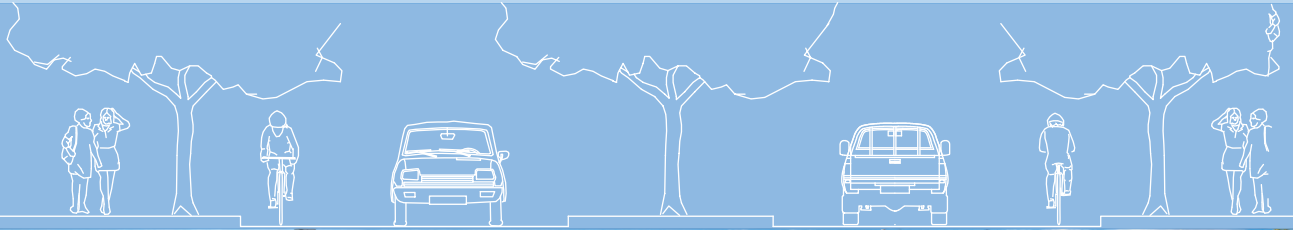


university hill bike network project



Final Report
December 2008



Syracuse Metropolitan Transportation Council
126 N. Salina Street, Suite 100
Syracuse, NY 13202

UNIVERSITY HILL BIKE NETWORK PROJECT

SYRACUSE METROPOLITAN TRANSPORTATION COUNCIL

FINAL REPORT
DECEMBER 2008

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For further information contact:

Mario Colone, Senior Transportation Planner, Project Manager
Syracuse Metropolitan Transportation Council
126 N. Salina St., 100 Clinton Square, Suite 100
Syracuse, NY 13202
PHONE: (315) 422-5716; FAX: (315) 422-7753
www.smtcmpo.org

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UNIVERSITY HILL BIKE NETWORK PROJECT EXECUTIVE SUMMARY

INTRODUCTION

As part of the 2008-2009 Unified Planning Work Program (UPWP), the Syracuse Metropolitan Transportation Council (SMTC) agreed to complete the University Hill Bike Network Project on behalf of the City of Syracuse. This project was a direct result of the University Hill Transportation Study, completed in 2007, which recommended bicycle boulevards be installed on various streets in the University Area.

The purpose of the University Hill Bike Network Project was to establish a plan for a bike network, including segregated lanes and traffic calming measures that cover University Hill. The network was designed to link to the community's greater bike lane and trail system, improve bicyclist safety, elevate the priority of bicyclists over cars, and encourage alternative modes of transportation. The project also created a tool for evaluating city streets for inclusion in the bike network. Further, it offers a menu of treatments for the city to use during design and construction.

The study area for the project mirrored the study area utilized for the University Hill Transportation Study. More specifically, the study area is bounded by Water Street to the north, Stratford Street and Oakwood Cemetery to the south, Almond Street to the west, and Ostrom Avenue to the east. A secondary study area was also formed to include neighborhoods to the south and east of the primary study area. This secondary area serves as the main generator for bicycle traffic on University Hill, as it includes residential neighborhoods closely affiliated with the Hill's medical institutions and universities. The secondary study area extends the boundaries of the primary study area to Colvin Street on the south and Westcott Street on the east. This study did not consider additional bike lanes for the secondary study area.

A Public Involvement Plan (PIP) was developed for this project, which is contained in its entirety in Appendix A. The PIP is a reflection of the SMTC's overarching Public Participation Plan that outlines strategies for encouraging public involvement in transportation planning projects region-wide. The goals of the University Hill Bicycle Network Project PIP were to:

- Create public awareness relative to the study’s goals, objectives, and process, and publicize opportunities for public involvement throughout the study; and
- Involve the public throughout the planning process.

EXISTING CONDITIONS

To gain a greater understanding of the street network in the primary study area, a review of existing conditions (land-use and transportation characteristics) data for the study area were gathered and analyzed. Data that was analyzed included demographics, road ownership, road width, functional classification, traffic volumes, topography, pavement conditions and transit. Much of these data provided the background information requisite to construct the evaluation matrix contained in Chapter 4 (Appropriateness Measures).

APPROPRIATENESS MEASURES

In order to determine which University Hill streets should be included in a bicycle network, the SMTC developed a series of metrics, or “appropriateness measures.” The SMTC designed the appropriateness measures as an analytical tool for use at the planning level by city workers in the field. The appropriateness measures were separated into three categories that reflect major criteria in site decisions for bike routes: safety, connectivity, and design potential. The SMTC assigned points, reflecting relative weights, to each of these categories.

Descriptions and guidelines for applying the appropriateness measures are provided in Chapter 4. The matrix used for evaluating streets according to the measures is contained in Table 4-1.

PROPOSED STREET NETWORK

Using the appropriateness measure matrix, the SMTC ranked each University Hill street and determined which were generally suitable for bike treatments. Any street scoring above 60 was considered suitable for bike treatments. The SMTC then used professional judgment to review the identified streets for practicality, particularly with regard to those critical measures – traffic volumes, connectivity, and topography – before the bike network was recommended. This meant that the highest scoring streets were not necessarily suggested for inclusion in the network.

Chapter 5 presents a series of general network-wide and street specific recommendations for the primary study area. The street specific

recommendations are divided into five application levels based on their level of complexity or intensity, with Level 1 representing low impact treatments that can be implemented at relatively low cost. It should be noted that corridors targeted for higher-level applications should also receive relevant lower-level treatments. For instance, a street targeted for Level 3 applications should also include appropriate Level 1 and 2 applications.

Streets for consideration in the bicycle network are listed below.

East-West Streets

- East Genesee Street
- Waverly Avenue
- Raynor Avenue
- Renwick Avenue
- Fineview Place

North-South Streets

- Irving Avenue
- Crouse Avenue
- University Avenue
- Comstock Avenue

Bicycle lanes are recommended for installation along Comstock Avenue, East Genesee Street, South Crouse and/or University Avenues, Renwick Avenue and Waverly Avenue within the primary study area. The remaining streets, due to geometric constraints, are suggested for signage to provide a continuous and interconnected bicycle network. An implementation plan has been developed displaying the suggested bicycle treatments on all proposed streets in the network and is shown on the following page.

The streets identified for inclusion in the University Hill Bike Network were designed to connect with the existing bicycle lanes in the primary study area. Likewise, streets were selected for their ability to provide connections to adjacent neighborhoods. In particular, treatments suggested for East Genesee Street, Renwick Avenue, and South Crouse Avenue should be continued as those streets leave the study area and provide access to other parts of the city.

Detailed explanations of all recommendations and an implementation plan are included within this chapter. As the SMTC is not an implementing agency, it's the sponsor's responsibility to implement report recommendations, if deemed appropriate. Please note that the majority of recommendations are preliminary planning level recommendations and would require further engineering analysis prior to implementation.

TABLE 5-1: IMPLEMENTATION PLAN

STREETS	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
Comstock Avenue	• bike network signage	• bike lane marking on both sides from Stratford to Waverly	• bike activation buttons at Comstock & Euclid • bike boxes and bike detection at Comstock & Euclid	• intersection painting at Comstock & Euclid	• road diet from Euclid to Waverly
East Genesee Street	• bike network signage	• bike lane markings on both sides from Almond to Beech (and east, as feasible)	• intersection treatments as part of Connective Corridor	• traffic calming as part of Connective Corridor	
Fineview Place	• bike network signage				
Irving Avenue	• bike network signage	• share-the-road markings on both sides from Waverly to Van Buren • on-street parking delineation			
Raynor Avenue	• bike network signage				
Renwick Avenue	• bike network signage	• bike lane markings on both sides from Van Buren to Leon (and west, as feasible)	• intersection treatments as part of Connective Corridor		
South Crouse Avenue	• bike network signage	• if one-way, northbound bike lane marking on east side from Waverly to Water (and north, as feasible) OR • if converted to two-way, bike lane markings on both sides from Waverly to Water (and north, as feasible)	• bike boxes and bike detection at Crouse & Genesee	• if one-way, contra-flow bike lane on west side separated by median or planting strip	
University Avenue	• bike network signage	• if one-way, southbound bike lane marking on west side from Water to Waverly			
Waverly Avenue	• bike network signage	• bike lane markings on both sides from Comstock to Irving		• landscaped median	• road diet from Comstock to Irving

1. INTRODUCTION

In late 2007, the City of Syracuse approached the Syracuse Metropolitan Transportation Council (SMTC) with a request for assistance in developing a plan for a dedicated bicycle network in the heavily traveled and populated University Hill area (“the Hill”). The *University Hill Transportation Study* had recently recommended the examination of a bicycle network for this area, and the city had created bike lanes and share-the-road corridors on streets leading to the Hill. The city was looking to extend these improvements onto and throughout University Hill.

The University Hill Bicycle Network Project is the result. The project establishes a plan for a bike network, including segregated lanes and traffic calming measures, that blankets University Hill. This network is designed to link to the community’s greater bike lane and trail system, improve bicyclist safety, elevate the priority of bicyclists over cars, and encourage alternative modes of transportation.

In addition, the University Hill Bicycle Network Project lays the groundwork for the expansion of this network into neighborhoods across the city. The project establishes a tool for evaluating city streets for inclusion in the bike network. Further, it offers a menu of treatments for the city to use during design and construction. Ultimately, not only should bike treatments traverse University Hill, but the entire City of Syracuse as well.

1. STUDY GOALS

Through discussion, the SMTC and the Study Advisory Committee (SAC) developed a formal purpose for this study - to identify a proposed bicycle network within the University Hill area of the City of Syracuse which:

- Uses existing urban roadways to provide an appropriate and practical hybrid of recommended bicycle lanes, shared roadways, and/or traffic calming;
- Ties to existing bicycle routes;
- Enhances connectivity to the ongoing Connective Corridor Project, the Canalway Trail, and Creekwalk; and
- Allows for this alternative form of transportation to reach key destinations.



Existing Water Street bike lane.

II. STUDY PROCESS

The study was organized into three phases:

1. During the first phase, the project team collected data on existing transportation conditions on University Hill.
2. In the second phase, the project team, with consultation from bike advocacy groups and the SAC, developed appropriateness measures for evaluating streets for inclusion in the network. The team assessed each street on University Hill and, using the resulting scores, developed a recommended bike network.
3. The last phase of the project included an analysis of the suitability of street treatments for each link in the recommended network. A plan for implementing these improvements was also developed.

Each of these phases incorporated input from the public.

III. PUBLIC INVOLVEMENT

The University Hill Bicycle Network Project included the development of a Public Involvement Plan (PIP), which is contained in its entirety in Appendix A. The PIP is a reflection of the SMTC's overarching Public Participation Plan (PPP), which outlines strategies for encouraging public involvement in transportation planning projects region-wide. The goals of the University Hill Bicycle Network Project PIP were to:

- Create public awareness relative to the study's goals, objectives, and process, and publicize opportunities for public involvement throughout the study; and
- Involve the public throughout the planning process.

The Study Advisory Committee for the University Hill Bicycle Network Project included representatives from the City of Syracuse, Syracuse-Onondaga County Planning Agency (SOCPA), Onondaga County Department of Transportation (OC DOT), New York State Department of Transportation (NYSDOT), Central New York Regional Transportation Authority (CNYRTA), Syracuse University, University Hill Corporation, BikeCNY!, and the Onondaga Cycling Club. The SAC advised the SMTC on technical content and provided input throughout the project. Appendix A includes a list of SAC members.

In addition to the SAC, the SMTC developed a list of interested stakeholders, a broader group of individuals with significant interests in the study area, and kept them apprised of public involvement opportunities as the project progressed. The stakeholder list for this study was adapted from the stakeholder list from the SMTC's *University*

Hill Transportation Study. Additional stakeholders were added based on recommendations from the SAC. Appendix A documents all input received from project stakeholders.

The SMTC held public workshops at two stages during the study. The first public workshop was held in May of 2008. At the workshop, the SMTC formally presented the study to the public and engaged participants in actively designing the University Hill bike network. Workshop attendees reviewed study area maps, identified destinations and barriers, outlined bike routes, and recommended street treatments. Appendix A includes a summary of workshop findings.

The second public workshop was held in October 2008. The workshop was designed as an open house, where attendees could review and comment on project materials. Participants commented on the proposed bicycle network and the specific treatments recommended for each street. Additionally, attendees prioritized general network-wide recommendations and street-specific treatments. Appendix A includes a summary of the open house comments.

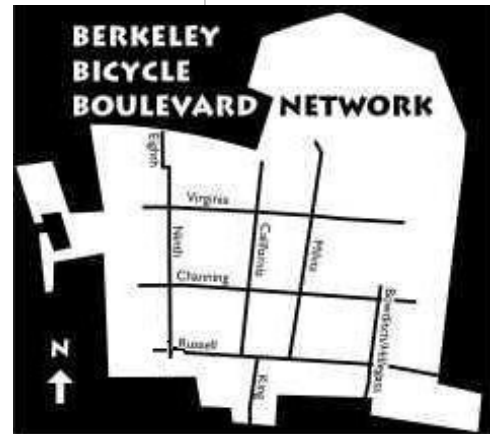
2. THE BIKE NETWORK CONCEPT

A bike network is a system of bicycle-friendly street treatments and amenities that allows people to access important origins and destinations in a community via bicycle. Bicycle networks are designed to serve multiple bicyclist types, including commuter cyclists, recreational riders, and less-experienced cyclists, and usually include treatments on lower-order, lower-volume streets. These treatments can vary from bike boulevards, where bicyclists and motorists are accommodated in the same travel lanes, to segregated bike lanes or trails. Regardless of the particular treatment, a bike network places emphasis on the safe movement of bicyclists.

1. WHY ARE BIKE NETWORKS USED?

Communities develop bicycle networks for various reasons:

- *Bike networks increase the number of people with access to bicycle facilities.* By providing an integrated web of bicycle routes that spans the entire community, bike networks increase riding opportunities for bicyclists of all types. Increased riding opportunities translate into more bicycle commuters, more recreational bicyclists, and more bicyclist trips.
- *Bike networks improve the safety and visibility of biking.* Because bike networks consist of physical treatments, including signs, pavement markings, and often traffic calming, they improve driver awareness, enhance cyclist comfort, and reduce the potential for driver-bicyclist conflict.
- *Bike networks provide opportunities for healthier communities.* Bike networks improve individual and community health by encouraging exercise and reducing the number of cars on the road.
- *Most local streets can be converted to bicycle networks fairly easily.* Most existing streets can incorporate relatively inexpensive bike treatments like new signage, pavement markings, striping and signal improvements to facilitate bicyclists' mobility and safety.
- *Bike networks can provide benefits beyond an improved bicycling environment.* Residents living on bicycle networks benefit from reduced vehicle speeds and through traffic, creating a safer and more-attractive environment. Pedestrians and other users can also benefit from bike treatments (e.g., by improving the crossing environment where bike treatments meet major streets).



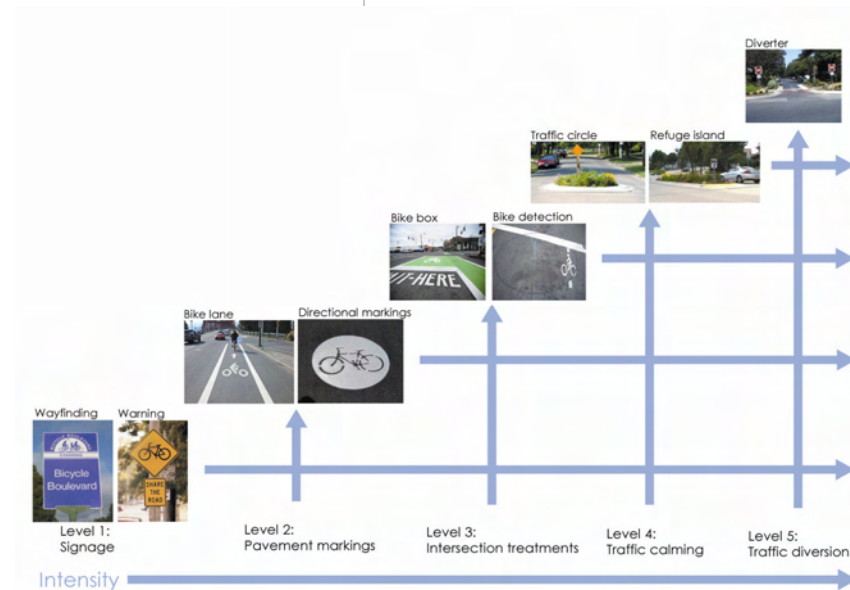
Berkeley, CA Bike Boulevard Network sign.

II. HOW DO BICYCLE NETWORKS WORK?

Bicycle networks generally follow lower-order streets with lower traffic volumes and vehicle speeds, such as minor collector or local streets passing through residential neighborhoods. Traffic controls on the network can assign priority to through cyclists and encourage through vehicle traffic to use alternate parallel routes. Traffic calming and other treatments along the network can reduce vehicle speeds so that motorists and bicyclists generally travel at the same speed, creating a safer and more-comfortable environment for all users. The bike network can also incorporate treatments to facilitate safe and convenient crossings where bicyclists must traverse major streets. Bicycle networks work best in well-connected street grids, where riders can follow reasonably direct and logical routes with few “twists and turns.” Bike networks also work best when higher-order streets exist parallel to those with bike treatments to serve through vehicle traffic.

III. APPLICATION

A variety of treatments are commonly used for developing bicycle networks. These treatments can be divided into five main application levels based on their level of physical intensity, with Level 1 representing low impact treatments that can be implemented at relatively low cost.



Bicycle treatment application levels.

It should be noted that corridors targeted for higher-level applications should also receive relevant lower-level treatments. For instance, a street targeted for Level 3 applications should also include appropriate Level 1 and 2 applications. Also, some treatments are not suitable for all street types. For example, it may not be appropriate to implement Level 5 applications on major city streets. To identify and develop specific treatments for each link in the bicycle network, the City should involve the bicycling community, neighborhood groups, and the Public Works Department. Further analysis

and engineering work may also be necessary to determine the feasibility of some applications.

LEVEL 1 – SIGNS

Bikeway signs are a cost-effective yet visible treatment that can improve the riding environment. Signs can include:

Wayfinding Signs

Bicycle wayfinding signage can be installed along cycling routes. Signs are typically placed at key locations leading to and along bicycle links, including where multiple routes intersect and at key bicyclist decision points. Wayfinding signs displaying destinations, distances and riding time can dispel common misperceptions about time and distance and increase users' comfort and accessibility to the network. Wayfinding signs also visually cue motorists that they are driving along a bicycle route and should correspondingly use caution. Note that too many road signs tend to clutter the right-of-way, and it is recommended that these signs be posted at a level most visible to bicyclists and pedestrians, rather than per vehicle signage standards.



Warning Signs

Warning signs advising motorists to “share the road” can also improve bicycling conditions. These signs would be especially effective near major bicycle trip generators such as schools, parks, and other activity centers. Warning signs should also be placed on major streets approaching bicycle links to alert motorists of bicyclist crossings.



Wayfinding signs from the Berkeley Bike Boulevard Network, Berkeley, CA.

LEVEL 2 – PAVEMENT MARKINGS

A variety of pavement marking techniques can effectively improve conditions in a bicycle network. Pavement markings can be added to any street type, and can include the following.

Bicycle Lane Markings

The most common pavement marking is a striped bike lane. Bike lanes are usually four feet in width, and include bike symbol markings at intersections. Some communities also fill bike lanes with colored paint in order to improve visibility. Adding bike lanes often requires delineating on-street parking and shifting the centerline. In cases of one-way streets, contra-flow bicycle lanes may be appropriate. Contra-flow lanes allow bicyclists to travel the opposite direction of motor vehicle traffic. Contra-flow lanes can be striped or physically separated from vehicular



traffic using curbs or planting strips. Markings should be continued through intersections to clearly delineate lanes.

On-Street Parking Delineation

Delineating on-street parking spaces with paint, pavers, or other materials clearly indicates where a vehicle should be parked, and can discourage motorists from parking their vehicles too far into the adjacent travel lane. This helps bicyclists by preserving a wide enough space to safely share a travel lane with moving vehicles. It also minimizes the need to swerve farther into the travel lane to maneuver around parked cars. In addition to benefiting cyclists, delineated parking spaces also promote the efficient use of on-street parking by maximizing the number of spaces in high-demand areas.



Shared Lane Markings

High-visibility pavement markings are often used to delineate where bicyclists should operate within a shared vehicle/bicycle travel lane. These markings, known as shared lane markings, or “sharrows,” are often used on streets where dedicated bicycle lanes are desirable but are not possible due to physical or other constraints. These markings are placed strategically in the travel lane to alert motorists of bicycle traffic, while also encouraging cyclists to ride at an appropriate distance from the “door zone” of adjacent parked cars. Placed in a linear pattern along a corridor (typically every 100-200 feet), shared lane markings also encourage cyclists to ride in a straight line so their movements are predictable to motorists. Although these pavement markings are not yet a nationally adopted standard, they are successfully used in many small and large communities throughout the U.S.



Bike lane markings in Portland, OR (top) and Cambridge, MA (middle). Shared lane marking in Berkeley, CA (middle). Directional pavement marking from the Portland Bike Network, Portland, OR (bottom).

Directional Pavement Markings

Directional pavement markings lead cyclists along a bicycle link and reinforce that they are on a designated route. The markings can take a variety of forms, such as small bicycle symbols placed every 600-800 feet along a linear corridor. When a bicycle link travels along several streets (with multiple turns at intersections), additional markings accompanied by directional arrows are provided to guide cyclists through turns and other complex routing areas.

Directional pavement markings also visually queue motorists that they are traveling along a bicycle route and should exercise caution.

LEVEL 3 – INTERSECTION TREATMENTS

Intersection treatments represent a critical component of bicycle networks. Intersection traffic controls favoring through bicycle movement on the link facilitate continuous and convenient bicycle travel. Intersection treatments also provide convenient and safe crossings where links intersect major roads. Intersection improvements can generally be added to any street type, and include the following measures.

Stop Sign Placement

Placing stop signs on cross-streets approaching a bicycle network link can facilitate convenient through bicycle travel. A reduced number of stop signs on a designated bicycle route enable riders to maintain their momentum while exerting less energy with fewer “stops and starts.” However, this treatment should be used judiciously to minimize the potential for increasing vehicle speeds on the bicycle route.

Bicycle Left Turn Lanes

Bike routes crossing major streets at offset intersections can incorporate “bicycle left turn lanes” to facilitate easier bicyclist crossings. Similar to medians/refuge islands, bicycle left turn lanes allow the crossing to be completed in two phases. A bicyclist on the boulevard could execute a right-hand turn onto the cross-street, and then wait in a delineated left turn lane (if necessary to wait for a gap in oncoming traffic).

Bicycle Detection

Several treatments can be used to streamline bicycle travel where bicycle routes approach intersections with actuated signals. In-pavement bicycle loop detectors can sense a bicyclist’s presence (in the way that vehicle loop detectors sense automobiles) and trigger the signal to provide a “green” phase for the cyclist. Bicycle loop detectors should be placed within the bicyclist’s expected travel path, (including left turn lanes and shoulders), and should be accompanied with a pavement marking indicating the optimal location for detection. Vehicle loop



Bicycle left turn lane (middle) and detector (bottom) in Portland, OR.



Bicyclist activation button (top), bike box (middle), and bike signal (bottom) in Portland, OR.

detectors can also be used for bicycle detection provided they are located within the bicycle travel path and their sensitivity levels are adjusted for bicycles.

Bicyclist Activation Buttons

Similar to pedestrian activation buttons, bicyclist activation buttons can be used at signalized intersections as long as they do not require cyclists to dismount or make unsafe leaning movements. These devices should be placed as close to the street as possible in a location that is unobstructed by parked vehicles or motorists making right-hand turns.

Bike Boxes

As bicyclists and motorists on a boulevard approach a signalized intersection, bike boxes assign priority to bicyclists by offering a literal box in which bicyclists can wait out the light. Bike boxes incorporate:

- A striped bicycle lane which allows bicyclists to safely maneuver in front of stopped vehicles
- An advanced vehicle stop bar located several feet upstream from the intersection that provides a space for bicyclists to move directly in front of the vehicle at the head of the line
- Bicycle pavement markings in the bike box that advise motorists to stay out of the bike box
- Signs advising motorists to stay out of the bike box.

Bike boxes reduce bicyclist waiting time and increase the likelihood that a cyclist would not have to wait more than one signal cycle for a green light. Bike boxes also allow bicyclists to avoid breathing exhaust fumes from vehicles idling at the intersection. Bicyclists making left turns can safely position themselves in the bike box in front of motor vehicle traffic, as opposed to merging with vehicle traffic as they approach the intersection.

LEVEL 4 – TRAFFIC CALMING

Traffic calming treatments on bicycle networks improve the bicycling environment by reducing vehicle speeds to the point where they generally match cyclists' operating speeds, enabling all users to safely co-exist on the same facility. Traffic calming treatments are generally appropriate for all streets. Specific traffic calming

measures include the following.

Curb Extensions

Curb extensions slow vehicle traffic by creating a visual “pinch point” for approaching motorists. Typically constructed within the on-street parking lane, these devices can calm vehicle traffic passing through or turning at an intersection. Where bicycle routes intersect major streets, curb extensions placed on the major street reduce the bicycle/pedestrian crossing distance. Curb extensions should be designed with sufficient radii to accommodate the turning movements of emergency vehicles.

Medians/Refuge Islands

Medians are elevated or delineated islands that break up non-motorized street crossings into multiple segments. Where shared roadways intersect major streets at unsignalized intersections, medians can be used to simplify bicyclist and pedestrian crossings of the major street. Appropriate signage should be installed on the major street approach to warn motorists of bicyclist/pedestrian crossings. Additionally, vegetation within the median should be low to maintain adequate sight distances for both motorists and bicyclists/pedestrians. Medians can also be used along the bicycle route to create a visual pinch point for motorists as well as to accommodate mid-block bicycle/pedestrian crossings.

Chicanes

Chicanes are a series of raised or delineated curb extensions on alternating sides of a street forming an S-shaped curb, which reduce vehicle speeds through narrowed travel lanes. Chicanes can also be achieved by establishing on-street parking on alternate sides of the street. These treatments are most effective on streets with narrower cross-sections.

Small Traffic Circles

Small traffic circles are raised or delineated islands placed at intersections, reducing vehicle speeds through tighter turning radii and narrowed vehicle travel lanes.



Curb extensions (top) and chicanes (middle) in Austin, TX. Small traffic circle (middle) and speed hump (bottom) in Madison, WI.

These devices can effectively slow vehicle traffic while accommodating all turning movements at an intersection. Small traffic circles can also include a paved apron to accommodate the turning radii of larger vehicles, such as fire trucks.

Speed Humps/Cushions

Speed humps are rounded raised areas of the pavement requiring approaching motor vehicles to reduce speed. These devices also discourage through vehicle travel on a street when a parallel through



route exists. Speed cushions are similar to speed humps, but include narrow inlets enabling bicycles to pass through without traversing the hump. Spacing between inlets could be matched with the spacing of wheels on a fire truck to allow these vehicles to pass through without slowing.

Intersection Painting

Painted intersections, often designed and completed by local residents, can effectively reduce the speeds of vehicles approaching and traversing intersections. Because no road construction work is required, these devices require very little capital outlay. They are generally most effective on lower order residential streets.



Intersection painting in Portland, OR (top). Choker entrance in Austin, TX (bottom).

LEVEL 5 – TRAFFIC DIVERSION

Traffic diversion treatments physically restrict through auto traffic in favor of bicycle travel. These treatments accommodate bicyclists and local vehicle traffic, but direct through vehicle traffic onto parallel higher-order streets.

Traffic diversion is most effective when higher-order streets can sufficiently accommodate the diverted traffic.

Choker Entrances

Choker entrances are intersection curb extensions or raised islands allowing full bicycle passage while restricting vehicle access to and from a bicycle link. When they approach a choker entrance at a cross-street, motorists on the bicycle route must turn onto the cross-street while cyclists may continue forward. These devices can be designed to permit some vehicle turning movements from a cross-street onto the bicycle route while restricting other movements.

Traffic Diverters

Similar to choker entrances, traffic diverters are raised features directing vehicle traffic off the bike route while permitting through bicycle travel.

3. UNIVERSITY HILL CONTEXT

The study area for this project is the University Hill, located in the southeast quadrant of the City of Syracuse. More specifically, the study area is bounded by Water Street to the north, Stratford Street and Oakwood Cemetery to the south, Almond Street to the west, and Ostrom Avenue to the east. This area houses Syracuse's major educational and medical institutions, including Syracuse University, the SUNY College of Environmental Science and Forestry (SUNY ESF), SUNY Upstate Medical University, Crouse Hospital, the Veterans Administration Hospital, and the Hutchings State Psychiatric Center. The study area also provides a home for a variety of commercial, arts, and recreation destinations, including the Crouse Marshall Business Improvement District, Syracuse Stage, and the Carrier Dome.



Existing bike lane on Euclid Avenue.

A secondary study area was also formed to include neighborhoods to the south and east of the primary study area. This secondary area serves as the main generator for bicycle traffic on University Hill, as it includes residential neighborhoods closely affiliated with the Hill's medical institutions and universities. The secondary study area extends the boundaries of the primary study area to Colvin Street on the south and Westcott Street on the east. There are currently bike lanes in this area on Euclid and Comstock Avenues. This study does not consider additional bike lanes for the secondary study area. Figure 3-1 shows the primary and secondary study areas, existing bike lanes, and the locations of major institutions. Figure 3-2 shows the larger context for the study area, including potential bike destinations.

These areas were chosen as the focus of this study because of both the substantial amount of bicycling that occurs there and the possibility of significantly more. The *University Hill Transportation Study* estimates the potential for approximately 13,000 bicycle trips per day on the Hill. Because of the great potential for biking in this part of Syracuse, existing studies, including the *University Hill Transportation Study*, have explicitly suggested bike treatments for the Hill.

I. LAND USE

Understanding land use on University Hill is important in identifying origins, destinations, and potential bicycle travel patterns. Land use in the primary study area is shown in Figure 3.I-1.

The vast majority of land on University Hill is classified as “public service/institutional” in use, and is occupied by medical, educational, cultural, and social facilities. These facilities comprise some of the most important destinations on University Hill: campuses, hospitals, libraries, and performing arts venues. There are also a variety of commercial properties on the Hill which serve as important destinations. Most of these are located along the Genesee Street corridor and on Marshall Street, just north of the Syracuse University campus. Eating establishments and small scale retail dominate these commercial zones. There is one major park, Thornden Park, on the eastern periphery of the primary study area which also serves as a destination. This park hosts community events throughout the year and houses basketball courts, tennis courts, an amphitheater, a sledding hill, and a swimming pool.

