

# University of Illinois Champaign-Urbana

Campus

Area

Transportation

Study

Executive Summary

June 1999

*Prepared for:*

**Champaign-Urbana Urbanized  
Area Transportation Study**

*in association with:*

**City of Champaign**

**City of Urbana**

**University of Illinois**

**Mass Transit District**

**Illinois Department of Transportation**



BUCHER, WILLIS & RATLIFF  
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## ***Executive Summary***

### **A. BACKGROUND**

**W**hat 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:

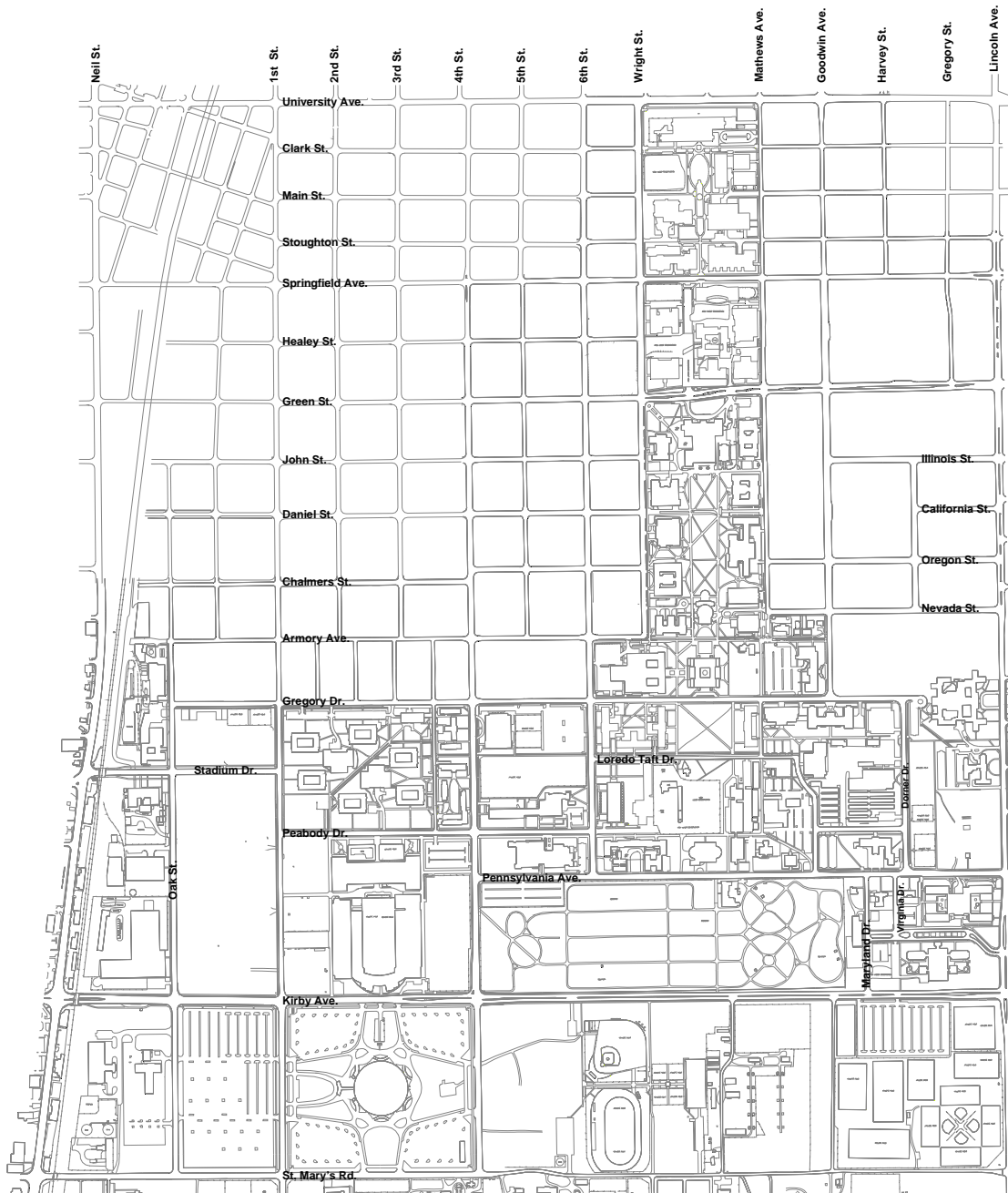
- Pedestrian safety
- Community traffic flow needs
- University-oriented traffic
- Interaction among travel modes
- The role of non-auto travel modes including pedestrian, bus, bike and travel by persons with disabilities
- Truck traffic, freight deliveries and loading issues
- Traffic calming
- Interaction 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**

