**CITY OF URBANA, ILLINOIS**
**DEPARTMENT OF PUBLIC WORKS**

***ADMINISTRATION***

# M E M O R A N D U M

**TO:** Bruce K. Walden, Chief Administrative Officer

**FROM:** William R. Gray, P. E., Public Works Director

**DATE:** January 24, 2002

**RE:** **Green Street and Wright Street Intersection Improvement**

## INTRODUCTION

On December 10, 2001, the Committee of the Whole was presented with the City of Champaign's plans to rebuild Green Street from Wright Street to Fourth Street. The proposed work for Green Street includes a three-lane cross section along with streetscape improvements. At this meeting, there were several questions and concerns raised by Committee members regarding the proposed improvements. This memorandum will attempt to address those questions and concerns. In addition, at the January 28 Committee of the Whole meeting the CATS consultant (Clark Dietz, Inc.), MTD staff, and Champaign staff will be available to provide further explanations and insights.

Attached please find a copy of the June 1999 "Executive Summary" of the *Campus Area Transportation Study*. It is important to understand the mission, goals, and objectives for the campus area or "University District." This study distilled a complex set of differing objectives and goals. The end result was a recommended plan for short-term, mid-term, and long-term improvements. The proposed intersection improvements is consistent with the stated mission, goals, and objectives.

The Phase II CATS Study involved a lot of time discussing circulation patterns or schemes. At our last meeting, the existing circulation pattern and the proposed recommended circulation pattern were presented. Attached please find the Clark Dietz letter dated January 21, 2002, which describes other circulation schemes considered. The letter details how Circulation Scheme #9 was determined. There is a draft "Core Campustown Traffic Circulation" report, which goes into great detail discussing each scheme. It is available for viewing.

Questions were raised at the meeting regarding what other alternatives have been looked at for the east leg of the Green and Wright intersection. Attached please find a Clark Dietz letter dated January 22, 2002, that discusses other east leg alternatives. It is staff's opinion that the proposed east leg configuration is a safe and efficient way to transition from two westbound lanes, on Green Street east of Wright Street, to one westbound lane on Green Street west of Wright Street. This configuration also provides the flexibility of accommodating any future lane configuration Green Street may have east of Wright Street.

There will be traffic signal modifications and geometric changes at the Springfield Avenue and Wright Street intersection. This work is necessary to accommodate a two-way Wright Street. The east leg of Springfield Avenue will have one through lane eastbound and westbound, and a westbound center left-turn lane. Staff is supportive of this proposed work.

## FISCAL IMPACTS

The proposed costs for the east leg of the Green and Wright Streets intersection is $140,000. The proposed cost for modifications to the east leg of the Springfield Avenue and Wright Street intersection is $80,000. The University of Illinois has committed to the City that they would pay 50% (fifty percent) of the local cost {[$140,000 + $80,000] x 50% = $110,000} for these intersection improvements. You may recall from previous intergovernmental agreements that the University has paid 50% of the local cost for the Lincoln Avenue and Florida Avenue intersection improvements, and the Illinois Street and Lincoln Avenue improvements. The University has also committed to the City to pay 50% of the cost for the Lincoln Avenue and Pennsylvania Avenue, and Lincoln Avenue and Nevada Street intersections' improvements planned in the next several years. It is in the City's interest to be cooperative with the University of Illinois, the Champaign-Urbana Mass Transit District [CUMTD], and the City of Champaign, assisting in the first phase of streetscape and CATS improvements within the University District. Staff believes the University's offer to pay half of the costs for the east leg of the intersection is a reasonable response under these circumstances. Staff supports the cost sharing for these improvements with the University of Illinois and the City of Champaign in an amount of $110,000. This contribution should not have an adverse impact to the City's projects planned for this coming construction season.

## COMMITTEE ACTION

The Committee needs to direct staff, by motion, to: 1) approve construction of the east leg of Green Street and Wright Street, and Springfield Avenue and Wright Street, and 2) develop with the University of Illinois and the City of Champaign an intergovernmental agreement for the sharing of costs for the east leg of the Green Street and Wright Street intersection and Springfield Avenue and Wright Street intersection.

The agreement will be subject to City Council approval.

WRG:klf
Attachments

# University of Illinois Campus Area Transportation Study (CATS)

## Final Report

### *Executive Summary*

**June 1999**

*Prepared for*
*Champaign-Urbana Urbanized Area Transportation Study*

*by*
*Bucher, Willis & Ratliff Corporation*

# *Executive Summary*

## A. BACKGROUND

What are the transportation needs in the University of Illinois campus area? How should travel be accommodated among vehicles, pedestrians, bicycles, and transit? And which transportation projects should receive priority for future funding? In a collective effort with the Champaign-Urbana Urbanized Area Transportation Study (CUUATS), the City of Champaign, the City of Urbana, the University of Illinois, the Illinois Department of Transportation, and the Mass Transit District have completed the Campus Area Transportation Study (CATS) to answer these questions.

Over the past several years much effort has been spent identifying transportation/circulation deficiencies and issues that exist within the campus area. Out of this process have come reports such as the Campus Safety Task Force Report and the Campus 2000 Report, which detail many of these deficiencies. While these studies have set forth concerns about specific problems, there was not previously a study which looked comprehensively at transportation issues in the campus area, included all of the jurisdictions and agencies serving the campus area, or which recommended integrated solutions for all transportation modes.

The CATS represents the first transportation study that all agencies have participated together to address campus area transportation problems. It is the intent of the CATS to identify a comprehensive approach to address transportation issues within the study area. This study area includes the University of Illinois campus and parts of both Urbana and Champaign immediately adjacent to the campus (see Figure 1). The consulting firm of Bucher, Willis & Ratliff Corporation was contracted to conduct this study. It addressed the following issues:

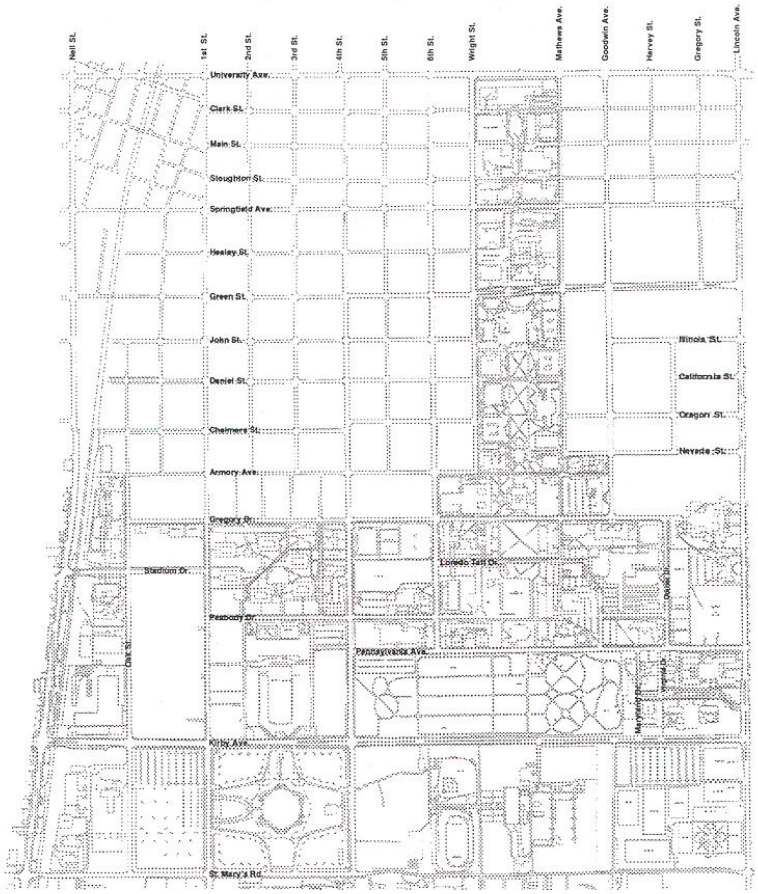
- Pedestrian safety
- Community traffic flow needs
- University-oriented traffic
- Interaction among travel modes
- The role of non-auto travel modes including pedestrian, bus, bike and travel by persons with disabilities
- Truck traffic, freight deliveries and loading issues
- Traffic calming
- Interaction between parking supply and traffic circulation
- Identifying projects, priorities, and cost estimates

The CATS consisted of three principal phases. The purpose of Phase One was to identify transportation-related problems and issues pertinent to the campus area. These issues were identified through past studies, public meetings, joint meetings of citizen, policy and technical advisory committees, and business and university surveys. In Phase Two, potential strategies for addressing the identified problems were developed and evaluated. In Phase Three, the preferred strategies were selected and developed into a plan and implementation strategies were identified.

## Study Area

The study area includes the campus area and adjacent areas located in Champaign and Urbana. The study area boundaries are University Avenue to the north, St. Mary's Road to the south, Neil Street to the west, and Lincoln Avenue to the east. The study area is comprised of separate neighborhoods or sub-districts including the Athletic Complex, Champaign Campustown District, Champaign Downtown – East, East Campus Residential, Northeast Campus Residential, Northwest Campus Residential, Core Campus, Southwest Campus Residential, Urbana Campustown District, and the Campus Service.

**Figure 1. Study Area Map**



### CATS Committees

Study input, guidance and direction were provided during the course of this study by the following committees:

- POLICY ADVISORY COMMITTEE was formed and consisted of the Mayors of Urbana and Champaign and the Vice Chancellor of the University of Illinois.
- EXECUTIVE POLICY ADVISORY COMMITTEE was formed and consisted of top administrative officials of all four agencies.
- CITIZEN ADVISORY COMMITTEE was formed consisting of community and civic leaders in Champaign and Urbana to provide input to the consulting team on transportation issues and solutions throughout the study process.
- TECHNICAL ADVISORY COMMITTEE comprised of staff and technical representatives from the Cities of Champaign and Urbana, the University of Illinois, the Illinois Department of Transportation, the Mass Transit District, and from CUUATS to assist the consulting team in the completion of the study.

## B. POLICY AND GUIDANCE

### Mission Statement

A mission statement was developed with input from the CATS committees to establish a broad vision to guide the study. The mission statement is based on the finding that modal conflicts currently exist within the study area. In some cases, these conflicts have resulted in severe accidents and fatalities. This study recognizes the importance of minimizing, reducing or eliminating modal conflicts.

**CATS Mission Statement**

***To better accommodate pedestrian, bicycle, transit, and vehicle movements in a more user-friendly environment.***

### Goals and Objectives

Project goals and objectives set forth a more specific means of achieving the policy direction reflected in the mission statement. The project goals and objectives were developed at a workshop attended by members of the CATS Technical, Citizen and Policy Committees and from participation of area citizens. The goals and objectives provide more detail on how to achieve the overall direction defined in the mission statement. The CATS goals and objectives are shown in Table 1.

**Table 1. CATS Goals and Objectives**

| | |
|---|---|
| **GOAL 1 - Improve safety for all transportation modes.** | |
| OBJECTIVES | 1. Better separate pedestrians, bicyclists and vehicles and special needs population.<br>2. Decrease vehicle speeds.<br>3. Accommodate persons with disabilities.<br>4. Minimize intermodal conflicts.<br>5. Address safety related design issues. |
| **GOAL 2 - Create a transportation system compatible with the physical environment described in the City and Campus Master Plans.** | |
| OBJECTIVES | 1. Establish a University District to promote uniform transportation policy across jurisdictional boundaries.<br>2. Facilitate vehicular through traffic on fringe roads of the study area.<br>3. Prioritize alternative modes of transportation in core area.<br>4. Examine strategies to reduce the level of vehicular traffic in the core of the study area.<br>5. Develop policies and implement strategies, which encourage increases in transit, bicycle and pedestrian modal shares. |
| **GOAL 3 - Improve the operational efficiency and effectiveness of the transportation system in a cost-effective manner.** | |
| OBJECTIVES | 1. Better accommodate the movement of transit vehicles in the campus area.<br>2. Develop more effective bikeway and route connections throughout the campus area.<br>3. Develop coordinated parking information, regulations and policies.<br>4. Develop safe pedestrian crossings.<br>5. Design transportation improvements to be compatible with City/University maintenance capabilities. |
| **GOAL 4 - Enhance access to the campus core area and route through traffic on fringe of the study area.** | |
| OBJECTIVES | 1. Improve travel times on designated routes used to access the campus area.<br>2. Encourage bus ridership to access the campus core.<br>3. Develop effective bike route connections between the city's bicycle system and the campus system.<br>4. Provide sufficient parking to support campus and commercial functions.<br>5. Provide for freight deliveries. |

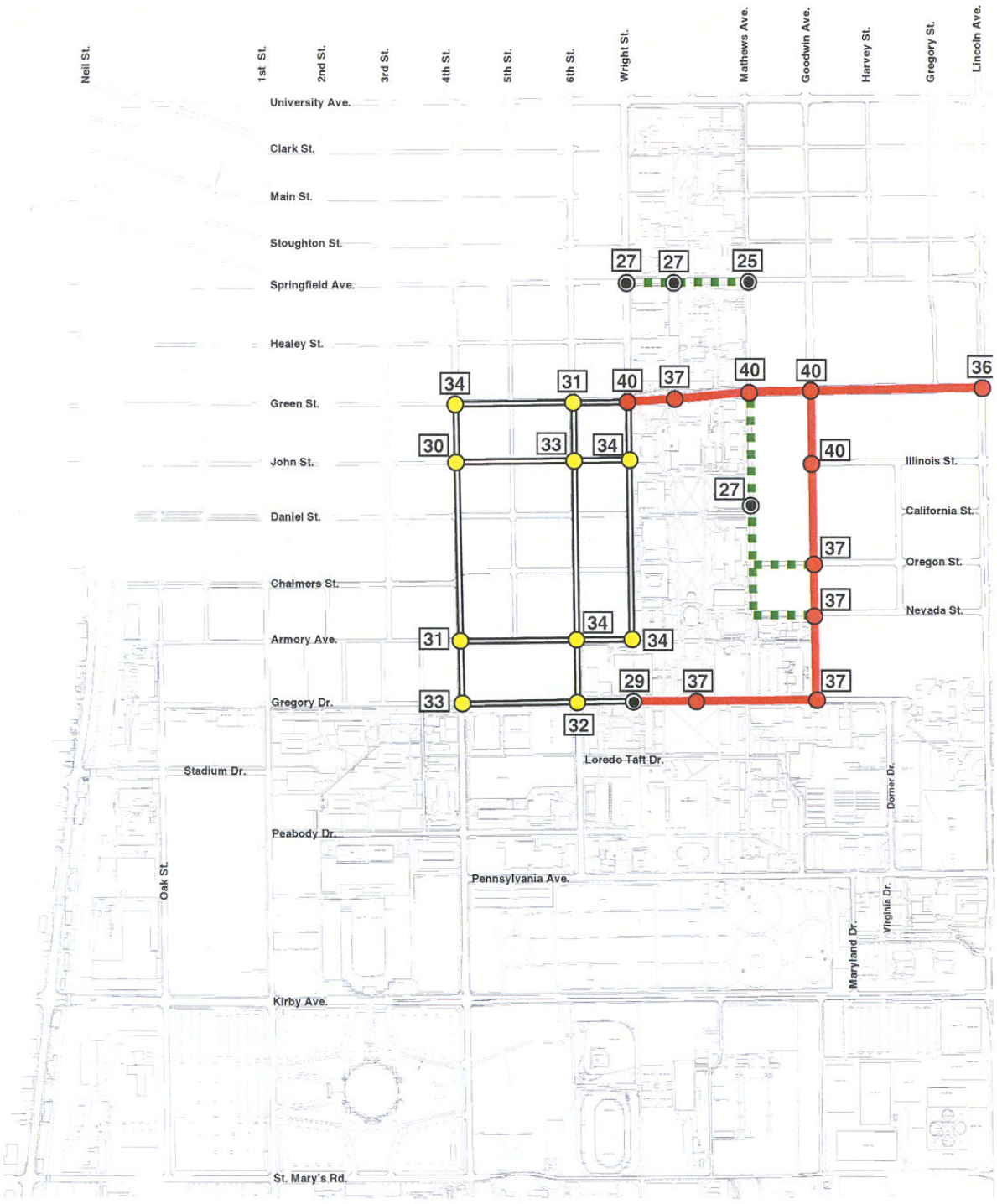
SOURCE: Bucher, Willis & Ratliff Corporation and TAC.

