

Agenda



Metro

600 NE Grand Ave.
Portland, OR 97232-2736

Meeting: Southwest Corridor Plan Steering Committee
Date: Monday, Nov. 14, 2016
Time: 9:00 a.m. to 10:30 a.m.
Place: Council Chambers, Metro Regional Center, 600 NE Grand Ave., Portland
Purpose: Staff update on environmental review process. Staff recommendations on alternatives to study in draft environmental impact statement.

9 a.m. Welcome and introductions Co-Chair Stacey

ACTION ITEM

9:10 a.m. Consideration of the Steering Committee meeting summary Co-Chair Stacey
From June 13, 2016 ACTION REQUESTED

DISCUSSION ITEMS

9:15 a.m. Project update Chris Ford, Metro
Summary of project activities since June, including scoping for the forthcoming environmental review. Overview of environmental review timeline.
Discussion: Any questions on the environmental review process and other project activities?

9:35 a.m. Public involvement update Eryn Kehe, Metro
Summary of comments received during scoping period. Overview of community advisory committee.
Discussion: Any questions on the comments received on the proposed project? Any questions about the CAC selection process and agenda?

9:50 a.m. Staff recommendations on definition of alternatives Matt Bihn, Metro
Overview and explanation of staff's recommendations on what to study in the draft environmental impact statement.
Discussion: Any questions on adjustments made from the proposed range of alternatives endorsed in June?

PUBLIC COMMENT

10:10 a.m. Public Comment Co-Chair Dirksen
Opportunity for citizens to provide short testimony and/or submit written comments to inform the Steering Committee decisions.

10:30 a.m. Adjourn

Materials for 11/14/2016 meeting:

- 6/13/2016 meeting summary
- Scoping Summary Report
- Staff Recommendations on Definition of Alternatives



Southwest Corridor Plan Steering Committee
Monday, June 13, 2016
9:00a.m. to 11:00a.m.
Beaverton City Council Chambers
The Beaverton Building
12725 SW Millikan Way

Committee Members Present

Craig Dirksen, Co-chair
John Cook
Roy Rogers (9:17am)
Steve Novick
Krisanna Clark
Al Reu
Alan Snook
Neil McFarlane
Lou Ogden
Gerry Schirado
Denny Doyle

Metro Council
City of Tigard
Washington County
City of Portland
City of Sherwood
City of King City
ODOT
TriMet
City of Tualatin
City of Durham
City of Beaverton

Metro Staff

Malu Wilkinson, Chris Ford, Matt Bihn, Jessica Martin, Michaela Skiles, Craig Beebe, Noelle Dobson, Tyler Frisbee

1.0 Welcome and introductions

Co-chair Craig Dirksen called the meeting to order at 9:00am and welcomed the committee members and public to the meeting. Committee members proceeded to introduce themselves.

Chair Dirksen asked committee members and guests to pause for a moment of silence for victims of the Orlando shooting tragedy.

Chair Dirksen provided a recap of the previous meeting actions and thanked members for diligently working in order to narrow down to a clear set of options. He added that the meeting today would focus on the last action needed to complete the refinement phase and would include an update to the purpose and need statement.

2.0 Consideration of the Steering Committee meeting summary from May 9, 2016.

Co-chair Dirksen asked the committee for approval of minutes from the previous meeting.

MOTION: Mayor John Cook moved, seconded by Mayor Denny Doyle to approve the meeting summary from May 9, 2016. With all in favor, the meeting summary was **accepted** unanimously.

3.0 Public Comment

Richard Shavey, Tigard resident, provided testimony in favor of having the light rail pass directly to Tigard downtown (written testimony submitted and included as part of the meeting record).

Sunnie Page, owner, The Ballroom Dance Company, provided testimony in favor of the Ash Avenue option (written testimony submitted and included as part of the meeting record).

Arnold Panach, Hillsdale resident, provided testimony to the committee. He asked committee members to make sure there are stops in city as well as suburbs. He asked committee members to consider where stations are and the economic impact of those.

R.A Fontes, Lake Oswego resident, spoke in support of bus rapid transit (BRT). He distributed a handout (included as part of the meeting record) illustrating BRT ridership in several countries.

Roger Averbeck, SW Portland resident and SW Neighborhood Inc. volunteer, spoke of his appreciation for the opportunity to appear before the committee. He directed the committee's attention to page 8 of the Draft Proposed Range of Alternatives for Environmental Review document in the meeting packet and proceeded to state his preference for Barbur needing bike lanes and sidewalks. He commended project staff for meeting with neighborhoods recently and refining project lists. He stated his surprise that projects providing walk/bike access were not automatically included.

Evelyn Murphy, Tigard resident, spoke about one of the challenges before the committee, which is to ensure all voices are heard. She added that the committee's challenge and opportunity is to hear from those in our community that are "invisible" (such as those who are dependent on others to get around) but part of the community.

John Gibbon, Markham Neighborhood Association, spoke about 26th Avenue improvements.

Sue Christensen – Citizens’ Coalition for Social Justice and Tigard resident spoke about the relation of infrastructure and economic stability. She stated that the decision for light rail would go along way into moving us in the modern world and creating a better Tigard for future generations.

Steve Diangelo – Tigard resident and self employed business owner for over 35 yrs old, spoke about light rail being the most sustainable choice for the future. He urged the committee to see the importance of connectivity (bike and pedestrian).

Dave Jorling – retired attorney and Lake Oswego resident stated his disappointed that Lake Oswego didn’t provide representation on this committee. He stated his support light rail.

4.0 Recap of refinement phase, decisions before the committee.

Chris Ford, Metro appeared before the committee to provide a recap of the refinement phase. He provided a PowerPoint presentation (included as part of the meeting record) which outlined the recap of decisions and public engagement over the past 18 months, reviewed decisions for the committee to consider (including overview of the proposed range of alternatives and additional staff comments on Purpose and Need).

5.0 Consideration of whether to adopt updates to the project’s Purpose and Need

The Federal Transit Administration (FTA) recommended updating the Purpose & Need prior to public scoping of the Draft Environmental Impact Statement (DEIS) in order to more clearly define the project to reflect decisions made during the Refinement Phase. Mr. Neil McFarlane stated his firm support in general, but proposed an amendment to add the words “high quality transit” into the second line in the paragraph:

Project Purpose

The purpose of the Southwest Corridor light rail project is to directly connect Tualatin, downtown Tigard, Southwest Portland, and the region’s central city with light rail, high quality transit and appropriate community investments in a congested corridor to improve mobility and create the conditions that will allow communities in the corridor to achieve their land use vision...

Chair Dirksen and Mayor Clark agreed. Mayor Ogden asked for clarification regarding what the committee’s options would be as the project moves through the National Environmental Policy Act (NEPA) process.

Ms. Malu Wilkinson stated that the Purpose and Need is used to judge different alternatives. As alternatives are looked at, they would need to meet purpose and need criteria in order to move forward. She added that as the project moves forward, it will be important to assess how to meet all the components.

The committee discussed the need to ensure projects have flexibility as they advance and that the decision today wouldn’t preclude them from making changes in the future.

ACTION: Chair Dirksen, seconded by Mayor Cook moved to add the words “high quality transit” to the Purpose and Need statement. The motion was unanimously **approved.**

6.0 Consideration of technical modifications to alignments in Tigard

The steering committee discussed whether to adopt further study of (a) a two way alignment on SW 70th Ave. in the Tigard Triangle and (b) a branch service alignment that services both downtown Tigard and Bridgeport Village with a split in the Tigard Triangle, and whether to remove (c) the current couplet alignment on SW 68th and 70th avenues in the Tigard Triangle and (d) the current branch service alignment with a split at

Hunziker and Wall west of OR-217.

Commissioner Rogers stated his preference not to continue the Clinton alternative. Mayor Cook agreed. Mr. McFarlane advocated waiting until fall when the project would have some engineering work done. Depending on which branch the service of Bridgeport follows there could be different opportunities.

ACTION: Chair Dirksen moved, seconded by Councilor Reu to remove the couplet and branch options. The motion was unanimously **approved.**

7.0 Consideration of whether to endorse the Proposed Range of Alternatives for Environmental Review

The committee discussed an endorsement of the Proposed Range of Alternatives (PRA), which would be presented during the DEIS scoping for public and agency comment. The PRA includes light rail alignment options, as chosen by the Steering Committee during the Refinement Phase, potential station locations and selected roadway, bike and pedestrian projects which are inherent to LRT design or provide critical access to PCC Sylvania and Marquam Hill.

ACTION: Mr. McFarlane moved, seconded by Councilor Reu to endorse the proposed range of alternatives for environmental review. The motion was unanimously **approved.**

Mayor Doyle asked for confirmation that this action would not obligate potential changes. Mr. Ford confirmed that this was correct. Metro project staff will prepare and package the information and distribute for the engagement process.

8.0 Overview of next phase

Mr. Ford provided a PowerPoint presentation (included as part of the meeting record) describing the upcoming work on the Southwest Corridor Plan including next steps on the Shared Investment Strategy projects, purpose and approach of public scoping for the Draft Environmental Impact Statement, decisions to be made after scoping and ongoing planning work concurrent with DEIS.

Mr. Ford stated that the next meeting would likely occur in September sometime – although no formal date has yet been set.

Chair Dirksen asked members and attendees to please check the Metro website for updates.

9.0 Adjourn

There being no further business, Co-chair Craig Dirksen adjourned the meeting at 10:56 am.

Attachments to the Record:

Item	Type	Document Date	Description	Document Number
1	Agenda	06/13/16	Meeting agenda	061316SWCSC-01
2	Summary	05/09/16	05/09/16 meeting summary	061316SWCSC-02
3	Document	October 2014 – May 2016	Public Engagement Strategy	061316SWCSC-03
4	Memo	5/13/16	PTL recommendation regarding Tigard technical modifications	061316SWCSC-04
5	Report	6/6/16	Draft Proposed Range of Alternatives for Environmental Review	061316SWCSC-05
6	Memo	6/6/16	Additional input on updates to SW Corridor HCT Purpose & Need	061316SWCSC-06
7	Document	6/6/16	ATTACHMENT #1: Purpose and Need for the Southwest Corridor Light Rail Project	061316SWCSC-07
8	Document	5/14/12	ATTACHMENT #2: Southwest Corridor Plan and Implementation Strategy: Vision and Goals	061316SWCSC-08

Scoping Summary Report

This report has been prepared in support of the Southwest Corridor Light Rail project Draft Environmental Impact Statement

November 2016

Prepared by: Metro

If you picnic at Blue Lake or take your kids to the Oregon Zoo, enjoy symphonies at the Schnitz or auto shows at the convention center, put out your trash or drive your car – we’ve already crossed paths.

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Auditor

Brian Evans

600 NE Grand Ave.

Portland, OR 97232-2736

503-797-1700

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EXECUTIVE SUMMARY

The Southwest Corridor Light Rail project is a plan for a new, high-capacity transit (HCT) line to fill service gaps and address future demand of a quickly growing area the southwest portion of the Portland metropolitan area. The Southwest Corridor study area — from Downtown Portland to Bridgeport Village in Tualatin — is expected to grow by about 75,000 residents from 2010 to 2040. Since 2011, project partners have worked to refine a package of potential HCT alignments and associated roadway, bicycle and pedestrian projects in preparation for evaluation under the National Environmental Policy Act (NEPA). The work has required collaboration and partnership amongst several area jurisdictions including the cities of Beaverton, Durham, King City, Portland, Sherwood, Tigard and Tualatin; Washington County; and TriMet, ODOT and Metro.

A formal scoping comment period for the Southwest Corridor Plan was held from Sept. 2, 2016 to Oct. 3, 2016 as part of the project's NEPA Draft environmental review process.

What we did

During the scoping comment period, Southwest Corridor project partners and the Federal Transit Administration (FTA) invited broad participation from agencies and the public to review the proposed light rail project. A variety of outreach efforts were used to encourage the involvement of residents and businesses in the Southwest corridor.

- Two public online surveys – available Sept. 2 to Oct. 3, 2016
- Five neighborhood association meetings – Sept. 7, Sept. 8, Sept. 12, Sept. 19 and Sept. 28
- Agency and tribal scoping meeting – Sept. 20, 2016
- Public scoping meeting – Sept. 22, 2016

What we heard

A total of 1,620 comments were received during the scoping comment period, including surveys and emails from the general public and letters from agencies and organizations.

- A majority of comments from the public indicated support for the project as proposed.
- Over 70 percent of the comments received were supportive of the draft purpose and need statement; the alignment options presented for study and the proposed stations, park-and-ride and maintenance facility locations.
- Some opposition to the project was expressed and suggestions were made to expand the options studied. Many of those suggestions had been studied in previous phases of this project. Others will be considered by the project team in preparation of the detailed description of alternatives.

INTRODUCTION

Background

The Southwest Corridor Plan is a comprehensive effort focused on supporting community-based development and placemaking that targets, coordinates and leverages public investments to make efficient use of public and private resources. The work has been guided by a Steering Committee comprised of representatives from the cities of Beaverton, Durham, King City, Portland, Sherwood, Tigard and Tualatin; Washington County; and TriMet, ODOT and Metro. In August 2011, the Metro Council appointed the Southwest Corridor Steering Committee. A charter defining how the partners will work together was adopted by the Steering Committee in December 2011. Steering Committee members agreed to use a collaborative approach to develop the Southwest Corridor Plan and a Shared Implementation Strategy to align local, regional and state policies and investments in the corridor.

