

Attachment E to the Scoping Booklet

Proposed Range of Alternatives for Environmental Review

September 1, 2016

Overview

The Southwest Corridor Light Rail Project is a subset of the Southwest Corridor Plan, which is a broad array of transit, roadway, bicycle and pedestrian solutions to help reduce congestion, improve circulation and improve quality of life in the area stretching from Southwest Portland to Sherwood and Beaverton to Tualatin. The Plan defines investments to help realize the local land use visions adopted by each community. Community members, business leaders, transit providers, the state and local governments are working together now to plan for these transportation and community development improvements in this corridor. In 2013, the Southwest Corridor Steering Committee adopted a comprehensive Shared Investment Strategy (SIS) that established a vision of investments in parks, trails, sidewalks, bikeways, transit and roadways to support community goals.

Based on technical analysis and public engagement, the steering committee identified light rail as the preferred high capacity transit mode for the Southwest Corridor in May 2016. The proposed 12-mile Metropolitan Area Express (MAX) light rail line would be complemented with an array of roadway connectivity improvements, stormwater and streetscape improvements, and bikeways, sidewalks, and safe crossings along and to the line. While some of these complementary investments have already been incorporated into the light rail project, others will be identified through the environmental review process. Projects from the 2013 Shared Investment Strategy that are not included in the light rail project will remain part of the overall Southwest Corridor Plan, but will require a separate collaborative funding strategy.

Purpose and use of this document

This document defines the initial set of investments proposed for environmental review, including the transit mode, alignments and terminus, as well as associated roadway, bicycle, and pedestrian projects along the light rail alignment or providing critical access to PCC Sylvania and Marquam Hill.

The Southwest Corridor Steering Committee endorsed this proposed range of alternatives at their June 2016 meeting. Since June, this document has been updated to provide additional detail about station locations, park-and-ride lots, operating and maintenance facility sites, additional roadway, bicycle, and pedestrian projects, and PCC Sylvania connection options.

Environmental review phase

The next phase of the planning process for the Southwest Corridor Light Rail Project is a detailed review of anticipated environmental impacts and mitigation strategies under the National Environmental Policy Act. An in-depth Environmental Impact Statement (EIS) will analyze the potential impacts of a range of reasonable alternatives For more information on the EIS, read the **What is an EIS?** fact sheet on the project website: www.swcorridorplan.org

that meet the project's adopted Purpose and Need and identify any necessary mitigation strategies. The EIS will analyze the light rail line and the complementary roadway, bicycle and pedestrian projects. The development of an EIS is a requirement for using federal transit dollars for this project because the impacts are likely to be significant.

The first step of the environmental review phase is "scoping," during which the public and federal agencies will have the opportunity to comment on both the range of alternatives and the potential impacts to consider.

To share your thoughts about the range of alternatives and impacts to consider during the September 2016 scoping period, complete either a short (5-7 minutes) or long (20 minutes) online survey, both available at www.swcorridorplan.org

Alternatively, you can email any comments to swclrt.scoping@oregonmetro.gov.

After scoping, a final range of alternatives to study will be identified, including consideration of any new alternatives suggested during scoping. A Draft EIS will then be completed to assess the positive and negative impacts of these alternatives and help inform the selection of a Locally Preferred Alternative (LPA). The Draft EIS will be circulated for public and agency comment, and local agencies will be asked to adopt the LPA. After the LPA adoption, a Final EIS will be completed. The Final EIS will include responses to all comments on the Draft EIS and commitments to mitigate adverse impacts of the project.

This graphic illustrates the anticipated timeline for the environmental review phase for the Southwest Corridor Light Rail Project:

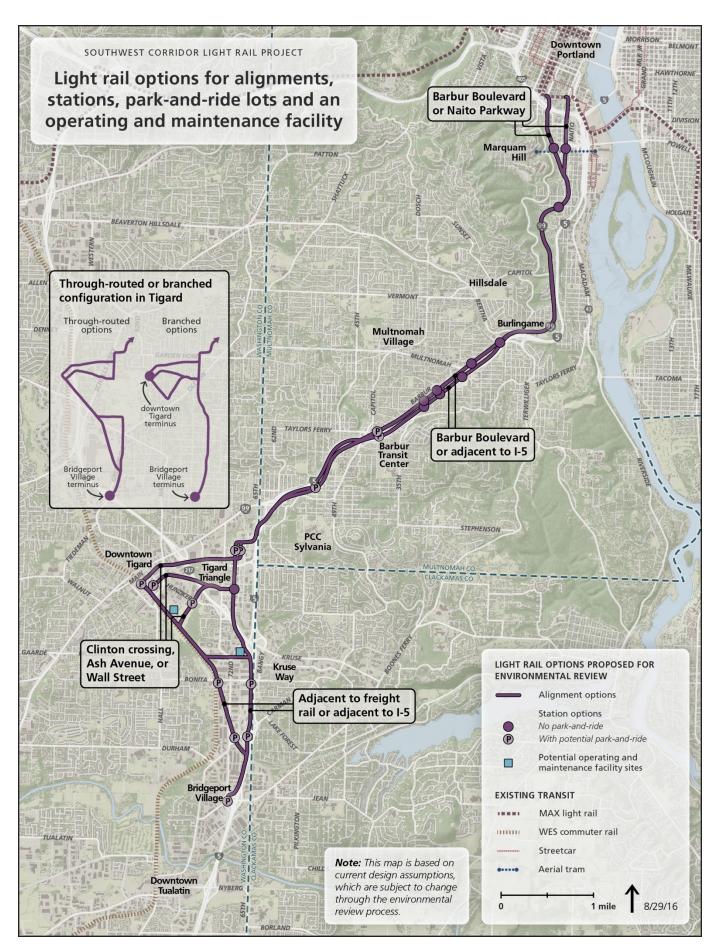


Proposed range of alternatives

The proposed range of alternatives includes the components of the light rail project itself, the accompanying roadway, bicycle and pedestrian improvements, and the options for enhanced connections to Marquam Hill and PCC Sylvania for transit users.

Light rail options for alignments, stations, park-and-ride lots and an operating and maintenance facility

The proposed high capacity transit investment for the Southwest Corridor is a new 12-mile Metropolitan Area Express (MAX) light rail line connecting Portland, Tigard and Tualatin. The line would include stations serving many destinations, including South Portland, Marquam Hill, Burlingame, the Barbur Transit Center, Portland Community College (PCC) Sylvania, Tigard Triangle, downtown Tigard and Bridgeport Village. Park-and-ride lots could be included at several of the proposed station locations between the Barbur Transit Center and Bridgeport Village. The various options for alignments, stations and park-and-ride lots are described below, from north to south by general geographic area, followed by an overview of the potential sites for an operating and maintenance facility.



South Portland

The light rail line would extend south from the existing Green/Yellow/Orange Line MAX tracks that run through the downtown Portland Transit Mall. Two alignment options remain in the South Portland area: Barbur and Naito. With the Barbur option, the light rail line would cross over I-405 on a new structure parallel to the SW 4th Avenue bridge, then run in the center of SW Barbur Boulevard south of SW Caruthers Street. With the Naito option, the light rail line would follow the Yellow/Orange Line tracks to the existing station on SW Lincoln Street, then turn south at SW Naito Parkway to cross over I-405 and continue south to Barbur on Naito. South of the point where Barbur and Naito converge, the line would continue in the center of Barbur for both alignment options.

The Naito alignment would require modifications to the roadway configuration through South Portland in order to add a light rail trackway while maintaining traffic flow to and from the Ross Island Bridge and allowing people to safely access the station and cross Naito Parkway.

An option to pave the light rail trackway to accommodate local buses is under consideration between the Portland Transit Mall and Barbur Boulevard/SW Capitol Highway (Oregon Highway 10) for both the Barbur and Naito alignment options. On this "shared transitway," certain bus lines could have faster and more reliable travel times through South Portland, with the trade-off of fewer stops. Currently, one bus stop is assumed to be included along the shared transitway, located near SW Gibbs Street.

Proposed station locations

Both alignments would include a station between SW Gibbs Street and SW Grover Street to serve both Marquam Hill and the Lair Hill area, including the Oregon Health & Science University (OHSU), the Veterans Affairs (VA) Medical Center and the National University of Natural Medicine (NUNM). Either alignment would include a new mechanized connection between Barbur Boulevard and Marquam Hill and a ramped walkway between Barbur and Gibbs to connect to Naito Parkway. For either alignment, the station near Gibbs Street would also serve the South Waterfront via a new safe crossing of Naito Parkway and the Hooley Pedestrian Bridge over I-5, which is located three blocks east of Naito and five blocks from Barbur.

A second South Portland station would be located on the north side of the intersection with Hamilton Street.

Southwest Portland

South of Hamilton, the light rail line would continue in Barbur Boulevard through "The Woods" to SW Terwilliger Street. Construction of a center-running light rail alignment through this area would require reconstruction of the Vermont and Newbury viaducts. For bicycle and pedestrian access, either the viaducts could be widened to accommodate bike lanes and sidewalks or all bicycle and pedestrian movements could be combined on the west side of Barbur on a separated facility.

Between Terwilliger Street and SW 60th Avenue, near the Portland-Tigard city limits, the light rail line could either continue to run in the center of Barbur Boulevard or transition to run adjacent to I-5. On the northern end, the line could shift from Barbur to adjacent to I-5 at SW Custer Street, SW 26th Avenue or SW Plum Street (just north of the Barbur Transit Center). An adjacent to I-5 alignment could either transition back to Barbur at the "Crossroads" intersection of SW Capitol Highway, Barbur and I-5, or continue adjacent to I-5 to 60th Avenue.

