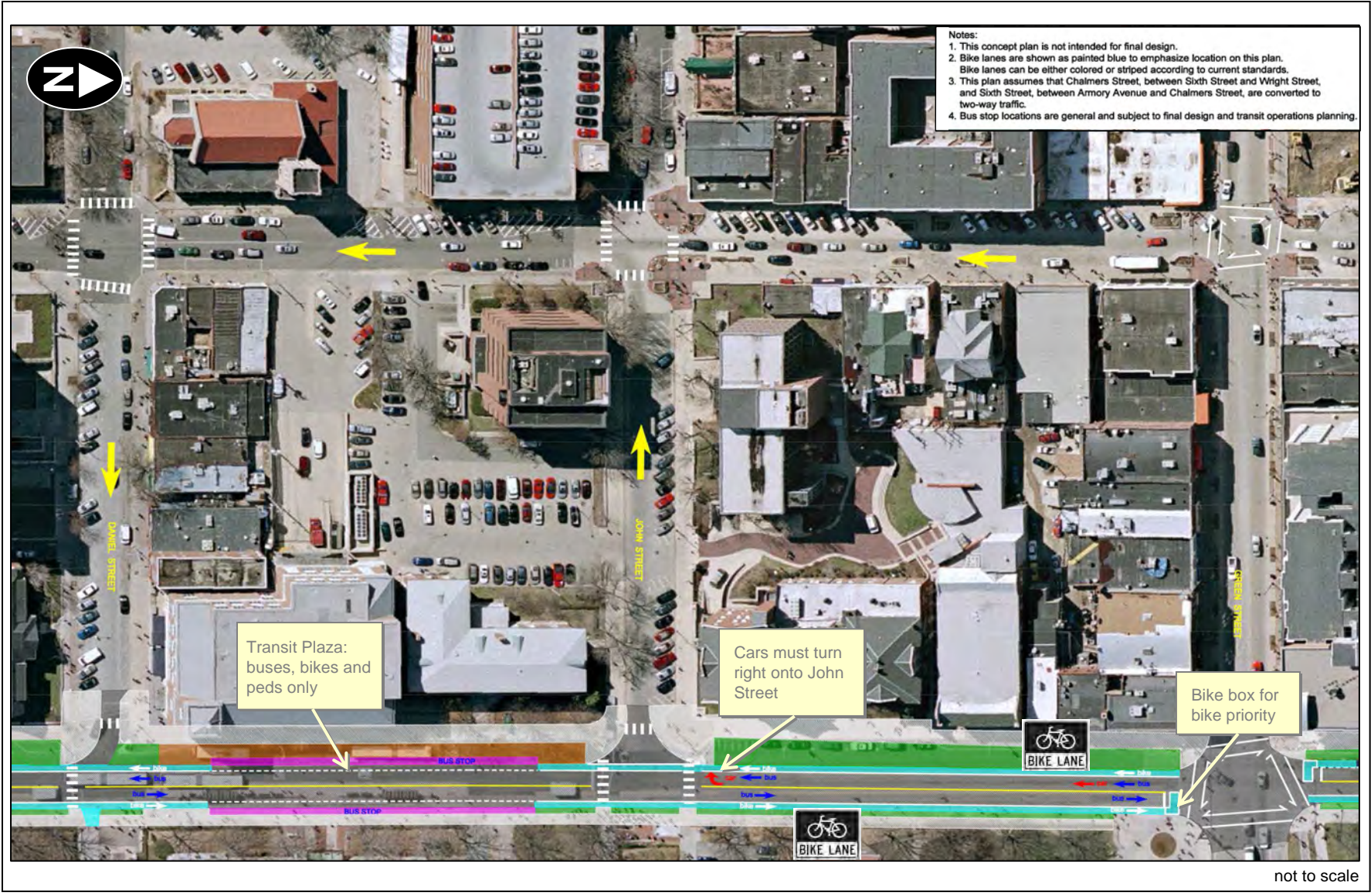
Recommendation 3.17: Limit large delivery trucks on campus by enforcing central receiving system and restricting hours of delivery.



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**Figure 3.6a: Wright Street Concept Plan
 (Green St to Springfield Ave)**

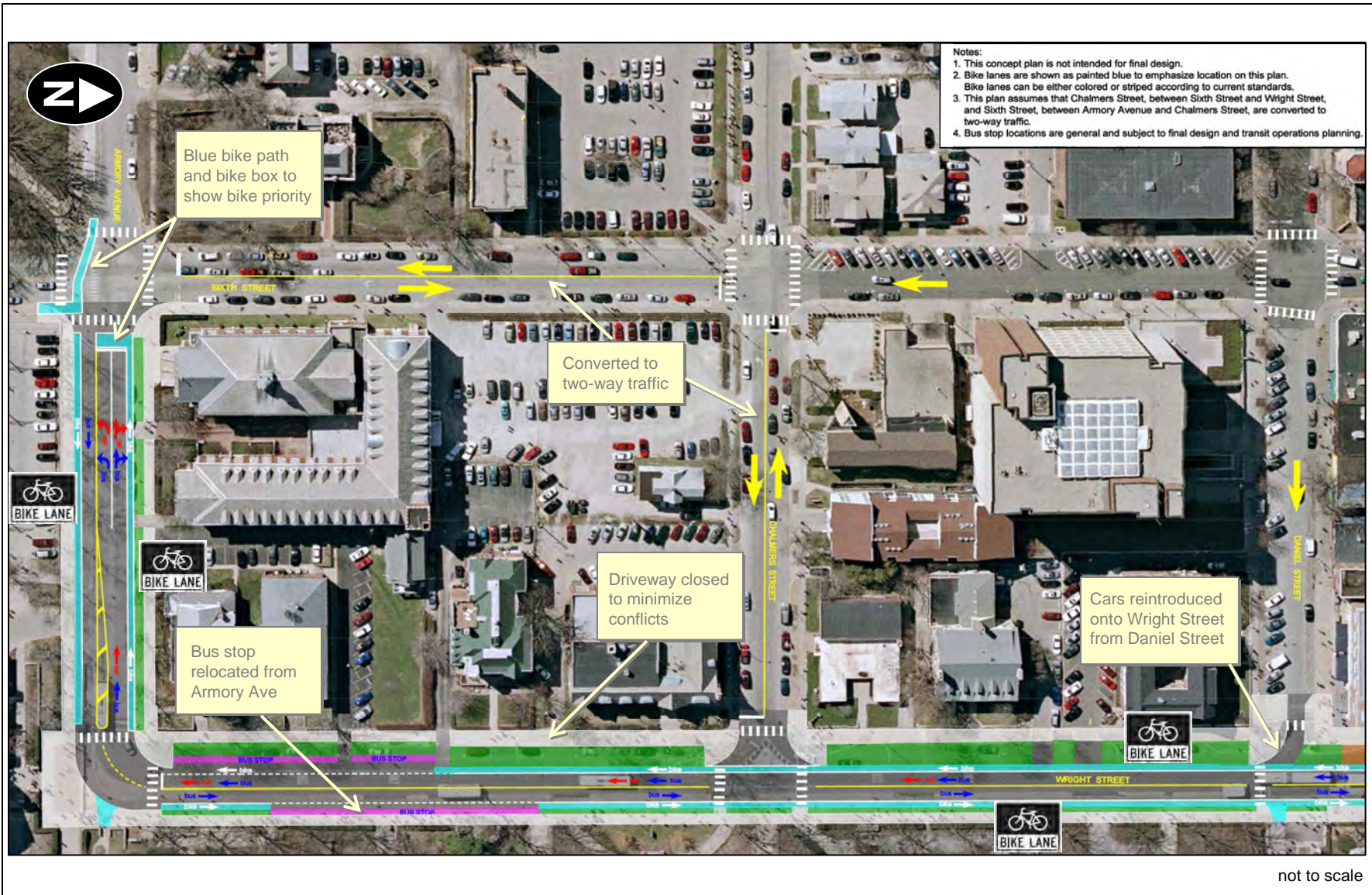




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**Figure 3.6b: Wright Street Concept Plan
 (Daniel St to Green St)**





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**Figure 3.6c: Wright Street Concept Plan
(Armory Ave to Daniel St)**



Bicycling

By many standards, the University of Illinois campus area is ideal for bicycle commuting: the topography is flat, the campus and surrounding area are compact, the grid-patterned streets are predictable and efficient, and many students live within an easy bicycle ride to campus. Bad weather is clearly an impediment during winter months, and the lack of bicycle facilities off-campus in Urbana and Champaign make connections to campus difficult. But the relatively short and flat distances, for students especially, compensate for weather and off-campus connection issues, making bicycling a viable mode at UIUC. As an alternative to the single occupancy vehicle, bicycling benefits both the environment and the health of the riders.

Bike Facilities

The analysis in Section 2 of this report highlights the safety and functionality issues with the campus' current bike path system. It is recommended that bicycles become part of the "complete streets" program described above. Bicycles can safely be accommodated on the street with bike lanes in most situations, with bike paths supplementing the system of on-street facilities in areas without street access (ie, across the campus quad) or in areas intended for recreational use (see Figure 3.7).

In the long term, the current bike path system should be phased out as streets are redeveloped as "complete streets" to accommodate bicyclists with bike lanes. Careful planning of the transition from the current bike paths to on-street bike lanes will be required. Therefore, it is recommended that a comprehensive campus bicycle plan be undertaken to plan for upgrading existing facilities and developing new ones. The campus bicycle plan should be closely coordinated with bike planning for Champaign and Urbana to enhance regional connectivity and promote uniformity within the University District. A critical component of the transition will be education; current and future bicyclists need to learn how to ride in the street safely, just as drivers learn to drive safely. Bicycle education and promotion should be an ongoing University effort.

In the short term, major safety issues with the current bike path system should be addressed. As discussed previously, one of the main safety issues with the current system is the lack of marking and signing at intersections. Bike paths typically end at the intersection with little indication of how to safely cross. One recommended solution is to paint the bike paths blue with bike symbol markings through intersections and conflict points, such as driveways and other crossings. Cities, such as Portland, Oregon, have implemented colored bike lanes with success in situations similar to those at UIUC. The bike paths are also in need of fresh striping and pavement markings, as well as standard bike path signage at intersections, driveways and crossings.

Bike Parking and Other Amenities

In addition to facility improvements for bicyclists, there are a variety of other improvements that can be made on campus to improve the bicycling environment,



On-Street Bike Lanes – College Campuses
 Rutgers (left) and Univ. of Wisconsin-Madison (above)



Blue Bike Lane
 Portland, OR



Bike Box
 Vancouver, BC



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Figure 3.7:
Bike Lanes and Markings

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accommodate existing bicyclists, and encourage others to begin to ride. One major improvement is enhancing the amount and quality of bike parking. In general, bike parking should be located convenient to every building entrance in high visibility locations. Covered and secure bike parking should also be provided across campus to provide protection from weather and theft. Covered parking can be in free standing structures (see Figure 3.8), or more simply can often be provided under existing building overhangs, awnings, eaves, breezeways, and in parking decks.