Light rail emerged as the preferred high capacity transit investment of the Southwest Corridor Shared Investment Strategy. The project is a proposed 12-mile MAX line serving SW Portland, Tigard, Tualatin and surrounding communities. The proposed project also includes bicycle, pedestrian and roadway projects to improve access to light rail stations. In compliance with the National Environmental Policy Act (NEPA), and with direction from the Metro Council, an Environmental Impact Statement (EIS) will be prepared by Metro, TriMet and the Federal Transit Agency (FTA) to identify the significant positive and negative impacts the project could have on the built and natural environment and to determine options to avoid, minimize or mitigate those impacts. The Draft EIS will assess the project alternatives and suggest ways to avoid, minimize or mitigate significant adverse impacts. The information included in the Draft EIS, and public and agency comments on the Draft EIS will inform the Southwest Corridor Steering Committee in making its recommendation of a Preferred Alternative.

The scoping period for the EIS occurred between Sept. 2 and October 3, 2016. This report summarizes the agency, tribe and public comments that Metro and FTA received and describes how Metro and FTA advertised the notice of intent and engaged the public and agencies.

Comment summary

During the scoping period, Metro and FTA received comments from the public, agencies, businesses and organizations. This report reflects the total number of comments received, and not the number of people who commented. Individuals may have submitted multiple responses online or at public meetings. The comments received included letters, emails, meeting notes and answers to survey questions. A variety of groups provided comments.

Commenter group	Number of comments received
Federal Agencies	2
State Agencies	2
Tribes	0
Regional or local jurisdiction	3
Education, Community or Faith-based organizations	5
Business	3
Individual online survey responses	1,606

The scoping period opened on Sept. 2, 2016 with the release of the Notice of Intent in the Federal Register and closed 31 days later on Oct. 3, 2016. A detailed summary of the efforts taken to involve the public are described below.

Summary of outreach efforts

Metro used a variety of outreach methods to broadly share information and invite participation from agencies and the public during the scoping period. The outreach methods used include:

- Media
- Advertisements
- Project website
- Interested parties email
- Social media
- Tabling at public events
- Federal register



Media Metro uses the website Newsfeed (oregonmetro.gov) to invite public attention and media interest. To kick-off the scoping period on Friday Sept. 2, Metro published “Comment today to shape important Southwest light rail study” (<http://www.oregonmetro.gov/news/comment-today-shape-important-southwest-light-rail-study>). Project staff sent information and a link to the Newsfeed to reporters at the following major regional media outlets.

- Oregonian

- Portland Tribune
- Oregon Public Broadcasting
- Tigard Tualatin Times
- Willamette Week

Two local newspapers published stories about the scoping period.

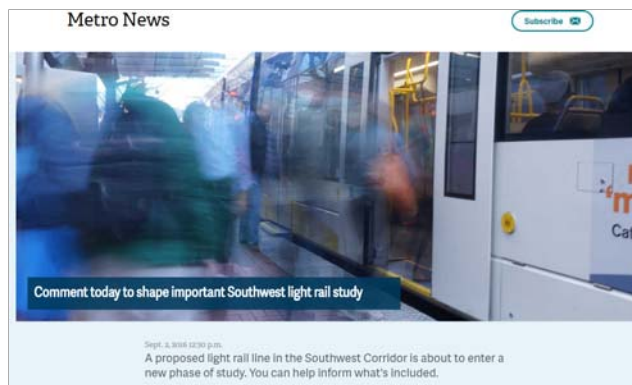
Date	Newspaper	Headline
Sept. 06, 2016	Tigard Tualatin Times	<u>Public input sought on Southwest Corridor project</u>
Sept. 08, 2016	Portland Tribune	<u>SW Corridor project seeks public input</u>

Metro staff provided information about scoping and an invitation to the public meeting to several community newspapers, blogs and newsletters including: SWNI Newsletter, the SW Connection, SW Portland Post, Southwest Community Connection, Sherwood Gazette, Hillsboro Tribune, (King City) Regal Courier, Tualatin Today, the Red Electric blog and Bike Portland blog.

Advertisements In addition to seeking earned media, staff designed and purchased advertisements in seven local, monthly newspapers. These advertisements announced the public scoping meeting in three languages: English, Spanish and Vietnamese.

- El Hispanic News
- The Southwest Portland Post
- The Regal Courier (King City)
- Sherwood Gazette
- Southwest Community Connection
- The Asian Reporter
- The Tigard/Tualatin Times

Each advertisement ran during the month of September. An example advertisement is included as Appendix A.



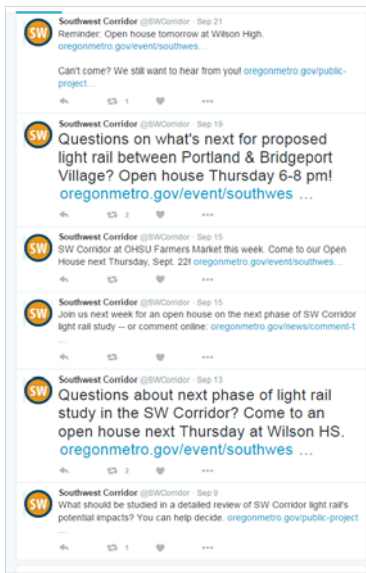
Metro News, September 2, 2016

Southwest Corridor Project Website The project website provided information about the scoping process and various ways to participate, including the public scoping meeting and two online surveys. The site shared email and mailing addresses to which the public could send comments.

Interested parties email The project maintains a large email list of interested individuals and businesses. Metro sent an email to 1,381 people announcing the start of scoping and inviting participation. This email can be seen in Appendix B.

In addition, project staff emailed contact people at organizations and educational institutions in the corridor and requested that they share scoping comment opportunities with their networks. The organizations contacted included: The Westside Economic Alliance, Bike Portland, 1,000 Friends of Oregon, Oregon Walks, the Westside Transportation Alliance, Portland Transport, the National University of Natural Medicine, Portland Community College and Oregon Health and Science University.

TriMet sent two emails (Sept. 19 and Oct. 1) explaining scoping and inviting “Riders Club” members in Southwest Portland, Tigard and Tualatin zip codes to participate. The pair of emails reached 3,167 people.



SW Corridor Twitter feed

Social media Social media is another tool used by Metro and its partners at TriMet to invite participation throughout scoping. Metro issued a tweet on Sept. 2 to kick-off scoping. The SW Corridor account released tweets about scoping on nine dates in September (Sept. 4, 9, 13, 15, 19, 21, 22, 23 and 27).

TriMet reached 5,520 Facebook users through their Facebook page on Sept. 19. The post generated more than 44 reactions, was shared twice and received twelve comments

Tabling Project staff attended popular farmer’s markets prior to and during the scoping period to advertise comment opportunities. Each event was between four and six hours in duration.

Tabling at public events	Date
Tigard Farmer's Market	August 28
Hillsdale Farmer's Market	Sept. 4
OHSU Farmer's Market	Sept. 13

Federal Register The Notice of Intent (NOI) was published in the Federal Register on Sept. 2, 2016. A copy of the notice is included as Appendix C.

Focused outreach to minority, low-income and disabled populations



SW Corridor table at a farmers market

Metro and its project partners strive to cultivate diversity, advance equity and practice inclusion in all of their work. The Metro Council approved a Diversity Action Plan in 2012 and a strategic plan to advance racial equity, diversity and inclusion in 2016. The strategic plan established four goals that drive all of

Metro's activities, including the work of the planning group. One goal says that

Metro will meaningfully engage communities of color. In addition to Metro's goals, federal laws and guidance direct Metro to meaningfully engage these groups in their planning efforts.

Title VI of the Civil Rights Act of 1964 prohibits discrimination based on race, color or national origin. Executive Order 12898 directs federal agencies to make environmental justice a part of its mission by identifying and addressing disproportionately high and adverse human and environmental effects of its programs, policies and activities on minority and low-income populations. U.S. Department of Transportation (USDOT) Order 5031.2(a) implements the executive order, and FTA and USDOT guidance further describes how to incorporate environmental justice principles into plans, projects and activities including achieving meaningful public engagement with environmental justice populations.

An analysis of the corridor was conducted to establish limited English proficiency (LEP) levels in this part of the region. A 1,000-person LEP threshold was established to determine the language support most needed by residents in the southwest corridor. Spanish was the only language that clearly exceeded the threshold. Vietnamese was very close and therefore considered another language to support. No individual LEP language represented 5% of the total Southwest Corridor population. LEP proficiency and population data were sourced from the 2009-2013 5-year average American community Survey data published by the U.S. Census Bureau.

The project advertised the scoping meeting in two monthly papers, El Hispanic News and the Asian Reporter, during September, and advertisements purchased in all local newspapers included information in both Spanish and Vietnamese.

Targeted emails were sent to organizations that work with these populations. Email notification of the public scoping meeting and other ways to provide comments were sent to Community Partners for Affordable Housing and the local contact for AARP Oregon.

The public scoping meeting was held at a convenient location inside the Southwest Corridor to make it easier for local residents to attend. Wilson High School is just $\frac{3}{4}$ mile from the proposed alignment and well-served by nine different bus lines (1,

39, 44, 45, 54, 55, 56, 61, 64). The meeting space was ADA accessible and signs clearly marked the ADA entrance.

Based on working schedules, the meeting was held in the evening, from 6 p.m. to 8 p.m. to accommodate working people and families. There were children's activities, including coloring activities, provided at the meeting so that families with young children were encouraged to attend. A light snack and refreshments were also provided.

AGENCY SCOPING COMMENTS

Agency scoping meeting

Metro and TriMet hosted a scoping meeting for federal, state, regional, and tribal governments on Tuesday, September 20, 2016, from 1 pm to 3 pm. Participants could attend the meeting in person or via conference call, or watch a live, streaming broadcast of the meeting. Invitation to the meeting was included in letters of invitation sent by FTA and Metro to 34 public agencies and tribes. Agencies that participated in the meeting included:

- Federal Transit Administration
- Federal Railroad Administration
- National Park Service
- NOAA Fisheries
- Tualatin Valley Fire & Rescue
- Cities of Beaverton, Portland, Sherwood, Tigard and Tualatin

The meeting consisted of presentations by Metro and TriMet on an overview of proposed project, proposed alternatives for environmental review, expected significant impacts and the NEPA process and timing, followed by a question-and-answer session.

List of participating and cooperating agencies

Metro, TriMet and FTA invited agencies to formally participate in the environmental review process by inviting them to be cooperating or participating agencies. FTA also invited tribes to formally participate in the environmental process through initiation of tribal consultation under Section 106 of the National Historic Preservation Act. The following table shows the agencies and tribes that accepted the invitation to participate:

Agency	Type	Level
Federal Highway Administration*	Federal	Cooperating
Federal Railroad Administration*	Federal	Cooperating
National Park Service*	Federal	Participating
NOAA Fisheries	Federal	Participating
U.S. Army Corps of Engineers	Federal	Participating
U.S. Environmental Protection Agency	Federal	Participating
U.S. Fish and Wildlife*	Federal	Participating
Oregon Department of Transportation	State	Participating
Oregon State Historic Preservation Office	State	Participating
West Multnomah Soil & Water Conservation District	Regional	Participating
City of Lake Oswego	Local	Participating
City of Portland	Local	Participating
City of Tigard	Local	Participating
City of Tualatin	Local	Participating
Clackamas County	Local	Participating
Washington County	Local	Participating

* Federal agencies that did not decline their invitation are deemed to have accepted it. 23 USC 139 (d)(3)

The following agencies did not accept their invitation to be participating agencies:

- Grand Ronde Tribe
- Siletz Tribe
- Warm Springs Tribe
- Oregon Department of Energy
- Oregon Department of Environmental Quality
- Oregon Department of Fish and Wildlife
- Oregon Department of Geology and Mineral Industries
- Oregon Department of Land Conservation and Development

- Oregon Department of State Lands
- Oregon Parks and Recreation Department
- City of Beaverton
- City of Durham
- City of King City
- City of Rivergrove
- City of Sherwood
- Multnomah County (declined)
- Tualatin Hills Park & Recreation District
- Tualatin Valley Fire & Rescue (declined)
- Tualatin Valley Water District

Agency comment summary

Seven public agencies submitted written comment letters during scoping, consisting of statements more substantive than accepting the invitation to participate:

- City of Portland
- City of Tigard
- City of Tualatin
- Oregon Department of Transportation
- U.S. Army Corps of Engineers
- U.S. Environmental Protection Agency
- West Multnomah Soil & Water Conservation District

Copies of the agency comment letters can be found in Appendix D.

No agency suggested any changes to the project Purpose and Need. The agency comments generally focused on the issue areas of concern to the agency or the geographic area of the jurisdiction. This section summarizes the contents of the agency letters.

The City of Portland flagged areas of concern to consider in the EIS, including:

- compatibility of Marquam Hill access facilities with the open space and recreation resource provided by the historic Terwilliger Parkway
- function and design of the Barbur Transit Center in terms of pedestrian access, park-and-ride capacity and bus operations and visual impacts of overhead structures
- biological resources and ecosystems impacts in the Stephens Creek and Tryon Creek watersheds

- the opportunity to improve water quality and control peak flows from stormwater runoff from Barbur Boulevard
- examination of existing storm water infrastructure and its ability to support the proposed project
- a specific focus on affordable housing impacts and opportunities

Portland also requested and provided examples of how the community cohesion and resources, land use and economics, historic and cultural resources, and transportation issue areas of the EIS include evaluation of compliance with local adopted plans and policies. The city also requested inclusion of additional issue areas in the EIS—an evaluation of human health, and climate change. The city stated its support for improved transit access to the PCC Sylvania campus, the inclusion of bike and pedestrian connectivity projects in the Draft EIS, and for study of both the Barbur and Naito alignment options in South Portland. The letter specifically requested documentation for storm water infrastructure associated with bike and pedestrian projects and stated that bus service options to connect PCC Sylvania to LRT stations should be a fundamental component. Finally the city suggested that the Draft EIS inventory the range of permits that will be required from City agencies and commissions and that these that may be important considerations in the selection of alternatives.