The adjacent to I-5 options would cross over the Crossroads intersection on a new structure. The option that stays on Barbur Boulevard the full length of 13th Avenue to 60th Avenue would cross through that intersection at-grade, which would require reconstructing the existing Barbur Boulevard/Capitol Highway bridge over I-5.

Near the Portland-Tigard city limits, just west of where Barbur crosses over I-5 between 60th Avenue and SW 64th Avenue, the light rail line would turn south and then cross over I-5 and into the Tigard Triangle on a new structure. For the adjacent to I-5 alignment to 60th, the line could cross Barbur at 60th Avenue with either an at-grade crossing, a tunnel under the intersection or a structure over the intersection. The center-running Barbur Boulevard alignment would cross over the northbound lanes of Barbur on a new structure.

Proposed station and park-and-ride locations

Several station locations are proposed through the Southwest Portland area, with a few variations:

- No stations have been identified for "The Woods" section of the alignment between Hamilton Street and 13th Avenue, which has relatively little development and is largely bordered by parks.
- Both the adjacent to I-5 and the Barbur alignment would include a station between Custer Street and 13th Avenue to serve the area around the Burlingame Fred Meyer.
- The Barbur alignment would include a station at the intersection of Barbur Boulevard and SW Capitol Hill Road/SW 19th Avenue to serve the area around Safeway. This station would require split platforms, with the northbound platform on the north side of the intersection and the southbound platform on the south side of the intersection. Because of the existing bridges and I-5 ramps, the adjacent to I-5 alignment would not be able to locate a station at 19th Avenue. Instead, a station just north of SW Spring Garden Street would be served with the adjacent to I-5 alignment.
- Either alignment would include a station at either 26th Avenue or SW 30th Avenue. For the Barbur alignment, the 26th Avenue station would be located in the center of Barbur as it crosses over 26th, with stairs and ramps to provide access down to street below. The existing

structure would be rebuilt to accommodate the added width of the light rail trackway and station platform. The 30th Avenue station on Barbur would include a split platform, with the northbound platform on the northeast side of the intersection and the southbound platform on the southwest side of the intersection. For the adjacent to I-5 alignment, the station would be located at the level of I-5 and Barbur Boulevard just northwest of I-5, with a pedestrian and bicycle bridge connecting to Barbur. The 30th Avenue station adjacent to I-5

- Both alignments would include a station at the Barbur Transit Center to provide transfer opportunities to several bus lines and walk access to the surrounding West Portland town center. For the Barbur alignment, this station would be located in the center of Barbur Boulevard just north of the intersection with SW Taylors Ferry Road. For the adjacent to I-5 alignment, this station would be located at the eastern edge of the transit center. For both alignments, the station would include a combined structured and surface park-and-ride with a capacity of somewhere between 350 and 800 spaces (368 spaces in a surface lot today). Bus facilities at the transit center would be retained.
- Both alignments would include a station and a new park-and-ride lot at 53rd Avenue with a capacity of somewhere between 600 to 950 spaces using a combination of structured and surface parking. For the Barbur alignment, the station would be located in the center of Barbur Boulevard just west of the intersection with 53rd. For the adjacent to I-5 alignment, the station would be located alongside Barbur just northwest of the Barbur/53rd intersection. This station would also include improvements to 53rd Avenue between Barbur and the PCC Sylvania campus to provide a safer and more accessible walking and biking connection to the campus. Several mechanized connection options along 53rd Avenue are also under consideration, which are described in the PCC Sylvania Connection Options for Scoping memo.

Tigard and Tualatin

After crossing over I-5 from Southwest Portland into the Tigard Triangle on a new structure, the light rail alignment would run along the west side of I-5 and the north side of Atlanta Street.

Through Tigard, there are two general route configurations: a through-routed configuration to Bridgeport Village via downtown Tigard or a branched configuration with a split in the Tigard Triangle, where every other train would either continue south to Bridgeport Village or turn west to serve downtown Tigard. Each configuration has different alignment options, as explained below.

Through-routed configuration alignment options

For the through-routed configuration, there are two alignment options for traveling through the Triangle and downtown Tigard: Ash Avenue and Clinton crossing.

With the Ash Avenue option, the light rail line would run on the east side of SW 70th Avenue to SW Beveland Street, including construction of new street segments of 70th Avenue that do not exist today. From 70th Avenue, the line would run on Beveland Street and a new structure over Highway 217 extending from Beveland Street to SW Hall Boulevard near SW Knoll Drive, connect to SW Ash Avenue, and then turn south to run parallel to the Westside Express Service (WES) commuter rail tracks.

With the Clinton crossing option, the light rail line would turn south onto SW 69th Avenue or 70th Avenue then cut west near SW Clinton Street on a long structure extending from 70th Avenue over SW Dartmouth Street and Highway 217. The alignment would cross Hall Boulevard at grade just south of Pacific Highway (99W), run on a new street segment connecting SW Scoffins Street and SW Commercial Street near the Tigard Transit Center, and then turn south to run parallel to the WES commuter rail tracks.

