

5. INFRASTRUCTURE IMPROVEMENT RECOMMENDATIONS

The purpose of this chapter is to provide information to both SDOT staff and members of the community about the relative value and importance of each project in addressing area transportation needs.

It provides background on projects that were identified as community priorities and recommendations for improving the safety of intersections and corridors including design concepts.

The projects are organized into two categories – community-supported projects (1-15) and community-led projects (16-19). The former requires transportation analysis and are those where SDOT would be the lead-City department for planning and implementation. The latter requires significant involvement and support from the community and other stakeholders for design and implementation.

EVALUATION APPROACH

To assess projects identified in earlier plans and those identified through this study's outreach process, the project team developed a set of evaluation criteria. Similar to the approaches of previous mobility studies, the evaluation criteria are framed around community goals and priorities. These priorities were confirmed during the community engagement process.

Using a range of measures specific to each category, the study evaluated each project based on the criteria. For a full list of criteria and measures, see appendix C. The projects were ranked based on their performance across the criteria categories. In the following pages, symbols indicate a project that ranked in the top-third of the project list for that evaluation criteria.

Evaluation criteria



SAFETY

Improves safety for people walking, biking, using transit, and/or driving.



CONNECTIVITY AND MOBILITY

Improves movement between destinations and connects walking, biking, and/or transit networks.



HEALTH

Enhances health by reducing pollution, adding green space and encouraging activity.



EQUITY

Addresses the needs of people who are under-served (e.g., people of color, non-English speakers) and/or are vulnerable (e.g., people with disabilities, seniors, children, low-income).



LIVABILITY

Supports or promotes community connections and a sense of place, and provides space or improves the experience for people walking, biking, and/or riding transit.



IMPLEMENTATION

High-level feasibility for implementing the project.



COMMUNITY SUPPORT

General level of support within the community.

For additional projects identified in previous City, County, and Community reports (see page 9) that did not emerge as high priorities following our outreach and project evaluation, see appendix D on page 77.

While project evaluation is an important part of assessing the impact and effectiveness of individual projects in achieving community and SDOT goals, it is just one factor among many in determining how projects will ultimately be prioritized for implementation. Additional factors, such as available funding, are also a key consideration. Thus, the order of projects presented in the following section does not suggest the order in which projects may be implemented.

PROJECT COST ESTIMATES

The study provides planning-level cost ranges as follows:

Low:	Under \$100,000
Medium:	\$100,000 - \$500,000
Medium/High:	\$500,000 - \$1,000,000
High:	Over \$1,000,000

Costs on page 51 have a more detailed description in appendix E on page 78 to page 80.

Please note that for all projects listed in this study, additional engineering study is needed prior to permit, design, funding, and construction phases. All proposed designs shown in the following pages are conceptual. Cost estimates are planning-level and assume 2018 prices. More detailed analysis will be needed prior to design and construction.

Legend

-
- The map displays the Beacon Hill neighborhood in Seattle, with a proposed light rail line highlighted in blue. The line runs north-south, starting near Golf Dr S and 12th Ave S, passing through 14th Ave S, 15th Ave S, 17th Ave S, 19th Ave S, 21st Ave S, 22nd Ave S, 23rd Ave S, and ending near S Spokane St. Key streets shown include S Atlantic St, S Hill St, S Plumb St, S College St, S Lander St, S Forest St, S Stevens St, S Hanford St, S Hinds St, S Spokane St, S Massachusetts St, S Holgate St, S Walker St, S Bayview St, S McClellan St, and Rainier Ave S. Major highways I-5 and I-90 are also visible. The map includes a north arrow and a scale bar.

Beacon Ave S Corridor Improvements and Study: Projects 1-5

Beacon Ave S is a key transportation corridor through the neighborhood and a primary commercial hub in Beacon Hill. Improvements to Beacon Ave S were a top interest at multiple outreach events, especially the limited crossing opportunities along the corridor, and signals that have not been upgraded to current standards.

The corridor is the spine of Beacon Hill's Urban Village and zoned for higher-density multi-family and mixed-used development. Stretches of

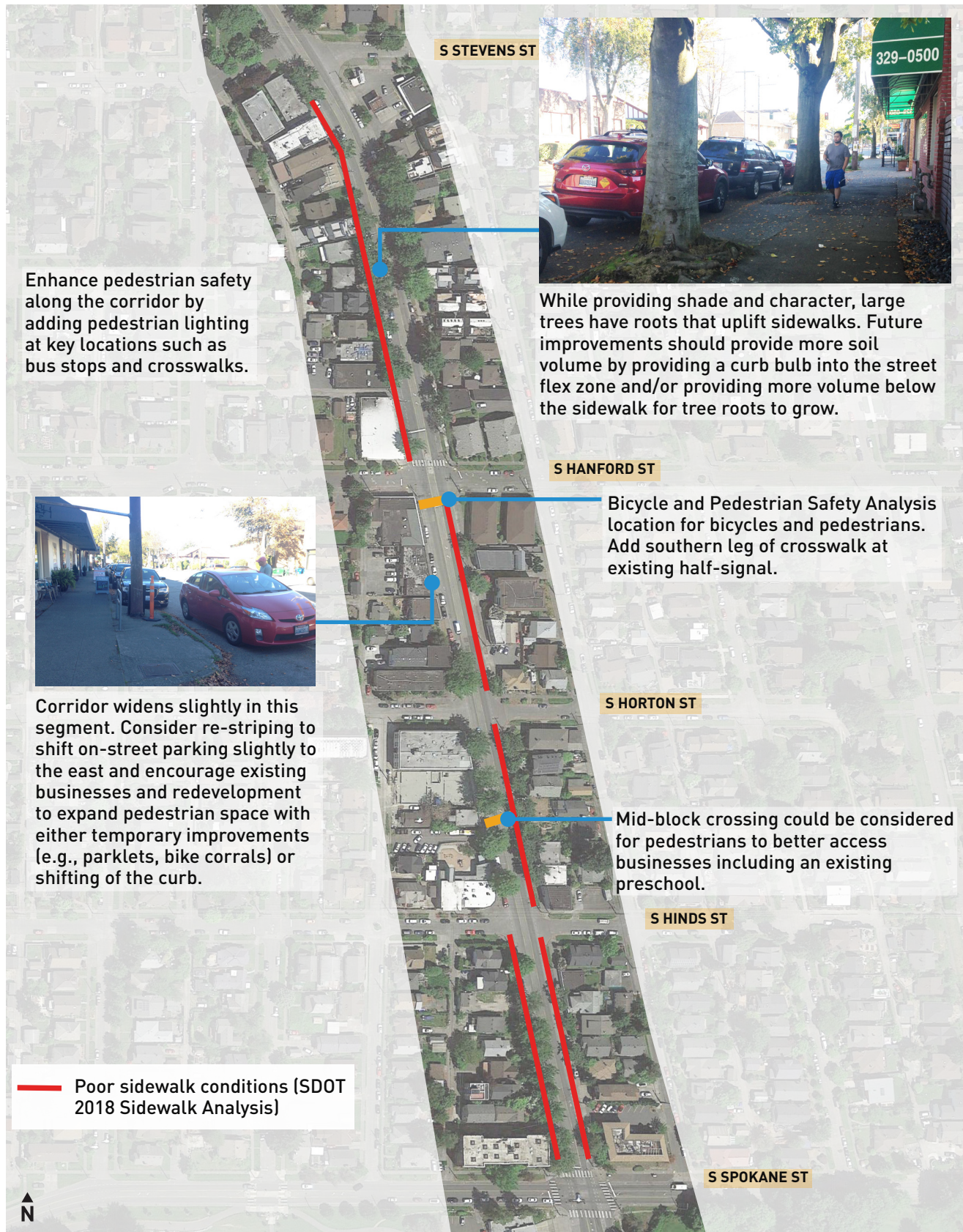
sidewalks along the corridor are in poor condition as pavement is uplifted by mature tree roots or are not wide enough to facilitate good pedestrian flow. People who bike within and through the neighborhood expressed a desire for better bike facilities on the Beacon Ave S corridor because it is the flattest, most direct, north-south route.

Previous plans identified many of the Beacon Ave S intersections as prime candidates for improvement. This study built on and refined several of the intersection improvement ideas with design concepts.

FIGURE 16. BEACON AVE S CORRIDOR PROPOSED PROJECT LOCATIONS



FIGURE 17. BEACON AVE S CORRIDOR: COMMUNITY IDENTIFIED OPPORTUNITIES



Additional considerations for the Beacon Ave S Corridor study (see project 5 on page 48).

1

CROSSING IMPROVEMENT AT BEACON AVE S / S STEVENS ST

Improve pedestrian and bicycle crossing at this location by adding curb bulbs and other pedestrian safety features.



Background

Future redevelopment is possible in close proximity of the intersection. South of S Stevens St along the west side of Beacon Ave S are several small businesses including restaurants. There is also a south-bound bus stop located just north of the intersection at Stevens Place Park and a north-bound bus stop across Beacon Ave S (see Figure 18). There are few crossing opportunities along this segment of Beacon Ave S with only one pedestrian-actuated signal at S Hanford St between S Forest St and S Spokane St.

Relevant Plans

- 2008 Southeast Transportation Study (SETS)
- 2010 Beacon Hill Neighborhood Plan

FIGURE 18. EXISTING INTERSECTION SHOWING ADJACENT USES



● bus stop

Recommendations

Intersection improvements may help control north-bound traffic approaching the Town Center to slow drivers prior to approaching the Rectangular Rapid Flashing Beacon (RRFB) in front of the Library.

Phase 1

- A** Square-up the intersection (with a 20' turning radius) using paint and post curb extensions to calm traffic.

Study intersection post-improvement to assess its effectiveness on traffic calming, and on pedestrian circulation and crossing locations.

Phase 2

- B** Paint new crosswalks and install new curb ramps.
- C** Explore new crossing signal for pedestrians (i.e., half-signal or full signal).

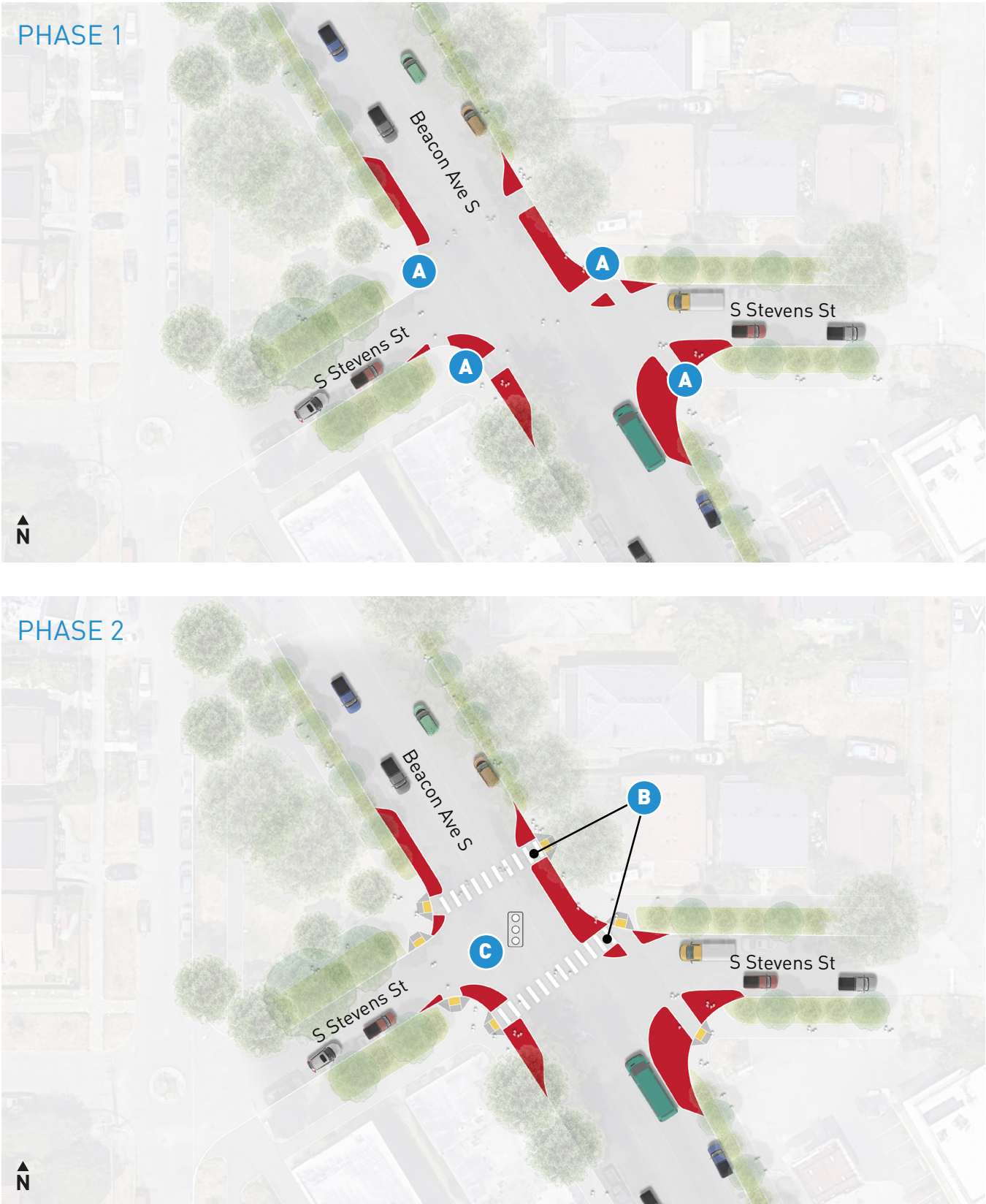
If it is determined that bike facilities are not to be accommodated on Beacon Ave S, painted curb extensions can be built out in concrete.