The City of Tigard provided extensive comments on the proposed light rail system components located in the city, including:

- preference for the Ash Avenue alignment in the through-route configuration
- removal of the Clinton Street alignment in the branched configuration from further consideration
- request that the Draft EIS include study of mitigations for possible residential displacement caused by the Ash Avenue alignment
- requests for inclusion of bike/pedestrian improvements on bridges
- request to study feasibility of extending two-way vehicle traffic and a sidewalk on 70th Avenue south of Beveland Street
- requests for specific roadway, bicycle and pedestrian station connectivity projects in the Draft EIS
- requests for the Draft EIS to include a thorough cost/benefit analysis of proposed Park & Rides lots, for consultation with the city of the locations and designs of any Park & Rides in the city, for the consideration of alternative parking approaches (shared parking strategies, parking pricing, parking managed or co-managed by the city), and that any displacement of existing buildings, businesses and residents caused by new Park & Rides be considered including the economic cost to the community
- opposition to a proposed Park & Ride lot at Bonita Road along the I-5 alignment due to likely business displacements, and a request to study improved transit, bike and

pedestrian connections to this station location and the related impacts of those connections

- explanation for the city's preferences for two stations in the Tigard Triangle and a station in downtown Tigard

Tigard also emphasized the need to understand housing impacts from the proposed project, notable displacements expected due to acquisitions and changes in housing cost, and exploration of mitigations. The letter also addressed the proposed maintenance facility sites in the city, noting the need to study riparian and economic impacts, and stating preferences for a partial facility due to lesser impacts and for the proposed location along I-5 over the downtown location. The city also stated its willingness to explore a combined facility at a mutually-agreeable location that minimizes the impact to high-value areas. Tigard requested being consulted and involved in the selection of environmental mitigation sites in order to meet the city's open space and stormwater goals and master plans.

The City of Tualatin requested consideration of traffic impacts from the proposed project to local roadways connecting to the proposed terminus at Bridgeport Village, specifically citing SW Lower Boones Ferry Road, SW Bridgeport Road, and SW 72nd Avenue. The city also requested provision of adequate parking at the Bridgeport Village terminus station to serve demand and reduce overflow parking at surrounding. The city also requested careful coordination to ensure no impacts to Tualatin's water supply pipeline during construction.

The Oregon Department of Transportation (ODOT) noted that it would submit a refined scope of work for the traffic analysis needed in order for ODOT to adequately consider future modifications to ODOT facilities in the project area. ODOT also requested that the requested traffic analysis be completed early in the environmental review process and that the environmental analysis thoroughly consider both temporary and permanent construction impacts in order to safely maintain bicycle, pedestrian and traffic movements on all ODOT highways during construction. The letter also included information on the scope of its authority on at-grade rail crossings and noted the need for the project to meet Federal Railroad Administration requirements in locations where the light rail alignment parallels the existing WES commuter rail, encouraging consideration of this additional layer of complexity when evaluating alignment options. Finally, ODOT noted an upcoming on-site assessment of potential rail crossings with TriMet staff with detailed technical comments on each location to be provided afterwards.

The U.S. Army Corps of Engineers noted that the proposed project may require a Clean Water Act Section 404 permit, which will require demonstration that the project has avoided and minimized impacts to waters of the U.S. to the extent practicable.

The U.S. Environmental Protection Agency (EPA) recommended:

- applying guidance from the Council on Environmental Quality in the analysis of greenhouse gas emissions by estimating direct and indirect GHGs from the proposal

and how climate change could affect the proposed proposal or alter its environmental impacts

- mapping existing wildlife corridors in the study area, as well as the gaps that need to be restored, and discussing how the Build Alternative options would potentially affect those areas
- that the alignment options be designed to avoid and minimize impacts to the natural and human environment, and maximize environmental and community benefits, by maximizing the use of existing transportation corridors and right-of-ways, consider redevelopment of existing developed or urbanized areas, applying zero/low-impact development approaches, maintain and preserve natural stream characteristics and hydrology, include means to make the transportation corridor permeable to wildlife movements
- that the proposed project may require a Clean Water Act Section 404 permit from the Army Corps of Engineers

The EPA also requested that the EIS:

- analyze, disclose, and mitigate impacts to fish, fish habitat, fish passage, and effects to other aquatic biota
- address federal and state threatened, endangered, candidate, and sensitive animal and plant species and their habitats
- address all potentially affected aquatic resources, including source water protection areas, with extensive details provided on issues to study, existing conditions to document, and effects to be assessed—see the copy of the letter in Appendix D for full details
- disclose whether air toxics emissions would result from project construction and operations, discuss the cancer and non-cancer health effects associated with air toxics and diesel particulate matter, and identify sensitive receptor populations and individuals who are likely to be exposed to these emissions
- conducting community impact assessments for communities that would potentially be most affected by the proposed project.
- addressing impacts to vulnerable populations, including low income and minority populations as well as the elderly, disabled, and children
- discuss whether or not the proposed action may affect tribal treaty resources
- analysis and disclosure of Ground disturbing activities to address the opportunity for establishment of non-native invasive species
- address the federal "green" requirements and opportunities that may apply to design, operation, and maintenance of project-related facilities and equipment
- consider the cumulative effects of the proposed project when added to other past, present and reasonably foreseeable future projects within and outside the project area

and indirect effects that are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable

The West Multnomah Soil & Water Conservation District flagged a number of concerns about the design of the project, such as the need to:

- protect and enhance existing stormwater systems in and along the corridor to address surface flooding, landslides and water quality concerns
- minimize and mitigate any increase in impervious surfaces
- avoid the creation or exacerbation of wildlife barriers in the West Willamette River wildlife corridor
- avoid removal of mature trees, especially Oregon White Oak
- provide critically needed pollinator habitat

The District also expressed support for incorporating road/bike/pedestrian connectivity projects and light rail as the transit mode, and stated a preference for a light rail alignment on Naito Parkway instead of Barbur Boulevard.

PUBLIC SCOPING COMMENTS

Opportunities for public comment

People had many opportunities to comment during the scoping period. Staff attended neighborhood meetings, hosted a public scoping meeting, provided two online surveys, and accepted comments through email and mail.

Neighborhood meetings During the public scoping period, staff attended five neighborhood association meetings to provide project information, invite participation in the scoping engagement opportunities and take people's comments. Three to four staff attended each meeting.

Neighborhood group	Date
South Portland Neighborhood Association	Sept. 7
West Portland Park Neighborhood Association	Sept. 8
Homestead Neighborhood Association and Friends of Terwilliger	Sept. 12
Southwest Neighborhoods Inc. Transportation subcommittee	Sept. 19
Community Participation Organization 4M	Sept. 28

Online surveys During scoping, people were invited to participate in one of two online surveys. Both surveys provided opportunity to comment on scoping materials. The longer, detailed survey included 15 project-related questions and seven demographic questions. The shorter survey included five project-related questions and the same demographic questions. Both surveys asked participants to review the following:



Welcome table at the Public Scoping meeting

1. Proposed Purpose and Need
2. Proposed alignment
3. Proposed station locations
4. Proposed park-and-ride locations
5. Racial and Social Equity

The longer survey encouraged participants to read the scoping materials in more depth and answer additional questions about Marquam Hill and Portland Community College Sylvania campus connections. It also included questions about accompanying roadway, bicycle and pedestrian projects.



Staff at the Public Scoping meeting

The survey was available for use during the scoping period, Sept. 2 to Oct 3. During that time, the longer survey collected 268 responses and the shorter survey received 1,338 responses for a total of 1,606 responses. A name was not required for participation, and no login was required, so the number of people who participated in the survey cannot be determined, only the number of responses received. In total, there were over 2,400 comments received through the two surveys. Those comments were summarized and will be discussed in the next section.

Public scoping meeting A public meeting was held on Sept. 22 from 6 to 8 p.m. at Wilson High School in Portland. About 80 people attended the event. Many were new to the project, and this was the first event they had attended.

The meeting was an open house format and participants were encouraged to visit stations around the room with information about different parts of the scoping booklet. At each station, participants could interact with project staff and provide comments. The topic area stations included the following.

1. Purpose and Need statement
2. Alignment
3. Stations, park-and-ride, and maintenance facilities
4. Roadway, bicycle and pedestrian projects
5. Marquam Hill connection
6. PCC Sylvania connection
7. Areas of concern

The roadway, bicycle and pedestrian project information was divided between tables where participants could see information specific to three geographic areas (South Portland, Central Barbur Blvd. and Tigard/Tualatin). There were activities at each station where participants could share comments. Green or red sticky notes and red/green dots were used as a simple way for participants to share their ideas at the purpose and need, alignment, stations, park-and-ride and the roadway, bicycle and pedestrian project stations. Large flip charts were used for suggestions about the areas of concern.



Display at the Public Scoping meeting



Comment form completed at the Public Scoping meeting

Staff took notes at the geographic focus areas to record the thoughts and ideas of participants.

In addition to the seven topic stations, there was a project library where participants could access scoping information and other project reports. An aural comment table was available to record live testimony received. Only one person recorded testimony.

Comment cards were made available to all participants when they entered the event. The comment card included an area for scoping comments, evaluation questions about the event and a few demographic questions. 19 completed comment cards were received.

Email/Letters An email account was established at swclrt.scoping@oregonmetro.gov to accept comments during the scoping period. A total of 37 emails were received. Six letters were attached to emails received by this account. Of those, two also mailed letters to the project team at Metro, but they were duplicates of letters sent by email.

Public comment summary

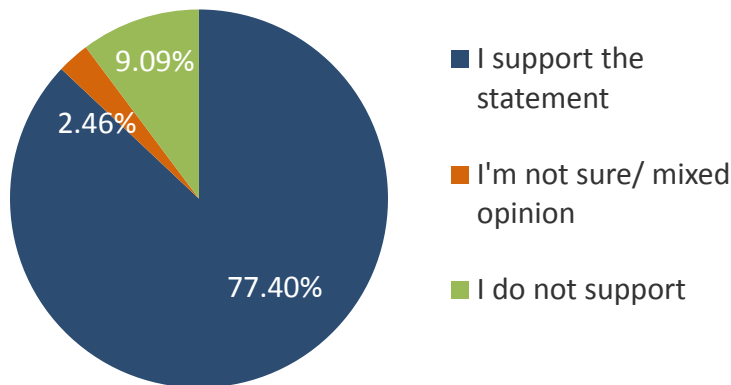
The following pages provide a summary of the comments received during scoping. The comments received through different means are combined and addressed by topic in the following sections:

1. Draft Purpose and Need statement
2. Proposed alignment options
3. Station locations
4. Park-and-ride and maintenance facilities
5. Options for access to Marquam Hill
6. Options for access to Portland Community College Sylvania
7. Roadway, bicycle and pedestrian projects
6. Impacts and areas of concern
7. Racial and social equity

Draft Purpose and Need statement Overall, people were very supportive of the Purpose and Need statement. Over 77 percent of survey respondents supported the draft statement as written. At the public scoping event, as well, participants were primarily supportive. The

emails and letters received during scoping did not suggest changes to the Purpose and Need statement.

Figure 1: What do you think of the purpose and need statement?



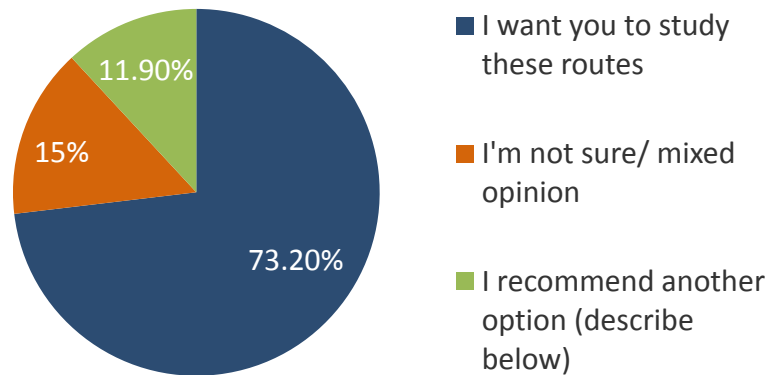
Comments received most about the Purpose and Need statement emphasized minimizing neighborhood impacts, incorporating congestion reduction, planning for resiliency, considering climate change and incorporating affordable housing. Additional suggestions were raised, but less often. Those topics included: equal access, safety, reliability, health, and concerns about displacement and environmental impacts (air and water quality).

Many online survey responses to this question were not on topic. Many participants used it as an opportunity to discuss other topics of interest. The topics raised the most are shared below.

Comments	Number of comments
Support for Naito alignment option	34
Go to Oregon Health & Science University	32
Oppose light rail transit generally	36
Access to the National University of Natural Medicine	11
Support light rail transit	10

Proposed alignment options Comments received were predominantly supportive of the proposed alignment options. Over 73 percent of online survey responses indicated support for studying the routes proposed. Another 15 percent were unsure/didn't know and 12 percent did not support the proposed route or recommended another suggestion.