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

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### **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**

<b>GOAL 1 - Improve safety for all transportation modes.</b>	
<b>OBJECTIVES</b>	<ol style="list-style-type: none"> <li>1. Better separate pedestrians, bicyclists and vehicles and special needs population.</li> <li>2. Decrease vehicle speeds.</li> <li>3. Accommodate persons with disabilities.</li> <li>4. Minimize intermodal conflicts.</li> <li>5. Address safety related design issues.</li> </ol>
<b>GOAL 2 - Create a transportation system compatible with the physical environment described in the City and Campus Master Plans.</b>	
<b>OBJECTIVES</b>	<ol style="list-style-type: none"> <li>1. Establish a University District to promote uniform transportation policy across jurisdictional boundaries.</li> <li>2. Facilitate vehicular through traffic on fringe roads of the study area.</li> <li>3. Prioritize alternative modes of transportation in core area.</li> <li>4. Examine strategies to reduce the level of vehicular traffic in the core of the study area.</li> <li>5. Develop policies and implement strategies, which encourage increases in transit, bicycle and pedestrian modal shares.</li> </ol>
<b>GOAL 3 - Improve the operational efficiency and effectiveness of the transportation system in a cost-effective manner.</b>	
<b>OBJECTIVES</b>	<ol style="list-style-type: none"> <li>1. Better accommodate the movement of transit vehicles in the campus area.</li> <li>2. Develop more effective bikeway and route connections throughout the campus area.</li> <li>3. Develop coordinated parking information, regulations and policies.</li> <li>4. Develop safe pedestrian crossings.</li> <li>5. Design transportation improvements to be compatible with City/University maintenance capabilities.</li> </ol>
<b>GOAL 4 - Enhance access to the campus core area and route through traffic on fringe of the study area.</b>	
<b>OBJECTIVES</b>	<ol style="list-style-type: none"> <li>1. Improve travel times on designated routes used to access the campus area.</li> <li>2. Encourage bus ridership to access the campus core.</li> <li>3. Develop effective bike route connections between the city's bicycle system and the campus system.</li> <li>4. Provide sufficient parking to support campus and commercial functions.</li> <li>5. Provide for freight deliveries.</li> </ol>

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.