## C. PROBLEM IDENTIFICATION

During Phase One of the study - the problem identification stage - community members described what they thought were problems with the current transportation system. Some of the problems stated during this part of the process were:

- High volume of through traffic on Green Street
- Buses slowing traffic flow
- Buses off-loading into some bicycle paths
- Pedestrians not using current crosswalks
- Bicyclists using sidewalks
- Not enough parking for customers of businesses
- Current infrastructure not sufficient for high volumes of pedestrians, buses and vehicles
- Numerous other safety issues involving conflicts with vehicles, pedestrians and bicycles.

The data analysis completed by the Consultant supported the public observations. The analysis showed all transportation modes have high to very high utilization within the study area. The data also indicated that conflicts exist between modes of transportation at many locations within the campus area. Figure 2 shows the locations of highest modal conflicts in the study area.




NOTE: Maximum score = 40. Scores reflect relative comparison between locations evaluated.

**Figure 2. Areas of Conflict**
Source: Bucher, Willis & Ratliff Corporation (Fall 1997)

BUCHER, WILLIS & RATLIFF CORPORATION

# D. STRATEGIES

## Potential Transportation Strategies

The transportation strategies shown in Table 2 were studied as potential solutions to campus area transportation problems.

**Table 2. Summary of Potential Transportation Strategies**

| Mode/Issue | Potential Transportation Strategy |
|---|---|
| **Vehicular Traffic** | • Traffic Calming<br>• Intersection Improvements<br>• Encourage Travel on Peripheral Routes<br>• Increase Street Capacity on Peripheral Routes<br>• Create Loading Zone Areas and Designated Times for Freight Delivery<br>• Reassign One-way Streets<br>• Close Streets<br>• Destination Routing of Traffic |
| **Transit Service** | • Improve Transit Service<br>• Increase Transit Travel Speeds<br>• Improve Transit Boarding Areas<br>• Subsidize Transit for Faculty/Staff |
| **Pedestrian/Bicycle Travel** | • Channel Pedestrian Movements<br>• Improve Bike Trails<br>• Create Bike Lanes on Streets<br>• Implement Bicycle Safety Programs<br>• Eliminate Vehicle/Pedestrian Conflicts at High Volume Intersections |
| **Parking** | • Refine Parking System<br>• Increase Peripheral Parking<br>• Increase Core Parking<br>• Provide Appropriate Type of Parking<br>• Implement Demand Related Pricing for Parking |

SOURCE: Bucher, Willis & Ratliff Corporation and TAC.

## The Transportation Zone Concept

Once the strategies were identified, the remaining issue was to determine where each strategy should be applied within the study area. Because of the high volume of activity for all modes of transportation, it was determined that the needs of all modes could not be fully met in all areas. Rather, priorities needed to be established by mode for various parts of the transportation system. To assist in developing a framework for applying the strategies, a transportation zone concept was developed. In general, the transportation data showed that the highest potential and most severe actual conflicts occur near the core campus. Further away from the core the potential for conflicts exist but generally to a lesser degree and the actual number of conflicts tends to be less. Thus, strategies that prioritize pedestrians would be applied closer to the core campus. Table 3 summarizes the transportation zone concept and Figure 3 displays the general zone locations.

**Table 3. The Transportation Zone Concept**

| ZONE | DESIRED RESULT | DESCRIPTION |
|---|---|---|
| 1 | Lessen Vehicular Traffic | Prioritize pedestrian, bicycle and transit modes while safely accommodating vehicular traffic and freight loadings. |
| 2 | Calm Vehicular Traffic | Accommodate all travel modes in the most efficient and safest manner. |
| 3 | Encourage Vehicular Traffic | Improve roadway/signal operations to encourage safe travel away from the campus area. |

SOURCE: Bucher, Willis & Ratliff Corporation and TAC.

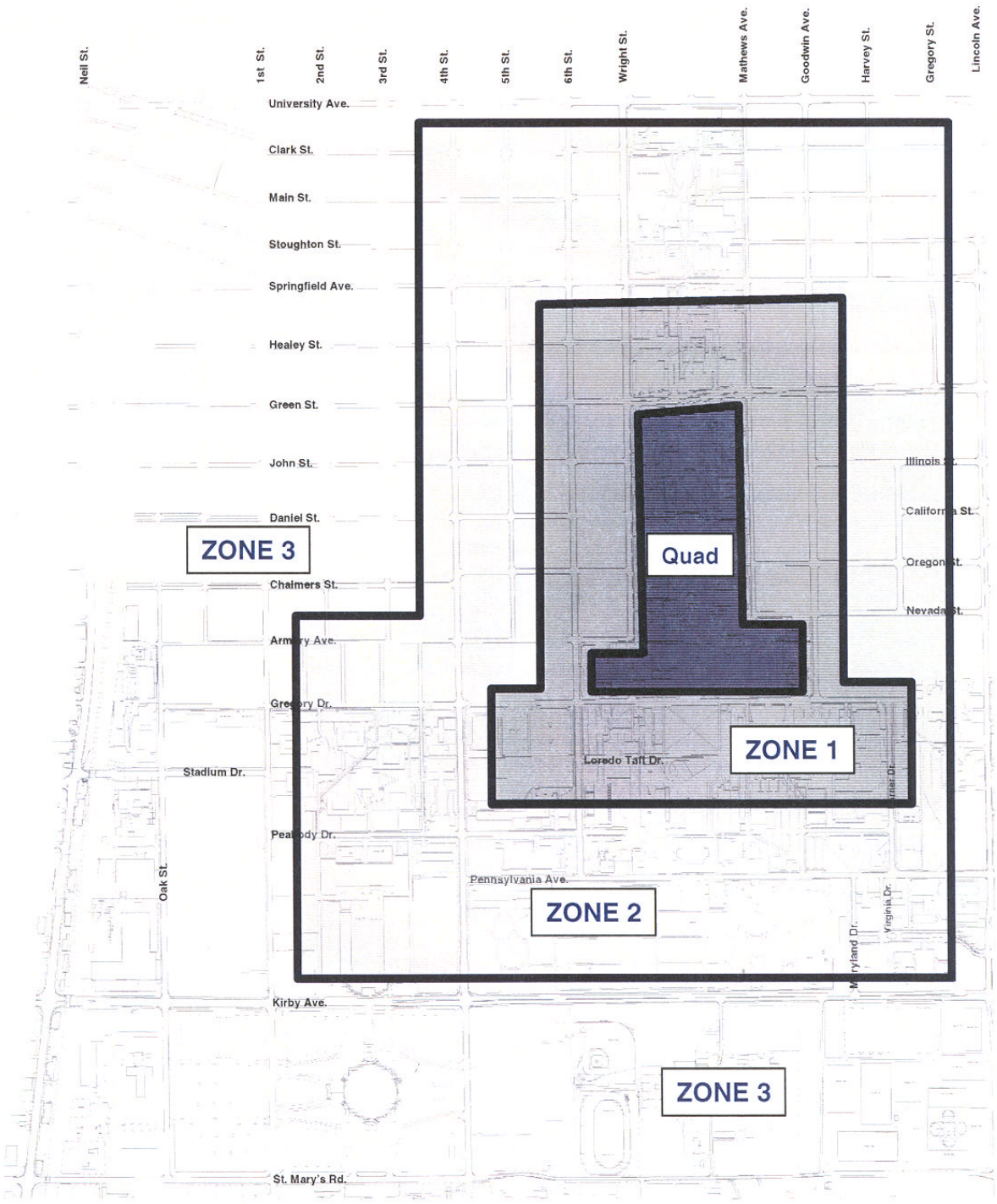



**Figure 3. The Transportation Zone Concept**
Source: Bucher, Willis & Ratliff Corporation (Spring 1998)

BUCHER, WILLIS & RATLIFF CORPORATION

## Improvement Alternative

Following the transportation zone concept, the strategies were grouped together into alternative scenarios. From the initial review, three scenarios were formally defined for the purposes of comparison. Through the process of comparing the scenarios, one recommended scenario resulted. The comparison of the three scenarios involved:

- Reviewing transportation needs as supported by the data analysis
- Reviewing the project goals and objectives
- Incorporating public and TAC input regarding potential projects
- Evaluating the applicability of the projects as they related to the project goals and objectives
- Reflecting specific actions, which follow the transportation, zone concept

The three scenarios ranged in intensity from scenario one which included relatively minor improvements to the study area (i.e., primarily traffic calming) to scenario three which involved some significant improvements (i.e., street closures, circulation changes, transit lanes, etc.). Following the development of these scenarios, the TAC members reviewed specific elements from the three scenarios to determine those elements that would be included in the recommended plan. A detailed description of the three scenarios is provided in the final report.

The level and type of transportation activity in the campus area is diverse and in most cases cannot be measured using traditional traffic engineering methods. Given the complexity of transportation system, an alternative analysis method was used. This method involved determining the pros and cons of the potential improvements as they related to the project goals and objectives. The result of this discussion between the TAC members was the preferred strategy for the study area.

Table 4 provides an overview of the recommended plan by specific locations/corridors within the University District. Figure 4 displays the recommended plan for the study area.

**Table 4. Recommended Elements by Specific Locations/Corridors**

| Location | Improvement |
|---|---|
| **Wright Street** (Armory Avenue to Springfield Avenue) | 1. Improved two-way bicycle path located on the eastside of sidewalk on the eastside of the street |
| | 2. Transit lane adjacent to curb (eastside) |
| | 3. Defined freight loading/unloading areas |
| | 4. On-street parking removed(Between Green Street and John Street) |
| | 5. Leased parking between John Street and Daniel Street |
| | 6. Close segment of Wright Street between John Street and Daniel Street to create plaza (transit service and emergency vehicles continue to operate through this segment) |
| | 7. One-lane vehicular traffic. |
| **Green Street** (Under Viaduct) | 1. Two through lanes to accommodate vehicular traffic |
| | 2. Two outside lanes used to accommodate bicycle and pedestrian movements |
| | 3. Bicycle connections provided to the Boneyard Creek and John Street via Locust Street |
| **Green Street** (Viaduct to Wright Street) | 1. Three lane cross section for vehicular traffic |
| | 2. Designate freight delivery loading/unloading areas on side streets |
| | 3. Increased sidewalk width and improved streetscaping with possible bus-pull out areas and possible eastbound and westbound right-turn lanes at Sixth Street and Fourth Street. |
| | 4. Investigate or consider "all-walk" cycle for traffic signal at Sixth Street and at Wright Street |
| **Green Street** (Wright Street to Lincoln Avenue) | 1. Two through lanes to accommodate vehicular traffic |
| | 2. Transit lane between Wright Street and Mathews Avenue |
| | 3. Pedestrian signal and traffic calming between Wright Street and Mathews Avenue at mid-block location |
| | 4. Add on-street parking and bicycle path between Goodwin Avenue and Lincoln Avenue |
| | 5. Explore extending a bike path/lane or route into Urbana to Lincoln Square |
| **Sixth Street** | 1. Two-way traffic flow between University Avenue and Gregory Drive |
| | 2. Modify traffic signals at Armory Avenue, Green Street and Springfield Avenue |
| | 3. Install traffic signal at intersection of University Avenue |
| | 4. Identify areas for freight loadings/unloadings |
| **Gregory Drive** | 1. Install gate system between Sixth Street and Mathews Avenue extended to allow for street closure during certain time periods |
| | 2. Implement well defined pedestrian crosswalks |
| **Mathews Avenue** (Green Street to Nevada Street) | 1. Convert eastside on-street meter parking to leased parking; remove westside parking |
| | 2. Improve two-way bicycle path |
| | 3. Improve pavement markings at major pedestrian crossings |
| | 4. Eliminate existing transit loading conflicts with bicyclists |

SOURCE: Bucher, Willis & Ratliff Corporation and TAC.

**Table 4 continued.**
**Recommended Elements by Specific Locations/Corridors (continued from Table 3-1)**

| Location | Improvement |
|---|---|
| **Springfield Avenue** (Neil Street to Wright Street) | 1. Implement capacity enhancements including: |
| | a) Replacement and widening of viaduct |
| | b) Widening of roadway where appropriate |
| | c) Additional turn lanes as needed |
| | d) Traffic signal coordination |
| **Springfield Avenue** (Wright Street to Mathews Avenue) | 1. Pedestrian signal and traffic calming at mid-block location (coordinate with other signals) |
| **Springfield Avenue** (Mathews Avenue to Lincoln Avenue) | 1. Improved intersection design and traffic management |
| **John Street** | 1. Make additional enhancement of pedestrian crossings (i.e., sidewalks, intersection crossings) with special consideration for persons with disabilities. |
| | 2. Explore option of parking garage at Sixth Street and John Street becoming entry only off John Street |
| | 3. Connect two-way bike path between Fourth Street and Sixth Street to Wright Street as future project |
| | 4. Install diagonal parking on northside of John Street in the 500 block |
| **Daniel Street** | 1. Explore option of parking garage at Sixth Street and John Street becoming exit only off Daniel Street |
| | 2. Convert the segment between Wright Street and Sixth Street from two-way traffic to one-way traffic (westbound) |
| | 3. Designate possible bicycle route |
| **Lincoln Avenue** | 1. Install traffic signal and complete intersection improvements at Illinois Street |
| | 2. Install traffic signal at Nevada Street |
| | 3. Install traffic signal and complete intersection improvements at Pennsylvania Avenue |
| | 4. Install traffic signal and complete intersection improvements at Florida Avenue |
| **Fourth Street** | 1. Install traffic calming at the intersection of John Street |
| | 2. Install traffic calming at the intersection of Armory Avenue |
| | 3. Install traffic calming at the intersection of Gregory Drive |
| | 4. Install traffic calming at the intersection of Peabody Avenue |
| | 5. Complete traffic signal warrant study and possible intersection improvements at Pennsylvania Avenue |
| | 6. Install traffic signal at the intersection of John Street with exclusive left-turn lanes on all approaches |
| **First Street** | 1. Implement traffic signal improvements and coordination |
| **Neil Street** | 1. Implement traffic signal improvements and coordination |
| **University Avenue** | 1. Implement traffic signal improvements and coordination |
| **Kirby Avenue** (Neil Street to Fourth Street) | 1. Implement traffic signal improvements and coordination |

SOURCE: Bucher, Willis & Ratliff Corporation and TAC.

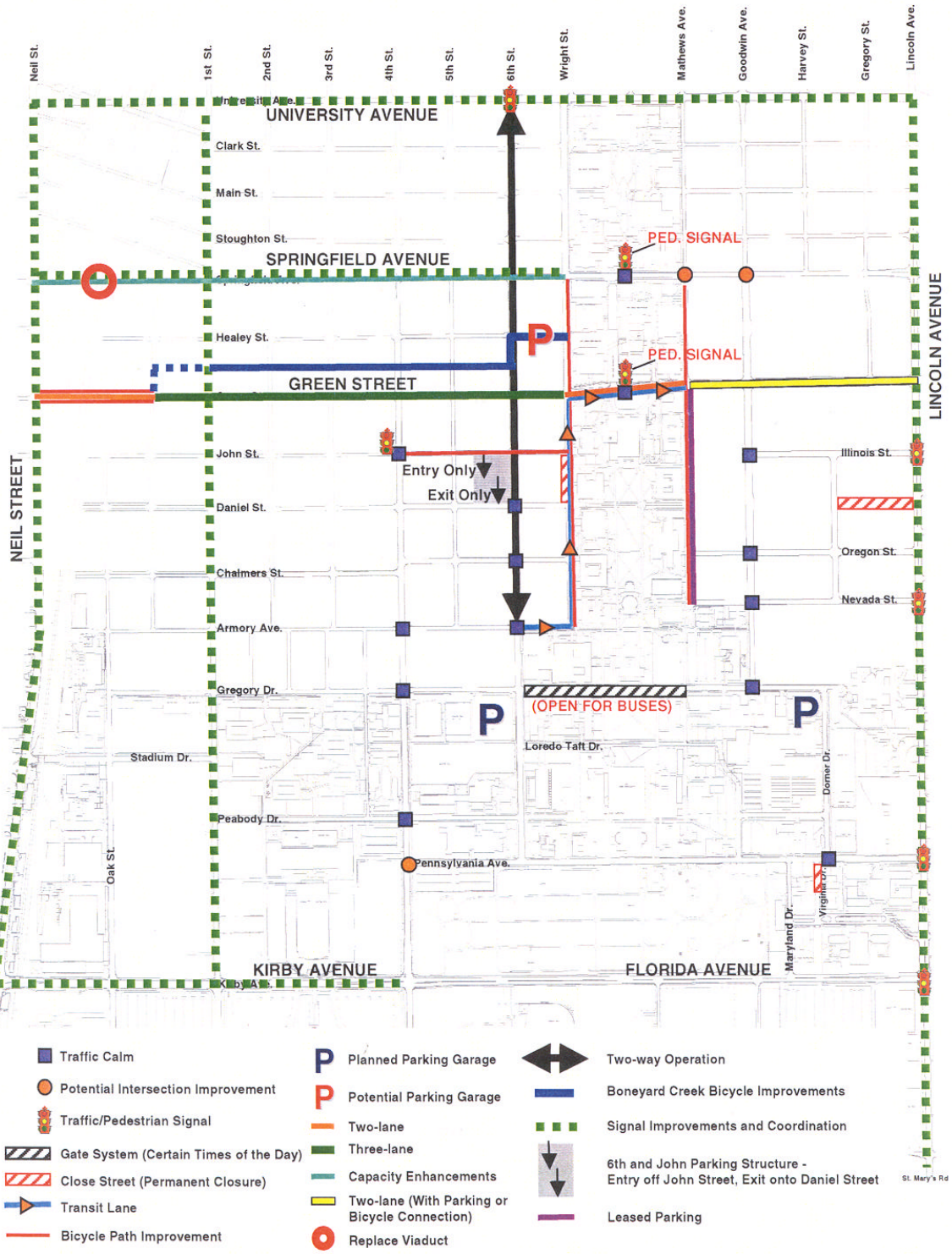



**Figure 4. CATS Recommended Elements**

Source: Bucher, Willis & Ratliff Corporation and TAC (October 1998)

BUCHER, WILLIS & RATLIFF CORPORATION

## Project Phasing and Cost Estimates

The implementation of the recommended plan consists of three phases. These phases include short-term, mid-term, and long-term projects. The implementation phasing is fairly aggressive in that many of the projects identified are included in the short-term and seek to address many of the problems identified within the study area. The mid-term projects build on the short-term projects and would further reinforce the CATS goals and objectives. The long-term projects are projects that require detailed engineering study and could take several years to fully implement.

