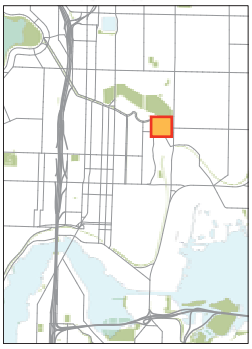
University Area Transportation Action Strategy



Ravenna Ave NE/55th Ave/Ravenna Park

Bicycle and Pedestrian Mobility & Safety

Project # 25

Improve off-street mutli-use trail parallel to Ravenna Ave NE to improve pedestrian & bicycle mobility and safety.

Priority Rating:	Medium
Cost Estimate:	$423,000

Problems and Issues

1. Ravenna Ave to the Burke Gilman Trail is a popular bicycle connection that lacks adequate facilities. The Bicycle Master Plan recommends constructing a northbound bicycle climbing lane.

- There is not sufficient roadway width to provide 2 traffic lanes and a 5-foot climbing lane. The BMP recommendation would require roadway widening and could be prohibitively expensive.

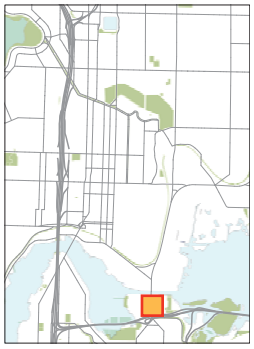
2. An effective, less expensive solution is to provide a trail within Ravenna Park that runs parallel to Ravenna Ave NE.

Recommended Actions

1. Provide off-street bicycle and pedestrian trail at Ravenna Park from 55th Ave NE to Ravenna Blvd with improved surfacing, lighting, and signage. This will likely involve working with the Parks Department on cost-sharing and maintenance strategies.

2. Upgrade crosswalks and sidewalks that connect the off-street trail to the street network.

- Together with UATAS project #10, this project provides a comprehensive, multi-modal upgrade to the street network.



Montlake Boulevard E and E Hamlin St

Congestion Management & Vehicle Safety

Project # 26

Extend northbound left/U-turn lane at E Hamlin St to reduce congestion on Montlake Boulevard.

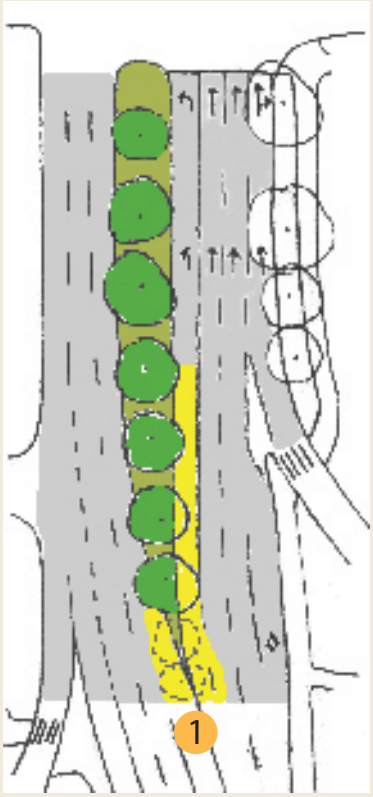
Priority Rating:	Medium
Cost Estimate:	$72,000

Problems and Issues

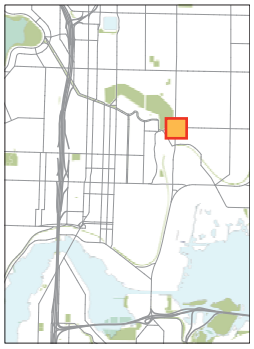
- The existing U-turn lane on Montlake Blvd is the principle turn for northbound vehicles accessing State Route 520.
- 1 The turn lane is currently not long enough to store the vehicles wanting to access SR 520. Vehicles regularly spill back into the through-lane and block northbound traffic.
- While the replacement of the 520 Bridge is expected to cause major road revisions in the near future, there are low-cost improvements that can and should be done now to improve traffic flow.

Recommended Actions

1. Add vehicle storage capacity to the existing northbound left/U-turn on Montlake Blvd at E Hamlin St by removing part of the median.
- Work with the Washington State DOT to gain approvals for this project, which is technically in state-owned right-of-way.
- Additional congestion management can be achieved along Montlake Blvd by asking WSDOT to add a sign on SR-520 directing westbound-to-southbound drivers to utilize the Lake Washington Blvd exit, which is a more direct route than using Montlake Blvd.



University Area Transportation Action Strategy



25th Ave NE/NE 55th St

Congestion Management & Safety for All Modes

Project # 27

Provide northbound and southbound left-turn pockets to reduce congestion and improve safety.

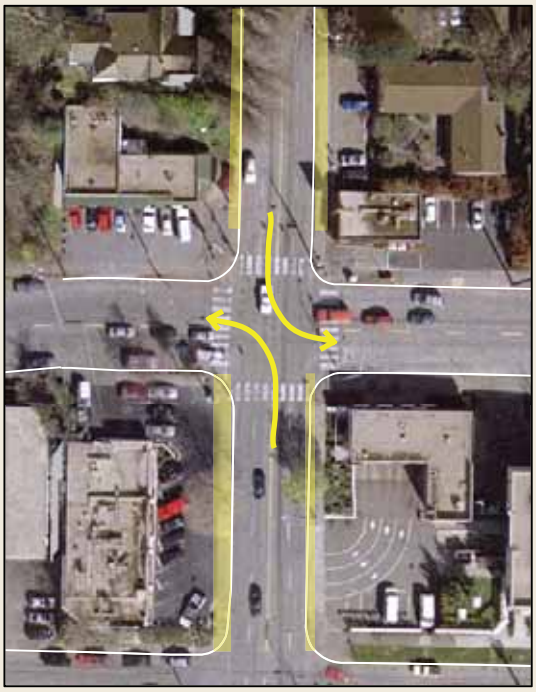
Priority Rating:	Medium
Cost Estimate:	$849,000

Problems and Issues

- This intersection has one of the highest collision rates of the study area, based on number of crashes and traffic volume.
- There is high demand for northbound and southbound left turns but they are not currently "protected."
- Making this intersection more attractive to drivers travelling to and from Ravenna Blvd could help reduce traffic (and thus vehicle/bicycle/ped conflicts) at the Burke Gilman Trail crossing at NE Blakely St/25th Ave NE.

Recommended Actions

- Provide left-turn pockets on 25th Ave NE at NE 55th St; 25th Ave will need to be widened near the intersection to provide enough room.