With expanded pedestrian space, explore opportunities for placemaking/gateway elements such as art, enhanced landscape plantings, signage, and community crosswalks.

Planning-Level Cost Estimates

Phase 1	\$50,000
Phase 2	\$400,000

FIGURE 19. CONCEPTUAL DESIGN AND PHASED IMPLEMENTATION OF CROSSING IMPROVEMENTS AT BEACON AVE S AND S STEVENS ST



2 MOBILITY HUB IMPROVEMENTS AT THE BEACON HILL LIGHT RAIL STATION

Clarify connections and provide amenities that support different types of travel including bus, light rail, bicycle, shared mobility options, and vehicle loading/unloading.



Background

The area around the Beacon Hill Light Rail Station, especially the Beacon Ave S block in front of the station between S Lander St / Roberto Maestas Festival St and S McClellan St, is important for the mobility of the neighborhood. In this area, people walk from the light rail station to catch the bus, drive along Beacon Ave S to head to the Chinatown/International District to go to the market, and travel to many other places. As a convergence point for people using various transportation modes, clarifying multi-modal circulation is important for ensuring the safety of users and for supporting the vision of the Urban Village as a lively hub.

FIGURE 20. AREAS OF OPPORTUNITY AT EXISTING INTERSECTIONS



Two intersections in this area ranked within the Bicycle and Pedestrian Safety Analysis' (BPSA) top 1,000 high-risk intersections: Beacon Ave S / S Lander St and Beacon Ave S / S McClellan St. The near-term recommendations ensure that bike facilities on Beacon Ave S are not precluded in the future. The location of bike facilities needs further study.

As is true elsewhere in the city, there has been a substantial increase in transportation network company (TNC) trips starting or ending in North Beacon Hill in the last several years.

- 1 A pedestrian-activated half-signal was installed at the Beacon Ave S / S Lander St intersection in 2018 during the course of this study. It was installed to address the pedestrian crossing concerns and to improve access to a new King County Metro Bus Route 107 stop on S Lander St. At this time, our study does not recommend a full signal at this intersection due to the proximity of full signals on Beacon Ave S at 15th Ave S to the north, and at S McClellan St to the south.

Outreach for this study, most of which was conducted before the new half-signal was installed, identified pedestrian challenges in this area.

- 2 Pedestrians frequently jaywalk mid-block over the median on Beacon Ave S between S Lander St and S McClellan St since the locations of the crosswalks at Beacon Ave S / S Lander St and S McClellan St do not provide an efficient connection for people transferring between light rail and the bus, or going to the Hilltop Red Apple Market.

The current median design does not deter southbound vehicles from passing stopped buses on the left, endangering pedestrians crossing mid-block in front of the light rail entrance.

The study explored shifting the southbound bus stop to extend the bus zone on Beacon Ave S. This would address the back-up of traffic behind a stopped bus into the Beacon Ave S and S Lander St intersection. However, shifting the bus stop further south may further encourage transit users coming out of the light rail station to cross Beacon Ave S mid-block to catch a southbound bus.

- 3 The 16th Ave S / Roberto Maestas Festival St intersection can be confusing to drivers trying to navigate multiple intersections. Speed concerns were noted during a 2017 Find It, Fix It walk.

Traffic data collected in fall 2018 found significant volumes of westbound traffic on S Lander St. Vehicles may be using the Roberto Maestas Festival Street and S Lander St segments to navigate around traffic back-ups on adjacent streets. Some of the traffic can be attributed to cars doing pick-up and drop-off at the passenger load zones on the curbless street just north of the station.

- 4 Pedestrian and circulation for people with disabilities is awkward at the northwest corner of the Beacon Ave S / S McClellan St intersection. A slip lane, which is a separate turning lane at an intersection that is not controlled by traffic signals, requires people walking south on the west side along Beacon Ave S to cross S McClellan St in two locations. The North Beacon Hill Neighborhood plan recommended conversion of this right-of-way to open space (Goal 10, Strategy 1).



Beacon Ave S before and after sidewalk widening and median installation (elements outlined in white).

Metro bus Routes 107 and 60 use the slip-lane. Bus Route 107 uses the slip-lane en route to the bus layover location (on the southside of S Lander St between 15th Ave S and Beacon Ave S). Eliminating the slip-lane should be explored when the Hilltop Red Apple Market site redevelops.

- 5 Sidewalks in front of the light rail station were widened in 2014, but navigating the station itself is difficult for people with limited mobility. Station plaza design and wayfinding is unclear and illegible.

Relevant Plans

- 2010 North Beacon Hill Neighborhood Plan
- 2011 North Beacon Hill Town Center Urban Design Framework

General Recommendations

Future improvements should meet the goals of mobility hubs by supporting:

- Placekeeping/placemaking, cultural assets, and economic potential
- Transit connections and amenities
- Walking and biking facility improvements
- Integration of new mobility options with existing facilities to ensure transfers can be made safely, and with ease
- Wayfinding and information
- Systems to better respond to user-experience such as integration of fare payment systems and access to public wifi networks

All future improvements should support the North Beacon Hill Neighborhood Plan goal of creating streets that are safe and inviting for people walking, biking and using transit, as well as those who drive. This includes:

- Prioritizing safety and wayfinding for people with limited mobility.
- Maintaining in-lane bus stops for the future transit vision of this segment of Beacon Ave S as a priority bus corridor.
- Analyzing data, including collision data before and after implementing improvements.

Location-Specific Recommendations

(Figure 22)

Phase 1

- Extend pedestrian-priority treatment (i.e., street mural) on the Roberto Maestas Festival Street to the eastern edge of Beacon Ave S using paint. Consider improving signage for vehicles to clarify movements.
- Since 16th Ave S is a one-way street, narrow the intersection of S Lander St and 16th Ave S using paint and posts to shorten pedestrian crossing distance and help clarify vehicular movements.

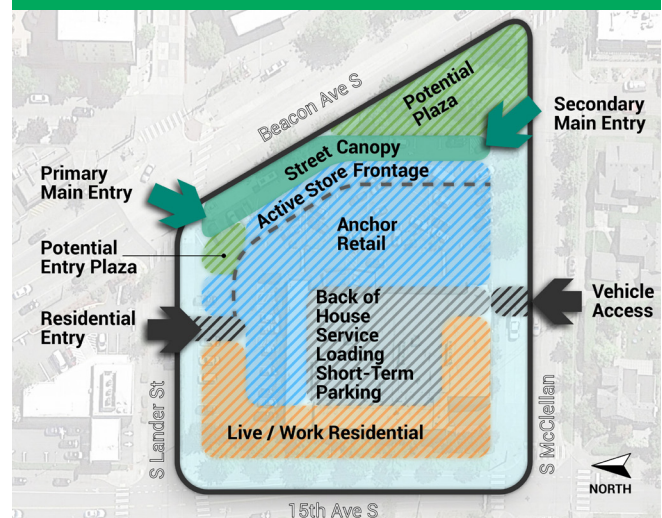
Increase pedestrian safety by allowing a turning radius of 10' at the north and east corners of 16th Ave S at S Lander St / Roberto Maestas Festival St.

Given the location of the Red Apple Market site across from the Beacon Hill Light Rail Station, future redevelopment of this property would have a large impact on circulation throughout the immediate station area.

Though SDOT is not aware of current redevelopment plans for this site, should it redevelop, staff from SDOT and the Office of Planning and Community Development (OPCD)'s recommendations on pedestrian entrances and vehicular access locations are summarized in Figure 21. Built on 2010 North Beacon Hill Neighborhood Plan and 2011 North Beacon Hill Town Center Urban Design Framework redevelopment concepts, it provides guidance on optimal pedestrian entrances, circulation, and vehicle access to ensure long-term multimodal safety and vibrancy.

It is important to note that the Red Apple Market is a key amenity for Beacon Hill and adjacent neighborhoods, such as Georgetown, that have limited access to grocery stores near transit.

FIGURE 21. CONCEPTUAL REDEVELOPMENT GUIDANCE



- Add curb ramps and curb extensions (paint and post) on the north and south sides of Lander St (east of Beacon Ave S) to shorten pedestrian crossing distances.

Increase pedestrian safety by allowing a turning radius of 20' at the northwest and southwest corners of the Roberto Maestas Festival St at Beacon Ave S.

Additional Considerations

Phase 2

Explore changes to traffic circulation to minimize vehicle-pedestrian conflicts and reduce vehicular traffic to prioritize pedestrians while facilitating drop-offs on the Roberto Maestas Festival Street and provide space for new mobility options such as Transportation Network Companies (TNCs), bike share, and car share.

Look at opportunities for improving accessibility and safety for people crossing the 'slip-lane' on 16th Ave S (at the northwest quadrant of Beacon

Ave S and S McClellan St) including enhancing McClellan Place, the planted island.

D Add paint and post curb extensions on the east and west sides of Beacon Ave S for traffic calming.

E Fan out existing crosswalks across S Lander St at Beacon Ave S on the west side and across Beacon Ave S at S Lander St on the south side.

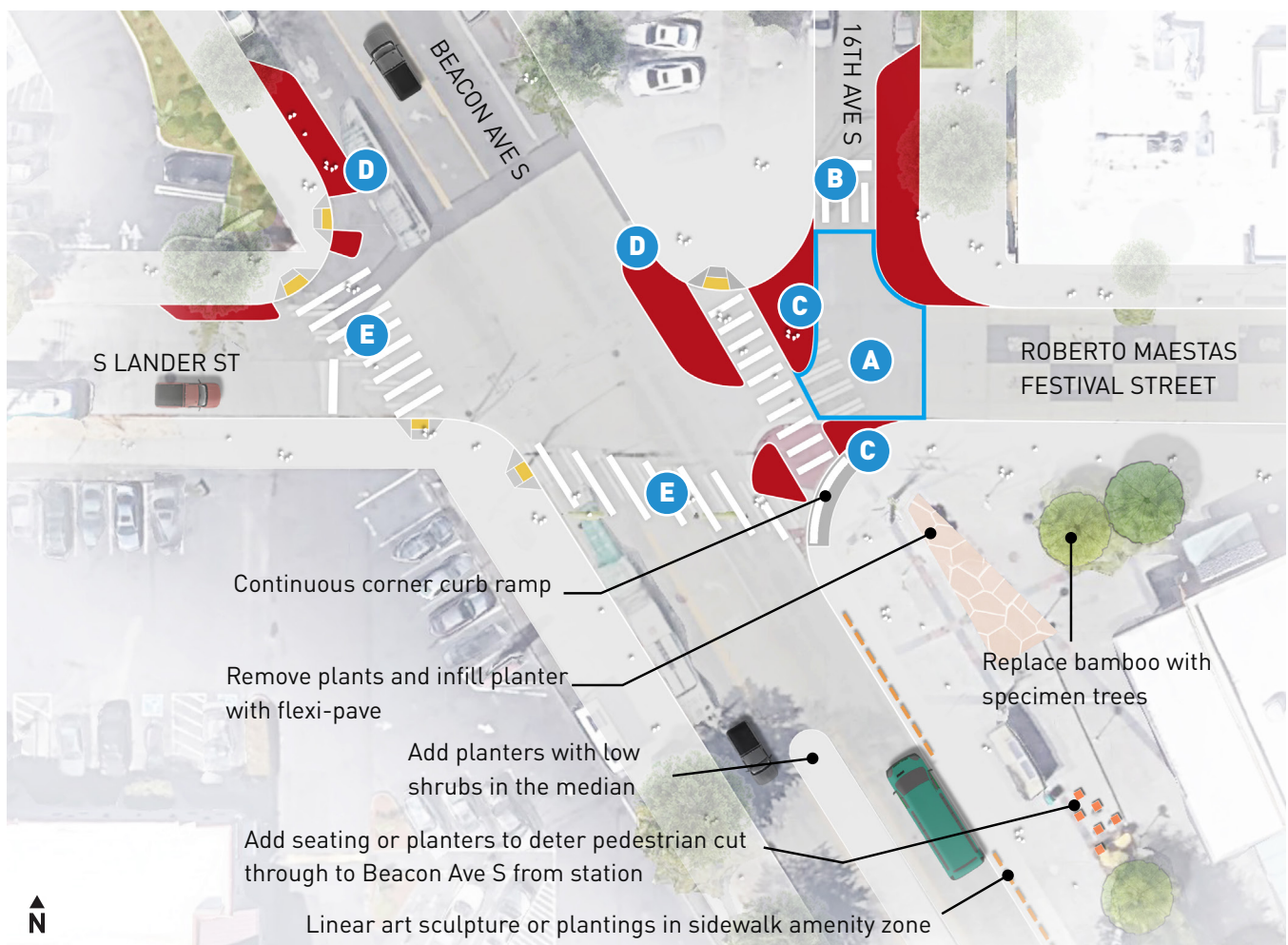
Retrofit plaza and deter mid-block crossings by pedestrians in front of the light rail station - see notes in Figure 22.