## Short-term Implementation Phase

The short-term projects address high conflict areas and are intended to be implemented within a short time period. These projects are intended to minimize or eliminate high conflict areas and create an environment in which all travel modes are accommodated. Table 5 lists the short-term improvements and the approximate cost of each improvement. Figure 5 displays the improvements.

Also included in the short-term are supportive policy recommendations including the creation of the University District. The University District would include the area consistent with the CATS study area. The purpose of establishing the University District is to define an area comprised of parts of the Cities of Champaign and Urbana in which consistent policies would be established.

Implementation of the University District would involve developing policies that support the recommendations of the CATS, educating users about the District, and placing signs at major entryways to define the District boundaries.

**Table 5. Short-term Improvements**

| | Improvement | Location | Approximate Cost Low | Approximate Cost High |
|---|---|---|---|---|
| 1 | Traffic Calming | Goodwin Avenue and Illinois Street | **$200,000** | **$330,000** |
| 2 | Pedestrian Signals | Green Street – Between Wright Street and Mathews Avenue | $40,000 | $50,000 |
| | | Springfield Avenue – Between Wright Street and Mathews Avenue | $40,000 | $50,000 |
| | | **SUBTOTAL** | **$80,000** | **$100,000** |
| 3 | Traffic Signals | Lincoln Avenue and Illinois Street | $85,000 | $105,000 |
| | | Lincoln Avenue and Nevada Street | $85,000 | $105,000 |
| | | Lincoln Avenue and Pennsylvania Avenue | $85,000 | $105,000 |
| | | Lincoln Avenue and Florida Avenue | $85,000 | $105,000 |
| | | University Avenue and Sixth Street | $85,000 | $105,000 |
| | | **SUBTOTAL** | **$425,000** | **$525,000** |
| 4 | Traffic Signal Coordination | Neil Street | $30,000 | $40,000 |
| | | University Avenue | $40,000 | $60,000 |
| | | Lincoln Avenue | $30,000 | $45,000 |
| | | Kirby Avenue | $25,000 | $40,000 |
| | | First Street | $35,000 | $50,000 |
| | | **SUBTOTAL** | **$160,000** | **$235,000** |
| 5 | Convert Street to Two-way | Sixth Street – from University Avenue to Armory Avenue | **$180,000** | **$405,000** |
| 6 | Close Street Segments | Wright Street – from John Street to Daniel Street | $250,000 | $500,000 |
| | | Virginia Drive – south of Pennsylvania Avenue | $100,000 | $150,000 |
| | | **SUBTOTAL** | **$350,000** | **$650,000** |
| 7 | Install Gate System on Gregory Drive | Sixth Street to Mathews Avenue Extended | **$100,000** | **$150,000** |
| 8 | Bicycle Path Improvements | Wright Street – Between Springfield Avenue and Armory Avenue | $45,000 | $60,000 |
| | | Mathews Avenue – Between Springfield Avenue and Armory Avenue | $45,000 | $60,000 |
| | | **Boneyard Creek Bicycle Path Extension- From Sixth Street along Healy Street to Wright Street** | **$30,000** | **$50,000** |
| | | **SUBTOTAL** | **$120,000** | **$170,000** |
| 9 | Parking Garage Modification | Parking Garage at Sixth and John – Entry only off John Street, Exit only onto Daniel Street | **$200,000** | **$400,000** |
| | | **TOTAL** | **$1,815,000** | **$2,965,000** |

SOURCE: Bucher, Willis & Ratliff Corporation and CATS Technical Advisory Committee.
NOTE: All cost estimates in 1998 Dollars. Estimates include construction, utility, and drainage costs.

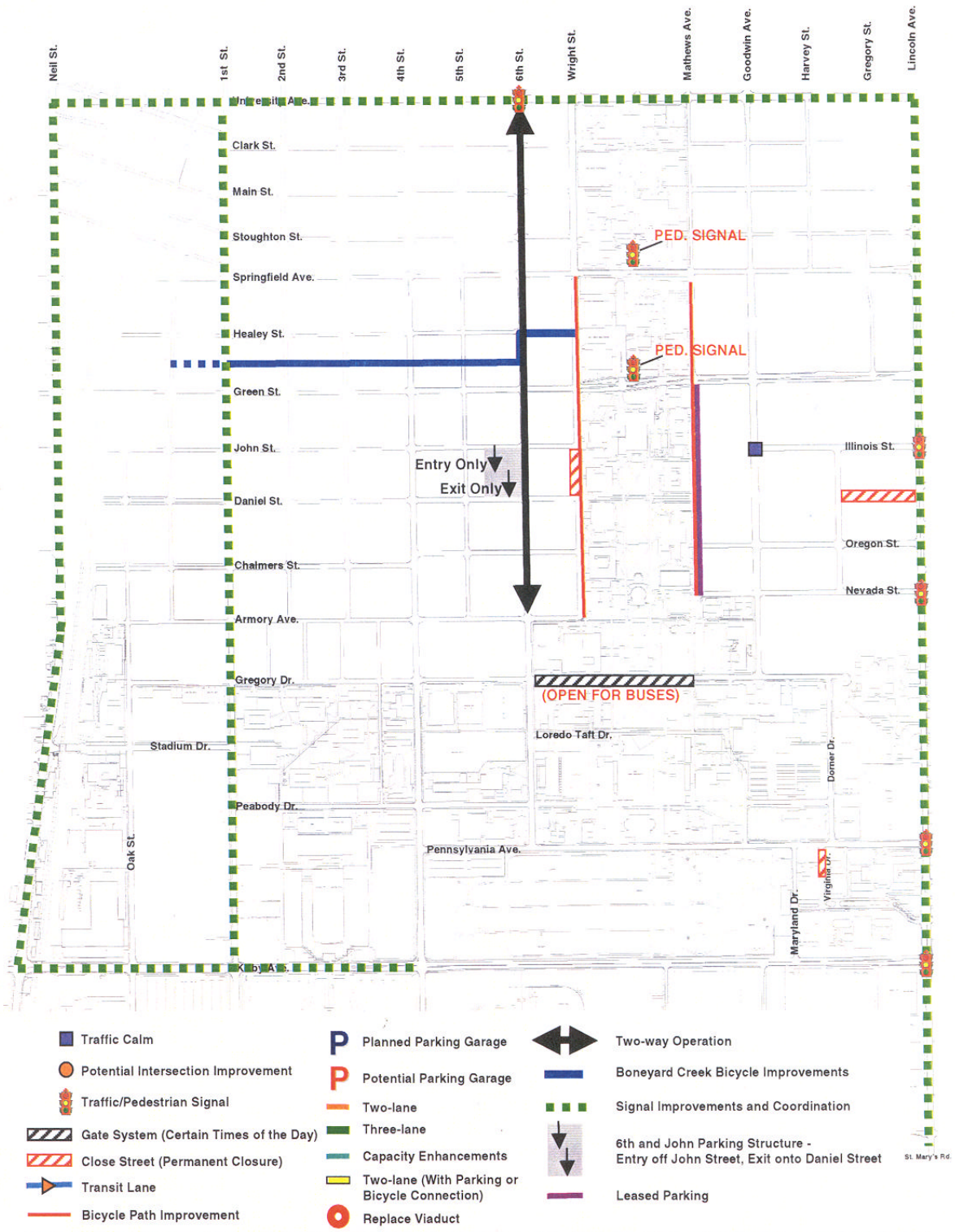



**Figure 5. Short-term Improvements**

Source: Bucher, Willis & Ratliff Corporation and TAC (October 1998)

BUCHER, WILLIS & RATLIFF CORPORATION

## Mid-term Implementation Phase

The mid-term implementation phase builds on the short-term projects. Table 6 lists the mid-term improvements while Figure 6 displays the location of the improvements.

**Table 6. Mid-term Improvements**

| Improvement | | Location | Approximate Cost Low | Approximate Cost High |
|---|---|---|---|---|
| 10 | Traffic Calming | Intersection of Fourth Street and John Street | $120,000 | $210,000 |
| | | Intersection of Fourth Street and Armory Avenue | $120,000 | $210,000 |
| | | Intersection of Fourth Street and Gregory Drive | $120,000 | $210,000 |
| | | Intersection of Fourth Street and Peabody Drive | $120,000 | $210,000 |
| | | Intersection of Sixth Street and Daniel Street | $200,000 | $330,000 |
| | | Intersection of Sixth Street and Chalmers Street | $120,000 | $210,000 |
| | | Intersection of Sixth Street and Armory Avenue | $20,000 | $75,000 |
| | | Mid-block on Green Street between Wright Street and Mathews Avenue | $50,000 | $150,000 |
| | | Intersection of Springfield Avenue and Wright Street | $120,000 | $210,000 |
| | | Mid-block on Springfield Avenue between Wright Street and Mathews Avenue | $30,000 | $90,000 |
| | | Intersection of Goodwin Avenue and Oregon Street | $120,000 | $210,000 |
| | | Intersection of Goodwin Avenue and Nevada Street | $120,000 | $210,000 |
| | | Intersection of Goodwin Avenue and Gregory Drive | $120,000 | $210,000 |
| | | Intersection of Dorner Drive and Pennsylvania Avenue | $120,000 | $210,000 |
| | | **SUBTOTAL** | **$1,500,000** | **$2,745,000** |
| 11 | Intersection Improvements | Intersection of Springfield Avenue and Mathews Avenue | $120,000 | $225,000 |
| | | Intersection of Springfield Avenue and Goodwin Avenue | $120,000 | $225,000 |
| | | Intersection of Fourth Street and Pennsylvania Avenue | $120,000 | $225,000 |
| | | Traffic Signal at Fourth Street and John Street | $85,000 | $105,000 |
| | | **SUBTOTAL** | **$445,000** | **$780,000** |
| 12 | Capacity Enhancements | Springfield Avenue – from Neil Street to Wright Street | Not Available | Not Available |
| 13 | Narrow Roadway | Green Street – from Wright Street to Lincoln Avenue | **$200,000** | **$400,000** |
| 14 | Transit Lanes | Wright Street – from Armory Avenue to Green Street | $150,000 | $250,000 |
| | | Green Street – from Wright Street to Mathews Avenue | $75,000 | $125,000 |
| | | **SUBTOTAL** | **$225,000** | **$375,000** |
| 15 | Bicycle Path Construction | John Street – from Wright Street to Fourth Street | **$20,000** | **$50,000** |
| 16 | Parking Structure | Southwest corner of Gregory Drive and Dorner Drive | Not Available | Not Available |
| | | Add perimeter parking (shuttle lot) | Not Available | Not Available |
| | | **TOTAL** | **$4,390,000** | **$7,350,000** |

SOURCE: Bucher, Willis & Ratliff Corporation and CATS Technical Advisory Committee.
NOTE: All cost estimates in 1998 Dollars. Estimates include construction, utility, and drainage costs.
Costs not available for projects #12 and # 16 given the number of unknown variables.

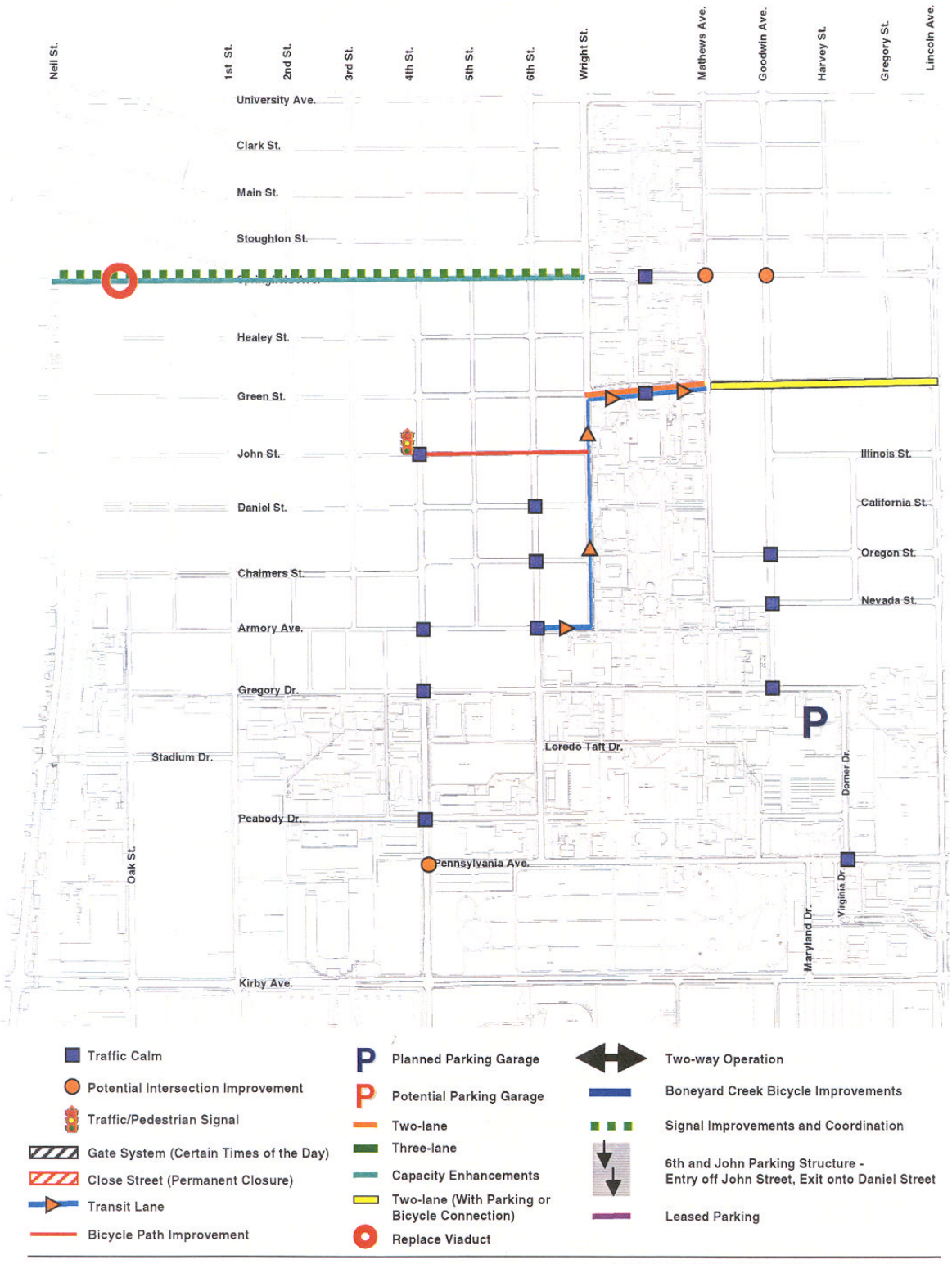



**Figure 6. Mid-term Improvements**

Source: Bucher, Willis & Ratliff Corporation and TAC (October 1998)

BUCHER, WILLIS & RATLIFF CORPORATION

The projects identified in Table 6 in general involve more detailed engineering study and additional time for construction and as such are included in the mid-term implementation phase.