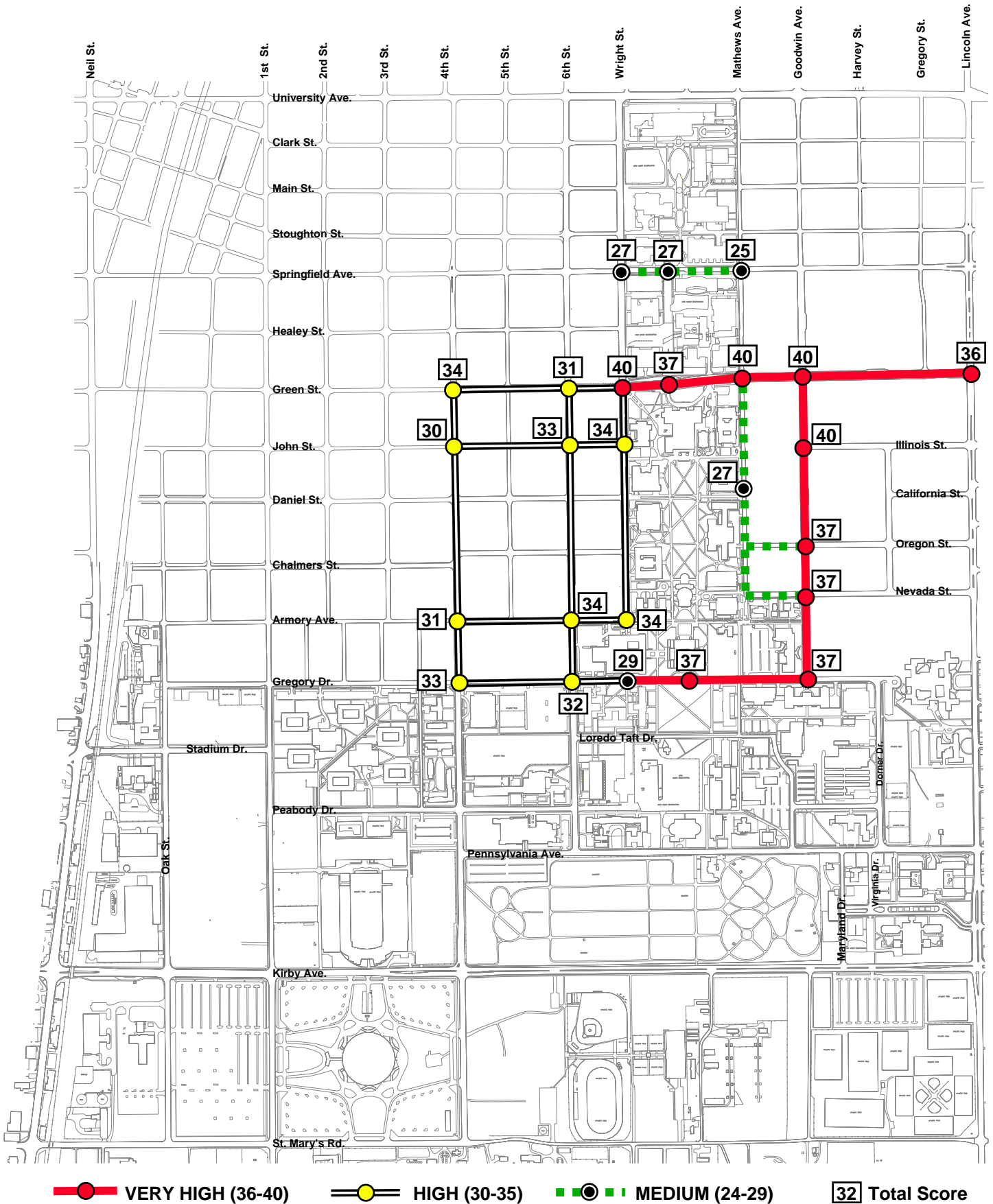


Figure 2. Areas of Conflict

Source: Bucher, Willis & Ratliff Corporation (Fall 1997)

## 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
<b>Vehicular Traffic</b>	<ul style="list-style-type: none"><li>• Traffic Calming</li><li>• Intersection Improvements</li><li>• Encourage Travel on Peripheral Routes</li><li>• Increase Street Capacity on Peripheral Routes</li><li>• Create Loading Zone Areas and Designated Times for Freight Delivery</li><li>• Reassign One-way Streets</li><li>• Close Streets</li><li>• Destination Routing of Traffic</li></ul>
<b>Transit Service</b>	<ul style="list-style-type: none"><li>• Improve Transit Service</li><li>• Increase Transit Travel Speeds</li><li>• Improve Transit Boarding Areas</li><li>• Subsidize Transit for Faculty/Staff</li></ul>
<b>Pedestrian/Bicycle Travel</b>	<ul style="list-style-type: none"><li>• Channel Pedestrian Movements</li><li>• Improve Bike Trails</li><li>• Create Bike Lanes on Streets</li><li>• Implement Bicycle Safety Programs</li><li>• Eliminate Vehicle/Pedestrian Conflicts at High Volume Intersections</li></ul>
<b>Parking</b>	<ul style="list-style-type: none"><li>• Refine Parking System</li><li>• Increase Peripheral Parking</li><li>• Increase Core Parking</li><li>• Provide Appropriate Type of Parking</li><li>• Implement Demand Related Pricing for Parking</li></ul>

SOURCE: Bucher, Willis & Ratliff Corporation and TAC.