The Hill also has a variety of residential nodes that function as origins. The area north of Adams Street and east of University Avenue is dominated heavily by multi-family residential properties, many of which house students at nearby Syracuse University or SUNY ESF. Other pockets of higher density housing exist, mostly along Euclid Avenue and I-81. Single-family residential properties become more predominant as one moves south and east out of the primary study area. Figure 3.I-2 shows population density on the Hill by census block.

II. TRANSPORTATION CHARACTERISTICS

A review of transportation characteristics for the study area, particularly those which relate to bicycling, is also critical to planning for the bicycle network on University Hill.

Figure 3.II-1 shows vehicle ownership data, collected from the 2000 Census Transportation Planning Package, for the primary and secondary study areas. Vehicle ownership is high throughout the secondary study area and in block groups at the southeastern corner of the primary study area, but declines as one moves northward. The block group containing the VA Medical Center, University Hospital, and Crouse Hospital has the lowest vehicle ownership in the primary and secondary study areas. By revealing areas where dependence on alternative forms of transportation is high, this figure begins to show which origins might most need bicycle facilities.

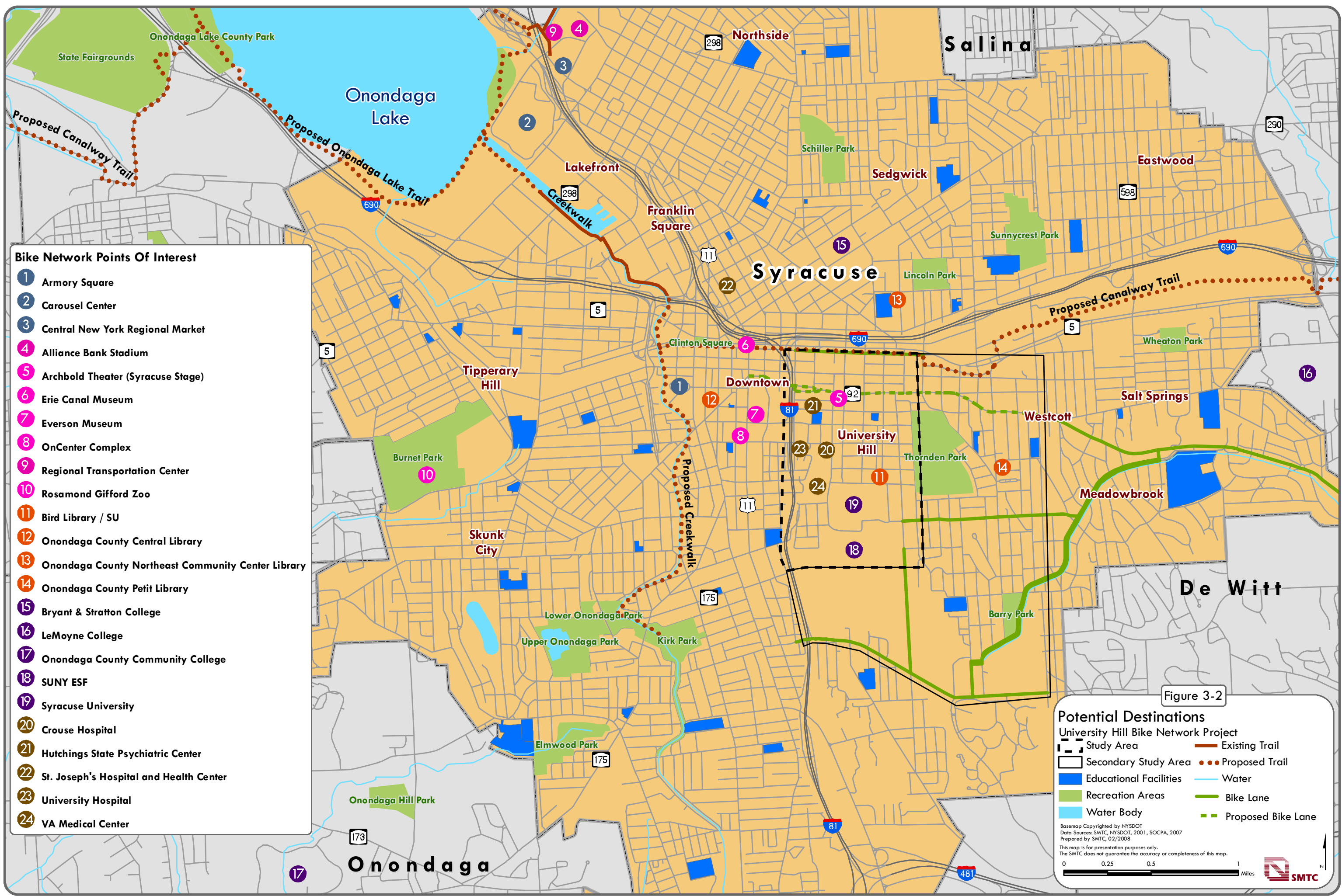


0 0.1 0.2 0.4 Miles

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- Bike Network Points Of Interest**
- 1 Armory Square
 - 2 Carousel Center
 - 3 Central New York Regional Market
 - 4 Alliance Bank Stadium
 - 5 Archbold Theater (Syracuse Stage)
 - 6 Erie Canal Museum
 - 7 Everson Museum
 - 8 OnCenter Complex
 - 9 Regional Transportation Center
 - 10 Rosamond Gifford Zoo
 - 11 Bird Library / SU
 - 12 Onondaga County Central Library
 - 13 Onondaga County Northeast Community Center Library
 - 14 Onondaga County Petit Library
 - 15 Bryant & Stratton College
 - 16 LeMoyne College
 - 17 Onondaga County Community College
 - 18 SUNY ESF
 - 19 Syracuse University
 - 20 Crouse Hospital
 - 21 Hutchings State Psychiatric Center
 - 22 St. Joseph's Hospital and Health Center
 - 23 University Hospital
 - 24 VA Medical Center

Figure 3-2

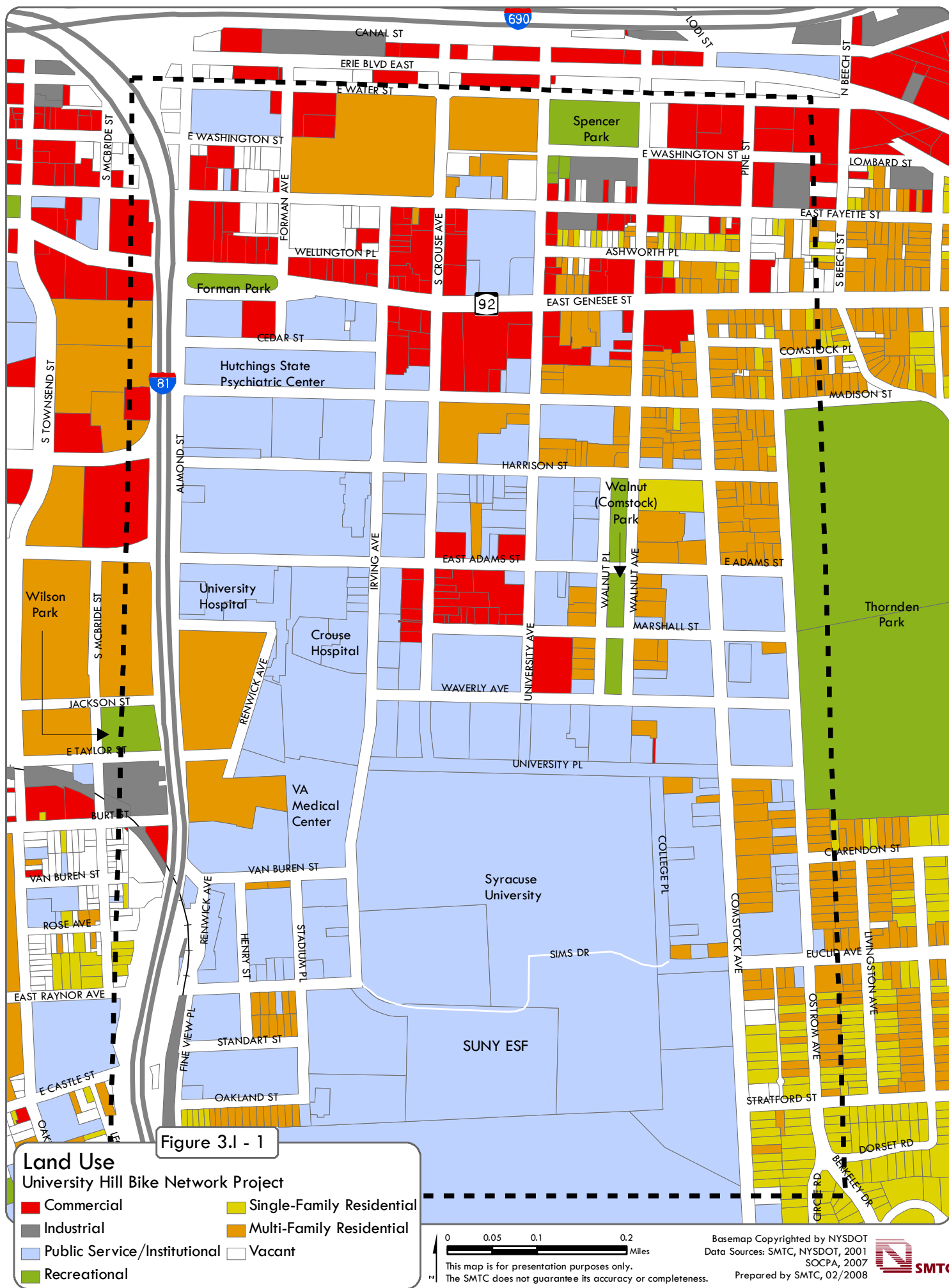
Potential Destinations
University Hill Bike Network Project

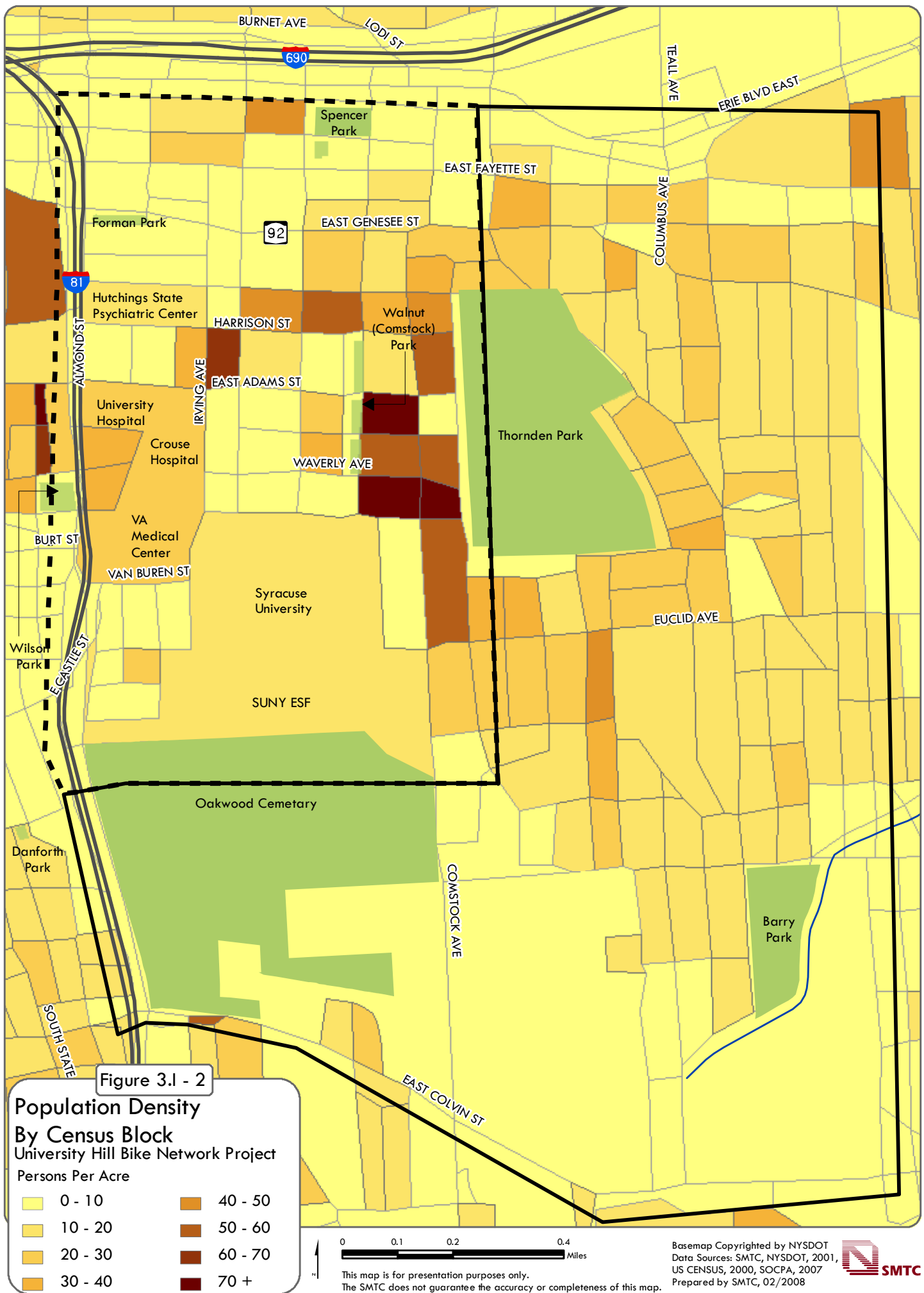
- Study Area
- Secondary Study Area
- Educational Facilities
- Recreation Areas
- Water Body
- Existing Trail
- Proposed Trail
- Water
- Bike Lane
- Proposed Bike Lane

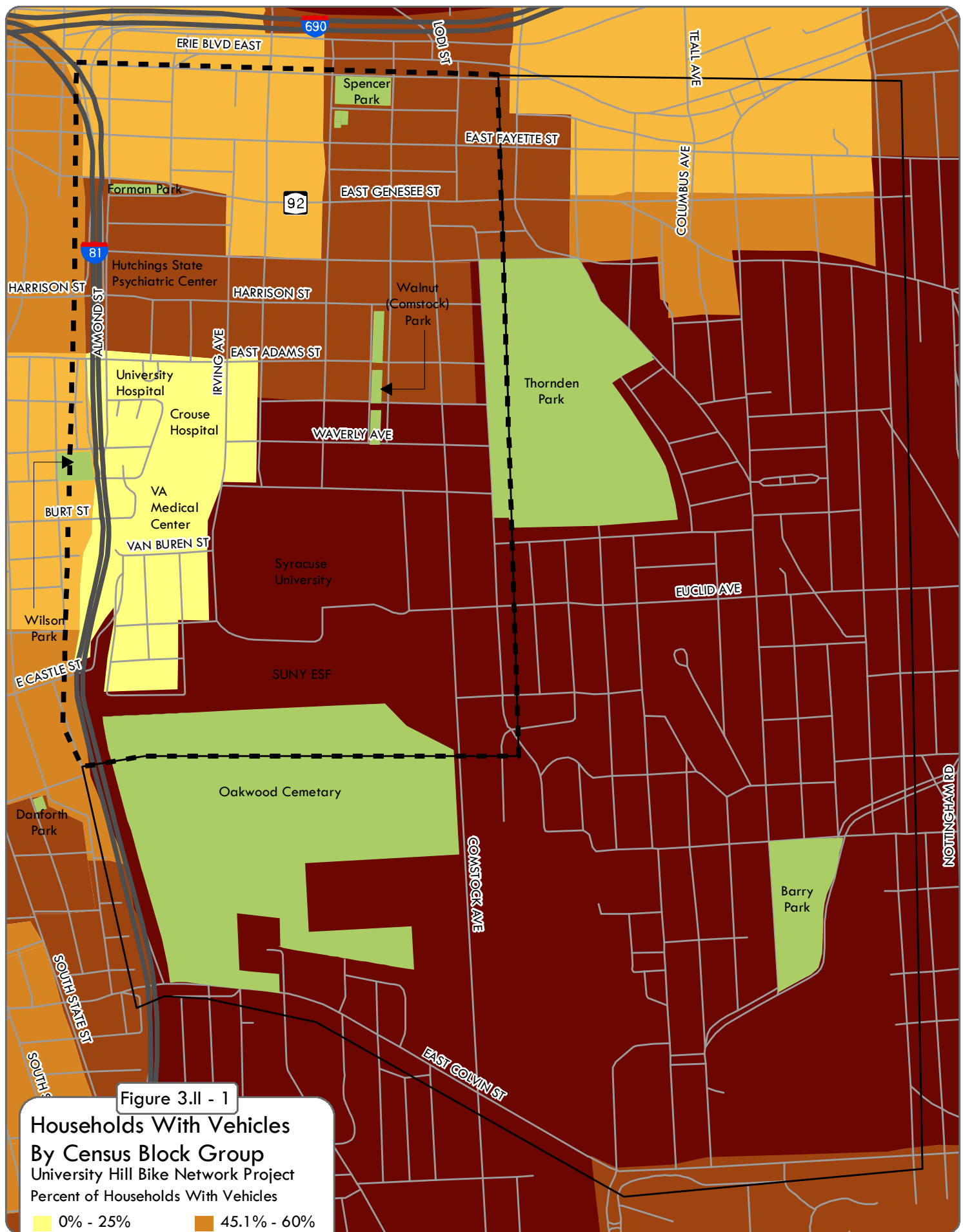
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0 0.25 0.5 1 Miles

SMTc





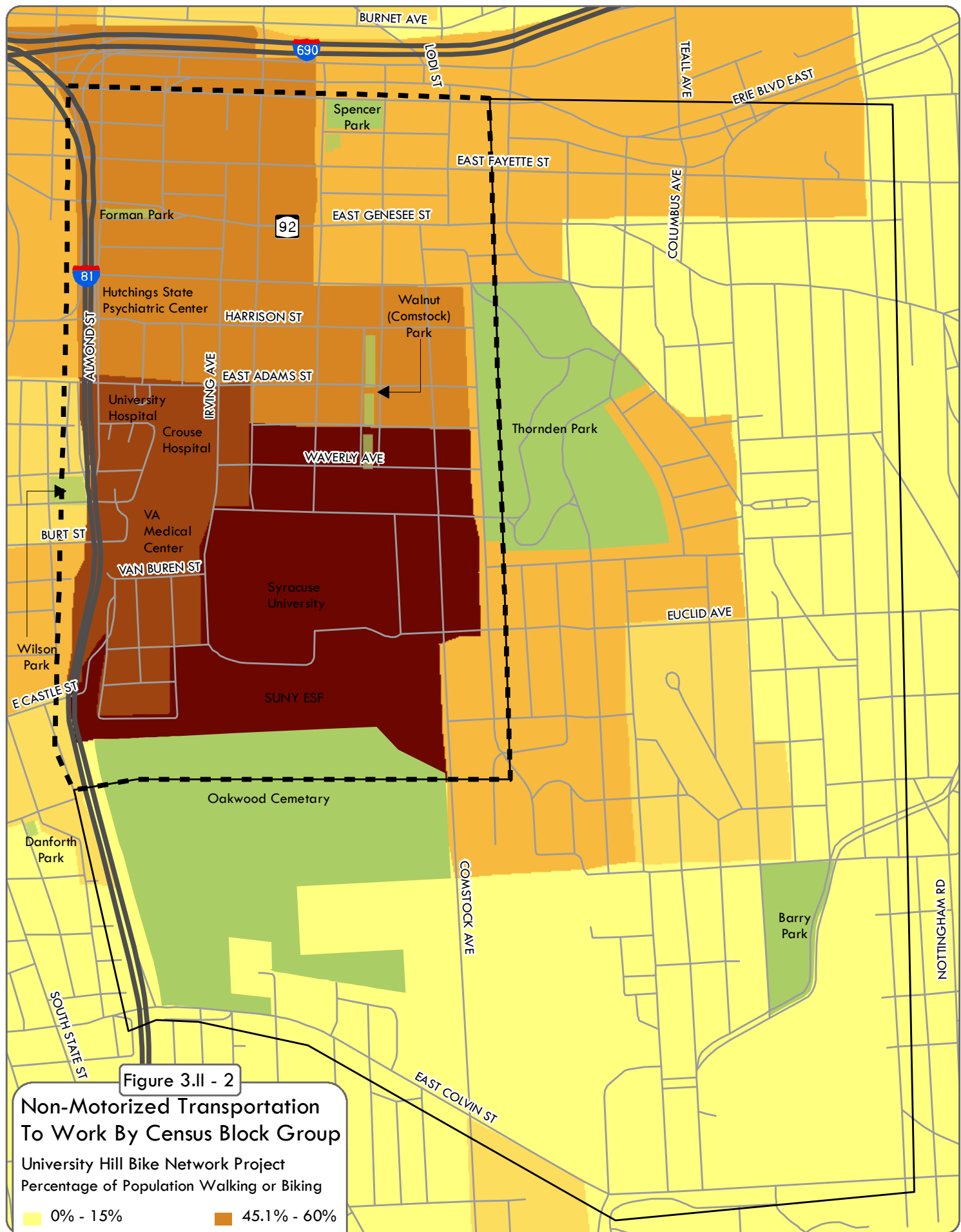


0 0.1 0.2 0.4
Miles

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0 0.1 0.2 0.4 Miles

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Figure 3.II-2 shows the percentage of residents currently using non-motorized transportation to access work, and thus which census block groups might most use bicycle facilities. According to the 2000 Census, pedestrian and bicycle commuting is most prevalent in the block groups immediately in and around the primary study area, and especially in the block groups containing Syracuse University and the hospitals. The census block groups farthest from the primary study area have the lowest percentages of residents using non-motorized transportation to access work. These census blocks also have the highest vehicle ownership.

The Pedestrian and Bicyclist Issues and Needs Assessment from the *University Hill Transportation Study* provides further relevant information, in this case about the types of bicycle trips that might take place on the Hill. Table 3-1 shows that approximately 25% of estimated bicycle trips on the Hill occur for commuting purposes: to reach primary schools, colleges, or work. The remaining 75% of estimated trips occur for discretionary reasons: to reach the store, the library, a basketball game, or to get a meal. This means that while planning for bicycle access to jobs and schools is important, it may be more critical to provide high quality bike access to the locations of incidental trips.

TABLE 3-1: ESTIMATE OF BICYCLE ACTIVITY

VARIABLE	FIGURE
Employed Adults, 16 Years and Older	6,182
Bicycle Commute Percentage	0.9%
Bicycle Commuters	56
Employed Adults, 16 Years and Older	6,182
Work-at-Home Percentage	3.3%
Work-at-Home Bicycle Commuters ¹	102
School Children ²	762
Estimated School Bicycle Commute Share ³	2%
School Bicycle Commuters	15
College Students	15,494 ⁴
Bicycle Commute Percentage ⁵	10%
College Bicycle Commuters	1,549
Estimated Work and School Commuters	1,722
Work and School Commute Trips	3,445
Discretionary Trips for Each Commute Trip ⁶	2.73
Estimated Non-Commute Trips	9,404
Total Estimated Daily Bicycle Trips	12,848

Notes: Unless noted otherwise, data collected from 2000 U.S. Census. For more information, see Table 3 of the University Hill Transportation Study, Pedestrian and Bicyclist Issues and Needs Assessment, April 2006.

¹Assumes 50% of population working at home makes at least one two-way trip per day by bicycle.

²Population ages 6-14.

³Estimated share of school children who commute by bicycle, as of 2000 (2003, *National Safe Routes to School Surveys*).

⁴2004-5 full-time enrollment, Syracuse University.

⁵Review of bicycle commute share in seven university communities (FHWA, 2005. *Case Study #1, National Bicycling and Walking Study*).

⁶27% of all trips are commute trips (2001, *National Household Transportation Survey*).

III. EXISTING TRANSPORTATION NETWORK

A review of the existing transportation network is also important in planning a system of bicycle treatments for the Hill. The Hill's transportation network consists of the following elements.



Shared lane marking, Euclid Avenue.

BIKE FACILITIES

In the last several years, the city of Syracuse has added bike lanes to major streets around the Hill, most of these in the secondary study area. There are bike lanes on Comstock Avenue from Stratford Street south to East Colvin Street, East Colvin Street from Comstock Avenue to Meadowbrook Drive, and Meadowbrook from Colvin to East Genesee Street. The city recently added a bicycle lane/shared road marking to Euclid Avenue from Comstock Avenue to Meadowbrook Drive. In 2007, the city striped the area's most recent bicycle lane along Water

Street from Almond Street to South Beech Street. The topographic conditions around these bike lanes are shown in Figure 3.III-1).

Bike storage facilities exist in on-campus locations, but are rare elsewhere. Few of these facilities are protected from rain or snow.

PEDESTRIAN NETWORK

The Hill supports modest facilities for pedestrian traffic. Sidewalks, of varying condition, exist on almost all University Hill streets. Pedestrian signalheads are common, and four intersections have exclusive pedestrian phases, meaning that all vehicular traffic stops for pedestrian crossings. Crosswalk markings, again of varying condition, have been painted at many intersections. The city has recently completed some pedestrian-oriented streetscape improvements on Marshall Street, and more are planned for East Genesee Street as part of the Connective Corridor capital improvement project.

The quality of the pedestrian environment is shown in Figure 3.III-2. Portions of the street network labeled as a "high" quality generally include street trees, lighting, aesthetically pleasing building façades, and minimal curb cuts. On the converse, those segments categorized as "low" are predominantly auto-oriented.



Figure 3.III - 1

Topography

University Hill Bike Network Project

0 0.05 0.1 0.2
Miles

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NYS DEC, 2000
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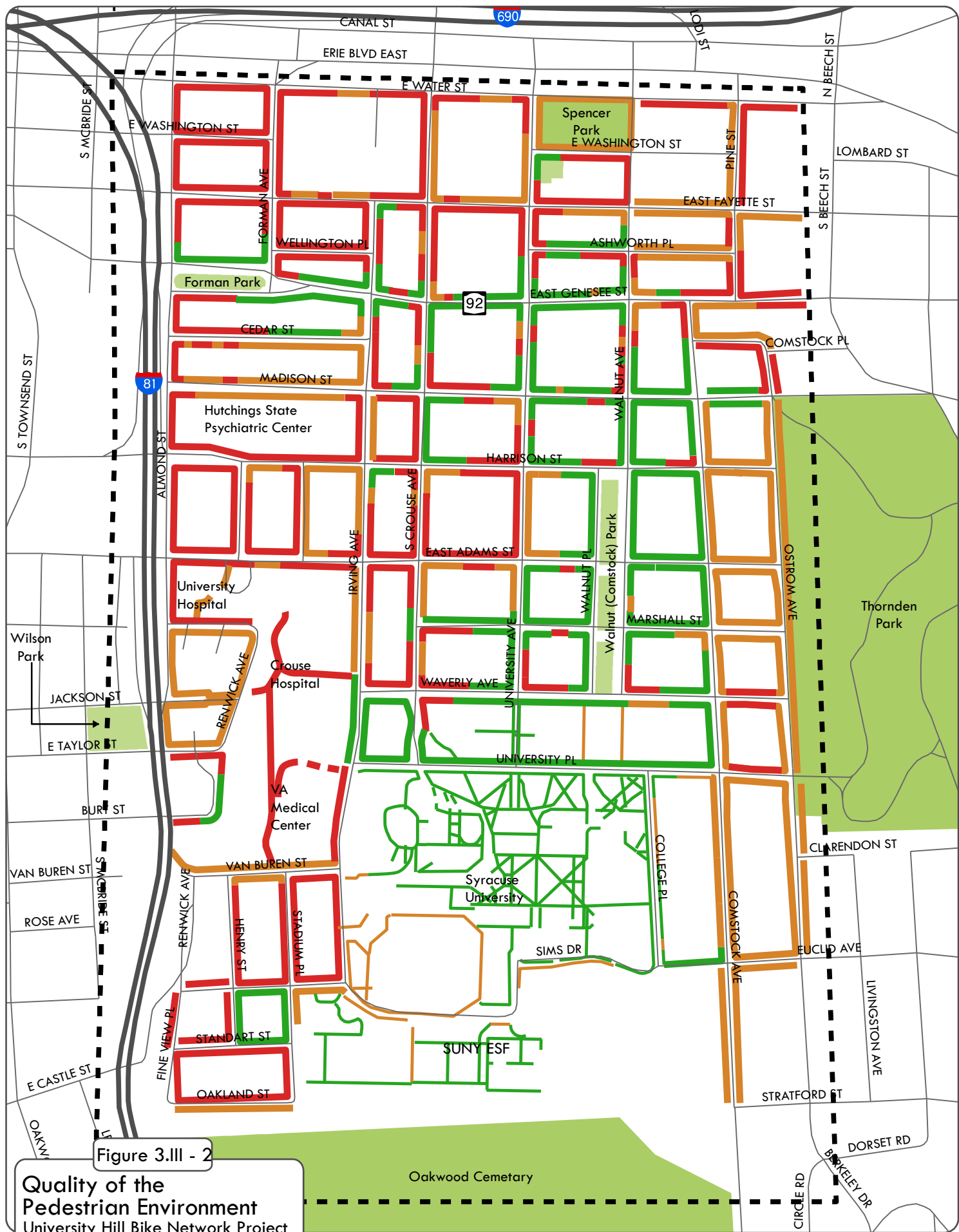


Figure 3.III - 2

Quality of the Pedestrian Environment University Hill Bike Network Project

- High
- Moderate
- Low

0 0.05 0.1 0.2 Miles

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VEHICULAR NETWORK

The local street network serves all major institutions and properties on University Hill. The Hill also has easy access to the regional transportation network via Interstates 81 and 690. Main east-west roads through the Hill include East Genesee, Harrison, and Adams Streets. Major main north-south roads include Almond Street, Irving, Crouse, University, and Comstock Avenues.

Road Ownership

Almost all roads in the primary and secondary study areas are owned by the City of Syracuse. Maintenance responsibility for these roads, including the state touring route on East Genesee Street, rests with the City of Syracuse Department of Public Works. Syracuse University owns and maintains the roads located on its campus, including University Place and College Place. The University closes these roads to public vehicular traffic. Centro buses, pedestrians, and bicyclists are allowed to cross campus.

Road Width

Road width within the study area varies from 71 feet on East Genesee Street between Almond Street and Forman Avenue to 18 feet on Fineview Place. The number of travel lanes also varies from one, found on several one-way streets, to four, found along Almond Street, Comstock Avenue, East Genesee Street, and Waverly Avenue. A complete listing of roads and their associated transportation characteristics is shown in Table B-1 in Appendix B.