Several locations have been identified as potential areas for traffic calming applications (project #10 in Table 6). These projects would build upon the improvements identified in the short-term implementation phase. In particular, the conversion of Sixth Street to two-way (project #5 in Table 5) and the closure of Wright Street between John Street and Daniel Street (project #6 in Table 5) should be reviewed to determine the effectiveness and to determine which of the traffic calming locations identified as mid-term projects should be constructed.

## Long-term Implementation Phase

The following projects are more capital intensive and would be constructed, as funding becomes available. Given the need for more detailed design and engineering, these projects would likely be completed in seven or more years. Table 7 lists the long-term improvements.

These long-term projects could require State funding or higher commitment from local sources. The cost of these projects are fairly significant and will require detailed engineering studies. Cost estimates for these projects are not provided at this time. Cost estimates will need to be determined as part of the engineering studies when the design elements are determined.

**Table 7. Long-term Improvements**

| | Improvement | Location |
|---|---|---|
| 17 | Narrow Roadway | Green Street – from Neil Street to Wright Street |
| 18 | Parking Structures | Gregory Drive and Sixth Street |
| | | In the vicinity of Sixth Street and Healy Street |

SOURCE: Bucher, Willis & Ratliff Corporation and CATS Technical Advisory Committee.

## E. CONCLUSION

The recommended plan represents a combination of physical improvements and policy initiatives. While the improvements will be phased in over time, it is the complete plan that represents what is considered by the EPAC, TAC, and PAC as the best solution to achieve the project goals and objectives. Major themes of the recommended plan include:

1. The plan will reduce the emphasis on moving vehicles, and put more emphasis on moving people via walking, bicycling, and public transit.

2. The plan will improve the safety at locations where people walk, bicycle, and get on/off buses.

3. The plan will provide for vehicle access through a more efficient traffic system.

4. The plan includes many recommendations that will result in slowing vehicles down to create a more pedestrian friendly and safe environment.

5. Implementation of the plan can be made using existing right-of-way. In fact, the plan identifies several opportunities to reclaim right-of-way that can be used to improve pedestrian, bicycle, and public transit facilities/operations.

An important policy recommendation is the creation of an "University District." The University District would be defined according to the study area boundaries of Neil Street, University Avenue, Lincoln Avenue, and St. Mary's Road. Within the University District, consistent regulations concerning parking, vehicle speeds, pedestrian crossings would be developed and strictly enforced. It is the goal to implement projects and policies that foster an attitude within the University District that one must drive, bicycle, and walk responsibly and safely.

This study has identified a consensus on the preferred strategy that best meets the project goals, objectives and mission statement. In order for the preferred strategy to be successfully implemented it will require a continuing cooperative effort among all stakeholders. The CATS represents the first step in identifying a comprehensive approach to address transportation deficiencies within the University District. The next steps include detailed engineering (planning) at specific locations, an education effort to inform individuals regarding the University District concept, and strict enforcement of those violating the University District regulations and policies. With a continuing cooperative effort among stakeholders and the implementation of the elements contained in the preferred strategy, the overall mission statement of accommodating pedestrian, bicycle, transit, and vehicle movements in a more user-friendly environment will be achieved.

January 21, 2002

City of Urbana
Attn: Mr. Bill Gray, P.E.
Director of Public Works
706 S. Glover
Urbana, IL 61801

Re: CATS II
Circulation Analysis

Dear Mr. Gray:

Attached you will find 9 diagrams of campus area circulation plans reviewed by the CATS II Technical Advisory Committee (TAC).

The first five circulation scenarios were initially presented at a Public Workshop on April 4, 2001. These five themes presented to the public for comment were selected by the TAC to represent the major categories of potential circulation themes, summarizing components of 25 individual circulation plans that had been reviewed by the TAC. These five circulation themes are summarized as follows:

| Theme | Description |
|---|---|
| 1 | The existing circulation plan |
| 2 | CATS Phase I recommended plan |
| 3 | A two-lane Fifth St./Sixth St. one-way couple |
| 4 | A one-lane Fifth St./Sixth St. one-way couple |
| 5 | Two-way transit on Wright St. |

We wish to iterate that the synopses below of various circulation plans contain abbreviated descriptions of the various themes. The decision making process resulting in the themes presented involved many weeks of discussion and revision by all entities of the TAC. A complex matrix analysis was developed to analyze the two dozen circulation plans initially studied which resulted in the themes presented here. A thorough discussion of this analysis can be found in the current draft of the *Core Campustown Traffic Circulation* chapter of the future CATS II

Interim Report. This draft has not been finalized.

Theme 1

The first theme represents the existing circulation plan – the number of lanes and direction of travel for various campustown streets as they exist at this time. This theme was presented at the April 4 Workshop for information only. We sought comments on the proposed themes.

Theme 2

The second theme summarized the recommended circulation plan as proposed in the CATS I Report. This report was presented in June of 1999 and it identified several unresolved issues that impacted campustown circulation. The most significant unresolved issue involved resolution of directional traffic on Sixth Street. The CATS I Report proposes two-way directional traffic on Sixth Street.

After interviews with the individual TAC members, it was stressed that the project should follow the goals of the mission statement and emphasize pedestrian safety. Furthermore, they concluded that other modal types, specifically vehicles, should be de-emphasized. A two-way Sixth Street would improve vehicle efficiency at the cost of pedestrian safety.

Additionally, comments received voiced concern over the two-way traffic scenario on Sixth Street compromising the commercial vitality of the Sixth Street corridor. The merchants would not be in favor of such a scenario.

Considering this, other circulation scenarios were investigated.

Theme 3

The third theme presented a one-way, two-lane Fifth St./Sixth St. couple. This theme would propose Sixth Street to remain as it current is, two southbound lanes; and Fifth Street to be converted to two northbound lanes. This theme would require signalization of the Green St./Fifth St. intersection.

Theme 4

The fourth theme was similar to Theme 3 with one significant change. This theme proposed a Fifth St./Sixth St. couple with only one lane in each direction

instead of two. The intent of this proposal was to further promote the safety of pedestrians and to provide for diagonal parking along the one-way street.

A theme proposing reduced traffic lane widths with diagonal parking, however, would impact transit operations along these streets. Considering this, if MTD operations were to be maintained in conjunction with this theme, routes would need to be altered. Further study of this proposal resulted in Theme 5.

Theme 5

In discussions with the MTD, they indicated that if they could move two-way bus traffic on Wright Street, they would have better bus circulation and they could remove all busses from Sixth Street north of Armory Avenue, and from Green Street and Springfield Avenue between First and Wright Streets. This would also provide more immediate drop-off and pick-up points closer to the core of student bus usage at the quad. This worked well with the concepts presented in Themes 3 and 4. As such, Theme 5 presents a two-way Wright Street with transit moving in both directions.

* * * *

As mentioned above, the five themes were presented to the public for discussion and comment on April 4, 2001. We recorded comments from groups at the meeting and received individual comments from participants.

The TAC made the selection of the final circulation theme after reviewing and condensing the comments. A process of elimination was employed by the TAC to select the final circulation theme. Circulation theme 1 (i.e., the existing circulation plan) and 2 (i.e., the CATS Phase I recommended plan) were consecutively removed for consideration based on the results of the final rankings established using the evaluation matrices discussed above. Circulation theme 3 (i.e., two-lane Fifth St./Sixth St. one-way couple) was removed for consideration based on a concern for pedestrian safety along Fifth St. and Sixth St. and anticipated high implementation costs associated with major improvements to Fifth Street.

After the process of elimination was complete, circulation themes 4 and 5 remained. It was decided by the TAC that circulation theme 4 provided the best opportunities for enhanced pedestrian safety. The TAC also sought to incorporate the major component of circulation theme 5 into circulation theme 4,

two-way transit on Wright Street.

Before final development of the of a circulation theme involving components of themes 4 and 5, an additional theme was reviewed based upon comments received at the public meeting. This theme, like themes 3 and 4 proposed a Fifth St./Sixth St. couple; however, the couple would reverse directions of the streets. Fifth Street would become one-way southbound and Sixth Street would become one-way northbound. This plan is depicted in the attached circulation Theme 6. This theme was removed from consideration by the TAC based primarily on the negative impact it would have on commercial businesses south of Green Street.

The incorporation of two-way transit on Wright Street necessitated additional changes to circulation theme 4. Since Wright St. south of Green St. will be southbound and a pedestrian plaza between John St. and Daniel St. on Wright St. will be present in the final plan resulting in the restriction of vehicular access south of John St. on Wright St., John St. west of Wright St. was change to flow westbound. Wright St. south of the pedestrian plaza was also change to southbound flow down to Chalmers St. to accommodate two-way transit. The TAC initially desired for two-way transit along the entire length of Wright St. south of Green St. down to Armory Avenue; however, after further analysis it was determined that two-way transit at the intersection of Wright St. and Armory Ave. would result in negative impacts to surrounding properties due to accommodating the movement of two buses turning simultaneously against one another. To alleviate this situation, it was decided to route southbound transit on Wright St. west onto Chalmers St., south onto Sixth St., to its original destination at the intersection of Armory Ave. and Sixth Street. Since transit and vehicular movements on Wright St. south of the pedestrian plaza will now turn west onto Chalmers St., and vehicles operate north of the intersection of Armory Ave. and Wright St., it was decided to make Chalmers St. between Wright St. and Sixth St. one-way westbound.

Lastly, it was decided by the TAC to change Fifth St. back to the existing two-way configuration to alleviate potential high costs associated with making major improvements to that street. A final concession was to change John St. between Fourth St. and Sixth St. to one-way eastbound to help facilitate vehicular ingress and egress to the parking garage at Sixth St. and John Street.

Themes 7, 8 and 9 represent an evolution of minor modifications to what was to become the recommended circulation plan. This final plan is depicted in Theme 9. Themes 6, 7 & 8 are presented here for information only. They were not

presented to the public and served only as working drawings in the development of a final circulation plan.

The final circulation plan was approved by the TAC on June 12, 2001.

If you have any questions or comments on the information presented in this letter, or any other aspect of the CATS II study, please do not hesitate to contact the undersigned.

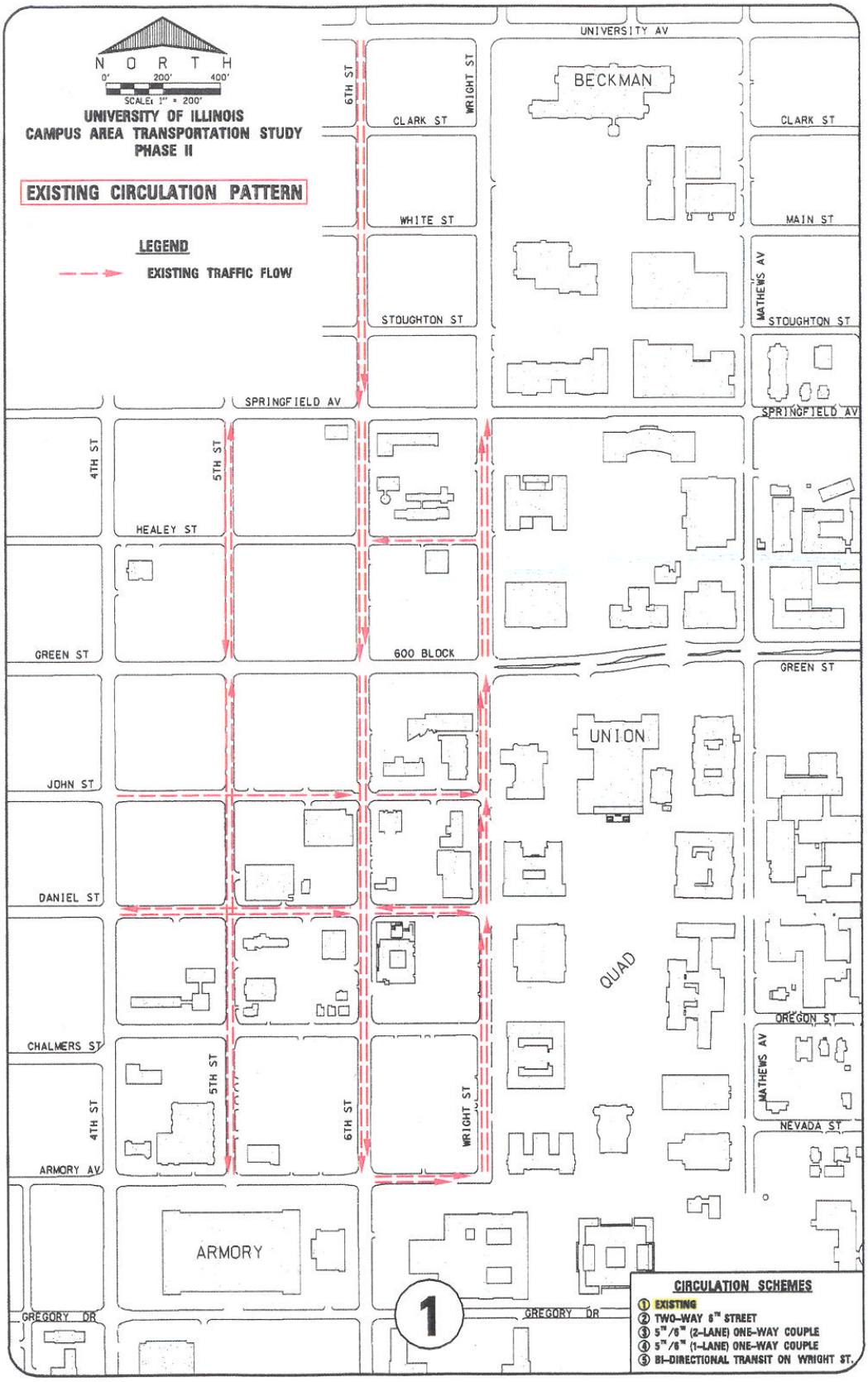
Cordially,

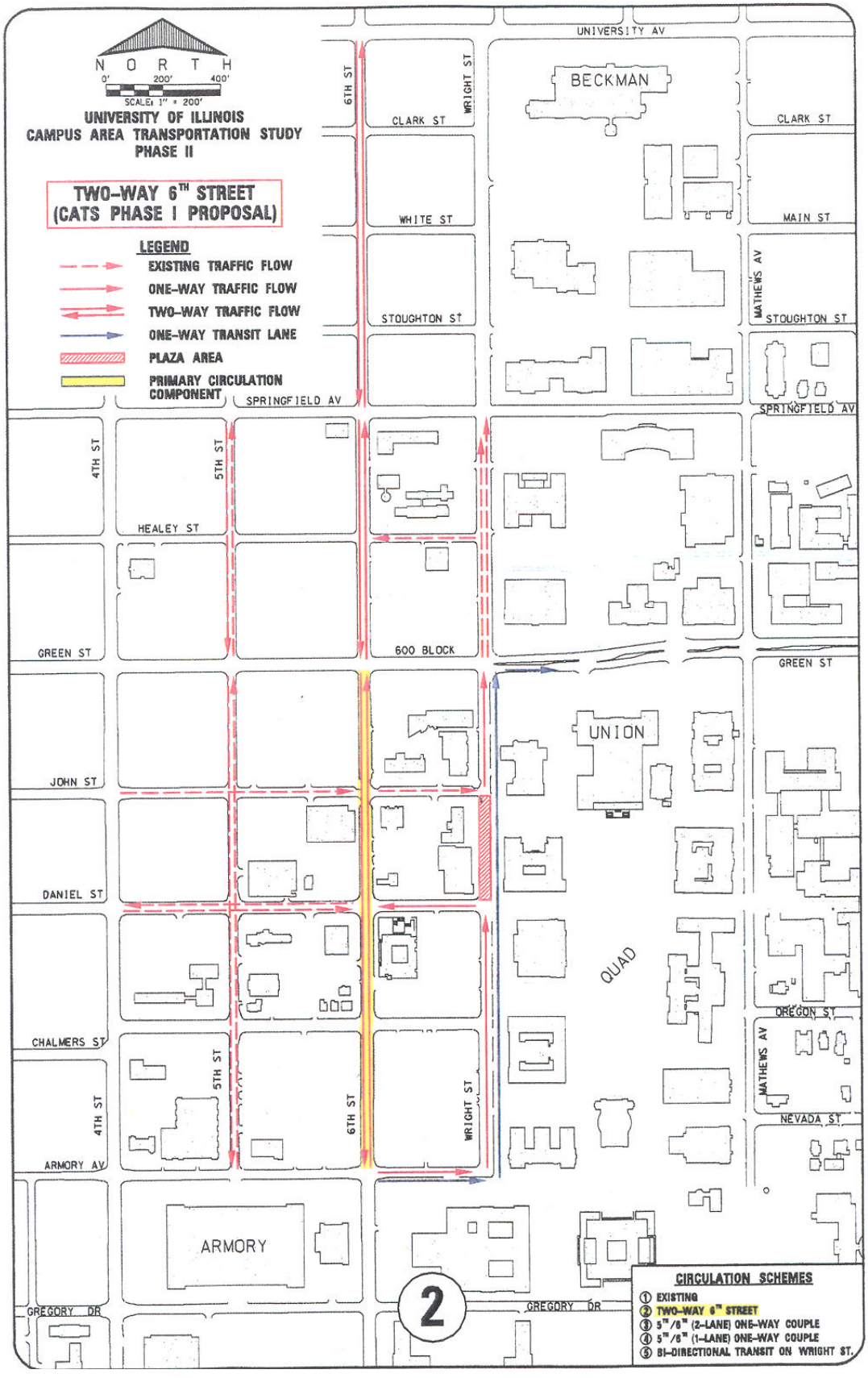
Clark Dietz, Inc.