### The Transportation Zone Concept

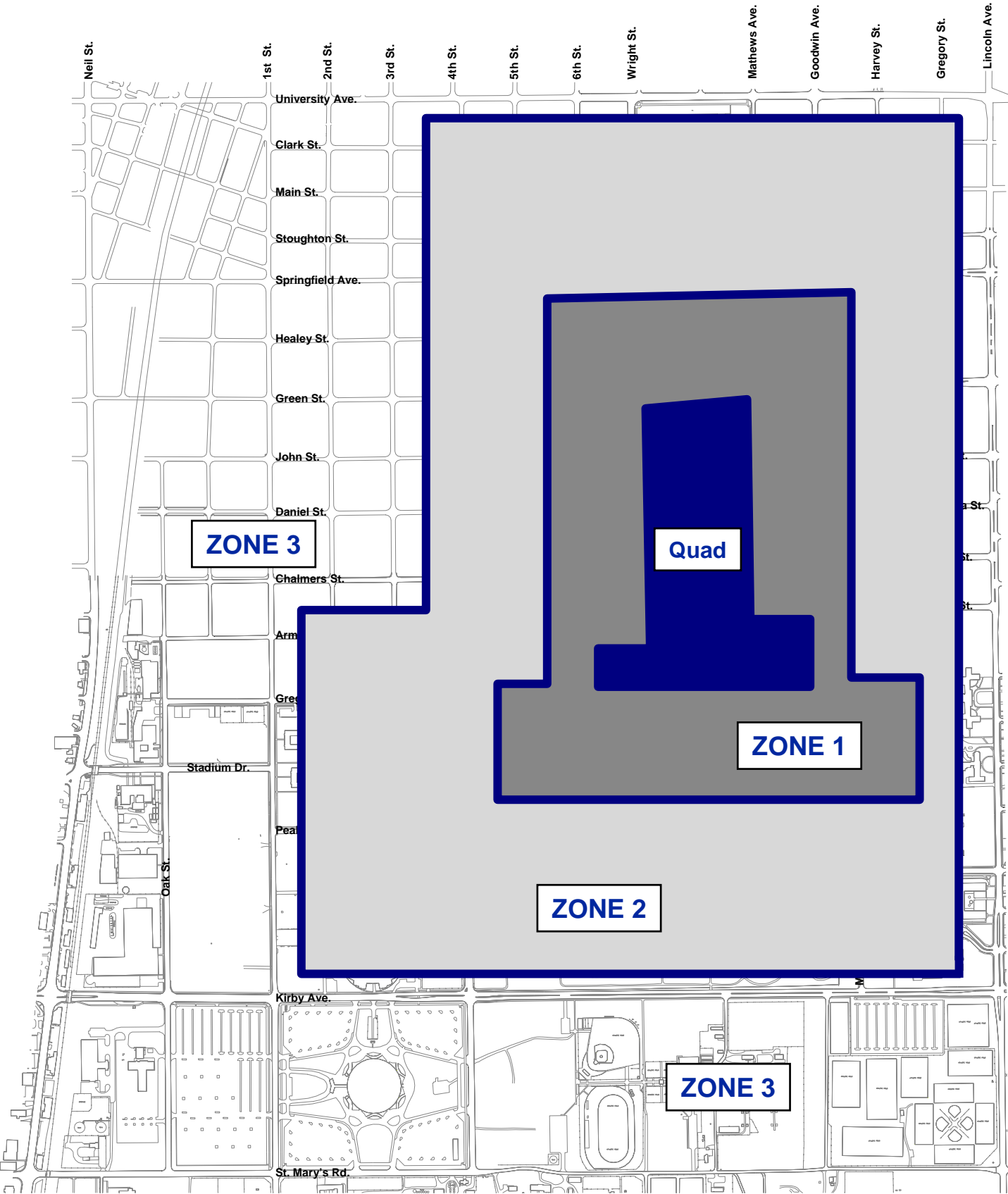
Once the strategies were identified, the remaining issue was to determine where each strategy should be applied within the study area. Because of the high volume of activity for all modes of transportation, it was determined that the needs of all modes could not be fully met in all areas. Rather, priorities 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.