Figure 2: What do you think of the proposed alignment?



Only one other option, an extension to Downtown Tualatin, was mentioned many times in the comments. This option was previously considered, but removed from further study by the Southwest Corridor Steering Committee in January 2016. The comments received the most were preferences for one of the proposed alternatives over another or interest in reaching a particular destination along the alignment.

Most shared comments	Number of comments	Percent of total comments
Support Naito alignment option	91	25%
Go to Oregon Health & Science University	31	8%
Oppose Light Rail Transit generally	25	7%
Go to Portland Community College Sylvania	20	5%
Go to Downtown Tualatin (connect to WES)	15	4%

Other recommended destinations that were mentioned less often included:

- Lake Oswego (Kruse Way and Boones Ferry)
- Sherwood/King City/Newburg (Areas west on Highway 99 West)
- Beaverton (Washington Square)
- Multnomah Village or Hillsdale
- Macadam

- Sellwood
- East or NE Portland

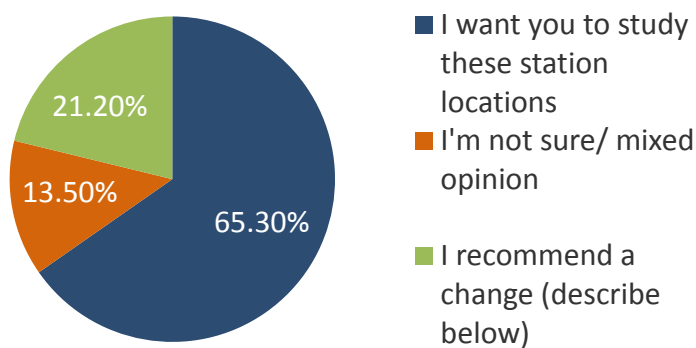
Some comments opposed light rail as the selected mode. A few respondents suggested that the light rail line should instead be a subway, elevated system or a monorail. Others suggested that a bus system would be less expensive. Some comments expressed concern that the Barbur Blvd. alignment option would reduce vehicle travel lanes and result in increased congestion.

Other comments received included:

- Not all people have or can ride bikes
- Improve bus frequency to Multnomah Village
- Use smaller buses on off-peak times
- Increase frequent service
- Improve feeder service
- Spend the money on roads for everyone
- Use marijuana revenues to pay for increased bus service

Station locations A total of 1,358 survey responses were received about proposed station locations. A majority of responses supported the proposed station locations, with over 65 percent of respondents agreeing they should be studied in the environmental review. Another 14 percent responded that they were unsure or did not know, and 21 percent said they did not support these stations or they had another recommendation.

Figure 3: Which statement best describes your opinion about station locations?



Both online surveys invited participants to share other station recommendations. Almost half of the responses received recommended a station at Marquam Hill (OHSU). There was also support expressed for the Naito alignment option with a new station north of the

proposed Gibbs Street station near the National University of Natural Medicine (NUNM). The other location mentioned most often was Portland Community College Sylvania (PCC).

Most shared station suggestions	Number of comments	Percent of total
OHSU	221	47%
NUNM / North Of Gibbs	29	6%
Support Naito alignment	26	6%
PCC	22	5%

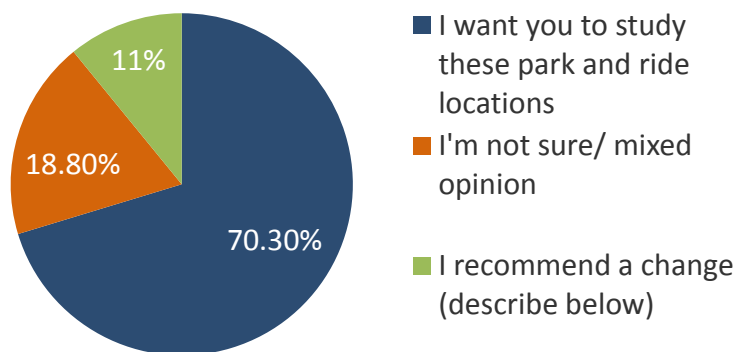
Other new station locations mentioned less often included:

- Terwilliger Blvd.
- Capital Highway
- Hillsdale
- Burlingame
- Kruse Way
- Multnomah Village
- Wilsonville
- John’s Landing

Other topics raised included a concern about the proposed Gibbs Street station increasing pedestrian and vehicle traffic in the South Portland neighborhood. There was concern about the impact this station could have on the livability of the neighborhood. The neighbors who raised this concern asked that the project consider moving the Gibbs station further north. At the public scoping meeting, some attendees expressed support for the Gibbs Station. Other comments suggested building opportunities around station areas for affordable housing and mixed-use development. One person opposed a station at Terwilliger Blvd.

Park-and-Ride and maintenance facility options Of 1,342 survey responses 70 percent supported the proposed park-and-ride locations. Another 19 percent said they didn’t know or were unsure, and 11 percent were opposed or had another suggestion.

Figure 4: Which statement best describes your opinion about park-and-ride options?



A total of 256 online survey comments were received on this question, but many were off topic. Most comments were requests for more capacity at park-and-ride locations or more park-and-ride locations along the alignment. There was a high level of interest in park-and-rides and a concern that they could become overcrowded. Other common responses were to include bike parking and easy access to stations for other modes of travel and some concern about the impact of park-and-ride lots to the neighborhoods that surround them.

Topic mentioned more than once	Number of comments	Percent of total
More capacity at park-and-ride	36	14%
More park-and-ride locations	30	12%
Park-and-ride near downtown Portland	17	7%
Support park-and-ride generally	10	4%
Alternative transportation to stations	9	4%
Minimize neighborhood impact	9	4%

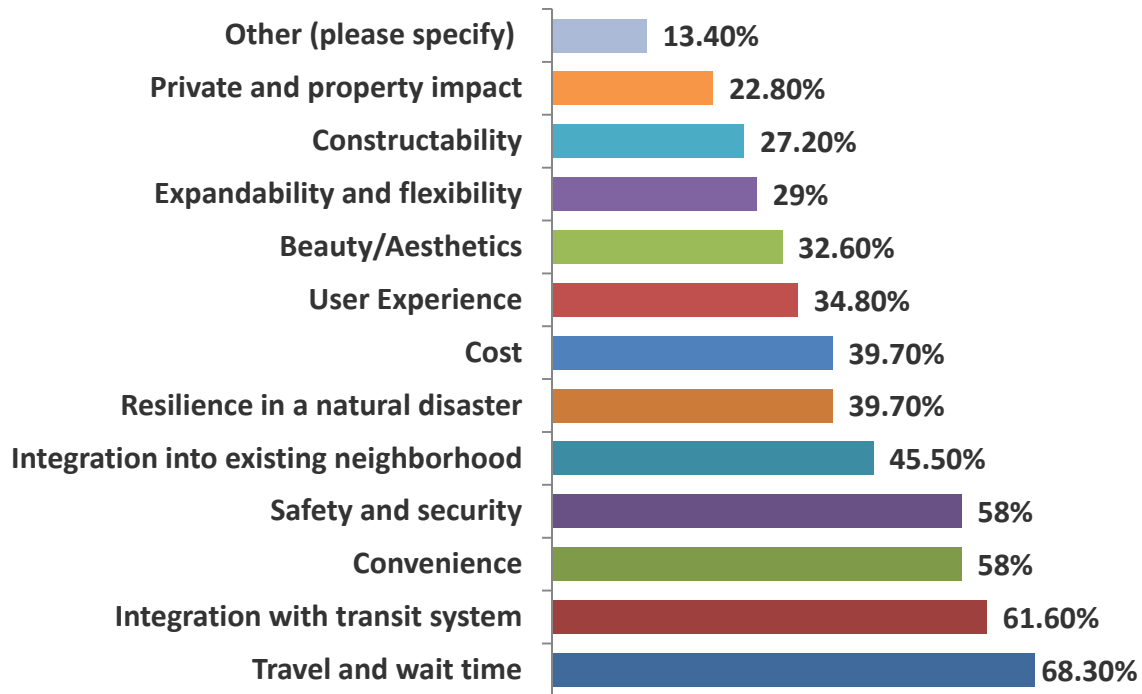
Fewer comments proposed new park-and-ride locations or the removal of park-and-ride locations from consideration. A few people recommended considering park-and-ride locations on Naito Parkway, Terwilliger, Burlingame, Multnomah Village or Hillsdale. Others suggested removal of park-and-rides at 53rd and in Downtown Tigard.

No comments were received about the proposed maintenance facility options.

Options for access to Marquam Hill Only one online survey submission asked about access to Marquam Hill. Additional comments were received at the public scoping meeting, during neighborhood association meetings and through emails. There wasn't a clear support or opposition to the options presented in the scoping material, yet few alternatives were proposed. The comments did direct staff to consider travel time, integration with the light rail, convenience and safety when making a decision about ways to connect to OHSU. Participants emphasize a good connection, but they also want the identified solution to preserve the historic character of Terwilliger Blvd., minimize impacts to parks and natural areas, and preserve quality of life in nearby neighborhoods.

The longer survey asked participants about the most important factors to consider when choosing an access option for Marquam Hill. Participants were provided a list of thirteen choices and asked to select all that applied. A total of 224 responses were received.

Figure 5: What are the most important factors to consider when choosing the Marquam connection option(s) to study?

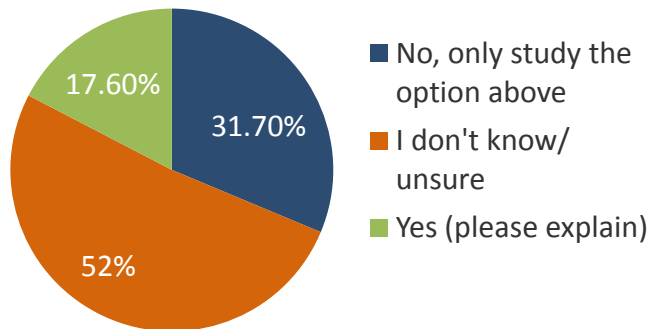


As the figure above shows, the more important factors for survey respondents were: travel and wait time, integration with transit system, convenience and safety and security. 30 comments shared other factors for consideration; only the four below were mentioned more than once.

Other factors	Number of comments
ADA accessibility	5
Congestion	2
Environmental impact	2
Congestion	2

When asked if the Draft EIS should consider options other than those proposed to improve access to Marquam Hill, the majority of survey responses were unsure or did not know. Another 32 percent of responses supported studying the options presented.

Figure 6: Should the EIS consider another option to improve access to Marquam Hill (not included here)?



A space was provided for survey participants to explain other options to consider in the Draft EIS. A total of 49 comments were received. The table below shows the most often mentioned suggestions—all are alternatives proposed in the scoping materials.

Most often options mentioned	Number of comments	Percent of total
Walking path /ramp	6	12%
Tunnel	6	12%
More buses or shuttle	5	10%
Elevator / bridge	4	8%

Other suggestions included: a new tram, an intermediate stop on the existing tram line, a shuttle, “something” at Hamilton, self-driving cars and no change/existing conditions.

The participants at the scoping meeting were given the opportunity to indicate support for proposed options from the scoping materials using stickers and post-it notes. They showed support for three of the five options: the tunnel option, an escalator and a combination of elevator and bridges. One response received on a comment card emphasized the importance of maintaining the historic and natural environment along the Terwilliger Parkway and urged minimal visual impacts.



Writing comments at the Public Scoping meeting

Participants at neighborhood association meetings held during the scoping period shared a variety of comments. They

thought that the most important factor in making a decision was travel time and frequency. They also put an emphasis on the following factors: safety and security, integration with the neighborhood, and integration with the transit system. They asked for consideration of additional factors including: reducing parking and traffic demand on Marquam hill and in surrounding neighborhoods and minimizing impact to Terwilliger Parkway.