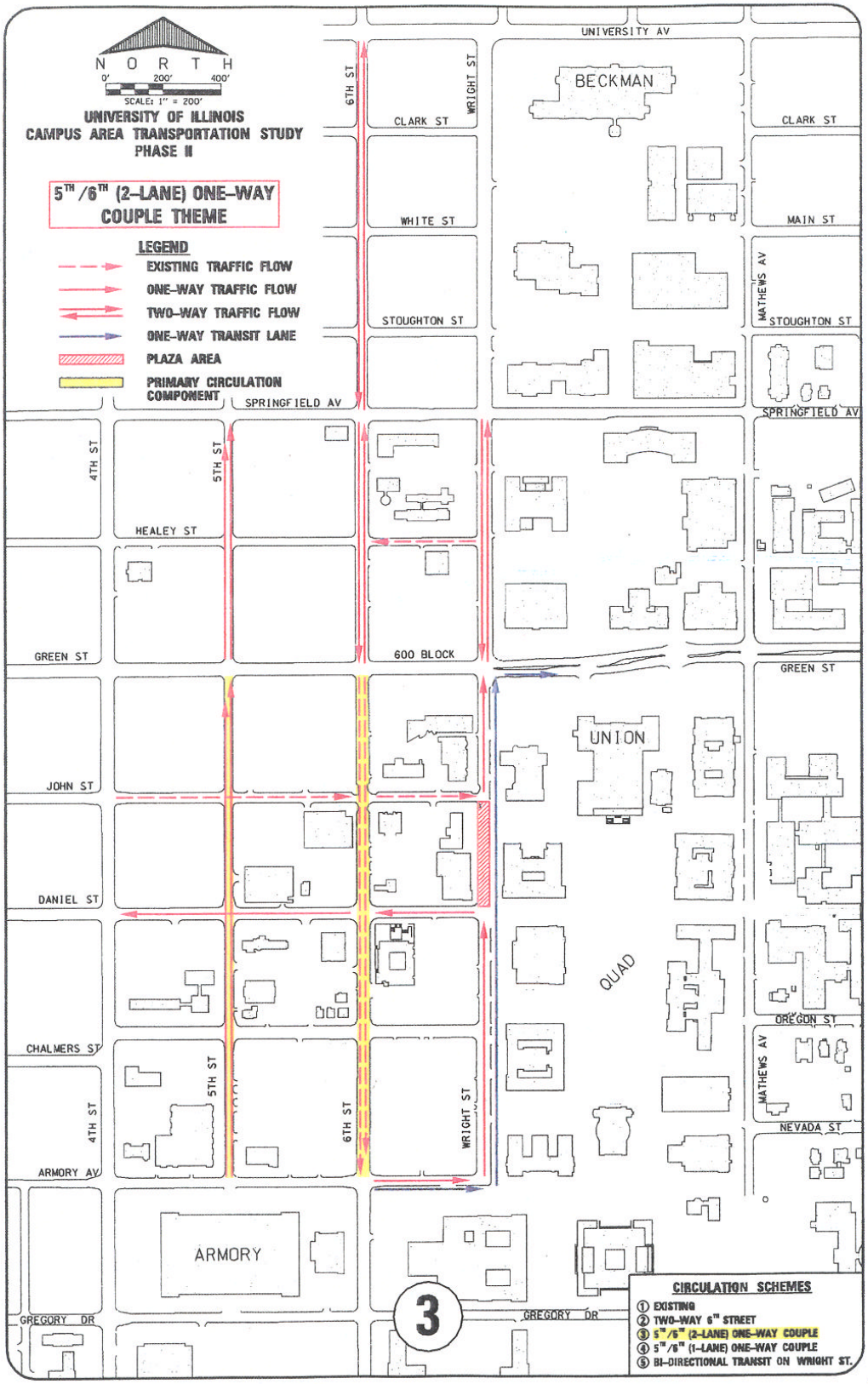
Jerald T. Payonk, P.E.
Project Manager

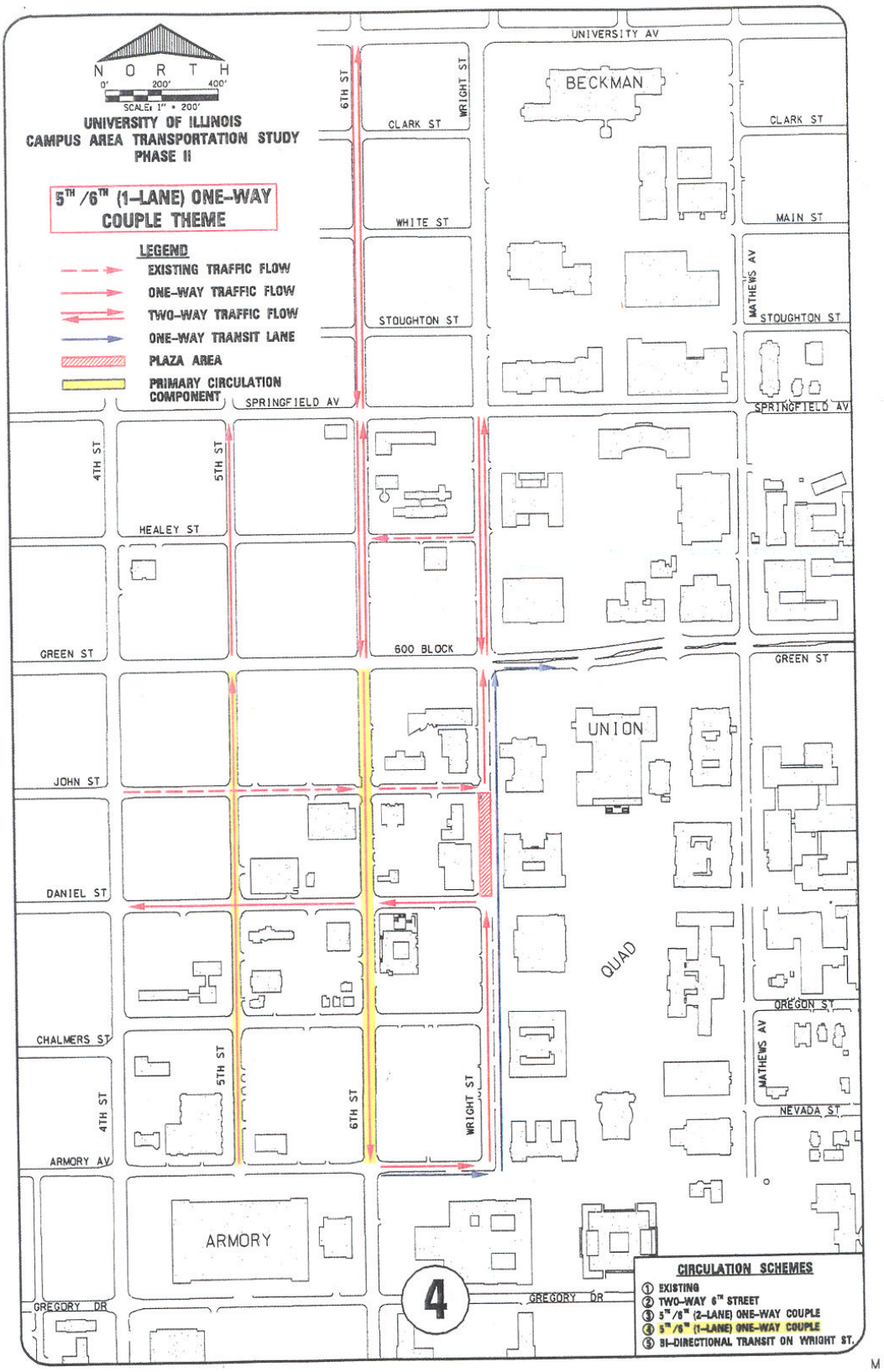
H:\WFILES\CATSII\012102bg.DOC

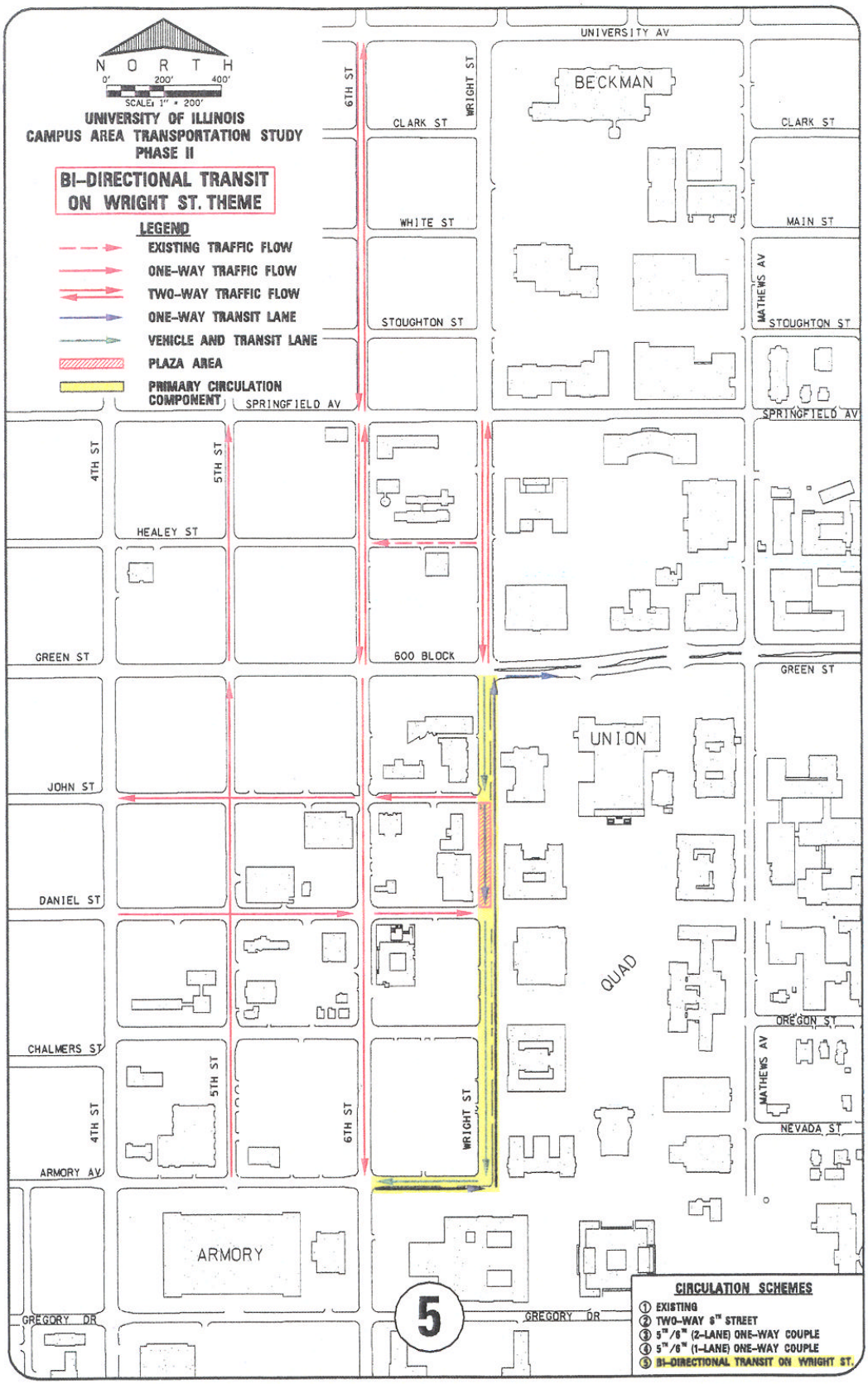
cc: Bruce Knight, TAC Chairman

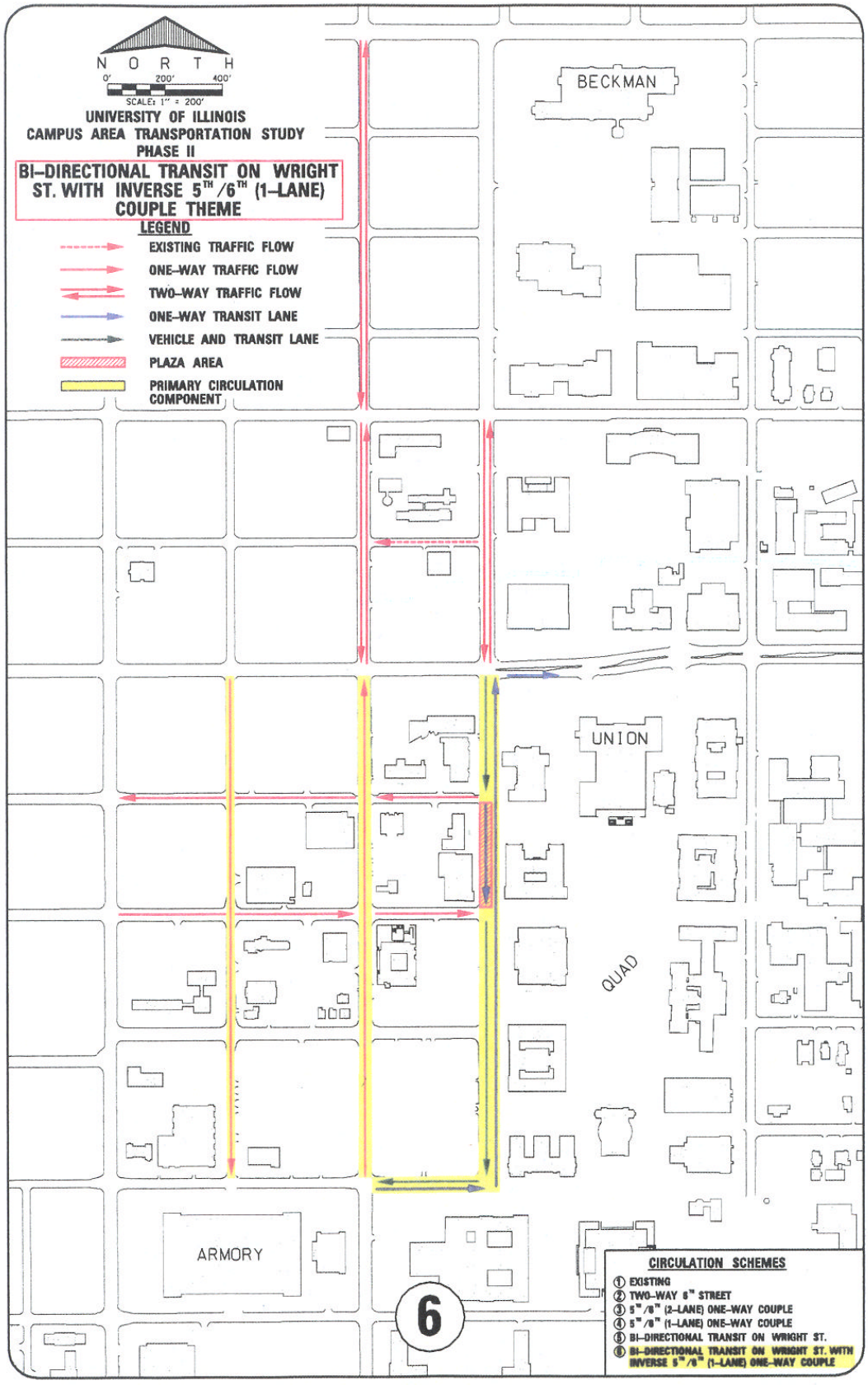

N O R T H
0' 200' 400'
SCALE: 1" = 200'
UNIVERSITY OF ILLINOIS
CAMPUS AREA TRANSPORTATION STUDY
PHASE II
EXISTING CIRCULATION PATTERN
LEGEND
EXISTING TRAFFIC FLOW
UNIVERSITY AV
BECKMAN
CLARK ST
WHITE ST
STOUGHTON ST
MAIN ST
MATHEWS AV
SPRINGFIELD AV
6TH ST
WRIGHT ST
4TH ST
5TH ST
HEALEY ST
GREEN ST
600 BLOCK
UNION
JOHN ST
DANIEL ST
QUAD
OREGON ST
CHALMERS ST
NEVADA ST
ARMORY AV
ARMORY
GREGORY DR
1
CIRCULATION SCHEMES
1 EXISTING
2 TWO-WAY 6TH STREET
3 5TH/6TH (2-LANE) ONE-WAY COUPLE
4 5TH/6TH (1-LANE) ONE-WAY COUPLE
5 BI-DIRECTIONAL TRANSIT ON WRIGHT ST.