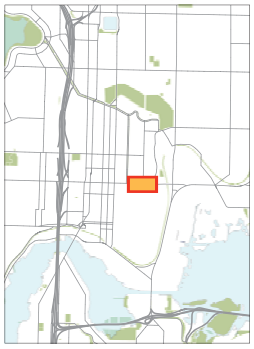


University Area Transportation Action Strategy

NE 45th St from 18th to 22nd Ave NE

Pedestrian Mobility & Safety

Project # 28



Widen sidewalks and install landscaped pedestrian refuge islands to improve pedestrian capacity and safety

Priority Rating:	Medium
Cost Estimate:	$1.4 million

Problems and Issues

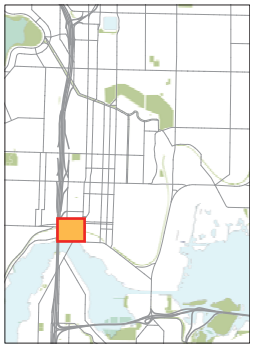
- NE 45th St is a principal arterial connecting the north University campus area with the business district and the east campus. Pedestrian volumes are high, especially north-south.
- This section of NE 45th St has narrow sidewalks, particularly on the north side, and fails pedestrian performance measures for width (LOS F) as established by UATAS.
- Sidewalks on both sides of the street are narrow. However, right-of-way constraints - and the potential for an improved pedestrian connection from the south side of NE 45th St underneath the NE 45th St Viaduct (see UATAS Project #11) - make focusing on the south side of the street (and connections to it) the most feasible and appropriate option for improving pedestrian safety and connectivity.

Recommended Actions

1. Widen sidewalks on south side of NE 45th St from 18th Ave NE to 22nd Ave NE. This improvement will be particularly valuable if a new pedestrian connection is established from NE 45th St to the Burke Gilman Trail as part of the NE 45th St Viaduct replacement project slated for 2009-2010.
2. Install landscaped pedestrian refuges on NE 45th St at 18th Ave and 20th Ave by replacing the 'dead spaces' where center turn lanes are not needed.

- When parcels redevelop on either side of 45th St, the City should require additonal setbacks for wider sidewalks.

University Area Transportation Action Strategy



Northlake Way Corridor

Pedestrian, Bicycle and Transit Mobility & Safety

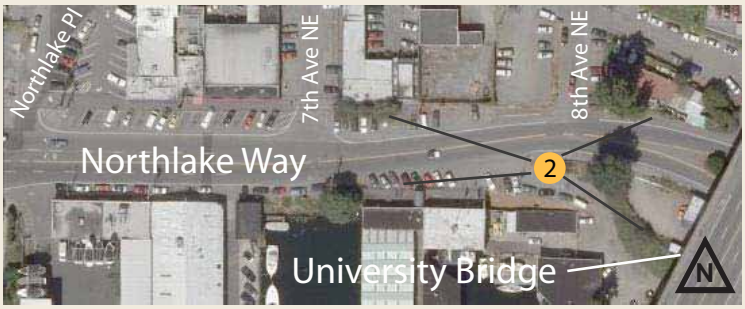
Project # 29

Reconstruct Northlake Way; add sidewalks and landscaping, upgrade bus stops, and provide off-street shared use path to improve mobility and safety

Priority Rating: Medium
Cost Estimate: $1.62 million

Problems and Issues

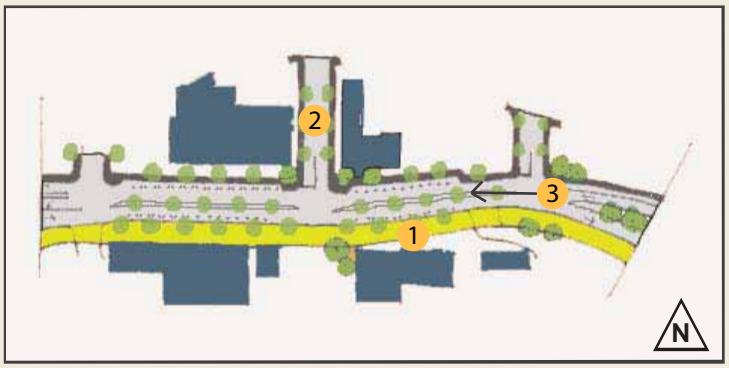
- Community plans call for new sidewalks and street trees in this area. Northlake Way is also a key section of the proposed Lake Union loop trail, which is in the Bicycle Master Plan and the Parks Foundation's 'Bands of Green' report.
- 1 This area currently lacks continuous sidewalks and well-defined pedestrian and bicycle facilities.
- 2 Underutilized and/or unregulated public rights-of-way provide ample opportunities to improve all modes, introduce more sustainable infrastructure, and activate the waterfront edge.
- Northlake Way is classified as a major truck street, and many adjacent properties are currently zoned for industrial use.



Recommended Actions

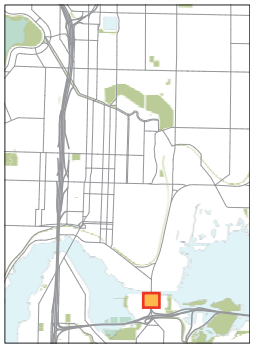
1. Reconstruct Northlake Way from University Bridge to 6th Ave NE. Shift roadway configuration to the north to provide an off-street shared-use trail from NE Boat St westward along the waterfront side.
2. Provide continuous sidewalks with street trees on the north side of Northlake Way, and along 7th and 8th Ave NE to Northlake Place.
3. Remove 90-degree parking to allow for an extension of the current landscaped center median on NE Pacific St to Northlake Way. Develop a comprehensive plan to manage parking by 2012.

- Maintain freight and business access. Consider potential impacts and/or changes to industrial lands as area is improved.



- Upgrade bus stops (covered seating, lighting, in-lane stops, etc.), and consider east-west transit improvements such as additional service hours and new connections as area develops and light rail operation begins.

University Area Transportation Action Strategy



Montlake Boulevard NE / NE Shelby St

Pedestrian & Bicycle Mobility, Safety for All Modes

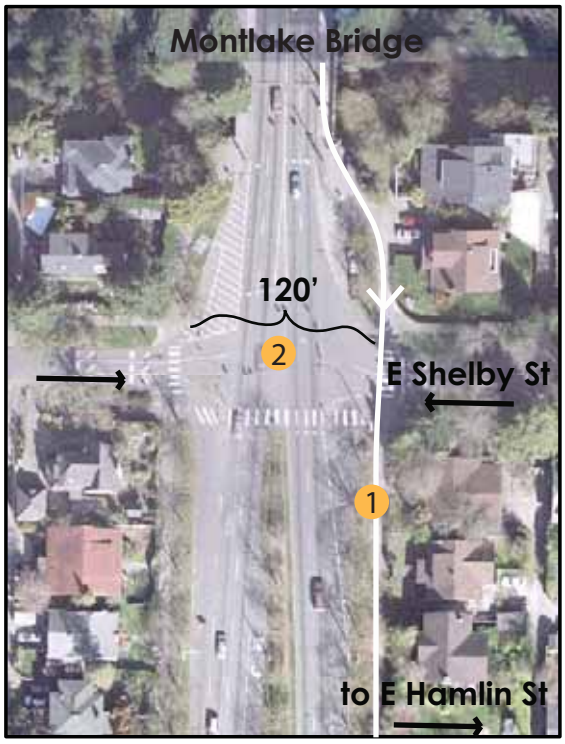
Project # 30

Narrow intersection, add bike lanes and widen sidewalks to improve safety. (Phase 2 of 2 - see Project #D)

Priority Rating:	Medium
Cost Estimate:	$785,000

Problems and Issues

- This intersection is a key connection in the designated Urban Trails and Bikeways Network, providing access over the Montlake Bridge from several major bicycle corridors.
- 1 E Shelby St and E Hamlin St are a one-way couplet. The majority of cyclists from Montlake Bridge are heading to Lake Washington Blvd from the east side of the bridge, and are forced onto the sidewalk for a full block before accessing Hamlin St, the signed eastbound route.
- 2 The intersection is wide with some painted stripes to reduce perceived width. Sidewalks are narrow, curb ramps are non-compliant, nighttime visibility is poor, and no bicycle facilities are provided.
- Whichever design is chosen, the 520 Bridge Replacement Project will provide an opportunity to redesign this intersection.