Functional Classification

Figure 3.III-3 displays the functional classification scheme within the University Hill area. There are two principal arterials within the study area – East Genesee Street and Erie Boulevard East. Several roads within the study area are classified as minor arterials, including Irving, Waverly, University, Euclid, and Comstock Avenues and Van Buren, East Adams, and Harrison Streets. There are two collectors, South Crouse Avenue and Walnut Avenue. All of these roads are federal-aid eligible, meaning that traditional federal surface transportation funds can be used to improve them. The remaining roads in the study area are classified as local.

FUNCTIONAL CLASSIFICATION

Functional classification is the process by which streets and highways are grouped into classes according to the character of service they are intended to provide. *Arterials* provide the highest level of mobility, at the highest speed, for long, uninterrupted travel. Arterials often have multiple lanes and some degree of access control. *Collectors* provide a lower degree of mobility than arterials. They are designed for travel at lower speeds and for shorter distances. Collectors are typically two-lane roads that collect and distribute traffic from the arterial system. *Local roads* provide the least mobility, but highest accessibility, of all road types. Arterials and collectors are federal-aid eligible, meaning that traditional surface transportation funds can be used on these roadways.

ACCIDENTS: REPORTABLE VS. NON-REPORTABLE

Accidents are classified as either reportable or non-reportable. *Reportable* accidents include those involving a death, injury, or reported property damage of at least one thousand dollars. All others are considered *non-reportable*.

Source: NYSDOT Accident Data Files Description

Pavement Condition

Figure 3.III-4 shows pavement conditions in the study area. Generally, pavement conditions are fairly good on the major thoroughfares, such as East Genesee Street and Comstock Avenue. Secondary roads tend to score lower in terms of pavement condition.

Traffic Volumes

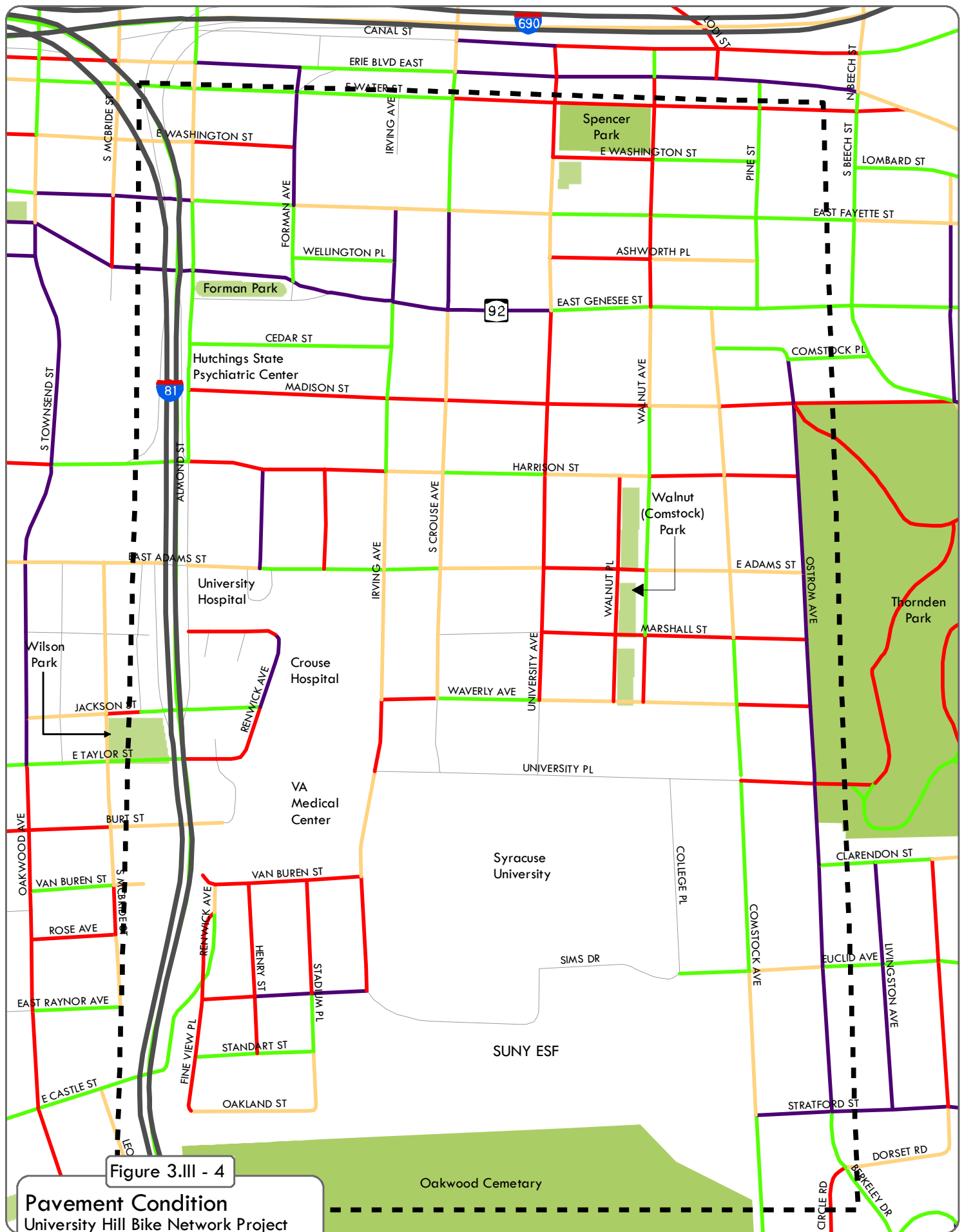
Figure 3.III-5 shows the available Annual Average Daily Traffic (AADT) counts for streets within the study area. Generally, the highest traffic volumes in the study area occur on East Genesee and Adams Streets, and Comstock, Irving, and Euclid Avenues. South Crouse, University, and Walnut Avenues have moderate volumes. Marshall, Madison, and Harrison Streets show the lowest volumes.

Accidents

Vehicular accidents that occurred in the study area between 2004 and 2006 are shown in Figure 3.III-6.¹ Pedestrian and bicycle accidents that occurred during this time frame are shown in Figure 3.III-7. Most vehicular accidents during this time period occurred along East Adams, Harrison, and East Genesee Streets, and South Crouse, University, and Comstock Avenues. Streets with slightly lower number of total accidents include East Fayette and Madison Streets and Ostrom and Walnut Avenues.

Of the 435 reportable accidents with geographic reference information that occurred in the study area between 2004 and 2006, 5% involved pedestrians and seven (2%) involved bicyclists. Just over half (51%) of the reported accidents involved injuries. No fatalities were reported.

¹ It is important to note that the accident data examined within this report includes only those accidents with geographic reference information. Approximately 12% of the accidents reported within the City of Syracuse in the time frames noted are not tied to a particular road segment or intersection and are therefore not included within this accident review. In addition, it should be noted that the 2004-2006 dataset was not complete at the time that this document was written. This dataset includes all reportable accidents (those over \$1,000 in damage) that occurred between 2004 and 2006 in the study area, but only some of the known non-reportable accidents. Non-reportable information had not yet been added to the dataset by the New York State Department of Motor Vehicles at the time this document was written.

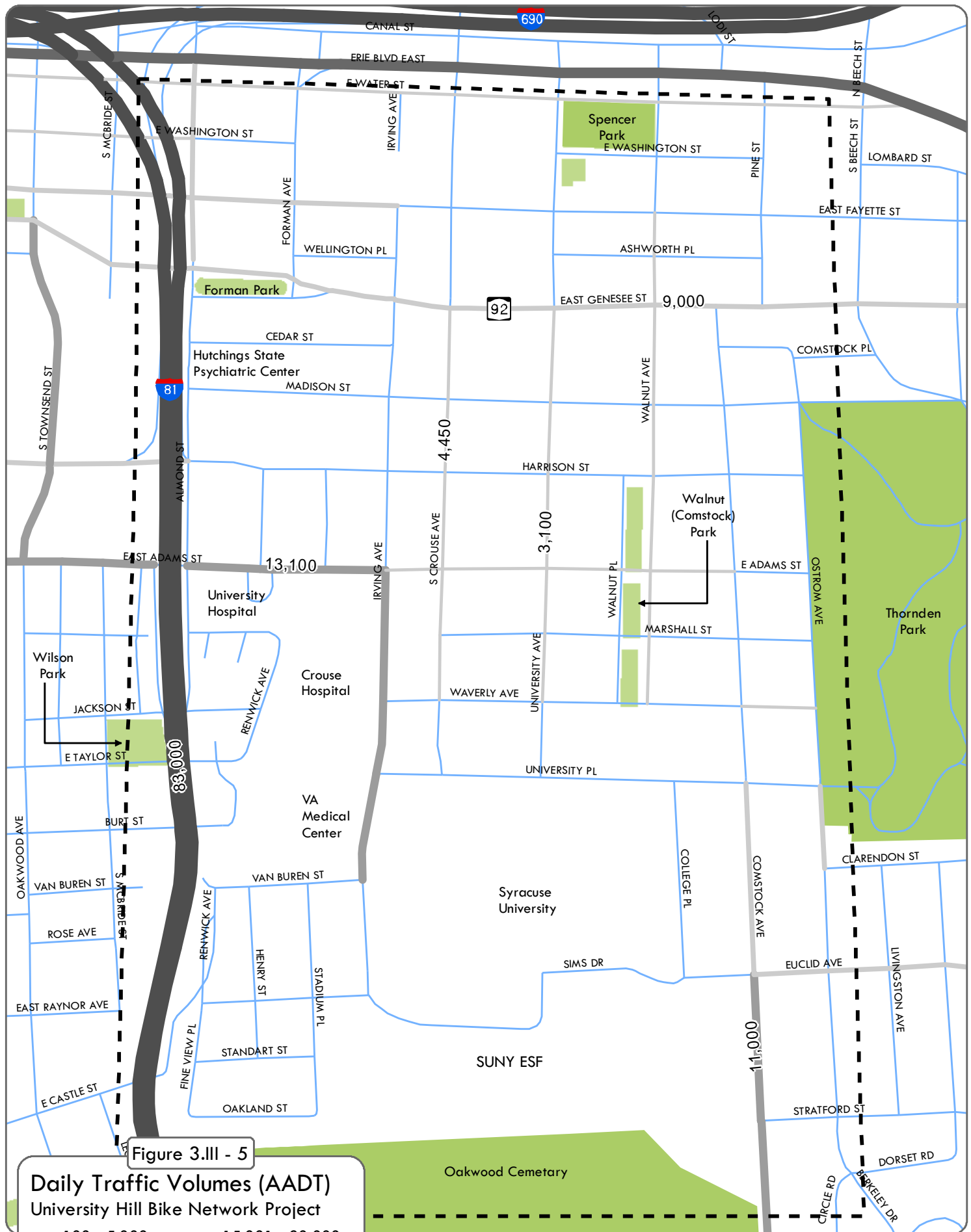


0 0.05 0.1 0.2 Miles

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City of Syracuse, 2006, SOCPA, 2007
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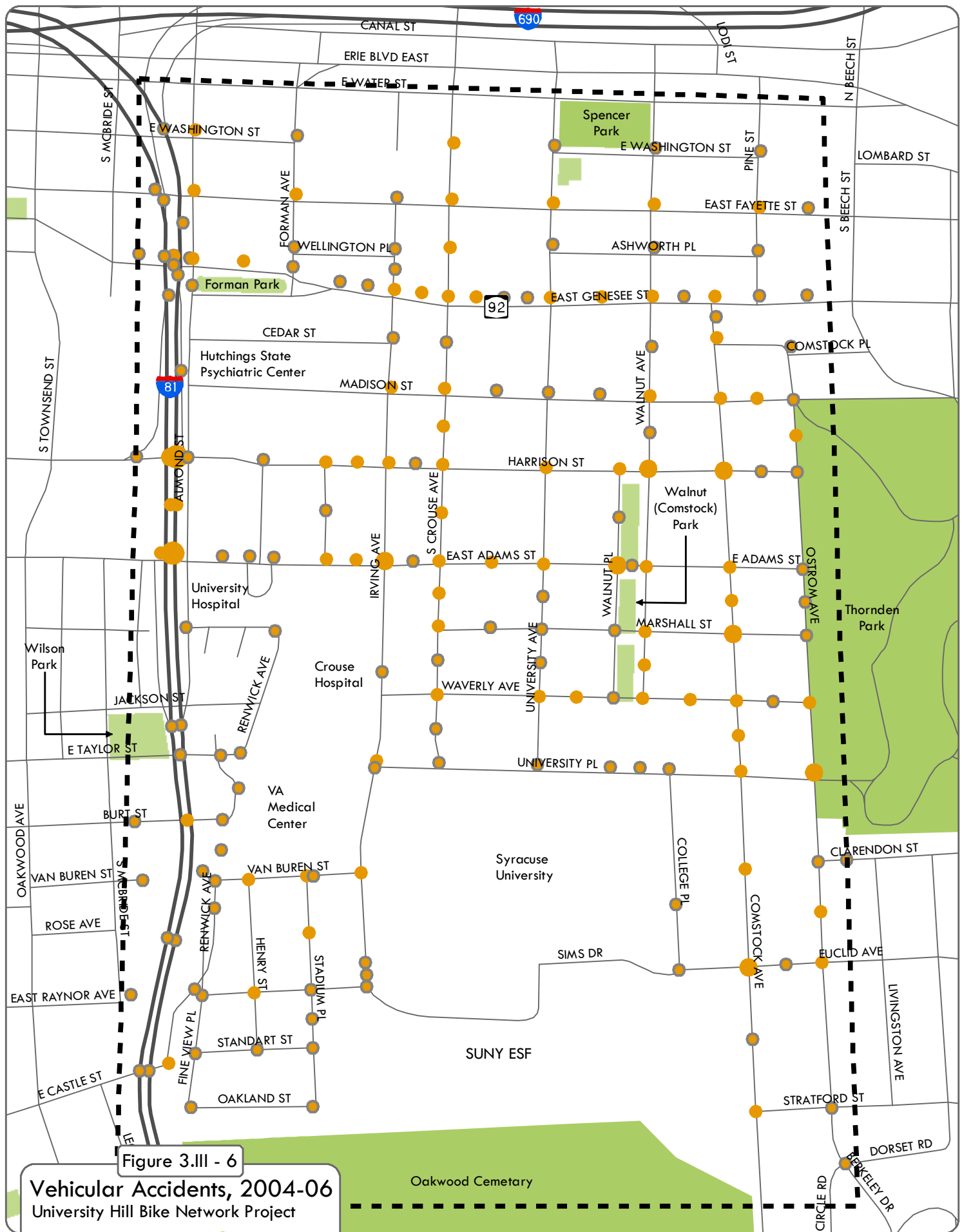


Figure 3.III - 6

Vehicular Accidents, 2004-06 University Hill Bike Network Project

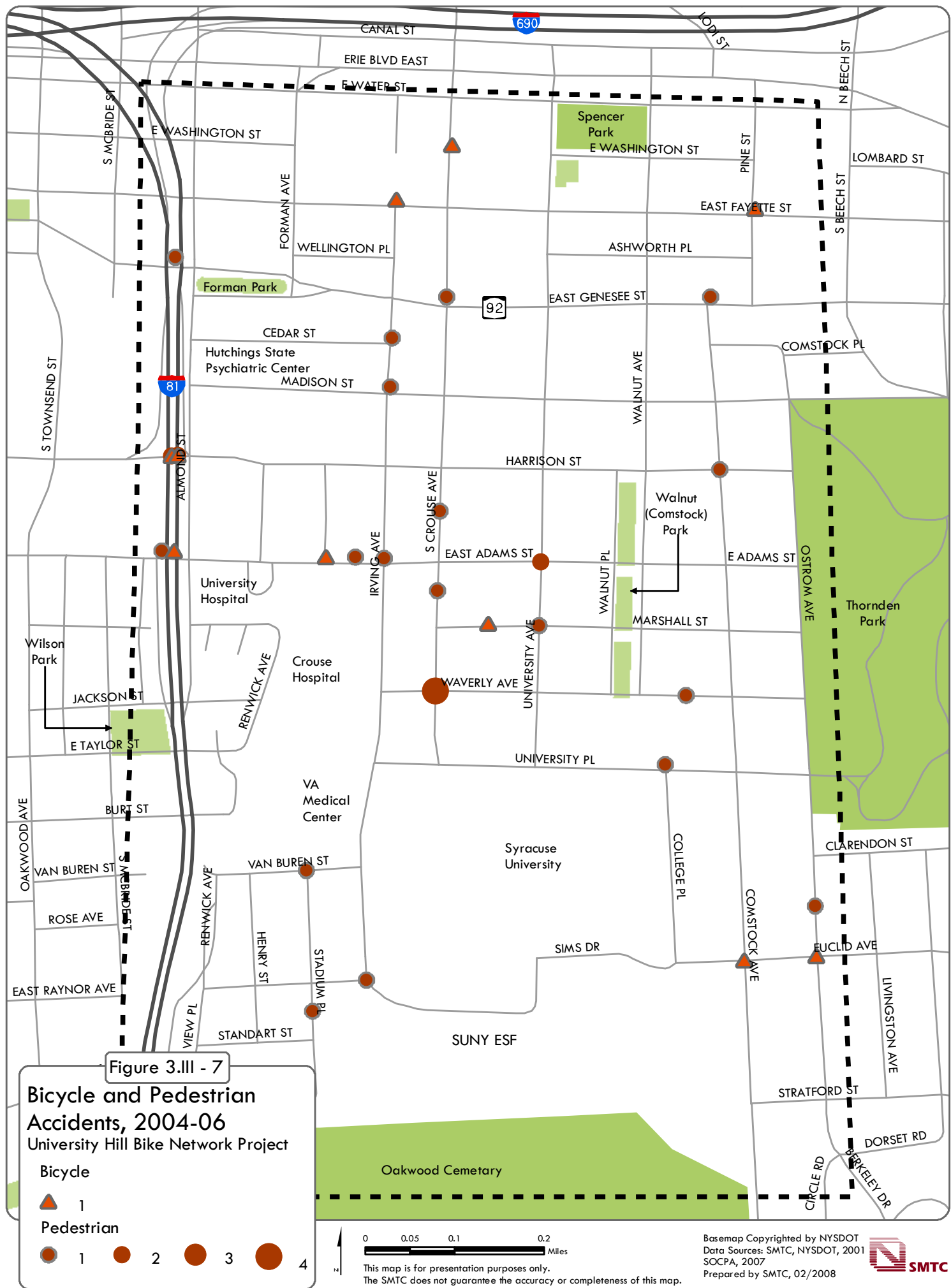
- | | | | |
|---|--------|---|---------|
|  | 1 |  | 11 - 19 |
|  | 2 - 10 |  | 20 - 28 |

0 0.05 0.1 0.2
Miles

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In terms of bicycle accidents, most seem to occur along Euclid Avenue and East Adams Street. There were also a few accidents toward the north end of the study area along East Fayette Street. Pedestrian accidents were concentrated in the center of the study area from East Genesee Street south to University Place and from Almond Street to Comstock Avenue. Not surprisingly, most bicycle and pedestrian accidents occurred in areas of heavy bike and walking traffic.

Parking

Parking facilities are located in virtually every corner on the Hill (Figure 3.III-8). The facilities include parking garages, off-street surface parking, and on-street parking. Almost every street on the Hill either has access to or abuts a parking facility. The western edge of the primary study area has a heavy concentration of garages affiliated with major educational and health institutions. The remainder of the primary study area generally has a mixture of on-street and surface parking.

Vehicular Plans

The *University Hill Transportation Study*, which concluded in 2007, made several recommendations regarding potential vehicular network improvements on the Hill. These included the restoration of two-way streets and the construction of roundabouts. Both recommendations were suggested as options to improve vehicular circulation on the Hill.

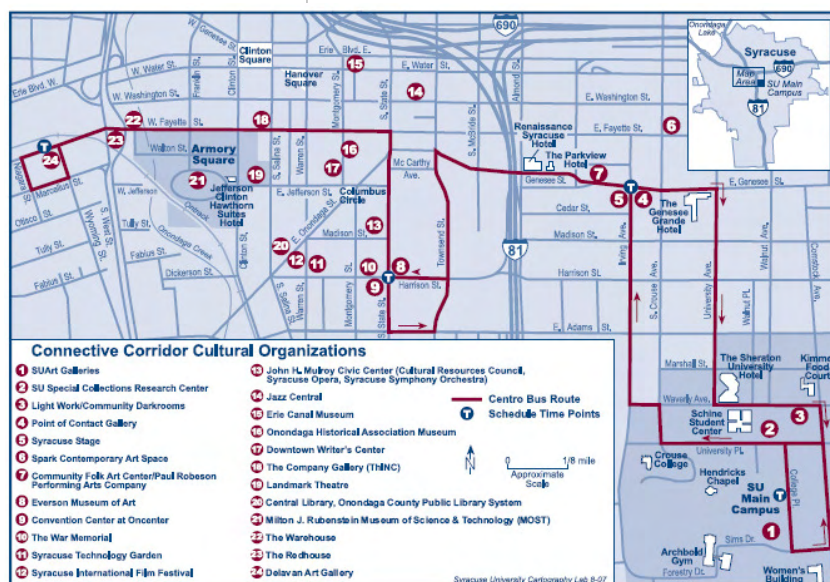
The conversion to two-way streets should improve accessibility, enhance wayfinding, reduce speeds, and help restore a pedestrian orientation on the Hill. Two-way streets favor accessibility rather than mobility. They allow motorists, especially those unfamiliar with an area, to follow a direct path to their destination. They eliminate the re-circulation of cars that comes with one-way streets, which produce more traffic and turning movements, more conflict points with other cars, pedestrians, and bicyclists, and ultimately, more distance traveled. Two-way streets also have traffic calming advantages over one-way streets, which generally encourage faster driving speeds.

TRANSIT

Centro, a subsidiary of the Central New York Regional Transportation Authority (CNYRTA), provides public transit services within the study area. Centro's bus service is designed as a hub and spoke system, where bus routes originate and end in downtown Syracuse. A number of these bus routes traverse University Hill. In addition, Centro and Syracuse University Parking and Transit Services offer several shuttles within the

primary study area. All Centro buses are equipped with bike racks or undercarriage storage for bikes.

The shuttle known as the Connective Corridor, a free service to both students and non-students, connects downtown Syracuse, University Hill, and more than 20 cultural venues in between. Eventually, the Connective Corridor will include traffic calming, bicycle, and pedestrian elements.



There are many Centro bus stops within the primary study area, nearly one on every block, and all of which are designated with a blue Centro sign. In addition, there are a number of sheltered bus stops within the primary study area. A transit hub, where transit riders can access multiple bus routes at one location, operates on the east edge of the Syracuse University campus along College Place. This transit hub provides access to areas outside University Hill, including Carousel Center, Shoppingtown

Mall, the downtown transit hub, and the Regional Transportation Center. The locations of these bus routes and facilities are shown in Figure 3.III-9.

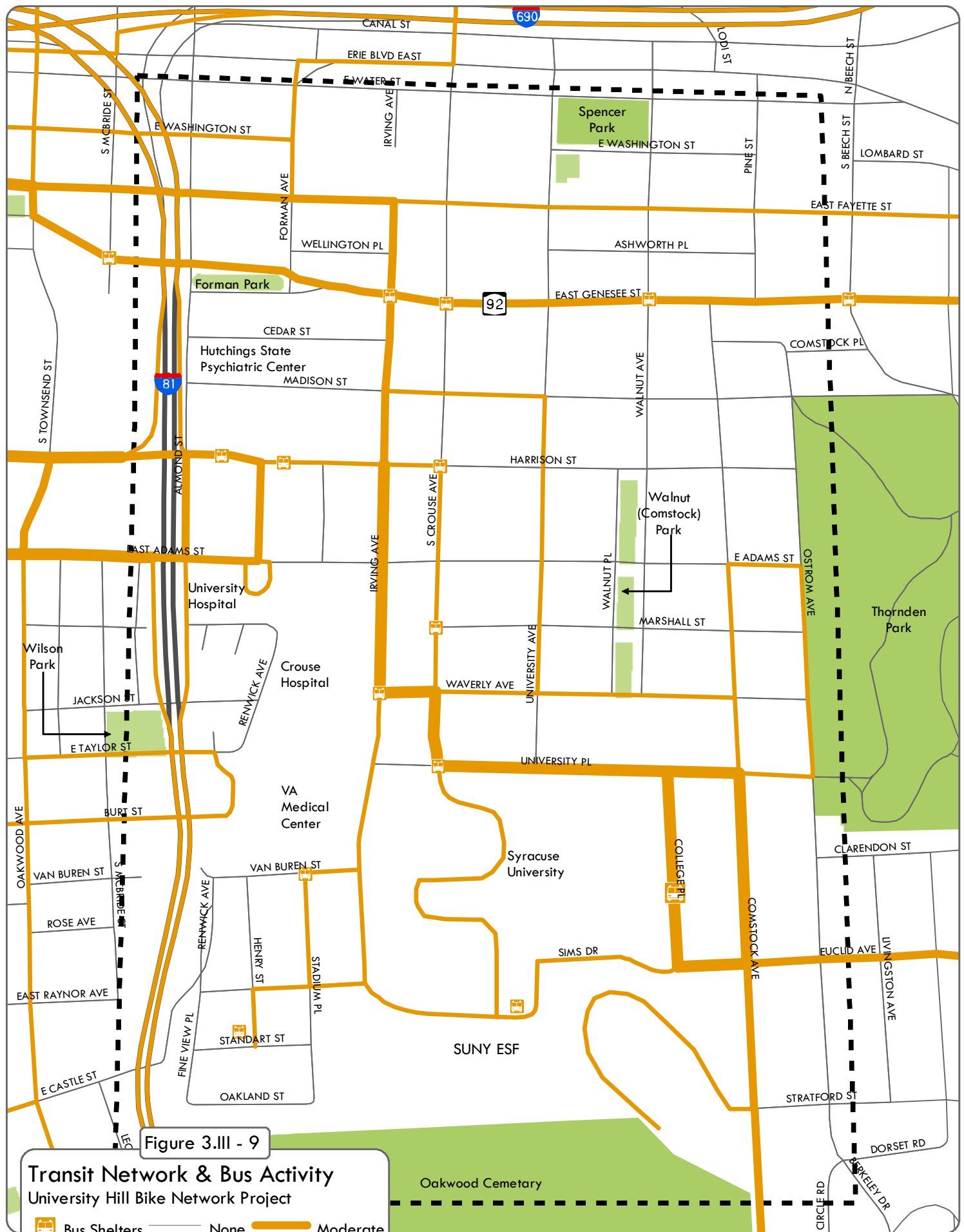


Figure 3.III - 9

Transit Network & Bus Activity University Hill Bike Network Project

- Bus Shelters
- Transit Hubs
- None
- Low
- Moderate
- High

0 0.045 0.09 0.18 Miles
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4. APPROPRIATENESS MEASURES

In order to determine which University Hill streets should be included in a bicycle network, the SMTC developed a series of metrics, or “appropriateness measures.” The SMTC designed the appropriateness measures as an analytical tool for use at the planning level by city workers in the field. While data may be available that allows evaluation using GIS or similar tools, emphasis was placed on creating a mechanism easily used on location and with standard city maps.

For ease of use, the SMTC separated the appropriateness measures into three categories that reflect major criteria in site decisions for bike routes: safety, connectivity, and design potential. The SMTC assigned points, reflecting relative weights, to each of these categories. Within the categories, the SMTC also assigned points of varying weights to each appropriateness measure. Criteria were then developed for each appropriateness measure and assigned a positive, neutral, or negative score. Positive scores were designed to receive full points, neutral scores half points, and negative scores no points.

Descriptions and guidelines for applying each appropriateness measure are provided below. The matrix used for evaluating streets according to the measures is shown in Table 4-1.

I. SAFETY MEASURES

Many factors play a role in determining the bicycle safety of existing University Hill streets. These appropriateness measures are described below.

QUALITY OF SURFACE (5 PTS.)

Streets with high quality pavement provide the best conditions for biking. These streets have the smoothest and most regular surfaces and thus reduce bicyclists’ need to swerve to avoid dangerous cracks or potholes. Streets with uneven pavement generally create an unsafe condition for biking.

The following criteria were developed to assess the appropriateness of surface condition:

- + = smooth surface, uniform width
- N = irregular surface, non-uniform width
- = surface deterioration, cracks, bumps.

TABLE 4-1: APPROPRIATENESS MEASURE MATRIX

	Measure	Criteria		Score
I. SAFETY	A. Average Quality of Surface	Smooth surface, uniform width (Excellent or Good)	+	
		Irregular surface, non-uniform width (Fair)	N	
	5 points maximum	Surface deterioration, cracks, bumps (Poor)	-	
	B. Traffic Volumes	Low Volume (< 5,000 ADT)	+	
		Medium Volume (5,000 – 10,000 ADT)	N	
	15 points maximum	High Volume (> 10,000 ADT)	-	
	C. Average Traffic Speeds	Under 25 MPH	+	
		25 - 35 MPH	N	
10 points maximum	Over 35 MPH	-		
D. Presence of Signals	Infrequent (Less than half of intersections)	+		
	Occasional (Around half)	N		
5 points maximum	Frequent (More than half)	-		
E. Presence of Heavy Vehicles	No truck or bus routes	+		
	Either truck or bus routes	N		
5 points maximum	Both truck and bus routes	-		
Subtotal (out of 40pts)				
II. CONNECTIVITY	A. Connection to Existing Bike Facilities and Lanes	Several connections to other bike routes	+	
		Few connections to other bike routes	N	
	10 points maximum	No connections to other bike routes	-	
	B. Connections to Destinations and Other Neighborhoods	Access to destinations and other neighborhoods	+	
		Access to destinations or other neighborhoods	N	
	15 points maximum	No access to either destinations or other neighborhoods	-	
C. Access to Bus Routes	Crosses multiple bus routes	+		
	Follows or parallels bus route	N		
5 points maximum	No nearby bus route	-		
D. Quality of Experience	Scenic amenities along route	+		
	Some scenic amenities along route	N		
5 points maximum	No scenic amenities along route	-		
Subtotal (out of 35pts)				
III. DESIGN	A. Topography	Grades less than 3% (Relatively flat)	+	
	Segments with grades over 15% should not be considered.	Grades 3%-6% (Sloped)	N	
	10 points maximum	Grades more than 6% (Rolling)	-	
	B. Distance from Center Line to Curb	More than 15'	+	
		From 12' to 15'	N	
10 points maximum	Less than 12'	-		
C. Parking Lanes	No parking lane	+		
	Parking on one side of street (metered or alternate)	N		
5 points maximum	Parking on both sides of street	-		
Subtotal (out of 25pts)				
EXTRA POINTS	Road Diet Feasibility	Travel lanes width over 40' and no alternate parking	+	
	10 points maximum	Either travel lane width under 40' or alternate parking	-	
Subtotal (out of 10pts)				
	Total Score			

The quality of surface appropriateness measure was designed to function in the field or by using the pavement condition rating system developed by the NYSDOT. The City of Syracuse, Onondaga County, the NYSDOT, and the New York State Thruway Authority each rate the quality of pavement throughout the metropolitan area on an annual basis. Each jurisdiction uses a rating scale that can be converted to the NYSDOT system. Streets who generally rate “excellent” or “good” according to the NYSDOT system should receive a positive ranking. Streets whose condition varies from “excellent” or “good” to “fair” on the NYSDOT scale should receive a neutral rating. Streets who generally rate “poor” should receive a negative rating.