South of downtown Tigard, both through-routed options would run adjacent to the WES commuter rail and freight rail tracks toward Bridgeport Village. South of Tech Center Drive, light rail could either continue adjacent to the freight rail tracks or run east between industrial buildings and then adjacent to I-5 south to Bridgeport Village.

Branched configuration alignment options

For the branched configuration, the downtown Tigard leg of the branch could run on the Clinton crossing option, the Ash Avenue option or on a Wall Street alignment. Similar to the Ash Avenue alignment, the Wall option would run along 70th Avenue and Beveland Street in the Triangle. The Wall alignment would cross over Highway 217 on a new structure extending from Beveland Street to SW Wall Street, then continue on SW Wall Street and run parallel to the WES tracks into downtown Tigard. The Bridgeport Village leg of the branch would continue south on 70th Avenue and cross over Highway 217 on a new structure, then run adjacent to I-5 to Bridgeport Village.

Proposed station and park-and-ride locations

In Tigard and Tualatin, the general station locations include the northern Tigard Triangle, the southern Tigard Triangle, SW Hunziker Street, downtown Tigard, SW Bonita Road, SW Upper Boones Ferry Road and Bridgeport Village. There are some differences which stations are included and the particular location of each station based on the alignment and configuration options:

- All options would include a northern Tigard Triangle station, which would be located on 70th Avenue between SW Atlanta Street and SW Baylor Street for all except the through-routed Clinton crossing alignment, which could alternatively locate the station on 69th Avenue between Atlanta and Baylor. A structured park-and-ride lot could be included at the northern Tigard Triangle station, with a capacity of 200 to 500 spaces.
- All options except the through-routed Clinton crossing alignment would include a station in the southern Tigard Triangle. For all branched configuration options, this station would be located on 70th Avenue just north of Beveland Street. For the through-routed Ash Avenue option, this station could be located either on 70th Avenue just north of Beveland Street or on Beveland Street just west of 70th Avenue.
- Only the Wall Street alignment would include a station in between downtown Tigard and the Tigard Triangle, which would be located on Wall Street just southwest of SW Hunziker Street. This station could include a park-and-ride lot with a capacity of around 350 to 400 spaces.
- All options would include a station in downtown Tigard. For the Wall alignment option or the Clinton option, this station would be located at the existing Tigard Transit Center along the WES commuter rail and freight rail tracks. For the Ash Avenue alignment option, this station would be located on Ash Avenue just east of Commercial Street. For any option, a structured park-and-ride lot could be included with 200 to 300 spaces (in addition to the 103 spaces provided by a surface lot west of the WES and freight rail tracks today).
- All options would include a station near Bonita Road. For the adjacent to freight rail alignment option, this station would be located south of Bonita Road between SW 72nd and 74th Avenues. For the adjacent to I-5 option, this station would be located south of Bonita Road on the west side of I-5. The adjacent to I-5 station location could include a small surface park-and-ride lot with around 150 spaces. The adjacent to freight rail station location could include a small surface park-and-ride lot with up to 200 spaces.
- All options would include a station near Upper Boones Ferry Road. For the adjacent to freight rail option, this station would be located north of Upper Boones Ferry on the west side of the freight rail tracks between SW Sequoia Parkway and 72nd Avenue. For the adjacent to I-5 option, this station would be located south of Upper Boones Ferry on the west side of I-5. The adjacent to freight rail alignment could include a small surface park-and-ride lot of around 50 to 100 spaces. The adjacent to I-5 alignment could include a park-and-ride lot with a capacity of 400 to 600 spaces using structured and/or surface parking.
- All options would include a station near Bridgeport Village, which would be located on the north side of SW Lower Boones Ferry Road between 72nd Avenue and I-5. The Bridgeport Village station would include a park-and-ride lot with a capacity of about 600 to 800 spaces using a combination of structured and surface parking (466 surface spaces today). The park-and-ride lot would be split between the north and south sides of Lower Boones Ferry Road as it is today, with majority of the parking located south of Lower Boones Ferry Road. A new pedestrian bridge crossing over Lower Boones Ferry Road would provide access between the parking in the southern lot and the station location north of the roadway.