Recommended Actions

- Reconstruct intersection with tighter curb radii, wider sidewalks, and bicycle-friendly ramps.
- Provide a southbound bike lane from Montlake Bridge to SR 520.
- Improve the southbound bicycle connection from the east side of Montlake Bridge. Provide contra-flow bicycle lane or shared-use path to Hamlin St, or consider reversing direction of one-way couplet.
- Add pedestrian-scaled lighting to improve night-time visibility.

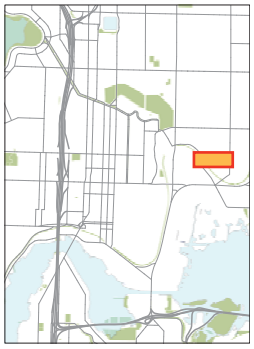
A more detailed design concept including the recommended actions should be completed when the SR 520 interchange location is decided as part of the WSDOT 520 Bridge Replacement Project.

University Area Transportation Action Strategy

NE 50th St / 30th Ave to 35th Ave NE

Pedestrian Safety

Project # 31



Complete sidewalk along south side of roadway and provide traffic calming devices to reduce vehicle speeds and improve pedestrian safety.

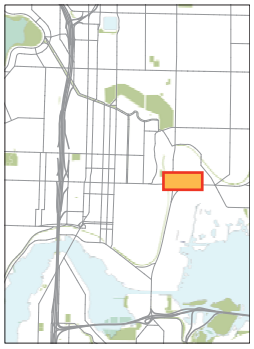
Priority Rating:	Medium
Cost Estimate:	$390,000

Problems and Issues

- NE 50th St between 30th and 35th Ave NE is a non-arterial residential street, bordered for most of its north side by a cemetary. Drivers often cut-through to avoid congested NE 45th St and travel at excessive speeds.
- Gaps in the sidewalk exist for several blocks along the south side of the street, while the north side is an unimproved shoulder with an earth embankment and parking toward the cemetary corners.

Recommended Actions

- Extend sidewalks along south side of street to provide a continuous off-street pedestrian path.
- Prioritize NE 50th St for the installation of traffic calming devices such as chicanes, speed humps, and"woonerf"-style alternating on-street parking.



Montlake Blvd/NE 45th St Corridors

Congestion Management

Project # 32

Install variable message signs in the vicinity of the Montlake Blvd/NE 45th St intersection to relay real-time traffic information.

Priority Rating:	Medium
Cost Estimate:	$728,000

Problems and Issues

- Traffic on Montlake Blvd southbound and on NE 45th St eastbound during peak periods is heavily-congested; drivers generally expect long delays. On the shoulders of the peak, and during off-peak hours, however, drivers may be unsure which route is faster to get to Interstate-5 and other destinations.
- Traffic cameras in this area linked to the internet are consistently the most-viewed cameras from SDOT's webpage, indicating a strong demand for real-time information.
- Better information can reduce vehicle trip times, improve safety around construction zones, and more efficiently distribute vehicles over the roadway system.

A rare moment of calm looking south along Montlake Blvd. But what will it look like up ahead?

Recommended Actions

- Install variable message signs before Montlake Blvd on southbound 25th Ave NE and westbound NE 45th St to inform drivers of heavy delays and average trip times.
- Signs could play a big role in alerting drivers to delays and re-routings related to the SR 520 Bridge Replacement Project.

University Area Transportation Action Strategy

I-5/NE 45th St Interchange

Congestion Management

Project # 33

Provide additional lane on southbound I-5 on-ramp at NE 45th St to reduce vehicle delay.

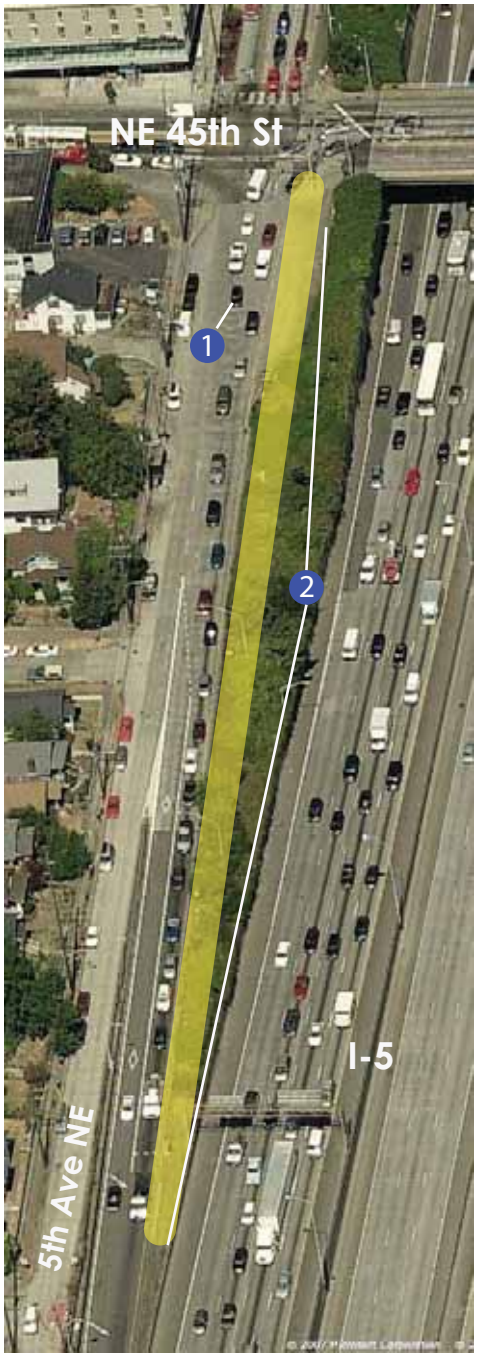
Partnership Project
Cost Estimate: TBD

Problems and Issues

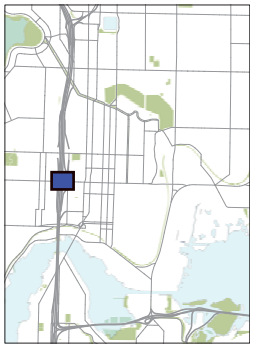
- The lack of adequate vehicle storage capacity on the I-5 on-ramp causes significant delays to traffic on NE 45th St.
- 1 Because there is only one general purpose lane on the I-5 on-ramp, single-occupant drivers do not use both westbound left turn lanes onto I-5 from NE 45th St. When they do, they turn into the HOV bypass lane and must merge left, blocking the lane for carpoolers.
- There is sufficient right-of-way so that an additional on-ramp lane can be added relatively easily.