PAVEMENT CONDITION

NYSDOT Rating Scale

No Data: Not rated due to ongoing work or lack of data

Poor: Distress is frequent and may be severe

Fair: Distress is clearly visible

Good: Distress symptoms are beginning to show

Excellent: No pavement distress

Source: NYSDOT

TRAFFIC VOLUMES (15 PTS.)

Generally, streets with low traffic volumes are preferable for bike treatments. Because these streets have light vehicle traffic, little potential for car-bike conflict exists. Cars also tend to move slowly on these streets. As a result, these streets are more comfortable for the average bicyclist. High volume streets should generally be avoided when planning bicycle treatments.

The following criteria were developed for assessing the appropriateness of streets with regard to traffic volumes:

+ = low volume (<5,000 AADT)

N = medium volume (5,000 – 10,000 AADT)

– = high volume (>10,000 AADT)

When possible, traffic count data should be used to assess suitability according to this measure. When counts are not available, functional classification can be used as a proxy, as each functional class can generally be associated with a range of traffic volumes. Low volumes generally correspond with local roads, and these should thus receive positive ratings. Medium volumes are associated with collectors, which should receive neutral ratings. High volumes are usually found on arterials, which should receive negative ratings.

AVERAGE TRAFFIC SPEEDS (10 PTS.)

Streets with low traffic speeds provide the best environment for bicyclists. When bike and vehicular speeds are similar, bicyclist comfort is enhanced and the potential for car-bike conflict is reduced. High speed roads should generally be avoided for bike treatments.

The following criteria were developed for assessing the suitability of streets with regard to speeds:

+ = under 25 miles per hour

N = 25-35 miles per hour

– = over 35 miles per hour.

When possible, actual speed data should be used to assess suitability for inclusion in a bike network. If speed data is not available, an assessment of observed speeds can serve as a substitute. Utilizing speed limits as a substitute is not recommended; speed limits are typically uniform within city bounds and do not paint an accurate picture of vehicle travel speed.

PRESENCE OF SIGNALS (5 PTS.)

The prevalence of signalized intersections can be viewed as positive or negative for bicycle mobility, depending on the distance between signals. Closely spaced signals require cyclists and motor vehicles to constantly stop and go. If bicyclists are required to make frequent stops, they may avoid the route or disregard traffic control devices.² For this reason, streets with infrequent signals should be given preference for bike treatments.

The following criteria were developed for assessing the suitability of road segments with regard to signals:

+ = infrequent signals (less than half of intersections on a street are signalized)

N = occasional signals (about half of intersections are signalized)

– = frequent signals (more than half of intersections are signalized).

PRESENCE OF HEAVY VEHICLES (5 PTS.)

Buses and trucks often create problems for bicyclists. Visibility is an issue, especially during right turning movements. Likewise, frequent starting, stopping, and pulling over increases the opportunity for vehicle-bicycle conflicts. As a result, bike treatments should generally be avoided on streets with large numbers of transit or truck routes.

With regard to heavy vehicles, the SMTC developed the following criteria:

+ = no truck or bus routes

N = either truck or bus routes

– = both truck and bus routes.

² American Association of State Highway and Transportation Officials, *Guide for the Development of Bicycle Facilities*, 1999, pg. 11.

Ideally, a comparison of truck and bus route maps should be used to assess suitability according to this measure. Observation of the frequency of truck and bus activity on a street should also be used to determine which streets tend to carry more heavy vehicles.

II. CONNECTIVITY MEASURES

The suitability of streets for bicycle facilities should also be assessed based on the potential to connect to existing facilities, origins, and destinations in the community.

CONNECTIONS TO EXISTING BIKE FACILITIES AND LANES (10 PTS.)

Bike facilities function best as a network – a system of connected, continuous treatments that allow bicyclists to access many destinations. For this reason, streets that connect to existing facilities, such as bike paths or lanes, are preferable for new bike facilities.

The SMTC developed the following ratings to assess connectivity to existing facilities:

- + = several connections to other bike routes
- N = few connections to other bike routes
- = no connections to other bike routes.

As the City of Syracuse continues to add bicycle facilities, the points received when evaluating routes through this appropriateness measure will increase.

CONNECTIONS TO DESTINATIONS AND OTHER NEIGHBORHOODS (15 PTS.)

The most important indicator of connectivity is the ability to link origins, destinations, and neighborhoods. Destinations are locations that people visit, such as libraries, parks, schools, retail districts, and employment centers. Streets that provide direct routes between these locations function best for cyclists. They reduce travel time and increase the potential for riding, even for less experienced cyclists.

The following ratings were developed:

- + = access to destinations and other neighborhoods
- N = access to destinations or other neighborhoods
- = access to neither destinations or other neighborhoods.

ACCESS TO BUS ROUTES (5 PTS.)

It is important to place bike facilities in locations which encourage intermodal transportation. Locating bike facilities proximate to transit routes allows bicyclists to more easily access destinations that may not be reachable by bike. The availability of transit along bicycle facilities can help to reduce commute times by providing an alternative for roads without dedicated bike facilities. For these reasons, streets that cross multiple transit routes are preferable for new bike facilities.

The SMTTC developed the following measures for bus route connectivity:

+ = crosses multiple bus routes

N = follows/parallels bus route

– = no nearby bus routes.

QUALITY OF EXPERIENCE (5 PTS.)

Bike facilities should also be placed in locations which are safe and, if possible, visually engaging. Scenic amenities, such as parks, natural features, and historic structures encourage use, especially amongst recreational cyclists.

The following criteria were developed to assess quality of experience:

+ = scenic amenities along route

N = some scenic amenities along route

– = no scenic amenities along route.

III. DESIGN MEASURES

In addition to considering safety and connectivity, it is critical that new bike facilities are planned for locations that can physically accommodate them.

TOPOGRAPHY (10 PTS.)

The topography of bike routes dramatically affects their use, especially for bicyclists with lower confidence levels. Generally, bicyclists will avoid streets with major grade changes, as these can create challenging and dangerous conditions. As a result, level terrain or a moderate grade is preferred when planning for bike treatments.

The following grade criteria were developed:

+ = grades less than 3%

N = grades 3% - 6%

– = grades more than 6%.

It is generally preferable to create continuous bike routes that stretch the entire lengths of their respective streets. For this reason, streets which are otherwise suitable for bike routes should not be precluded from the network based on small portions with slightly higher than acceptable grades. However, very steep topography poses a greater challenge. For this reason, street blocks with particularly steep slopes (i.e. 15% or more) should not be considered for inclusion in a bike network.

DISTANCE FROM CENTER LINE TO CURB (10 PTS.)

Travel lane width is critical in site decisions for bike treatments, as the distance from center line to curb must be wide enough to accommodate both cars and bikes safely. Wider useable paved right of way allows for the coexistence of travel lanes, delineated shoulders, and bicycle lanes.

The SMTTC developed the following criteria for distance from center line to curb:

- + = distance is more than 15 feet
- N = distance is between 12 and 15 feet
- = distance is less than 12 feet.

These criteria assume that a bicycle needs approximately 4 feet of road width, and takes into account the city standard of 11 feet per travel lane for vehicular traffic.

PRESENCE OF PARKING LANES (5 PTS.)

Since parking is at a premium on the Hill, preference should be given to streets where bike treatments will not supplant existing parking supply. Streets with no existing parking lane should be prioritized for bike treatments. Streets with parking on one side (i.e. alternating or metered parking) generally provide sufficient room for the addition of bike lanes, but can be problematic because of a lack of consistency (the bicyclist would have an open lane on some days, and a lane full of cars on others). Streets with alternating parking or parking on both sides of the street should generally be avoided if adequate room is not available, as they create the potential for conflicts with cyclists.

The following criteria were developed for parking lanes:

- + = no parking lane
- N = alternating parking
- = parking on both sides of street.

ROAD DIETS

What is a Road Diet?

A “road diet” means converting a wide road into a narrow one, often by removing a travel lane in each direction. The remaining road width can be used for bike lanes, on-street parking, or sidewalks. In cities throughout the world, streets have been put on “road diets,” and these improvements have generated benefits for all modes of transportation: reduced vehicle speeds, improved mobility and access, better pedestrian and bike environments, reduced collisions and injuries, and improved livability.

Source: *Road Diet Handbook: Setting Trends for Livable Streets*, by Jennifer Rosales

ROAD DIET FEASIBILITY (10 BONUS PTS.)

Preference should be given to streets that have the capacity for a “road diet” (lane and width reduction) as well as other long-term capital enhancements, such as intersection treatments, traffic calming, and traffic diversion. These enhancements increase rider comfort, especially for those less-experienced cyclists. They also benefit pedestrians and property owners by slowing traffic down and enhancing the landscape.

The following criteria were developed to measure the feasibility of long-term traffic calming:

- + = travel lanes with over 40 feet and no alternate parking
- = either travel lane width under 40 feet or alternate parking.

5. PROPOSED BICYCLE NETWORK

The SMTC evaluated streets on University Hill for inclusion in the bike network in the summer of 2008. Parts of the evaluation were completed on location through site visits. SMTC staff also relied on data from the City of Syracuse and the NYSDOT.

Using the appropriateness measure matrix, the SMTC was able to rank each University Hill street and determine which were generally suitable for bike treatments. The complete matrix appears in Table B-2 in Appendix B. Any street scoring above 60 was considered suitable for bike treatments, and streets with particularly high scores were identified as highly suitable. The SMTC then compared the identified streets with the *Bicycle and Pedestrian Plan's* bike suitability ratings and input received during the public workshop (see Appendix A). Staff also used professional judgment to review the identified streets for practicality, particularly with regard to those critical measures – traffic volumes, connectivity, and topography – before the bike network was recommended. This meant that the highest scoring streets were not necessarily suggested for inclusion in the network.

Streets for consideration in the bike network are listed below and shown in Figure 5-1.

East-West Streets

- East Genesee Street
- Waverly Avenue
- Raynor Avenue
- Renwick Avenue
- Fineview Place

North-South Streets

- Irving Avenue
- Crouse Avenue
- University Avenue
- Comstock Avenue

The streets identified for inclusion in the University Hill Bike Network were designed to connect with the existing bicycle lanes in the primary study area. Likewise, streets were selected for their ability to provide connections to adjacent neighborhoods. In particular, treatments suggested for East Genesee Street, Renwick Avenue, and South Crouse Avenue should be continued as those streets leave the study area and provide access to other parts of the city.

I. GENERAL RECOMMENDATIONS

In addition to recommending bicycle treatments for specific streets in the study area, this study suggests several network-wide improvements. These include the following:

- Develop consistent Syracuse Bike Network signs for use across the city and install on proposed network streets;
- Develop a bike network map;
- Refresh all pavement markings within study area (e.g. centerlines, lanes, crosswalks) with a high quality road paint;
- Extend bicycle lane markings through intersections to clearly separate bicycle space from the path of motorized vehicles;
- Enforce parking restrictions in bike lanes;
- Require bike parking (e.g. lockers and racks) through city zoning;
- Increase enforcement of improper vehicle and traffic law violations;
- Institute school curricula for varying ages (including elementary and post-secondary students) on issues of bicycle and pedestrian safety (with potential funding through Safe Routes to School);
- Encourage employer based incentives for bike commuting;
- Encourage institutions to implement bicycle treatments similar to those recommended here. Public input suggests bike treatments on University Place, College Place, and Sims Drive on the Syracuse University and SUNY ESF campuses; and
- Implement various bicycle related recommendations from the SMTC's *Bicycle and Pedestrian Plan*.

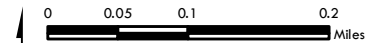
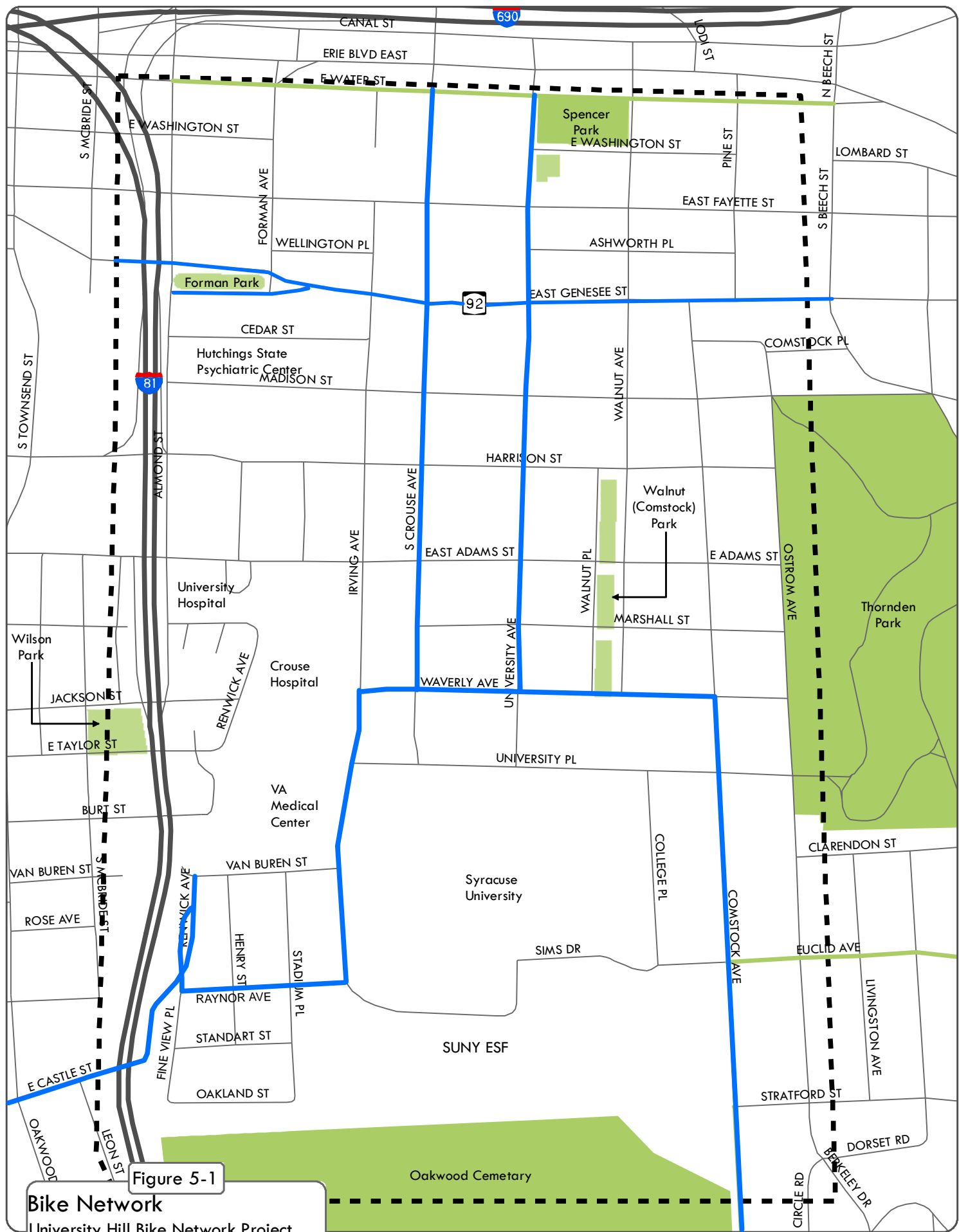
II. STREET-SPECIFIC RECOMMENDATIONS

Once the recommended network was identified, SMTC staff developed plans for particular street treatments. This planning was done with the input of the bicycling community, neighborhood groups, Syracuse's Engineering Department and the Department of Public Works.

The recommended street treatments range from the simple to the very complex. In order to facilitate a phased implementation, recommendations were grouped according to their level of complexity (Table 5-1). Level 1, Level 2, and Level 3 improvements should be completed in the short term. Level 4 and Level 5 treatments should be completed in the long term.

Further analysis and engineering may be necessary to determine the ultimate feasibility of some of the treatments suggested here. In particular, road diets are recommended as Level 5 treatments for several streets. These recommendations may require additional review of traffic operations before they are implemented. Additionally, the Special

Events Traffic Management Plan developed for events on Syracuse University campus should be taken into consideration prior to implementing any of the suggested street specific recommendations.



This map is for presentation purposes only.
The SMTC does not guarantee the accuracy or completeness of this map.

Basemap Copyrighted by NYSDOT
Data Sources: SMTC, NYSDOT, 2001
SOCPA, 2007
Prepared by SMTC, 09/2008



TABLE 5-1: IMPLEMENTATION PLAN

STREETS	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
Comstock Avenue	• bike network signage	• bike lane marking on both sides from Stratford to Waverly	• bike activation buttons at Comstock & Euclid • bike boxes and bike detection at Comstock & Euclid	• intersection painting at Comstock & Euclid	• road diet from Euclid to Waverly
East Genesee Street	• bike network signage	• bike lane markings on both sides from Almond to Beech (and east, as feasible)	• intersection treatments as part of Connective Corridor	• traffic calming as part of Connective Corridor	
Fineview Place	• bike network signage				
Irving Avenue	• bike network signage	• share-the-road markings on both sides from Waverly to Van Buren • on-street parking delineation			
Raynor Avenue	• bike network signage				
Renwick Avenue	• bike network signage	• bike lane markings on both sides from Van Buren to Leon (and west, as feasible)	• intersection treatments as part of Connective Corridor		
South Crouse Avenue	• bike network signage	• if one-way, northbound bike lane marking on east side from Waverly to Water (and north, as feasible) OR • if converted to two-way, bike lane markings on both sides from Waverly to Water (and north, as feasible)	• bike boxes and bike detection at Crouse & Genesee	• if one-way, contra-flow bike lane on west side separated by median or planting strip	
University Avenue	• bike network signage	• if one-way, southbound bike lane marking on west side from Water to Waverly			
Waverly Avenue	• bike network signage	• bike lane markings on both sides from Comstock to Irving		• landscaped median	• road diet from Comstock to Irving

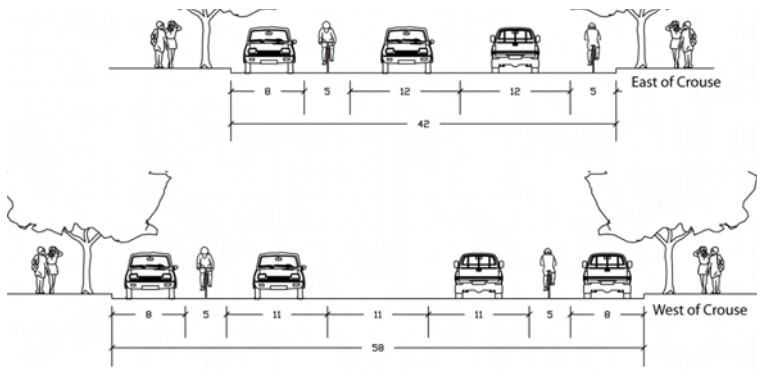
EAST GENESEE STREET

Preliminary conceptual designs indicate that, in the long term, major

streetscape and bike improvements will be made on East Genesee Street as part of the Connective Corridor. These designs should incorporate higher level facility treatments, such as road and lane reconstruction, to provide improved mobility for both bicyclists and pedestrians.

In the short term, it is recommended that eastbound and westbound bicycle lanes be installed on East Genesee Street throughout the entire primary study area. Striping should be used at the corner of East Genesee Street and South Crouse Avenue to

delineate the end of the parking zone. Bike boxes and detection should be added at the intersection with Crouse Avenue.



Proposed section for East Genesee Street with eastbound and westbound bike lanes.

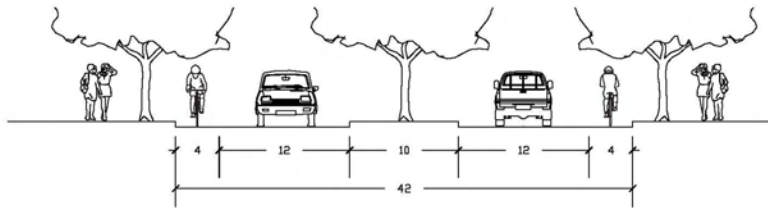
WAVERLY AVENUE

A road diet is recommended for Waverly Avenue between Irving and Comstock Avenues. It is recommended that the existing four-lane road be reduced to one-lane in either direction with a raised, planted median in the center. By reducing the number of travel lanes, space should be created for eastbound and westbound bicycle lanes. Where appropriate, left turn lanes should be installed at intersections to provide storage space for turning vehicles.

Preliminary analysis shows that the implementation of this recommendation should not negatively impact traffic operations in the morning and evening peak hours. Further engineering work is necessary prior to implementation.

RAYNOR AVENUE

It is recommended that the segment of Raynor Avenue between Irving Avenue and Fineview Place be developed as a share the road route. This share the road designation reflects the lack of space on Raynor Avenue for four foot bike lanes. Share the road signage should be installed along its length. This treatment, in coordination with treatments on Renwick Avenue and Fineview Place, should enhance connectivity to the south and west of the study area.



Waverly Avenue in its current condition (top) and as proposed with eastbound and westbound bike lanes and center median (middle and bottom).

RENWICK AVENUE

Northbound and southbound bicycle lanes are recommended on Renwick Avenue from Van Buren Street south to Castle Street.

FINEVIEW PLACE

Share the road signage should be installed on Fineview Place from Raynor Avenue to the intersection with Renwick Avenue, allowing this section to function as a share the road route.

IRVING AVENUE

It is recommended that Irving Avenue between Waverly and Raynor Avenues be developed as a share the road route. Again, this recommendation reflects the lack of sufficient road width for the installation of bike lanes. Share the road signage should be installed along the length of this segment. Bike boxes and bike detection are suggested at the intersection with Waverly Avenue.

SOUTH CROUSE / UNIVERSITY AVENUES

In 2007, the *University Hill Transportation Study* recommended that South Crouse and University Avenues be examined for conversion from one-way to two-way operation. This analysis is scheduled for completion in

March 2009. Depending on outcomes from the feasibility analysis, one of the three following options for Crouse and University Avenues should be implemented.

Option A, a long-term recommendation, assumes a conversion to two-way traffic on both South Crouse and University Avenues. Under this option, South Crouse becomes the major north-south bike artery through University Hill. Northbound and southbound bicycle lanes should be added to South Crouse Avenue from Waverly Avenue to Water Street, with the option of continuing north out of the study area. Bike boxes and bike detection should be added at the intersections with Harrison Avenue and Genesee Street. Parking on South Crouse could be retained on the west side only. No bicycle lanes are recommended for University Avenue.

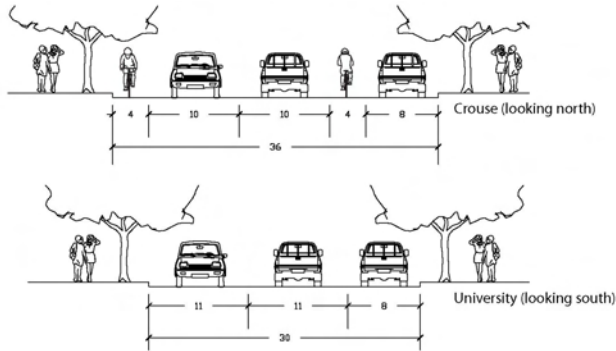
Option B, a long-term recommendation, assumes that one-way operation is maintained on South Crouse between Waverly Avenue and East Genesee Street. Under this option, a northbound bicycle lane is recommended on the east side of the road, along with a southbound contra-flow bicycle lane on the west side of the road. The contra-flow bicycle lane should allow bicyclists to travel the opposite direction of motor vehicle traffic on the one-way street, and be separated from vehicles by a curb or planting strip.³ To accommodate a contra-flow lane, parking on South Crouse should be limited to the east side only. No bicycle lanes are recommended for University Avenue under this option.

Lastly, Option C, a short-term recommendation, assumes that both South Crouse Avenue and University Avenue remain one-way. It is recommended that a northbound bicycle lane be installed on the east side of South Crouse Avenue from Waverly Avenue to the existing bike lane on Water Street. Additionally, it is recommended that the existing parallel parking on the west side of Crouse be converted to reverse diagonal parking in order to reduce the travel lane width and calm traffic. On University Avenue, it is recommended that a southbound bicycle lane be installed on the west side of the street from Water Street to Waverly Avenue.

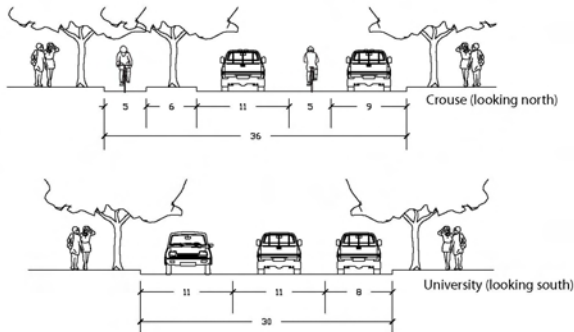
The preferred long-term recommendation is Option A. Assuming a conversion to two-way traffic, this option affords the highest degree of mobility, connectivity, and design flexibility. South Crouse Avenue is

³ <http://www.mtc.ca.gov/planning/bicyclespedestrians/tools/contrafLOW/index.htm>

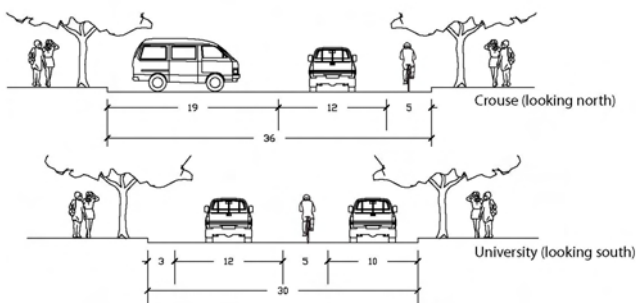
Option A



Option B

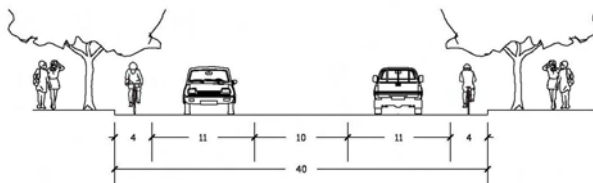


Option C



Crouse Avenue in its current condition (top); as proposed with two-way traffic and northbound and southbound bike lanes (Option A, middle); as proposed with one-way traffic and northbound and southbound bike lanes (Option B, middle); and as proposed with one-way traffic and northbound bike lane only (Option C, bottom).

currently 36 feet wide and can accommodate two travel lanes, two bicycle lanes, and a parking lane. When implementing this option, parking should be transferred to a single side only. The west side is preferable since it allows a better lane transition with the intersection with East Genesee Street. In the long term, the designs for South Crouse and University Avenues must be completed in collaboration with the Connective Corridor project, which will consider streetscape and bike improvements on South Crouse and/or University Avenues.



Comstock Avenue in its current condition (top) and as proposed with road diet, bike lanes, and center turn lane (middle and bottom).

COMSTOCK AVENUE

In the short term, it is recommended that the existing bicycle lane on Comstock Avenue be extended from Stratford Street to Euclid Avenue. The shoulders of Comstock Avenue are currently striped in this area; however, appropriate pavement markings and signage should be added.

In the long term, a road diet is recommended for Comstock Avenue between Euclid and Waverly Avenues. This particular segment of Comstock Avenue is presently 40 feet from curb to curb with two travel lanes in either direction. By reducing the number of travel lanes from four to two, space can be created for both northbound and southbound bicycle lanes. Further engineering work is necessary prior to implementation.

Public input received during the first public workshop indicated that the intersection of Comstock Avenue and Euclid Avenue is perceived as a trouble spot for bicyclists. Therefore, to provide additional and enhanced bicycle mobility, it is recommended that bike boxes and bike detection, inlaid in the pavement, be installed at the east and west approaches of Euclid Avenue. Bike activation buttons are suggested at all approaches.

APPENDIX A

PUBLIC INVOLVEMENT

I. Introduction

Engaging the public early and often in the planning process is critical to the success of any transportation plan or program, and is required by numerous state and federal laws. Such legislation underscores the need for public involvement, calling on Metropolitan Planning Organizations (MPO) such as the Syracuse Metropolitan Transportation Council (SMTC) to provide citizens, affected public agencies, businesses, local government, and other interested parties with a reasonable opportunity to comment on transportation plans and programs.

While public participation is mandated, it is also practical. No one organization has a monopoly on good ideas – they often germinate through an open exchange of information. It is the SMTC’s intention to promote the shared obligation of the public and decision makers to define the goals and objectives of the **University Hill Bicycle Network Project**, to develop alternatives, and to evaluate the alternatives.

This Public Involvement Plan (PIP) was created under the SMTC’s umbrella Public Participation Plan (PPP), which can be found at the SMTC website, www.smtcmpo.org.

II. Goals

The intent of the Public Involvement Plan (PIP) for the **University Hill Bicycle Network Project** is to:

- (1) Create public awareness relative to the study’s goals, objectives, and process, as well as publicize the public participation opportunities and activities available throughout the study; and
- (2) Involve the public throughout the planning process.

III. Formation of Study Advisory Committee and Interested Stakeholder Group

The PIP includes the formation of two groups to assist the SMTC in the study effort: a Study Advisory Committee (SAC) and a stakeholders group. Selected representatives from the following affected agencies will be invited to participate in this study as SAC members:

- BikeCNY
- Central New York Regional Planning and Development Board (CNYRPDB)
- Central New York Regional Transportation Authority (CNYRTA)
- City of Syracuse
- Metropolitan Development Association
- New York State Department of Transportation (NYSDOT)
- Onondaga County Department of Transportation (OCDOT)
- Syracuse Onondaga County Planning Agency (SOCPA)

- Syracuse University
- University Hill Corporation

The SAC will meet regularly with the SMTC to assist in managing the project. The SAC's role will be to advise the SMTC on the technical content of deliverables and to provide needed input and guidance throughout the project.