Planning-Level Cost Estimates

Phase 1

\$100,000

FIGURE 22. CONCEPTUAL DESIGN AND PHASED IMPLEMENTATION OF MOBILITY HUB IMPROVEMENTS



3

CROSSING IMPROVEMENTS AT BEACON AVE S / 15TH AVE S

Crossing improvements to address pedestrian crossing safety and decrease pedestrian wait times through signal timing changes for ADA accessibility needs.



Background

Located a block north of the Beacon Hill Light Rail Station, Beacon Ave S and 15th Ave S intersect at oblique angles, resulting in long-pedestrian crossing distances and difficult sightlines. This intersection was highlighted as being in the top 1,000 high-risk intersections of the Bicycle and Pedestrian Safety Analysis. The signal is currently timed with an all-walk phase, and accent brick patterned crosswalks are striped across both arterials, as well as the shorter diagonal crossing.

This non-standard intersection is difficult to navigate for people with limited mobility. Often it takes pedestrians two signal cycles to cross the entire intersection for pedestrians. Textured

surface in the crosswalks is uncomfortable for people who use wheelchairs. Accessible Pedestrian Signals (APS) are not provided at all crosswalks, and curb ramps are old and are not aligned with the crosswalk. The latter design feature is important in guiding people with limited vision. Several sidewalks leading to this intersection are in poor condition (e.g., uneven surface conditions, significant uplift).

Two redevelopment projects are planned in close proximity to the intersection (see Figure 23), and will add about 180 apartment units and commercial space. This will increase the number of people using the streets.

During this study, SDOT explored several options to determine if pedestrian safety and comfort at this intersection can be improved. The alternatives listed below are not viable:

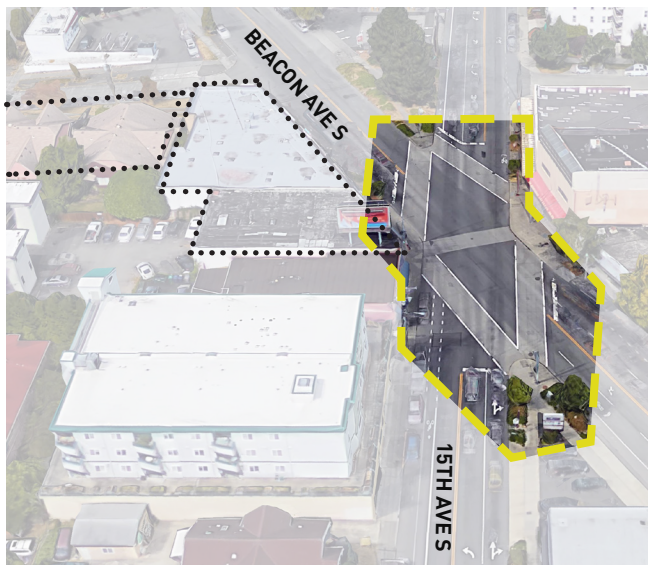
- Adding a crosswalk to connect the NW and SE corners is anticipated to significantly increase wait times for all modes.
- Squaring-up the intersection would result in removal of the all-walk crossing. Wait times for all modes would increase with this change.

Recommendations

In addition to the pedestrian crossings during the existing all-walk phase, allow pedestrian crossings across Beacon Ave S or 15th Ave S when the corresponding through movements are served by the signal. This option has the potential to significantly reduce pedestrian wait times.

Pedestrians may initially be confused by the change as they are now accustomed to crossing only during the all-walk phase. An education campaign would be important to inform the

FIGURE 23. EXISTING CONDITIONS AT BEACON AVE S / 15TH AVE S



- Focus area
- Currently under redevelopment

community about such a change. All changes should be evaluated after implementation.

Phase 1

- A** Add APS to the legs where they are currently missing. Auditory features need to be customized to indicate when and where to cross and to ensure the safety of people with vision/hearing impairments
- B** Maintain existing crosswalks. Consider adding a non-textured surface in middle of the crosswalk for wheelchair users
- C** Reconstruct two curb ramps so they are up to standard, to accommodate the crossing from the SW corner to the NE corner

Phase 2

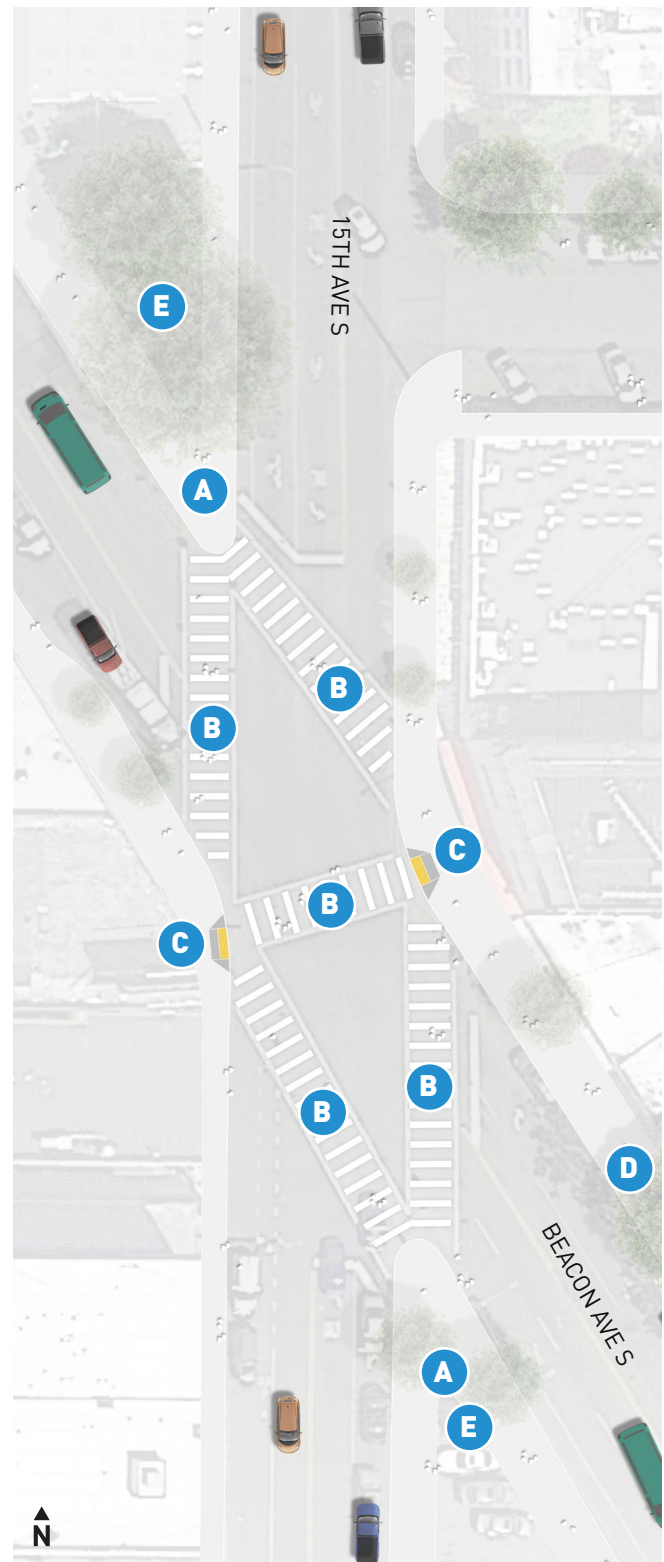
- D** Improve sidewalk conditions on the east side of Beacon Ave S between this intersection and the Light Rail Station
- E** Develop gateway treatment opportunities at northern and southern corners of the intersection and provide seating and/or weather protection for pedestrians and those waiting for buses at the northern corner. Gateway treatments could be initiated by a community-led effort

Consider potential for a community crosswalk rather than brick textured concrete for future intersection paving.

Planning-Level Cost Estimates

Phase 1	\$50,000
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FIGURE 24. CONCEPTUAL DESIGN AND PHASED IMPLEMENTATION OF CROSSING IMPROVEMENTS AT BEACON AVE S AND 15TH AVE S



4 BEACON AVE S / S FOREST ST / 17TH AVE S / S MCCLELLAN ST TRIANGLE IMPROVEMENTS

Assess and make crossing, signal, and traffic management improvements at the three intersections and along segments of 17th Ave S and S McClellan St to address safety.



Background

Beacon Ave S / S McClellan St was the location of a pedestrian fatality in January 2016. Pedestrian improvements through the Vision Zero program were implemented following the collision.

- 1 Beacon Ave S / 17th Ave S / S Forest St
 - Intersection was in the top 1,000 high-risk intersections of the BPSA
 - Long crossing distance at the intersection
 - Public comments noted that north-bound traffic turning onto 17th Ave S from Beacon Ave S tends to speed and not see pedestrians on the unmarked crosswalk across 17th Ave S

- A parcel adjacent to the Beacon Ave S / 17th Ave S / S Forest St intersection recently redeveloped and a second building immediately to its south is proposed for mixed use

- 3 Existing Rectangular Rapid Flashing Beacon (RRFB) across Beacon Ave S (at library)
 - Cars do not always stop for pedestrians even when the RRFB is flashing
 - Flashing lights of the RRFB are often hard to see during the day
 - Irregular traffic patterns make this a challenging crosswalk for people with low-vision, as there are no clear cues as to when it is safe to cross

FIGURE 25. EXISTING INTERSECTIONS SHOWING AREAS OF OPPORTUNITY



Focus area

- 4 17th Ave S / S McClellan St and Beacon Ave S / S McClellan St
 - Short spacing of intersections results in traffic queuing during peak times heading west on S McClellan St as well as heading south on 17th Ave S
 - Beacon Ave S / S McClellan St is in the top 1,000 high-risk intersections of the BPSA

Relevant Plans

- 2014 Bicycle Master Plan (BMP) - Identified S Forest St as a greenway
- Beacon Hill Family Circulation Plan - Developed a concept design for the Beacon Ave S / 17th Ave S / S Forest St intersection to improve pedestrian and bike safety

General Recommendations

Initial analysis should look at pedestrian and bicycle circulation needs, ADA accessibility, traffic speed, turning movements, signal timing, and congestion at intersections. Address accessibility challenges at all of the following intersections:

- Beacon Ave S / 17th Ave S / S Forest St
- 17th Ave S / S McClellan St
- Beacon Ave S / S McClellan St

Collect traffic speed and volume data for these intersections, as well as surrounding intersections that may be affected by cut-through traffic. Review historic collision data to develop location-specific countermeasures.