Recommended Actions

- 2 Add a lane to the southbound I-5 on-ramp from NE 45th St. This would provide two general prupose on-ramp lanes and an HOV bypass lane.
- Modify the ramp meter to accommodate the 2 general purpose lane approach.



Project # 34



I-5/NE 45th St Overpass

Pedestrian & Bicycle Mobility; Congestion Mangement

Widen NE 45th St/I-5 overpass to reduce vehicle delays and incorporate better sidewalks and bike lanes

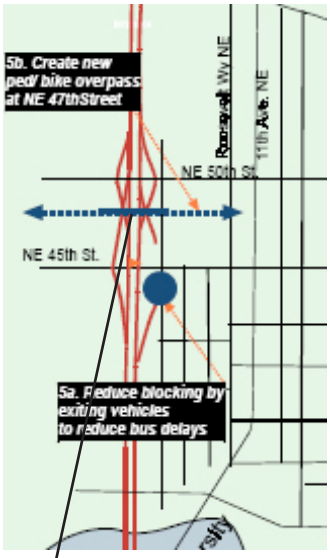
Partnership Project
Cost Estimate: TBD

Problems and Issues

- The lack of adequate westbound-to-southbound left-turning vehicle storage capacity causes significant delay to east-west traffic movements on NE 45th St.
- The existing overpass does not provide adequate pedestrian and bicycle connections across I-5.
- 1 The Bicycle Master Plan, the 2002 UATS report, and adjacent neighborhood plans call for a new shared-use overpass at NE 47th St. Such an action may be prohibitively expensive.

Recommended Actions

- Widen NE 45th St/I-5 overpass to accommodate lengthened left-turn lanes towards on-ramp, widened sidewalks with landscaping, and bike lanes. Consider as part of any major I-5 reconstruction efforts.



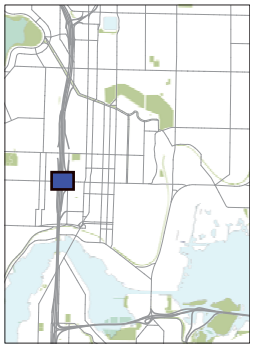
1 The need to improve east-west pedestrian and bicycle connectivity over I-5 has been a long-standing concern of the area. The 2002 University Area Transportation Study (top) and the 2007 Bicycle Master Plan (above) both call for a new I-5 overpass at NE 47th St. If such a project is not considered feasible due to cost concerns, WSDOT must consider a widening and enhancement to the NE 45th St overpass as part of any major new project on I-5.

University Area Transportation Action Strategy

I-5/NE 45th St Interchange

Congestion Management

Project # 35



Provide additional northbound on-ramp from 7th Ave NE to reduce vehicle delay.

Partnership Project
Cost Estimate: TBD

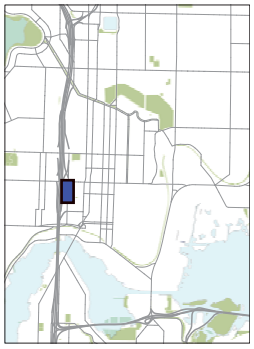
Problems and Issues

- NE 45th St, a key east-west vehicle and transit corridor, is heavily-congested during most of the day. A significant source of delay are vehicles looking to access Interstate 5.
- Inadequate vehicle storage capacity of the I-5 northbound on-ramp forces traffic spillovers back onto NE 45th St. Vehicles waiting to access I-5 from the westbound 45th St curb lane often slow east-west through traffic.
- There is sufficient right-of-way to provide additional storage capacity for the north-bound I-5 on-ramp, which would reduce spillovers onto NE 45th St and improve levels-of-service.

Recommended Actions

1. Add a lane to the northbound I-5 on-ramp from NE 45th St.
- Modify ramp meter to accommodate a two-lane ramp approach.

Project # 36



7th Ave NE/I-5 off-ramp at NE 45th St

Transit Speed & Reliability

Provide transit queue bypass lane to improve transit speeds & reliability.