It is anticipated that a minimum of four SAC meetings will be held throughout the course of the study. Securing a meeting location (facility), announcing the SAC meetings through mailings, running the SAC meetings (including preparation of agenda, materials, presentations, etc.), and preparing the minutes from each meeting will be the responsibility of the SMTC.

In addition to the SAC, a list of interested stakeholders (a broader group of interested individuals with significant relations and interest in the study area) will be maintained by the SMTC. The stakeholders list for this study will begin with those individuals on the stakeholders list from the SMTC's University Hill Transportation Study. Additional stakeholders will be added based on input from the SAC. The stakeholders will be sent pertinent study information, kept apprised of significant study developments, notified of all public meetings, and encouraged to provide feedback and comment regarding the **University Hill Bicycle Network Project**. If during the course of the study it seems warranted, a "stakeholder workshop" may be held separately to further assist the study in gathering and processing public input.

The SMTC and project sponsors will determine initial representation on the SAC and the stakeholders group. However, the SMTC will actively seek input at its "kick-off meeting" and throughout the course of the study regarding additional individuals who could participate in this planning activity and provide valuable input and perspective.

IV. Meetings and Public Comment

The SMTC will hold public involvement meetings/workshops at specific stages during the study. Securing a meeting location (facility), promoting the event through flyers, mailings and press releases, presenting the public meetings (including preparation of agenda, materials, presentations, etc.) and preparing the minutes of each meeting will be the responsibility of the SMTC.

The first public meeting will provide the opportunity to formally present the study to the public, review an inventory of existing conditions data, and obtain public comment on the concept of developing a bicycle network within the study area. The first public meeting will be held after the data gathering and existing conditions analyses have been completed and approved by the SAC. The input/comments received at the first public meeting will be incorporated into the Final Report prior to SAC approval of that document.

The second public meeting will take place after the SMTC and the SAC have developed a list of potential alternatives that adequately address the appropriateness measures (traffic volumes, parking regulations/restrictions, etc.) for potential bicycle lanes or other similar treatments, and completed a preliminary evaluation of alternatives (i.e., possibilities of where the bicycle network could be located). The preliminary recommendations from the SAC will be presented and the public will be invited to provide input on these recommendations. Input from the community will be considered in the final evaluation of alternatives, which will be completed by the SMTC staff and the SAC following the second public meeting.

A third public meeting may also be held to share the results of the entire study. This meeting would take place prior to SMTC Committee approval of the final document. The recommendations could then be modified in response to public input if warranted.

If, during the course of this study, the SAC feels that additional public meetings are warranted (for example, an initial public meeting to introduce the project to the public, or separate meetings to present the existing conditions data and to receive input on study area concerns) the SMTC is prepared to accommodate this need.

Note: All meetings (SAC and public) will be held in a handicapped accessible facility in compliance with the Americans with Disabilities Act. The SMTC will make every effort to respond to those who need a sign language interpreter, assistive learning system, or any other accommodations to facilitate the public's participation in the transportation planning process.

To further increase its outreach to the public, the SMTC will be initiating and conducting a variety of public involvement activities including distribution of study materials at locations within study area. If deemed necessary (at the discretion of the SAC and/or other appropriate SMTC committees), the SMTC may distribute miscellaneous study-specific information at sites within the study area. This information may include one or more of the following: introductory flyer, meeting notice, comment card, and/or a pre-addressed survey on a particular study issue. It is also the SMTC's intent to work with and encourage other agencies to include this information in their publications or to assist in material distribution.

All individuals (especially those who are not able to attend the public meetings or participate in direct contact with the SMTC staff) are encouraged to submit comments to the SMTC at any time. This message will be publicized and made clear throughout the study's project schedule, verbally, and on all study material and publications. The public is also welcome to attend any of the publicized SMTC Executive, Planning and Policy Committee meetings in which the **University Hill Bicycle Network Project** may be on the agenda as a discussion item.

V. Press Releases/Media Coverage

The SMTC will issue news releases (announcing the details of all public meetings) to all major and minor newspapers, television stations, and radio in advance. If necessary, the SMTC will also send additional news releases, or take the initiative to promote media coverage on pertinent developments pertaining to the **University Hill Bicycle Network Project**.

If possible, all media inquiries should be directed to the SMTC staff director or project manager. However, this is not always possible. If you (e.g. SMTC committee members, SAC members, and/or interested stakeholders associated with the study) are interviewed by the media, please limit your comments to your respective agency's/organization's opinion or involvement in the study. Speaking to the media on specific issues and questions regarding the **University Hill Bicycle Network Project**, such as study progress and development, is the exclusive responsibility of the SMTC.

VI. SMTC Publications

The SMTC publishes a newsletter, DIRECTIONS, that offers news about its activities and particular studies. This newsletter is distributed to nearly 3,000 individuals, some of whom include the media; local, state, and federal agencies associated with the SMTC; municipal and elected officials; community agencies and representatives; and a large number of interested citizens. It is anticipated that articles on the **University Hill Bicycle Network Project** (e.g. study development issues or the announcement or coverage of a public meeting) will be published in subsequent issues of DIRECTIONS. Should the need arise for the production of a separate newsletter/flyer/report to convey a timely study development the SMTC staff is prepared to perform this additional task. It is also important to note that the mailing list of the SMTC newsletter, DIRECTIONS, will be updated to include all members of the SAC, stakeholders, and others interested or involved in the **University Hill Bicycle Network Project**.

VII. Miscellaneous Public Involvement Efforts

To further its public involvement efforts, the SMTC will be asking the SAC members and interested stakeholders to assist them in better notifying citizens and community groups living and/or working in the study area about the public meetings and the study in general. Such a request is imperative in order to get the "grassroots community" involved. By helping to distribute flyers/announcements and speaking to the members of the community about the **University Hill Bicycle Network Project**, the SAC and interested stakeholders will serve to further promote public involvement in areas (and to individuals) that were not reached through the standard outreach methods.

Meeting notices and study-specific material previously mentioned may also be posted at libraries, local stores, shopping centers, and/or businesses.

Approved documents, such as the study's Final Report, may be made available at libraries in the vicinity of the study area. News releases will be produced to announce the availability of such items, and the SMTC invites written comments at any time.

The SMTC web site [www.smtcmpo.org] will also serve as a resource for general information about the SMTC, the **University Hill Bicycle Network Project**, and any final approved reports.

If a certain need arises to get public perception/opinion on a particular topic/issue, surveys may be used at one or more of the public meetings.

Additionally, the Bicycle Network Project will include various types of visualization techniques to aid the study. Examples of such techniques include mapping, aerial photographs, traffic simulation graphics, and pictures of the study area.

VIII. Conclusion

It is important for the SMTC to understand public attitudes and values throughout the **University Hill Bicycle Network Project**, as well as to solicit input from affected citizens and community representatives. Through the activities described in this Public Involvement Plan, the SMTC will solicit public input and provide opportunities for the public to develop greater awareness of and active involvement in the project. In such a study that pays particular attention to preserving and enhancing the pedestrian, bicycle, and transit-oriented nature of the surrounding neighborhoods, such involvement is paramount.

university hill bike network project

In the past several years, the City of Syracuse has embarked on an effort to improve the experience of bicyclists on city streets. As part of this effort, and as an outgrowth of the SMTC's University Hill Transportation Study, the city has recently begun to plan and develop a bike network – a series of connected bike lanes, facilities, and bike and pedestrian-friendly street improvements – for the University Hill area. The city has asked the SMTC to lead this effort, the University Hill Bike Network Project, which is just underway.

As a stakeholder in the study area, your input is critical to the success of this project. Look for mailings and flyers that announce upcoming project meetings and workshops. These meetings will give you opportunities to voice your opinions on proposed bike routes, traffic calming ideas, bicycle and pedestrian amenities, and the future of your neighborhood.


Please help us get the word out by sharing this flyer with your friends, colleagues, and neighbors!

How can University Hill work better
for bicyclists?



We need your input! Get involved!

For more information, contact Danielle Krol or Mario Colone at the SMTC:

 **SMTC** Phone: 315.422.5716 | Email: dkrol@smtcmpo.org or mcolone@smtcmpo.org | Mail: 126 N. Salina Street, Syracuse, NY 13202

The Syracuse Metropolitan Transportation Council (SMTC) is a state-designated metropolitan planning organization (MPO), responsible for administering the continuous and comprehensive transportation planning process in Onondaga County and small portions of Madison and Oswego Counties.

SMTC U HILL BIKE NETWORK SAC

November 12, 2008

Contact Person :	Mr. Dennis Brogan	Position:	Director of Public Affairs
Organization:	City of Syracuse	Department:	Mayor's Neighborhood Service Bureau
Address:	225 City Hall		
City, State, Zip:	Syracuse NY 13202		
Work Phone:	(315)448-8017	X:	Work Fax #: 800 #:
Home Phone:		Home Fax:	Cell Phone:
E-Mail:	dbrogan@ci.syracuse.ny.us		
Contact Person :	Mr. Mario Colone	Position:	Senior Transportation Planner
Organization:	Syracuse Metropolitan Transportation Council	Department:	
Address:	100 Clinton Square 126 N. Salina St.		Suite 100
City, State, Zip:	Syracuse NY 13202		
Work Phone:	(315)422-5716	X:	Work Fax #: (315)422-7753 800 #:
Home Phone:		Home Fax:	Cell Phone:
E-Mail:	mcolone@smtcmpo.org		
Contact Person :	Ms. Megan Costa	Position:	Planner
Organization:	Syracuse-Onondaga County Planning Agency	Department:	
Address:	1100 John H. Mulroy Civic Center 421 Montgomery St.		
City, State, Zip:	Syracuse NY 13202		
Work Phone:	(315)435-8571	X:	Work Fax #: (315)422-7753 800 #:
Home Phone:		Home Fax:	Cell Phone:
E-Mail:	MeganCosta@ongov.net.		
Contact Person :	Mr. Dustin Czarny	Position:	
Organization:	City of Syracuse	Department:	Department of Public Works
Address:	1200 Canal St. Extension		
City, State, Zip:	Syracuse NY 13210		
Work Phone:	(315)448-8560	X:	Work Fax #: 800 #:
Home Phone:	(315) 283-4378	Home Fax:	Cell Phone:
E-Mail:	dczarny@ci.syracuse.ny.us		
Contact Person :	Mr. James D'Agostino	Position:	Director
Organization:	Syracuse Metropolitan Transportation Council	Department:	
Address:	100 Clinton Square 126 N Salina Street		Suite 100
City, State, Zip:	Syracuse NY 13202		
Work Phone:	(315)422-5716	X:	Work Fax #: (315)422-7753 800 #:
Home Phone:		Home Fax:	Cell Phone:
E-Mail:	dagostino@smtcmpo.org		
Contact Person :	Ms. Nell Donaldson	Position:	Transportation Planner
Organization:	Syracuse Metropolitan Transportation Council	Department:	
Address:	126 N. Salina St. Suite 100		
City, State, Zip:	Syracuse NY 13202		
Work Phone:	(315)422-5716	X:	Work Fax #: (315)422-7753 800 #:
Home Phone:		Home Fax:	Cell Phone:
E-Mail:	ndonaldson@smtcmpo.org		

SMTC U HILL BIKE NETWORK SAC

November 12, 2008

Contact Person :	Mr. Dave Fehringer	Position:	
Organization:	NYS Department of Transportation	Department:	
Address:	333 E. Washington St.		
City, State, Zip:	Syracuse NY 13202		
Work Phone:	X: Work Fax #:	800 #:	
Home Phone:	Home Fax:	Cell Phone:	
E-Mail:	dfehringer@dot.state.ny.us		
Contact Person :	Ms. Marilyn Higgins	Position:	Vice President
Organization:	Syracuse University	Department:	Community Engagement & Economic Impact
Address:	The Warehouse 350 West Fayette St.		
City, State, Zip:	Syracuse NY 13244 3050		
Work Phone:	(315)443-8052 X: Work Fax #: (315)443-6153	800 #:	
Home Phone:	Home Fax:	Cell Phone:	
E-Mail:	mrhigg01@syr.edu		
Contact Person :	Ms. Danielle B. Krol	Position:	Senior Transportation Planner
Organization:	Syracuse Metropolitan Transportation Council	Department:	
Address:	100 Clinton Square 126 North Salina Street Suite 100		
City, State, Zip:	Syracuse NY 13202		
Work Phone:	(315)422-5716 X: Work Fax #: (315)422-7753	800 #:	
Home Phone:	Home Fax:	Cell Phone:	
E-Mail:	dkrol@smtcmpo.org		
Contact Person :	Mr. Rich Landerkin	Position:	Director of Planning
Organization:	Central New York Regional Transportation Authority	Department:	
Address:	200 Cortland Ave P.O. Box 820		
City, State, Zip:	Syracuse NY 13205		
Work Phone:	(315)442-3381 X: Work Fax #: (315)442-3337	800 #:	
Home Phone:	Home Fax:	Cell Phone:	
E-Mail:	rjlanderkin@centro.org		
Contact Person :	Mr. David Mankiewicz	Position:	Senior Vice President
Organization:	Metropolitan Development Association	Department:	University Hill Corporation
Address:	736 Irving Avenue		
City, State, Zip:	Syracuse NY 13210		
Work Phone:	(315)475-7244 X: Work Fax #: (315)471-4503	800 #:	
Home Phone:	Home Fax:	Cell Phone:	
E-Mail:	dmankiewicz@mda-cny.com		
Contact Person :	Mr. Andrew M. Maxwell MPA, APA	Position:	Neighborhood Planner
Organization:	City of Syracuse	Department:	Department of Community Development
Address:	201 E. Washington St. Suite 412		
City, State, Zip:	Syracuse NY 13202		
Work Phone:	(315)448-4750 X: Work Fax #: (315)448-8720	800 #:	
Home Phone:	Home Fax:	Cell Phone:	
E-Mail:	amaxwell@cdsyracuse.com		

SMTC U HILL BIKE NETWORK SAC

November 12, 2008

Contact Person :	Mr. Paul Salvatore Mercurio	Position:	Transportation Planner
Organization:	SMTC	Department:	
Address:	126 N. Salina St. Suite 100		
City, State, Zip:	Syracuse NY 13202		
Work Phone:	(315)422-5716	X:	Work Fax #: (315)422-7753
Home Phone:			Home Fax:
E-Mail:	pmercurio@smtcmpo.org	800 #:	
		Cell Phone:	
Contact Person :	Mr. Wayne Miner	Position:	
Organization:	Onondaga Cycling Club	Department:	
Address:	852 Westmoreland Ave.		
City, State, Zip:	Syracuse NY 13210		
Work Phone:	(315)569-9880	X:	Work Fax #:
Home Phone:			Home Fax:
E-Mail:	wayne.miner@gmail.com	800 #:	
		Cell Phone:	
Contact Person :	Mr. Pete O'Connor	Position:	Deputy Commissioner
Organization:	City of Syracuse	Department:	Department of Public Works
Address:	1200 Canal Street Extension		
City, State, Zip:	Syracuse NY 13210		
Work Phone:	(315)448-8576	X:	Work Fax #: (315)448-8531
Home Phone:	(315) 455-6161		Home Fax:
E-Mail:	PO'Connor@ci.syracuse.ny.us	800 #:	
		Cell Phone:	
Contact Person :	Mr. Eric Persons	Position:	Director of Engagement Initiatives
Organization:	Syracuse University	Department:	Office of Engagement Initiatives
Address:	Crouse Hinds Hall, Suite 400 900 South Crouse Ave.		
City, State, Zip:	Syracuse NY 13244		
Work Phone:	(315)443-4137	X:	Work Fax #:
Home Phone:			Home Fax:
E-Mail:	edperson@syr.edu	800 #:	
		Cell Phone:	
Contact Person :	Mr. Christopher Rauber	Position:	Civil Engineer
Organization:	City of Syracuse	Department:	Department of Engineering
Address:	401 City Hall		
City, State, Zip:	Syracuse NY 13202		
Work Phone:	(315)448-8219	X:	Work Fax #: (315)448-8488
Home Phone:			Home Fax:
E-Mail:	crauber@ci.syracuse.ny.us	800 #:	
		Cell Phone:	
Contact Person :	Mr. Steve Reiter	Position:	
Organization:	BikeCNY	Department:	
Address:	412 Kensington Road		
City, State, Zip:	Syracuse NY 13210		
Work Phone:	(315)472-0504	X:	Work Fax #:
Home Phone:	(315) 479-6827		Home Fax:
E-Mail:	coach@stevereiter.com	800 #:	8888328421
		Cell Phone:	

SMTC U HILL BIKE NETWORK SAC

November 12, 2008

Contact Person :	Ms. Mary Robison P.E.	Position:	City Engineer
Organization:	City of Syracuse	Department:	Department of Engineering
Address:	401 City Hall		233 Washington Street
City, State, Zip:	Syracuse NY 13202		
Work Phone:	(315)448-8214	X:	Work Fax #: (315)448-8488
Home Phone:		Home Fax:	
E-Mail:	mrobison@ci.syracuse.ny.us	800 #:	
		Cell Phone:	
Contact Person :	Ms. Beth Rougeux	Position:	Assistant Vice President
Organization:	Syracuse University	Department:	Office of Government & Community Relations
Address:	2-212 Center for Science & Technology		
City, State, Zip:	Syracuse NY 13244 4100		
Work Phone:	(315)443-3919	X:	Work Fax #: (315)443-3676
Home Phone:		Home Fax:	
E-Mail:	earougeu@syr.edu	800 #:	
		Cell Phone:	
Contact Person :	Mr. Jeff Sterly	Position:	
Organization:	Region 3	Department:	
Address:	New York State Department of Transportation		333 E. Washington St.
City, State, Zip:	Syracuse NY 13202		
Work Phone:		X:	Work Fax #:
Home Phone:		Home Fax:	
E-Mail:	N/A	800 #:	
		Cell Phone:	

A G E N D A
UNIVERSITY HILL BICYCLE NETWORK PROJECT
Kickoff SAC Meeting
October 26, 2007 10:00 AM

1. Introductions
2. Review Final Scope of Work
3. Discuss Problem Statement, Goals, Objectives
4. Review Public Involvement Plan
 - SAC List
 - 1st Public Meeting
 - Potential Workshop(s)
5. Discuss Study Area Boundaries
6. Discuss Data Collection & Appropriateness Measures
 - Accidents
 - Parking
 - Role of walking/pedestrian data, etc. in this study?
 - What can the City provide?
 - Other important items?
7. Discuss Hiring of Consultant
8. Review Tentative Schedule
9. Next Meeting?
10. Adjourn



UNIVERSITY HILL BIKE NETWORK PROJECT

PROBLEM STATEMENT, GOALS, & OBJECTIVES

PROBLEM STATEMENT (reason for study)

The City of Syracuse approached the SMTC to assist in addressing the lack of a dedicated bicycle network in the heavily traveled and populated University Hill area. The City of Syracuse has recently completed bike lanes/share the road corridors on surrounding streets leading to this project's targeted location. In addition, the on-going University Hill Transportation Study recommends further examination of a bicycle network in this area. As a result, the City of Syracuse is looking for a practical network of bicycle facilities to be developed in the University Hill area.

GOALS (overall intent or purpose)

The purpose of this project is to identify a proposed bicycle network within the University Hill area of the City of Syracuse which:

- Uses existing urban roadways to provide an appropriate and practical hybrid of recommended bicycle lanes, shared roadways, and/or traffic calming.
- Ties to existing bicycle routes; enhances connectivity to the ongoing Connective Corridor Project, the Canalway Trail, and Creekwalk; and allows for this alternative form of transportation to reach key destinations.

OBJECTIVES (specific actions & results expected -- i.e. public involvement, work products)

The study will:

- Compile relevant existing transportation data/and or complete a conditions inventory in the University Hill area, and analyze this information within the final document.
- Develop rating criteria/appropriateness measures (including measures of connectivity) for evaluating the street network in the study area for potential bike facilities.
- Assess the appropriateness of road segments within the study area for inclusion in a bicycle network (network assessment).
- Develop a recommended bicycle network (with potential alternative street options outlined in a phased approach) that the City of Syracuse can implement once the project is complete.
- Examine/evaluate the types of treatments (i.e., signage, bike lane markings/stripings, parking, etc.) that would be most appropriate for each street within the recommended bicycle network.
- Develop an implementation plan for the proposed bicycle network.
- Incorporate the input of stakeholders through public meetings and stakeholder meetings/workshops throughout the process.



UNIVERSITY HILL BIKE NETWORK PROJECT

MEETING MINUTES

October 26, 2007, SMTC

INTRODUCTION

Members of the University Hill Bike Network Study Advisory Committee (SAC) met on Friday, October 26th to discuss project startup. The following SAC members were in attendance:

- Dave Fehringer, Jeff Sterly, New York State Department of Transportation (NYSDOT)
- Paul Mercurio, Andy Maxwell, City of Syracuse Department of Community Development
- Pete O'Connor, City of Syracuse Department of Public Works
- Dennis Brogan, City of Syracuse Mayor's Neighborhood Service Bureau
- Steve Reiter, Bike CNY
- Mary Robison, City of Syracuse Department of Engineering
- Beth Rougeux, Syracuse University Office of Government and Community Relations
- Danielle Krol, James D'Agostino, Mario Colone, Nell Donaldson, Syracuse Metropolitan Transportation Council (SMTC)

SCOPE OF WORK

Ms. Danielle Krol, the SMTC's project manager, reviewed the project scope of work with committee members. She emphasized that the goal of the project is to develop a plan for bike treatments in the University Hill area *that can be implemented immediately* once complete. Large scale recommendations will be welcomed and might constitute Phase II or Phase III of this plan, but would not be immediately implemented. Mr. James D'Agostino added that the SMTC is planning to bring on a consultant at two points during the project – the beginning (to assist with the outset of the project) and at the end (to review the SAC-agreed upon final bicycle network recommendations).

PROBLEM STATEMENT, GOALS, AND OBJECTIVES

Ms. Krol reviewed a draft of the project's problem statement, goals, and objectives. She asked for comments from the committee by 11/9/2007.

Mr. Steve Reiter asked how the goal of connecting bicycle routes with key destinations outside of the study area (e.g. the Creekwalk) would be accommodated. It was noted that the overarching aim of the project is to complete a network within the University Hill area, because this is where most of the city's bikers currently are. Extension of this network to key destinations outside of the study area could be the aim of subsequent projects. However, because this network should eventually facilitate those subsequent projects, it will consider the potential for connection to key outside destinations as part of its criteria for route selection. It was noted that the project can be thought of as a 'base plan,' whose guidelines and concepts will eventually be applied, as/where appropriate, in other parts of the city.

PUBLIC INVOLVEMENT PLAN (PIP)

Ms. Krol reviewed key elements of the PIP for the University Hill Bike Network Project:

- SAC: Ms. Krol advised the committee that there would be a minimum of four SAC meetings over the course of the project. It was suggested that a representative for the Connective

Corridor project be added to the committee. Eric Persons, Syracuse University's project manager for the corridor, was recommended.

- *Stakeholder Groups:* Ms. Krol noted that there will be contact with key stakeholders throughout the project, and that the stakeholder list from the SMTC's University Hill Transportation Study would be used as a starting point for this project. Members of the SAC suggested adding groups, including SU student organizations and university area hospitals. As a way of identifying these groups, Mr. D'Agostino suggested that the SMTC distribute the stakeholder list to the SAC, and that the SAC provide the names of any additional people who should be included. It was also suggested that key institutional stakeholders, like the hospitals, might be included through a separate focus group.
- *Public Meetings:* Ms. Krol noted that a public meeting is proposed following the completion of the existing conditions report, and asked committee members to comment on the timing of this meeting. She noted that a public meeting could be held within the next two months, solely to introduce this project to the public; but also cautioned the SAC that it would likely be best to wait until there is something substantive to share with the public. SAC members agreed that the first public meeting be held after the completion of the existing conditions report as well as the University Hill Transportation Study, so as to not develop recommendations that conflict with that nearly-completed study. SAC members also emphasized that it would be important to schedule public meetings when school is in session. Mr. D'Agostino suggested that a flyer could be distributed to the public to introduce the project in the meantime.
- *Focus Group Workshop:* Ms. Krol noted that it might be helpful to hold a focus group workshop with key stakeholders after the first public meeting to begin to identify proposed bike routes.

Ms. Krol asked for comments on the PIP by 11/9/2007.

STUDY AREA BOUNDARIES

Ms. Krol reviewed the boundaries for the study area: Water Street to the north, Ostrom Avenue to the east, Stratford Street to the south, and Almond Street to the west. Concern was raised about the omission of residential areas to the south and east, where most of the SU, ESF, and Upstate Medical College students currently live. Ms. Beth Rougeux noted that the residents in these areas would likely push to be included in the study area, and that more logical boundaries might extend to Westcott Street to the east and Colvin Street to the south (thereby including the Westcott Street commercial district).

Mr. Pete O'Connor pointed out that there are already bike lanes serving as 'main connectors' in the areas east and south of the proposed boundaries. Further, committee members noted that many of the residential streets in these neighborhoods are already safe for cycling and would probably not be candidates for bicycle treatments. It was also noted that the bike network planning process put forth during this study could be duplicated in other neighborhoods after the completion of this project (e.g., in Outer Comstock and the WENA, SEUNA areas).

As a compromise, it was suggested that the boundaries be kept in their current configuration but that the outlying neighborhoods be identified as a 'secondary study area'. It would be noted in the plan that this secondary study area serves as a main generator for bike traffic on University Hill.

Questions were also raised as to the treatment of streets which have been recommended for reconfiguration in the University Hill Transportation Study (to be acknowledged in late November). It was decided that the road network should be examined 'as is,' and that no recommended improvements, aside from those with dedicated TIP funds (i.e. the Genesee St. portion of the Connective Corridor), should be assumed. Phase II or III projects recommended in the bike network plan could take proposed improvements into account.

DATA COLLECTION

Ms. Krol briefly reviewed data collection efforts to date and noted that several issues had yet to be resolved. She presented the SAC with a draft set of appropriateness measures to be used for assessing the bicycle suitability of road segments. These served as talking points for the data collection discussion. The following issues were discussed:

- *Accidents:* Mr. Mario Colone briefly reviewed the accident data, highlighting several key problems with the available data sets. Given these inadequacies, Ms. Krol asked the SAC for direction on how to treat accidents. It was suggested that the SMTC use the accident data that is available (i.e. the complete 2001-2003 data set [reportables and non-reportables with some missing location markers] and the incomplete 2004-2006 data set [reportables only with some missing location markers]) and add a disclaimer. It was agreed that bicycle, pedestrian, and vehicular accident data should all be considered.
- *Parking:* Questions were also raised about collecting data on University Hill parking. It was noted that a city study, recently completed by C&S, includes some current data on parking in the area. Ms. Krol also noted that parking information gathered for the University Hill Transportation Study could be updated and used in this study should the data from the C&S study not be sufficiently detailed.
- *Pedestrian Environment:* Ms. Krol inquired as to the level of detail at which the SAC wanted to see data collected regarding the pedestrian environment and how this should be used for bicycle network determination. It was suggested that data on the *quality* of the pedestrian environment be used in evaluating proposed bike routes. However, because this data is potentially cumbersome to collect, it was recommended that it be used as a secondary measure of suitability (i.e. proposed routes will be checked for the quality of the pedestrian environment after meeting the primary criteria). It was also suggested that potential bike routes should not be eliminated based solely on the quality of the pedestrian environment, as streetscape improvements could serve as second phase projects in this plan.
- *Curb Cuts:* It was also suggested that driveways and curb cuts be included in the data collection and appropriateness measures.
- *SU Street Network:* Additionally, there was some discussion regarding the existence of closed roads through the SU campus that currently serve bike and pedestrian traffic, but not vehicular traffic. As for the classification and jurisdiction of these streets, it was suggested that further research be conducted.

Ms. Krol requested that Mr. Reiter take the draft appropriateness measures to Bike CNY and collect additional suggestions from that group.

CONSULTANT ASSISTANCE

Ms. Krol noted that this is the first specific bicycle lane project that the SMTC will complete. To that end, she stated that when the SMTC and City held their first discussions relative to this project, the SMTC

indicated that it would be appropriate to bring a consultant in towards the end of the project to review the SMTC's work and resulting proposed bicycle network. The City was in favor of this. The SMTC is also suggesting bringing on a consultant at the outset of the project to assist with the appropriateness measures/data collection and start-up portion of this study. Essentially the consultant would provide an advisory role to the SMTC. The SAC agreed that a consultant would be beneficial at both points during this project.

Ms. Krol noted that the SMTC would develop and mail a RFP for consultant assistance.

SCHEDULE & NEXT STEPS

Ms. Krol distributed a draft schedule for the project and stated that the SMTC would update the schedule regularly based on study progress as well as suggestions of the SAC. The next SAC meeting will be used to talk about existing conditions and preparations for the public meeting.

ACTION ITEMS

- City & SMTC to gather relevant data
- SMTC to ask Eric Persons to serve on SAC
- SMTC to distribute the stakeholder list to the SAC electronically, SAC to review and add names, as necessary
- SMTC to develop project introductory flyer (to be reviewed by SAC prior to distribution)
- City engineering to research ownership/public access agreement(s) relative to SU street network
- Bike CNY to review draft appropriateness measures and comment
- SMTC to develop/mail RFP for consultant assistance
- All to review Problem Statement, Goals, and Objectives and PIP and comment by 11/9/2007.

A G E N D A
UNIVERSITY HILL BICYCLE NETWORK PROJECT
SAC Meeting #2
May 15, 2008 2:00 PM

1. Introductions
2. Discuss Draft Document to date (text and mapping)
3. Appropriateness Measures
 - Consultant Assistance
 - Matrix
4. Public Workshop
 - Review Draft PowerPoint presentation
 - Meeting style
 - Flyer
5. Next Meeting?
6. Adjourn



UNIVERSITY HILL BIKE NETWORK PROJECT

MEETING MINUTES

May 15, 2008, SMTC

INTRODUCTION

Members of the University Hill Bike Network Study Advisory Committee (SAC) met on Thursday, May 15th to discuss project activities. The following SAC members were in attendance:

- Dave Fehringer, New York State Department of Transportation (NYSDOT)
- Pete O'Connor, City of Syracuse Department of Public Works
- Dustin Czarny, City of Syracuse Department of Public Works
- Chris Rauber, City of Syracuse Engineering Department
- Rich Landerkin, Centro
- Beth Rougeux, Syracuse University Office of Government and Community Relations
- Eric Persons, Syracuse University Community Engagement and Economic Development
- Steve Reiter, Bike CNY!
- Wayne Miner, Onondaga Cycling Club
- James D'Agostino, Mario Colone, Nell Donaldson, Syracuse Metropolitan Transportation Council (SMTC)

The meeting commenced at 2:05 PM with introductions.