Other amenities that can be provided include:

- Shower and locker facilities to allow commuters to clean up for work;
- An on-campus bike station to allow for routine maintenance and repairs;
- A campus/regional bike map illustrating preferred bike routes and other bike facilities;
- Limited free daily parking passes; and
- A guaranteed ride home program that would provide bicycle commuters transportation home in the event of emergency, inclement weather, or other unplanned events.

Summary of Bicycle Recommendations

Recommendation 3.18: Commission a comprehensive campus bicycle plan to plan for upgrading existing facilities and developing new facilities.

Recommendation 3.19: Implement bike lanes on campus streets as part of “complete streets” program. Bike paths should supplement street system in areas inaccessible by street and in areas used for recreational purposes.

Recommendation 3.20: Develop and implement a bicycle education program to assist in the transition from the existing bike path system to the proposed on-street system.

Recommendation 3.21: Implement temporary solutions for existing bike paths as new facilities are developed. Potential solutions include:

- Painting paths blue and marking them with appropriate bike symbols through intersections and conflict points.
- Painting fresh stripes and marking on existing paths and developing a program for regular maintenance.
- Adding standard bike path signage and markings, especially at intersections and crossings.

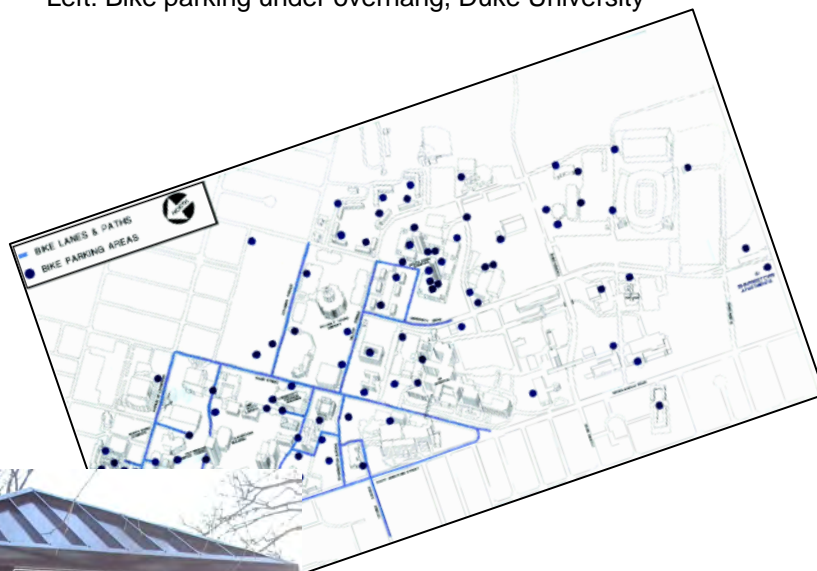
Recommendation 3.22: Implement a comprehensive bicycle education and promotion program.

Recommendation 3.23: Provide other amenities to accommodate existing bicyclists



Above: Bike parking shelters

Left: Bike parking under overhang, Duke University



Above: Campus bike map, University of Kentucky



Left: Bike Station (on-campus bike repair and maintenance), University of Colorado, Boulder

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Figure 3.8:
Bike Parking and
Other Amenities

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and attract new ones, including:

- More accessible bike parking;
- Covered and secure bike parking;
- Shower and locker facilities;
- On-campus bike station (repair/maintenance shop);
- Campus/regional bike map;
- Limited free daily parking passes; and
- Guaranteed ride home program.

Use of Alternative Modes

One of the keys to increasing pedestrian safety is to decrease the number of pedestrian/car conflicts, and one way of reducing the number of cars on campus is to reduce the demand for parking. Strategies to move parking out of the campus core were addressed previously in the “Parking” section. But there are a number of other tools the University can use to encourage the use of alternative modes. Collectively, these strategies, programs, and policies are known as Travel Demand Management (TDM).

The University currently utilizes a variety of programs to give commuters options in their mode choice. But there is no comprehensive, centralized TDM program, and no single staff person responsible to administer it. Transportation planning duties are currently split among multiple staff persons. It is recommended that the University hire a full-time Transportation Planner/TDM Coordinator that can act as the University’s liaison with regional transportation planning partners, advocate for campus transportation needs, and educate and assist commuters in using alternative modes. Many large universities, and the majority of Big 10 schools, have transportation planners on staff.

It is also recommended that a comprehensive TDM program, which may be called the Commuter Assistance Program (CAP), be developed and promoted to provide incentives to use alternative modes. Elements of the CAP may include

- Give financial incentives for not buying a parking permit
- Provide parking vouchers for those who may need to drive occasionally
- Provide a guaranteed ride home program
- Establish preferred parking for carpool/vanpool users
- Enhance existing ride-matching service for carpoolers and vanpoolers
- Implement car-sharing (short-term rentals) program

Summary of TDM Recommendations

Recommendation 3.24: The University should hire a full-time transportation planner/Travel Demand Management coordinator.

Recommendation 3.25: Develop and promote a comprehensive Travel Demand Management program to provide incentives to use alternative modes. Elements of this program, which may be called the Commuter Assistance Program (CAP), may include:

- Financial incentives for not buying a parking permit
- Parking vouchers
- Guaranteed ride home program
- Preferred parking for carpool/vanpool
- Enhance existing ride-matching service for carpoolers and vanpoolers
- Implement car-sharing (short-term rentals) program

SECTION 4: STREET-LEVEL IMPROVEMENTS

The street-level plan focuses on street improvements that should be implemented at intersections and mid-block crossings, as well as pedestrian-safety signage. These improvements complement the recommended system-level strategies and improvements recommended in Section 3 of this report.

This study recognizes that significant work and study has recently been done for these types of street-level improvements in the University District. Specifically, the following studies have taken a comprehensive look at pedestrian safety improvements:

- *Campus Area Transportation Study* (Clark-Dietz, Inc.)
- *University District Crosswalk Guidelines* (CUUATS)
- *Comprehensive Crosswalk Assessment* (UIUC Civil Engineering Dept.)

For a variety of reasons, including lack of funding, the recommendations in these studies have not been fully implemented. It is critical that the University work with the local jurisdictions to identify funding sources, implement needed improvements, and develop a program for regular maintenance.

Pedestrian Crossings

Consistent Treatments

As noted in Section 2 of this report, there are currently a variety of crosswalk types and other pedestrian crossings in the campus area. These treatments have evolved over time and have created a system of mixed messages and confusion for pedestrians and motorists. One of the most important strategies to address pedestrian safety at the street level is to create an environment of consistent messages and expectations. Crosswalks and crossings should be of a standard type, design and material to effectively communicate the crossing.

The *University District Crosswalk Guidelines* (CUUATS) provides specific guidance for developing consistent treatments and improvements. Some of these recommendations are:

- Retrofitting crosswalks in the University District with “ladder” design (see Figure 4.1)
- Establishing priority locations (identified in the CUUATS Guidelines and *Comprehensive Crosswalk Assessment*, published by the UIUC Civil Engineering Dept.)



- Using materials that will be highly visible and weather-resistant. Inlay tape is preferred over paint for its durability.
- Identifying locations for uncontrolled and mid-block crosswalks.

It is recommended that the University continue to implement the recommendations in the *University District Crosswalk Guidelines*. As part of the implementation, alternative funding sources should be identified to fund a comprehensive and regular construction and maintenance program. Intersection and crossing improvement projects should be prioritized based on a ranking system that accounts for factors such as pedestrian volumes, accident data, proximity to significant pedestrian generators, and other factors identified in the *University District Crosswalk Guidelines*.

Other Improvements

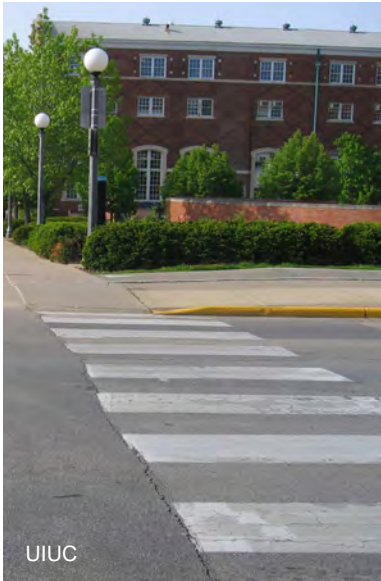
In addition to intersection and crosswalk improvements, there are a variety of other treatments that can be implemented to enhance pedestrian safety. One method is to prevent jaywalking by channelizing pedestrian flow to formal crossings where pedestrians are expected and regulated. Channelization treatments can include simple landscaping between the sidewalk and the edge of street, or physical barriers, such as bollards or low fences or walls. Well-designed channelization treatments can blend in well with the fabric of the streetscape while increasing safety (see Figure 4.1, UNC Chapel Hill).

Other pedestrian safety treatments should be implemented at appropriate locations, such as pedestrian refuge islands, curb extensions, pavers or other materials. The intersection improvements on Green Street west of campus that were part of the *Campus Area Transportation Study* are good examples of narrowing intersections and using alternative materials to heighten pedestrian priority at key intersections. This model should be applied at appropriate locations across campus.

Also, traffic signals on campus should be upgraded to include more wide-spread use of pedestrian countdown signal heads.

Summary of Pedestrian Crossings Recommendations

Recommendation 4.1: Develop a specific program for comprehensive intersection improvements on campus, including consistent design treatments, an implementation schedule, and identification of funding sources. Intersection and crossing improvement projects should be prioritized based on a ranking system that accounts for factors such as pedestrian volumes, accident data, proximity to significant pedestrian generators, and other factors identified in the *University District Crosswalk Guidelines* (published by CUUATS).



Ladder style crosswalks.
 Note the visibility of the material (inlay tape) in the crosswalk on the right.



Pedestrian channelization treatment at UNC Chapel Hill.
 Combines landscaping with attractive stone bollards to direct pedestrians to the signalized intersection.

Intersection improvements (part of CATS) at 6th St/John St.



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**Figure 4.1:
 Crosswalks and Treatments**



Recommendation 4.2: Implement the recommendations detailed in the University District Crosswalk Guidelines (CUUATS). These recommendations include:

- Retrofitting crosswalks in the University District with “ladder” design
- Establishing priority locations (identified in the CUUATS Guidelines and Comprehensive Crosswalk Assessment, published by the UIUC Civil Engineering Dept.)
- Using materials that will be highly visible and weather-resistant. Inlay tape is preferred over paint for its durability.
- Identifying locations for uncontrolled and mid-block crosswalks.

Recommendation 4.3: Channelize pedestrian flow through use of medians, landscaping and other physical barriers.

Recommendation 4.4: Develop and implement other pedestrian safety treatments at appropriate locations, such as pedestrian refuge islands, curb extensions, pavers or other materials.

Recommendation 4.5: Upgrade traffic signals on campus to enhance pedestrian safety, including more wide-spread use of pedestrian countdown signal heads.