Partnership Project
Cost Estimate: TBD

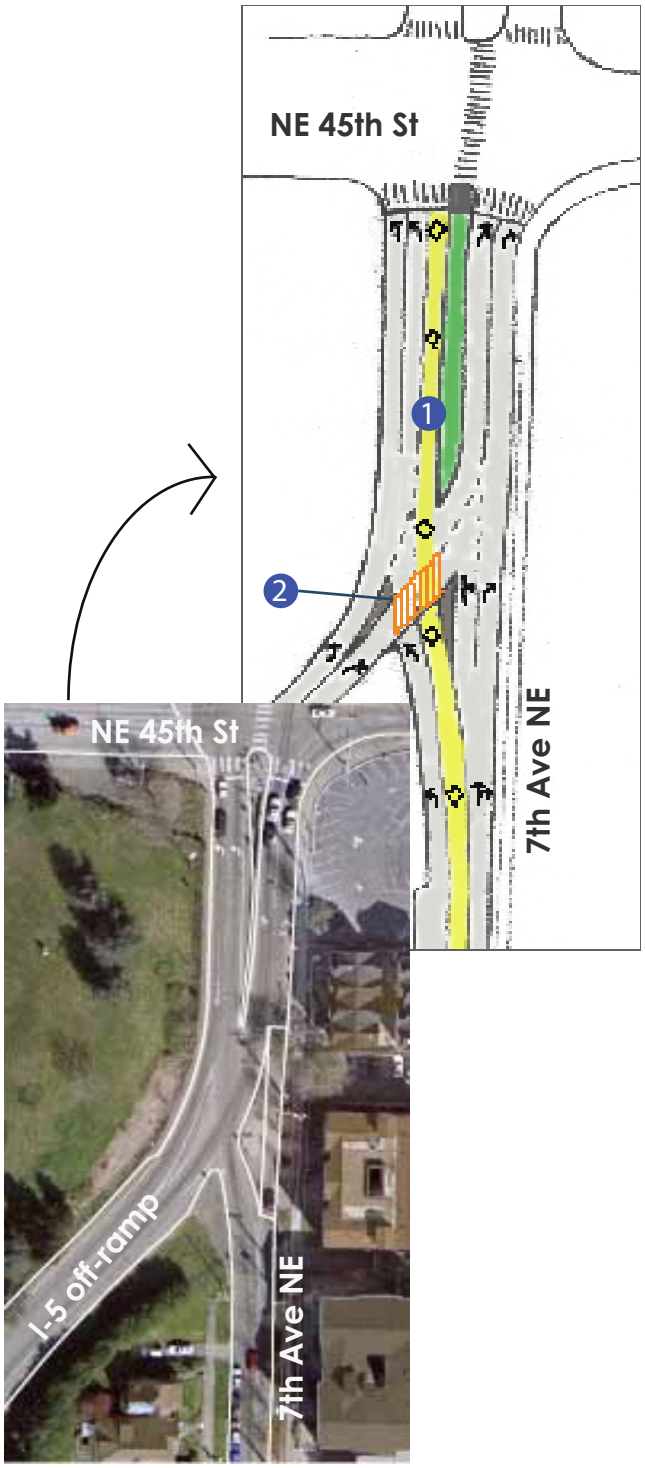
Problems and Issues

- 7th Ave NE is a northbound one-way arterial street. The I-5 northbound off-ramp approaching NE 45th St is not signalized as it crosses 7th Ave, while 7th Ave is controlled by a stop sign. This intersection performs poorly in the peak periods.
- Traffic backups on the NE 45th St I-5 off-ramp sometimes block the intersection with 7th Ave.
- Transit vehicles (28 buses in the AM peak and 22 in the PM peak) experience severe delays getting through this intersection and the intersection at NE 45th St.

Recommended Actions

1. Construct a transit queue bypass lane on northbound 7th Ave NE south of NE 45th St.
2. Create a clearly delineated intersection with the I-5 northbound off-ramp, improving pavement markings and signage that indicate to drivers not to block the intersection.

- This project will provide significant time savings to peak period transit. Potential negative impacts include increased I-5 off-ramp congestion and some parking removal along 7th Ave.
- The need for this project will greatly diminish once light rail service is established to and from Northgate. WSDOT and the City should prioritize the implementation of this project in order to maximize the accrued benefit to existing transit service.

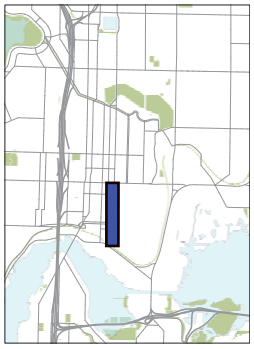


University Area Transportation Action Strategy

15th Ave NE Corridor

Multi-Modal Corridor Planning; Urban Design

Project # 37



Conduct a corridor study in cooperation with the UW and King County Metro to improve pedestrian and transit facilities, manage congestion, & improve urban design.

Partnership Project
Cost Estimate: TBD

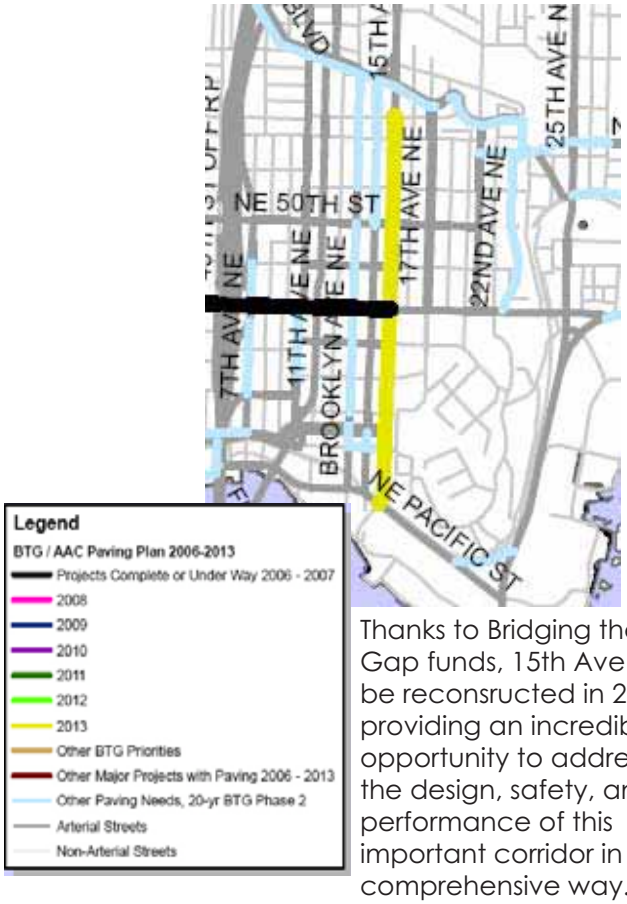
Problems and Issues

- 15th Ave NE carries a high volume of pedestrian, transit, and vehicle traffic - all of which are forecasted to increase.
- Existing pedestrian facilities are generally substandard, particularly the sidewalk and connection with campus on the east side of the street.
- The lifting of the University 'lease lid' and expected development of light rail at Brooklyn Ave, as well as increased employment and housing densities, all contribute to the importance of improving east-west connections across 15th Ave.
- Forecasted increases in north-south vehicle and transit volumes - especially if an interchange north of Montlake is chosen for the 520 Bridge Replacement Project - will only heighten the need to comprehensively manage all of the demands placed on 15th Ave NE.

Forecasted increases in transit and new development, such as the William Gates Hall Law Center (above), will only continue to place pressure for improving 15th Ave NE for all modes.

Recommended Actions

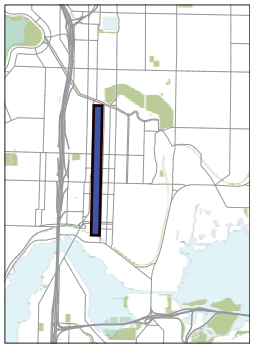
- Conduct a corridor study in conjunction with the University of Washington and King County Metro to develop improvement concepts and implementation strategies for 15th Ave NE. Focus particularly on the east side of the street where the roadway and west campus edge intersect.
- Improvement concepts developed by this study should be considered in conjunction with SDOT reconstruction of 15th Ave NE scheduled for 2013 or for mitigation related to the SR 520 Bridge Replacement Project.



Thanks to Bridging the Gap funds, 15th Ave will be reconsructed in 2013, providing an incredible opportunity to address the design, safety, and performance of this important corridor in a comprehensive way.

University Area Transportation Action Strategy

Project # 38



Brooklyn Ave NE Corridor

Multi-Modal Corridor Planning; Streetscape Design

Develop a streetscape concept plan and implementation strategy to encourage coordinated urban design/sustainable infrastructure, and to leverage development activities.

Partnership Project
Cost Estimate: TBD

Problems and Issues

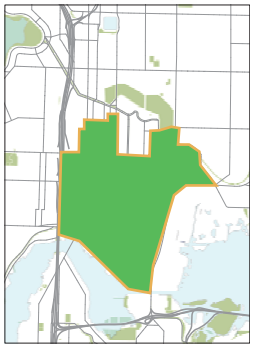
- Brooklyn Ave from Ravenna Park to NE Boat St is designated as a Neighborhood Green Street and has long been considered a key bicycle route. UATAS analysis has identified adding bicycle sharrows and widening sidewalks north of 50th St as recommended projects.
- More than adequate right-of-way provides implementation opportunities for sustainable and pedestrian-friendly improvements: the curb-to-curb distance is about 40 ft.
- Aging and substandard infrastructure, such as the pavement and utility poles/street lighting, indicate that new infrastructure investments will be needed in the foreseeable future.
- New investments are expected along Brooklyn Ave by SDOT, Sound Transit, the University of Washington, (potentially) the Parks Department, and private development. In order to facilitate coordinated construction, good urban design and the leveraging of opportunities, SDOT and the Department of Planning & Development should promote stakeholder participation in - and funding of - a concept streetscape plan for this corridor.