DRAFT DOCUMENT AND MAPPING

Mario Colone, the SMTC's project manager, reviewed the agenda with committee members. He asked if any of the members had comments relative to the draft document or maps. Beth Rougeux provided several comments. Ms. Rougeux also provided information on several streets that are found on the main University campus. College Place, University Place, portions of South Crouse Avenue and Euclid Avenue are owned by Syracuse University, with the City retaining some utility rights. Discussion ensued to using federal funds on campus if the street network is not fully open to the public. Both Ms. Rougeux and Eric Persons stated that the University would be interested to implementing some bike treatments if recommended through this project. Rick Landerkin asked why Sky Top was not included in the study area. Mr. Colone mentioned that this was discussed during the first SAC meeting and that the group agreed to a "primary" and "secondary" area. The "primary area" would reflect the study area used in the *University Hill Transportation Study*. He asked for comments from the committee by 5/23/2008.

APPROPRIATENESS MEASURES

Mr. Colone reviewed the appropriateness measures with the committee. He noted that these metrics were reviewed by the consultant. The SMTC's anticipation is to develop some type of matrix that can be used in the field in recommending streets for bike treatments. Mr. Persons asked if and how the Connective Corridor project is being considered. Mr. Colone mentioned that the existing road network would be examined as it is today. He emphasized that any recommended treatments would be referenced in

phases and that the later phases (i.e., phase II or III) could potentially tie into the design/concept of the Connective Corridor.

PUBLIC WORKSHOP

Mr. Colone presented a draft PowerPoint presentation to the committee members that will be shown at the May 28th Public Workshop. Ms. Rougeux asked what constitutes a truck route. James D'Agostino noted that the route generally would include signage to direct truck drivers and they are suggested routes for trucks. Mr. D'Agostino asked if these routes had been approved by the Common Council. Pete O'Connor stated Common Council action has not occurred and that the DPW would bring this to them in the coming months. The format of the public workshop was discussed. Following the project presentation, staff will ask the attendees to participate in a workshop style exercise to solicit their input on 4 questions:

1. Origins and destinations to connect;
2. Obstacles/impediments to consider;
3. Streets for bike treatments; and
4. Types of treatments.

The public workshop flyer was mailed to 394 contacts. SAC members requested that a digital copy be provided and they'd assist with notification through their respective electronic contact lists.

SCHEDULE & NEXT STEPS

Mr. Colone reviewed the project schedule with the group. The final report is scheduled for completion and SMTC Committee acknowledgement in the fall. The next SAC meeting will be used to talk about recommendations.

The meeting adjourned at 3:30.

university hill bike network project


public workshop

Wednesday, May 28, 2008

7:00 p.m.

Levy Middle School Cafetorium

Fellows Avenue & Harvard Place




Where should bike treatments on the Hill go?
What places should bike facilities connect?
How can we improve bicycling on the Hill?

The Syracuse Metropolitan Transportation Council (SMTC), working on behalf of the City of Syracuse, has recently begun to plan a bike network - a series of connected bike lanes, facilities, and bike and pedestrian-friendly street improvements - for University Hill. As we begin the process, your input is important. Join us for a workshop on Wednesday, May 28th and help design the bike network for University Hill.

Share your ideas.
Help us improve bicycling on the Hill.

The meeting facility is handicapped accessible.

For more information, or to request accommodations for the workshop, contact Mario Colone:

 **SMTC** Phone: 315.422.5716 | Email: mcolone@smtcmpo.org
Mail: 126 N. Salina Street, Syracuse, NY 13202 | Web: www.smtcmpo.org

The Syracuse Metropolitan Transportation Council (SMTC) is a state-designated metropolitan planning organization (MPO), responsible for administering the continuous and comprehensive transportation planning process in Onondaga County and small portions of Madison and Oswego Counties.



Syracuse Metropolitan Transportation Council

100 Clinton Square
126 N. Salina Street, Suite 100
Syracuse, New York 13202
Phone (315) 422-5716
Fax (315) 422-7753
www.smtcmpo.org

NEWS RELEASE

FOR IMMEDIATE RELEASE – May 27, 2008

Contact: Mario Colone, Senior Transportation Planner
(315) 422-5716; e-mail: mcolone@smtcmpo.org

University Hill Bike Network Project Public Workshop to be held May 28, 2008

SYRACUSE, N.Y. – The Syracuse Metropolitan Transportation Council (SMTC) will be holding a scheduled workshop to begin the process of seeking public comment relative to a bike network in the University Hill area.

**WEDNESDAY, MAY 28 @ 7:00 P.M.
Levy Middle School Cafeteria,
Fellows Ave and Harvard Place, Syracuse, NY**

The SMTC completed its Bicycle and Pedestrian Plan for the SMTC Metropolitan Planning Organization (MPO) area in March 2005. In November of 2007, the SMTC completed its University Hill Transportation Study. The current bike network project is a result of the findings from the two aforementioned studies.

For more information about the May 28 public workshop, view the informational flier at www.smtcmpo.org or contact Mario Colone of the SMTC at (315) 422-5716.

Levy Middle School is handicapped accessible. Please advise the SMTC of specific accommodations required to facilitate your participation in this public meeting.

###

What is the SMTC?

The Syracuse Metropolitan Transportation Council was formed in 1966 as a result of the Federal Aid Highway Act of 1962 and Urban Mass Transportation Act of 1964. Serving as the metropolitan planning organization (MPO) for the Syracuse Metropolitan area, the SMTC provides the forum for cooperative decision making in developing transportation plans and programs for Onondaga County and small portions of Madison and Oswego Counties. The SMTC is comprised of elected and appointed officials, representing local, state and federal governments or agencies having interest in or responsibility for transportation planning and programming.

University Hill Bike Network Project Public Workshop

May 28, 2008 7:00 PM

T.A. Levy Middle School

SIGN IN SHEET (PLEASE PRINT)

Name	Address	Phone	Email
Peter B. Volans	522 See # Ave, Syracuse 13224	446-1748	pev@me
Andrew McClurg	312 Scotland Terr, Syr. 13224	-	amcclurg@gmail.com
DUSTIN M CANN	213 MELBURN AVE. SYRACUSE NY 13224	383-4378	dccann@ci.syracuse.ny.us
HAMILTON/MARY WHITE	503 Thurber St. Syr 13210	476-6215	KikiRW@yahoo.com
Beverly Humphrey	834 Westcott St. 13210	428-7909	behumphrey@gmail.com
Wanda Minor	852 Westmoreland 13210	867-7870	Wanda.minor@gmail.com
Emile Fossas	355 Buchanan Ave. 13210	943-4137	emilefossas@yahoo.com
John Murry	121 Oak Rd 13210		
Dan Hughes	157 Strong Ave 13210	395-1887	dhughes@ci2.org
Julianne O'Grady	300 Berkeley Dr 13210	475-6257	johanne20@yahoo.com

University Hill Bike Network Project Public Workshop

May 28, 2008 7:00 PM

T.A. Levy Middle School

SIGN IN SHEET (PLEASE PRINT)

Name	Address	Phone	Email
Teresa Doherty	313 Scott Ave	256 7194	teresa.doherty@gmail.com
Pat Mosley	1309 Meadowbrook Dr Sy	13224 449-1545	Pat.Mosley@gmail.com
Stacie Donnelly	141 Clarke St	472-2140	stacie1@earthlink.net
Harry Koser	935 Kelly St Apt 110	472-3110	harrykoser@att.net
John Groux	City of Syracuse Comm. Dev.	448-8629	JG120UX@Syracuse.com
AS HUMPHREY	200 DAKOTA ST SYRACUSE, NY 13210	440 9348	ajhumphrey1016@gmail.com
Katie Chimileski	200 DAKOTA ST SYRACUSE, NY 13210	395-4616	katiechimileski@gmail.com
Peter D King	606 Thunder St Syr 13210	455-5600 (315) 3019	pedz@earthlink.net
Unice Dred	240 Rockwood Rd.	446-1107	unicedred@gmail.com

University Hill Bike Network Project Public Workshop

May 28, 2008 7:00 PM

T.A. Levy Middle School

SIGN IN SHEET (PLEASE PRINT)

Name	Address	Phone	Email
Sharon Wilson	1225 Comstock Ave (St Albans)	478-7565	swilson1504@verizon.net
Fred Wilson	1225 Comstock Ave	478-7565	FWILSON1504@NETZERO.NET

Thank you for attending the public workshop for the **University Hill Bike Network Project** on May 28, 2008. Please provide any additional comments in the space below.

This form can be returned to the comment box or to any SMTC staff member at tonight's meeting. You may also return this form via mail (SMTC, 126 N. Salina St., Suite 100, Syracuse, N.Y. 13202) or fax (315-422-7753). **Please return comment forms by June 13, 2008.**

① A major problem is connection of bike lanes through intersections

The city of Syracuse has not done very well with this.

② Dealing w/ parked cars is essential to creating enough space for cyclists

Name (optional)

Don Hughes

Address (optional)

157 Strong Ave Syracuse NY 13202

Email (optional)

dhughes@eciz.org

Would you like to be added to the SMTC mailing list? Yes ☒ No ☐

For additional information on the **University Hill Bike Network Project**, please contact Mario Colone, Senior Transportation Planner, SMTC, by phone (315-422-5716) or email (mcolone@smtcmpo.org).

Thank you for attending the public workshop for the **University Hill Bike Network Project** on May 28, 2008.
Please provide any additional comments in the space below.

This form can be returned to the comment box or to any SMTC staff member at tonight's meeting. You may also return this form via mail (SMTC, 126 N. Salina St., Suite 100, Syracuse, N.Y. 13202) or fax (315-422-7753).
Please return comment forms by June 13, 2008.

THE GAS IS GOING DRY, CARS ARE
THE PAST & BIKES & ~~OTHER~~ ~~PUBLIC~~
OTHER FORMS OF GAS FREE
TRANSPORTATION ARE THE FUTURE!
SYRACUSE NEEDS TO SINK OR SWIM!

↓
OR BIKE!

NO PARKING IN BIKE
LANES, NEED BIGGER
FINES ~~FOR~~ OR TICKETS
FOR PEOPLE WHO
BREAK THE LAW!

I LOOK FORWARD TO
CHANGE!

Name (optional) AJ

Address (optional) _____

Email (optional) _____

Would you like to be added to the SMTC mailing list? Yes ☐ No ☐

For additional information on the **University Hill Bike Network Project**, please contact Mario Colone, Senior Transportation Planner, SMTC, by phone (315-422-5716) or email (mcolone@smtcmpo.org).



UNIVERSITY HILL BIKE NETWORK PROJECT

PUBLIC WORKSHOP NOTES

May 28, 2008, SMTC

SMTC staff present:

Mario Colone, Senior Transportation Planner/Project Manager

James D'Agostino, Director

Nell Donaldson, Transportation Planner

Ahmed Ismail, Junior Transportation Planner

Paul Mercurio, Transportation Planner

The first public workshop for the SMTC's University Hill Bike Network Project was held on Wednesday, May 28, 2008 at T.A. Levy Middle School in Syracuse. Approximately 30 individuals attended. The meeting started at approximately 7:10 PM with an introduction and presentation of the study by Mario Colone. The presentation consisted of the following:

- Introduction of the Syracuse Metropolitan Transportation Council (SMTC) – who the agency is and what SMTC does;
- Project origin;
- Purpose of the study;
- Overview of Existing Conditions;
- Discussion of Evaluation Techniques; and
- Project schedule.

Prior to going into the breakout session, Mr. Colone invited those in attendance to express their concerns, ask questions, and provide comments. The following noted questions, comments and concerns represent the SMTC's understanding and interpretation of the discussion that occurred. Written comments and concerns received via the provided comment cards are included within the Appendices of the Final Document:

- It was stated that conflicts exist between parking and bicycle lanes, particularly on Meadowbrook Drive.
 - Concern about residents and church goers impacted by removal of parking
 - Concern about anonymous notes and phone calls to St. Alban's Church along Meadowbrook when parishioners park in bike lane.
 - Church members stated a belief that they have deeded use of the right of way in front of their property.
 - Church sent letter to city mayor on May 13th and is still awaiting a response.
- One attendee cited the corner of Euclid and Comstock as a very busy corner
 - Suggestion to keep parking to one side of Euclid (Camillus cited as a local example of a municipality that is already doing this.)
 - Suggestion to place bicycle lane between the parking lane and the curb
 - Creates a physical buffer between the moving bicycles and cars.
 - Sundance Channel cited as source of this idea (show aired the evening of 5/27)

- Statement that green infrastructure improvements (such as permeable pavement and bio-swales) could be incorporated with bicycle lane improvements to provide synergistic benefits to the neighborhood.

Following the question and comment period, attendees separated into 3 groups for the breakout session. Participants were asked 4 questions:

1. Are there other places in the City, or outside the City that you would like bike facilities to connect?
2. What obstacles/impediments should be considered?
3. What streets do you think should be considered for bike facilities and why?
4. What bike treatments and facilities would you like to see on those streets identified in #3?

Participants were given approximately 45 minutes. After 45 minutes, SMTC staff reported back to the broader group. Group 1 identified that connections should be provided between parks and libraries. They noted that high accident locations and steep grades are impediments to bicycling. South Crouse Avenue, University Avenue, East Genesee Street and streets through Syracuse University campus were selected for consideration. Group 1 suggested more/better signage for bicyclists and the installation of bike boxes at intersections.

Group 2 identified schools and business areas within the city to connect via bike facilities. They identified steep topography, particularly on the eastern side of the study area, intersections and the interstate system as barriers. Primarily all streets within the primary study area were selected for consideration to improve bicycling. Group 2 noted that bike boxes, segregated lanes, connections through Syracuse University and SUNY ESF campuses should be installed along with providing bike space (racks and/or lockers) in parking garages on the University Hill.

Group 3 would like to connections made between downtown Syracuse, parks (City and County), schools and locations in DeWitt. They identified East Genesee Street, Erie Boulevard (outside of study area), steep slopes, brick crosswalks, highways and existing conflicts with automobiles as obstacles to consider. Streets that Group 3 selected for consideration include Comstock Avenue, Ostrom Avenue, South State Street (outside study area), Townsend Street (outside study area), S. Crouse Avenue, Irving Avenue and potential lanes through Thornden Park (outside study area). They would like to see more bike racks in throughout the area, a hard structure between bicyclists and motorists (segregated lane), bike/bus lanes, better speed enforcement and increased education.

Before closing the workshop, Mr. Colone reiterated that the goal of this project is to recommend a network of bike facilities that can be easily implemented and easily repeated in the University Hill area and other areas throughout the City of Syracuse. Mr. Colone thanked those present for their attendance. He reminded them that SMTC staff would continue to take comments after the meeting through June 13, 2008 and that the SMTC could also be contacted via the comment cards, phone, email and fax. The meeting formally ended at 8:30 PM.

These notes represent the SMTC's understanding and interpretation of the activities and discussion that occurred at the first public workshop for the University Hill Bike Network Project on May 28, 2008 at T.A. Levy Middle School in Syracuse, NY.

A G E N D A
UNIVERSITY HILL BICYCLE NETWORK PROJECT
SAC Meeting #3
September 23, 2008 9:00 AM

1. Introductions
2. Minutes from May SAC meeting
3. Public Information Session
4. Draft Document Discussion
5. Appropriateness Measures
6. Recommended Treatments
7. Implementation Plan
8. Additional Discussion
9. Adjourn



UNIVERSITY HILL BIKE NETWORK PROJECT

MEETING MINUTES

September 23, 2008, SMTC

INTRODUCTION

Members of the University Hill Bike Network Study Advisory Committee (SAC) met on Tuesday, September 23, 2008 to discuss project activities. The following SAC members were in attendance:

- Dustin Czarny, City of Syracuse Department of Public Works
- Wayne Miner, Onondaga Cycling Club
- Chris Rauber, City of Syracuse Engineering Department
- Steve Reiter, Bike CNY!
- Beth Rougeux, Syracuse University Office of Government and Community Relations
- Jeff Sterly, New York State Department of Transportation (NYSDOT)
- Mario Colone, Nell Donaldson, Paul Salvatore Mercurio, Danielle Krol, Syracuse Metropolitan Transportation Council (SMTC)

Mario Colone, the SMTC's project manager, began the meeting at 9:05 AM with introductions.

MINUTES FROM MAY SAC MEETING / PUBLIC INFORMATION SESSION

Mr. Colone asked the SAC if there were any comments or questions on the minutes from the May 15th SAC meeting. Hearing none, he handed out and briefly reviewed notes from the public workshop held on May 28th. Mr. Colone pointed to a map, which was included in the mailing that summarized the thoughts/comments of the public workshop breakout groups and noted that the SMTC received good feedback on potential bike facilities (locations, types of treatments, etc.) from those in attendance. SMTC will incorporate this map in the final document.

Steve Reiter asked whether the SMTC could suggest the continuation of bike facilities through Syracuse University (SU) campus/property in plan recommendations. Mr. Colone stated that the SMTC could encourage SU to continue bike lanes through its property. Beth Rougeux believes that SU would be willing to continue bike facilities through University property, but noted that they would need assistance with the details (how wide to stripe a lane, etc).

DRAFT DOCUMENT DISCUSSION

Mr. Colone noted that the appendices to the draft document would be added later and opened the floor to discussion on the draft document. Mr. Reiter complimented SMTC on a nice document and noted that it was good for the City of Syracuse to see examples of bike lanes going through intersections. Mr. Reiter did also not see any discussion in the text about whether or not the public would have access through SU. Ms. Rougeux stated that the guard booths are more for cars and safety than for keeping the public off the campus. She noted that cyclists and pedestrians will not be stopped and that the guard booth is there primarily for cars. She noted that biking through is not a problem and that the public is certainly invited to come onto campus.

Mr. Reiter also noted the intersection of Euclid and Comstock as a difficult area for cyclists to navigate. In the long-term, BikeCNY! suggests something there to allow bike/pedestrian traffic over or under Comstock Ave., and realizes there would be a large capital cost involved in doing so. Mr. Colone indicated this intersection was recommended to receive several types of treatments.

Mr. Reiter asked about the area just north of the intersection – pointing out that the SMTC has a long-term recommendation to re-stripe this location as part of a road diet. He wondered if we could make that a short-term recommendation. Paul Salvatore Mercurio pointed out that there are large volumes of traffic at this location. Because of this, the intersection would need to be reconfigured, which takes more thought and likely further study. Mr. Reiter suggested some clarification in the text to note why the striping at this location would be considered a long-term solution. Mr. Colone stated that text would be added to note that further engineering analysis would be required. Nell Donaldson stated that the SMTC could also reiterate transportation demand management strategies.

Under General Recommendations, Ms. Rougeux was concerned about requiring covered bike parking through city zoning. Ms. Donaldson pointed out that this recommendation could be left to interpretation by the City. Ms. Rougeux also questioned the awareness campaign and issuing informal citations. SMTC staff responded that City police could potentially do this, such as they do when checking on seatbelt use (hand out citations, and then the following week hand out tickets). Wayne Miner noted that an education campaign should be implemented and asked what involvement SU presently has with its students regarding bicycle safety. Ms. Rougeux noted that SU does ask students to register their bikes when they arrive on campus and that perhaps their public safety officers could be involved in issuing citations. Mr. Colone pointed out that the SMTC's Bicycle and Pedestrian Plan has numerous education and enforcement related recommendations, and that the Bike Network document could refer to that for more detail.

Discussion ensued regarding the Van Buren/Raynor/Renwick area. Ms. Donaldson noted that the network needed a connection to the West and this was proposed during the public workshop. The combined connectivity and slope rankings pointed to using Van Buren/Raynor over Renwick. Mr. Miner indicated that when he commutes, he uses Raynor to Fineview, and then Renwick to reach points located to the west of the University Area. SMTC will re-evaluate this connection and include such in the recommendations.

Chris Rauber mentioned Waverly Ave and asked if based on our data, if SMTC could do a model run of this location to see if the suggested road diet is even feasible. Mr. Colone pointed out that SMTC would examine operations. Mr. Colone reviewed the Crouse Avenue recommendations. Mr. Rauber questioned when looking at South Crouse/University Avenues where Option A looks at removing parking on at least one side of the street if the public would really want this. Mr. Colone noted that parking would be recommended for removal only on South Crouse between Waverly and Adams, approximately 16 spaces. Ms. Rougeux believed that the merchants would be upset with the removal of parking. Mr. Mercurio explained that if parking were removed, combined with the return to 2-way traffic, searching for a parking location would become easier because you now have the 2-way functionality.

Mr. Mercurio then handed out plan view and cross-sectional diagrams to assist in explaining the recommendations for specific intersections. SAC concerns primarily fell with removal of parking -- how it affects snow removal and how the public would react if parking is eliminated.

APPROPRIATENESS MEASURES

Mr. Colone noted the appropriateness measure matrix and that we could pass along the results of SMTC's ranking via email following the meeting. He noted that the consultant (Alta Planning and Design) assisted with what measures to use, and stated that the consultant would also be

reviewing the draft network for us. Mr. Colone stated that the intention of the matrix was that it could be used out in the field, and in-house with maps and other readily available data, but that a field check would certainly be required.

RECOMMENDED TREATMENTS

Mr. Mercurio reviewed the intersection mark-ups with the SAC. Mr. Reiter asked if the maps/diagrams would become part of the document. Mr. Colone stated that they would.

IMPLEMENTATION PLAN

Mr. Colone pointed to page 40 to explain the implementation plan. He noted that level 5 also includes the previous levels and that they can also be viewed as short-term, medium-term, and long-term.

ADDITIONAL DISCUSSION

Mr. Rauber asked if by “reducing the number of travel lanes” if SMTC meant from 4 to 2 or if we meant width under the Comstock and Waverly Avenues recommendation. Mr. Colone indicated that as part of a road diet, the travel lanes would be reduced from 4 to 2. Mr. Rauber inquired why other segments weren’t looked at. Mr. Colone explained the scoring used in the matrices – that if segments reached a score of 60 or higher, they were considered for inclusion in the network. Staff then explained why a few segments didn’t make it through, citing Marshall Street, Adams and Madison. Mr. Rauber stated that it would help the reader to have these numbers on a map.

ADJOURN

Mr. Colone asked the SAC to review the document and provide additional comments and edits to SMTC by next Friday (October 3, 2008). He noted that staff is working on setting up the next public workshop where SMTC will present the draft recommendations for the bike network. This meeting is expected to occur in October. Following the public workshop, SMTC staff will finalize the report (have SAC review again) and then go through SMTC Committee acknowledgement. He thanked all for their time and the meeting adjourned at 10:30 AM.

university hill bike network project

open house

Wednesday, October 29, 2008

7:00 p.m.

Levy School

111 Fellows Avenue



The Syracuse Metropolitan Transportation Council (SMTC), working on behalf of the City of Syracuse, has developed a draft bike network – a series of connected bike lanes, facilities and bike and pedestrian-friendly street improvements – for University Hill. Join us for an open house on Wednesday, October 29, to review and comment on the suggested bike network.

Review and comment on the recommended bike network.

The meeting facility is handicapped accessible.

For more information, or to request accommodations for the workshop, contact Mario Colone:



SMTC

315.422.5716 | mcolone@smtcmpo.org

126 N. Salina Street, Syracuse, NY 13202 | www.smtcmpo.org

The Syracuse Metropolitan Transportation Council (SMTC) is a state-designated metropolitan planning organization (MPO), responsible for administering the continuous and comprehensive transportation planning process in Onondaga County and small portions of Madison and Oswego Counties.



Syracuse Metropolitan Transportation Council

100 Clinton Square
126 N. Salina Street, Suite 100
Syracuse, New York 13202
Phone (315) 422-5716
Fax (315) 422-7753
www.smtcmpo.org

NEWS RELEASE

FOR IMMEDIATE RELEASE – October 17, 2008

Contact: Mario Colone, Senior Transportation Planner
(315) 422-5716; e-mail: mcolone@smtcmpo.org

University Hill Bike Network Project Open House to be held October 29, 2008

SYRACUSE, N.Y. – The Syracuse Metropolitan Transportation Council (SMTC) will be holding an Open House to seek comments and suggestions on the development of a bike network in the University Hill area.

**WEDNESDAY, OCTOBER 29 @ 7:00 P.M.
Levy School Cafeteria,
Fellows Ave and Harvard Place, Syracuse, NY**

For more information about the October 29 public workshop, view the informational flier at www.smtcmpo.org or contact Mario Colone of the SMTC at (315) 422-5716.

Levy School is handicapped accessible. Please advise the SMTC of specific accommodations required to facilitate your participation in this public meeting.

###

What is the SMTC?

The Syracuse Metropolitan Transportation Council was formed in 1966 as a result of the Federal Aid Highway Act of 1962 and Urban Mass Transportation Act of 1964. Serving as the metropolitan planning organization (MPO) for the Syracuse Metropolitan area, the SMTC provides the forum for cooperative decision making in developing transportation plans and programs for Onondaga County and small portions of Madison and Oswego Counties. The SMTC is comprised of elected and appointed officials, representing local, state and federal governments or agencies having interest in or responsibility for transportation planning and programming.



UNIVERSITY HIW BIKE NETWORK WORKSHOP 10.29.08

NAME

ADDRESS

EMAIL

DUSTEN M. CZARNY

DPW-TRANSPORTATION

dccarny@ci.syracuse.ny.us

PAUL SWINBURNE

8612 Wrenwood B'ville

pswinbur@twcny.rr.com

Brendan Murphy

920 Westcott St.

bfmurphy@syr.edu

Harry Lewis

935 Lancaster Ave

harrylewis@ATTONET

Gary Jones

125 Griffith St

gjones01@twcny.rr.com

Steve Reiter

BikePCNY 412 Kensington Rd. 13210 coach@stevereiter.com

Mike Flusche

726 Lancaster Ave

flusche99@yahoo.com

Pat Mosley

1309 Meadowbrook Dr Sy 13224

Pat.Mosley@gmail.com

Thomas Keays

PO Box 35938, 13235

htkeays@syr.edu

Zebe Ronnen

225 Candace Ave Sy 13124

Don Pulver

158 Meredith Av.

Eric Wollford

424 Maple St.

ewollfo-d@hotmail.com

Wayne Miner

852 Westmoreland

wayne.miner@gmail.com

Tyler Andue

734 Maryland Ave 13210

tylerandue@gmail.com

Scot Vanderpool

Syracuse University

svanderp@syr.edu

David Greenfield

517 Bradford Pl Sy. N.Y.

Keisuke Inoue

218 Etchata Pl. Liverpool NY

kinoue@syr.edu

Bonnie Steinkraus

324 Harrow Pl Sy

Steinkraus@syngoc.org

JACOB BROWN

267 GENESEE PARK DR

JLBROWN@SYR.EDU

Andy Maxwell

201 E. Washington St.

amaxwell@cdsyracuse.com

Pete King

808 Thurston St

pedz@earthlink.net

Don Hughes

157 Strong Ave

dhughes17@twcny.rr.com

Bus Travelers needs and Biking Safety

Thank you for attending the open house for the **University Hill Bike Network Project** on October 29, 2008. Please provide any additional comments in the space below.

This form can be returned to the comment box or to any SMTC staff member at tonight's meeting. You may also return this form via mail (SMTC, 126 N. Salina St., Suite 100, Syracuse, N.Y. 13202) or fax (315-422-7753). **Please return comment forms by November 7, 2008.**

Bus travelers need seating at all shelters - many older and handicapped people should not be forced to stand while waiting for buses.

~~More shelters (even smaller ones) needed at most used bus~~

Cross walks need chirping lights as added protection for pedestrians - like Boston, etc.

More bus shelters needed (even smaller ones) for heavily used bus lines.

Bikers should never be ticketed for making lawful traffic (as this is a safety measure). Cops should be ticketed for excessive speeding on all bike routes.

Children should receive bicycle safety training as part of school curriculum.

Name (optional) Bonnie Steinkraw

Address (optional) 324 Harvard Place Syr 13210

Email (optional) steinkrbe@sunysccc.edu

Would you like to be added to the SMTC mailing list? Yes ☐ No ☐

For additional information on the **University Hill Bike Network Project**, please contact Mario Colone, Senior Transportation Planner, SMTC, by phone (315-422-5716) or email (mcolone@smtcsmo.org).

Note:

green - bike colors for higher visibility.

Thank you for attending the open house for the **University Hill Bike Network Project** on October 29, 2008. Please provide any additional comments in the space below.

This form can be returned to the comment box or to any SMTC staff member at tonight's meeting. You may also return this form via mail (SMTC, 126 N. Salina St., Suite 100, Syracuse, N.Y. 13202) or fax (315-422-7753). **Please return comment forms by November 7, 2008.**

* Please close Barry Park Meadowbrook Drive from Westcott to Broad Street from May 1 - Nov. 1 - Also the biking shoulders need fill and paving for the safety of cyclists and others.*

Cars speed regularly and are a great danger to cyclists - in fact I have to bike on the wrong side from Broad St to Lancaster for my own safety.

Houston Avenue from Westmouland to Euclid must have speed limits posted, and bike lanes painted.

~~Add~~ Create separate bike paths - just for biking around the city and county. - see other cities for models - esp. St Paul, MN park biking, etc., Canada

Meadowbrook drive - entire length needs to be a major bike network - cars speed and are a terrible hazzard for cyclists - as Meadowbrook is so narrow.

Also Barry Park - many cars park illegally across bike paths during sports events - also brush & debris often block bike paths.

Name (optional) Bonnie Steinkrans

Address (optional) 324 Harvard Pl., Syr. 13210

Email (optional) Steinkrb@syracc.edu

Would you like to be added to the SMTC mailing list? Yes ☐ No ☐

For additional information on the **University Hill Bike Network Project**, please contact Mario Colone, Senior Transportation Planner, SMTC, by phone (315-422-5716) or email (mcolone@smtcmpo.org).



UNIVERSITY HILL BIKE NETWORK PROJECT

OPEN HOUSE NOTES

October 29, 2008, SMTC

SMTC staff present:

Mario Colone, Senior Transportation Planner/Project Manager

James D'Agostino, Director

Nell Donaldson, Transportation Planner

Danielle Krol, Senior Transportation Planner

Paul Mercurio, Transportation Planner

The second public workshop for the SMTC's University Hill Bike Network Project was held on Wednesday, October 29, 2008 at T.A. Levy Pre-K through 8 School in Syracuse. Approximately 30 individuals attended. The meeting was designed as an open house to provide ample opportunity to review and comment on various project materials. The open house started at 7:00 PM with attendees reviewing project materials set-up at several stations. At 7:15, Mario Colone gave a presentation of the study. The presentation consisted of the following:

- Introduction of the Syracuse Metropolitan Transportation Council (SMTC) – who the agency is and what SMTC does;
- Project origin;
- Purpose of the study;
- Overview of Existing Conditions;
- Discussion of Evaluation Techniques;
- Street Network; and
- Recommendations.