Zone Boundary

Figure 3. The Transportation Zone Concept

Source: Bucher, Willis & Ratliff Corporation (Spring 1998)



### **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**

<b>Location</b>	<b>Improvement</b>
<b>Wright Street</b> (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.
<b>Green Street</b> (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
<b>Green Street</b> (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
<b>Green Street</b> (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
<b>Sixth Street</b>	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
<b>Gregory Drive</b>	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
<b>Mathews Avenue</b> (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
<b>Goodwin Avenue</b>	1. Install traffic calming at the intersection of Illinois Street
	2. Install traffic calming at the intersection of Oregon Street
	3. Install traffic calming at the intersection of Nevada Street
	4. Install traffic calming at the intersection of Gregory Drive

SOURCE: Bucher, Willis & Ratliff Corporation and TAC.

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

<b>Location</b>	<b>Improvement</b>
<b>Springfield Avenue</b> (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
<b>Springfield Avenue</b> (Wright Street to Mathews Avenue)	1. Pedestrian signal and traffic calming at mid-block location (coordinate with other signals)
<b>Springfield Avenue</b> (Mathews Avenue to Lincoln Avenue)	1. Improved intersection design and traffic management
<b>John Street</b>	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
<b>Daniel Street</b>	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
<b>Lincoln Avenue</b>	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
<b>Fourth Street</b>	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
<b>First Street</b>	1. Implement traffic signal improvements and coordination
<b>Neil Street</b>	1. Implement traffic signal improvements and coordination
<b>University Avenue</b>	1. Implement traffic signal improvements and coordination
<b>Kirby Avenue</b> (Neil Street to Fourth Street)	1. Implement traffic signal improvements and coordination

SOURCE: Bucher, Willis & Ratliff Corporation and TAC.

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

## **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	High
1	Traffic Calming	Goodwin Avenue and Illinois Street	<b>\$200,000</b>	<b>\$330,000</b>
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
		<b>SUBTOTAL</b>	<b>\$80,000</b>	<b>\$100,000</b>
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
		<b>SUBTOTAL</b>	<b>\$425,000</b>	<b>\$525,000</b>
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
		<b>SUBTOTAL</b>	<b>\$160,000</b>	<b>\$235,000</b>
5	Convert Street to Two-way	Sixth Street – from University Avenue to Armory Avenue	<b>\$180,000</b>	<b>\$405,000</b>
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
		<b>SUBTOTAL</b>	<b>\$350,000</b>	<b>\$650,000</b>
7	Install Gate System on Gregory Drive	Sixth Street to Mathews Avenue Extended	<b>\$100,000</b>	<b>\$150,000</b>
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
		<b>Boneyard Creek Bicycle Path Extension- From Sixth Street along Healy Street to Wright Street</b>	<b>\$30,000</b>	<b>\$50,000</b>
		<b>SUBTOTAL</b>	<b>\$120,000</b>	<b>\$170,000</b>
9	Parking Garage Modification	Parking Garage at Sixth and John – Entry only off John Street, Exit only onto Daniel Street	<b>\$200,000</b>	<b>\$400,000</b>
<b>TOTAL</b>			<b>\$1,815,000</b>	<b>\$2,965,000</b>

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

NOTE: All cost estimates in 1998 Dollars. Estimates include construction, utility, and drainage costs.