The 2005 University District Parks Plan is "anchored" around the development and planning associated with Brooklyn Ave.

Recommended Actions

- Develop Green Street design concept for Brooklyn Ave from Ravenna Park to NE Boat St in cooperation with DPD, Sound Transit, the UW, the Parks Department, and neighborhood property-owners and stakeholders.
- Officially designate Brooklyn Ave as a bicycle route and add shared-lane markings (sharrows).
- Prioritize pedestrian improvements, such as wider sidewalks, street trees, better trail connections, and shorter signal cycles.

University Area Transportation Action Strategy



University Area Urban Center

Pedestrian Mobility

Project # A

Automatically activate pedestrian signals at all times in Urban Center. Remove push buttons to avoid confusion.

Low Capital Cost, Early Implementation Project

Cost Estimate: $52,000

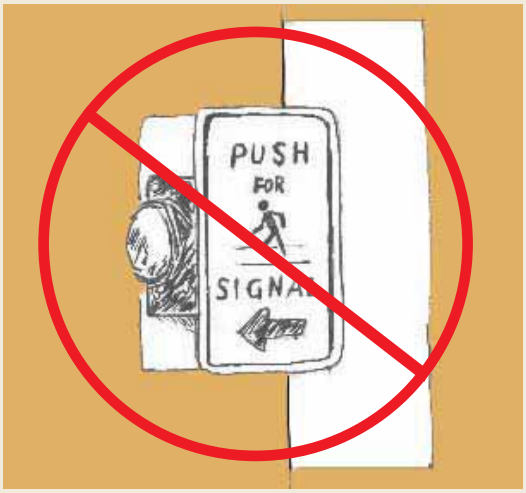
Problems and Issues

Burke Gilman Trail Crossing at 25th Ave NE

- Most signalized intersections operate with autmoatic pedestrian phases from 7am-11pm, and are pedestrian-actuated from 11pm-7am.
- Many pedestrians do not understand this push button operating practice, often resulting in user confustion and frustration.
- SDOT's current push button policy is not fully consistent with many other City and SDOT policies that aggressively promote pedestrian-friendly urban centers and modal shifts away from the automobile.*
- Any changes to the policy must be approved by the Seattle City Council.

* Current SDOT push button policy is full automation if pedestrians are persent at the main street crossing for 75% or more of the cycles for 12 hours of the day; and partial automation/partial user-activation if pedestrians are present for 50% of cycles.

Recommended Actions



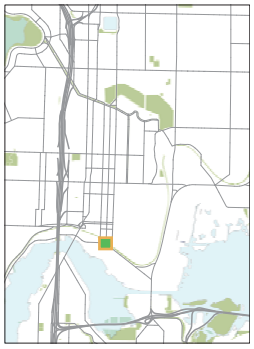
- Include within the scope of the Pedestrian Master Plan a task to examine the current SDOT policy regarding pedestrian crossing push buttons. Consider removal of pedestrian push buttons at all fully-signalized intersections within an Urban Center such as the University District Urban Center. Automatically activate the pedestrian crossing signal with every green cycle 24-hours per day.

University Area Transportation Action Strategy

University Way NE and NE Pacific St

Bicycle Safety

Project # B



Remove vegetation and add raised, colored crosswalks at Burke-Gilman Trail crossing to improve visibility & safety.

Low Capital Cost, Early Implementation Project

Cost Estimate: $50,000

Problems and Issues

- The Burke-Gilman Trail crosses University Way on the north leg of the intersection with NE Pacific Street. Drivers approaching the intersection often fail to recognize the trail crossing and pay sufficient attention to the crosswalk.
- 1 The existing vegetation planted along both sides of University Way reduces or blocks the sightlines of bicyclists traveling on the trail.
- 4 bicycle-vehicle collisions were reported here in the last three years.

Recommended Actions

- Clear where appropriate the trees and shrubs located near the Burke-Gilman trail on the northeast and northwest corners of the intersection to increase sight distances between roadway and trail.
- Provide a raised, colored crosswalk on the north leg of the University Way NE and Pacific Street NE intersection where it crosses the trail.
- Prioritize this intersection for signage improvements as recommended in the Seattle Bicycle Master Plan to improve trail visibility.

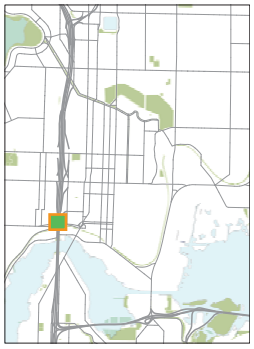
A crosswalk similar to this one above should be installed at the crossing of University Way to improve safety and visibility of the Burke Gilman Trail.

University Area Transportation Action Strategy

6th Ave NE and Lower NE 40th St

Congestion Management

Project # C



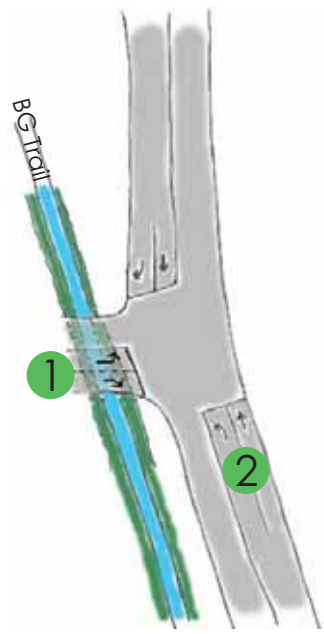
Add left turn lanes to improve traffic flow.

Low Capital Cost, Early Implementation Project

Cost Estimate: $8,000

Problems and Issues

- The intersection of 6th Ave NE and Lower NE 40th St (under I-5) is a three legged, "T"-intersection controlled by all-way stops.
- The intersection currently operates at level-of-service (LOS) F with 127 seconds of delay. In 2030, it is forecasted to operate at LOS F with an average 152 seconds of delay if actions are not taken.
- There is sufficient roadway width to accommodate turn lanes, although no striping is currently provided.



Recommended Actions

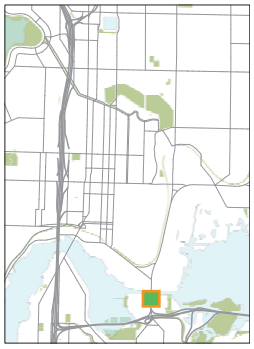
1. Stripe a northbound left-turn lane on 6th Ave NE.
2. Stripe a westbound left-turn lane on Lower NE 40th Street to improve traffic flow.
- Ensure that changes to channelization can safely accommodate buses from eastbound NE 40th St turning to southbound 6th Ave NE.