Following the formal presentation, Mr. Colone invited those in attendance to review the station materials and ask questions to SMTC staff present. The four stations consisted of:

- 1.) Public feedback from the May 28 meeting; proposed street network and appropriateness measures matrix;
- 2.) Implementation plan;
- 3.) General network-wide recommendations; and
- 4.) Street specific recommendations displaying photo simulations for Comstock Avenue, South Avenue and Waverly Avenue.

Each station was designed for public interaction, ranging from open dialogue with SMTC staff to providing written comments. The following comments/suggestions, listed by station, were provided during the open house.

- 1.) Public feedback; proposed street network and appropriateness measures matrix
 - Is there too much parking on Waverly?
 - E Castle safety factor?
 - What about using University's streets?

- Euclid Ave. at rush hour is problem. Cars on both sides and no room for bikes (but high bike traffic)

2.) Implementation plan

- Euclid-Comstock intersection is very ... give it priority

3.) General network-wide recommendations

- Sewer grates facing in correct position (perpendicular to travel lane)
- Of the nine general network-wide recommendations, item 9 (extend bike network throughout the city) was ranked the highest based on public response
- Extend bike lanes to and through intersections
- Add a tenth recommendation, connect to city parks
- Install 1 side angle parking on Euclid
- Item 8 (elementary school curriculum on bike/ped. safety) needs to be more than elementary school
- Closing off Barry Park to motor vehicles May through November
- Enforce bike lanes at Barry
- Houston Ave. needs bike lanes and speed signs
- Pave roads and bike lanes to make safer bicycling
- Integrate well marked lanes in all parking (including Thornden)
- Need more green connectors (bike network, multi. Use trails, rail corridors/ Erie Canal greenway)

4.) Street specific recommendations

- At this station, the public was invited to choose their most desirable of 3 options developed for S. Crouse and University Avenues. Based on responses, Option C (S. Crouse one-way NB with bicycle lane on right side and reverse diagonal parking on left side along with SB bicycle lane on University) was identified as the recommended option.

Mr. Colone thanked everyone for attending and providing their comments/input. He mentioned that the SMTC would likely have a draft final report prepared for Committee acknowledgement by the end of November. The open house formally ended at 8:30 PM.

These notes represent the SMTC's understanding and interpretation of the activities and discussion that occurred at the second public workshop for the University Hill Bike Network Project on October 29, 2008 at T.A. Levy Pre-K through 8 School in Syracuse, NY.

syracuse.com

The Post-Standard

WHO NEEDS A

Saturday, July 05, 2008

By Maureen Fitzsimmons
Contributing writer

Commuting to work by bicycle has several advantages, say the people who do it regularly. Riders get more daily miles in. And they can save a gallon or more of gas a day, no small consideration with today's soaring gas prices.

But riders cite similar challenges to commuting: Difficult traffic patterns. Motorists who don't understand that a bicycle is a vehicle entitled to the road. And no good place to store the bike while they work.

The Syracuse Metropolitan Transportation Council is listening to the cyclists this summer, as it works on a plan to make the University Hill area more welcoming to bicyclists, especially commuters.

A meeting last month sponsored by the SMTC to discuss the project drew more than 30 people, according to Mario Colone, senior transportation manager at SMTC and project manager for the University Hill plan.

That level of interest has local bicyclists wondering about whether Syracuse can become what Wayne Miner of the Onondaga Cycling Club calls a "bike-friendly city." The club represents more than 570 cyclists.

"It's not only about creating nice bike lanes," Miner said, "but really about the quality of life. It's not happening overnight, but we're getting there."

Miner calls the University Hill project a "a piece in the puzzle."

The University Hill Bike Network Project grew out of the University Hill Transportation study the SMTC approved late last year, Colone said.

"One of the goals of the study is using the existing road network and to tie it into bicycle facilities, such as existing bike lanes, and connecting into other projects, such as the Connective Corridor," he said.

Colone is optimistic about the potential for the project.

"I think the city is wanting to improve the bicycling culture that exists right now in the city," he said. Colone said the final project would be a "matrix of recommendations," from signage, traffic calming, bike boulevards and bike lanes. One of the purposes of last month's meeting was to get local riders' perspectives on what they would like to see.

The meeting demonstrated some consensus among the bicyclists in attendance, Colone said. "They certainly want to see more bicycles lanes," he said. "And some of the streets they identified were the same, such as East Genesee to South Crouse."

South Crouse is one of the challenges faced by Michael Lyon when he commutes on his recumbent bike from his home in the Memphis section of Van Buren to Upstate Medical Center, where he works as a researcher in the ear, nose and throat department.

"There's no good way off the hill," Lyon said. "I end up going down Crouse, but it's really busy all the time. I can get up to 35 miles per hour easily going down that hill, but it's a little unsafe."

Because bicycles must obey traffic laws, Lyon's choices can be limited. He can't use University Avenue to get off the Hill because it's one way in the other direction, and other streets take him out of the way.

But once he gets to Water Street, he's able to cruise to downtown.

"Water Street is a perfect road," at least for bikes, Lyon said. "There's nothing there."

Sam Sampere, who teaches physics at Syracuse University and has been commuting to campus on his bicycle for 14 years, said the biggest challenge he faces is that "drivers don't give bicycles the respect they deserve on the road."

"I can't tell you how many times a driver has rolled down his window and told me to get on the sidewalk where I belong," Sampere said.

Miner knows that motorists can be a problem for cyclists, but he also acknowledges that some cyclists ride erratically and don't obey traffic laws. The most basic bicycle support, such as bike lanes and signs, can educate both motorists and cyclists, as well as encourage cyclists to use the road, Miner said.

Despite the challenges, both Sampere and Lyon encourage people to get on their bikes, and to consider commuting to work on them.

"Cycling in CNY (offers) some of the most scenic roads around," Sampere said. "People should get out on their bikes and take advantage of it."

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Mario Colone

From: Mario Colone
Sent: Tuesday, May 20, 2008 8:58 AM
To: Matthew J. Driscoll (mayor@ci.syracuse.ny.us)
Cc: 'O'Connor, Pete'; dczarny@ci.syracuse.ny.us; James D'Agostino
Subject: University Hill Bike Network Project
Attachments: SAC mtg AGENDA_5.15.08.pdf; flyer.pdf

Tracking:	Recipient	Delivery
	Matthew J. Driscoll (mayor@ci.syracuse.ny.us)	
	'O'Connor, Pete'	
	dczarny@ci.syracuse.ny.us	
	James D'Agostino	Delivered: 5/20/2008 8:59 AM

Mayor Driscoll,

Over the past several months, the Syracuse Metropolitan Transportation Council (SMTC) has continued work on the University Hill Bike Network Project on behalf of the City. The University Hill Bike Network Project is a direct recommendation of the recently completed University Hill Transportation Study. This project will recommend a hybrid of bicycle lanes, shared roadways, and traffic calming measures that emphasize the use of existing urban roadways to create an identifiable grid of streets for use by bicyclists in the University Hill area. These recommendations will be developed based on several appropriateness measures, some of which include pavement condition, number of crossings/signals, road width, topography and connections to existing bike lanes. Two additional goals have been identified for this project: 1) that the resulting bicycle network tie to existing bike routes; enhance connectivity to the ongoing Connective Corridor Project, the Canalway Trail, and Creekwalk; and allow city residents to reach key destinations, such as Syracuse University, the Marshall Street retail district, hospitals/medical centers and residential neighborhoods and 2) promote bicycling as a legitimate form of transportation.

The Study Advisory Committee (SAC) met last Thursday at the SMTC office and reviewed several draft products associated with the project. I've attached a few materials as a reference (the May 15th SAC agenda, public workshop flyer and a copy of the presentation slides for the Wednesday, May 28th public workshop [to be provided via separate message]). We are available to assist with any questions you might have.

Thank you,

-Mario

~~~~~

**Mario A. Colone**  
**Senior Transportation Planner**  
**Syracuse Metropolitan Transportation Council**  
**100 Clinton Square**  
**126 North Salina St., Suite 100**  
**Syracuse, NY 13202**  
**P: 315.422.5716, ext. 306**  
**F: 315.422.7753**  
[mcolone@smtcmtpo.org](mailto:mcolone@smtcmtpo.org)



**Mario Colone**

---

**From:** Snowfallatnight@aol.com  
**Sent:** Wednesday, May 28, 2008 9:04 PM  
**To:** Mario Colone  
**Subject:** university hill bike network public workshop  
**Attachments:** Southern\_Hills\_RC.jpg

Mario,

I was unable to attend the public workshop this evening on the University Hill Bike Network Project, but I did want to give some input if that is possible by email:

I know many folks who live in or near the university hill neighborhoods that like to ride their bikes out to Jamesville and LaFayette. They often ride down Nottingham Rd. to Jamesville Rd. to Apulia Rd. where the cycling is great, but the route requires a lot of very challenging hill climbing to get there and back, and is not all that safe. My idea is to create a bike path (a RWT) alongside the county-owned railroad track between the On-track platform at SU/ESF and the intersection of Rock Cut Rd. and Jamesville Rd. in Jamesville. It is about 4.5 miles and a very gentle and scenic climb that would make biking out of, and into the city of Syracuse easy, fun, safe and popular.

I'm attaching a plan that illustrates the bike path as a component of a recreational corridor I am shamelessly trying to promote for the southern hills communities. I think that bike networks are great, especially when they connect to real prime cycling resources like we have south of the city.

There is a very good study and resource for planning such a system published by the U.S.D.T. called "*Rails-with-trails: Lessons Learned, Literature Review, Current Practices, Conclusion*" August 2002 FTA-MA-26-0052-04-1.

Thanks for asking for our (public) input!

Jeanie

planner-designer  
 Jeanie Gleisner, MSLA, ASLA, APA  
 2880 Eager Road  
 LaFayette, NY 13084

315-677-9147  
 snowfallatnight@aol.com

\*\*\*\*\*

Get trade secrets for amazing burgers. Watch "Cooking with Tyler Florence" on AOL Food.  
 (<http://food.aol.com/tyler-florence?video=4&?NCID=aolfod00030000000002>)



**Mario Colone**

---

**From:** Mario Colone  
**Sent:** Wednesday, August 20, 2008 9:12 AM  
**To:** Paul Swinburne  
**Subject:** RE: Bicycle Network Project meeting

Mr. Swinburne,

The next University Hill Bicycle Network Project public meeting has not been scheduled at this time. SMTC has completed our review of the road network in the study area and are currently in the process of developing a recommended street network and bicycle facility treatments. My hope is that we can have the next meeting scheduled before the end of September. With all meetings, notification will be provided to stakeholders and various communication outlets with specific details. Thank you for your message and your willingness to improve the bicycling culture in our area.

Thank you,

-Mario

~~~~~

Mario A. Colone
Senior Transportation Planner
Syracuse Metropolitan Transportation Council
100 Clinton Square
126 North Salina St., Suite 100
Syracuse, NY 13202
P: 315.422.5716, ext. 306
F: 315.422.7753
mcolone@smtcmpo.org

From: Paul Swinburne [mailto:pswinbur@twcnny.rr.com]
Sent: Tuesday, August 19, 2008 8:46 PM
To: Mario Colone
Subject: Bicycle Network Project meeting

Dear Mr. Colone,

When will be the next Bicycle Network Project meeting? I don't live in the University Area but I am interested in helping to improve bicycling in the SMTC Planning Area. I am retired but working part time so I have some time available to help.

Thanks

Paul Swinburne

Mario Colone

From: Emily M. Herbst [eherst1@twcny.rr.com]
Sent: Tuesday, October 28, 2008 8:06 PM
To: Danielle Krol
Subject: Meeting at Levy on October 29, 2008

Hi.

I am unable to attend the meeting. I think that the basic premise is absolutely great. However, having lived with the bike lanes on the East Side for some time, I have a couple of comments.

Tragically, a cyclist was hit and killed in Thornden Park this week. I am concerned that this may happen more frequently. I have noticed that cyclists generally do not abide by traffic rules, signals, or signs. On more than one occasion, I have had a cyclist breeze right through a stop sign in front of me. Although I do not wish anyone harm, it is only due to great reflexes and the grace of God that I have not unintentionally injured someone. Mind you, I had stopped for the 4-way stop sign.

I would humbly suggest that cyclists be reminded of the rules of the road so that, hopefully, they remain safe while cycling. And a pox on those drivers who deliberately take aim at those of us riding bikes.

Best wishes for the success of this project.

Emily Herbst

Mario Colone

From: Gary Jones [GJones@onlib.org]
Sent: Thursday, October 30, 2008 9:27 AM
To: Mario Colone
Subject: UHill Bike Network Open House

Dear Mr. Colone:

I want to thank you and the SMTC for hosting the University Hill Bike Network Open House last night; your presentation was both informative and encouraging as I can see the City is finally addressing the issues I and my fellow bicyclists face when commuting to work or enjoying recreational "urban" rides. While I live in the Valley section of Syracuse, when I commute to work I travel through the University Hill area on my way to Soule Branch Library and look forward to a less stressful commute in the future. I also wanted to make the SMTC aware of the availability of the community room Soule Library has to offer if you ever need an alternative space for public meetings. Also, I frequently lead groups of bicyclists from my house on "urban" rides and if any cycling member of the SMTC is interested in attending one, I'd be happy to add them to my email list.

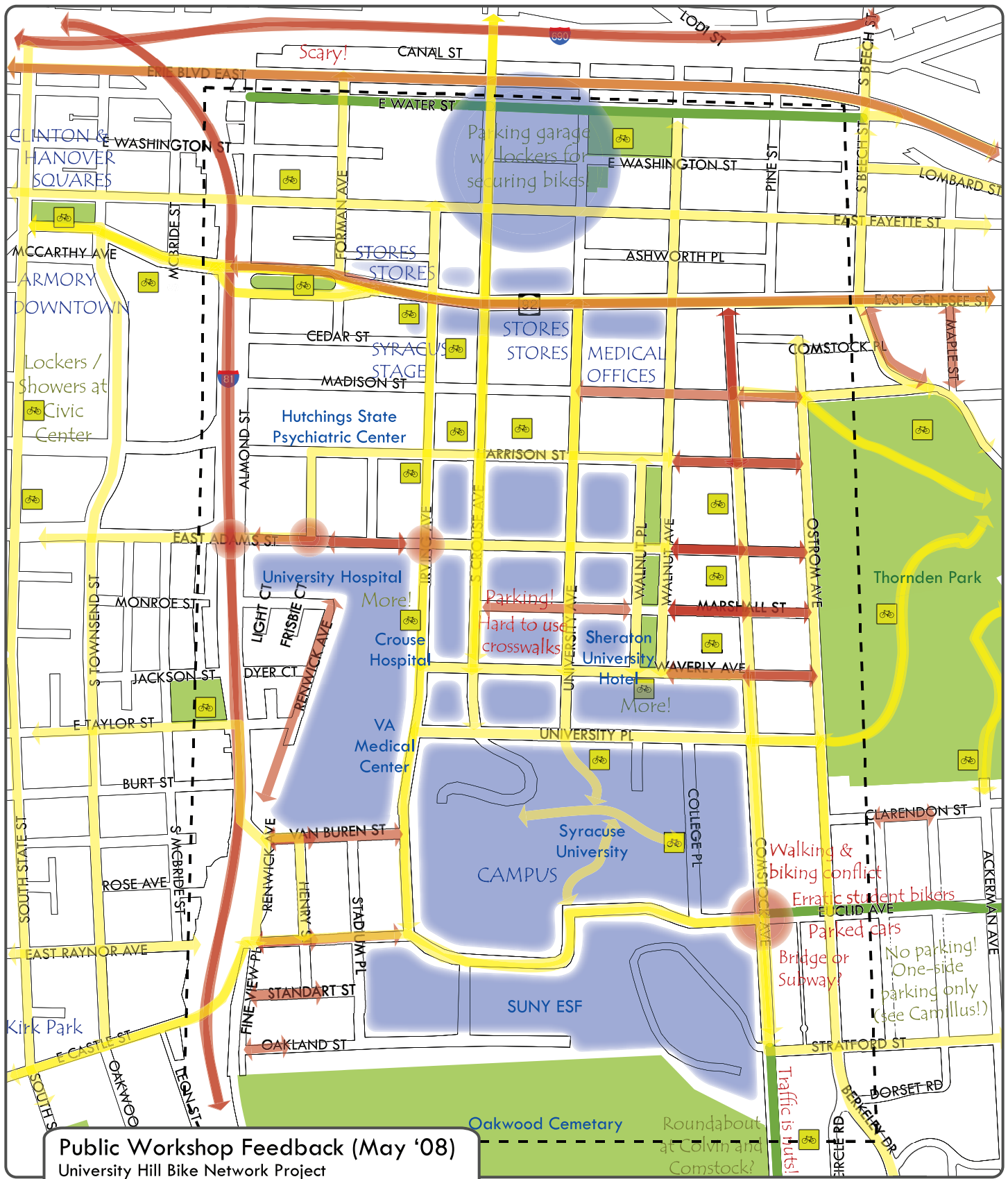
Again, thank you.

Regards, Gary Jones

Gary Jones, MLS
Onondaga County Public Library
Soule Branch
101 Springfield Road
Syracuse, NY 13214
315-435-5320
gjones@onlib.org
gjones01@twcnny.rr.com

APPENDIX B

FIGURES AND TABLES



Public Workshop Feedback (May '08)

University Hill Bike Network Project

Yellow arrow Suggested for inclusion in network

Red arrow Not suggested for inclusion

Blue shaded area Destinations Red circle Obstacles



Basemap Copyrighted by NYSDOT

Data Sources: SMTC, NYSDOT, 2001

SOCMA, 2007

Prepared by SMTC, 05/2008

Table B-1: Study Area Infrastructure Data

Street Name:	From:	To:	Width:	Lanes:	Pavement:	Date:	FC:
Adams St., E.	C-D Road	Irving	30	2	7	2/06	MA
Adams St., E.	Irving	Crouse	30	2	7	1/06	MA
Adams St., E.	Crouse	University Av.	30	2	6	1/06	MA
Adams St., E.	University Av.	Walnut	30	2	5	1/06	MA
Adams St., E.	Almond	C-D Road	30	2	6	2/06	MA
Adams St., E.	Walnut	Comstock	28	2	6	1/06	MA
Adams St., E.	Comstock	Ostrom	28	2	6	1/06	LO
Almond St.	Taylor	Burt	40		9	2/06	PA
Almond St.	Burt	Renwick	40		8	2/06	PA
Almond St.	Jackson	Taylor	40		10	10/05	PA
Almond St.	Adams	Jackson	40		10	10/05	PA
Almond St.	Harrison	Adams	54		6	3/06	PA
Almond St.	Madison	Harrison	54		8	3/07	PA
Almond St.	Genesee	Cedar	54		7	3/07	PA
Almond St.	Fayette	Genesee	54	4	7	2/06	PA
Almond St.	Washington	Fayette	54	4	6	2/06	PA
Almond St.	Water	Washington	54	4	6	2/06	PA
Almond St.	Cedar	Madison	54		8	3/07	PA
Ashworth Pl.	University Av.	Walnut	27	2	5	2/06	LO
Ashworth Pl.	Walnut	Pine	27	2	6	2/06	LO
Burt St.	Almond	Renwick	30	2	6	3/06	MA
C-D Rd.	Adams	Harrison	36	4	9	2/06	LO
Cedar St.	Forman	Irving	30	2	8	2/06	LO
Cedar St.	Almond	Forman	30	2	8	2/06	LO
College Pl	University Pl.	Euclid	34	2		11/95	LO
Comstock Ave	E. Genesee	Madison	27	2	6	1/06	MA
Comstock Ave.	Madison	Harrison	30	2	6	1/06	MA
Comstock Ave.	Harrison	Adams	30	2	6	12/06	MA
Comstock Ave.	Adams	Marshall	30	2	6	12/06	MA
Comstock Ave.	Marshall	Waverly	30	2	7	12/06	MA
Comstock Ave.	Waverly	University Pl.	29	4	7	12/06	MA
Comstock Ave.	University Pl.	Euclid	36	4	7	12/06	MA

Street Name:	From:	To:	Width:	Lanes:	Pavement:	Date:	FC:
Comstock Ave.	Euclid	Stratford	36	2	6	1/06	MA
Comstock Pl	Comstock	Ostrom Av	26	2	7	1/06	LO
Crouse Ave., S.	Madison	Harrison	36	2	6	2/06	CO
Crouse Ave., S.	Harrison	Adams	36	2	6	2/06	CO
Crouse Ave., S.	Adams	Marshall	36	2	6	1/06	CO
Crouse Ave., S.	E. Fayette	E. Genesee	36	2	9	12/06	LO
Crouse Ave., S.	Marshall	Waverly	36	2	6	1/06	CO
Crouse Ave., S.	Water	E. Fayette	36	2	8	12/05	LO
Crouse Ave., S.	E. Genesee	Madison	36	2	6	2/06	CO
Elizabeth	Harrison	Adams		2	5	3/07	LO
Euclid Ave	College Pl.	Comstock	39	2	7	12/96	LO
Euclid Ave.	Comstock	Ostrom	39	2	6	12/06	MA
Fayette St., E.	Irving	Crouse	36	2	6	3/07	MA
Fayette St., E.	Walnut	Pine	36	2	7	12/06	MA
Fayette St., E.	Crouse	University	36	2	6	3/07	MA
Fayette St., E.	Forman	Irving	36	2	6	3/07	MA
Fayette St., E.	Almond	Forman	36	2	7	3/07	MA
Fayette St., E.	University	Walnut	36	2	7	3/07	MA
Fine View Pl	Raynor/Renwick	Standart	18	2	4	1/06	LO
Fine View Pl	Standart	Oakland	18	2	5	1/06	LO
Forman Ave	Erie Blvd.	Washington	37	2	9	3/07	LO
Forman Ave	Washington	Fayette	37	2	9	3/07	LO
Forman Ave	Fayette	Genesee	37	2	8	3/07	LO
Genesee St., E.	Irving	Crouse	56	4	10	10/05	PA
Genesee St., E.	Walnut	Comstock	42	2	8	12/06	PA
Genesee St., E.	Comstock	Pine	42	2	8	12/06	PA
Genesee St., E.	Forman	Irving	62	4	10	10/05	PA
Genesee St., E.	Almond	Forman	71	4	10	10/05	PA
Genesee St., E.	University	Walnut	42	2	8	12/06	PA
Genesee St., E.	Crouse	University	42	4	10	10/05	PA
Harrison St	Almond	Irving	30	3	4	2/06	MA
Harrison St	Irving	Crouse	30	3	6	12/06	MA
Harrison St	Crouse	University	30	2	7	12/06	MA
Harrison St	University	Walnut	30	2	6	12/06	MA

Street Name:	From:	To:	Width:	Lanes:	Pavement:	Date:	FC:
Harrison St	Walnut	Comstock	30	2	5	12/06	MA
Harrison St	Comstock	Ostrom	30	2	4	12/06	LO
Henry St	Van Buren	Raynor	27	2	5	1/06	LO
Henry St	Raynor	Standart	27	2	5	1/06	LO
Irving Ave	Genesee	Madison	40	3	8	12/06	MA
Irving Ave	Madison	Harrison	35	3	8	12/06	MA
Irving Ave	Harrison	Adams	35	3	6	1/06	MA
Irving Ave	Adams	Waverly	35	3	6	1/06	MA
Irving Ave	University	Van Buren	35	2	6	1/06	MA
Irving Ave	Van Buren	Raynor	35	2	5	1/06	LO
Irving Ave	Waverly	University	35	2	5	1/06	MA
Irving Ave	Fayette	Genesee	40	2	9	12/06	LO
Jackson St	Almond	Renwick	30	2	7	2/06	LO
Madison St	Crouse	University Av	27	2	5	2/06	LO
Madison St	University Av	Walnut Av	30	2	5	12/06	LO
Madison St	Walnut Av	Comstock	30	2	6	12/06	LO
Madison St	Comstock	Ostrom	30	2	5	12/06	LO
Madison St	Irving	Crouse	30	2	5	2/06	LO
Madison St	Almond	Irving	30	1	3	2/06	LO
Marshall St	Crouse	University	36	1		1/06	LO
Marshall St.	University	Walnut	36	1	5	1/06	LO
Marshall St.	Walnut	Comstock	36	1	5	1/06	LO
Marshall St.	Comstock	Ostrom	36	1	4	1/06	LO
Monroe St	Renwick	Almond	27	2	5	2/06	LO
Oakland St	Fineview	Stadium	30	2	6	12/06	LO
Ostrom Ave	Euclid	Stratford	28	2	9	12/05	LO
Ostrom Ave	University	Euclid	28	2	9	12/05	LO
Ostrom Ave	Waverly	University	28	2	9	12/05	LO
Ostrom Ave	Marshall	Waverly	28	2	9	12/05	LO
Ostrom Ave	Adams	Marshall	28	2	9	12/05	LO
Ostrom Ave	Harrison	Adams	28	2	9	12/05	LO
Ostrom Ave	Comstock Pl.	Madison	28	2	9	12/05	LO
Ostrom Ave	Madison	Harrison	28	2	9	12/05	LO
Pine St	Ashworth	Genesee	30	2	7	12/06	LO

Street Name:	From:	To:	Width:	Lanes:	Pavement:	Date:	FC:
Pine St	Fayette	Ashworth	30	2	8	12/06	LO
Pine St	Erie Blvd	Washington	30	2	8	12/06	LO
Pine St	Washington	Fayette	30	2	7	12/06	LO
Raynor Ave E	Stadium	Irving	36	2	9	1/06	LO
Raynor Ave E	Fineview	Henry	36	2	4	1/06	LO
Renwick Ave	Taylor	Jackson	30	2	5	3/07	LO
Renwick Ave	Van Buren	Fineview	30	2	6	1/06	MA
Renwick Ave	Fineview	Castle	30	2	7	1/06	MA
Renwick Ave	Jackson	Monroe	30	2	9	3/07	LO
Stadium Pl	Van Buren	Raynor	27	2	4	1/06	LO
Stadium Pl	Raynor	Standart	27	2	7	1/06	LO
Stadium Pl	Standart	Oakland	27	2	6	1/06	LO
Standart St	Fineview	Stadium Pl.	27	1	7	12/06	LO
Stratford St	Comstock	Ostrom	30	2	10	11/05	LO
Taylor St E	Almond	Renwick	27	2	5	2/06	LO
University Ave	Washington	Fayette	34	2	6	2/06	LO
University Ave	Adams	Marshall	30	2	4	12/06	MA
University Ave	Harrison	Adams	30	2	3	12/06	MA
University Ave	Madison	Harrison	30	2	4	12/06	MA
University Ave	Fayette	Genesee	34	2	6	2/06	LO
University Ave	Marshall	Waverly	30	2	4	12/06	MA
University Ave	Erie Blvd.	Washington	34	2	5	2/06	LO
University Ave	Genesee	Madison	30	2	4	12/06	MA
University Pl	Irving	S. Crouse	32	2		11/93	LO
University Pl.	Walnut	Comstock		2			LO
University Pl.	S. Crouse	University Ave	30	2			LO
University Pl.	University Ave	Walnut	30	2		11/93	LO
University Pl.	Comstock	Ostrom	30	2	4	12/06	LO
Van Buren St	Henry	Stadium	29	2	5	2/06	MA
Van Buren St	Stadium	Irving	29	2	5	2/06	MA
Van Buren St	Almond/Renwick	Henry	29	2	5	2/06	MA
Walnut Ave	Harrison	Adams	34	2	7	3/06	CO
Walnut Ave	Adams	Marshall	34	2	8	3/06	CO
Walnut Ave	Madison	Harrison	30	2	7	1/06	CO

Street Name:	From:	To:	Width:	Lanes:	Pavement:	Date:	FC:
Walnut Ave	E. Genesee	Madison	30	2	6	1/06	CO
Walnut Ave	Ashworth Pl.	E. Genesee	30	2	5	1/06	LO
Walnut Ave	Fayette	Ashworth Pl.	30	2	5	2/06	LO
Walnut Ave	Washington	Fayette	30	2	5	1/06	LO
Walnut Ave	Erie Blvd. E.	Washington	30	2	5	1/06	LO
Walnut Ave	Marshall	Waverly	34	2	4	3/06	CO
Walnut Pl	Harrison	Adams	28	1	4	3/06	LO
Walnut Pl	Adams	Marshall	28	1	5	3/06	LO
Walnut Pl	Marshall	Waverly	28	1	4	1/06	LO
Washington St E	University	Walnut	36	2	5	2/06	LO
Washington St E	Walnut	Pine	36	2	5	1/06	LO
Washington St E	Almond	Forman	36	2	5	2/06	LO
Water St E	University	Walnut	34	2	5	2/06	LO
Water St E	Walnut	Pine	34	2	4	12/06	LO
Water St E	S. Crouse	University	34	2	5	2/06	LO
Water St E	Forman	S. Crouse	34	2	7	2/06	LO
Water St E	Almond	Forman	34	2	7	2/06	LO
Waverly Ave	Irving	S. Crouse	30	4	5	1/06	MA
Waverly Ave	S. Crouse	University	30	4	7	1/06	MA
Waverly Ave	University	Walnut	30	4	6	1/06	MA
Waverly Ave	Walnut	Comstock	30	4	6	1/06	MA
Waverly Ave	Comstock	Ostrom	30	4	3	12/06	LO
Wellington Pl	Forman	Irving	25	2	8	2/06	LO