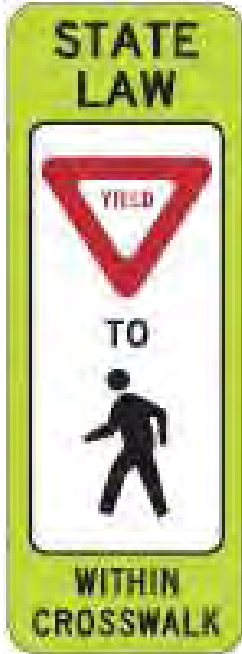
Signage

Signage is another key component of creating a consistent pedestrian environment, especially for motorists. As noted in Section 2, there are currently numerous pedestrian safety sign types in place around campus. Like multiple crosswalk types, multiple sign types create confusion and ambiguity for motorists and pedestrians.

The *University District Crosswalk Guidelines* recommend use of the sign type illustrated in Figure 4.2. Use of this sign type is also supported by the results of the *Comprehensive Crosswalk Assessment* surveys conducted by the Civil Engineering Department. These signs, both the pole-mounted and in-street pedestal types, are currently being implemented successfully on campus. It is recommended that full implementation continue, including replacing existing signs that do not conform to these standards.

Summary of Signage Recommendations

Recommendation 4.6: Develop and implement a signage program that utilizes consistent sign types, designs and placement. The CUUATS *University District Crosswalk Guidelines* should be followed for sign type and placement. Existing signs not consistent with this program should be eliminated and replaced as the program is implemented.



Signage in place at UIUC.

Source: Manual on Uniform Traffic Control Devices (MUTCD), 2003 Edition

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Figure 4.2:
Pedestrian Signage

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SECTION 5: IMPLEMENTATION PLAN

A critical piece of an effective transportation plan is developing a sound implementation plan. Given that a major constraint for transportation improvements is funding, it is imperative that potential projects be evaluated, planned and prioritized. The Implementation Plan on the following pages suggests a method for carrying out each of the recommendations in the *Multi-Modal Transportation Study*. The Implementation Plan addresses recommendations of the System-Level Plan and the Street-Level Plan, and evaluates each in the following categories:

- Timeframe;
- Cost;
- Prime Responsibility;
- Coordination Required; and
- Next Steps.

Implementation will undoubtedly require high levels of coordination with local transportation partners. New funding sources may be required, as well as possible organizational changes to carry out new programs and initiatives. This Implementation Plan is the first step in accomplishing both the broad vision and specific details of this *Multi-Modal Transportation Study*.

**Multi-Modal Transportation Study
Implementation Plan**

Recommendation	Timeframe	Cost	Prime Responsibility	Coordination Required	Next Steps
System-Level Plan					
Parking					
1 Minimize the need for constructing additional parking facilities on campus	Ongoing	None	UIUC	Campus Master Plan	Administration approval of policy
2 Concentrate future parking on periphery of campus in hubs and park-and-ride lots	Ongoing	Medium/High	UIUC	Campus Master Plan	Administration approval of policy
3 Develop park-and-ride lots that are free and easily accessible (via express transit) to and from campus. The following locations should be considered:					Administration approval of policy
Lot E14	0-2 years	Low	UIUC	none	Designate portion of lot for park-and-ride; permits and signage
Lot B22	0-2 years	Low	UIUC	none	Designate lot for park-and-ride; permits and signage
1st Street/Curtis Street	2-5 years	Medium	UIUC	City of Champaign	Site selection and study
Windsor Road/Lincoln Avenue	2-5 years	Medium	UIUC	City of Urbana	Site selection and study
4 Minimize development of new surface lots in core campus	Ongoing	Medium/High, assuming construction of new lots/decks	UIUC	Campus Master Plan	Administration approval of policy
5 Continue to provide adequate accessible and service parking	Ongoing	None	UIUC	Campus Master Plan	Continue policy
6 Require resident students to park in remote resident storage lots that are secure and easily accessible by transit	0-2 years	Medium	UIUC	none	Identify appropriate lots; administration approval of policy
7 Investigate other parking permit price structures to reduce parking demand	0-2 years	None	UIUC	none	Study best practices at other universities
Transit					
8 Move city MTD routes that do not primarily serve campus to the periphery of campus; reduce number of buses passing through campus core	0-2 years	None for UIUC	CUMTD	Work w/ CUMTD	Work with CUMTD through ongoing miPlan process
9 Develop a transit/parking hub system in conjunction with park-and-ride lots	0-5 years	Medium/High, assuming construction of two new lots and other infrastructure	UIUC	Work w/ CUMTD	Site selection and study
10 Consolidate bus stops on campus, especially in campus core	0-2 years	Low	CUMTD	Work w/ CUMTD	Develop consolidation plan for all campus bus stops, w/ schedule
11 Convert existing fleet of campus-serving buses to low-floor, high-capacity buses that are more efficient and promote University brand	2-5 years	Low, if instituted as part of regular fleet replacement	CUMTD	Work w/ CUMTD	Commitment from CUMTD
12 Work with MTD to continue implementation of STOPwatch GPS system campus-wide	0-2 years	None for UIUC	CUMTD	Work w/ CUMTD	Continue coordination

Recommendation		Timeframe	Cost	Prime Responsibility	Coordination Required	Next Steps
Streets						
13	Create great campus streets that are pedestrian-friendly and visual amenities for the campus	Ongoing	High, spread over time	UIUC/Cities	Cities/CATS	Commitment from cities; develop concept plans
14	Create "complete streets" across campus	Ongoing	High, spread over time	UIUC/Cities	Cities/CATS	Commitment from cities; develop concept plans
15	Develop the following streets as campus gateways:					
	Wright Street	0-2 years	High	UIUC/City of Champaign	City of Champaign	Commitment from City of Champaign; develop concept plans
	Gregory Drive	2-5 years	High	UIUC	Cities	Commitment from cities; develop concept plans
	Springfield Avenue	2-5 years	High	UIUC/Cities	Cities	Commitment from cities; develop concept plans
	Goodwin Avenue	0-2 years	Medium	UIUC/City of Urbana	City of Urbana	Commitment from City of Urbana; develop concept plans
16	Develop Wright Street as a model for other campus streets	0-2 years	High	UIUC/City of Champaign	City of Champaign	Commitment from City of Champaign; refine concept plan
17	Limit large delivery trucks on campus by enforcing central receiving system	Ongoing	None	UIUC	Regular campus deliverers; campus depts	Notification to deliverers; commitment to enforcement
Bicycling						
18	Commission a comprehensive campus bicycle plan	0-2 years	Medium	UIUC		Identify funding for study; develop and issue RFP
19	Implement bike lanes on campus streets as part of "complete streets" program	0-5 years	See Recommendations 13-15			
20	Develop and implement a bicycle education program to assist in transition from existing bike path system to proposed on-street system	0-2 years	Low	UIUC/ Transportation Planner (see Recommendation 24)		Research successful programs at other campuses; develop program and identify funding
21	Implement temporary solutions for existing bike path safety issues (new markings and signage, especially at intersections)	0-2 years	Medium	UIUC	With Cities, as required	Identify funding source; program improvements
22	Implement a comprehensive bicycle education and promotion program	0-2 years	Low	UIUC	Local bike advocates	Develop basic program; phase in over time
23	Provide other amenities to accommodate existing bicylists and attract new ones	0-5 years	Low/Medium	UIUC	Campus Master Plan; local bike advocates	Identify funding source; implement as part of campus bicycle plan (see Recommendation 18)
Alternative Modes						
24	The University should hire a full-time transportation planner/ Travel Demand Management Coordinator	0-2 years	Medium	UIUC	None	Identify funding; develop job description
25	Develop and promote a comprehensive TDM program to provide incentives to use alternative modes	0-5 years	Medium	UIUC	CUUATS, cities	Hire planner/TDM coordinator (see Recommendation 24)

	Recommendation	Timeframe	Cost	Prime Responsibility	Coordination Required	Next Steps
	Street-Level Plan					
	Pedestrian Crossings					
1	Develop a specific program for comprehensive intersection improvements on campus, including consistent design treatments, an implementation schedule, and identification of funding sources	0-2 years	Medium/spread over time	UIUC	Cities/CUUATS	Identify funding; develop implementation schedule
2	Implement the recommendations detailed in the University District Crosswalk Guidelines (CUUATS)	Ongoing	Medium/spread over time	UIUC	Cities/CUUATS	Identify funding; develop implementation schedule
3	Channelize pedestrian flow at key locations through use of medians, landscaping and other physical barriers	0-2 years	Medium	UIUC	Cities/CUUATS	Identify appropriate locations
4	Develop and implement other pedestrian safety treatments at appropriate locations, such as refuge islands, curb extensions, pavers or other materials	0-2 years	Medium	UIUC	Cities/CUUATS	Identify appropriate locations
5	Upgrade traffic signals on campus to enhance pedestrian safety	Ongoing	High	UIUC	Cities/CUUATS	Develop program for phasing-out old signals
	Signage					
6	Develop and implement a signage program that utilizes consistent sign types, designs and placement; follow University District Crosswalk Guidelines	Ongoing	Low	UIUC	Cities/CUUATS	Identify funding source; continue with aggressive implementation

Attachment 1:

PUBLIC COMMENTS FROM CAMPUS OPEN HOUSE NOVEMBER 1, 2006

A campus open house was held on November 1, 2006 to receive comments and input on emerging concepts from the Multi-Modal Transportation Study. Nearly 200 people were in attendance. As part of the open house activity, attendees were asked to provide written comments on post-it notes on the various presentation boards. The following pages are a transcript of those comments.

Comments from Nov. 1, 2006 Open House

GENERAL COMMENTS AND TDM

STUDENTS	STAFF	FACULTY	OTHERS
Ask Students if they are willing to help pay for safety upgrades and combine student, university & state funding to really do a fantastic makeover. The Students voted to fund IMPE upgrades, so why not fund safety.	Study should include vehicle safety not just pedestrians-the pedestrians usually cause wrecks because of their lack of awareness	The focus should be on driver behavior not on pedestrian behavior	Everyone should go to a campus safety training class for 1-2 hours
1. Better Crosswalks 2. Bio-diesel buses 3. Better marked bike paths	Better connection from town to campus	Consider safety not convenience	Build a bump and Green St. should be a one-way street on campus
Bus shelters at most main bus stops because of weather conditions	More Pedestrian Education and better parking areas on campus	Ticket who cross away from cross walks-Ticket drivers who do not stop enforce the law	This is the most poorly managed campus for transportation/walking I have seen, chaotic, poorly maintained and poorly planned
Long travel times make traveling to campus from outside areas impractical. Parking systems on campus are a nightmare and punish those who most rely on the car to travel to campus.	Pedestrians often do not stop at the pavement edge but keep walking. Enforce pedestrians to stop and look both ways before crossing.	Biking should be encouraged but not at the expense of pedestrian safety there should be some enforcement of the no biking zones – Similarly pedestrians should not be in the bike paths maybe ticketing in August	Green and Wright is a disaster-get the bicycles into the road where they belong!
Discourage Parking on campus-remote lots w/connect via bus. Encourage bus and pedestrian transport.	More pedestrian education and clearer signage with regard to bike paths	To encourage and promote sustainable sound travel, the U of I should distribute bicycle safety tips to students such as bike lights, helmets good bike routes	St. Mary's could be a great way to get by bike to Urbana
There is a need for point to point shuttles connecting important modes. Sidewalks need improvement in some part of Campus.	Directing bike and pedestrian traffic. Wider lanes on streets throughout campus to allow bike traffic.	How about a street car to go down Green Street that accommodates bikes in addition to people	Must have a zip car program
Provide local grocery stores closer to residential units	Must change bike management. The bike path on Wright Street is extremely dangerous for bicyclists and Ped. Managing bus/peds. At Green and Wright could be improved by having actual bike lanes or widening the road with better signs.	The comments/people commenting need to take into consideration who make the comments i.e., biker, walker, driver mix. This makes a difference when interpreting results and comments	A transportation department to manage the transportation system is long overdue. There must be dollars and staff allocated to the transportation system