University Area Transportation Action Strategy

Montlake Blvd E and E Shelby St

Bicycle Mobility & Safety

Project # D



Modify traffic island and add a bike lane to improve safety (Phase 1 of 2 - see Project #30)

Low Capital Cost, Early Implementation Project

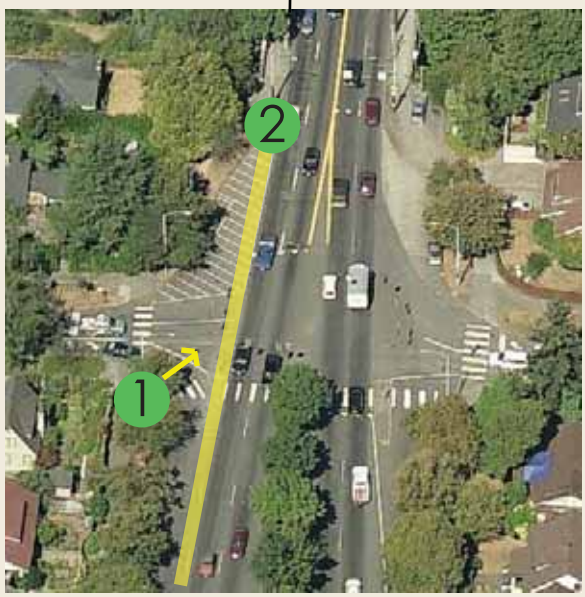
Cost Estimate: $22,000

Problems and Issues

- Montlake Blvd E is an important connection in the Urban Trails and Bikeways System, linking the UW cmpus and Burke Gilman Trail with major bicycle corridors to the south.
- The traffic island on the west leg of the intersection of Montlake Boulevard and NE Shelby Street prevents bicyclists from comfortably merging from the sidewalk on the Montlake Bridge to southbound Montlake Boulevard.
- The island is a barrier that increases cyclist discomfort and the potential for vehicle/bicycle conflicts along Montlake Blvd.
- There is no bicycle facility provided at this intersection.

Recommended Actions

1. Remove a portion of the traffic island on the west side of Montlake Boulevard NE at the intersection with NE Shelby Street to help cyclists get into the southbound general traffic lane from the sidewalk on the Mont-lake Bridge.
2. Stripe a bike lane on southbound Montlake Blvd E south of the Montlake Bridge to SR 520.
- Look to reconstruct entire intersection when the 520 Bridge Replacement Project moves forward (See Phase 2, Project #30).

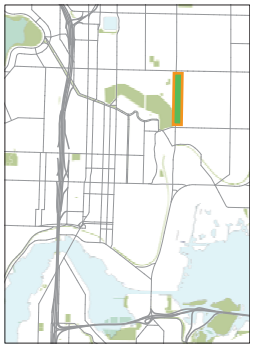


University Area Transportation Action Strategy

25th Ave NE Corridor

Congestion Management

Project # E



Extend peak-hour parking restrictions to all-day to reduce off-peak congestion.

Low Capital Cost, Early Implementation Project

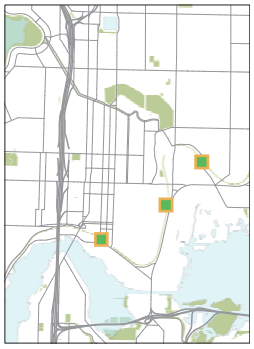
Cost Estimate: $78,000

Problems and Issues

- During the PM peak period parking on the east side of 25th Avenue NE is prohibited and two northbound through lanes are provided. As a result, the 25th Avenue NE/ NE 65th Street intersection operates at an acceptable level-of-service (LOS).
- At times when on-street parking is allowed – after 6 PM weekdays and all-day weekends – northbound vehicles approaching this intersection encounter excessive delays.

Recommended Actions

- Allow late PM and overnight parking only on the east side of 25th Avenue NE between NE 55th Street and NE 65th Street to reduce northbound traffic congestion during the off-peak period and on weekend days.



University Area Transportation Action Strategy

Burke Gilman Trail at Pend Oreille Rd, Brooklyn Ave NE, and NE Blakely St

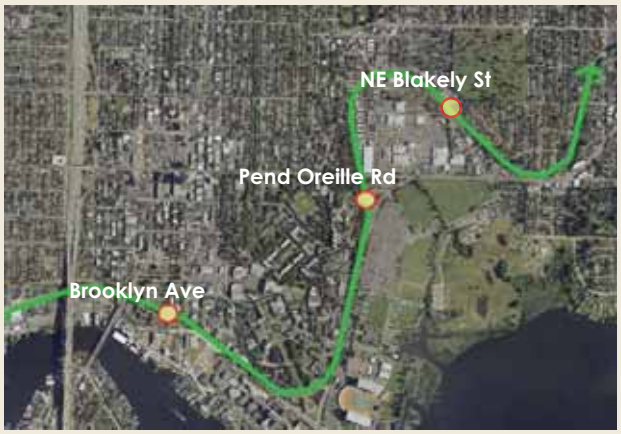
Bicycle and Pedestrian Mobility & Safety

Project # F

Add raised, colored trail crossings, and consider traffic control modifications at key mid-block intersections, to improve safety.

Low Capital Cost, Early Implementation Project
Cost Estimate: $29,000

Problems and Issues

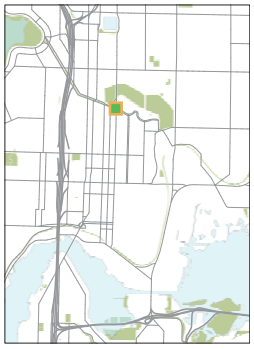


- These mid-block trail crossings are considered high accident & conflict locations. Current traffic control provides stop signs for the trail and uncontrolled right-of-way for vehicles.
- Driver and trail user behavior often do not reflect the traffic control: many drivers yield to trail traffic (which for pedestrians is state law), and many trail users (including bicyclists) have come to anticipate yielding vehicles and fail to stop along the trail.
- 1 The UW police recently placed additional warning signs along the trail at Brooklyn and Pend Oreille as a stop-gap safety measure.
- These streets have relatively light traffic volumes, while this is the most heavily used segment of the Burke Gilman Trail. Considering these specific locations and the comparison of vehicular/trail volumes, the current traffic control and signage can be considered inconsistent with City and SDOT policies that aggressively promote non-motorized transportation and sustainability.
- For more detailed discussion of SDOT's current policy related to assigning right-of-way at mid-block trail crossings, see Appendix H of the Bicycle Master Plan.

New trail signage at Pend Oreille Rd and Brooklyn Ave.

Recommended Actions

- The University of Washington may conduct a comprehensive study of the Burke Gilman Trail along campus property. Work with their transportation office to consider revising the current traffic control and signage at Pend Oreille Rd and Brookyln Ave, and replicate these modifications at the crossing of NE Blakely St to maintain consistency.
- Add raised, colored and/or patterned crosswalks to distinguish Burke Gilman Trail crossings and reduce potential conflicts with motorists.