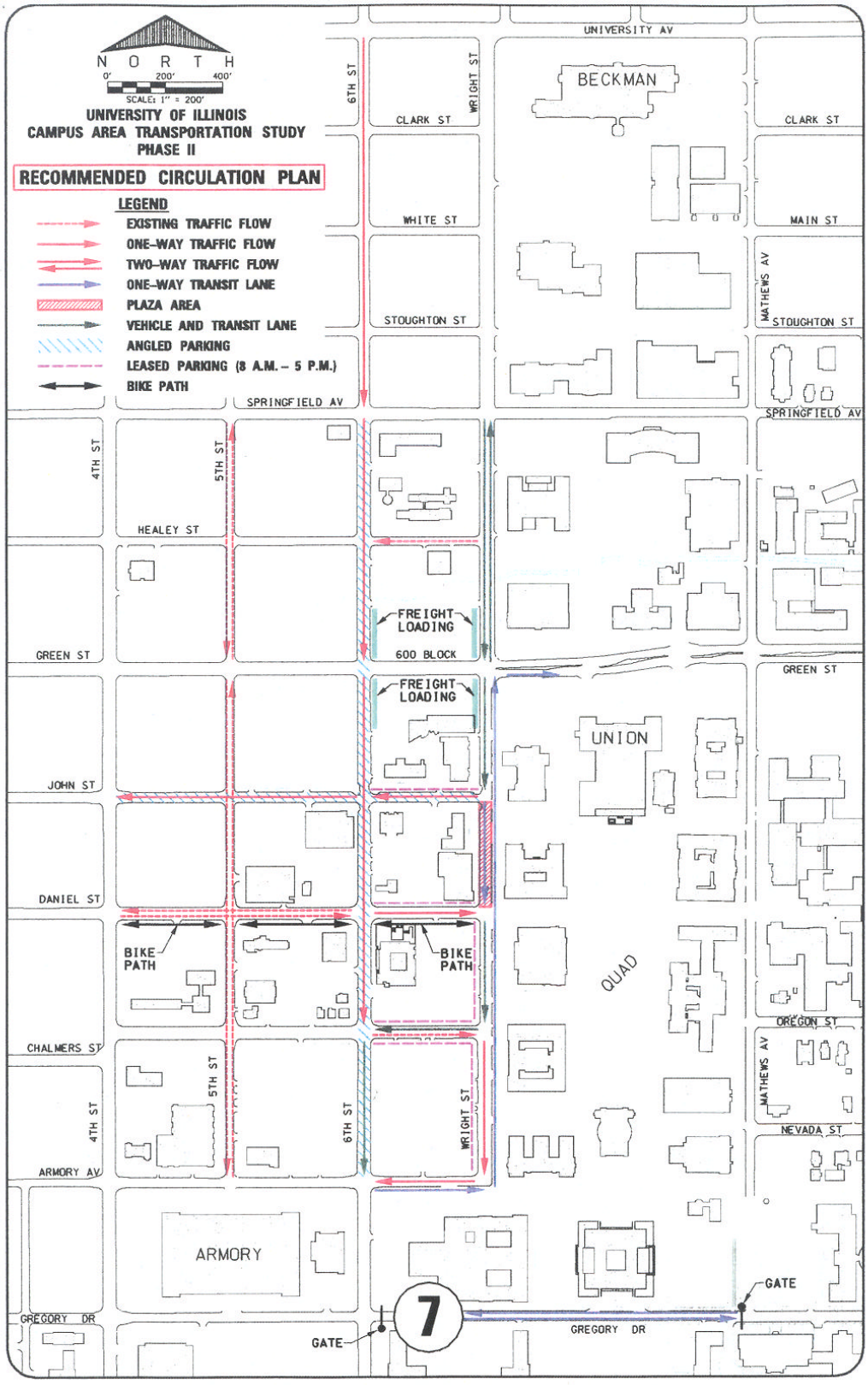

N O R T H
0' 200' 400'
SCALE: 1" = 200'
UNIVERSITY OF ILLINOIS
CAMPUS AREA TRANSPORTATION STUDY
PHASE II
TWO-WAY 6TH STREET
(CATS PHASE I PROPOSAL)
LEGEND
EXISTING TRAFFIC FLOW
ONE-WAY TRAFFIC FLOW
TWO-WAY TRAFFIC FLOW
ONE-WAY TRANSIT LANE
PLAZA AREA
PRIMARY CIRCULATION COMPONENT
UNIVERSITY AV
6TH ST
WRIGHT ST
CLARK ST
BECKMAN
WHITE ST
MAIN ST
MATHEWS AV
STOUGHTON ST
SPRINGFIELD AV
4TH ST
5TH ST
HEALEY ST
GREEN ST
600 BLOCK
UNION
JOHN ST
DANIEL ST
QUAD
OREGON ST
CHALMERS ST
NEVADA ST
ARMORY AV
ARMORY
GREGORY DR
2
CIRCULATION SCHEMES
1 EXISTING
2 TWO-WAY 6TH STREET
3 5TH/6TH (2-LANE) ONE-WAY COUPLE
4 5TH/6TH (1-LANE) ONE-WAY COUPLE
5 BI-DIRECTIONAL TRANSIT ON WRIGHT ST.

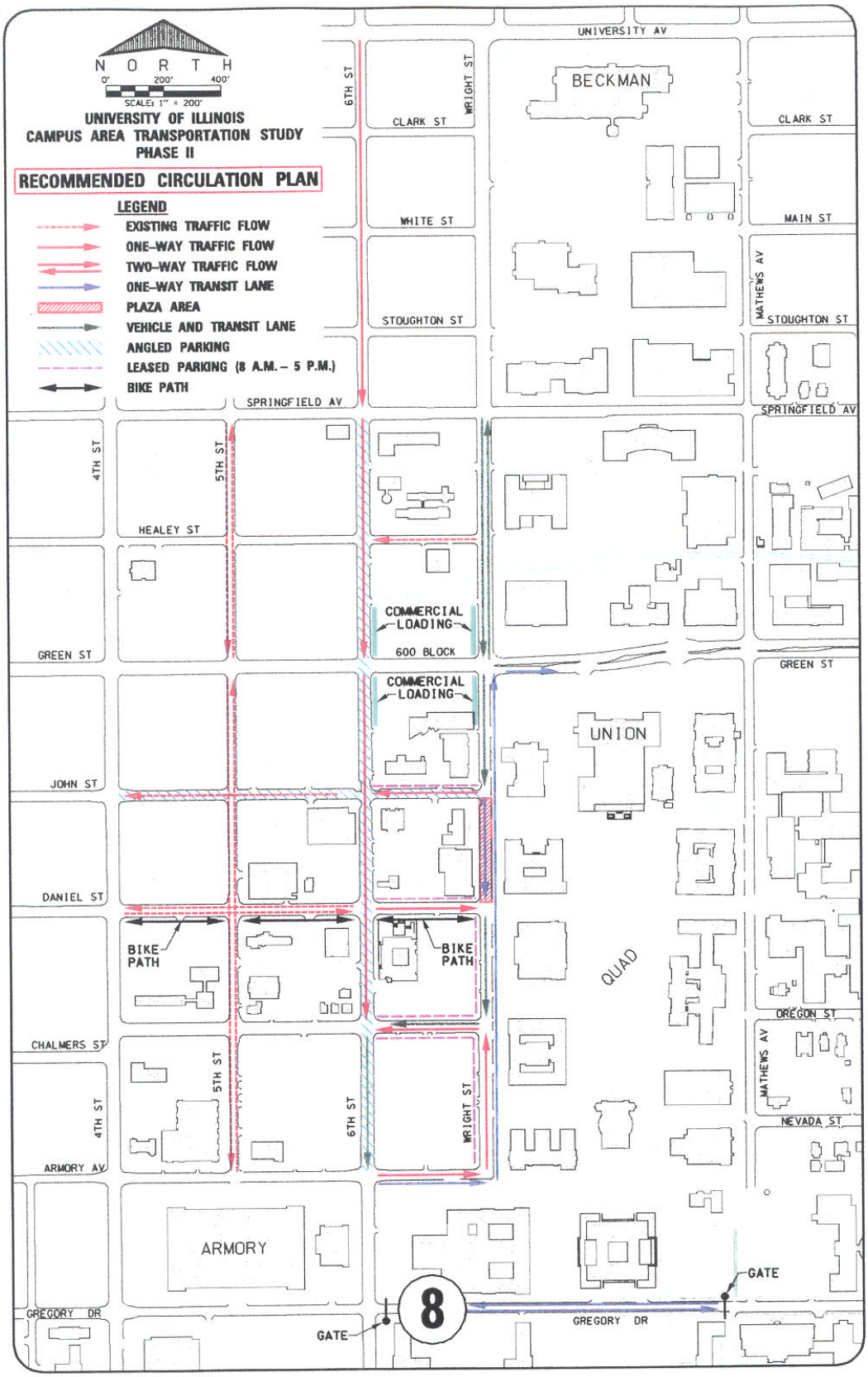

N O R T H
0' 200' 400'
SCALE: 1" = 200'
UNIVERSITY OF ILLINOIS
CAMPUS AREA TRANSPORTATION STUDY
PHASE II
5TH/6TH (2-LANE) ONE-WAY COUPLE THEME
LEGEND
EXISTING TRAFFIC FLOW
ONE-WAY TRAFFIC FLOW
TWO-WAY TRAFFIC FLOW
ONE-WAY TRANSIT LANE
PLAZA AREA
PRIMARY CIRCULATION COMPONENT
UNIVERSITY AV
BECKMAN
CLARK ST
WHITE ST
STOUGHTON ST
MAIN ST
MATHEWS AV
SPRINGFIELD AV
6TH ST
WRIGHT ST
4TH ST
5TH ST
HEALEY ST
GREEN ST
600 BLOCK
UNION
JOHN ST
DANIEL ST
QUAD
OREGON ST
CHALMERS ST
NEVADA ST
ARMORY AV
ARMORY
GREGORY DR
3
CIRCULATION SCHEMES
① EXISTING
② TWO-WAY 6TH STREET
③ 5TH/6TH (2-LANE) ONE-WAY COUPLE
④ 5TH/6TH (1-LANE) ONE-WAY COUPLE
⑤ BI-DIRECTIONAL TRANSIT ON WRIGHT ST.

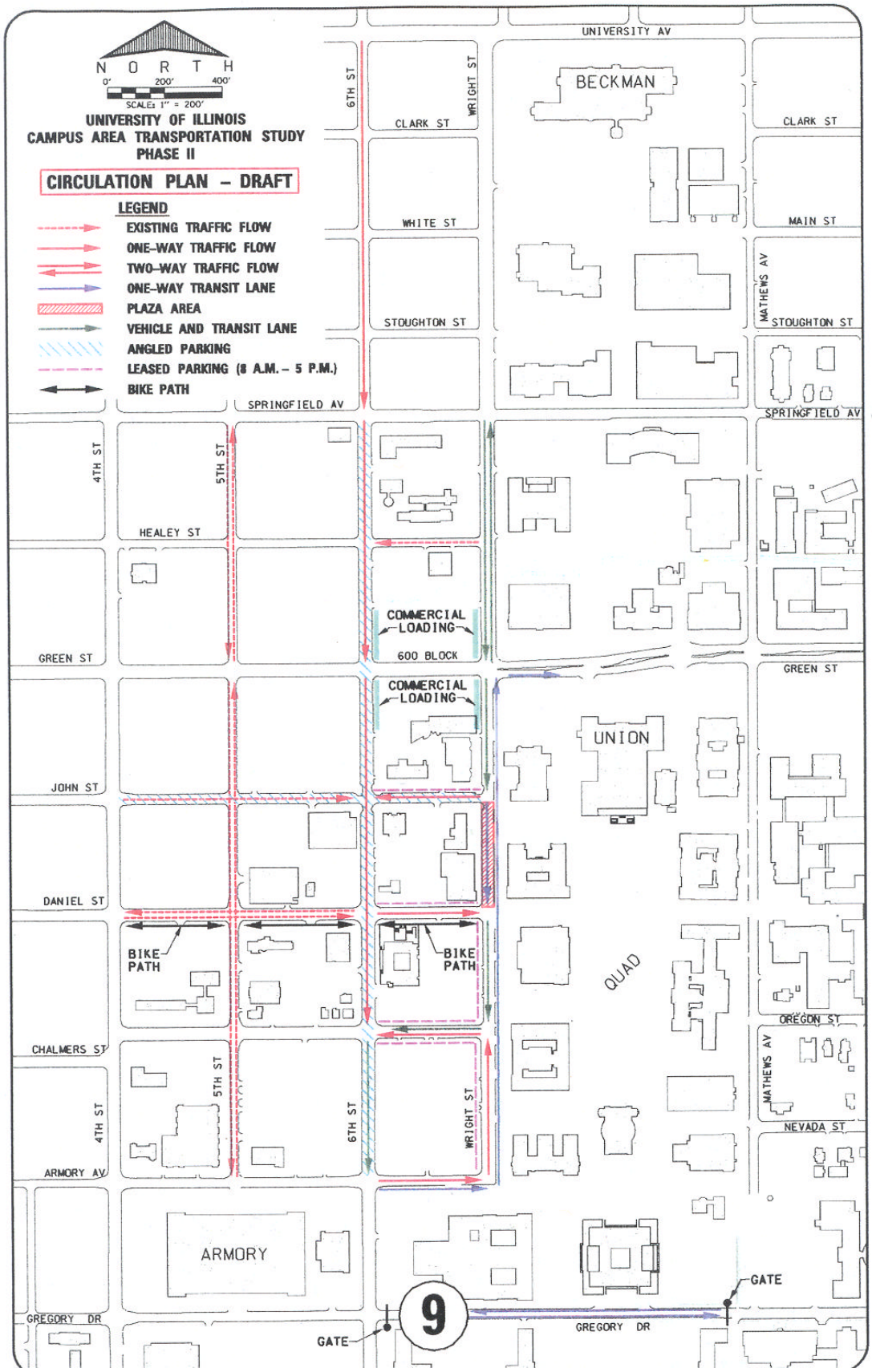

N O R T H
0' 200' 400'
SCALE: 1" = 200'
UNIVERSITY OF ILLINOIS
CAMPUS AREA TRANSPORTATION STUDY
PHASE II
5TH/6TH (1-LANE) ONE-WAY COUPLE THEME
LEGEND
EXISTING TRAFFIC FLOW
ONE-WAY TRAFFIC FLOW
TWO-WAY TRAFFIC FLOW
ONE-WAY TRANSIT LANE
PLAZA AREA
PRIMARY CIRCULATION COMPONENT
UNIVERSITY AV
BECKMAN
CLARK ST
WHITE ST
STOUGHTON ST
MAIN ST
MATHEWS AV
SPRINGFIELD AV
6TH ST
WRIGHT ST
4TH ST
5TH ST
HEALEY ST
GREEN ST
600 BLOCK
UNION
JOHN ST
DANIEL ST
QUAD
CHALMERS ST
OREGON ST
NEVADA ST
ARMORY AV
ARMORY
GREGORY DR
4
CIRCULATION SCHEMES
1 EXISTING
2 TWO-WAY 6TH STREET
3 5TH/6TH (2-LANE) ONE-WAY COUPLE
4 5TH/6TH (1-LANE) ONE-WAY COUPLE
5 BI-DIRECTIONAL TRANSIT ON WRIGHT ST.