Comments from Nov. 1, 2006 Open House

GENERAL COMMENTS AND TDM

STUDENTS	STAFF	FACULTY	OTHERS
Major intersections need to have better design. Maybe something elevated to separate traffic and pedestrians.	Pedestrians and drivers show such disrespect and pedestrians walk in the roads. Get rid of cell phones.	State Law says cars must stop for pedestrian at cross walk. This never happens on Green St. It only happens on Goodwin because of the new stop sign. Cars accelerate, swerve so as not to stop for pedestrians	Car pool discounts
No cell phones; almost ran over several times at crosswalk between DCL and Grainger library because of people on mobiles.	Need to enforce laws made to protect pedestrians. No laws are enforced!	It is not a question of is there better alternatives. We know there are better alternatives, however the questions are about how should we implement alternatives	
Ban Cell phones	Enforce Pedestrians to stay on the curb if traffic is present	Yes, it is crucial to overcome the car/bus and make campus/town more environmentally friendly and humane	
Need a continuous 24 hour service for all 7 days, year round, until that is fixed parking will be the major hindering force.	Traffic patterns are not user friendly	It is not about parking as usual	
Better connections from town to campus-15 min bus time instead of 30.	Traffic rules should be strictly enforced, especially jaywalking & speeding	Promote fixed-rail system in Campus area	
The creation of transit plaza created 2-way traffic increasing pedestrian safety, on the John-to Daniel block, as well as, consolidating many potential bus stops between Armory & Green. This has helped along the boundaries of the core area, but the fact that one street (Green from Wright to Mathews) runs through the CORE, causes problems.	Enhancing pedestrian safety does not mean removing pedestrian responsibility	The broader transportation issues also include connections with Champaign and Urbana. This should not be framed as a "University" study	
Gregory Drive from the location of the underground Lib to Goodwin has been very dimly lit for the past 2 years! I've been working at the UGL and a student was killed at this location.	Get rid of yellow signs in the middle of streets	No cars in core area on Green St. during certain hours or put stop lights in for cars that pedestrians trigger with button then enforce for pedestrians and drivers	
I think it is wonderful it reminds me of home (New York)	Must change parking policies to give incentives to bike/alt no monthly rates	Parking vouchers for various parking lots will be great for people only occasionally drive to campus	

Comments from Nov. 1, 2006 Open House

GENERAL COMMENTS AND TDM

STUDENTS	STAFF	FACULTY	OTHERS
Go out in front of the Union and witness the chaos whenever class changes	Vertical parking, (head-in or to a slant) can fit more cars in a space than parallel parking Example: Sixth Street	Car pool incentives. the value of cars is their autonomy and I do not think any "shared" plan will appeal to them. The options are cars, bus, bike, pedestrians. I think motorized anything should be discouraged	
Move non-campus traffic going E-W to Kirby/Florida and University. Corridors between that are DANGEROUS	Core is larger. Many Pedestrians farther out than current core describes	Many campuses offer families partial vouchers to bus/bicycle commuters. Excellent Idea!	
We need more Pedestrian bicycle corridors with wide sidewalks and green space. See E-W corridor between undergrad library and Foelinger to Lincoln and Iowa	"Core" really goes to University now doesn't it?	TDM should consider the ability to influence demand for private autos by aggressive development of safe alternatives, walking, bicycling, transit	
Trying to access Kirby Avenue Westbound from the Commuter lot (E14) in the late afternoon is difficult. Traffic cues from Neil and Kirby intersection extend to this intersection making turning movements difficult	Boneyard path ends in a parking lot. This is not safe for pedestrians and bicyclists as can't move through lot without looking. Also, if bikes use path how do they continue east?	All great ideas-promote car sharing and free parking vouchers.	
People wait for the bus in the middle of the bike path here, It's dangerous when people are getting off bus here	Students and people walking across Wright St. in non-marked areas	Pay per use – It is a good idea. Use like flexible spending accounts.	
The Wright St. bike path W. of Quad is one of the best on Campus. It is separated from the road & walking path and clearly marked. People on foot rarely cross it without looking or walk in it blocking traffic. (A good Model)	Fourth Street-this is really heavily crossed by students going from dorms and Greek housing and apts. Yield to Pedestrian signs do not work well, they just lead to very frustrated drivers & Ped.		
The North/South Ped. Routes here are closed due to construction. This is a serious impediment. When reopened, bike and foot lanes should be separated and marked, they were crowded, confusing, and in poor condition previously.	Not a fan of new "Walk" & "Don't Walk" Intersections at Green & Wright and also at Green & 6 th . People walk against the light all the time because they get impatient for the "all walk" signs.		

Comments from Nov. 1, 2006 Open House

GENERAL COMMENTS AND TDM

STUDENTS	STAFF	FACULTY	OTHERS
In the future, 10,000 more students will commute to campus so build them housing or get centralized transportation from outside of Campus	St. Mary's Road needs sidewalks and/or bike path		
Integrate greenway to connect the quad to neighborhood Park.	Lack of resources UI has devoted to trans is a scandal. Parking is the only thing they worry about.		
The cross walk north of Grainger Library is VERY effective at getting a driver's attention so much so that drivers even slow down at crosswalk, even if the flashing lights are not flashing. Why don't we have more walks with these flashing yellow lights?	I think a bike share or bike on demand program would be cheaper and people would be willing to use them		
The more varied this bus routes and the more buses available for students to take the few students having to walk long distances and fewer driving	Pay per week parking cash keys are great		
Cars, parking and congestion make campus ugly and so do elitist pedestrians	Keep in mind that many of our faculty and staff commute from small towns.		
Actually enforce the no right turn from Wright to Green St.	Need to improve shuttle to lot E14 (Oak and Kirby). Van pools sound like a good way to shuttle from E-14 to campus efficiently at 8:30 a.m. and 5 p.m.		
Reduce traffic to one lane each direction on Green Street. Why is Green St. only 2 lanes on Campus?	Bike demand excellent idea!		
Very difficult for pedestrians to cross Green St. between lights. More places where median can be crossed?	I live out of town and need to park on campus. Getting paid not to park will not work		

Comments from Nov. 1, 2006 Open House

GENERAL COMMENTS AND TDM

STUDENTS	STAFF	FACULTY	OTHERS
The new (fall 2006) crosswalks on Green St, between Wright and Mathews (in the CORE) have organized pedestrian traffic and significantly reduced the free-for-all for pedestrians at this busy area. However, vehicular traffic (MTD, UI, and private vehicles) still provides congestion and conflicts in this area.	I really appreciate the free transportation that the University provides its staff, faculty a students via the MTD.		
Improving the way people get to campus will help improve the way they travel within campus	Financial incentives for those who don't park "in the heart" of Campus. Either ride a bicycle or bus in good weather.		
This is the standard local thinking you need tasty carrots and big sticks	I don't think people that work here will want or use any of these I have lived here all my life.		
Make incoming student understand that off-campus housing very far from campus and off bus routes is a poor choice.	We already car pool and rides are already matched per towns. Need to run errands for work & need immediate access to car.		
Get paid not to drive! Good idea!! Keep campuses walker friendly.	Reduced price visitor parking meters at remote shuttle lot.		
Good idea and should cover large area	All good. Esp. parking cash flows when charges cover full cost of providing parking		
Yes to financial incentive. Especially for grad student.	Car sharing on campus would be helpful esp. at lunch hour		
Park-n-Ride and shuttle show increase service times.	What about a yellow bike program and bike share program for people who use the bus system		
Make parking prohibitively expensive and use money to convert streets into Green spaces.	Parking vouchers & financial incentives both sound like good ideas		
Bus passes for all university affiators a good start. Need options for bad weather conditions. Have more shopping in walking distance.			
Zip cars perfect for UIUC/Champaign and only really need a car to buy large things at Northern Prospect big box store.			

Comments from Nov. 1, 2006 Open House

GENERAL COMMENTS AND TDM

STUDENTS	STAFF	FACULTY	OTHERS
How about change land use so you don't need to drive to do grocery shopping.			
I hope can get discount passes for buses for dependents of grad students. Preferential parking for car/vanpools is really a great idea			
Designated bus stops with shelters. Maybe close to a coffee shop. So the video experience could get improved. I am willing to walk more to get more comfort			
If they had zip cars that you could get for the weekend, I would sell my car and use them.			

Comments from Nov. 1, 2006 Open House

PARKING

STUDENTS	STAFF	FACULTY	OTHERS
Parking should be convenient, but affordable. Most lots on campus are off limit to students & are left to fight over metered spots and pay a ridiculous fare.	Parking & Buses a nightmare-It should not be an hour trip if you live 15 min. from campus.	Bring Emory planners to UIUC!	I like the idea of edge parking lots being connected by express transit. UC San Diego did this and it worked well.
If parking is a benefit for staff/faculty, an alternative (monetary?) benefit should be provided for those who choose to bike or use off campus lots.	Parking lots should be located at the perimeter of the campus & shuttles used.	Workers deserve to park close to their work places.	Parking fees should be graduated based on income (progressive vs regressive). More parking in the Core is not the answer.
If designed correctly decks can better fit into urban environments than empty spaces	Better bus system with smaller buses and more frequent, better routes through out the town. Buses would need bike racks.	Lots at campus edge should be cheaper. Some relation to salary would be good.	Dramatically increase parking fees and provide vanpools/zip cars. Take out meters and put in bike lanes.
What about rainwater run off? Could it be captured and used later in a sustainable manner? Ex.: planted areas could exclude curbs and be level to grade to absorb water run off.	We cannot attract good faculty/staff and expect them to park at the assembly hall. We need a parking garage near the quad	I would like to see parking at a distance to promote health by longer walks.	
Undergraduates should have less opportunity for parking permits than grad students-esp. when the former live on campus and the latter live off campus.	Keep parking on campus. Have students do the commute not workers and lower pricing on parking because it takes too much dollars.	Please no parking on bus routes in congested (campus) areas.	
Only for those who commute from afar. Overnight visitors have nowhere to park M-F.	We need a commuting lot on the north side-not just assembly. If facilities were available to clean up easier I would commute to work on a bike.	Park & Ride- Free parking!	
Move more car traffic off campus and offer more service such as 23 shuttles. Too many cars on student non-commuter campus	I work in one area and need to run errands for work-not easy and effective to park off-site. What about parents who need to get to sick children quickly?	Frequent, circulator transit will solve this issue.	