New residences and commercial spaces could significantly change circulation patterns in this area. Future pedestrian, bicycle and

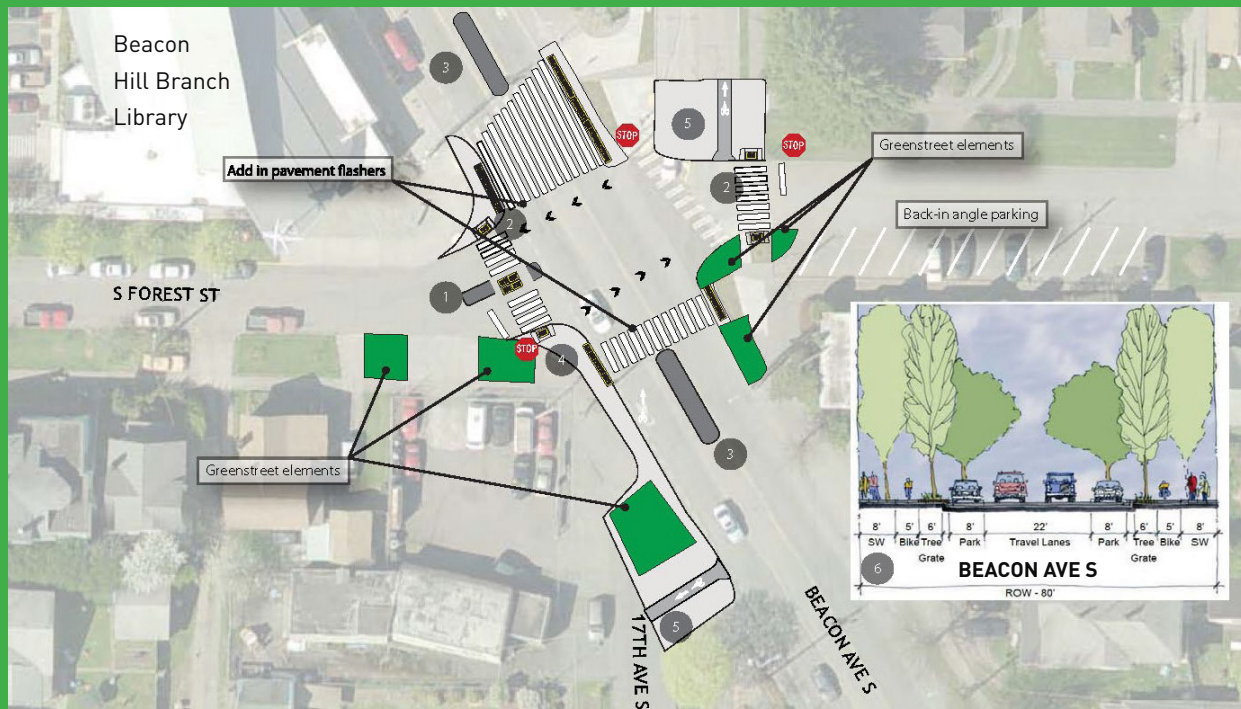
vehicle circulation should be studied to assess improvement needs.

If curb bulbs are added, ensure bikes have adequate space to navigate streets safely.



New building and streetscape improvements on Beacon Ave S at 17th Ave S / S Forest St.

FIGURE 26. FAMILY BICYCLE AND PEDESTRIAN CIRCULATION PLAN CONCEPTUAL DESIGN



Conceptual improvements for Beacon Ave S / 17th Ave S / S Forest St created for the Beacon Hill Family Bicycle and Pedestrian Circulation Plan. This concept pre-dates the Bicycle Master Plan and the construction of the 18th Ave S Greenway. Redevelopment on the southeast corner has eliminated angled parking. The Beacon Hill Station Access and Mobility Study revisited and updated this concept above.

Location-Specific Recommendations

17th Ave S / S McClellan St and Beacon Ave S / S McClellan St:

- Study turning options and signal timing at Beacon Ave S / S McClellan St to identify improvement opportunities
- Analyze signal timing and operations to address vehicle circulation challenges
- Include APS signals at all legs of the Beacon Ave S / S McClellan St intersection

17th Ave St, SW of Beacon Ave S:

- Consider using removable bollards to close 17th Ave S south of Beacon Ave S, to provide a safer pedestrian crossing between Beacon Hill Library and Stevens Place Park

Phase 1 (Figure 27)

Beacon Ave S / 17th Ave S / S Forest St

- A** Square-up intersection (on the east and west side) to reduce traffic speeds
- B** Paint-and-post curb extensions to reduce crossing distance for pedestrians across Beacon Ave S and S Forest St and add a stop bar to on the westbound lane on S Forest St, east of 17th Ave S



Proximity of intersections results in cars often cutting off pedestrians using unmarked S Forest St crossing.

- C** Paint-and-post median on Beacon Ave S (north of S Forest St) to reduce traffic speed and crossing distance for pedestrians

- D** RRFB across Beacon Ave S (at library)

Consider making beeping sounds more audible for people with low vision and explore options to make crossing more detectable

Consider adding RRFBs in the median refuge to highlight visibility

If treatments from Phase 1 do not improve safety for people crossing 17th Ave S north of the 17th Ave S / Beacon Ave S / S Forest St intersection, Phase 2 is recommended.

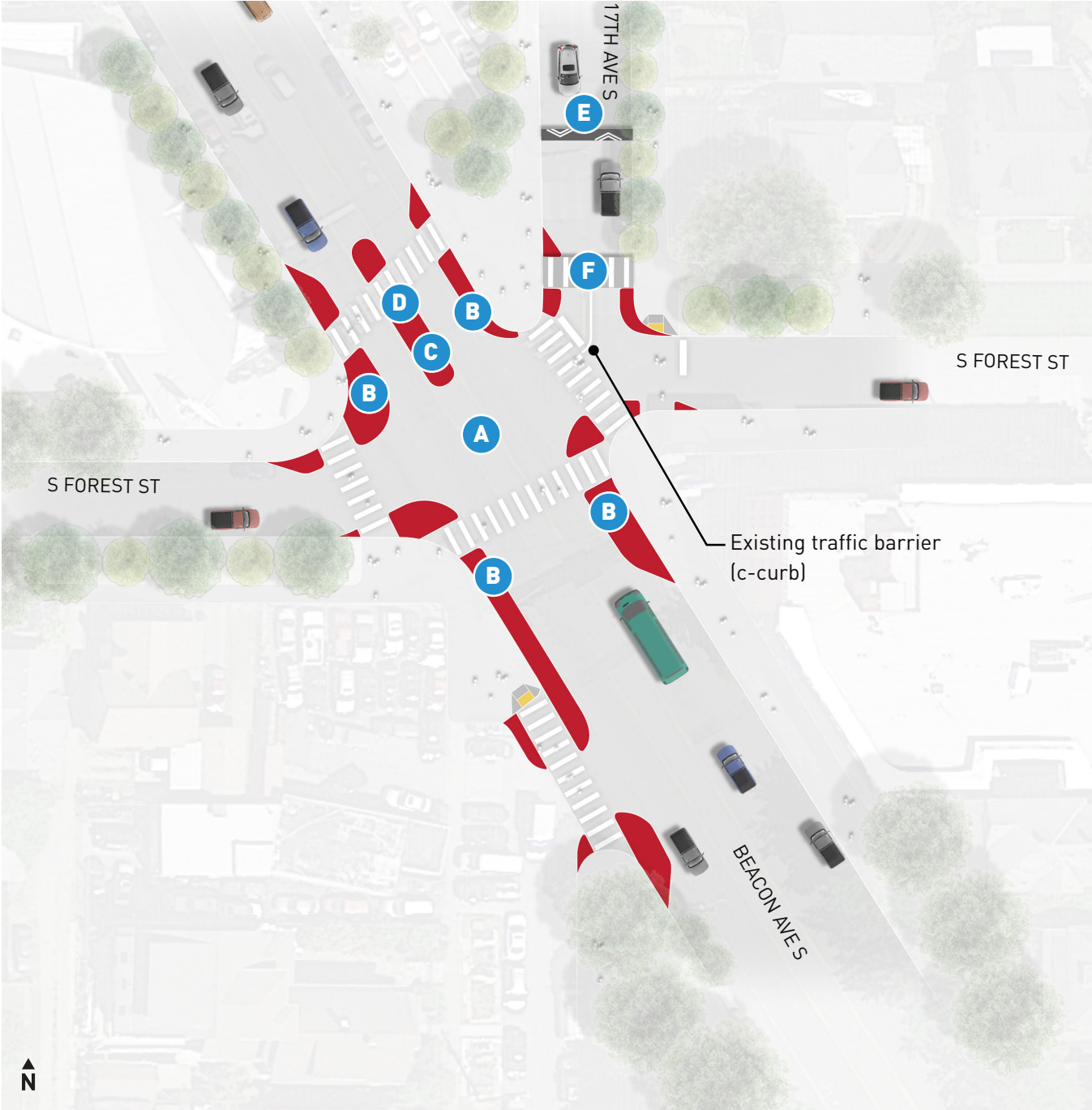
Phase 2 (Figure 27)

- E** Add traffic calming speed hump on 17th Ave S
- F** Narrow 17th Ave S with paint and post curb extensions and consider a raised crosswalk

Planning-Level Cost Estimates

Phase 1	\$140,000
Phase 2	\$20,000

FIGURE 27. CONCEPTUAL DESIGN FOR BEACON AVE S / 17TH AVE S / S FOREST ST INTERSECTION



5

BEACON AVE S CORRIDOR STUDY

Conduct a comprehensive analysis of the corridor to identify pedestrian and bicycle safety and circulation improvements along Beacon Ave S between 14th Ave S and S Spokane St, particularly south of the Town Center.



Background

Beacon Ave S is a central transportation corridor through the neighborhood and a primary commercial hub in Beacon Hill. The corridor, from 14th Ave S to S Spokane St, has unique travel patterns that necessitate a comprehensive analysis of key intersections in the Town Center and adjacent areas. Beacon Ave S and its intersections were identified as a top concern through our outreach.

FIGURE 28. BEACON AVE S CORRIDOR FOCUS AREAS



 Focus area

The Bicycle and Pedestrian Safety Analysis (BPSA) identifies the following priority intersections on Beacon Ave S: 15th Ave S; S Lander St; S McClellan St; S Hanford St; S Spokane St and the intersection of 17th Ave S / S Forest St.

Relevant Plans

- King County Metro's *Metro Connects 2040* and 2016 Transit Master Plan (TMP) - Identifies Beacon Ave S as a high priority bus service corridor
- 2014 Bicycle Master Plan (BMP) - Identifies several greenway crossings of Beacon Ave S

Recommended Next Steps

This document has identified a number of potential improvements for the Beacon Ave S corridor. A more detailed analysis is needed to improve multimodal circulation and safety, finalize improvements for signal timing, manage traffic and identify locations for new pedestrian and bike crossings, improve bike facilities, assess opportunities for traffic calming, improve sidewalks and review pedestrian lighting at key bus stops.

Early analysis should assess the feasibility of implementing parking and vehicular circulation changes as recommended by the 2010 North Beacon Hill Neighborhood Plan.

Traffic speed data would be useful to determine if high speeds along Beacon Ave S outside of the Town Center are a concern, and to identify future improvements. This speed data will guide traffic calming scenarios that will require further design and engineering analysis.

Through our outreach and observation, a significant number of people who bike appear to prefer Beacon Ave S as their north-south route. A review of vehicular travel and parking needs should be done to determine the feasibility of a protected bike lane on Beacon Ave S.

The conceptual scope of work for this comprehensive analysis, summarized in the table below and detailed in appendix E, provides a framework for developing and analyzing multiple corridor scenarios.

See previous projects 1 to 4 for location-specific opportunities along the corridor.

Planning-Level Cost Estimates for Beacon Ave S Corridor Study*	
Data Collection and Existing Conditions	\$10,000 – \$20,000
Baseline Trends and Forecasts	\$10,000 – \$15,000
Development and Evaluation of Conceptual Scenarios	\$30,000 – \$40,000
Operational Analysis of Scenarios	\$70,000 – \$120,000
Conceptual Design of Preferred Scenario	\$45,000 – \$60,000
Project Management, Meetings, and Documentation	\$15,000 – \$25,000
Total Estimated Cost Range:	\$180,000 – \$280,000

*All estimates shown are planning-level and assume 2018 costs.

6

ACCESSIBILITY IMPROVEMENT STUDY

Develop strategic improvements to address gaps in accessible routes around the station area, especially around bus stops.