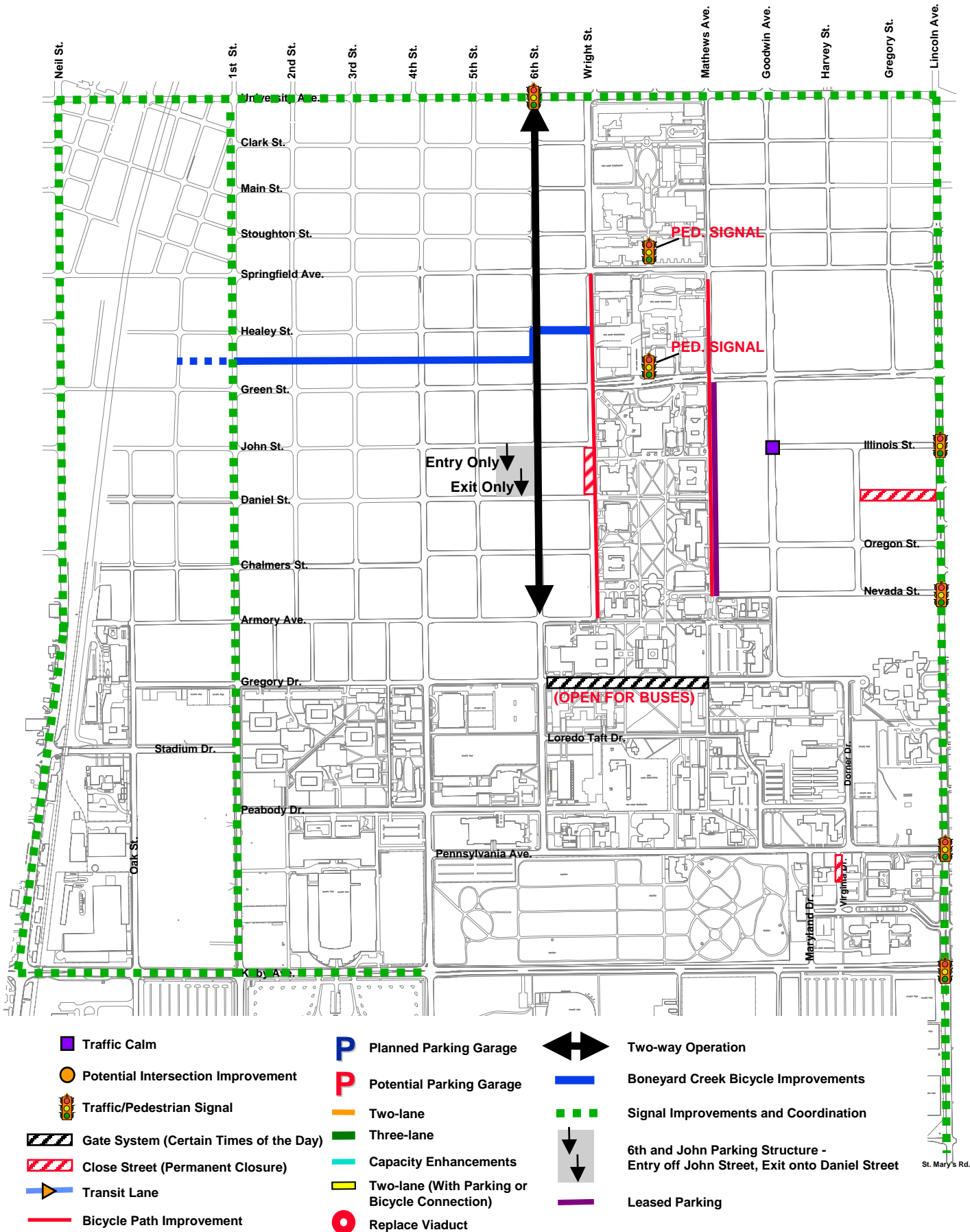


Figure 5. Short-term Improvements

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



## **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	High
<b>10</b> 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 Dornier Drive and Pennsylvania Avenue	\$120,000	\$210,000
	<b>SUBTOTAL</b>	<b>\$1,500,000</b>	<b>\$2,745,000</b>
<b>11</b> 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
	<b>SUBTOTAL</b>	<b>\$445,000</b>	<b>\$780,000</b>
<b>12</b> Capacity Enhancements	Springfield Avenue – from Neil Street to Wright Street	Not Available	Not Available
<b>13</b> Narrow Roadway	Green Street – from Wright Street to Lincoln Avenue	<b>\$200,000</b>	<b>\$400,000</b>
<b>14</b> 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
	<b>SUBTOTAL</b>	<b>\$225,000</b>	<b>\$375,000</b>
<b>15</b> Bicycle Path Construction	John Street – from Wright Street to Fourth Street	<b>\$20,000</b>	<b>\$50,000</b>
<b>16</b> Parking Structure	Southwest corner of Gregory Drive and Dornier Drive	Not Available	Not Available
	Add perimeter parking (shuttle lot)	Not Available	Not Available
<b>TOTAL</b>		<b>\$4,390,000</b>	<b>\$7,350,000</b>

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.