Comments from Nov. 1, 2006 Open House

PARKING

STUDENTS	STAFF	FACULTY	OTHERS
Prohibit freshmen and sophomores from having cars on campus. They will adjust away from Chicago suburban drive everywhere lifestyle	Dangerous entrance to lot between education and Buell. Entry off Peabody into lot has been site of many near accidents between cars leaving lot and entering lot. -Need traffic direction arrows in lot, wider entrance to lot off Peabody, and removal of 2 parking spaces just inside entrances.	Eliminate surface parking in isles of park decks-strategically placed	
I don't think parking should be added. Large lot like E-14 can be used with a shuttle line. If current street parking becomes too few, I'd advocate an increase in campus meter pricing.	Moving parking to campus perimeter is best way to truly improve pedestrian safety and reduce conflicts.	Parking could be provided on perimeter sufficiently & economically if modes of connected throughout campus are improved.	
Parking fees on periphery lots should be decreased. Raise meter prices-rely on mass transit more and discourage parking in campus lots	Get rid of monthly parking or provide a credit incentive to ride on mass transit into campus some days.	If bicycling were safer choice, you would get far more bicyclist on campus than currently existing. The demand for parking would be lower.	
Parking must be available at McKinley. Sick students should not have to hunt for a legal spot 5 roads away.	Increased parking garages. Parking is horrific. I have been on the list to get a parking place for 3 years and still don't have one. I pay \$8 a day on meters-anything less that is good.	Students should have low priority for on-campus parking. It is hard to feel sorry for a 20 year old who feels entitled to park in front of their class room.	
Commuter students and resident students alike should be encouraged to use remote parking & the MTD campus system. There is no need for a typical student or staff member in the central campus area to drive to central campus, such use should be restricted to honored guests and persons with disabilities	Build parking garages. Give free employee parking.	Exhaust pollution by cars and buses must be aborted.	
Build and they will park (hence stop building) Less spaces more incentive for alternate transportation=more expensive parking.	Encourage carpooling, vanpooling, etc. Make parking (in outer ring) available for 1 or 2 days a week so people can bike most days.	Offer free walking escorts to people who park way out. Also could offer buses, golf carts to transport people to and from parking on outskirts.	
Keep free after-hours metered parking for this reason	Offer short-term car rentals for staff to run errands that don't drive to campus.	Reserve some close parking for restricted users. Auction the reset.	

Comments from Nov. 1, 2006 Open House

PARKING

STUDENTS	STAFF	FACULTY	OTHERS
Keep it difficult to park on campus except at night, safety is an issue.	Better to have less land used by having decks rather than surface parking. Decks can be underground or under building to preserve open space.	Abandon the wasteful solo shots.	
Remote parking and use shuttles into campus. Discourage/ban cars on campus. Encourage 1 st year students to leave their cars at home	Suggested parking garage: West side of main library (connected to west & south sides) and east side of Huff Gym.	Make motorists pay the real cost of parking per day/hour but per semester. Remove on sheet parking to accommodate bikes.	
Safety is an issue at night, driving may be most desirable option for students on campus alone.	Where is the parking for disabled visitors on campus?	Less cars, less parking spaces, less congestions. Provide incentives to keep cars off campus	
Open all university lots to free parking on the weekends and at nights	Make sure motorists pay full parking costs, under any system chosen. Use internet auction system with adequate reserve bids to allocate spaces. No status preferences.		
It seems that more and more undergrads are driving to campus-the university should not allow freshmen to bring cars at all.	Have true short-term "loading" spaces. Frequently these are now in front of dumpsters and marked both "loading zone" and "no Parking".		
Program/funding to promote use of transit system to reduce parking demand.	Parking is a nightmare for anyone "visiting" the campus. Too many faculty/staff parks all day in meters that should be used for guests.		
More understanding for parking for art students please.	If use of personal vehicle is needed for the job (to transport equipment between buildings for example) parking should be provided without cost to the employee.		
If bus system were more frequent, the need for parking would decrease. Bus routes are too winding making me feel sick	UIUC parking restricts freshman parking to "Green" lots on campus "overnight parking for residents or "commuter" for Soph & Blue staff parking. 1 st -come-1 st park. Parking fees are low & reasonable.		
Have some meters that are free but for 5/10 mins. (Like Post Office in Champaign on Neil)	Need more bus shuttle lots on all (4) sides of campus. This needs to be commuter campus drive in, park and bike, walk or ride bikes in on campus.		

Comments from Nov. 1, 2006 Open House

PARKING

STUDENTS	STAFF	FACULTY	OTHERS
Current transit systems make traveling to campus from country fair area very time consuming. Cars are the only option for commuting from these areas. Current parking system punishes those who must rely on cars to travel to/from Campus.	In summer, I ride my bike as much as possible yet I still have to pay for parking space or I will go back to the bottom of the list. Doesn't make sense.		
Reduce or eliminate small parking lots in the core. Increase shuttle bus frequencies. Reduced traffic congestion makes alternative transportation such as busses quicker and this more convenient	Need more continuous bike paths on streets.		
More frequent and longer hours for E-14 shuttle might encourage its use	Partner with Big Lots stores to provide Park & Ride for commuters. Stores get customers who may shop on way home. Campus gets free/low cost parking spaces. Direct MTD Shuttles may also carry town customers to the stores.		
Yes, shuttle lots will use impact of new suburban commuters (students and staff)	Offer short-term parking to staff for running errands on campus.		
Give priority parking to carpools	I do not like the idea of seniority parking by class (fresh, soph., junior, senior) – E14 has plenty of room because “shuttle” is not dependable. I rode for six years and had to build in 30 min. to get to the apts.		
Parking at edged campus (E-14) for freshman should be implemented	Restrict student cars in the Core of campus during work hours		
Most “zoo hour” spots are not used after 5 get rid of morn.	Students should have limits. Grad students and staff/faculty should have more flexibility-each parking lot should have zones restricted by permit type		
Look at the UCLA parking study	Too many small parking lots that are an eyesore. Need multi-plex parking (Emory Univ. a good example of positive)		

Comments from Nov. 1, 2006 Open House

PARKING

STUDENTS	STAFF	FACULTY	OTHERS
PLEASE convert as many parking spaces (lots) into pedestrian plazas and INCREASE greenway. Mass transit is good.	Need adequate parking to support output town businesses.		
Staff/Faculty paying hourly would be effective way to encourage other transit modes.			
Undergrads should have an option to gradually move from edge of campus parking to core parking as they move up in classes?			
Do not build more parking garages! It only encourages more cars!!!			

Comments from Nov. 1, 2006 Open House

PEDESTRIAN SAFETY

STUDENTS	STAFF	FACULTY	OTHERS
Close Gregory to all but peds, bikes & buses	Drivers on cell phones are a hazard-support a ban for cell phones while driving	Close Matthews, Wright and Gregory to vehicles. Bikes and Peds are okay and make seating areas and small green spaces	Peds can be made the #1 priority without closing streets to all vehicles
No place should be pedestrian only, there is student living in the quad but some of the faculty reserve parking on campus	Today a ped student walked straight across from Chalmers to Lincoln Hall right in front of a bus. Did not stop, pause or look!	Green St. from Lincoln to Wright should be ped only during class/Business hours	Close Wright (Green to Armory section) should be for buses and ped and bikes only
Green Street	I do not think any streets should be for ped only. The people driving the cars are just as important. We are working in the jobs that support students. There is already a lack of parking problem.	Close Matthews place ped crossing in front of Krannert	Union High's south part
Close Matthews, Wright and Green to cars-Make distinct areas for bikes and pedestrians	One problem is student not paying attention on cell phones and walking in front of cars	Driving on campus should be as difficult as possible & discouraged. It is too dangerous and people should be walking or biking.	No local traffic only in Core
Restricting motor vehicles from pedestrian-intense areas has already been done for the most part. Restricting bicycles to bike paths and barring them from sidewalks is a policy, which exists but is not enforced and does not adequately reflect ingrained behaviors. Enforcement of pedestrian-only areas would be a pointless headache for DPS	Wright is a dying nightmare. Despite efforts over years, nothing works. Close it.	The entire campus core should be pedestrian/bike only	Wright & Matthews were both closed to car traffic in the 1970's. It was great! Do it again!
Pedestrian Crossing should be well marked with signs	Place ped crossing in line with Krannert and Elaine	Close Green. The street is too small for big cars and currently just a hazard.	The University has neglected the ped system and dollars must be allocated to manage and improve.
Green St. from Fourth to Goodwin. It is not easy to cross. This street is main part of campus and ped crossways should be improved.	One pet peeve: ped walking in street when there is a sidewalk.	Close Matthews and Wright	
No buses or cars at all should drive on Wright between Armory and Green	North-Springfield, South—Gregory, West – Sixth, and East-Goodwin	Keep cars out of entire core campus area. (buses, deliveries and disabled only)	
Closing Green St. is crazy busiest street in Champ/Urbane unless Springfield expanded	Keeping Cars off Main areas on campus are bad for people living far away	Wright and Matthews should be closed to all vehicular traffic-Bus routes changed to sixth and Goodwin routes	

Comments from Nov. 1, 2006 Open House

PEDESTRIAN SAFETY

STUDENTS	STAFF	FACULTY	OTHERS
Green Matthews and Wright Streets	Ped only! All streets bordering Quad. (Exception to Green St.) I like the 1 lane in front of Union	Close Green	
No cars (bus ok) on Green between Wright and Goodwin	The Quad and Green from 4 th -Wright Should be ped only	All sidewalks should be ped only and absolutely no bikes!	
Engineering Quad, Main Quad, and South Quad	Green St. from 6 th St. in Champaign to Gregory in Urbana-limited bus for campus routes only		
Green St from Wright to Goodwin	NONE! Please remember that campus is heavily stuffed by people living in other small towns and must drive. We won't get good people if we make it so inconvenient to get to work		
Wright, E-W to West of Wright	No bikes on the Quad		
Close Green	Unless you restrict student riding buses in Core no area should be for ped only		
Close Matthew and add speed bumps at Green & Springfield. (Something to calm the thoroughfares)	Core campus from Gregory on South, Goodwin on East, Springfield on North and 6 th and 4 th on West should be ped only. No area needs to be restricted just need good patterns, signage and education.		
Wright St. should be turned into a brick paved bus/ped/UI vehicle only zone south of Green.	As a corollary-there is need to be better instruction and education of proper usage of crosswalks at Freshman Orientation and in regular articles published each semester in the Daily Illini-Student News		
Green st. to 3 rd to Goodwin, Quad	I advocate fewer ped crosswalks, not more. Students & others believe & act as if the presence of a crosswalk gives them cart blanche to walk out in front of on coming traffic. Drivers also so not understand the law and will pause and stop when ped are approaching the crosswalk. Total Confusion!		
Gregory still has too many cars during the day	To extend possible whole campus		

Comments from Nov. 1, 2006 Open House

PEDESTRIAN SAFETY

STUDENTS	STAFF	FACULTY	OTHERS
Limiting traffic (like on Gregory) would be awesome in more university areas-ped/bike/skating right of way regardless of cross walkers on crosswalk in more areas, like 4 th (from Florida to Green), Lincoln Ave., Chalmers, Gregory.			
No faculty special city reserved parking on campus-these people only have to come in and out twice			
The Quad-a commercial center can be ped only and attached to the area hear is the YMCA on Wright.			
Only within quads not across any streets			
Green and Springfield-exceptions Bus/Emergency/university vehicle only			
Stop running us over			
Streets around Quad, Green between Wright and Matthews, Gregory should be pedest. To connect to South quad			
Green @ Core			
It is your own fault if you get hit by a bus			
Streets around the quad			
Reduce/Eliminate cars on Green and other Core Campus Streets			
Current Bike paths often cross ped paths with no regard for right of way			
Areas without direct parking connections can be served primarily by bus should be ped. More Ped toward Core less moving out –Density			
An area bounded by Green to the north, Forth to the west, Kirby to the South and Lincoln to the east should be limited to ped, bus and maintenance vehicle use only			
Lincoln to 6 th and Gregory to Springfield			

Comments from Nov. 1, 2006 Open House

PEDESTRIAN SAFETY

STUDENTS	STAFF	FACULTY	OTHERS
The streets around the quad can be made Ped only but only during summer. I do not think it would work in the winter and during vacations			
Better Shuttle service from different car parks. Student parking only in the library or other important places.			