Background

Accessibility improvements, such as curb ramps and crossing improvements, offer benefits to the full community, and particularly those who are most vulnerable, such as children, seniors, and people with temporary or permanent limited-mobility. Sidewalk improvements are most typically constructed and maintained by the adjacent property owner. New developments at corner lots are now required to add ADA compliant curb ramps with sidewalk improvements.

Accessibility was noted as particularly challenging in the station area, and was a focus of this study. As shown in Figure 8, there is a gap in sidewalk facilities in the NE corner of the study area, north of S College St. The map also shows the need for sidewalk improvements on significant stretches of Beacon Ave S and 15th Ave S.

Key Accessibility Challenges

- Connectivity for those who use mobility devices is poor. Unrepaired sidewalks and lack of curb ramps make moving around the neighborhood difficult.
- Curb ramps and crosswalks are not aligned at a majority of the crossings in the neighborhood including many areas of the business district.
- Nearly all major and signalized intersections lack accessible (audible/tactile/visual) crossing signals.
- Sidewalks and paths of travel should be free of poles, street furniture, sandwich boards, shared mobility devices (like bike share) and other obstructions.

Recommendations

Use the results from SDOT's recent sidewalk inventory, and develop a connectivity plan to create accessible routes to major arterials and connector streets.

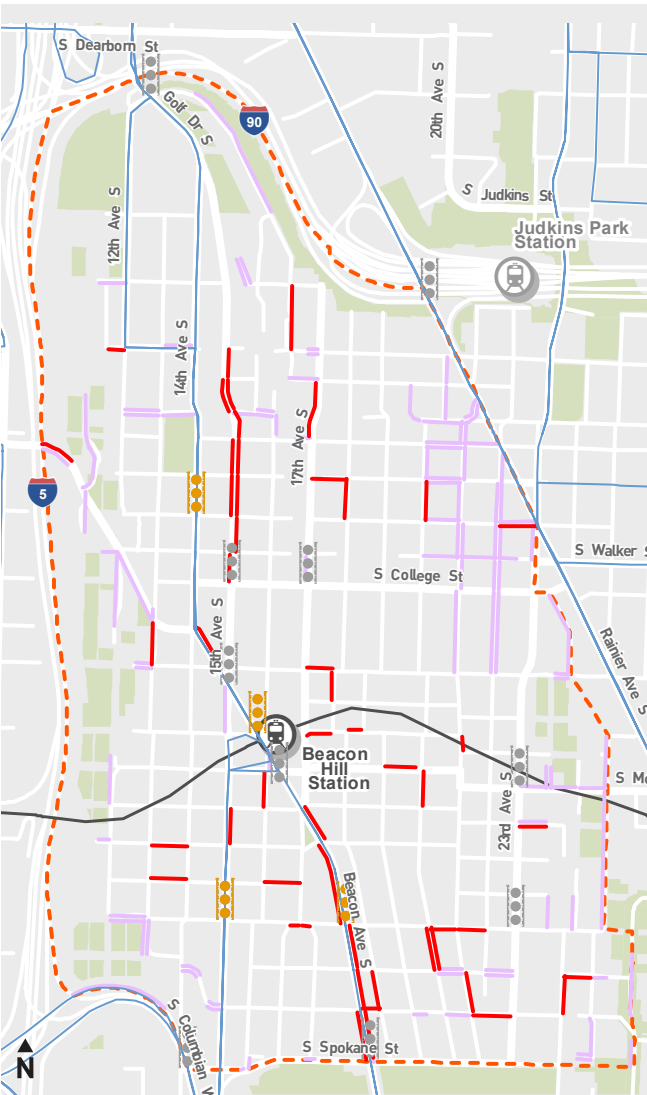


Misalignment of curb ramps and crosswalks can inadvertently direct people with low vision into traffic.



Poor paving and crosswalk marking conditions at Beacon Ave S and 17th Ave S.

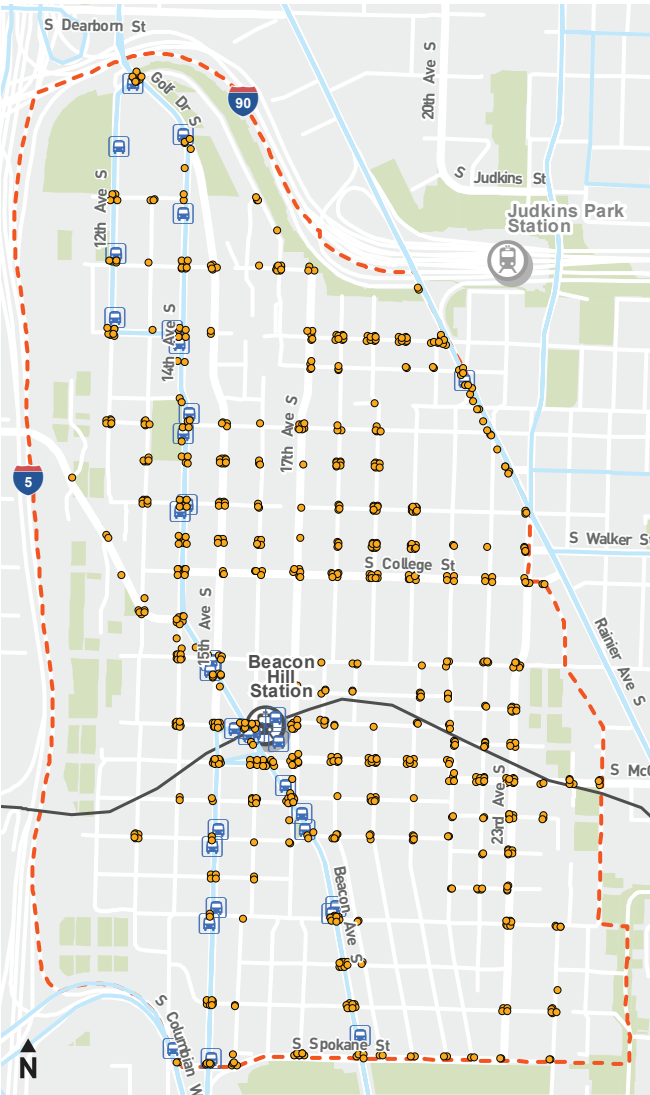
FIGURE 29. SIDEWALK CONDITIONS AND TRAFFIC SIGNALS



- Pedestrian-activated Traffic Signal
- Traffic Signals
- Poor Sidewalk Surface Condition
- Sidewalk less than 4' Wide
- Bus Routes

Sidewalk conditions influence the route people take to their destination, particularly those with disabilities.

FIGURE 30. CURB RAMP LOCATIONS AND BUS STOPS



Legend

- Existing Curb Ramps
- Bus Stop
- Bus Routes

American Disabilities Act compliant curb ramps make it easier for people with disabilities to safely get to bus stops and light rail stations.

Ensure that all bus stops are fully accessible and build out an accessible network to travel to them. Currently, the bus stops near the following intersections are only partially-served:

- 15th Ave S and S Hanford St
- 15th Ave S and S Stevens St
- 14th Ave S and S Judkins St

Add curb ramps at intersections to provide more accessible route options in the neighborhood. Priority for new curb ramps should be given to intersections without them and near transit stops. Noticeable gaps shown on Figure 23 are:

- The residential area north of S Spokane St, east and west of Beacon Ave S
- The residential area west of 15th Ave S, south of S Bayview St
- The area west of Rainier Ave S and north of S Walker St (upcoming redevelopment will provide some streetscape improvements, including updated sidewalks and curb ramps)



Lack of curb ramps is a barrier to people who use mobility devices. Examples from 15th Ave S (left) and Beacon Ave S (right).

Design improvements to align curb ramps and sidewalks to provide clear and accessible paths.

Treat the sides of crosswalks with a textured surface (and leave the center pathway smooth). Crosswalks should have high contrast striping or other high contrast treatment for visibility. Curbless streets should have high-contrast, cane-detectable delineation between sidewalk and street.

Include Accessible Pedestrian Signals (APS) at all major arterial intersections:

- Ensure that existing and any new all-way stop intersections have APS on all crossings
- Accommodate slow walkers with a longer signal time at wide crossings

Include dedicated accessible parking when new parking is added. Make it easy for drivers of vehicles with side ramps or lifts to use street parking.

Consider signalized bike intersections or a leading pedestrian interval to allow safe crossing for pedestrians when protected bike lanes are planned.

Surround outdoor seating with fencing that has a horizontal bar low enough to the ground to be detectable by a white cane.

Estimated Cost Range for Study

Medium to Medium/High: \$100,000 - \$500,000 to over \$500,000



Sidewalk uplift, a trip hazard for all, can create a complete barrier to people who use mobility devices.



Incorporating a wayfinding strip into the paving surface, like in the light rail station, can be helpful to people with low and impaired vision.



An example of good alignment of curb ramp, crosswalk and the Accessible Pedestrian Signal button.

An Accessibility Assessment of the Roberto Maestas Festival Street

The Roberto Maestas Festival Street provided an informative case study when viewed from the lens of accessibility. As an important central civic space, there are many positive aspects of this shared street. However, it may present challenges to low-vision navigation.

Curb ramps have yellow detectable surfaces while the festival street edge have black detectable surfaces. The use of two colors is confusing, since both colors indicate to the person who is sight-impaired that they are entering traffic.

In addition, as the paving adjacent to the Beacon Hill Light Rail Station ages and darkens, the contrast between the roadway pavement and the black detection strip, which is an important cue for users with low-vision, will decrease.

The pedestrian space along the Roberto Maestas Festival St is well defined, particularly on the north side of the street, shown in the photo below. However, both yellow and red bollards create visual confusion since their functions are the same.

Finally, there is an ongoing need to manage elements that clutter the pedestrian space, such as bike share parking and signage.



7

BEACON HILL GATEWAY NORTH

Improve intersection to enhance multi-modal safety, calm and clarify traffic flows, and provide a gateway experience into Beacon Hill.



Background

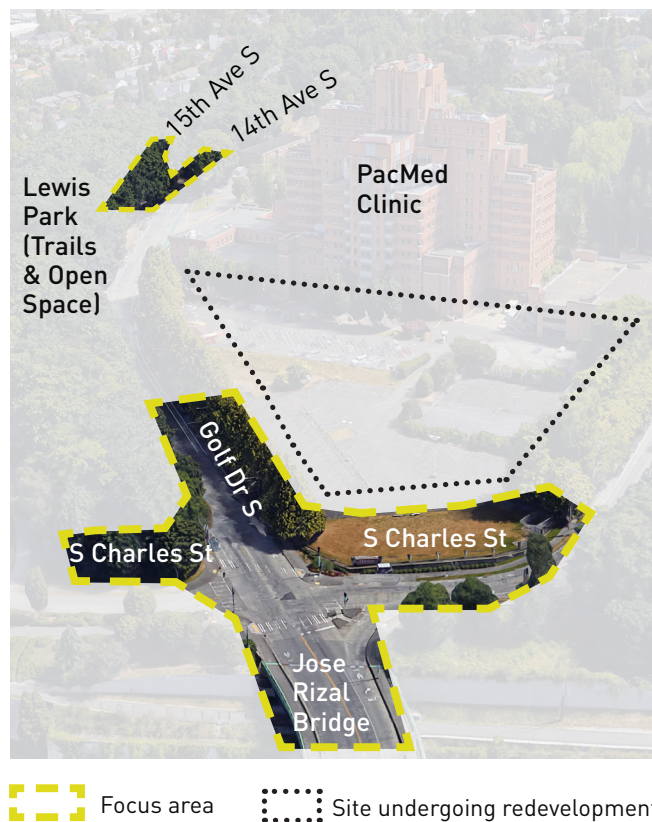
Golf Dr St and S Charles St is the northern gateway into Beacon Hill and has sweeping views of Downtown Seattle and Puget Sound. An iconic historic medical building (Pacific Tower) stands out in view approaching Beacon Hill from the Jose Rizal Bridge.

PacMed Clinic is a large employer in Beacon Hill, and a participant of the Commute Trip Reduction (CTR) program that is run by SDOT in partnership with the Washington State Department of

Transportation. Since 2009 when data has been collected, the percentage of employees who drive alone has generally hovered around 55%, while those who walk, bike, take transit, telework, or car/vanpool to commute has been around 45%. These numbers are higher than targets set for Southeast Seattle, but because of the relatively good transit access to the worksite, there is an opportunity to encourage more employees to take alternative modes of transportation.