15th Ave NE/Ravenna Blvd

Vehicle Congestion

Project # G

Monitor traffic congestion to determine if and when a signal needs to be installed to reduce delay.

Low Capital Cost, Early Implementation Project

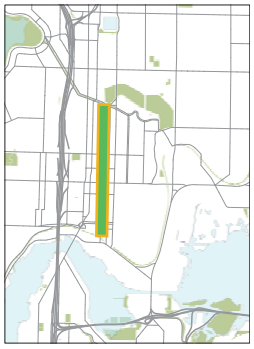
Cost Estimate: N/A

Problems and Issues

- This intersection was converted to a 4-way stop several years ago.
- The intersection is currently operating at an acceptable level of service.
- Due to forecasted increases in traffic volumes on 15th Ave NE, future delays during the PM peak hour may require the installation of a signal.

Recommended Actions

- Monitor traffic periodically and evaluate the need for a signal at the 4-way stop intersection.



University Area Transportation Action Strategy

Brooklyn Ave NE from Ravenna Blvd to the Burke Gilman Trail

Bicycle Mobility & Safety

Project # H

Install bicycle sharrows and signage to improve mobility and safety.

Low Capital Cost, Early Implementation Project

Cost Estimate: $39,000

Problems and Issues

- Brooklyn Avenue is a designated Neighborhood Green Street and has long been considered a preferred north-south bicycle route.
- The need to improve north-south bicycle facilities in the University District has been recognized by the University District Neighborhood Plan, UW Campus Master Plan, 2005 Parks Plan, Bicycle Master Plan, and consistently by community members in UATAS outreach.

Recommended Actions

- Provide shared lane markings (bicycle sharrows) along Brooklyn Avenue from the Burke-Gilman Trail (NE Pacific Street) to Ravenna Blvd.
- Designate Brooklyn Ave as a bike route and provide wayfinding from adjacent trails and bicycle facilities.

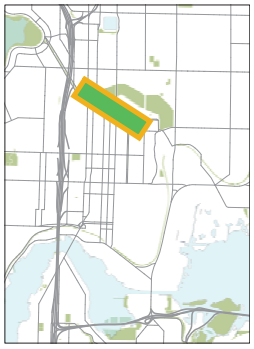
The recently completed Seattle Bicycle Master Plan, while suggesting that Brooklyn Ave could see improvements in the future, fell short of fully designating Brooklyn Ave in the bicycle facilities network. Active neighborhood support, however, and Brooklyn Ave's low traffic volumes and strong connections to other parks and trails make installation of sharrows or other bicycle improvements a priority for the area.

University Area Transportation Action Strategy

Ravenna Boulevard

Bicycle Safety

Project # I



Prioritize funding the repaving of Ravenna Blvd from NE 65th St to Ravenna Ave NE to improve safety.

Low Capital Cost, Early Implementation Project
Cost Estimate: $2.5 million*
*not including drainage

Problems and Issues

Ravenna Blvd at 8th Ave NE

- Ravenna Blvd is a critical link in Seattle's Urban Trails and Bikeways System, both systemwide and for the Green Lake, Roosevelt, Ravenna, and University District neighborhoods. It is also a prominent Olmstead legacy park facility.
- The existing pavement on Ravenna Blvd is rough and hazardous for cyclists. SDOT Street Maintenance has identified Ravenna Blvd as needing major maintenance, although it has not been prioritized or scheduled for improvement.
- While the pavement on Ravenna Blvd is in need of repair, the street carries less vehicle traffic volume than other Seattle streets that have also been identified for resurfacing.

Recommended Actions

- As new information becomes available to SDOT concerning recently enacted drainage regulations and their cost impacts, consider prioritizing Ravenna Boulevard from NE 65th St to Ravenna Ave NE.
- Work with SDOT's Bicycle Program, Seattle Public Utilities, and Seattle Parks and Recreation Department to identify grant and other partnership opportunities to help fund this project.

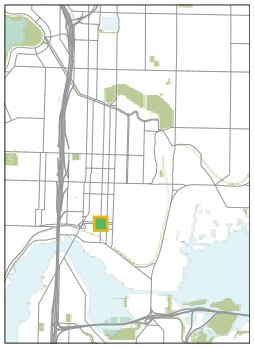
Draft 9-Year Paving Plan (left):
- Recently completed paving projects
- 15th Ave NE scheduled for 2013
- Needs maintenance (potential Bridging the Gap 20-year project)

University Area Transportation Action Strategy

15th Ave NE and NE Campus Parkway

Pedestrian & Vehicle Safety

Project # J



Add protected left-turn phase to signal timing to improve safety.

Low Capital Cost, Early Implementation Project

Cost Estimate: $245,000

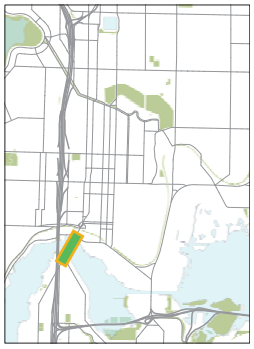
Problems and Issues

- 3 pedestrian-vehicle collisions have occurred at this intersection in the last three years.
- 1 Because of the wide median on Campus Parkway, it takes a long time for pedestrians to cross the street.
- Northbound vehicles on 15th Avenue NE can turn left at any time during the green phase; this turning movement presents a hazard to pedestrians crossing Campus Parkway.

Recommended Actions

- Modify signal operation to provide protected northbound left-turn phase. Pedestrians would not be permitted to cross the street when vehicles are turning left across the crosswalk.

University Area Transportation Action Strategy



University Bridge

Pedestrian & Bicycle Safety; Urban Design

Project # K

Install pedestrian lighting fixtures to existing poles along the University Bridge to improve safety.

Low Capital Cost, Early Implementation Project

Cost Estimate: $ 125,000

Problems and Issues

- The University Bridge is a critical link in the Urban Trails and Bikeways System, is part of the South Lake Union Loop Trail, and is a highly visible facility from many neighborhoods and waterways.
- While architectural flood lighting exists on the draw-bridge structure, the roadway lights on the remaining bridge span are sparse and do not provide sufficient pedestrian or bicycle safety and comfort.
- KC Metro has evenly-spaced trolley-wire poles that should be able to accommodate pedestrian lighting fixtures over the sidewalks and bike lanes.

Recommended Actions

- Install pedestrian luminaires (type Lumec Z-40 dark green) to the existing KC Metro and roadway lighting poles.
- The improved lighting should help increase the visibility of pedestrians and bicyclists along the bridge and reduce potential vehicle conflicts at the NE Fuhrman and NE 40th intersections.
- SDOT must seek approval from KC Metro to utilize the trolley poles.

Z40

Because of the even-spacing of the existing transit poles, new pedestrian fixtures will provide a distinctive and "rhythmic" quality to the bridge in addition to increasing safety.