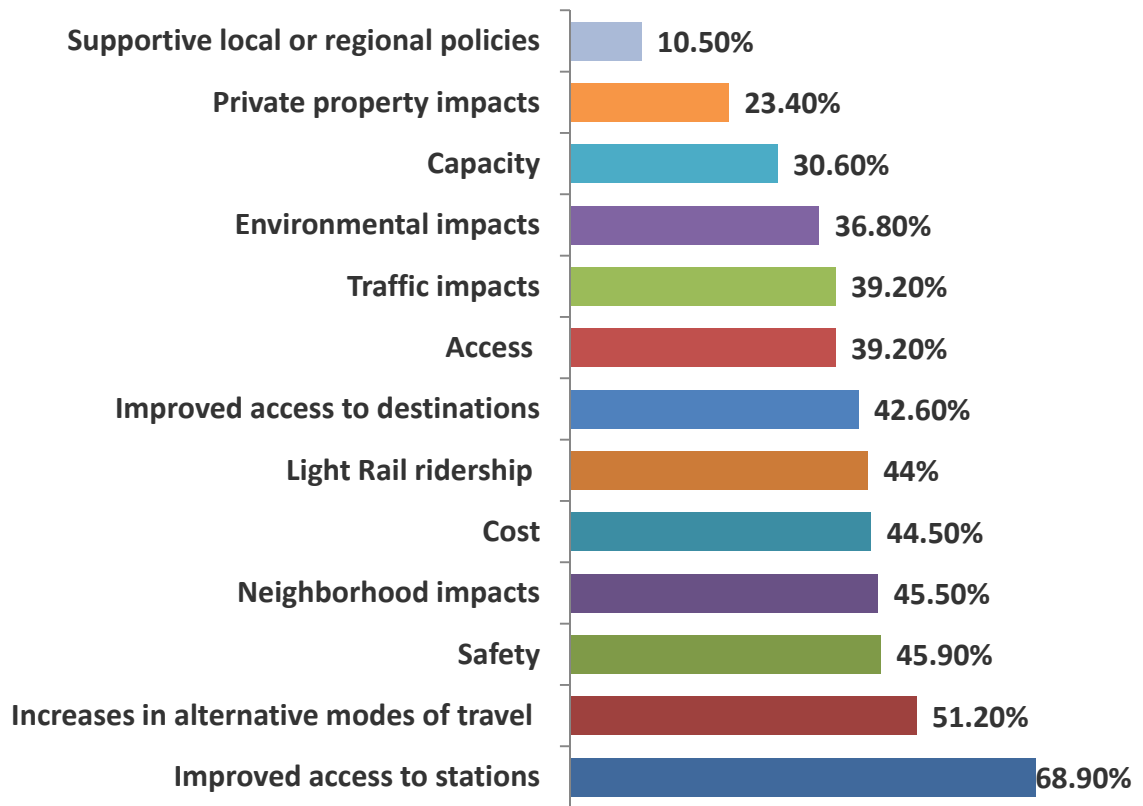
Neighbors expressed concern about potential impacts to the historic Terwilliger Parkway including the addition of infrastructure that is highly visible, such as a bridge or elevator towers, flashing beacons and signage, and anything that could detract from the historic and natural aspects of the Parkway today. Some felt that the primary destination should be the facilities at the top of Marquam Hill and not other destinations including the Parkway itself. Neighbors shared concerns about safety for pedestrians crossing Terwilliger. It was emphasized that creating a pathway for walking up the hill was an important aspect of the connection.

One email echoed support for studying the tunnel and elevator/bridge options, but also suggested studying the escalator option. Another email supported the tunnel, saying that security concerns could be addressed with camera and lighting. The emails reiterated the need to consider visual impacts at Terwilliger Parkway.

Options for access to Portland Community College Sylvania Overall, comments about access to Portland Community College Sylvania (PCC) included more support for bus options than the mechanized alternatives proposed in the scoping materials. The one exception was the bike share proposal, which was the one mechanized options that generated a notable level of interest and support. Support was also expressed for the roadway, bicycle and pedestrian improvements suggested.

One of the two online surveys asked about connection options to PCC. Participants chose the most important factors to consider when studying the options for connecting to Portland Community College Sylvania campus. A total of 209 responses were received. The factors with the most responses were improved access to a proposed light rail station, increases in alternative modes of travel, safety, neighborhood impacts and cost. The results are displayed in Figure 7.

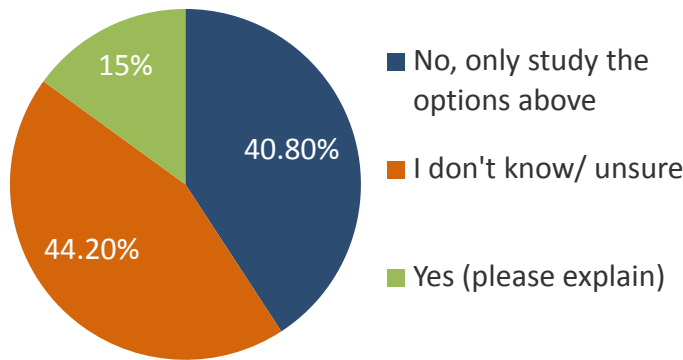
Figure 7: What are the most important factors for decision makers to consider when choosing the PCC connection option(s) to study in the EIS? (Mark all that apply)



There were 21 additional suggestions provided in the “other” category; only two were mentioned more than once—reliability and neighborhood impacts. Other suggested factors included: weather, cost, environmental impacts and transit ridership.

When asked if the EIS should consider additional option to improve access to PCC Sylvania besides those included in the scoping materials, 206 responses were received, of which only 15 percent said yes. Most responses were unsure (44 percent) or answered “no, only study the options presented in the scoping materials” (41 percent).

Figure 8: Should the EIS consider another way to improve transit connections to PCC Sylvania (not included here)?



Participants who answered that another option should be considered were asked to explain their answer. Of the 45 responses received, most provided opinions about the proposed options. Others supported a tunnel, an option removed from further study by the Steering Committee in May 2016.

Most mentioned options	Number of comments	Percent of total
Bus or shuttle	12	27%
Bike share	5	11%
Roadway, bicycle, pedestrian improvements	7	16%
Tunnel	3	7%
Opposition to all mechanized options	3	7%
ADA accessibility	3	7%

At the scoping meeting, participants saw a list of mechanized and enhanced bus service options for connecting PCC. They were invited to share their opinions with green (for positive) and red (for negative) stickers. There were more negative responses to the aerial tram and the skyway options for reaching PCC. The bus service options received fewer comments, but those received tended to be positive. No single bus option was clearly favored.

Mechanized Options	Responses
Aerial tram	Strong negative reaction (11 negative: 4 positive)
Skyway	Strong negative reaction (11 negative:3 positive)
Park shuttle traffic on 53rd Ave	Majority negative (5 negative : 2 positive)
Personal rapid transit: small autonomous shuttles on elevated guideway	Mixed (4 negative : 3 positive)
Electric bike share	Mixed (6 negative : 5 positive)

Enhanced bus service options	Responses
Line 44 improvements: frequent service and extension to Tualatin	Unanimously positive (3)
Shuttle: light rail to campus	Unanimously positive (5)
Bus hub: new connection to PCC with potential speed/reliability improvements	Majority positive (3 positive: 1 negative)
Barbur shared transitway: for TriMet bus or PCC shuttle	Majority positive (3 positive: 1 negative)

Email and letters received were generally in opposition to mechanized options. Three responses were in opposition to any changes on SW 53rd Avenue, including the roadway, bicycle and pedestrian improvements described in the scoping material. Two others supported roadway, bicycle and pedestrian improvements on SW 53rd Avenue with an emphasis on the need for tree protection and stormwater management. One commenter opposed having a station at SW 53rd Avenue. One letter shared support for enhanced bus service or the bus hub. A letter from Portland Community College emphasized the importance of an effective and efficient connection to the campus and asked for consideration of a shared transit-way on Barbur Boulevard. It would allow buses and the college shuttle to utilize the light rail tracks as a travel lane to move quickly between campus and Downtown Portland.

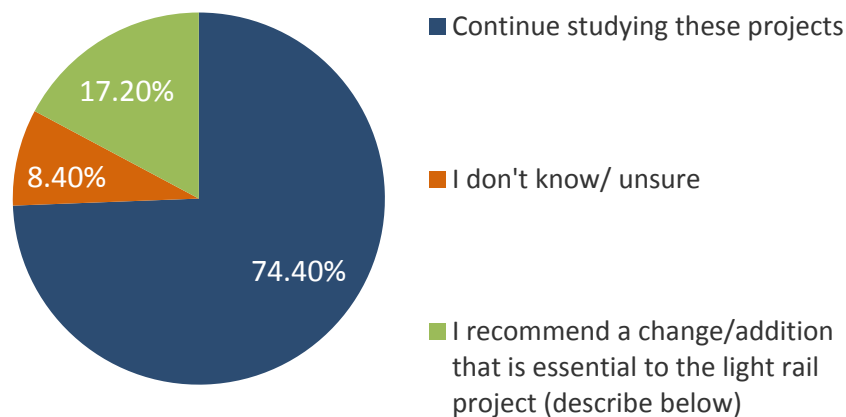
At neighborhood meetings, neighbors shared a concern that the proposed mechanized options along 53rd Avenue seemed unrealistic. They said that the mechanized options would eat up money otherwise available for more valuable improvements, such as the outer

Capital Highway bike and pedestrian improvements or SW 40th Avenue sidewalk connections. Bike share was the one mechanized option for 53rd Avenue they thought made sense. There was a general statement of support for a bus shuttle option. One respondent said that a shuttle should include neighborhood stops and operate on weekends. Attendees said that the bus options offer more benefit to a wider audience (the surrounding neighborhoods).

Roadway, bicycle and pedestrian projects Comments received on this topic were very supportive of the projects proposed. Many participants advocated for particular projects, suggested modifications or asked for additional projects not included on the list.

The longer online survey and the scoping meeting shared information about the thirteen bicycle, pedestrian and roadway projects that proposed for study in the Draft EIS. When asked for their opinion about the projects presented, 74 percent of the responses supported studying them. Only 17 percent suggested a change or an addition. A total of 203 responses were received to this question.

Figure 9: Which statement best describes your opinion about proposed roadway, bicycle and pedestrian projects?



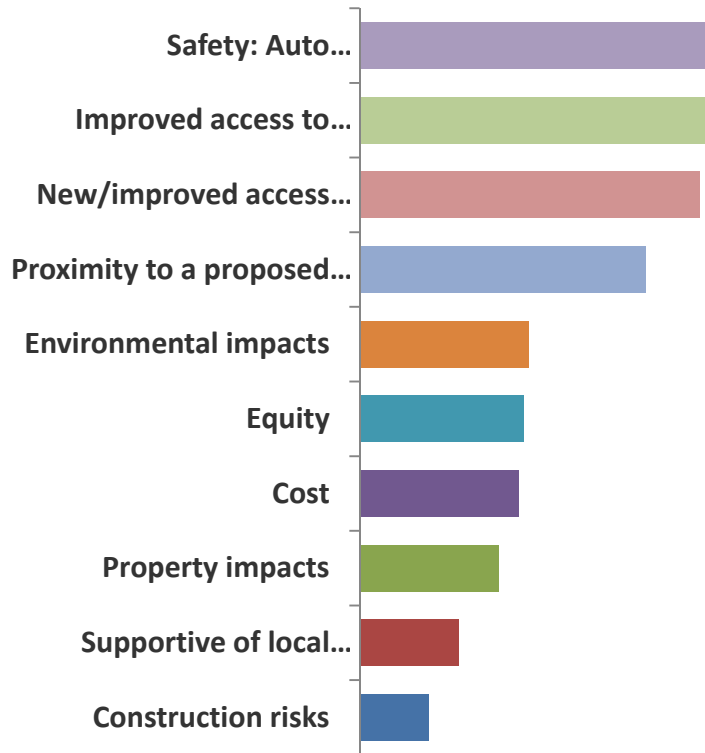
The changes suggested most through the survey are shown in the table below, but most of these suggestions are not changes to the proposal in the scoping material.

Topic mentioned more than once	Number of comments
Roadway, bicycle and pedestrian projects to Barbur Transit Center	3
Barbur: no bike lane	2
I-5 multi-modal crossings	2
Roadway, bicycle and pedestrian education	2
Roadway, bicycle and pedestrian projects in Tigard/Tualatin	2

Survey respondents were also shown a map of additional projects and asked to review the most important criteria for deciding which of these projects are studied in the Draft EIS. A total of 210 responses were received to this question. The top three criteria identified were:

1. Safety: Auto speeds/volumes and bike/pedestrian crash history (67 percent)
2. Improved access to important destinations via light rail (67 percent)
3. New/improved access across barriers such as I-5 (65 percent)

Figure 10: Which criteria do you think are most important in deciding which projects are reviewed in the EIS? (Mark all that apply)



Respondents could also suggest other criteria for deciding which of these projects are studied in the Draft EIS. Comfort and connectivity was mentioned the most often. The suggestions that were mentioned more than once are listed below.

Topic mentioned more than once	Number of comments
Comfort, safety and connectivity for pedestrians and cyclists	6
Separated bicycle or pedestrian facilities	4
Serve neighborhoods	3
Barbur Blvd. improvements	2
Connectivity	2

Several emails and letters advocated for particular roadway, bicycle and pedestrian projects or included suggestions for new projects. A total of 40 suggestions were made, and about half were existing projects or possible modifications to existing projects. Other suggestions were considered but were too far from station areas, were redundant to other existing or planned improvements or were too difficult to build.

The scoping meeting included a map of roadway, bicycle and pedestrian projects. Similar to the question on the survey, attendees were asked which criteria are most important in deciding which projects are studied in the Draft EIS. Much like the survey, the top criteria were safety, improved access to destinations and access across barriers. A fourth criterion, environmental impacts, also received support.

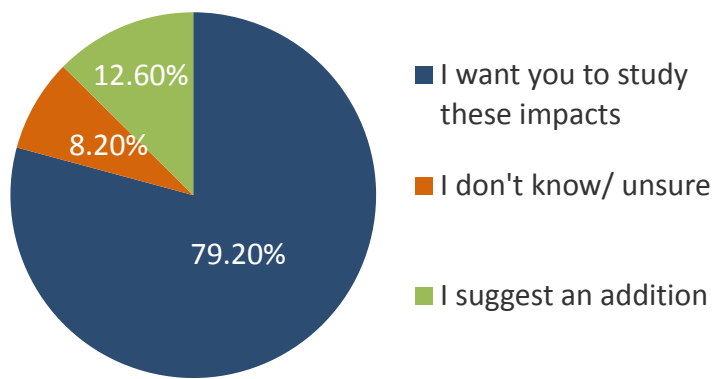
Criteria	Number of votes received
Safety: Auto speeds/volumes and bike/pedestrian crash history	9
Improved access to important destinations via light rail	5
New/improved access across barriers, such as I-5	3
Environmental impacts	3
Proximity to a proposed light rail station	2
Equity: Areas with higher proportions of historically under-represented populations	2
Cost	1
Supportive of local or regional plans	0
Property impacts	1
Construction risks	0
Other?	0

Comments received at the public meeting and through email supported studying more roadway, bicycle and pedestrian projects. A few of those reasons included safe and convenient access to destinations, increased ridership and improved livability. A few suggested building sidewalks on only one side of identified streets to make funding available for more projects. Others advocated for continuous pedestrian networks without gaps. Others asked for improvements at specific locations including Multnomah Village, SW Barbur Blvd., the Ross Island Bridgehead, freeway crossings of I-5 and connections to the National University for Natural Medicine. Some asked for improvements within a distance of the stations, including funding projects within the three-mile “bikeshed.” In terms of roadway improvements, one respondent asked for lower speed limits to support safety and another recommended synchronized traffic signals to reduce congestion. A few people

recommended separated or buffered bike lanes and supported routes or trails through natural areas to reach transit stations.