Redevelopment of the parking lot at the Pacific Tower site will bring over 300 new residences, an adult care facility, and a daycare. It will increase the number of people in the area with limited mobility, and in the coming years, the two intersections identified below will be more heavily used.

FIGURE 31. VIEW OF NORTH BEACON HILL GATEWAY LOOKING SOUTH



Golf Dr S / 12th Ave S / S Charles St Intersection:

- A serious pedestrian collision occurred here in the winter of 2018
- Ranked in the top 1,000 high-risk intersections in the Bicycle and Pedestrian Safety Analysis
- The southern extent of the 12th Avenue Vision Zero Project: www.seattle.gov/transportation/projects-and-programs/safety-first/vision-zero/projects/12th-ave
- Beacon Hill Safe Streets hosted a June 23, 2018 event at this intersection (see appendix F on page 81)
- Pacific Tower redevelopment could further complicate circulation patterns in this area
- Due to the current intersection alignment, topography and vegetation, it is difficult for northbound cars on 14th Ave S to see the north-bound traffic on 15th Ave S

- For bicyclists, this intersection is the critical connection between the Mountains to Sound (MTS) Greenway, Beacon Hill neighborhood, and the Jose Rizal Bridge

Relevant Plans

- Seattle Department of Transportation's 2018 Bridge Safety Analysis

Recommendations*

- A** Consider adding a painted northbound bike lane through the intersection
- B** South of the intersection, consider removing on-street parking on Golf Dr S to improve sightlines and provide a right-turn lane on the right side of the bike lane

- C** Study feasibility to remove slip lane to provide pedestrians more space to shorten crossing
- D** Study feasibility to update signal to provide left-turn phase
- E** Explore options to keep cars in-lane such as adding a c-curb that do not preclude a future bicycle facility on S Charles St

Update signage throughout the intersection to clarify movements

Estimated Cost Range for Project
Medium/High: Over \$500,000

FIGURE 32. INTERSECTION SHOWING POTENTIAL IMPROVEMENTS AT JOSE RIZAL BRIDGE / GOLF DR S / S CHARLES ST



*These recommendations are a response to the early concept design, and based on community input and discussions with SDOT staff. They will be passed along to the SDOT 12th Avenue Vision Zero project team.

14th Ave S / 15th Ave S / Golf Dr S Intersection:

- Pedestrians traveling from Pacific Tower to Lewis Park currently have to cross two streets (14th Ave S and 15th Ave S)
- Bicyclists moving up-hill are very exposed in this large intersection. Cars often try to cut ahead or follow close behind them
- Sidewalks along 14th Ave S are narrow and uncomfortable for pedestrians
- The access road of the current parking area will be the primary access road for the 14th Ave S / 15th Ave S / Golf Dr S Intersection

Recommendations

- A** Consider realigning intersection, so that 14th Ave S meets 15th Ave S / Golf Dr S closer to a right angle
- B** Expand pedestrian space while considering turning radius for southbound buses going onto 14th Ave S from Golf Dr S

Improve sightlines at intersection

- C** Explore options to safely and comfortably connect Pacific Center to Lewis Park trails and open space areas

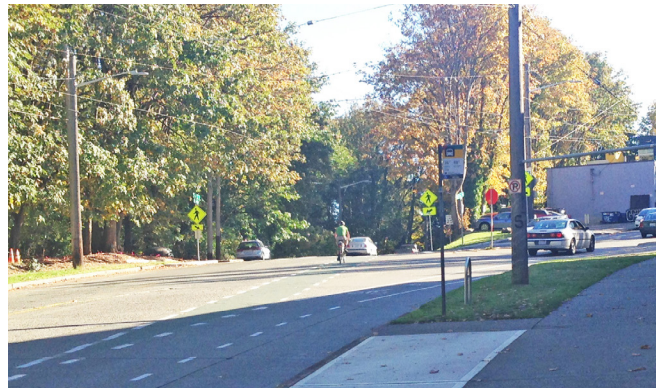
Additional Considerations

Upcoming development may change traffic patterns and increase turning movements through this area.

Identify additional opportunities to improve bicycle and pedestrian safety.

Estimated Cost Range for Project

Medium/High: Over \$500,000



Bicyclists pedaling uphill are exposed in this open intersection, as cars cut ahead of or follow closely behind them.

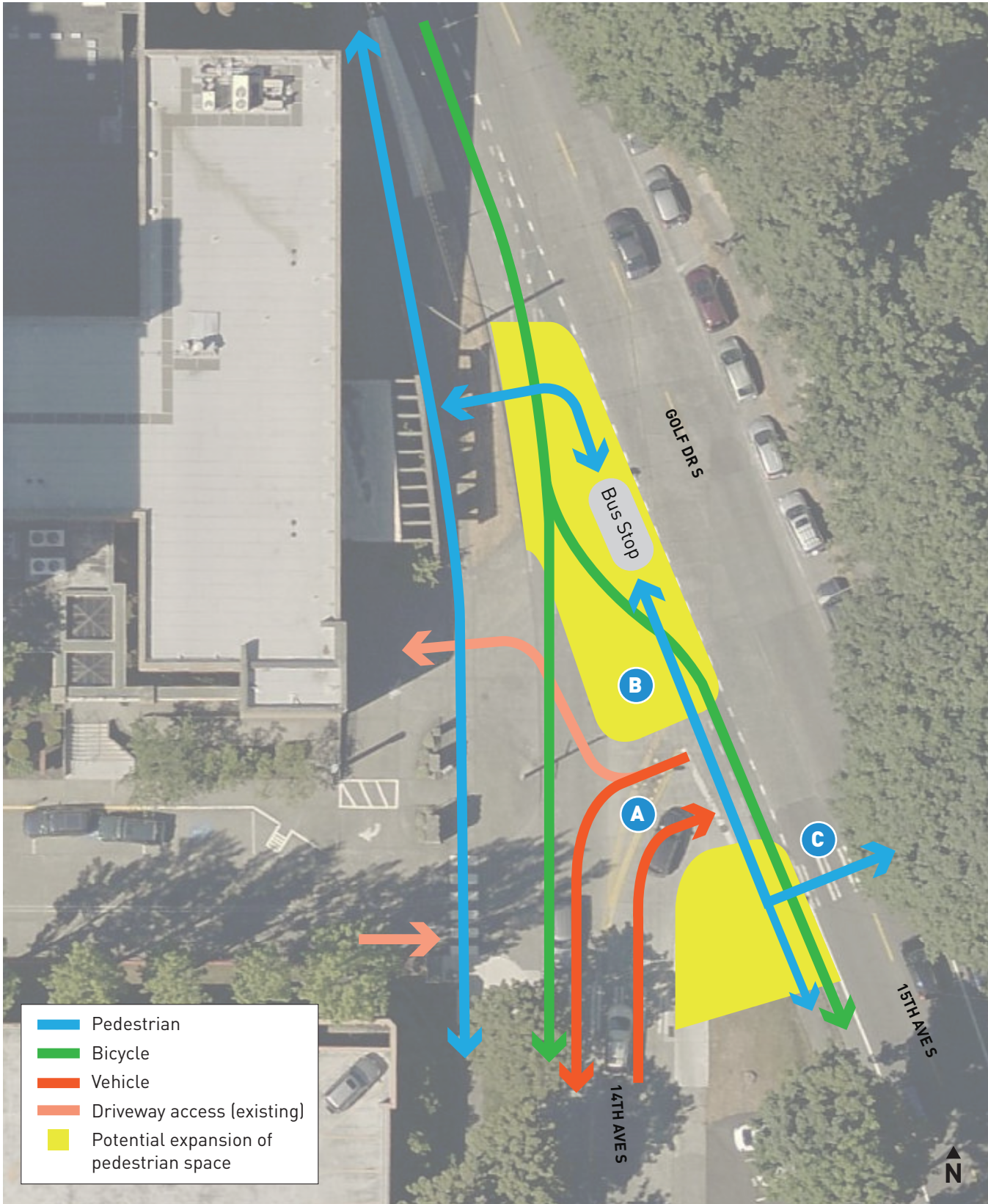


Shortening the crossing distance of the intersection where 14th Ave S meets 15th Ave S and Golf Dr S could increase safety.



Pedestrians have to cross two streets from the southwest corner of Golf Dr S and 14th Ave S to access Lewis Park.

FIGURE 33. SUGGESTED MOVEMENTS BY MODE AT THE 14TH AVE S / 15TH AVE S / GOLF DR S INTERSECTION



8 15TH AVE S CORRIDOR ANALYSIS

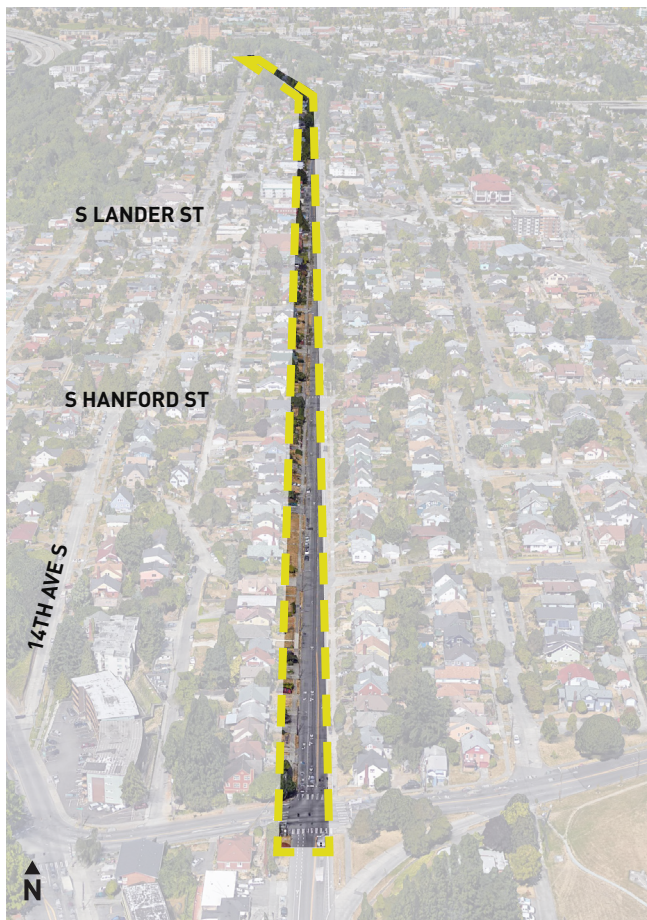
Assess corridor safety and management needs and identify opportunities for strategic near-term improvements and long-term corridor enhancements.



Background

15th Ave S is a key north-south route through Beacon Hill that includes transit service south of S Lander St. It is the primary arterial route to Downtown Seattle, north of where 15th Ave S intersects with Beacon Ave S. Several intersections along 15th Ave S ranked in the Bicycle and Pedestrian Safety Analysis' top 1,000 high-risk intersections: Beacon Ave S, S Spokane St, S College St, and S Hanford St.

FIGURE 34. EXISTING CORRIDOR



 15th Ave S Corridor focus area

Relevant Plans

- 2014 Bike Master Plan (BMP) - Proposes greenway crossings of 15th Ave S at S Hill St, S Forest St, and S Hanford St; it also proposes an in-street bike facility and crossing of 15th Ave S at S Spokane St

Recommendations

Early analysis should look at traffic speeds, pedestrian and bike crossings, Americans with Disabilities Act (ADA) accessibility, and bike facility improvements.

Improvements should increase pedestrian safety and comfort, provide bike facilities, maintain transit operations, and discourage vehicle speeding.

ADA and accessibility:

- Improve sidewalk surface conditions on 15th Ave S, north of the intersection with Beacon Ave S
- Add curb ramps at all bus stops along 15th Ave S, to provide an accessible route, including at 15th Ave S and S Stevens St, which is adjacent to a bus stop

Estimated Cost Range for Study

Analysis - Low: Under \$100,000

9

CROSSING IMPROVEMENT AT 15TH AVE S / S LANDER ST

Design Crossing improvements to address pedestrian and bicycle safety and ADA accessibility needs.



Background

People in the neighborhood have concerns about fast moving traffic on 15th Ave S, and vehicles not stopping for pedestrians crossing the street. At the 15th Ave S and S Lander St intersection, northbound vehicles on 15th Ave S block the intersection which prevents both vehicles and pedestrians from crossing S Lander St. Traffic back-ups and related vehicle idling may also be a concern in this area.