Operating and maintenance facility options

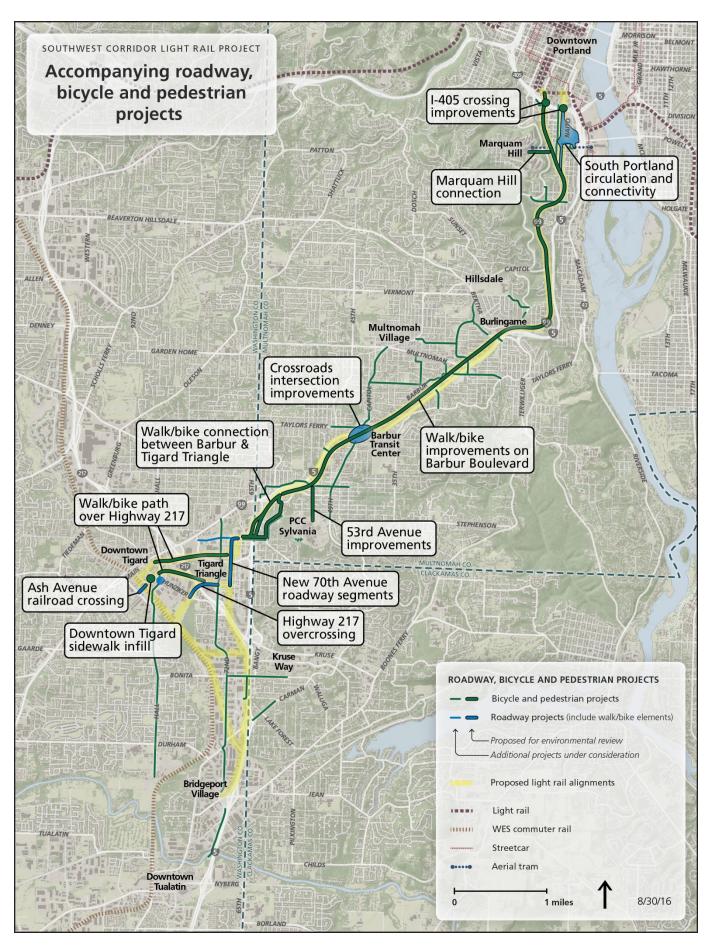
The light rail project could include a maintenance facility for storage and maintenance of the additional light rail vehicles required for this service. There are two potential locations in Tigard under consideration: one near SW Wall Street and the WES commuter rail line and the other just west of I-5 north of SW Bonita Road (see map on page 4). Alternatively, an expansion of the existing Ruby Junction maintenance facility in Gresham is also being considered.

Accompanying roadway, bicycle and pedestrian projects

Through the Southwest Corridor Plan process, many roadway, bicycle and pedestrian projects have been identified that could improve safety and connectivity throughout the corridor and support the land use vision. In July 2013, the steering committee endorsed a specific list of roadway, bicycle and pedestrian projects to pursue as part of the Shared Investment Strategy, which included a preliminary identification of projects that could provide access to the high capacity transit line or be constructed together with the transit project.

Along with the refinement of the high capacity transit mode, alignments and stations, project partners have further developed the list of potential accompanying roadway, bicycle and pedestrian projects, including removing projects that would be more appropriate to pursue with other funding sources and adding new projects as alignments were added or infrastructure needs were identified.

Several projects have already been proposed for environmental review because they are integrally connected to the designs of at least one of the light rail alignments that will be studied in the Draft EIS. Thirty-six additional projects are under consideration to include in the Draft EIS, primarily to provide adjoining neighborhoods with pedestrian and bicycle access to the transit stations and the alignment. These additional projects have undergone more detailed analysis to better understand the costs and benefits of including each project in the Draft EIS. This information is provided in a separate document, *Analysis of Additional Roadway, Bicycle and Pedestrian Projects,* and a staff recommendation on which of these projects are included in the Draft EIS is scheduled to be released in November 2016. The Southwest Corridor Steering Committee is scheduled to consider the staff recommendation at their December 2016 meeting.



Projects proposed for environmental review

The list of projects already proposed for environmental review includes bicycle and pedestrian improvements along the light rail alignments and critical station access projects that are already incorporated into the transit design, as well as major roadway projects that are key priorities of the partner jurisdictions and combine improvements for autos, bikes and pedestrians. Because these projects fall along the proposed light rail alignments and may be eligible for federal New Starts funds, they could be constructed together with the transit project and merit joint environmental analysis. Based on staff analysis and input gathered during scoping, there may be other projects added from the list of additional roadway, bicycle and pedestrian projects under consideration for environmental review.

Walking and biking improvements along the proposed light rail alignments:

- I-405 crossing improvements: Improve opportunities for bicycles and pedestrians to cross over/under I-405.
- Walk/bike improvements on Barbur Boulevard: Add new and upgrade existing sidewalks, bike
 lanes and safe crossings on Barbur Boulevard from 3rd Avenue to 60th Avenue, including
 reconstruction of Vermont and Newbury viaducts.
- Walk/bike improvements at Crossroads: Add new sidewalks, bike lanes and safe crossings at the "Crossroads" intersection of Barbur Boulevard and Capitol Highway at I-5.
- Walk/bike improvements on Naito Parkway: Add new sidewalks, bike lanes and safe crossings on Naito Parkway from SW Lincoln Street to the merge point with Barbur Boulevard
- Walk/bike connection between Barbur Boulevard and the Tigard Triangle: Build new bicycle and pedestrian connection between Barbur Boulevard near 60th Avenue and the northern Tigard Triangle area.
- Walk/bike connection over Highway 217: Include bicycle and pedestrian facilities on the light rail structure over Highway 217.
- Downtown Tigard sidewalk infill: Build sidewalks, where there are none, along the light rail alignment in downtown Tigard.