Impacts and areas of concern Just over 200 responses were received through the online survey about the areas of concern to study. Nearly 80 percent of those who commented online were supportive of the list proposed in the scoping material. Another 13 percent suggested an addition. At the public scoping meeting, attendees asked for consideration of congestion and crime. Another suggested a study of noise impacts at SW 13th Avenue near Chestnut.

Figure 11: Which statement best describes your opinion about the areas of concern?



A total of 39 respondents suggested additions; those shared more than once are shown below.

Suggestions received more than once	Number of comments
Congestion	6
Air quality	4
Project cost	3
Equity	3
Comprehensive study	2
Impact on bus service	2
Supports roadway, bike, pedestrians	2
Visual impact	2

Survey participants were invited to suggest specific locations where impacts should be studied and the following list was provided.

Locations for study

I-5 Capitol Highway interchange	Access to Barbur transit center
53rd Avenue Nature park	SW 53rd Avenue
ADA access to PCC-Sylvania	SW Burlingame- groundwater and noise
Barbur Blvd. construction impacts	Terwilliger Blvd.
Barbur Blvd. and Terwilliger intersection	Tryon headwaters
Barbur Blvd. bike lanes and safe crossings	West Portland Crossroads
I-5 / Hwy 217 Interchange congestion	Noise impact SW 13th Ave/Chestnut
I-405 / 4th Ave off-ramp congestion	Landslide impacts uphill from Barbur Blvd.
Lesser and Haines congestion	Loss of bus service to Tigard and Tualatin

Racial and social equity The online surveys asked participants to comment on benefits and burdens the project should consider in addressing racial and social equity. The survey included the following statement:

Social and racial equity work acknowledges that different people in the community may be impacted differently by a light rail project. During the environmental study, project partners will seek to better understand those different impacts. This list was developed based on what Metro has heard about the potential benefits and burdens of transportation projects for people of color, low-income populations, seniors, and people with disabilities so potential inequities can be addressed.

- Increased or decreased access to important community services (employment, education, affordable housing, health care, retail services)
- Changes in property values
- Increased or decreased exposure to environmental impacts
- Increase or decrease in safety and security
- Increase or decrease in community stabilization or displacement

80 percent of survey responses supported the five issues presented above. Other additions and changes suggested included the following:

- neighborhood impact
- affordable housing
- displacement
- equity
- crime
- job training locations
- churches
- libraries and parks
- food services
- volunteer opportunities
- renters
- removal of trees
- air pollution
- noise pollution
- for disabled, seniors and women
- for pedestrians and cyclists
- gentrification
- homeless displacement

Demographic information about participants

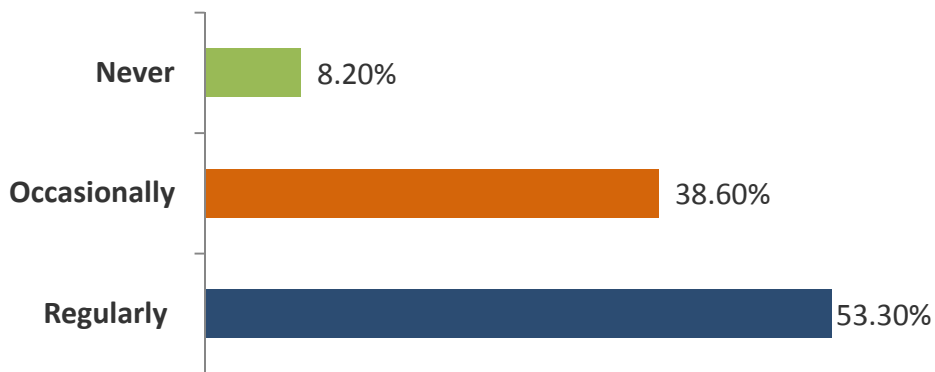
The online surveys and the comment cards provided at the public scoping meeting included demographic questions to help the project team learn about who was participating in the process.

The demographic questions were optional because of the personal nature of the questions. Not all respondents shared demographic information, so it is not a complete picture of the scoping participants, but it provides some information about the people who commented.

Location The two online surveys asked which part of the corridor people most identify with, and a total of 1,298 responses were received. The results show a variety of locations through the corridor, including areas in Washington County, Sherwood, Tualatin, Durham, Tigard, although areas within the city of Portland were the most represented at just over 64 percent of the responses. The highest single category identified was Marquam Hill, which represented 28 percent of responses, followed by Lair Hill and Tigard each at 10 percent.

Transit riders The two online surveys asked about use of public transit. There were 1,288 responses to this question and the majority, nearly 92 percent, identified as occasional or regular transit riders. Of that, 53 percent responded that they ride transit regularly.

Figure 12: How often do you currently ride transit?



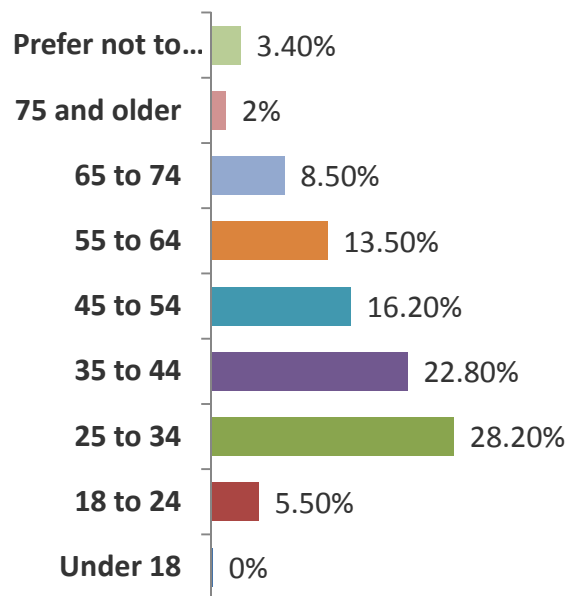
Race Category Survey respondents were asked to choose the one or more races to which they identify. Participants were instructed to select all categories that applied. A total of 1,231 responses were received. A significant majority, 83 percent, identified as White. The second highest category identified was Prefer not to answer (7 percent), followed by Hispanic, Latino or Spanish origin (5 percent).

Race category	Percent of responses
White	83.30%
Prefer not to answer	6.70%
Asian or Asian American	5%
Hispanic, Latino or Spanish origin	4.90%
other (please specify)	2.80%
American Indian or Alaska Native	1.90%
Black or African American	1.60%
Native Hawaiian or other Pacific Islander	0.50%

Of the 19 comment cards received at the public meeting, only nine people answered the option question about race. Of those, 78 percent identified as White and the other 22 percent identified as Other.

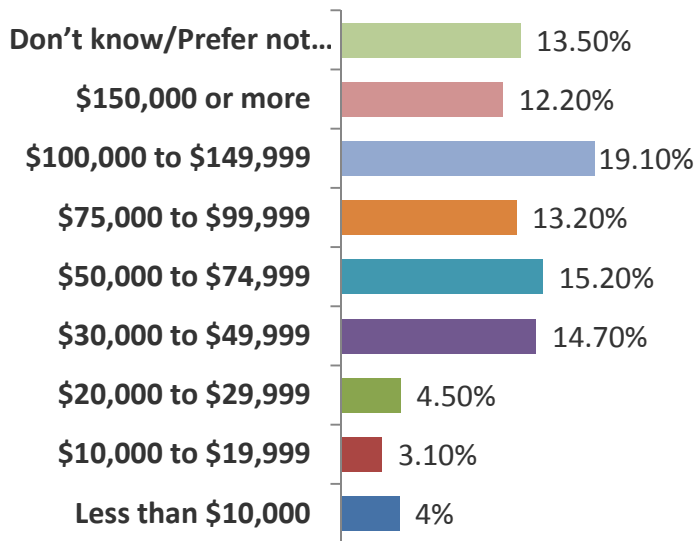
Figure 13: Which of the following age ranges includes your age? (check one)

Age There were 1,257 responses to the survey questions about age. Over 50 percent of these responses chose age categories of 25 to 44. The ten people who answered this question on a comment card at the public meeting were older—50 percent of those respondents were between the ages of 45 and 64. This same age range represented about 30 percent of the survey respondents



Income The incomes reported through the online survey questions and the scoping meeting comment cards indicate that participants tended to report incomes at or above the median household income for Portland (based on the HUD Portland Area Median Income published effective March 28, 2016: \$58,840 for a family of two). Nearly 60 percent of the responses reported an income of \$50,000 or higher. Nearly 23 percent reported annual household incomes under \$50,000. Another 14 percent preferred not to answer the question.

Figure 14: Which of the following categories best represents the annual income of your household before taxes? (check one)





November 2016 Staff Recommendation: *Revisions to the Proposed Range of Alternatives and Purpose and Need*

November 9, 2016

Overview

This document presents the staff recommendation to the Southwest Corridor Steering Committee based on additional analysis and public input received during the project's scoping period, held from September 2 through October 3, 2016. The recommendation further refines the options described in the *Proposed Range of Alternatives for Environmental Review*, which was published on September 1, 2016 and defines the initial set of investments proposed to be studied in the project's Draft Environmental Impact Statement (EIS). That report is available on the project website: http://www.oregonmetro.gov/sites/default/files/AttachmentE_ProposedRangeOfAlternativesForEnvironmentalReview.pdf

In addition, the recommendation includes proposed revisions to the Southwest Corridor Light Rail Project Purpose and Need statement, which was distributed for public and agency comment during the scoping period. The updated Purpose and Need adopted in June 2016 is available on the project website: http://www.oregonmetro.gov/sites/default/files/AttachmentD_PurposeAndNeed.pdf

The recommendations contained in this document apply to the following project elements:

1. Marquam Hill connection options
2. Portland Community College (PCC) Sylvania connection options
3. Light rail alignment and station options
4. Roadway, bicycle, and pedestrian projects
5. Purpose and Need

Next Steps

After steering committee consideration of and action on these recommendations, which is scheduled for December 12, 2016, Metro, TriMet and the Federal Transit Administration (FTA) will begin assessing the impacts and benefits of the proposed alternatives as required under the National Environmental Policy Act (NEPA).

Consideration of how to fund and implement transportation and "green" investments for the SW Corridor that are identified in the Shared Investment Strategy but not studied in the Draft EIS will continue as part of the overall Southwest Corridor Plan dialogue. Additional roadway, bicycle and pedestrian projects proposed during the EIS scoping process may also be included in that discussion. Staff will release an update on the Shared Investment Strategy in the upcoming months.

Marquam Hill connection options

Full background and descriptions of the Marquam Hill connection concepts and analysis are included in the *Marquam Hill Connection Options* document published on September 1, 2016, and updated on October 13, 2016, and available on the project website:

<http://www.oregonmetro.gov/sites/default/files/SWCorridor-Marquam-Hill-Connection-Options-20161013.pdf>

Four separate design concepts were initially considered:

- Multiple elevator and bridge
- Escalator, stair and inclined elevator
- Elevator and bridge with a covered walkway/tunnel above Terwilliger
- Pedestrian tunnel with elevators

Recommendation

Staff recommends the following options be studied in the Draft EIS:

- **Elevator and bridge with on-grade walkway:** A walkway, elevator and bridge between SW Barbur Boulevard and SW Terwilliger Boulevard; either an underpass or an at-grade crossing of Terwilliger; and an on-grade path with an elevator and bridge connecting to the 3rd floor of the Kohler Pavilion.
- **Elevator and bridge with trench or tunnel:** A walkway, elevator and bridge between Barbur and Terwilliger; either an underpass or at-grade crossing of Terwilliger; and a combination of on-grade path, trench or tunnel from Terwilliger to below Campus Drive with an elevator to the 3rd or 7th floor of the Kohler Pavilion.
- **Pedestrian tunnel with elevators:** A pedestrian tunnel from Barbur to Campus Drive, with an elevator to the 3rd or 7th floor of the Kohler Pavilion.

Because a direct light rail tunnel connection to Marquam Hill was removed from further study by the steering committee in 2015 due to adverse construction impacts and high costs relative to the projected ridership gains, a connection between a light rail station in the vicinity of SW Gibbs Street on either SW Barbur Boulevard or SW Naito Parkway and the major employment, health and educational center on Marquam Hill will be provided by an accessible pedestrian and bicycle connection. All options under consideration would provide a connection with high projected use.