N O R T H
0' 200' 400'
SCALE: 1" = 200'
UNIVERSITY OF ILLINOIS
CAMPUS AREA TRANSPORTATION STUDY
PHASE II
BI-DIRECTIONAL TRANSIT ON WRIGHT ST. THEME
LEGEND
EXISTING TRAFFIC FLOW
ONE-WAY TRAFFIC FLOW
TWO-WAY TRAFFIC FLOW
ONE-WAY TRANSIT LANE
VEHICLE AND TRANSIT LANE
PLAZA AREA
PRIMARY CIRCULATION COMPONENT
UNIVERSITY AV
6TH ST
WRIGHT ST
CLARK ST
WHITE ST
STOUGHTON ST
SPRINGFIELD AV
BECKMAN
MAIN ST
MATHEWS AV
4TH ST
5TH ST
HEALEY ST
GREEN ST
600 BLOCK
JOHN ST
DANIEL ST
CHALMERS ST
ARMORY AV
UNION
QUAD
OREGON ST
NEVADA ST
ARMORY
GREGORY DR
5
CIRCULATION SCHEMES
1 EXISTING
2 TWO-WAY 6TH STREET
3 5TH/6TH (2-LANE) ONE-WAY COUPLE
4 5TH/6TH (1-LANE) ONE-WAY COUPLE
5 BI-DIRECTIONAL TRANSIT ON WRIGHT ST.


N O R T H
0' 200' 400'
SCALE: 1" = 200'
UNIVERSITY OF ILLINOIS
CAMPUS AREA TRANSPORTATION STUDY
PHASE II
BI-DIRECTIONAL TRANSIT ON WRIGHT ST. WITH INVERSE 5TH /6TH (1-LANE) COUPLE THEME
LEGEND
EXISTING TRAFFIC FLOW
ONE-WAY TRAFFIC FLOW
TWO-WAY TRAFFIC FLOW
ONE-WAY TRANSIT LANE
VEHICLE AND TRANSIT LANE
PLAZA AREA
PRIMARY CIRCULATION COMPONENT
BECKMAN
UNION
QUAD
ARMORY
6
CIRCULATION SCHEMES
① EXISTING
② TWO-WAY 6TH STREET
③ 5TH /6TH (2-LANE) ONE-WAY COUPLE
④ 5TH /6TH (1-LANE) ONE-WAY COUPLE
⑤ BI-DIRECTIONAL TRANSIT ON WRIGHT ST.
⑥ BI-DIRECTIONAL TRANSIT ON WRIGHT ST. WITH INVERSE 5TH /6TH (1-LANE) ONE-WAY COUPLE


N O R T H
0' 200' 400'
SCALE: 1" = 200'
UNIVERSITY OF ILLINOIS
CAMPUS AREA TRANSPORTATION STUDY
PHASE II
RECOMMENDED CIRCULATION PLAN
LEGEND
EXISTING TRAFFIC FLOW
ONE-WAY TRAFFIC FLOW
TWO-WAY TRAFFIC FLOW
ONE-WAY TRANSIT LANE
PLAZA AREA
VEHICLE AND TRANSIT LANE
ANGLED PARKING
LEASED PARKING (8 A.M. - 5 P.M.)
BIKE PATH
UNIVERSITY AV
BECKMAN
CLARK ST
WHITE ST
STOUGHTON ST
MAIN ST
MATHEWS AV
SPRINGFIELD AV
6TH ST
WRIGHT ST
4TH ST
5TH ST
HEALEY ST
GREEN ST
FREIGHT LOADING
600 BLOCK
JOHN ST
DANIEL ST
UNION
BIKE PATH
QUAD
OREGON ST
CHALMERS ST
NEVADA ST
ARMORY AV
ARMORY
GREGORY DR
GATE
7


N O R T H
0' 200' 400'
SCALE: 1" = 200'
UNIVERSITY OF ILLINOIS
CAMPUS AREA TRANSPORTATION STUDY
PHASE II
RECOMMENDED CIRCULATION PLAN
LEGEND
EXISTING TRAFFIC FLOW
ONE-WAY TRAFFIC FLOW
TWO-WAY TRAFFIC FLOW
ONE-WAY TRANSIT LANE
PLAZA AREA
VEHICLE AND TRANSIT LANE
ANGLED PARKING
LEASED PARKING (8 A.M. – 5 P.M.)
BIKE PATH
UNIVERSITY AV
BECKMAN
CLARK ST
WHITE ST
STOUGHTON ST
MAIN ST
MATHEWS AV
SPRINGFIELD AV
6TH ST
WRIGHT ST
4TH ST
5TH ST
HEALEY ST
GREEN ST
COMMERCIAL LOADING
600 BLOCK
UNION
JOHN ST
DANIEL ST
BIKE PATH
QUAD
CHALMERS ST
OREGON ST
NEVADA ST
ARMORY AV
ARMORY
GREGORY DR
GATE
8


N O R T H
0' 200' 400'
SCALE: 1" = 200'
UNIVERSITY OF ILLINOIS
CAMPUS AREA TRANSPORTATION STUDY
PHASE II
CIRCULATION PLAN – DRAFT
LEGEND
EXISTING TRAFFIC FLOW
ONE-WAY TRAFFIC FLOW
TWO-WAY TRAFFIC FLOW
ONE-WAY TRANSIT LANE
PLAZA AREA
VEHICLE AND TRANSIT LANE
ANGLED PARKING
LEASED PARKING (8 A.M. – 5 P.M.)
BIKE PATH
UNIVERSITY AV
BECKMAN
CLARK ST
WHITE ST
MAIN ST
STOUGHTON ST
MATHEWS AV
SPRINGFIELD AV
6TH ST
WRIGHT ST
4TH ST
5TH ST
HEALEY ST
GREEN ST
COMMERCIAL LOADING
600 BLOCK
JOHN ST
UNION
DANIEL ST
BIKE PATH
QUAD
OREGON ST
CHALMERS ST
NEVADA ST
ARMORY AV
ARMORY
GREGORY DR
GATE
9

January 22, 2002

City of Urbana
Attn: Mr. Bill Gray, P.E.
Director of Public Works
706 S. Glover
Urbana, IL 61801

Re: CATS II - Green Street/Wright Street Intersection

Dear Mr. Gray:

Per your request, we have compiled the analysis of the various channelization alternates investigated for development of the east leg of the referenced intersection.

As you are aware, the proposed design for the east leg of the intersection (the Urbana side) will contain a left turn-lane, a through-lane, and a right turn-lane. This will require the removal of the existing median at the intersection. The west leg will contain a through-lane and a left turn-lane, the north leg will contain a combination through/left turn-lane (right turns will not be allowed) and the south leg will contain a combination through/right turn-lane (left turns will not be allowed).

CDI looked at numerous alternatives to this proposed channelization. All alternatives would require a 17-second all-walk pedestrian phase. This phasing would be in sync with phasing at the Green/Sixth and Green/Fourth intersections. The 17-second ped phasing is two seconds longer than the current ped phasing operating at the intersection today. Concerning the proposed geometrics, the crossing distance of the east leg will measure 54' from face-to-face of barrier curb. The crossing existing today measures 59' from face-to-face at the crossing location. Countdown signals are proposed to better inform pedestrians in making decisions about crossing the intersection. With the average walking speed of a pedestrian being four feet-per-second, under the proposed plan a student would need 13.5 seconds to cross the east leg of Green Street.

We are proposing the cross section described above for several reasons. First, adding more walk time means that green time must be removed from the vehicle phases. We cannot extend the signal cycle length because the signal cycle length must be the same length as all adjacent signal phases; the signal timing along

Green Street will be coordinated. When we shorten the green times of the vehicle phases, this increases delay for vehicles. One way of countering this increased delay is to increase efficiency of the major movements, namely the east/west through movements. We accomplish this by removing turning vehicles from the through lanes. On the west leg we have separated left-turning vehicles from the through-movement; on the east leg we propose separating left and right-turning vehicles from the through-movement resulting in a separate right turn-lane and left turn-lane. The separation of these east/west movements result in an overall intersection delay of approximately 30 seconds per vehicle, meaning that during the peak hour, the average amount of delay that each vehicle will experience when traveling through the intersection is 30 seconds. The longest delay for a single movement under this scenario would be approximately 65 seconds for the eastbound left turn. Under the criteria established by the CATS II Technical Advisory Committee (TAC), these delays are considered to be acceptable. The TAC established the criteria that no movement should exceed twice the cycle length. With a 90 second cycle length, the upper limit of delay for any movement would be 180 seconds. We will call this channelization scheme as described above Scenario 1.

One scenario investigated involved the removal of the exclusive left turn-lane on the east leg. Doing this would require that left turns be combined with through-vehicles in one lane. Such a scenario would leave the existing median in place. Under this scenario, a left-turning vehicle would only be able to turn left if there is a gap in oncoming traffic. As busy as oncoming traffic is expected to be during the peak hours, a left-turning vehicle in the westbound traffic stream may have to wait until the end of the respective signal cycle to make a left turn - during the yellow light. If a left-turning vehicle is the first queued vehicle once the light turns green, all vehicles behind it would have to wait until this vehicle could make a left turn. Resultant delays for the average vehicle would increase from the 30 seconds identified above to approximately 155 seconds per vehicle. More specifically, the delay for the east leg alone would increase from approximately 20 seconds per vehicle to 295 seconds. Delays of this nature are not considered to be acceptable. This condition will be called Scenario 2.

A third scenario (Scenario 3) would be similar in cross-section to Scenario 2, but different in its operation. The scenario would propose only two westbound lanes: a left turn-lane and a combination through/right lane. Like the prior scenario, the existing median would remain. This scenario would result in an overall intersection delay of approximately 67 seconds per vehicle. More specifically however, because a high number of right-turning vehicles are now combined with

through-vehicles in a single lane, the gaps, or opportunities for east-bound left turning-vehicles to make a turn are greatly reduced. The average delay for this specific movement will increase from the 65 seconds identified in Scenario 1 to approximately 420 seconds. Again, such a delay is not considered acceptable.

A fourth scenario, would propose a cross section on the east leg identical to Scenario 2. The difference between the two would be in the signal phasing. Scenario 4 would propose a split phase in the east/west direction, meaning that only the eastbound movement would receive a green light followed by a green light for only the westbound movement. These two movements would never move concurrently. Such a proposal would result in an average intersection delay of approximately 300 seconds per vehicle with the westbound left/through movement exceeding 420 seconds per vehicle. Delay of this magnitude is not considered acceptable.

The primary objective of the CATS II project is to promote the safety of pedestrians. Considering this, however, we must not abandon all consideration for vehicle efficiency. Excessive delay beyond driver expectations can result in unusual drive behavior. Examples of such behavior would be the running of red lights or added "sneakers" trying to make a left turn during the yellow light. These actions expose the pedestrian to dangerous conditions.

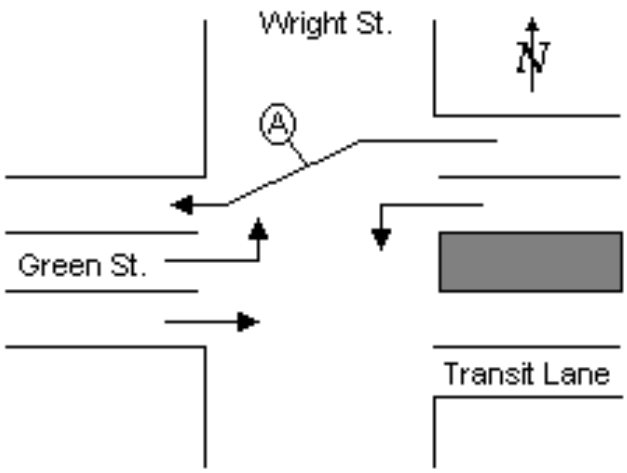
A second concern involving the channelization of the east leg involves the resultant queuing of vehicles to the east. Longer delays typically result in longer queues. The chart below identifies the estimated length of queue for the four scenarios above based upon the 70% queue analysis procedures from the Highway Capacity Software, Version 4.1a:

| **Scenario** | **Calculated Length of Peak Hour Queue** | **Location of Peak Hour Queue's Termination** |
|---|---|---|
| Scenario 1 | 400' | Approximately 100' east of west Illini Union entrance |
| Scenario 2 | 1560' | Approximately 200' east of Goodwin Ave. |
| Scenario 3 | 625' | Immediately east of the east Illini Union entrance |
| Scenario 4 | 1665' | Approximately 300' east of Goodwin Ave. |

A component of the CATS II project is to provide a pedestrian signal on Green Street in front of the Illini Union. A scenario which provides greatest opportunity to make this workable would be Scenario 1. The peak hour utilized in the capacity analysis which determined delay for the various scenarios is the PM peak hour – not the period experiencing the highest number of pedestrians. Considering this, the vehicle queues may be less during the day when student pedestrian volumes are higher.

An argument could be made that Scenario 3 is not significantly greater than Scenario 1 in terms of queue length. Considering this, Scenario 3 would maintain the center median and, therefore, have minimal impacts on the existing cross section.

The diagram below illustrates how Scenario 3 would work with the proposed three-lane Green Street cross section on the west side of Wright Street.




The line identified as A represents the path for a westbound vehicle proceeding through the intersection. As illustrated, vehicles following this path would have to merge over an entire lane width (11 feet) to properly situate themselves in the westbound departure lane. IDOT procedures for shifting lanes through intersections for a 25 mph design speed would suggest a 24:1 taper (Figure 36-1G in the BDE Manual). The proposed distance measure from stopbar to stopbar is 90 feet. A 24:1 taper to shift a lane 11 feet would require a longitudinal length of 264 feet. This distance is considerably greater than the 90 feet proposed between stopbars. As a result, vehicles will need to merge over a substandard distance. Under slick conditions, this could result in vehicles sliding into the northwest

quadrant of the intersection – an area where pedestrians would be gathering awaiting the pedestrian signal. This condition greatly increases the potential for pedestrian/vehicle conflicts.

Additionally, the configuration above also poses sight distance problems for left-turning vehicles. When left turn-lanes are not situated directly across from each other, queued left-turning vehicles obstruct the view of oncoming through vehicles. Similar to the Prospect/Green and Green/First intersections in Champaign, the consequence of such lane alignments typically result in a drastic increase of turning accidents.

All scenarios which proposed keeping the existing median (Scenarios 2, 3, & 4) presented safety or efficiency problems with the operation of the intersection. For these reasons, Scenario 1 became the configuration that presented the best option in reducing vehicle delay, minimizing vehicle queues, and avoiding potential pedestrian/vehicle conflicts. As such, this option was approved by the Technical Advisory Committee.

We have included summary reports of capacity analysis for the four scenarios identified above. If you have any question concerning the contents of this letter or any other component of the CATS II project, please do not hesitate to contact our office.

Cordially,

Clark Dietz, Inc.