Critical station access projects serving Marquam Hill and PCC Sylvania:

- Marquam Hill connection: Construct a new pedestrian connection between Marquam Hill and Barbur Boulevard to access a light rail station on Barbur Boulevard or Naito Parkway near Gibbs Street. The potential designs for the Marquam Hill connection are described in more detail on page 20 and in a separate document, *Marquam Hill Connection Options for Scoping* (available on the project website, www.swcorridorplan.org).
- 53rd Avenue improvements: Reconfigure and improve intersection of Barbur Boulevard, 53rd Avenue and Pomona Street to manage traffic turning speeds and improve safety of pedestrians and bicyclists. Build neighborhood greenway connection on 53rd Avenue between Barbur and PCC Sylvania. Potential designs include updated sidewalks, bike lanes, pervious pavement, landscaping and ramp connection to campus. In addition to these bicycle and pedestrian improvements, several other options for improving transit access to PCC Sylvania are under

consideration. These other connection options are described on page 19 and in a separate document, *PCC Sylvania Connection Options for Scoping* (available on the project website).

Roadway projects that could be constructed with the light rail line:

- South Portland circulation and connectivity: Reconfigure ramp access to the west end of the Ross Island Bridge. Reconnect streets and pedestrian/bike facilities across Naito Parkway.
- Crossroads intersection improvements: Through the Draft EIS analysis, identify strategies for mitigating the anticipated impacts of the project on the "Crossroads" intersection of Barbur Boulevard and Capitol Highway at I-5.
- New 70th Avenue roadway segments: Construct new segments of 70th Avenue in the Tigard Triangle, including one auto lane each direction and sidewalks.
- Highway 217 overcrossing: Build new connection of Beveland Street to Hunziker Street over Highway 217 for cars, bikes and pedestrians.
- Ash Avenue railroad crossing: Extend Ash Avenue at-grade across the Portland and Western and WES railroad tracks between Commercial Street and Burnham Street, including sidewalks.

Additional projects under consideration for environmental review

The list of additional projects under consideration to include in the Draft EIS includes many walking and biking projects and a handful of roadway projects that could potentially be constructed with the light rail project. In order to better understand the trade-offs of including

To learn more about these projects, read *Analysis of Additional Roadway, Bicycle and Pedestrian Projects*, available on the project website: www.swcorridorplan.org

these projects in the Draft EIS, project staff has developed more detailed designs and an analysis addressing several considerations, including proximity to stations, safety needs, and project cost and impacts. This information is provided in a separate document, *Analysis of Additional Roadway*, *Bicycle and Pedestrian Projects*. This analysis, paired with public input gathered during scoping, will inform the staff recommendation on which projects to include in the final range of alternatives to study in the Draft EIS. This recommendation is scheduled to be released in November 2016, followed by a steering committee decision in December.

Walking and biking projects: South Portland

- Broadway and Caruthers Street sidewalks and bikeway: reconstruct the sidewalk on the north side of SW Broadway between SW 4th and 5th Avenues, add a bike lane on SW Caruthers Street between Broadway/4th and 5th, and add a crosswalk across Caruthers at Broadway and 4th
- 1st Avenue bikeway: restripe SW 1st Avenue to provide a southbound bike lane (uphill) and a northbound shared street bikeway (downhill) from SW Lincoln Street to SW Barbur Boulevard
- Naito Parkway to Hooley Bridge bikeway: create a shared street bikeway on Grover Street,
 Corbett Avenue and Gibbs Street to connect a light rail station at Naito Parkway and Grover
 Street to the Darlene Hooley pedestrian and bicycle bridge over I-5
- Hamilton Street/Terrace bikeway and sidewalks: create a shared street bikeway connecting Barbur Boulevard to Terwilliger Parkway via both SW Hamilton Street and SW Hamilton Terrace. The project would also fill in missing sidewalks on one side of Hamilton Street for approximately one block east of Terwilliger.

Walking and biking projects: Barbur Boulevard historic highway area

- Terwilliger Parkway bikeway gap: complete a short gap in the southbound bike lane on SW Terwilliger Parkway north of SW 7th Avenue, including reconstruction of the adjacent sidewalk
- Chestnut Street bikeway: restripe SW Chestnut Street to create a westbound bike lane (uphill) and an eastbound shared street bikeway (downhill) between SW Vermont Street and SW Terwilliger Street
- Custer Drive sidewalks: construct sidewalks on the north side of SW Custer Drive between SW Capitol Hill Road and SW 13th Avenue