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**

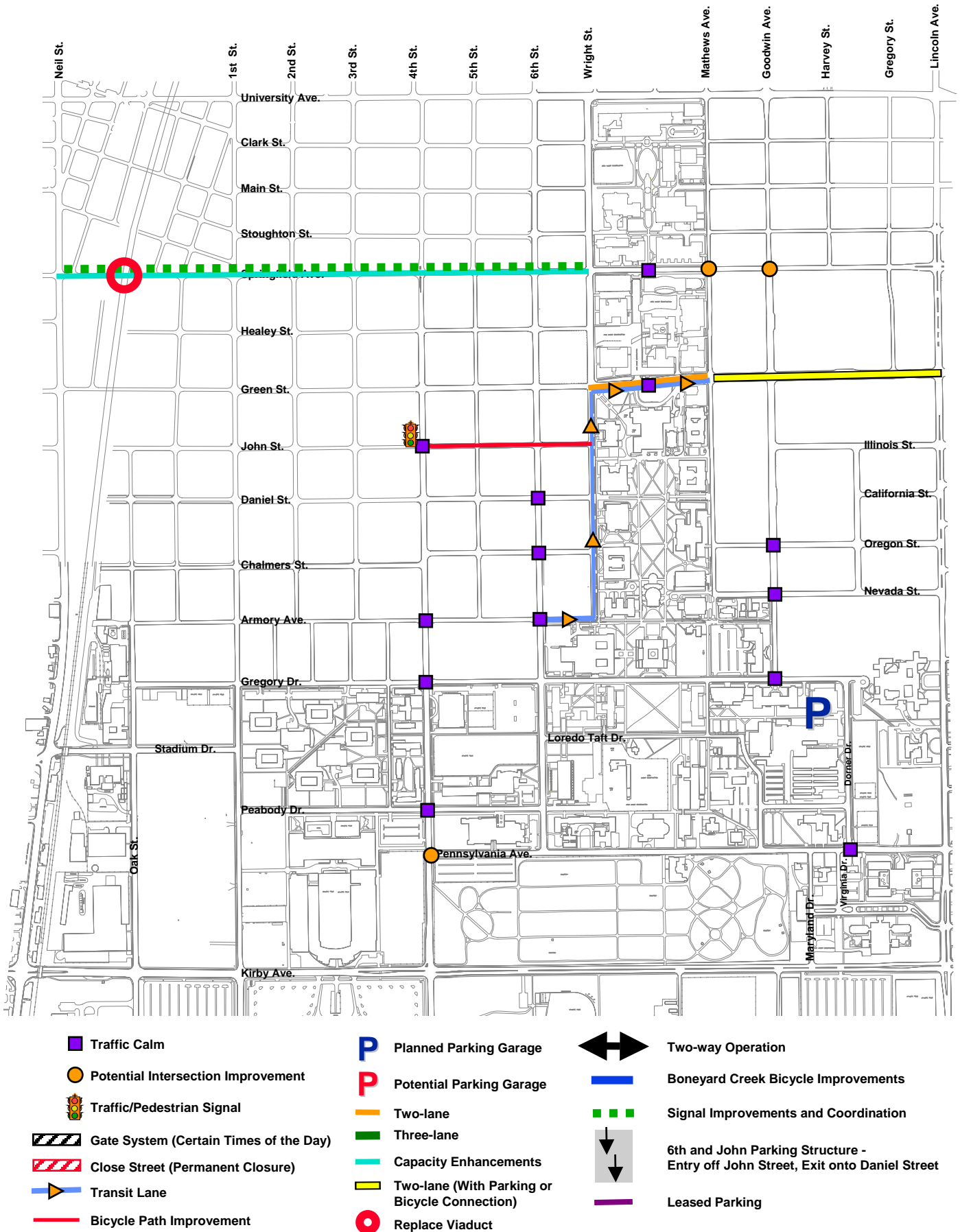
The following projects are more capital intensive and would be constructed, as funding becomes available. Given the need for more detailed design and engineering, these projects would likely be completed in seven or more years. Table 7 lists the long-term improvements.

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**

<b>Improvement</b>		<b>Location</b>
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.



**Figure 6. Mid-term Improvements**

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

## **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.



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