Traffic speed and volume data collected at this intersection in summer 2018 was below the threshold SDOT uses to warrant installation of a full traffic signal. Some members of the community would like to see a 4-way stop here, but this would require further traffic analysis.

FIGURE 35. 15TH AVE S AND S LANDER ST INTERSECTION



Focus area

Relevant Plans

- Southeast Transportation Study (SETS)

Recommendations

Ensure curb ramps align with crosswalks to the degree possible with all future improvements.

Repaint crosswalk and explore other ways to heighten the visibility of pedestrians.

Consider the feasibility of a raised crosswalk along the northern leg of the intersection to provide traffic calming along the corridor. No bus routes currently run on 15th Ave S north of S Lander St.

Consider “Don’t block the box” treatment and signage to prevent vehicles stopping in the intersection.

Estimated Cost Range for Project

Low - Medium: Under \$100,000 to \$500,000



Existing south side crossing at 15th Ave S and S Lander St.



Bicyclists using the sidewalk at Beacon Ave S and S Hinds St intersection.

Bike Route Studies: Projects 10-13

Biking as a travel preference did not rank high in the outreach conducted for this project, but of those who do bike, there was a strong desire for safer, more comfortable north-south bike routes through the Beacon Hill neighborhood and a more connected system through Beacon Hill.

North-South Bike Routes

A number of bicyclists from south of the neighborhood use north Beacon Hill's north-south streets to go to Downtown Seattle. Current construction of a protected bike lane (PBL) on Columbian Way S and S Alaska St between Beacon Ave S and MLK Jr Way S, may encourage more bicyclists to commute through North Beacon Hill to Downtown and beyond. The PBL is part of the SDOT Columbian Way/S Alaska St Paving Project, which is anticipated to be completed by Spring 2019.

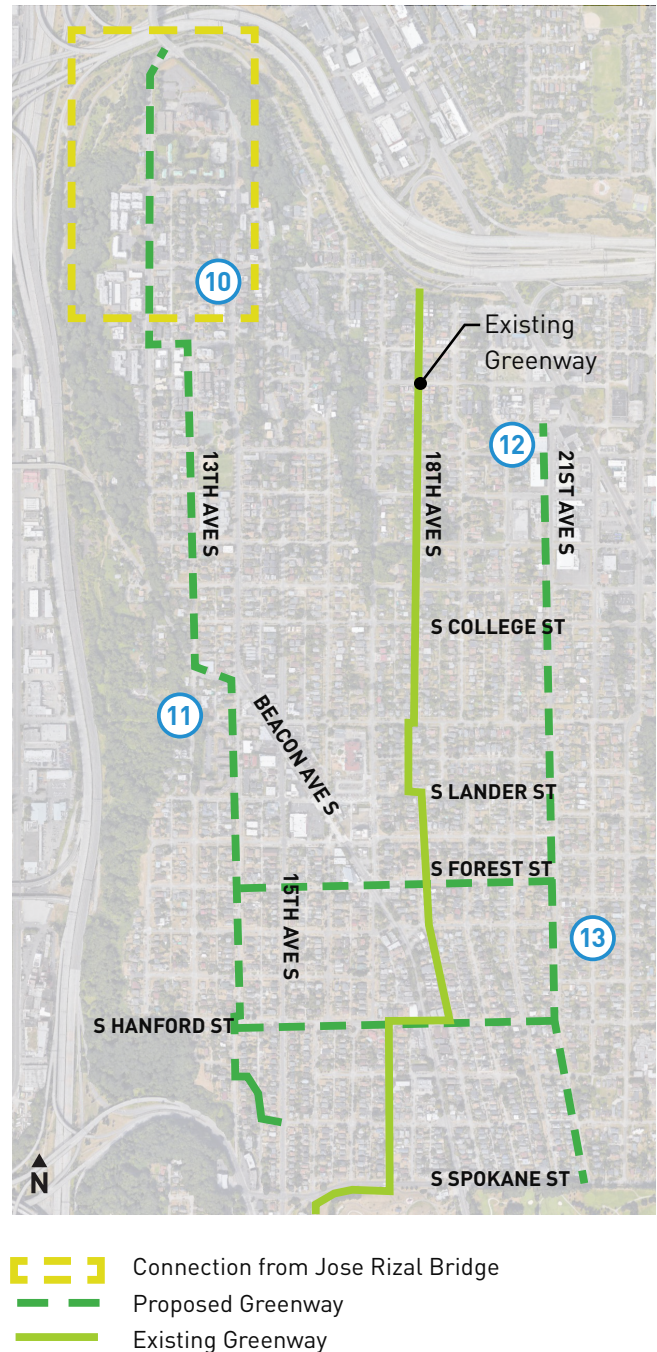
Bicycle lanes and sharrows were added to Beacon Ave S south of 14th Ave S to S Spokane St in 2007, since it provides the flattest and most direct route through the neighborhood.

The existing 18th Ave S greenway, which opened in late 2013, provides an important bike connection through the neighborhood. There may be opportunities to upgrade to current standards.

The following pages highlight the top priority projects for improving north-south bike

circulation through North Beacon Hill. All corridors shown are conceptual, with the final location and alignment of facilities to be determined during early project development. The project recommendations were gathered from outreach events and coordination with SDOT staff.

FIGURE 36. BIKE ROUTE PROPOSED PROJECT LOCATIONS AND THE 2014 BICYCLE MASTER PLAN – EXISTING AND PROPOSED GREENWAYS



Separate from this study's process, the 2019-2024 Implementation Plan for the Bicycle Master Plan (BMP) prioritized the study of the Beacon Ave S corridor from Jose Rizal Bridge south to S 39th St which includes protected bike lane and neighborhood greenway opportunities for the northern section of the corridor within the study area.

East-West Bike Routes

Given the topography of North Beacon Hill, east-west circulation is challenging for all transportation modes. Though there are existing bike facilities in the area that provide north-south circulation options, the area lacks facilities for east-west travel through Beacon Hill and towards SODO and Mt Baker neighborhoods. While outreach conducted for this study highlighted the priority of north-south circulation improvements, east-west bike facilities are also desired by people who bike in the area.

The City's Bicycle Master Plan (BMP) indicates two potential alignments for east-west greenway connections in North Beacon Hill. The first alignment on S Forest St would provide the easiest grade down the eastern slope of Beacon Hill. Crossing Beacon Ave S at S Forest St is difficult due to the complex geometry of the intersection, but improvements proposed in this study can enhance its safety (see project 4 on page 44 for more details).



Existing half-signal crossing at S Hanford St is marked on the north side but not on the south side.

The second east-west alignment identified in the BMP is S Hanford St, which has a signalized crossing of Beacon Ave S as part of the 18th Ave S Greenway, but the grade on S Hanford St east of 19th Ave S is sufficiently steep to limit usage by people riding bicycles. The pavement is also textured for traction on the steepest portion of S Hanford St, which is uncomfortable for bike travel. The steep grade of S Stevens St is difficult for bikes east of 19th Ave S.

Hills interrupt the street grid between 14th Ave S and 15th Ave S in the northwest area, which constrains circulation. There is another east-west greenway connection proposed for the northeastern area of the neighborhood. The project is associated with the 23rd Ave Corridor Improvements and the Route 7 Transit-Plus Multimodal Corridor projects. S Hill St, S Grand St, and S Plum St have been identified as potential alignments for east-west bicycle facilities, but the final determination will be coordinated with Rainier Ave S Corridor improvement projects.

Relevant Plans

- 2014 Bicycle Master Plan (BMP) identified a number of potential north-south bike improvement opportunities
- 2019-2024 Implementation Plan for the Bicycle Master Plan
- Beacon Bikes Family Circulation Plan - Recommends crossing improvements at S Forest St and S Hanford St at 15th Ave S and Beacon Ave S

10

BIKE CONNECTION FROM JOSE RIZAL BRIDGE

Assess design feasibility and implement a Protected Bike Lane (PBL) or other bicycle facility between Jose Rizal Bridge and North Beacon Hill neighborhood.



Background

The 2014 Seattle Bicycle Master Plan proposes a protected bike lane on 12th Ave S but current conditions on 12th Ave S would require improving the pavement.

Street width on 15th Ave S north of Beacon Ave S is constrained so adding bike facilities would likely require the removal of street parking along the corridor, which could leave some residents with limited options for parking nearby.

In 2015, improvements were made to this area including a widened northern sidewalk on Beacon Ave S from 13th Ave S to 14th Ave S for a safer bike connection, and a raised crosswalk at Beacon Ave S / 14th Ave S.

See project 7. *Beacon Hill Gateway North* for improvement recommendations at the Jose Rizal Bridge / Golf Dr S / S Charles St.

Recommendations

- Explore providing north and southbound bike facilities on separate streets while considering transit access and operations.
- Identify opportunities to improve paving conditions on bike routes with proposed facility improvements.

Estimated Cost Range for Study

Medium/High to High: Over \$500,00 to over \$1,000,000

11

13TH/14TH AVE GREENWAY

Study and implementation of north-south neighborhood greenway serving the western side of North Beacon Hill.



Background

The Seattle Bicycle Master Plan identified 13th Ave S and 14th Ave S as separate greenway projects, but when combined, they represent a continuous alignment through north Beacon Hill. The southern portion of the greenway includes a connection on S Hinds St.

Earlier plans identified the need for traffic calming at several intersections along the alignment. The corridor has had some recent improvements on 14th Ave S, south of the intersection with Beacon Ave S. This greenway would provide a connection to Beacon Hill International Elementary School.

Recommendations

- Combine proposed greenways for 13th and 14th Ave S into one project to implement a continuous north-south connection in Beacon Hill, west of Beacon Ave S.
- Analyze crash patterns on 14th Ave S to identify additional safety improvements.
- Improve paving surface for bicycle safety and comfort.

Estimated Cost Range for Study

Medium/High: \$500,00 to \$1,000,000

12

21ST AVE S CORRIDOR STUDY AND TRAFFIC CALMING IMPROVEMENTS

Study and implement strategic spot improvements to calm traffic and increase pedestrian and bicycle safety on this north-south neighborhood street serving the eastern side of North Beacon Hill.



Background

A 21st Ave greenway would provide a bicycling connection on the east slope of Beacon Hill.

Several schools are located on or close to 21st Ave S, including Kimball Elementary and the Hamlin Robinson School, a private school for children with special needs. There are also two additional independent schools for elementary and middle-school age children that will be co-located in a new building, currently under construction on 21st Ave S, between S Walker St and S Hill St.

There are community concerns about safety, including speeding traffic, at several intersections along 21st Ave S. 21st Ave S connects to Rainier Ave S, and as a result, people often drive this residential street faster than the speed limit.

The northern half of the 21st Ave S corridor has steep segments but the slope is generally slight and even. There are several uncontrolled intersections along the corridor where hills create sightline challenges for people driving, biking and walking.

Recommendations

- Study the corridor, gathering data such as traffic speeds, sightline issues and sidewalk gaps to identify strategic locations for improvements.
- Improve paving surface for safety and comfort.

Estimated Cost Range for Study

Medium/High: \$500,00 to \$1,000,000

13

EAST-WEST GREENWAY ALIGNMENT STUDY AND IMPLEMENTATION

Develop a new east-west neighborhood greenway bike route with pedestrian and bike crossing improvements at intersections to provide circulation improvements in the neighborhood.



Background

The topography of Beacon Hill presents many challenges for safe, comfortable east-west bicycle circulation. Earlier plans identified both S Forest St and S Hanford St as potential routes.

The Beacon Bikes Family Circulation Plan identified the need for safety improvements including:

- High visibility crosswalk across 15th Ave S and Beacon Ave S or crossbike with ADA compliant curb ramps
- Intersection improvements to increase safer bicycle and pedestrian crossings at Beacon Ave S / 17th Ave S / S Forest St
- Curb bulb opportunities where feasible
- High visibility crossing aids, such as a Rectangular Rapid Flashing Beacon (RRFB)
- Signage improvements

Recommendations

Future study should identify the alignment that best serves this area, taking into consideration topography and key neighborhood destinations such as schools.

Beacon Ave S and 15th Ave S carry high volumes of traffic through the neighborhood. Well-designed bicycle and pedestrian arterial crossing improvements should be implemented with either greenway alignment.

If a signal is added at S Stevens St, it could provide a crossing option. See project 1 on page 36 for details.

Improve paving surfaces to enhance bicycle safety and comfort.