Source: Syracuse DPW; SMTC field investigations

FC: Functional Classification

CO: Collector

LO: Local

MA: Minor Arterial

PA: Principal Arterial

Table B-2: Evaluation Matrix

	Measure	Criteria	Adams	Almond	Comstock	E. Genesee	Fayette	Fineview	Forman	Harrison	Irving	Madison	Marshall	Ostrom	Raynor	S. Crouse	University Ave.	University Pl.	Van Buren	Walnut Ave.	Walnut Pl.	Washington	Water	Waverly
I. SAFETY	A. Average Quality of Surface	Smooth surface, uniform width (Excellent or Good)	+				5	5	5					5	5					2.5			2.5	2.5
		Irregular surface, non-uniform width (Fair)	N								2.5					2.5							2.5	
	5 points maximum	Surface deterioration, cracks, bumps (Poor)	-					0		0		0	0				0	0	0		0	0		
	B. Traffic Volumes	Low Volume (< 5,000 ADT)	+					15	15			15	15	15	15	15	15	15	15	15	15	15	15	7.5
		Medium Volume (5,000 – 10,000 ADT)	N			7.5	7.5	7.5			0	0												
	15 points maximum	High Volume (> 10,000 ADT)	-	0	0						0	0												
II. CONNECTIVITY	C. Traffic Speeds	Under 25 MPH	+										10											
		25 - 35 MPH	N	5	5	5	5	5	5	5	5	5		5	5	5		5	5	5	5	5	5	5
	10 points maximum	Over 35 MPH	-																					
	D. Presence of Signals	Infrequent (Less than half of intersections)	+					5	5			5	5	5	5				5		5	5	5	
		Occasional (Around half)	N			2.5												2.5		2.5				
	5 points maximum	Frequent (More than half)	-	0	0		0	0		0	0					0								0
III. DESIGN	E. Presence of Heavy Vehicles	No Truck or Bus Routes	+					5	5			5	5	5	5					5	5		5	
		Either Truck or Bus Routes	N	2.5		2.5		2.5								2.5		2.5	2.5			2.5		
	5 points maximum	Both Truck and Bus Routes	-		0		0			0	0						0							0
	Subtotal (out of 40pts)		10	7.5	20	17.5	20	30	35	5	7.5	30	35	35	35	25	20	25	27.5	30	30	27.5	32.5	15
	A. Connection to Existing Bike Facilities and Lanes	Several connections to other bike routes	+			10																		
		Few connections to other bike routes	N		5				5		0	0		5	0	5	5			5				
	10 points maximum	No connections to other bike routes	-	0			0	0		0	0	0	0		0			0	0		0	0	0	0
IV. EXTRA POINTS	B. Connections to Destinations and Other Neighborhoods	Access to destinations and other neighborhoods	+	15		15	15		15	15	15		15			15	15	15						15
		Access to destinations or other neighborhoods	N		7.5		7.5	7.5				7.5		7.5	7.5				7.5	7.5	7.5			
	15 points maximum	No access to either destinations or other neighborhoods	-																			0	0	
	C. Access to Bus Routes	Crosses multiple bus routes	+	5	5	5	5		5	5	5		5	5		5	5	5	5	5	5	5	5	5
		Follows or parallels bus route	N				2.5					2.5										2.5		
	5 points maximum	No nearby bus route	-					0							0								0	
V. TOTAL	D. Quality of Experience	Scenic amenities along route	+			5	5						5	5			5			5	5		2.5	2.5
		Some scenic amenities along route	N						2.5			2.5				2.5		2.5					2.5	
	5 points maximum	No scenic amenities along route	-	0	0		0	0		0	0				0				0			0		
	Subtotal (out of 35pts)		20	17.5	35	25	10	7.5	27.5	20	20	12.5	25	22.5	7.5	27.5	30	22.5	12.5	22.5	17.5	2.5	2.5	22.5
	A. Topography	Grades less than 3% (Relatively flat)	+		10		10	10	10													10	10	
		Grades 3%-6% (Sloped)	N					5				5						5		5	5			
	10 points maximum	Grades more than 6% (Rolling)	-	0		0				0	0		0	0	0	0	0		0					0
VI. TOTAL	B. Distance from Center Line to Curb	More than 15'	+		10	10	10		10		10		10			10	10			10	10	10	10	10
		From 12' to 15'	N							5		5		5	5			5	5					
	10 points maximum	Less than 12'	-	0				0																
	C. Parking Lanes	No parking lane	+	5	5	5		5		5	5			5		2.5	2.5		5	5		2.5	5	5
		Parking on one side of street (metered or alternate)	N				2.5		2.5			2.5			2.5	2.5				2.5				
	5 points maximum	Parking on both sides of street	-				0						0								0			
VII. TOTAL	Subtotal (out of 25pts)		5	25	15	20	22.5	10	22.5	10	15	12.5	10	10	7.5	12.5	12.5	15	10	17.5	15	22.5	25	15
	A. Road Diet Feasibility	Travel lanes width over 40' and no alternate parking	+		10	10	10																	10
		Either travel lane width under 40' or alternate parking	N	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10 points maximum																							
	Subtotal (out of 10pts)		0	10	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	Total Score		35	60	80	72.5	52.5	47.5	85	35	42.5	55	70	67.5	50	65	62.5	62.5	50	70	62.5	52.5	60	62.5

"+" category provides much benefit and receives full points
"N" category provides some benefit and receives half points
"-" category provides little or no benefit and receives no points

APPENDIX C

ADDITIONAL RESOURCES

- Pedestrian and Bicycling Information Center
www.bicyclinginfo.org; www.walkinginfo.org
- BikeSafe bikeability checklist, included
- PedSafe walkability checklist, included
- New York State Department of Transportation Highway Design Manual:
Chapter 17 (Bicycle Facility Design)
https://www.nysdot.gov/divisions/engineering/design/dqab/hdm/hdm-repository/chapt_17.pdf
Chapter 25 (Traffic Calming)
<https://www.nysdot.gov/divisions/engineering/design/dqab/hdm/chapter-25>
- American Association of State Highway and Transportation Officials “Guide for the Development of Bicycle Facilities”
http://www.sccrtc.org/bikes/AASHTO_1999_BikeBook.pdf
- Chicago, Illinois “Bike Lane Design Guide”
http://www.cityofchicago.org/webportal/COCWebPortal/COC_EDITORIAL/bike_lane.pdf
- Portland, Oregon “Bicycle Master Plan”
<http://www.portlandonline.com/Transportation/index.cfm?a=71843&c=34812>

Bikeability Checklist

How bikeable is your community?

Riding a bike is fun!

Bicycling is a great way to get around and to get your daily dose of physical activity. It's good for the environment, and it can save you money. No wonder many communities are encouraging people to ride their bikes more often!

Can you get to where you want to go by bike?

Some communities are more bikeable than others: how does yours rate? Read over the questions in this checklist and then take a ride in your community, perhaps to the local shops, to visit a friend, or even to work. See if you can get where you want to go by bicycle, even if you are just riding around the neighborhood to get some exercise.

At the end of your ride, answer each question and, based on your opinion, circle an overall rating for each question. You can also note any problems you encountered by checking the appropriate box(es). Be sure to make a careful note of any specific locations that need improvement.

Add up the numbers to see how you rated your ride. Then, turn to the pages that show you how to begin to improve those areas where you gave your community a low score.

Before you ride, make sure your bike is in good working order, put on a helmet, and be sure you can manage the ride or route you've chosen. Enjoy the ride!



National Highway Traffic
Safety Administration



Pedestrian and Bicycle Information Center



U.S. Department
of Transportation

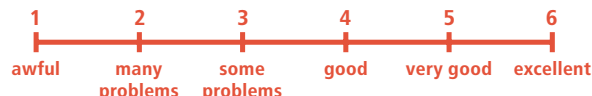
Go for a ride and use this checklist
to rate your neighborhood's bikeability.



How bikeable is your community?

Location of bike ride (be specific):

Rating Scale:



1. Did you have a place to bicycle safely?

a) On the road, sharing the road with motor vehicles?

- ☐ Yes ☐ Some problems (please note locations):
- ☐ No space for bicyclists to ride
 - ☐ Bicycle lane or paved shoulder disappeared
 - ☐ Heavy and/or fast-moving traffic
 - ☐ Too many trucks or buses
 - ☐ No space for bicyclists on bridges or in tunnels
 - ☐ Poorly lighted roadways
- Other problems: _____

b) On an off-road path or trail, where motor vehicles were not allowed?

- ☐ Yes ☐ Some problems:
- ☐ Path ended abruptly
 - ☐ Path didn't go where I wanted to go
 - ☐ Path intersected with roads that were difficult to cross
 - ☐ Path was crowded
 - ☐ Path was unsafe because of sharp turns or dangerous downhill
 - ☐ Path was uncomfortable because of too many hills
 - ☐ Path was poorly lighted
- Other problems: _____

Overall "Safe Place To Ride" Rating: (circle one)

1 2 3 4 5 6

2. How was the surface that you rode on?

- ☐ Good ☐ Some problems, the road or path had:
- ☐ Potholes
 - ☐ Cracked or broken pavement
 - ☐ Debris (e.g. broken glass, sand, gravel, etc.)
 - ☐ Dangerous drain grates, utility covers, or metal plates
 - ☐ Uneven surface or gaps
 - ☐ Slippery surfaces when wet (e.g. bridge decks, construction plates, road markings)
 - ☐ Bumpy or angled railroad tracks
 - ☐ Rumble strips
- Other problems: _____

Overall Surface Rating: (circle one)

1 2 3 4 5 6

3. How were the intersections you rode through?

- ☐ Good ☐ Some problems:
- ☐ Had to wait too long to cross intersection
 - ☐ Couldn't see crossing traffic
 - ☐ Signal didn't give me enough time to cross the road
 - ☐ Signal didn't change for a bicycle
 - ☐ Unsure where or how to ride through intersection
- Other problems: _____

Overall Intersection Rating: (circle one)

1 2 3 4 5 6

Continue the checklist on the next page...

4. Did drivers behave well?

- ☐ Yes ☐ Some problems, drivers:
- ☐ Drove too fast
 - ☐ Passed me too close
 - ☐ Did not signal
 - ☐ Harassed me
 - ☐ Cut me off
 - ☐ Ran red lights or stop sign
- Other problems: _____

Overall Driver Rating: (circle one)

1 2 3 4 5 6

5. Was it easy for you to use your bike?

- ☐ Yes ☐ Some problems:
- ☐ No maps, signs, or road markings to help me find my way
 - ☐ No safe or secure place to leave my bicycle at my destination
 - ☐ No way to take my bicycle with me on the bus or train
 - ☐ Scary dogs
 - ☐ Hard to find a direct route I liked
 - ☐ Route was too hilly
- Other problems: _____

Overall Ease of Use Rating: (circle one)

1 2 3 4 5 6

6. What did you do to make your ride safer?

Your behavior contributes to the bikeability of your community. Check all that apply:

- ☐ Wore a bicycle helmet
- ☐ Obeyed traffic signal and signs
- ☐ Rode in a straight line (didn't weave)
- ☐ Signaled my turns
- ☐ Rode with (not against) traffic
- ☐ Used lights, if riding at night
- ☐ Wore reflective and/or retroreflective materials and bright clothing
- ☐ Was courteous to other travelers (motorist, skaters, pedestrians, etc.)

7. Tell us a little about yourself.

In good weather months, about how many days a month do you ride your bike?

- ☐ Never
- ☐ Occasionally (one or two)
- ☐ Frequently (5-10)
- ☐ Most (more than 15)
- ☐ Every day

Which of these phrases best describes you?

- ☐ An advanced, confident rider who is comfortable riding in most traffic situations
- ☐ An intermediate rider who is not really comfortable riding in most traffic situations
- ☐ A beginner rider who prefers to stick to the bike path or trail

How does your community rate? Add up your ratings and decide.

(Questions 6 and 7 do not contribute to your community's score)

1. _____	26-30	Celebrate! You live in a bicycle-friendly community.
2. _____	21-25	Your community is pretty good, but there's always room for improvement.
3. _____	16-20	Conditions for riding are okay, but not ideal. Plenty of opportunity for improvements.
4. _____	11-15	Conditions are poor and you deserve better than this! Call the mayor and the newspaper right away.
5. _____	5-10	Oh dear. Consider wearing body armor and Christmas tree lights before venturing out again.
Total _____		

Did you find something that needs to be changed?

On the next page, you'll find suggestions for improving the bikeability of your community based on the problems you identified. Take a look at both the short- and long-term solutions and commit to seeing at least one of each through to the end. If you don't, then who will?

During your bike ride, how did you feel physically? Could you go as far or as fast as you wanted to? Were you short of breath, tired, or were your muscles sore? The next page also has some suggestions to improve the enjoyment of your ride.

Bicycling, whether for transportation or recreation, is a great way to get 30 minutes of physical activity into your day. Riding, just like any other activity, should be something you enjoy doing. The more you enjoy it, the more likely you'll stick with it. Choose routes that match your skill level and physical activities. If a route is too long or hilly, find a new one. Start slowly and work up to your potential.

Now that you know the problems,
you can find the answers.

Improving your community's score...



1. Did you have a place to bicycle safely?

a) On the road?

No space for bicyclists to ride (e.g. no bike lane or shoulder; narrow lanes)
Bicycle lane or paved shoulder disappeared
Heavy and/or fast-moving traffic
Too many trucks or buses
No space for bicyclists on bridges or in tunnels
Poorly lighted roadways

What you can do immediately

- pick another route for now
- tell local transportation engineers or public works department about specific problems; provide a copy of your checklist
- find a class to boost your confidence about riding in traffic

What you and your community can do with more time

- participate in local planning meetings
- encourage your community to adopt a plan to improve conditions, including a network of bike lanes on major roads
- ask your public works department to consider "Share the Road" signs at specific locations
- ask your state department of transportation to include paved shoulders on all their rural highways
- establish or join a local bicycle advocacy group

b) On an off-road path or trail?

Path ended abruptly
Path didn't go where I wanted to go
Path intersected with roads that were difficult to cross
Path was crowded
Path was unsafe because of sharp turns or dangerous downhill
Path was uncomfortable because of too many hills
Path was poorly lighted

- slow down and take care when using the path
- find an on-street route
- use the path at less crowded times
- tell the trail manager or agency about specific problems

- ask the trail manager or agency to improve directional and warning signs
- petition your local transportation agency to improve path/roadway crossings
- ask for more trails in your community
- establish or join a "Friends of the Trail" advocacy group

2. How was the surface you rode on?

Potholes
Cracked or broken pavement
Debris (e.g. broken glass, sand, gravel, etc.)
Dangerous drain grates, utility covers, or metal plates
Uneven surface or gaps
Slippery surfaces when wet (e.g. bridge decks, construction plates, road markings)
Bumpy or angled railroad tracks
Rumble strips

- report problems immediately to public works department or appropriate agency
- keep your eye on the road/path
- pick another route until the problem is fixed (and check to see that the problems are fixed)
- organize a community effort to clean up the path

- work with your public works and parks department to develop a pothole or hazard report card or online link to warn the agency of potential hazards
- ask your public works department to gradually replace all dangerous drainage grates with more bicycle-friendly designs, and improve railroad crossings so cyclists can cross them at 90 degrees
- petition your state DOT to adopt a bicycle-friendly rumble-strip policy

3. How were the intersections you rode through?

Had to wait too long to cross intersection
Couldn't see crossing traffic
Signal didn't give me enough time to cross the road
The signal didn't change for a bicycle
Unsure where or how to ride through intersection

- pick another route for now
- tell local transportation engineers or public works department about specific problems
- take a class to improve your riding confidence and skills

- ask the public works department to look at the timing of the specific traffic signals
- ask the public works department to install loop-detectors that detect bicyclists
- suggest improvements to sightlines that include cutting back vegetation; building out the path crossing; and moving parked cars that obstruct your view
- organize community-wide, on-bike training on how to safely ride through intersections

Improving your community's score...

(continued)

What you can do immediately

What you and your community can do with more time

4. Did drivers behave well?

Drivers:
Drove too fast
Passed me too close
Did not signal
Harassed me
Cut me off
Ran red lights or stop signs

- report unsafe drivers to the police
- set an example by riding responsibly; obey traffic laws; don't antagonize drivers
- always expect the unexpected
- work with your community to raise awareness to share the road

- ask the police department to enforce speed limits and safe driving
- encourage your department of motor vehicles to include "Share the Road" messages in driver tests and correspondence with drivers
- ask city planners and traffic engineers for traffic calming ideas
- encourage your community to use cameras to catch speeders and red light runners

5. Was it easy for you to use your bike?

No maps, signs, or road markings to help me find my way
No safe or secure place to leave my bicycle at my destination
No way to take my bicycle with me on the bus or train
Scary dogs
Hard to find a direct route I liked
Route was too hilly

- plan your route ahead of time
- find somewhere close by to lock your bike; never leave it unlocked
- report scary dogs to the animal control department
- learn to use all of your gears!

- ask your community to publish a local bike map
- ask your public works department to install bike parking racks at key destinations; work with them to identify locations
- petition your transit agency to install bike racks on all their buses
- plan your local route network to minimize the impact of steep hills
- establish or join a bicycle user group (BUG) at your workplace

6. What did you do to make your ride safer?

Wore a bicycle helmet
Obeyed traffic signals and signs
Rode in a straight line (didn't weave)
Signaled my turns
Rode with (not against) traffic
Used lights, if riding at night
Wore reflective materials and bright clothing
Was courteous to other travelers (motorists, skaters, pedestrians, etc.)

- go to your local bike shop and buy a helmet; get lights and reflectors if you are expecting to ride at night
- always follow the rules of the road and set a good example
- take a class to improve your riding skills and knowledge

- ask the police to enforce bicycle laws
- encourage your school or youth agencies to teach bicycle safety (on-bike)
- start or join a local bicycle club
- become a bicycle safety instructor



Need some guidance?
These resources might help...

Great Resources

STREET DESIGN AND BICYCLE FACILITIES

American Association of State Highway and Transportation Officials
444 North Capitol Street, NW, Suite 249
Washington, DC 20001
Tel: (202) 624-5800
www.aashto.org

Institute of Transportation Engineers
1099 14th Street, NW, Suite 300 West
Washington, DC 20005-3438
Tel: (202) 289-0222
www.ite.org

Association of Pedestrian and Bicycle Professionals (APBP)
P.O. Box 23576
Washington, DC 20026
Tel: (202) 366-4071
www.apbp.org

Pedestrian and Bicycle Information Center (PBIC)
UNC Highway Safety Research Center
730 Airport Road, Suite 300
Campus Box 3430
Chapel Hill, NC 27599-3430
Tel: (919) 962-2202
www.pedbikeinfo.org
www.bicyclinginfo.org

Federal Highway Administration
400 Seventh Street, SW
Washington, DC 20590
www.fhwa.dot.gov/environment/bikeped/index.htm

EDUCATION AND SAFETY

National Highway Traffic Safety Administration
400 Seventh Street, SW
Washington, D.C. 20590
Tel: (202) 366-1739
www.nhtsa.dot.gov/people/injury/pedbimot/bike/

League of American Bicyclists
1612 K Street NW, Suite 401
Washington, DC 20006
Tel: (202) 822-1333
www.bikeleague.org

National Bicycle Safety Network
www.cdc.gov/ncipc/bike/default.htm

National Safe Kids Campaign
1301 Pennsylvania Ave NW, Suite 1000
Washington, DC 20004
Tel: (202) 662-0600
www.safekids.org

PATHS AND TRAILS

Rails to Trails Conservancy
1100 17th Street SW, 10th Floor
Washington, DC 20036
Tel: (202) 331-9696
www.railtrails.org

National Park Service
Rivers, Trails and Conservation Assistance Program
1849 C Street, NW, MS-3622
Washington, DC 20240
www.nrc.nps.gov/rtca/rtca-ofh.htm

HEALTH

Centers for Disease Control and Prevention
Division of Nutrition and Physical Activity
4770 Buford Highway, NE
Atlanta, GA 30341-3724
www.cdc.gov/nccdphp/dnpa
Tel: (770) 488-5692

National Center for Injury Prevention and Control
Childhood Injury Prevention
4770 Buford Highway, NE
Atlanta, GA 30341
www.cdc.gov/ncipc

ADVOCACY AND USER GROUPS

Thunderhead Alliance
1612 K Street, NW, Suite 401
Washington, DC 20006
Tel: (202) 822-1333
www.thunderheadalliance.org

League of American Bicyclists
1612 K Street, NW, Suite 401
Washington, DC 20006
Tel: (202) 822-1333
www.bikeleague.org

National Center for Bicycling and Walking
1506 21st Street, NW, Suite 200
Washington, DC 20036
Tel: (202) 463-6622
www.bikewalk.org

Surface Transportation Policy Project
1100 17th Street, NW, 10th Floor
Washington, DC 20036
Tel: (202) 466-2636
www.transact.org

OTHER USEFUL RESOURCES

Bikes and transit: www.bikemap.com

Bicycle information: www.bicyclinginfo.org

Bicycle-related research:
www.tfhr.gov/safety/pedbike/pedbike.htm

Bicycling Magazine: www.bicycling.com/

Bicycle touring:
Adventure Cycling Association
P.O. Box 8308
Missoula, MT 59807
(800) 755-2453
(406) 721-8754
www.adv-cycling.org

Walkability Checklist

How walkable is your community?

Take a walk with a child and decide for yourselves.

Everyone benefits from walking. These benefits include: improved fitness, cleaner air, reduced risks of certain health problems, and a greater sense of community. But walking needs to be safe and easy. Take a walk with your child and use this checklist to decide if your neighborhood is a friendly place to walk. Take heart if you find problems, there are ways you can make things better.

Getting started:

First, you'll need to pick a place to walk, like the route to school, a friend's house or just somewhere fun to go.

The second step involves the checklist. Read over the checklist before you go, and as you walk, note the locations of things you would like to change. At the end of your walk, give each question a rating. Then add up the numbers to see how you rated your walk overall.

After you've rated your walk and identified any problem areas, the next step is to figure out what you can do to improve your community's score. You'll find both immediate answers and long-term solutions under "Improving Your Community's Score..." on the third page.



Take a walk and use this checklist to rate your neighborhood's walkability.

How walkable is your community?

Location of walk _____

Rating Scale:



1. Did you have room to walk?

- ☐ Yes ☐ Some problems:
- ☐ Sidewalks or paths started and stopped
 - ☐ Sidewalks were broken or cracked
 - ☐ Sidewalks were blocked with poles, signs, shrubbery, dumpsters, etc.
 - ☐ No sidewalks, paths, or shoulders
 - ☐ Too much traffic
 - ☐ Something else _____
- Locations of problems: _____

Rating: (circle one) _____
1 2 3 4 5 6

4. Was it easy to follow safety rules?

Could you and your child...

- ☐ Yes ☐ No
- ☐ Yes ☐ No Cross at crosswalks or where you could see and be seen by drivers?
- ☐ Yes ☐ No Stop and look left, right and then left again before crossing streets?
- ☐ Yes ☐ No Walk on sidewalks or shoulders facing traffic where there were no sidewalks?
- ☐ Yes ☐ No Cross with the light?
- Locations of problems: _____

Rating: (circle one) _____
1 2 3 4 5 6

2. Was it easy to cross streets?

- ☐ Yes ☐ Some problems:
- ☐ Road was too wide
 - ☐ Traffic signals made us wait too long or did not give us enough time to cross
 - ☐ Needed striped crosswalks or traffic signals
 - ☐ Parked cars blocked our view of traffic
 - ☐ Trees or plants blocked our view of traffic
 - ☐ Needed curb ramps or ramps needed repair
 - ☐ Something else _____
- Locations of problems: _____

Rating: (circle one) _____
1 2 3 4 5 6

5. Was your walk pleasant?

- ☐ Yes ☐ Some unpleasant things:
- ☐ Needed more grass, flowers, or trees
 - ☐ Scary dogs
 - ☐ Scary people
 - ☐ Not well lighted
 - ☐ Dirty, lots of litter or trash
 - ☐ Dirty air due to automobile exhaust
 - ☐ Something else _____
- Locations of problems: _____

Rating: (circle one) _____
1 2 3 4 5 6

3. Did drivers behave well?

- ☐ Yes ☐ Some problems: Drivers...
- ☐ Backed out of driveways without looking
 - ☐ Did not yield to people crossing the street
 - ☐ Turned into people crossing the street
 - ☐ Drove too fast
 - ☐ Sped up to make it through traffic lights or drove through traffic lights?
 - ☐ Something else _____
- Locations of problems: _____

Rating: (circle one) _____
1 2 3 4 5 6

How does your neighborhood stack up? Add up your ratings and decide.

- | | | |
|----------|-------|---|
| 1. _____ | 26-30 | Celebrate! You have a great neighborhood for walking. |
| 2. _____ | 21-25 | Celebrate a little. Your neighborhood is pretty good. |
| 3. _____ | 16-20 | Okay, but it needs work. |
| 4. _____ | 11-15 | It needs lots of work. You deserve better than that. |
| 5. _____ | 5-10 | It's a disaster for walking! |

Total _____

Now that you've identified the problems,
go to the next page to find out how to fix them.

Now that you know the problems,
you can find the answers.

Improving your community's score...



What you and your child can do immediately

What you and your community can do with more time

1. Did you have room to walk?

Sidewalks or paths started and stopped
Sidewalks broken or cracked
Sidewalks blocked
No sidewalks, paths or shoulders
Too much traffic

- pick another route for now
- tell local traffic engineering or public works department about specific problems and provide a copy of the checklist

- speak up at board meetings
- write or petition city for walkways and gather neighborhood signatures
- make media aware of problem
- work with a local transportation engineer to develop a plan for a safe walking route

2. Was it easy to cross streets?

Road too wide
Traffic signals made us wait too long or did not give us enough time to cross
Crosswalks/traffic signals needed
View of traffic blocked by parked cars, trees, or plants
Needed curb ramps or ramps needed repair

- pick another route for now
- share problems and checklist with local traffic engineering or public works department
- trim your trees or bushes that block the street and ask your neighbors to do the same
- leave nice notes on problem cars asking owners not to park there

- push for crosswalks/signals/parking changes/curb ramps at city meetings
- report to traffic engineer where parked cars are safety hazards
- report illegally parked cars to the police
- request that the public works department trim trees or plants
- make media aware of problem

3. Did drivers behave well?

Backed without looking
Did not yield
Turned into walkers
Drove too fast
Sped up to make traffic lights or drove through red lights

- pick another route for now
- set an example: slow down and be considerate of others
- encourage your neighbors to do the same
- report unsafe driving to the police

- petition for more enforcement
- request protected turns
- ask city planners and traffic engineers for traffic calming ideas
- ask schools about getting crossing guards at key locations
- organize a neighborhood speed watch program

4. Could you follow safety rules?

Cross at crosswalks or where you could see and be seen
Stop and look left, right, left before crossing
Walk on sidewalks or shoulders facing traffic
Cross with the light

- educate yourself and your child about safe walking
- organize parents in your neighborhood to walk children to school

- encourage schools to teach walking safety
- help schools start safe walking programs
- encourage corporate support for flex schedules so parents can walk children to school

5. Was your walk pleasant?

Needs grass, flowers, trees
Scary dogs
Scary people
Not well lit
Dirty, litter
Lots of traffic



- point out areas to avoid to your child; agree on safe routes
- ask neighbors to keep dogs leashed or fenced
- report scary dogs to the animal control department
- report scary people to the police
- report lighting needs to the police or appropriate public works department
- take a walk with a trash bag
- plant trees, flowers in your yard
- select alternative route with less traffic

- request increased police enforcement
- start a crime watch program in your neighborhood
- organize a community clean-up day
- sponsor a neighborhood beautification or tree-planting day
- begin an adopt-a-street program
- initiate support to provide routes with less traffic to schools in your community (reduced traffic during am and pm school commute times)

A Quick Health Check

Could not go as far or as fast as we wanted
Were tired, short of breath or had sore feet or muscles
Was the sun really hot?
Was it hot and hazy?

- start with short walks and work up to 30 minutes of walking most days
- invite a friend or child along
- walk along shaded routes where possible
- use sunscreen of SPF 15 or higher, wear a hat and sunglasses
- try not to walk during the hottest time of day

- get media to do a story about the health benefits of walking
- call parks and recreation department about community walks
- encourage corporate support for employee walking programs
- plant shade trees along routes
- have a sun safety seminar for kids
- have kids learn about unhealthy ozone days and the Air Quality Index (AQI)

Need some guidance?
These resources might help...

Great Resources

WALKING INFORMATION

Pedestrian and Bicycle Information Center (PBIC)
UNC Highway Safety Research Center
730 Airport Road, Suite 300
Campus Box 3430
Chapel Hill, NC
27599-3430
Phone: (919) 962-2202
www.pedbikeinfo.org
www.walkinginfo.org

National Center for
Safe Routes to School
730 Martin Luther
King, Jr. Blvd., Suite 300
Campus Box 3430
Chapel Hill, NC 27599-3430
Toll-free 1-866-610-SRTS
www.saferoutesinfo.org

National Center for Bicycling and Walking
Campaign to Make America Walkable
1506 21st Street, NW
Suite 200
Washington, DC 20036
Phone: (800) 760-NBPC
www.bikefed.org

WALK TO SCHOOL DAY WEB SITES

USA event: www.walktoschool-usa.org
International: www.iwalktoschool.org

STREET DESIGN AND TRAFFIC CALMING

Federal Highway Administration
Pedestrian and Bicycle Safety Research Program
HSR - 20
6300 Georgetown Pike
McLean, VA 22101
www.fhwa.dot.gov/environment/bikeped/index.htm

Institute of Transportation Engineers
www.ite.org

Surface Transportation Policy Project
www.transact.org

Transportation for Livable Communities
www.tlcnetwork.org

WALKING COALITIONS

America Walks
P.O. Box 29103
Portland, Oregon 97210
Phone: (503) 222-1077
www.americawalks.org



PEDESTRIAN SAFETY

National Highway Traffic Safety Administration
Traffic Safety Programs
400 Seventh Street, SW
Washington, DC 20590
Phone: (202) 662-0600
www.nhtsa.dot.gov/people/injury/pedbimot/ped

SAFE KIDS Worldwide
1301 Pennsylvania Ave. NW
Suite 1000
Washington, DC 20004
Phone: (202) 662-0600
Fax: (202) 393-2072
www.safekids.org

WALKING AND HEALTH

US Environmental Protection Agency
Office of Children's Health Protection (MC 1107A)
Washington, DC 20460
Phone: 202-564-2188
Fax: 202-564-2733
www.epa.gov/children/
www.epa.gov/airnow/
www.epa.gov/air/urbanair/ozone/what.html
www.epa.gov/sunwise/uvindex.html
www.epa.gov/otaq/transp/comchoic/ccweb.htm

President's Task Force on Environmental Health Risks and
Safety Risks to Children
www.childrenshealth.gov

Centers for Disease Control and Prevention
Division of Nutrition and Physical Activity
Phone: (888) 232-4674
www.cdc.gov/nccdphp/dnpa/readysset
www.cdc.gov/nccdphp/dnpa/kidswalk/index.htm

Prevention Magazine
33 East Minor Street
Emmaus, PA 18098
www.itsallaboutprevention.com

Shape Up America!
6707 Democracy Boulevard
Suite 306
Bethesda, MD 20817
www.shapeup.org

ACCESSIBLE SIDEWALKS

US Access Board
1331 F Street, NW
Suite 1000
Washington, DC 20004-1111
Phone: (800) 872-2253;
(800) 993-2822 (TTY)
www.access-board.gov