The **elevator and bridge concept with on-grade walkway** would be the least complex of the options to construct, maintain and operate. It would have relatively fewer impacts to trees in the park between SW Barbur Boulevard and SW Terwilliger Boulevard compared to the full tunnel option, but could also have both temporary and permanent Section 4(f) impacts in the vicinity of Terwilliger Parkway and near Barbur.¹ The **elevator and bridge concept with a trench or tunnel** west of Terwilliger would introduce complexities with excavation required for a pedestrian trench or tunnel in the hillside. A trench or tunnel could reduce risks of permanent Section 4(f) impacts,

¹ Section 4(f) refers to the original section within the U.S. Department of Transportation Act of 1966 which established the requirement for consideration of park and recreational lands, wildlife and waterfowl refuges, and historic sites in transportation project development.

but would increase the risks of temporary impacts during construction. Both options are recommended for study in the Draft EIS.

Also recommended is the full-length **pedestrian tunnel with elevators** option. It could potentially avoid some Section 4(f) impacts by tunneling under the parkway and providing elevator access SW Campus Drive near the Kohler Pavilion; Section 4(f) impacts during construction could be significant due to access requirements and staging needs for the mining operations, however. Similar to the previously removed light rail tunnel under Marquam Hill, the pedestrian tunnel would likely be challenging to construct due its proximity to sensitive medical equipment and could have construction impacts to Terwilliger Parkway at the portal west of Barbur Boulevard.

The **escalator with inclined elevator** is not recommended for advancement because of its anticipated significant long term impacts to the park. An escalator would not be fully accessible to all users without an inclined elevator to accommodate wheelchairs and strollers. The resulting 24-foot wide structure along the hillside would require removal of many trees and would create a significant permanent visual impact to the parkway between SW Barbur Boulevard and SW Terwilliger Boulevard and up to the Kohler Pavilion.

PCC Sylvania connection options

More complete background, descriptions and analysis of the PCC Sylvania connection options are included in the *PCC Sylvania Connection Options* document published on September 1, 2016, and updated on October 13, 2016, and available on the project website:

http://www.oregonmetro.gov/sites/default/files/AttachmentH_PCC-SylvaniaConnectionOptionsForScoping_0.pdf

There are three general approaches to improving transit access to PCC Sylvania under consideration, with multiple options for each:

- Bicycle and pedestrian improvements to connect the campus to the nearest proposed light rail stations
- SW 53rd Avenue mechanized connections between the campus and the SW 53rd Avenue light rail station
- Enhanced bus service, including new or revised bus routes with potential capital investments

Recommendation

Staff recommends the following options be studied in the Draft EIS:

- Bicycle and pedestrian improvements between campus and light rail stations
- Bus shuttle: TriMet shuttle bus between campus and light rail stations at Barbur Transit Center and SW Baylor Street
- Park shuttle: small shuttles in mixed traffic on SW 53rd Avenue

A key goal of the PCC Sylvania connection is to provide convenient, fast, and reliable access between the campus and the light rail alignment. The most basic element of this goal is to provide safe and attractive **pedestrian and bicycle access** to the campus from stations, so several projects are recommended to be studied in the Draft EIS. Improvements to SW 53rd Avenue between the proposed station at SW Barbur Boulevard and the Sylvania campus, including paving and lighting, were previously identified in the *Proposed Range of Alternatives for Environmental Review*. This recommendation adds improvements to SW Capitol Highway and SW 49th Avenue, and to SW Haines Street and SW Lesser Road, to enhance connections to the Barbur Transit Center and SW Baylor Street stations, respectively. These connections are also included in the “roadway, bicycle, and pedestrian projects” section of this document.

While support for potential campus redevelopment is a welcome result of the project, the uncertainty of future campus plans, the level of projected demand for a connection at the time of opening, lack of public support and the comparable performance of less expensive bus connection options make a large investment in a mechanized connection unnecessarily impactful and risky. Mechanized options would connect the campus to light rail via a transfer at the SW 53rd Avenue station. The **personal rapid transit, aerial tram** and **gondola** options would be expensive to construct and would result in property and visual impacts to the SW 53rd Avenue neighborhood. While the permanence of the investment could support campus growth, service capacity would exceed the projected demand for the campus connection at the time of opening and for the

foreseeable future. These options are not recommended for study in the Draft EIS, but could be viable options in the future when campus growth generates travel demand that would warrant such large-scale investment. Therefore, staff recommends that designs for the SW 53rd Avenue station not preclude future implementation of these mechanized options.

The **park shuttle** would operate in mixed traffic on SW 53rd Avenue with small vehicles with capacities of approximately ten people. This option would not produce the physical impacts of the other mechanized connections described previously, and could have lower operating costs. Therefore, staff recommends the park shuttle for further study in the Draft EIS to facilitate further analysis and discussion.

While an **electric bike share** program would be less expensive to implement than the other mechanized connection options, it would not be weatherproof, would not serve all transit riders and could experience challenges in redistributing bikes, potentially resulting in problems with bike availability. A campus bike share program would most likely be successful as part of a larger bike share program. Therefore, staff recommends that the electric bike share program be pursued outside of the Draft EIS and that designs for the SW 53rd Avenue station should not preclude construction of a bike share station in relatively close proximity to the light rail platforms.

Compared to mechanized options, some of the bus service improvement options could be implemented with relatively little risk. They would require little to no additional capital investment and would result in few property impacts.

Among bus options, the most promising is the TriMet-operated **bus shuttle** with potential timed connections to light rail at Barbur Transit Center and at the SW Baylor Street station in the Tigard Triangle. With this option, service would be scaled to demand and travel time to campus would be similar to, if not better than, the mechanized connection options on SW 53rd Avenue. Staff recommends further study of the bus shuttle option in the Draft EIS because it would provide simple, fast, and effective access to campus from light rail with little capital investment.

Model projections show that most of the benefit of the **bus hub** option would be due to the extension and improved frequency of the Line 44, improvements that could be implemented separate from the broader bus hub concept and optional capital improvements. The new opportunities for one-seat rides to campus proposed by the bus hub would improve access from more directions than other connection options, and could be optimized with further analysis. Most of the capital elements of the bus hub concept, however, showed little promise of improving travel times and reliability in preliminary analysis. Specifically, the on-campus dedicated busway, new bridge over I-5 at SW G Street and segment of shared transitway in the Tigard Triangle showed little to no travel time gains relative to the current Line 78 bus route on SW Lesser Road and SW Haines Street. Staff recommends that TriMet further consider opportunities to route new or existing bus lines to the Sylvania campus, but that this effort should be pursued as part of the general bus route planning to support light rail service, and not as an element of the Draft EIS. Staff does not recommend further study of an on-campus dedicated transitway, a bus bridge over I-5 at SW G Street or a segment of shared transitway in the Tigard Triangle. The *Proposed Range of Alternatives for Environmental Review* includes a new auto crossing over Highway 217 connecting

downtown Tigard and the Tigard Triangle, which could improve travel times and reliability for buses serving the campus.

The **shared transitway** between the Barbur Transit Center and downtown Portland would provide a one-seat ride from Portland State University, but would require an estimated investment of over \$53 million (2014\$) in paved trackway over a long distance to allow buses to travel on the light rail's exclusive right-of-way. Buses and light rail would likely need to adhere to a 25 miles per hour speed limit, which is the operating limitation on the shared transitway portion of the Orange Line, and in other locations including downtown Seattle. Finally, the introduction of a bus line on the light rail right-of-way would duplicate service of the light rail and of the Line 44, using operating resources that could be allocated to other routes in the corridor. These issues do not justify the sole benefit of avoiding a transfer between light rail and bus to reach the PCC campus. As a result, staff recommends not studying the shared transitway from the Barbur Transit Center in the Draft EIS. The *Proposed Range of Alternatives for Environmental Review* already includes a shorter segment of shared transitway between the downtown Portland Transit Mall and SW Capitol Highway in "The Woods" section of SW Barbur Boulevard, which could improve travel times and reliability for the Line 44 bus to PCC Sylvania.

Light rail alignment, station, and park-and-ride options

The *Proposed Range of Alternatives for Environmental Review*, published on September 1, 2016, defines the initial set of investments proposed to be studied in the project's Draft EIS. Based on an analysis and public comment during the scoping period, modifications are recommended for three alignment options and two stations with park and ride facilities.

Recommendations

- Remove the Clinton branched alignment from further consideration
- Only consider SW 70th Avenue, and not SW 69th Avenue, as the route for the Clinton through-routed alignment
- Remove the option of an alignment adjacent to I-5 at the Barbur Transit Center transitioning to center-running in Barbur south of Crossroads
- Remove the Hunziker station and park-and-ride lot from further consideration
- Increase the Bridgeport station park-and-ride lot capacity range to be studied to include a higher maximum number of spaces

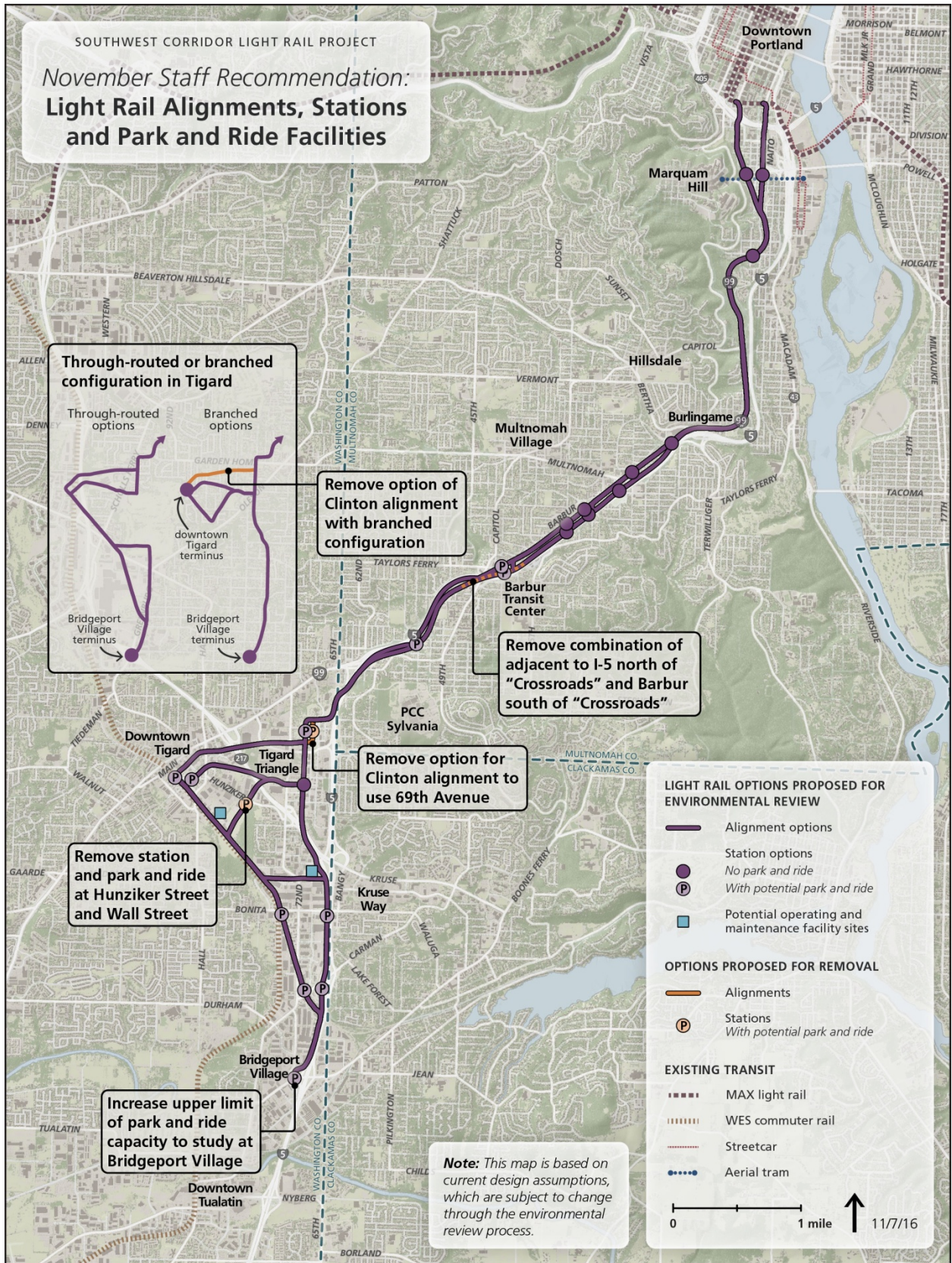
These recommended changes to the light rail alignments, stations and park and ride facilities are illustrated on the map on the following page.

The **Clinton alignment** is an option to connect downtown Tigard and the Tigard Triangle that is currently under consideration for both the through-routed and branched operating configurations. Because the Clinton alignment would include a long structure crossing over Highway 217 and parking lots between the Tigard Triangle and downtown Tigard, it would be a more expensive option compared to alternative options. For the through-routed configuration, the Clinton alignment would cost approximately \$25 million more to construct than the Ash alignment (2014\$, not including finance costs). For the branched route configuration, the Clinton alignment would be at least \$70 million more expensive than the Ash alignment. The cost difference would be greater for the branched configuration because the through-routed Clinton option would avoid the cost of the constructing new segments of the 70th Avenue roadway in the Triangle, while all branched route options would include this cost.

The Clinton alignment was initially introduced as a through-routed option to provide a more direct route through downtown Tigard relative to other through options, saving approximately 1.5 minutes for riders accessing the Tigard Transit Center, Bonita, Upper Boones Ferry, and Bridgeport Village stations (compared to the Ash through-routed option). As a branched option terminating in downtown Tigard, however, only riders at the Tigard Triangle station would benefit from the faster travel time. Staff recommends removing the option of the Clinton alignment with the branched operating configuration from further consideration while retaining the Clinton through-routed alignment for further study in the Draft EIS.