- Pedestrian/bicycle bridge over I-5 near Custer Street: construct a new crossing over I-5 for pedestrians and bicyclists near the proposed light rail station on Barbur Boulevard between SW Custer Street and SW 13th Avenue
- Capitol Hill Road sidewalks and bikeway: construct sidewalks and a bikeway on SW Capitol
 Hill Road between Barbur Boulevard and SW Bertha Boulevard
- 19th Avenue bikeway: add a bikeway on SW 19th Avenue between Barbur Boulevard and SW Spring Garden Street
- Troy Street bikeway: restripe SW Troy Street to provide an uphill bike lane and downhill shared street bikeway between SW Capitol Hill Road and SW Capitol Highway
- Spring Garden Street and Dolph Court sidewalks and bikeway: construct sidewalks and bike lanes on SW Spring Garden Street between 19th Avenue and SW Taylors Ferry Road southeast of I-5; construct sidewalks and a bikeway on Spring Garden between Barbur Boulevard and 26th Way, and on Dolph Court between 26th Way and SW Capitol Highway northwest of I-5
- 24th Avenue sidewalks and bikeway: construct sidewalks and a bikeway on SW 24th Avenue,
 SW Hume Court and SW 25th Avenue between Barbur Boulevard and Multnomah Boulevard
- 26th Avenue sidewalks and bikeway: construct sidewalks and bike lanes on SW 26th Avenue between the I-5 underpass and SW Taylors Ferry Road and add lighting under I-5
- 30th Avenue/Hume Street/31st Avenue sidewalks: construct sidewalks on SW 30th Avenue, SW Hume Street and SW 31st Avenue between Dolph Court and Multnomah Boulevard
- Capitol Highway sidewalks and bike lanes: construct sidewalks and bike lanes on Capitol Highway between Multnomah Village and Barbur Boulevard at the "Crossroads" intersection
- Taylors Ferry Road sidewalks and bikeway: construct sidewalks and bike lanes on SW Taylors Ferry Road between SW Capitol Highway and SW 49th Avenue

Walking and biking projects: PCC Sylvania area

- 40th Avenue sidewalks: construct sidewalks on the west side of SW 40th Avenue between SW
 Wilbard Street and SW Alfred Street and a rapid flashing beacon crosswalk at SW Huber Street
- Outer Capitol Highway pedestrian improvements: provide pedestrian improvements on SW
 Capitol Highway and SW 49th Avenue between Barbur Boulevard and SW Palatine Street,
 including new sidewalks, ramps, crosswalks, signals, bus shelters and medians
- Pedestrian/bicycle bridge over I-5 near Luradel Street or 53rd Avenue: construct a new walking and biking crossing over I-5 at one of two locations
- Pomona Street sidewalks: construct sidewalks and bike lanes on SW Pomona Street between SW 53rd Avenue and SW 45th Avenue
- Pasadena Drive sidewalks and bike lanes: construct sidewalks and bike lanes connecting Pacific Highway/64th Avenue with the pedestrian/bicycle bridge over I-5 near 53rd Avenue

 Walk/bike connection between PCC Sylvania and the Tigard Triangle: provide a bicycle and pedestrian connection between the northern Tigard Triangle area and the PCC Sylvania campus, including sidewalks and bike lanes on SW Haines Street and SW Atlanta Street between SW Lesser Road and SW 68th Avenue and two options for connecting from Lesser/Haines to the campus

Walking and biking projects: Tigard Triangle and downtown Tigard

- 72nd Avenue sidewalks and bikeway- 99W to Dartmouth Street: construct sidewalks and bike lanes on SW 72nd Avenue between Pacific Highway (99W) and SW Dartmouth Street
- 72nd Avenue sidewalks and bikeway- Dartmouth Street to Hunziker Street: construct sidewalks and bike lanes on SW 72nd Avenue between SW Dartmouth Street and SW Hunziker Street
- Hall Boulevard sidewalk infill: construct missing sidewalks on Hall Boulevard between Pacific Highway (99W) and SW Durham Road

Walking and biking projects: Southeast Tigard and Bridgeport Village

- 72nd Avenue sidewalks and bikeway- Hunziker Street to Bonita Road: construct sidewalks and bike lanes on SW 72nd Avenue between SW Hunziker Street and SW Bonita Road
- Bonita Road bikeway- 72nd Avenue to I-5: restripe SW Bonita Road to provide bike lanes between SW 72nd Avenue and I-5
- Bonita Road sidewalks and bikeway- I-5 to Windfield Way: construct sidewalks and bike lanes on SW Bonita Road between I-5 and SW Windfield Way
- Pedestrian/bicycle path along I-5 between Bonita Road and Cardinal Lane: construct multi-use path connecting the proposed light rail station at Bonita Road adjacent to I-5 with the SW Cardinal Lane cul-de-sac
- 72nd Avenue sidewalks and bikeway- Bonita Road to Upper Boones Ferry Road: construct sidewalks and bike lanes on 72nd Avenue between SW Bonita Road and SW Upper Boones Ferry Road
- Carman Drive sidewalks and bikeway: construct sidewalks and bike lanes on SW Carman Drive between I-5 and SW Parker Road
- 72nd Avenue sidewalks and bikeway- Upper Boones Ferry Road to Durham Road: construct sidewalks and bike lanes on SW 72nd Avenue between SW Upper Boones Ferry Road and SW Durham Road
- 72nd Avenue sidewalks and bikeway- Durham Road to Lower Boones Ferry Road: would construct sidewalks and bike lanes on 72nd Avenue between SW Durham Road and SW Lower Boones Ferry Road
- Pedestrian/bicycle path along I-5 between Bridgeport Village and Tualatin River Greenway: construct a new bicycle and pedestrian path along the west side of I-5 to connect the Bridgeport Village light rail station to downtown Tualatin via the Tualatin River Greenway