Comments from Nov. 1, 2006 Open House

STREETS AND BICYCLING

STUDENTS	STAFF	FACULTY	OTHERS
Median = inefficient use of space	Use off street bike lanes	How about making some street for bikes only	Use shared bike/bus ways
A lot of students have not biked a lot before so they probably won't start unless there are marked lanes for them, which makes them feel safer, even if unmarked wide lanes are just as safe	Shared bus/bike would be great for Wright, Mathews and Green. I like bike lanes a part of street	Reduce Green Street between Wright and Lincoln to 3 lanes plus bike lanes (on street)	Keep width of travel lanes-narrow line road diet
Dedicated Bike and Bus lanes good, but implementation should preserve natural "traffic" pattern flow, i.e., ride on right	Yes to shared bus/bike way (no cars)	Get rid of parking on congested streets	Need lots of bumps to reduce speed and remind people and drivers
Shared bus/bike most efficient for campus area saw it and walked it in Denver. Wonderful!	Shared bus/bike way and lanes with median	Continuous bike paths! (not ones that stop anywhere)	Use medians and bike ways
Have the bike path next to the travel lane and keep the sidewalks clean	Another option is having different levels for each mode of transportation, for example: car lanes in middle. Bike lanes outside car lanes, but raised 6" – 1 ft., then side walks on outskirts raised up another 6" -1 ft.	Bike lanes & parking don't mix-too difficult for pedestrians to negotiate. I like on street bike lanes. But turns?	Bike lanes not paths
Shared bus with no cars – most favorable priority should be given to pedestrian and bicyclists	Wright Street mall-buses only-bikes in the middle	Actually I am becoming less comfortable with bike paths-maybe integrated into traffic on side streets and on broad sidewalks on arteries (e.g.) Kirby is best.	This is the best one by far it accommodates all users
I vote for more shared bus/bike way (no Cars) on this non-commuter campus. Have better, safer, more comfortable wait stations for employees to wait for shuttle buses, which operate from off campus lots/garages to center of campus.	Shared Lanes with parking good. We need signs at intersections for turns of traffic and pedestrians.	Consideration needs to be given to handicapped, hearing impaired, slow moving	The bike path system has been neglected to the point of creating a liability for the university a major over and out is overdue!
This would be fine except most of our streets have no bike lanes	Rutgers looks safest	There are too many mixed message in these examples	Get bikes on the streets and mark lanes
That would work if people stop walking in the bike lanes	Please give us on street bike lane. There will be less congestion and less need for more parking spots if more people feel safe to bike	Street calming is an appropriate approach. However, we have very few studies to help us know what works the best	Bike lanes need more and must be marked "complete streets" for all users

Comments from Nov. 1, 2006 Open House

STREETS AND BICYCLING

STUDENTS	STAFF	FACULTY	OTHERS
Separate on-street bike lanes are good to make people feel safer; this may encourage people to bike instead of driving, thereby reducing traffic. Also, reducing speed limits on campus streets would reduce the speed differential between bikes, car, making biking safer	Too many 90 degree angle, bikes need to have curves	Do everything to encourage more biking-education, infrastructure, maintenance	We have bike paths? Where? Where do they go?
Put bikes on streets away from pedestrian	Bike path system like Boulder, CO completely separated from roads would be ideal	Bike paths should consistently continue. Not stop anywhere and connect to bike paths outside campus	
Bike lanes not paths please	I like the university of Wisconsin picture of bike lanes incorporated w/street. Makes more sense as bikes should follow car rules	Better parking for bikes!	
Despite its college town reputation, C-U is much more resistant to progressive change than many other places-Madison, Chapel Hill, Davis, etc.	Connections to the community on the bike. To commute on my bike can either ride north over the interstate on Lincoln Ave. or on Cunningham (rt.45). Neither option is safe. Bike routes need to be available everywhere.	Need on street facilities for bikes and keep paths only where there is no parallel street	
Whatever it is, it should be more clearly marked-solid color painting, etc.	Bikes racks out in front and backs of all buildings	Do not have bus stops next to a bike lane where people stand on bike lane to wait for bus (Armory and Wright)	
Also provide students with pamphlet or training so they know how to turn using bike lanes on streets	A mix of on & off street seems like a reasonable compromise; streets for transportation, paths for recreation	Bad spots for bikes Pennsylvania and Lincoln – Bike paths ends at curb at Lincoln and Iona providing no safe way on/off path.	
Bike lanes with median seems safe. However, the crossing street will be not easy. Pedestrian can't cross where they want.	Conflicts with pedestrian crossings bike paths and wheelchairs sidewalks, paths	Bike lanes stop and start abruptly, which causes cyclists must switch to street or sidewalk and in winter, the cyclists use streets because paths are not well maintained	

Comments from Nov. 1, 2006 Open House

STREETS AND BICYCLING

STUDENTS	STAFF	FACULTY	OTHERS
Shared lanes are best, parking is a hazard for either shared or on-street bike lanes, but is avoidable if the bike lane is not "divided" by line. Driver may not pay attention to bikes if they are in a separate lane making avoidance of hazard in the bike lane difficult	Current path system has many problems, in bad shape, pedestrians hazards		
The enforcement of jaywalking laws would help-esp. on Matthews and Springfield	Need new paint and better signage on bike paths		
Multi use, multi modal but very controlled	Require all students to go through 15 min. bike safety session at student orientation		
Shared bus/Bike-this would be excellent between 4 th /Lincoln, Green/Florida. This would allow smooth pedestrian unmotorized traffic and mass transit	Work with city of Champaign and Urbana to come up with one uniform bike code so campus police can effectively and easily enforce it		
Marked Bike lanes have potential for confusion when bike is to make Left Turn on street	Enforce use of bike lanes and paths to stay off sidewalks		
No Medians please, make lanes slightly wider to more easily accommodate bikes and cars	Issues I have experienced with bikers-How can we slow them down? I have almost been hit several times and we need to keep them to the paths and not on sidewalks.		
Bike lanes at Lincoln and Springfield	Paving needs to be redone on existing paths and clearly marked to keep ped. off		
	Bike Lanes end abruptly at no place		
	Off street bike paths only! I hit a guy last year because he was on the sidewalk and did not look for cars and slammed into the front of my car		
	The bike paths are not truly paths peds are always on them. I think bike lanes on the road are a better option. Some bike paths have the arrows pointed the wrong direction		

Comments from Nov. 1, 2006 Open House

STREETS AND BICYCLING

STUDENTS	STAFF	FACULTY	OTHERS
	Bike Paths as a part of the road are safer.		
	Create complete bike path system that links out to community bikeways		
	Stop lights managed by sensors need to be sensitive/triggered by bikes		
	Bikers need to follow the laws too!		
	Proper signage, maintain painting, remove re-route conflicts with MTD/loading areas, educate bikers/peds, redesign to reduce conflicts, don't make multiuse like First Street		
	Education of motorists as to the road rights of bicyclists needed		
	Help inform people about walking onto paths		
	Safe/monitored bike parking		
	Build community bike paths that are maintained and lighted		
	More bike racks are needed		
	3 mix according to modern engineering knowledge		

Comments from Nov. 1, 2006 Open House

TRANSIT AND WALKING

STUDENTS	STAFF	FACULTY	OTHERS
Reverse one of the Quad or 6 Pack routes (lay by similar & long wait to get all the way around)	We need signs directing buses, cars, bikes and intersections in campus town. Pedestrians need these signs so they can have some idea of what to expect.	Inefficient and dangerous	Make buses and routes more useful or Wright St. a transit corridor.
Think about other safety issues too. At night it is a BAD idea to have bus stops too spread out, esp. when many women are not comfortable walking at night. Night rides need to be increased.	Smaller size buses needed which also run on ethanol (as now done in Sweden & Brazil)	MTD System is very slow	More Bus shelters and benches are needed.
Bust stop at Sieb Center is unused generally by 6W Orange buses, who prefer to unload at stop sign just prior. Example on how just designating stops may not help. Stop consolidation well in general though moving existing transit plaza and Wright/Armory stops north seems silly. Eliminating community routes on campus hurts MTD's service mission and hurts people (staff/student alike) living off campus.	Green St in front of Union is dangerous. People that get off the bus walk in front of bus and in front of cars and almost get hit; it messes up the flow of traffic.	In favor of reducing bus stops and alternative system	Increase capacity of transit and car parking. Increase frequency.
Make some streets bus only (at certain lines). More buses and stops on campus, more people using buses (as long as the routes are effective).	Current bus system is fine but some buses are empty too frequent.	Put in a hanging monorail running n-s. This will remove traffic friction from streets	I think stops could be consolidated but do not take stops & routes out of campus. It will become inconvenient and less used. Winter is brutal here we need a good bus system.
A transit hub based system is great idea. Combine this with the reduction of campus traffic and buses become more convenient by allowing more on-time stops.	No the system is not fine.	Decrease corners and eliminate parking on bus routes	Build bumper before all major stop signs and pedestrian crossings.
Remember to consider weather-rain, snow, wind and extreme coldness. All effect how much people are willing to walk to a stop.	We need more frequent, small buses on dedicated lanes. I like park & ride idea with frequent shuttles.	Both mass transit and automobiles are too eager to please lazy people who do not like to walk. Few bus stops and few parking garages.	Need more stop sign on Green and Springfield Streets.