Jerald T. Payonk, P.E.
Project Manager

H:\WFILES\CATSII\101101bg2.DOC

cc: Bruce Knight, TAC Chairman

HCS2000: Signalized Intersections Release 4.1a

SCENARIO 1

Analyst: JTP
Agency: CUUATS
Date: 02/07/2001
Period: Peak Hour
Project ID:
E/W St: Green Street

Inter.: Green/Wright
Area Type: All other areas
Jurisd:
Year : C45010
N/S St: Wright Street

SIGNALIZED INTERSECTION SUMMARY

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 |
| LGConfig | L | TR | | L | T | R | | TR | | | LT | |
| Volume | 160 | 580 | 30 | 90 | 590 | 130 | | 28 | 25 | 100 | 60 | |
| Lane Width | 10.0 | 11.0 | | 12.0 | 11.0 | 11.0 | | 13.5 | | | 13.5 | |
| RTOR Vol | | | 0 | | | 0 | | | 0 | | | |

Duration 0.25 Area Type: All other areas

Signal Operations

| Phase Combination | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| EB Left | A | | | | NB Left | | | |
| Thru | A | | | | Thru | A | | |
| Right | A | | | | Right | A | | |
| Peds | | | | | Peds | | | |
| WB Left | A | | | | SB Left | A | | |
| Thru | A | | | | Thru | A | | |
| Right | A | | | | Right | | | |
| Peds | | | | | Peds | | | |
| NB Right | | | | | EB Right | | | |
| SB Right | | | | | WB Right | | | |
| Green | 43.0 | | | | | 10.5 | 9.5 | |
| Yellow | 3.0 | | | | | 3.0 | 3.0 | |
| All Red | 1.0 | | | | | 0.0 | 17.0 | |

Cycle Length: 90.0 secs

Intersection Performance Summary

| Appr/ Lane Grp | Lane Group Capacity | Adj Sat Flow Rate (s) | Ratios v/c | Ratios g/C | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 184 | 386 | 0.91 | 0.48 | 64.3 | E | | |
| TR | 854 | 1787 | 0.75 | 0.48 | 23.0 | C | 31.5 | C |
| Westbound | | | | | | | | |
| L | 159 | 332 | 0.60 | 0.48 | 23.2 | C | | |
| T | 860 | 1801 | 0.72 | 0.48 | 21.7 | C | 20.6 | C |
| R | 710 | 1487 | 0.19 | 0.48 | 13.7 | B | | |
| Northbound | | | | | | | | |
| TR | 99 | 934 | 0.56 | 0.11 | 45.0 | D | 45.0 | D |
| Southbound | | | | | | | | |
| LT | 204 | 1747 | 0.82 | 0.12 | 62.0 | E | 62.0 | E |

Intersection Delay = 29.7 (sec/veh) Intersection LOS = C

HCS2000: Signalized Intersections Release 4.1a

SCENARIO 2

Analyst: JTP
Agency: CUUATS
Date: 02/07/2001
Period: Peak Hour
Project ID:
E/W St: Green Street

Inter.: Green/Wright
Area Type: All other areas
Jurisd:
Year : C45010

N/S St: Wright Street

SIGNALIZED INTERSECTION SUMMARY

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| No. Lanes | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 |
| LGConfig | L | TR | | | LT | R | | TR | | | LT | |
| Volume | 160 | 580 | 30 | 90 | 590 | 130 | | 28 | 25 | 100 | 60 | |
| Lane Width | 10.0 | 11.0 | | | 11.0 | 11.0 | | 13.5 | | | 13.5 | |
| RTOR Vol | | | 0 | | | 0 | | | 0 | | | |

Duration 0.25 Area Type: All other areas

Signal Operations

| Phase Combination | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| EB Left | A | | | | | | | |
| Thru | A | | | | | | | |
| Right | A | | | | | | | |
| Peds | | | | | | | | |
| WB Left | A | | | | | | | |
| Thru | A | | | | | | | |
| Right | A | | | | | | | |
| Peds | | | | | | | | |
| NB Right | | | | | | | | |
| SB Right | | | | | | | | |
| Green | 43.0 | | | | 10.5 | 9.5 | | |
| Yellow | 3.0 | | | | 3.0 | 3.0 | | |
| All Red | 1.0 | | | | 0.0 | 17.0 | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| NB Left | | | | | | | | | |
| Thru | | | | | A | | | | |
| Right | | | | | A | | | | |
| Peds | | | | | | | | | |
| SB Left | A | | | | | | | | |
| Thru | A | | | | | | | | |
| Right | | | | | | | | | |
| Peds | | | | | | | | | |
| EB Right | | | | | | | | | |
| WB Right | | | | | | | | | |

Cycle Length: 90.0 secs

Intersection Performance Summary

| Appr/ Lane Grp | Lane Group Capacity | Adj Sat Flow Rate (s) | Ratios v/c | Ratios g/C | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 187 | 392 | 0.90 | 0.48 | 60.3 | E | | |
| TR | 854 | 1787 | 0.75 | 0.48 | 23.0 | C | 30.7 | C |
| Westbound | | | | | | | | |
| LT | 421 | 882 | 1.70 | 0.48 | 348.9 | F | 295.0 | F |
| R | 710 | 1487 | 0.19 | 0.48 | 13.7 | B | | |
| Northbound | | | | | | | | |
| TR | 99 | 934 | 0.56 | 0.11 | 45.0 | D | 45.0 | D |
| Southbound | | | | | | | | |
| LT | 204 | 1747 | 0.82 | 0.12 | 62.0 | E | 62.0 | E |

Intersection Delay = 153.4 (sec/veh) Intersection LOS = F

HCS2000: Signalized Intersections Release 4.1a

SCENARIO 3

Analyst: JTP
Agency: CUUATS
Date: 02/07/2001
Period: Peak Hour
Project ID:
E/W St: Green Street

Inter.: Green/Wright
Area Type: All other areas
Jurisd:
Year : C45010

N/S St: Wright Street

SIGNALIZED INTERSECTION SUMMARY

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| LGConfig | L | TR | | L | TR | | | TR | | | LT | |
| Volume | 160 | 580 | 30 | 90 | 590 | 130 | | 28 | 25 | 100 | 60 | |
| Lane Width | 10.0 | 11.0 | | 12.0 | 11.0 | | | 13.5 | | | 13.5 | |
| RTOR Vol | | | 0 | | | 0 | | | 0 | | | |

Duration 0.25 Area Type: All other areas

Signal Operations

| Phase Combination | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| EB Left | A | | | | NB Left | | | |
| Thru | A | | | | Thru | A | | |
| Right | A | | | | Right | A | | |
| Peds | | | | | Peds | | | |
| WB Left | A | | | | SB Left | A | | |
| Thru | A | | | | Thru | A | | |
| Right | A | | | | Right | | | |
| Peds | | | | | Peds | | | |
| NB Right | | | | | EB Right | | | |
| SB Right | | | | | WB Right | | | |
| Green | 43.0 | | | | | 10.5 | 9.5 | |
| Yellow | 3.0 | | | | | 3.0 | 3.0 | |
| All Red | 1.0 | | | | | 0.0 | 17.0 | |

Cycle Length: 90.0 secs

Intersection Performance Summary

| Appr/ Lane Grp | Lane Group Capacity | Adj Sat Flow Rate (s) | Ratios v/c | Ratios g/C | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 94 | 196 | 1.79 | 0.48 | 416.9 | F | | |
| TR | 854 | 1787 | 0.75 | 0.48 | 23.0 | C | 104.6 | F |
| Westbound | | | | | | | | |
| L | 159 | 332 | 0.60 | 0.48 | 23.2 | C | | |
| TR | 833 | 1743 | 0.91 | 0.48 | 35.7 | D | 34.3 | C |
| Northbound | | | | | | | | |
| TR | 99 | 934 | 0.56 | 0.11 | 45.0 | D | 45.0 | D |
| Southbound | | | | | | | | |
| LT | 204 | 1747 | 0.82 | 0.12 | 62.0 | E | 62.0 | E |

Intersection Delay = 67.3 (sec/veh) Intersection LOS = E

HCS2000: Signalized Intersections Release 4.1a

SCENARIO 4

Analyst: JTP
Agency: CUUATS
Date: 02/07/2001
Period: Peak Hour
Project ID:
E/W St: Green Street

Inter.: Green/Wright
Area Type: All other areas
Jurisd:
Year : C45010

N/S St: Wright Street

SIGNALIZED INTERSECTION SUMMARY

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| No. Lanes | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 |
| LGConfig | L | TR | | | LT | R | | TR | | | LT | |
| Volume | 160 | 580 | 30 | 90 | 590 | 130 | | 28 | 25 | 100 | 60 | |
| Lane Width | 10.0 | 11.0 | | | 11.0 | 11.0 | | 13.5 | | | 13.5 | |
| RTOR Vol | | | 0 | | | 0 | | | 0 | | | |

Duration 0.25 Area Type: All other areas

Signal Operations

| Phase Combination | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|
| EB | Left | A | | | | | | | |
| | Thru | A | | | | | | | |
| | Right | A | | | | | | | |
| | Peds | | | | | | | | |
| WB | Left | | A | | | | | | |
| | Thru | | A | | | | | | |
| | Right | | A | | | | | | |
| | Peds | | | | | | | | |
| NB | Right | | | | | | | | |
| SB | Right | | | | | | | | |
| Green | | 19.0 | 20.0 | | | | | | |
| Yellow | | 3.0 | 3.0 | | | | | | |
| All Red | | 1.0 | 1.0 | | | | | | |

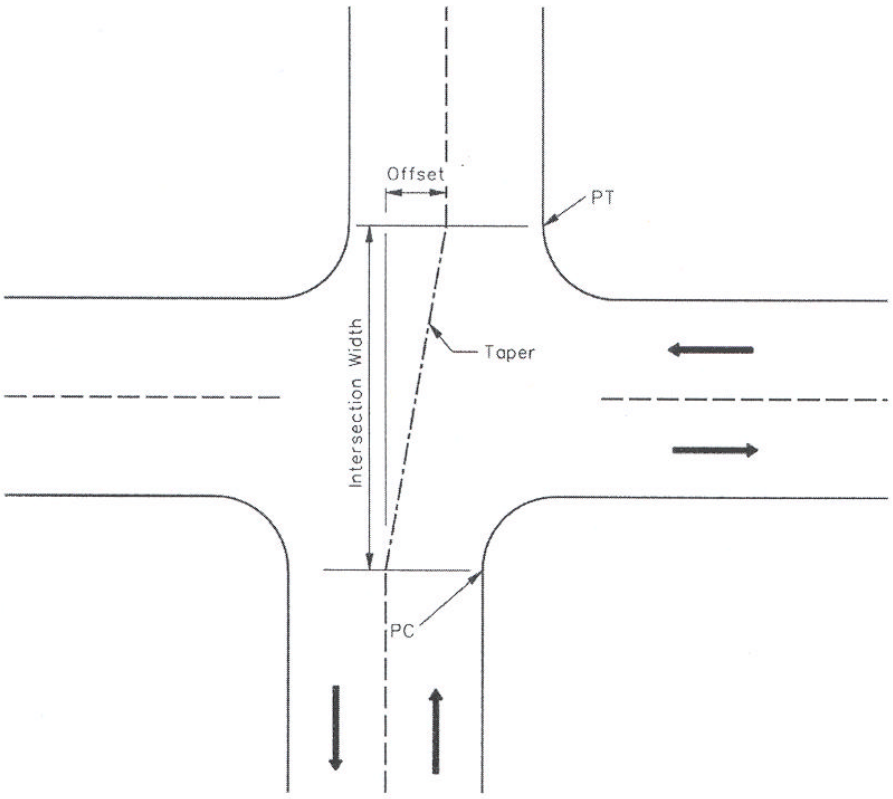
| | | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|
| NB | Left | | | | |
| | Thru | | A | | |
| | Right | | A | | |
| | Peds | | | | |
| SB | Left | A | | | |
| | Thru | A | | | |
| | Right | | | | |
| | Peds | | | | |
| EB | Right | | | | |
| WB | Right | | | | |
| | | 10.5 | 9.5 | | |
| | | 3.0 | 3.0 | | |
| | | 0.0 | 17.0 | | |

Cycle Length: 90.0 secs

Intersection Performance Summary

| Appr/ Lane Grp | Lane Group | Adj Sat Flow Rate (s) | Ratios | | Lane Group | | Approach | |
|---|---|---|---|---|---|---|---|---|
| | Capacity | | v/c | g/C | Delay | LOS | Delay | LOS |
| Eastbound | | | | | | | | |
| L | 349 | 1652 | 0.48 | 0.21 | 32.2 | C | | |
| TR | 377 | 1787 | 1.71 | 0.21 | 364.2 | F | 295.4 | F |
| Westbound | | | | | | | | |
| LT | 390 | 1755 | 1.84 | 0.22 | 421.0 | F | 358.4 | F |
| R | 330 | 1487 | 0.42 | 0.22 | 30.8 | C | | |
| Northbound | | | | | | | | |
| TR | 99 | 934 | 0.56 | 0.11 | 45.0 | D | 45.0 | D |
| Southbound | | | | | | | | |
| LT | 204 | 1747 | 0.82 | 0.12 | 62.0 | E | 62.0 | E |

Intersection Delay = 295.8 (sec/veh) Intersection LOS = F




*Notes:*

1. *Desirable taper rate is 0.6V:1, where V = design speed in km/h.*
2. *See discussion in Section 36-1.05(c) for more information.*

**OFFSET INTERSECTION**
**Figure 36-1G**

**CITY OF URBANA, ILLINOIS**
**DEPARTMENT OF PUBLIC WORKS**

***ADMINISTRATION***

# M E M O R A N D U M

**TO:** Bruce K. Walden, Chief Administrative Officer

**FROM:** William R. Gray, P.E., Public Works Director

**DATE:** January 24, 2002

**RE:** **CATS II Consultant Agreement Amendment**

Attached please find, for your information only, a "Letter of Understanding Between the City of Champaign, the University of Illinois, and the Champaign-Urbana Mass Transit District," which commits these agencies to pay in total an additional $60,000 to the consultant (Clark Dietz, Inc.) to complete all the proposed CATS Phase II work. The primary reason for the amendment was because the consultant was required to spend an extraordinary amount of time in studying the various circulation schemes in Champaign.

Urbana is not party to this agreement.

WRG:klf
Attachment

**Letter of Understanding between the City of Champaign, the University of Illinois and the Champaign-Urbana Mass Transit District**

This Letter of Understanding is supplemental to an Intergovernmental Memorandum of Agreement for the Campus Area Transportation Study (CATS), Phase 2 made and entered into the 15th day of December 2000, by and between the City of Champaign, the City of Urbana, the University of Illinois and the Champaign/Urbana Mass Transit District. This Letter of Understanding between the University of Illinois, the City of Champaign and the Champaign-Urbana Mass Transit District sets forth the terms by which the CATS Phase 2 project will be completed, including the specific project elements required to be accomplished by Clark Dietz, Inc. (CDI), additional financial contributions that might be required by the parties to complete successfully the project, and the deadline for the project's completion. It is the purpose of this Letter to facilitate a timely and orderly allocation of resources for the CATS Phase 2 Project.

The Champaign-Urbana Mass Transit District's (MTD) upcoming study of a fixed-guideway transit system through Champaign and Urbana has been discussed by the CATS Phase 2 Technical Advisory Committee members. Based on these discussions, the Committee has decided to suspend temporarily work involving the Urbana portion of the project corridor (east of Wright Street) and those Champaign areas of the project corridor that will be impacted by the MTD's fixed-guideway study.

The members of the CATS Phase 2 Technical Advisory Committee agreed that the remaining work to be performed by CDI beginning October 10, 2001 and ending March 31, 2002 (estimate date of completion) will concentrate on the following project elements:

1) Develop basic geometrics for Green Street between Neil Street and Fourth Street.
2) Finalize basic geometrics for Sixth Street between John Street and Armory Avenue.
3) Finalize basic geometrics for John Street between Fourth Street and Wright Street.
4) Finalize basic geometrics for Healey Street between Fifth Street and Wright Street.
5) Address arterial progression and methods of increasing capacity along Springfield Avenue between Neil Street and Wright Street.

Additionally, an Interim Project Report summarizing conclusions of the Phase 2 study to date will be developed by CDI and presented to the CATS Phase 2 Technical Advisory Committee and Policy Advisory Committee members no later than August 2002. It is anticipated that existing project funds will be sufficient to bring the project to this point.

After specifics of the proposed fixed-guideway system's alignment are completed, CDI will incorporate the proposed alignment and its impacts on other components of the campus area infrastructure into the final recommendations of the CATS Phase 2 project. Thus, CDI will resume all work associated with the following project elements:

1) Green Street between Wright Street and Lincoln Avenue.

2) Goodwin Avenue between Green Street and Gregory Drive.
3) Mathews Avenue between Green Street and Nevada Street.
4) First Street, south of Green Street.
5) Fourth Street, south of Green Street.

It is estimated that an additional fee of not more than $60,000 may be required to complete this portion of the project based on cost overruns in earlier phases of the project. If necessary, the City of Champaign, the University of Illinois and the Champaign/Urbana Mass Transit District agree to pay to the Champaign County Regional Planning Commission (RPC), in equal shares, any additional amounts not to exceed the $60,000 estimate by the end of September 2002. This additional funding would realign the project budget with the tasks remaining in the Scope of Work and is further anticipated to create a sufficient budget to complete the project as currently planned.

It is the Committee's intent that the finalized project not surpass total expenditures of $285,700 (comprised of the original contract excluding state funding, $225,700; and the additional estimated amount of $60,000). Should this occur, division of funding responsibilities will have to be revisited. Further, the CATS 2 Technical Advisory Committee will meet no later than September 15, 2002 to evaluate project completion, and if necessary, to issue a new Scope of Work and final total project budget.

This Letter of Understanding shall become effective upon approval by all signatory parties.

Steven Carter
City Manager, City of Champaign

12-12-01
Date

Charles C. Colbert
Vice Chancellor for Administration and Human Resources,
University of Illinois

12-14-2001
Date

Director, Champaign-Urbana Mass Transit District

Date