Roadway projects

- Atlanta Street extension: extend SW Atlanta Street from SW 70th Avenue to SW 74th Avenue.
- Hall Boulevard, Scoffins Street and Hunziker Street intersection alignment: would shift SW Scoffins Street to the north to align it with SW Hunziker Street at the intersection with SW Hall Boulevard

PCC Sylvania connection options

As the largest Portland Community College campus, PCC Sylvania is an essential destination to provide transit service in the Southwest Corridor, but its location on top of Mt. Sylvania complicates access. Project partners are committed to improving transit service to the campus, and have worked with PCC staff to identify the most promising options for linking the proposed light rail line to the Sylvania campus.

To learn more about these options, read *PCC Sylvania Connection Options for Scoping*, available on the project website:
www.swcorridorplan.org

Three general approaches are under consideration to improve transit access to PCC Sylvania, with multiple options for each. The three options are:

- **Bicycle and pedestrian improvements** to connect the campus to the three nearest proposed light rail stations: Barbur Transit Center, Barbur at 53rd Avenue, and the northern Tigard Triangle.
- **53rd Avenue mechanized connection** to provide a faster and more accessible link to the nearest proposed light rail station at Barbur Boulevard and 53rd Avenue. Options considered for study in the DEIS include electric bike share, autonomous shuttles in mixed traffic, shuttles on an elevated guideway, an aerial tram, and a gondola.
- **Enhanced bus service**, including new or revised TriMet bus routes with potential capital investments to provide improved travel times and reliability.

Because students, faculty, and staff access the Sylvania campus from all directions at various times of day, a combination of multiple options may be necessary.

Marquam Hill connection options

The SW Corridor light rail project will include a robust connection to the major employment, health and educational center atop Marquam Hill. This pedestrian and bicycle connection will link the light rail station in the Lair Hill neighborhood with the OHSU, VA and Shriners medical complex.

To learn more about these concepts, read *Marquam Hill Connection Options for Scoping*, available on the project website: www.swcorridorplan.org

Five concepts are under consideration:

- **Pedestrian tunnel with elevators.** A tunnel would start near SW Gibbs Street and extend under SW Terwilliger Parkway with an elevator serving Terwilliger Parkway and a second elevator connecting to the OHSU campus.
- **Embedded escalator, elevator, and bridge.** A weather-protected escalator would be embedded into the hillside between Barbur and Terwilliger. From Terwilliger, a tunnel and elevator would connect to the OHSU campus.
- **Elevator and bridge (skybridge).** An elevator from Barbur would rise to a pedestrian bridge leading directly to Terwilliger, where an at-grade path or underground pedestrian tunnel would connect to the OHSU campus.
- **Elevator and bridge (tree top walk).** An elevator from Barbur would rise to an elliptical pedestrian bridge with three exits to the existing sidewalk on Terwilliger. An at-grade path would connect to the OHSU campus.
- **Escalator and inclined elevator.** A covered escalator combined with an inclined elevator would lead from Woods Street west of Barbur uphill to an at-grade crossing of Terwilliger. A second escalator/inclined elevator would lead to a pedestrian tunnel under SW Sam Jackson Park Road to the OHSU campus.

Next steps

During the Draft EIS public scoping process in September 2016, the *Proposed Range of Alternatives for Environmental Review* will be available on the project website (www.swcorridorplan.org) and provided at the public scoping meeting, along with the accompanying documents on the additional roadway, bicycle and pedestrian projects, PCC Sylvania connection options and Marquam Hill connection options:

- Analysis of Additional Roadway, Bicycle and Pedestrian Projects
- Marquam Hill Connection Options for Scoping
- PCC Sylvania Connection Options for Scoping

The public will be invited to submit comments on the proposed range of alternatives, other reasonable alternatives that meet the project's Purpose and Need, and the impacts to be evaluated in the Draft EIS.

To share your thoughts during the September 2016 scoping period, complete an online survey at www.swcorridorplan.org.

A staff recommendation on the final range of alternatives to evaluate in the Draft EIS is scheduled to be released in November 2016, followed by a steering committee decision in December that would kick off the Draft EIS analysis. Staff will also prepare a Scoping Summary Report that summarizes the scoping outreach activities and comments received.