Comments from Nov. 1, 2006 Open House

TRANSIT AND WALKING

STUDENTS	STAFF	FACULTY	OTHERS
The unsafe high crime that persists around campus would make a shuttle system attractive. At night I walk to be able to go from class to the bus in the shortest distance possible.	Utilize consolidated stops to reduce traffic in core area	Move the off campus transit hub to the edge of campus	Don't take bus routes out of campus core area. We need those. I am a former student as well.
Use the empty lot next to/east of the north parking deck next Beckman as a metered parking lot. Not enough meters in parking deck	Less campus routes more bus routes to other sites in the city. Esp. for the poor people and where they live to where they work.	There are too many buses on campus. Buses should not be used as an alternative to a short walk.	When the weather is nice walking a longer distance is okay. However, mid October through early April, the weather can be wet and brutally cold/windy
Alternative looks much cleaner-I like it!	Bus shelters need to accommodate persons with disabilities	Please no parking on bus routes in congested (campus) areas.	
Campus stops are necessary for their convenience.	Taking city routes to outside hubs is a great idea. Let us do more walking in a safe traffic environment	Park & Ride- Free parking!	
I like Alternative system around parking hubs.	The buses give in to the students so they do not look and wait. They need to start giving out tickets	Frequent, circulator transit will solve this issue.	
Low volume stops are also important. Ask who use them. Are there special needs for people to use them?	Too many buses "sit" with not in service on their canopy. Waste of time & fuel-Consolidate stops to get "there" faster.	Eliminate surface parking in isles of park decks-strategically placed	
The bias against bus transit is not related to any real safety concern. It is easy to attack MTD because it is a single, large entity. It is much harder to encourage personal responsibility among autos, bikes and peds.	Zero emission buses	Parking could provide on perimeter sufficiently & economically if modes of connected throughout campus are improved.	
I like the consolidated stops idea.	Zero emissions buses in the core, hybrids citywide.	If bicycling were safer choice, you would get far more bicyclist on campus than currently existing. The demand for parking would be lower.	
Fixed bus waiting areas should have a map of bus routes	More covered/enclosed bus stops would be great	Students should have low priority for on-campus parking. It is hard to feel sorry for a 20 year old who feels entitled to park in front of their classroom.	

Comments from Nov. 1, 2006 Open House

TRANSIT AND WALKING

STUDENTS	STAFF	FACULTY	OTHERS
Replace Campus Routes (quad, pack, 22 Inline) with light rail. The consistent traffic densities would justify the investment.	Trolley shuttling around and back & forth. Predictable, fun obvious therefore (rails) safer.	Exhaust pollution by cars and buses must be aborted.	
Improve & increase parking on the periphery. Park & ride	If you reduce the number of stops it would require people to walk further which is a safety issue after dark.	Offer free walking escorts to people who park way out. Also could offer buses, golf carts to transport people to and from parking on outskirts.	
3 minutes is a long time when I am freezing.	I appreciate the current route set up and number of stops on campus.	Reserve some close parking for restricted users. Auction the rest.	
Fewer but all heated bus stops. Consolidate but think of year-round use.	Put in bus pull over to get buses out of traffic when possible.	Abandon the wasteful solo stops.	
People do not always have I-Cards or know schedules of anything but 22, 21 and 26	If commuting is necessary. Need to keep and have more bus stops	Make motorists pay the real cost of parking per day/hour but per semester. Remove on street parking to accommodate bikes.	
Move city route off campus but build a new transfer bus stop to connect them to campus routes, and then increase frequency of campus routes.	I support walking further distances but bad weather definitely affects my actually doing so.	Fewer cars, less parking spaces, less congestion. Provide incentives to keep cars off campus	
Substantial student population west of Wright, north of Green but no campus route esp., on weekends and evenings.	Viaduct St. Mary's Road/Neil Street is deadly for ped. And bikes. Surface is bad, no dedicated walkway. Disputed jurisdiction problem	Put pullouts at roadside so buses don't hold up cars when loading.	
Not very efficient use of gas- consider conversion to electric buses.	St Mary's Road has no sidewalks or bike paths. It's 4 lanes in a 25mph zone. 2 lanes could be dedicated to bikes and peds.	Make usage studies and improve over time.	
Look at the streetcar tram idea again.	Students need to be informed of how to abide by traffic laws or reminders sent from Chancellors office about the students paying attention not from the drivers perspective	Integrate campus routes with town routes and make MTD make reliable displays.	
Alternative-Consolidate stops are not a good idea. Maybe a few buses can do limited stops but not campus buses like QUAD & PACK & 22, which are used by students to get between classes.	Underground parking under Quad- Salt Lake City has this method	Change that students can ride free	

Comments from Nov. 1, 2006 Open House

TRANSIT AND WALKING

STUDENTS	STAFF	FACULTY	OTHERS
Please consolidate stops. The current system is confusing and wastes time with constant start/stops.	It is important that bikes ride with traffic. Recreational paths are important but not an absolute for bicycle transportation. We need to reward bicyclists who forgo cars on campus	More frequent buses between airport/last of aviation to campus	
More walking from stops after dark is a safety issue	It is healthier to walk anyway, let's encourage students and employee health by make the campus walkable and bikeable.	Hubs are useless for people now. I have a 40 min. walk, 20 min. bike, 30 min bus.	
Consolidating stops will require buses to run at a higher frequency. Less stops means less buses and decreased mobility and longer wait times.		I like the east-west bike path on the south end of the Quad, actually it is south of Greg/Follinger Music Bldg. Please do not remove it.	
I do not like the bus only street idea. It is a waste of space. However, give buses remote controls to change traffic signals (see Curitiba Brazil) this brings the speed of light rail w/o the cost.		Hanging monorail	
Currently too many stops make consolidated stop user friendly, visible and accessible		Thank you for suggesting that bike lanes need to connect outside of campus. Please work with the cities to further collaboration	
I like "frequency of Buses" because there are other choices even though I miss the bus. It is needed to reconsider the bus route esp. route one for 26, 21 almost rep. Route in north campus.		Promote bicycling by making it safe, getting easier across campus, connecting it to town bicycle paths.	
There is no reason why I can't drive		None of these are any good to get across campus	
This is a problem when it is zero outside and I live 5+ blocks from a bus stop or it is 1:00 a.m. with no Ped.		The main problem is still the underdeveloped bicycle path system in town.	

Comments from Nov. 1, 2006 Open House

TRANSIT AND WALKING

STUDENTS	STAFF	FACULTY	OTHERS
I almost never ride the bus around campus. Between waiting for the bus to arrive and all the stops, I can walk faster.		Build parking decks close to campus (not too far at edge) but make it expensive except to force vouchers for occasional use (e.g. faculty needs etc.)	
Allowing only campus shuttles. Campus shuttles can be rerouted so that they cater to the northwest campus too.		Maybe city buses should be removed from campus.	
This seems like a loaded question, implying that running core routes to campus is a vote for laziness. Community routes should be able to serve the campus as part of the MTD's mission.			
The proximity of city routes to campus are a key issue for students and staff who live off campus. Many routes already require a transfer to reach campus – having to transfer again or walk a long distance would make bus transportation more difficult.			
Have more frequent campus routes after removing city routes.			
As long as the system flows			
Any system, as long as pedestrians are removed from the bike path.			
Bike paths need to be unobstructed, straight (no gratuitous crossing of streets) and flat! (The up & down of curb cutouts, poorly maintained road crossings is horrible when biking @ decent speeds.			
Enforce, ticket cyclists on sidewalks or other ped-only path. Ticket pedestrians on bike paths.			
Bike paths could be prevented from having pedestrians if there were physical barriers.			
Very inconvenient if bus is missed			

Attachment 2:

SUMMARY OF CAMPUS PARKING ANALYSIS



Martin/Alexiou/Bryson, PLLC
Transportation Planning
Traffic Engineering

Memorandum

To: Pam Voitik, Director of Campus Services
From: Bill Martin, P.E.
Subject: Summary of Campus Parking Analysis
Date: March 14, 2007

Introduction and Assumptions

This memorandum provides detailed information on parking supply, management and pricing for the University of Illinois at Urbana-Champaign (UIUC) campus. It supplements the information summarized in the *Multi-Modal Transportation Study*. It is concerned primarily with the spaces owned and operated by the University. The spaces owned and operated by the Athletics Department and by the Cities of Champaign and Urbana are noted but not the focus of this memorandum. Unless explicitly stated otherwise, any references to the number of spaces refers to spaces owned and operated by the University.

This memorandum focuses primarily on two time periods: the present, and the completion of the current *Campus Master Plan* (Build-out). The changes in supply and gain are estimates only. Actual totals will be dependant on the specific building footprints adopted. If the *Campus Master Plan* proposed the construction of a building on an existing parking lot, then that lot was completely removed from the parking supply in the estimate of supply at Build-out. All other assumptions are detailed herein.

Existing Parking Facilities

The University operates approximately 16,200 parking spaces, of which 12,750 are permit controlled and 2,300 are metered. The University operates five parking decks which have approximately 3,500 spaces combined, roughly 22% of the total parking inventory. Resident students typically park in one of two lots on the south side of Kirby Ave./Florida Ave. (Lots E14 and F23). In addition to the spaces operated by the University, the Athletics Department operates the spaces near Assembly Hall. These spaces are not used on a daily basis, however they are used for special events, some of which are not athletic events. The cities of Urbana and Champaign also own and operate a number of on-street metered parking spaces in and near the University on city-owned streets.

Figure 1, attached, divides the campus in to three general areas. The first, the core, represents the heart of campus. This area includes the Illini Union and the Undergraduate Library. It is by far the most walkable area of campus. The second area, main campus, is

the area surrounding the core. This area comprises the remaining portions of the academic core of the campus. The third section, the periphery, includes the remaining sections of campus. This area includes most of the resident student housing, the athletic facilities and the veterinarian facilities. Table 1 below details the parking available in each of the three zones.

Table 1 – Parking by Zone

Zone	Parking Spaces (Approx.)	Percent of All Spaces
Core	324	2%
Main Campus	8,424	52%
Periphery	7,452	46%
Total Campus	16,200	100%

Future Parking Facilities

The *Campus Master Plan* details the locations of a number of new buildings to be constructed in the future. A number of those buildings will be constructed on existing surface parking lots. This is especially true in the core and main campus areas. As much as 75% of the parking in the core area and 45% in the main campus area could be lost to the construction of new buildings and open space. This will strain parking in two ways. First, it will reduce the number of available spaces for commuters. Second, new building will bring new people to campus, which will increase the demand for parking. Table 2 details the effect to the parking supply assuming no new parking facilities are opened.

Table 2 – Potential Changes to the Parking Supply

Zone	Current Parking Supply	Reduction in Parking Supply (%)	Potential Future Parking Supply
Core	324	75%	81
Main Campus	8,424	45%	4,633
Periphery	7,452	0%	7,452
Total Campus	16,200	n/a	12,166

New parking will need to be provided to make up for the higher demand and lower supply. This will likely be done in one of two ways: new parking decks closer to the center of campus, or new decks or surface lots in the peripheral areas. New decks closer to the center of campus are likely the preferred alternative of commuters, however, they are expensive to construct and operate and reduce the amount of land available for core academic needs and campus open space. Periphery lots are cheaper to construct and operate, but would require additional bus service to serve customers, as proposed in the *Multi-Modal Transportation Study*. New decks on the campus periphery, such as the North Campus Parking Deck, are much more expensive to construct and operate than surface lots, but are efficient uses of limited land supply and function well when serviced adequately by express transit to the heart of campus. The University should closely examine its needs when determining how to meet the parking needs of commuters in the future.