Estimated Cost Range for Study

Medium/High: \$500,00 to \$1,000,000

14

17TH AVE S CORRIDOR ANALYSIS AND SPOT IMPROVEMENTS

Develop a corridor analysis of 17th Ave S to assess corridor safety and management needs, and identify opportunities for spot improvements.



Background

Beacon Ave S / 17th Ave S / S Forest St ranked in the Bicycle and Pedestrian Safety Analysis' top 1,000 high-risk intersections. Previous plans identified potential improvements along the 17th Ave Corridor including:

- Intersection with S Bayview St
- Intersection with S McClellan St
- Intersection with Beacon Ave S / S Forest St; S Stevens St
- 17th Ave S between Beacon Ave S and S Stevens St

North of the intersection with Beacon Ave S, 17th Ave S offers an alternative route through the Beacon Hill Town Center for people on bikes.

Relevant Plans

- Beacon Bikes Family Circulation Plan - Proposes a cul-de-sac where 17th Ave S meets Beacon Ave S on both legs of the street
- 2011 Urban Design Framework - Proposes converting 17th Ave S between Beacon Ave S and S Stevens St to open space while preserving access for residents and businesses

Recommendations

Analyze corridor safety elements such as traffic speeds, pedestrian and bike crossings, ADA accessibility and bike facility improvements.

Between S Bayview St and Beacon Ave S, 17th Ave S has a wide right-of-way. Redevelopment along the corridor could offer opportunities to recapture some of this additional roadway width to accommodate a bike facility or widen existing sidewalks.

FIGURE 37. EXISTING 17TH AVE S CORRIDOR



 17th Ave S Corridor focus area

Estimated Cost for Study

Low: Under \$100,000

15

23RD AVE S SPOT IMPROVEMENTS

Provide spot improvements at 23rd Ave S intersections.



Background

S McClellan St is one of the primary streets that connect Beacon Hill to Rainier Ave S.

- 23rd Ave S intersections identified in the City's Bicycle and Pedestrian Safety Analysis (BPSA):
 - 23rd Ave S / S College St (bicycle priority)
 - 23rd Ave S / S McClellan St (pedestrian and bicycle priority)
- Additional intersections in Beacon Hill were identified by the BPSA, but have all been addressed by other projects in this document.

Recommendations

Study intersections along 23rd Ave S to identify strategic improvements to improve pedestrian and bicycle safety, with a focus on access to schools.

Estimated Cost for Project

Medium: \$100,000 \$500,000



23rd Ave S / S McClellan St intersection identified in the Bicycle and Pedestrian Safety Analysis.

Potential community-led Projects: 16-19

There are opportunities for the Beacon Hill community to become directly involved in initiating improvements in the neighborhood, including those located within the public right-of-way.

Projects 1 through 15 were identified by current City initiatives or previous plans, and the community can take a direct role in improving the neighborhood. Projects 16 through 19 did not rank as high in the outreach and project evaluation conducted for this study, but their

scope and scale make them potential candidates for community-initiated improvements. If a community group is interested in pursuing City or private funding, SDOT can provide technical support and direction to ensure project success. See also *6 Working Together* on page 72.

To assist communities, the City has compiled a resource document, *Communities Realized*, that lists funding opportunities and City programs. It is a useful resource for funding arts, culture, trees, and street projects.



Community-initiated projects within the public right-of-way include street murals, like this one in Wallingford.

16

S LANDER FESTIVAL STREET EXPANSION

Expand the existing Roberto Maestas Festival Street design and designation west along S Lander St from Beacon Ave S to 15th Ave S.



Background

Extending the existing festival street was a desire identified in the 2011 Beacon Hill Neighborhood Plan. The current festival street (the pedestrian-centered space at the heart of the Beacon Hill Town Center) between Beacon Ave and 17th Ave S was installed by SDOT in 2010 in anticipation of the completion of the Roberto Maestas Plaza. There was initially concern about speeding on this curbless street, but after installation of a statue that looks like a pedestrian, people have reported that speeding seems to have declined.

The existing festival street design is challenging for people with limited vision to navigate. The mix of materials (black tactile detection, bollards, etc.) makes wayfinding confusing and low traffic noise makes it difficult to know when it is safe to cross the street.

Bus Route 107 currently waits on S Lander St between 15th Ave S and Beacon Ave S. Design of an expanded festival street needs to carefully consider appropriate relocation for this bus layover in collaboration with King County Metro.

Relevant Plans

- Southeast Transportation Study(SETS)
- 2010 Beacon Hill Neighborhood Plan

Recommendations

Wait until redevelopment of adjacent properties is proposed before pursuing extension of the curbless festival street. This would ensure the new open spaces will be actively used with additional eyes-on-the-street to enhance community safety in this area.

Interim street enhancements, like parklets, could be pursued through a community-led effort.

Design of the festival street should also address pedestrian safety concerns at 15th Ave S / S Lander St.

ADA and accessibility:

- Both interim approaches and final design should carefully consider American Disabilities Act access and wayfinding.
- Curbless streets must have high contrast cane detectable delineation between sidewalk and street

Estimated Cost Range for Project

Medium/High: \$500,00 to \$1,000,000

FIGURE 38. EXISTING S LANDER FESTIVAL STREET AND POTENTIAL EXPANSION AREA



17

BEACON HILL TOWN CENTER AND NEIGHBORHOOD GATEWAYS

Enhance underutilized right-of-way space by adding new pedestrian uses, landscape, art and other elements at key locations to reinforce and celebrate the Beacon Hill Town Center and neighborhood identity.



Background

The City's 2011 North Beacon Hill Town Center Urban Design Framework (UDF) encourages gateways at the boundaries of the Town Center to help define the edges of the neighborhood's commercial center and identifies a number of potential locations.

Gateway installations at intersections can provide traffic calming, as they can define the boundary of a neighborhood or its cultural attributes to raise driver awareness of pedestrian and bike circulation.

A gateway project could be initiated by a group of community members through a program such as the Neighborhood Matching Fund. See SDOT document, *Communities Realized*, for additional opportunities.

Relevant Plans

- 2010 Beacon Hill Neighborhood Plan



Beacon Ave S at S Spokane St, a potential gateway/art opportunity at the north side of Jefferson Park.

Recommendations

The 2011 UDF identified the following possible locations for a Town Center gateway:

- The northern corner of Beacon Ave S and 15th Ave S
- Along Beacon Ave S between S Bayview St and 14th Ave S
- At the southern corner of Beacon Ave S and 17th Ave S

Additional potential locations include Beacon Ave S at: 14th Ave S, 15th Ave S, S Forest St, S Stevens St, S Spokane St, and at the south end of the Jose Rizal Bridge.

Estimated Cost Range for Project

Low to Medium: Under \$100,000 to \$500,000

18 TOWN CENTER ALLEY IMPROVEMENTS

Improve alleys within the Beacon Hill Town Center to supplement pedestrian and bicycle circulation and provide better access to parking, dumpster storage, utilities, and emergency response.



Objective

Provides low-traffic travel options for multiple modes of transportation. Enhancements to alleys can provide better access to parking, dumpster storage, utilities, emergency response, and pedestrian and bicycle cut-throughs. Alley-adjacent public space opportunities are also possible.

Background

Alley improvements were first identified in the 2010 North Beacon Hill Neighborhood Plan. There are several alleys within the Town Center that help serve North Beacon Hill commercial areas.

FIGURE 39. ALLEY LOCATIONS NEAR BEACON HILL TOWN CENTER



..... Alley enhancement opportunities

Relevant Plans

- 2010 Beacon Hill Neighborhood Plan

Recommendations

Improvements associated with redevelopment should reference alley-specific design guidelines. The following guidelines have been selected from *The Activated Alley - A Plan for Evolving the University District's Alleys (2014)*.

Corner Sites: Corner sites serve as a gateway into the alley - provide extra space for pedestrian safety or provide a strong urban edge by building out to the corner.

Connections: Where possible, provide through-block connections to increase pedestrian circulation and access.

Eyes on the Street: Create a safe environment by providing lines of sight and strategic placement of doors and windows.

Vehicle Access: When feasible, locate vehicle access, service uses, and delivery areas within building to minimize conflict with pedestrians. Employ a multi-sensory approach to areas of potential vehicle-pedestrian conflict (e.g., contrasting or textured pavement, warning lights, etc).

Service Uses: Where service entries, loading docks, and trash receptacles abut a pedestrian area, maintain an attractive edge through screening, plantings, and other design treatments.

Blank Walls: Avoid long blank walls wherever possible.

Lighting Functions: Use lighting to both increase safety and highlight architectural and landscape details (e.g., entries, signs, canopies, plantings, and art).

For more information, see www.seattle.gov/dpd/publications/directors_rules/DDR7-2015.pdf

Estimated Cost Range for Project

Low to Medium: Under \$100,000 to \$500,000

19 NEIGHBORHOOD STREET TREE PLANTING

Plant street trees around North Beacon Hill to promote traffic calming, provide greenery and shade, and increase the urban tree canopy.



Background

Seattle established a goal in 2007, to reach 30% tree canopy cover citywide by 2037. Tree canopy cover in North Beacon Hill is currently between 15.6% and 22.3% (see Urban Forestry Story Map at www.seattle.gov/trees/). Beacon Hill's tree canopy can grow and provide more health benefits to the entire neighborhood. 225 trees have been planted within North Beacon Hill over the past few years through the Levy to Move Seattle.

There are additional locations within the study area where trees can be planted in the public right-of-way (see Figure 45). They include planting opportunities in wide planting strips between the sidewalk and roadway.

For more information on how to get a free permit to plant street trees, call 206-684-TREE (8733).

Relevant Plans

- 2010 Beacon Hill Neighborhood Plan

Recommendations

- Building on city-led efforts, community members could pursue a Department of Neighborhoods Matching Fund Grant to plant more street trees in the neighborhood.
- Community members can plant trees in their own yards and in front of their own houses as well. Trees for Neighborhoods (www.seattle.gov/trees/) provides free trees to community members with instructions on how to choose the right tree for your space, plant, and care for your tree.

Estimated Cost Range for Project

Low: Under \$100,000

FIGURE 40. TREE CANOPY COVER AND OPPORTUNITIES FOR TREE PLANTING ALONG STREETS IDENTIFIED BY SDOT URBAN FORESTRY



6. WORKING TOGETHER

NEXT STEPS

The projects and strategies in this document were identified and prioritized by the north Beacon Hill community but have not been selected to receive funding for implementation.

This Mobility Study provides an additional lens to refine the list of improvements identified through previous outreach efforts and elevate improvements with wide community support. SDOT delivers projects on an ongoing basis through existing programs, and this study can be used as a reference documenting the prioritization of projects. Learn more about SDOT's current funding structure and the programs housed in several divisions at www.seattle.gov/transportation/about-sdot/organization.

GETTING TO PROJECT DELIVERY

There are several ways projects can be initiated, funded and implemented.

Community-Supported Projects

SDOT program managers assess potential projects based on data, community support, safety issues, leveraging opportunities, and analysis that reflects the impacts of growth and other new and future transportation improvements. The information included in the project evaluation, background, and project description sections in this study help SDOT staff better understand Beacon Hill priorities and existing conditions to accurately scope projects that meet community needs. The study validates North Beacon Hill community interests for projects that might not otherwise be a citywide priority.

Community-Led Projects

The City of Seattle supports small- and medium-scaled projects through several neighborhood grants. Examples of projects that might be

supported through these grants include the Neighborhood Enhancement projects that are listed at the end in *5 Infrastructure Improvement Recommendations* (project 16 through 19). Some of those enhancements have been identified in previous plans and their importance to the community has been confirmed through the outreach done for this study.

Community members can apply for a grant such as the Neighborhood Matching Fund or the Neighborhood Street Fund, and when selected, work with city staff to define the problem and shape the solution. More detailed information on criteria and application deadlines can be found in our resource guide, *Community Realized*.

The Advisory Group or organizations we engaged through our outreach (see p.29 for a full list of organizations) are good initial contacts for those interested in taking the lead or supporting these efforts. Larger projects require funds that are beyond what's available through City grants. This study provides project information that can be useful to lobby decision-makers and elected officials (Beacon Hill is Council District 2) to fund larger projects or to include projects in a transportation levy or state/federal grant application.

Private development

Private development is typically responsible for providing sidewalk and street improvements in accordance to city regulation. New developments are required to seek review and approval of permits from the city prior to construction. This study provides guidance to developers and permit review staff by identifying improvements that may be delivered through new developments. For more information see: www.seattle.gov/transportation/permits-and-services/permits/inspections/development-review.