SOUTHWEST CORRIDOR LIGHT RAIL PROJECT

November Staff Recommendation:
Light Rail Alignments, Stations
and Park and Ride Facilities



The *Proposed Range of Alternatives for Environmental Review* identifies both SW 69th and SW 70th Avenues in the Tigard Triangle as possible routes for the **Clinton crossing** option between SW Atlanta Street and SW Clinton Street. The 70th Avenue option would increase roadway capacity, result in fewer traffic impacts and cost less to construct. Further, it would better support the Tigard Triangle Strategic Plan's goal of creating a more connected street network in the area. As a result, staff recommends removing SW 69th Avenue as an option for the Clinton crossing through-alignment.

As described in the *Proposed Range of Alternatives for Environmental Review*, current concepts for an **adjacent to I-5 alignment** at the Barbur Transit Center include options to either transition back to Barbur at the "Crossroads" intersection (SW Capitol Highway, Barbur and I-5), or continue adjacent to I-5 to 60th Avenue. Either option would include a light rail bridge from the southeast side of the Barbur Transit Center over I-5 and SW Capitol Highway. Preliminary design shows that if this bridge were to land on Barbur as part of a center-running Barbur alignment, the grade change would require a retained fill structure to carry the light rail in the center of Barbur that would measure 620 feet long and up to 23 feet high. South of Crossroads, the retained fill walls would extend to just north of the Public Storage building. This walled structure would generate property and visual impacts. Staff recommends removing this transition from adjacent to I-5 to center-running Barbur, leaving two alignment options through the Crossroads area: center-running Barbur both north and south of Crossroads, and adjacent to I-5 both north and south of Crossroads. This recommendation results in three adjacent to I-5 alignment options to be studied in the Draft EIS: SW 13th Avenue to SW 60th Avenue, SW 26th Avenue to 60th, and Barbur Transit Center to 60th.

The **Hunziker Street station** near downtown Tigard would be located between the Tigard Transit Center station and the Beveland Street station in the Tigard Triangle for the Wall Branch option. Original plans for branched route configuration identified the Hunziker station as the location where the two branches would diverge, and where riders traveling between downtown Tigard and points south could transfer. Current plans, however, identify either the Beveland or Baylor station as the point where the branches would split, so the Hunziker station would no longer serve as a transfer point between branches. In addition, the station would be located in an industrial area, with a proposed 350- to 400-space surface park and ride lot under the light rail structure crossing over Highway 217. While some development is planned in the area, employment density is likely to remain low relative to other station areas. The park and ride lot would not be easily accessed by autos because of limited roadway connectivity and proximity to congested intersections, and security at the lot could be complicated by the lack of sight lines and lack of activity in the industrial landscape. The station and park-and-ride lot are therefore recommended to be removed from consideration.

The *Proposed Range of Alternatives for Environmental Review* includes a capacity range of 400 to 600 spaces for the **Bridgeport station park-and-ride lot**. Model projections show significantly higher demand for spaces at the lot. Staff recommends increasing the maximum capacity in the range to be studied in the Draft EIS to 1,000 spaces.

Roadway, bicycle, and pedestrian projects

The Southwest Corridor Light Rail Project includes roadway, bicycle, and pedestrian projects that could improve safety and connectivity throughout the corridor and support the light rail and the communities' land use visions. Some of these projects were already been endorsed for environmental review by the steering committee in June 2016, 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; those projects are described in the *Proposed Range of Alternatives for Environmental Review*.

Several dozen additional projects identified by staff and by public comment were also considered for inclusion in the Draft EIS, primarily to provide adjoining neighborhoods with pedestrian and bicycle access to transit stations. These projects were analyzed based on access, safety, existence in adopted plans, construction costs, and construction challenges to inform the recommendation. More complete background, descriptions and analysis of the additional options are included in the *Analysis of Additional Roadway, Bicycle and Pedestrian Projects* document published on September 1, 2016, and updated on October 13 and October 21, 2016, and available on the project website: <http://www.oregonmetro.gov/sites/default/files/Analysis%20of%20Additional%20Roadway%2C%20Bicycle%20and%20Pedestrian%20Projects%20-%2010102116.pdf>.

Recommendations

In addition to the projects already endorsed for environmental review in the scoping materials, staff recommends adding the following projects for study in the Draft EIS:

- 1st Avenue bikeway
- Naito Parkway to Hooley Bridge bikeway
- Hamilton Street/Terrace bikeway and sidewalks
- Terwilliger Parkway bikeway gap
- Chestnut Street bikeway
- Custer Drive sidewalks
- Pedestrian/bicycle bridge over I-5 near Custer Street
- Capitol Hill Road sidewalks and bikeway
- 19th Avenue bikeway
- Troy Street bikeway
- Spring Garden Street and Dolph Court sidewalks and bikeway
- 24th Avenue sidewalks and bikeway
- 26th Avenue sidewalks and bikeway
- 30th Avenue/Hume Street/31st Avenue sidewalks
- Capitol Highway sidewalks and bike lanes
- Taylors Ferry Road sidewalks and bikeway
- 40th Avenue sidewalks
- Outer Capitol Highway pedestrian improvements
- Pedestrian/bicycle bridge over I-5 near Luradel Street or 53rd Avenue
- Pomona Street sidewalks and bike lanes
- Pasadena Drive sidewalks and bike lanes

- Baylor Street sidewalks and bikeway
- 72nd Avenue sidewalks and bikeway: 99W to Lower Boones Ferry Road
- Hall Boulevard sidewalk infill: Knoll Drive to Bonita Road
- Bonita Road bikeway: 72nd Avenue to I-5
- Bonita Road sidewalks and bikeway: I-5 to Windfield Way
- Pedestrian/bicycle path along I-5 between Bonita Road and Cardinal Lane
- Carman Drive sidewalks and bikeway
- Walk/bike improvements on Lower Boones Ferry Road and Boones Ferry Road

Staff also recommends adjustments to the walking and biking connection proposed between Barbur Boulevard and the Tigard Triangle. This project was already endorsed for environmental review, but included four options for achieving this connection. Staff recommends studying an on-street route via 60th Avenue, Capitol Highway, Lesser Road, Haines Street and Atlanta Street. Improvements would include the addition of sidewalks, bike lanes and in-street bikeway markings. Staff recommends removing the off-street connection options from further consideration in favor of the on-street connection because the on-street connection would also improve access to PCC Sylvania from both the Tigard Triangle and Barbur Boulevard. The off-street paths recommended for removal include::

- Bicycle/pedestrian path on light rail structure over I-5
- Bicycle /pedestrian path along east side of I-5 with new bridge parallel to Haines Street bridge
- Bicycle /pedestrian path along east side of I-5 with connection to Haines Street and sidewalk and bikeway improvements on Haines Street and Atlanta Street

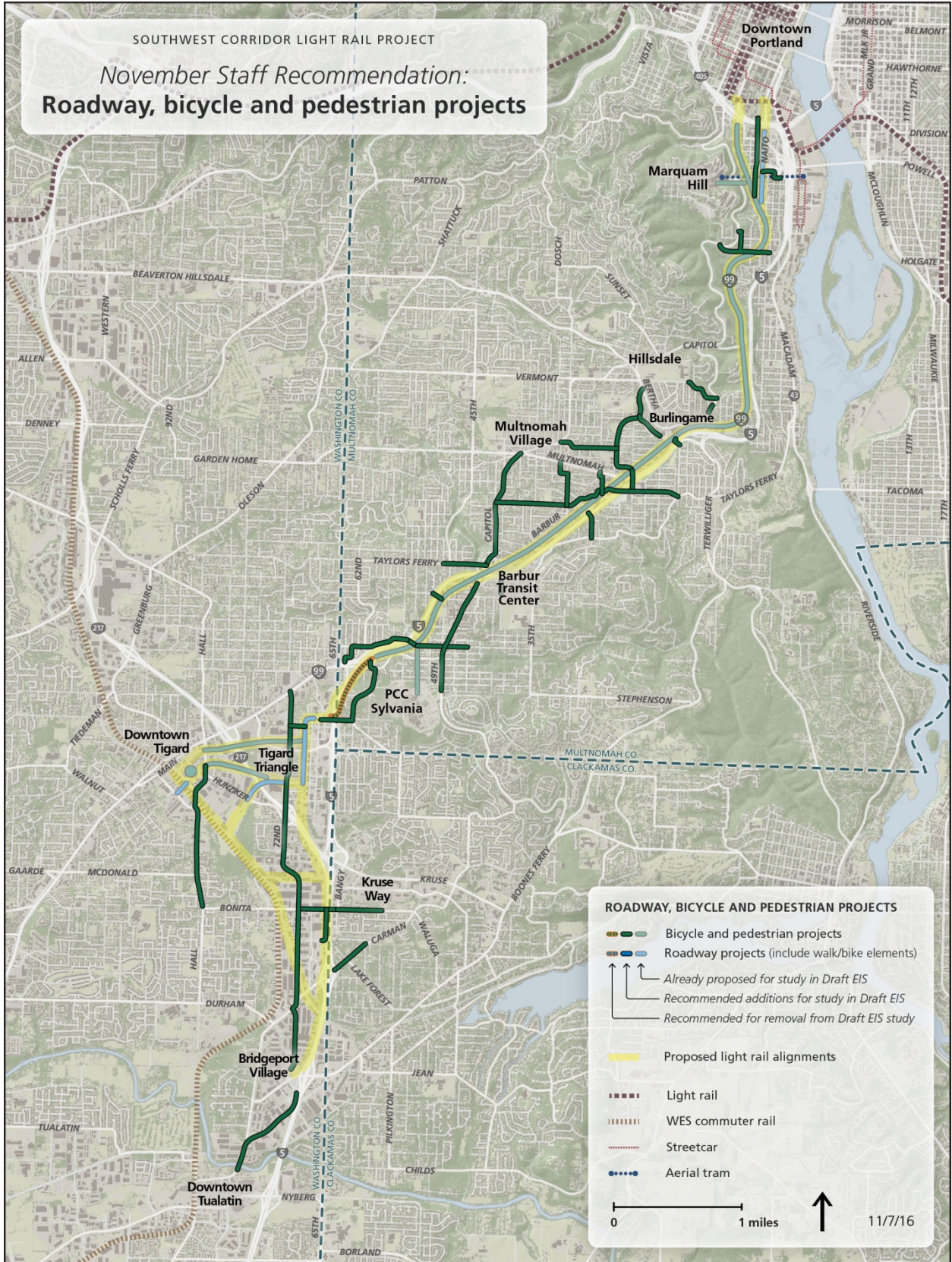
The map on the following page illustrates the location of roadway, bicycle and pedestrian projects already recommended for environmental review prior to the scoping period, additional projects proposed for study in the Draft EIS based on further analysis and input during scoping, and projects recommended for removal from consideration in the Draft EIS.

Project partners will continue to seek funding for other roadway, bicycle and pedestrian improvements in the Southwest Corridor that are more appropriate to pursue separately from the light rail project.

SOUTHWEST CORRIDOR LIGHT RAIL PROJECT

November Staff Recommendation:

Roadway, bicycle and pedestrian projects



Purpose and Need

The public and agency comments received during scoping did not suggest changes to the Purpose and Need statement. So that all stated purposes are supported by an expressed need, however, staff recommends adding language to explain the need for the following purpose: “Ensure benefits and impacts promote community equity.” The recommended edits are underlined in the following excerpt from the preliminary Purpose & Need adopted by the steering committee in June 2016:

There is a limited supply and range of housing options in the Southwest Corridor with good access to multimodal transportation networks, and jobs and services are not located near residences.

The Southwest Corridor is projected to add around 41,000 households from 2010 to 2035, an increase of 48 percent. Presently, the majority of housing in the project area consists of low density, single family housing and little affordable housing is available. As the region grows, providing a variety of housing options and increased housing supply in the corridor will be necessary to accommodate the additional residents. Concentrated development around light rail stations can provide a range of additional housing options, including affordable housing, with transit and walk access to jobs and other amenities that can reduce the reliance on automobile travel and reduce transportation costs for households. Providing light rail transit will allow development of affordable and higher density housing, which is not currently possible due to State of Oregon Transportation Planning Rules related to capacity on state road facilities.

In addition, many of the major employment areas in the corridor have developed far away from the area’s housing, requiring workers to commute over long distances. For example, 93% of workers in Tualatin and 92% of workers in Tigard live outside the city of their employment. With the transit service limitations described previously, driving on congested roadways is often the only choice for people to access their jobs. In addition, the incomplete sidewalk and bicycle networks in the corridor require riders to access transit by car and, as a result, park and ride lots in downtown Tigard and near Bridgeport Village are often full. The limited access of those who reside outside the corridor to its jobs, health services and educational opportunities is also an equity concern for the regional community.

As the region grows, implementation of light rail will be critical to improve transit connections between jobs and residences. A well-distributed park and ride system combined with place making principles will allow disconnected users to access light rail without impacting livability.

While providing opportunities for additional housing and jobs near transit is important, that outcome needs to be balanced against impacts on the existing community in the corridor. The region’s population growth and economic improvement have elicited concerns about increasing housing costs and displacement of residents and businesses, especially resulting from major public investments. Therefore, the project needs to strive for equitable distribution of benefits and impacts.