It is also worth noting that upon build-out of the *Campus Master Plan* there will be only approximately 1,200 surface parking spaces combined in the core and main campus areas

of campus (4,633 spaces in main campus + 81 in core – 3,500 existing spaces in decks = 1,213 remaining surface spaces). This could drastically alter the way in which commuters search for spaces, especially surface spaces, if surface spaces were priced lower than deck spaces. This situation may induce more commuters to hunt around campus for an open parking space, increasing traffic through already congested intersections. This could be offset by continuing the practice of assigning permits by lot and not switching to assigning permits to a wide area of lots.

Peer Comparison

Parking spaces per person is an effective way to measure the general availability of parking on a university campus. For the purposes of this comparison we compared the University of Illinois to other institutions in the Big 10 Conference and to other universities with a total campus population greater than 35,000 persons. The results are shown below in Table 3.

Table 3 – Parking Space Per Person Comparison

University	Total Campus Population	Parking Spaces	Parking Spaces Per Person
University of Wisconsin - Madison	57,820	11,600	0.201
Northwestern University	23,496	5,037	0.214
Arizona State University	69,324	19,000	0.274
Florida State University	35,706	10,289	0.288
Penn State University	48,173	15,000	0.311
The University of North Carolina at Chapel Hill	42,616	13,293	0.312
University of Illinois - Urbana Champaign	50,000	16,208	0.324
University of Florida	60,590	19,926	0.329
University of Arizona	48,652	17,480	0.359
The Ohio State University	67,376	25,168	0.374
North Carolina State University	36,235	15,269	0.421
University of Michigan	51,337	22,000	0.429
University of Maryland	42,906	22,650	0.528
Average	48,787	16,378	0.336
Highest	69,324	25,168	0.528
Lowest	23,496	5,037	0.201

The University of Illinois at Urbana-Champaign is roughly in the middle of the peers chosen for this comparison. The ratio of parking spaces to people is slightly below the average of the group. While there is room to increase travel demand management measures to reduce parking demand, the University is on par with its peers.

Cost of Building Structured Parking

The cost to construct and maintain parking decks has risen considerably in recent years. Conservatively, it costs \$1,500 a year per space to pay down construction debt and maintain a parking space in a deck. This is considerably more than the typical cost for a parking permit in a deck. Usually the difference is made up in permits sold for surface lots. The University will need to build new parking decks as it removes existing surface lots. The changing economic situation may require the University to raise the cost of deck permits to pay for the construction and maintenance of new decks.

Possible Changes to the Parking System

Zonal Based Parking Permit System

In a zonal based parking permit system a parking permit is valid for a number of lots in one particular zone. Zonal parking systems typically allow for a higher oversell ratio, which allows a University to more efficiently use an existing supply of parking. Zonal based schemes work best when a campus can be separated into clear and distinct zones that have equally attractive parking options. Zonal based schemes can lead to increased surface traffic as commuters search one lot, return to surface streets and search through additional lots. These systems tend to be more effective when there is a large amount of surface parking and less effective when most of the parking is provided in parking garages.

Remote Parking for Resident Students

Many on-campus dorms, in an effort to remain competitive with off-campus housing options, provide parking near the dorm. These spaces are often particularly attractive to commuters due to their proximate location. To provide additional on-campus parking for commuters many campuses are providing resident students with a remote parking option. This allows resident students who do not need their vehicles frequently to park in a remote lot. Typically these lots are fenced and well lit to improve the safety of the drivers and vehicles. Permits are considerably less than on-campus permits (between 10% and 30% of an on-campus permit). Access is provided via buses during most hours, and by campus safety in cases of emergency when bus service is not available.

Restricting Freshman Parking

Many campuses restrict freshmen from parking their car on campus. As the University continues to grow, more and more underclassmen will live on campus, reducing the need for a car, as classes and activities are within walking distance or transit access. Key requirements for a successful policy to restrict resident parking on the campus include:

- A secure off-campus vehicle storage area. The parking area should be fenced and patrolled. Access may be by card only.
- The storage area should be well served by transit and security should be a high priority.
- Residential street parking permit programs that are vigorously enforced. The University's parking policies should not impact neighboring areas. A successful program will require coordination with the City.

Reduce Parking Demand By Incentivizing Alternatives

The strategy would aim to keep the parking demand down to a level that can be met with the existing number of spaces. This is so that the financial and other costs of building and maintaining new spaces can be avoided wherever possible. A major element would be to develop and promote alternatives for commuters – particularly walking, cycling and transit, along with car/vanpooling. The recommendations for developing a comprehensive Travel Demand Management (TDM) program are detailed in the *Multi-Modal Transportation Study*.

Pricing Structures to Promote Sustainable Modes

A major factor behind people's travel choices is the cost – or perceived cost – of each option. There are several reasons why the current financial structure of travel to UIUC does not incentivize more sustainable options:

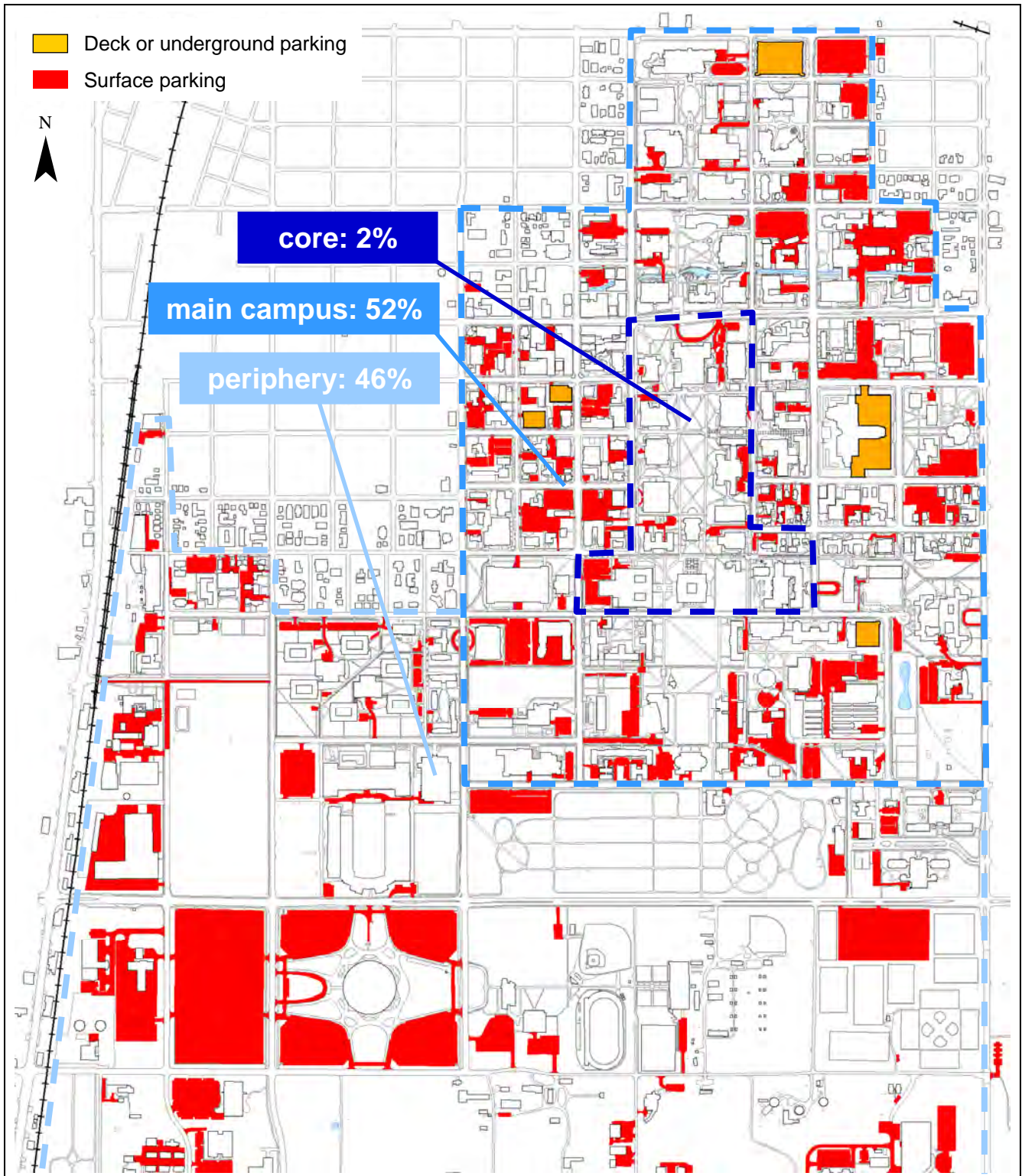
- *Parking is effectively 'free' once you have bought a permit.* A system of flat-rate annual permits creates an incentive to drive once the permit has been bought, because parking is effectively 'free' each time.
- *All the evidence shows that parking costs are a major factor in encouraging people to switch modes – but parking at UIUC is relatively cheap for many people.* But simply raising parking fees, in the hope that people will switch to other modes, is not a solution on its own. Many people have no realistic alternative to driving alone. Even with a major push to develop alternatives, as the *Multi-Modal Transportation Study* recommends, many people will still need to drive to campus.

To promote more sustainable options, several strategies that should be explored:

- **Pay-as-you-go:** UIUC may want to consider moving gradually toward a pay-as-you go system, in which users pay by the hour or by the day using electronic hangtags, instead of paying a flat rate with annual permits. Initially, pay-as-you-go would be introduced as an additional option, aimed at the people who are not on campus every day. Over time, it could become increasingly the norm. This would address the problem of parking being 'free' once the permit has been bought. It would reduce the incentive to drive once the sunk cost of a permit has been paid, and therefore encourage more sustainable travel patterns. It would also allow more flexibility in setting fees.
- **Parking cash-out.** This involves paying people not to drive, at a level that reflects the resulting savings in parking maintenance costs. At its simplest, it could be a reward for not having a parking permit. Stanford University offers employees up to \$160 per year on this basis. A more sophisticated alternative is to provide daily cash-out. Based on a swipecard system, people would receive a small amount for each day on which they 'swipe in' but have not entered a parking lot, thus encouraging them to be present but not to have driven.

Essentially, cash-out represents all or part of the difference between the permit fee and the actual cost of providing a parking space – the saving is shared between the user and the institution. The equity justification is that it allows non-drivers to share in any subsidy that drivers are already receiving. It also supports sustainability goals. Unlike transit fare schemes, it rewards not just transit users but also people who walk or cycle.

- **A 'transportation allowance'.** This is an alternative to cash-out, but has a similar aim. Staff (and potentially also students) would receive an allowance to cover their commuting needs. For many people, this would simply be used to pay for parking, thus returning the funds to the University, but they could also spend it on alternative modes of transportation. This would create a 'level playing field' between the modes. Like cash-out, it would reward not just transit users but also people who walk or cycle.



Multi-Modal Transportation Study

February 2007

prepared for
University of Illinois at Urbana-Champaign

**Figure 1:
Existing Campus Parking**

**MARTIN
ALEXIOU
BRYSON**

