

Meeting: SW Corridor Plan Steering Committee

Date: June 13, 2016

Time: 9:00 a.m. to 11:00 a.m.

Place: Beaverton City Council Chambers, The Beaverton Building, 12725 SW Millikan Way

Purpose: Consider decisions on technical modifications in Tigard, endorsement of the

Proposed Range of Alternatives, and updates to the project Purpose & Need.

Overview of upcoming work and DEIS scoping.

9:00 a.m. Welcome and introductions Co-chair Stacey

**ACTION ITEM** 

9:05 a.m. Consideration of the Steering Committee meeting summary

Co-chair Stacey

from May 9, 2016 ACTION REQUESTED

**PUBLIC COMMENT** 

9:10 a.m. Public Comment Co-Chair Stacey

*Opportunity for citizens to provide short testimony and/or submit written comments* 

to inform the Steering Committee decisions.

**DISCUSSION ITEMS** 

9:30 a.m. Recap of Refinement Phase, decisions before the Committee Chris Ford, Metro

Recap of decisions and public engagement and over past 18 months. Review of

decisions for the committee to consider, including overview of the Proposed Range of

Alternatives and additional staff comments on Purpose & Need. **Discussion: Any questions about the decisions to be made today?** 

**ACTION ITEMS** 

9:50 a.m. Consideration of technical modifications to alignments in Tigard Co-Chair Dirksen

ACTION REQUESTED Steering committee discussion and action on whether to adopt further study of (a) a two-way alignment on SW 70<sup>th</sup> Avenue in the Tigard Triangle and (b) a branch service alignment that serves both downtown Tigard and Bridgeport Village with a split in the Tigard Triangle, and whether to remove (c) the current couplet alignment on SW 68<sup>th</sup> and 70<sup>th</sup> avenues in the Tigard Triangle and (d) the current branch service alignment with a split at Hunziker and Wall west of OR-217.

10:00 a.m. Consideration of whether to endorse the Proposed Range of Alternatives for Environmental Review.

ACTION REQUESTED Steering committee discussion and action on endorsement of the Proposed Range of Alternatives (PRA), which will be presented during 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 Marguam Hill.

10:15 a.m. Consideration of whether to adopt updates to the project's Co-Chair Dirksen Purpose & Need.

<u>ACTION REQUESTED</u> Steering committee discussion and action on updates to the Purpose & Need, based on recommendations from staff and additional input included in the meeting packet.

#### **DISCUSSION ITEMS**

10:45 a.m. Overview of next phase

Chris Ford, Metro

Description of upcoming work on the Southwest Corridor Plan including next steps on Shared Investments 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.

Discussion: Any questions about scoping and the other upcoming project efforts?

11:00 a.m. Adjourn

#### Materials for 6/13/2016 meeting:

- 5/9/2016 meeting summary
- October 2014 May 2016 Public Engagement Summary
- Memo: PTL recommendation regarding Tigard technical modifications
- Draft Proposed Range of Alternatives for Environmental Review (updated June 6)
- Memo: Additional staff recommendations on Purpose & Need

600 NE Grand Ave. Portland, OR 97232-2736 503-797-1700 503-797-1804 TDD 503-797-1797 fax



Southwest Corridor Plan Steering Committee Monday, May 9, 2016 9:00a.m. to 11:00a.m. Tigard Town Hall, 13125 SW Hall Blvd., Portland, OR 97223

#### **Committee Members Present**

Craig Dirksen, Co-chair Metro Council
Bob Stacey, Co-chair Metro Council
John Cook City of Tigard

Roy Rogers Washington County
Steve Novick City of Portland
Krisanna Clark City of Sherwood
Al Reu City of King City

Alan Snook ODOT Neil McFarlane TriMet

Alice Cannon (in place of Lou Ogden)

Linda Tate (in place of Gery Schirado)

Randy Ealy (in place of Denny Doyle)

City of Durham

City of Beaverton

## Metro Staff

Malu Wilkinson, Brian Harper, Chris Ford, Matt Bihn, Yuliya Kharitonova, Michaela Skiles, Anthony Buczek, Craig Beebe, Elissa Gertler, Noah Siegel

#### 1.0 Welcome and introductions

Co-chair Craig Dirksen called the meeting to order at 9:01 am and welcomed the committee members and public to the meeting. Committee members proceeded to introduce themselves.

Co-chair Dirksen announced that the committee would be making two decisions today. The decisions are whether to select bus rapid transit (BRT) or light rail (LRT) as the preferred High Capacity Transit (HCT) mode for the Southwest Corridor and whether to advance study of an LRT tunnel to the Portland Community College (PCC) Sylvania campus into the federal Draft Environmental Impact Statement (DEIS). Co-chair Dirksen concluded with a brief overview of the meeting's agenda.

# 2.0 Consideration of the Steering Committee meeting summary from April 6, 2016.

Co-chair Dirksen asked the committee for approval of the meeting summary from April 6, 2016. With all in favor, the meeting summary was accepted unanimously.

#### 3.0 Public Comment

Mr. John Ludlow, Clackamas County Commission Chair, expressed concern about selecting light rail as preferred mode option. He stated that this mode option is a big commitment moneywise and might not be the most practical use of funds for the Southwest Corridor transit project. Mr. Ludlow added that instead of using funds for mass transit improvements, they should be used for tackling existing transportation problems in the region.

Co-chair Craig Dirksen pointed out that the decision on HCT mode is not meant to serve as a solution to the region's transportation issues. He added that the solution would be to have several transit modes working together as a system, and that in partnership with Oregon Department of Transportation (ODOT) and federal government, various funding opportunities are being pursued and considered.

Co-chair Bob Stacey acknowledged that there is a lack of funds to fulfill all the region's transportation needs. He pointed out that voting for light rail in the Southwest Corridor would not undermine the capacity of existing transportation, but would add a new mechanism for travel.

Commissioner Roy Rogers inquired about the Clackamas county position on selecting light rail as the preferred mode option and adding improvements along the Southwest Corridor. Mr. John Ludlow responded that if the option of light rail would be proposed in Clackamas county it would be up to the communities in the region to vote for or against it. In addition, Mr. Ludlow expressed appreciation for the transit enhancements along the corridor, but disagreed with a light rail mode option due to high cost.

Ms. Denise Frisbee, a member of Portland Community College (PCC) Board of Directors, expressed disappointment for losing the tunnel option as a direct connection to PCC. She welcomed the staff recommendation to continue exploring and refining alternative options for improved transit connections to the PCC Sylvania campus. Ms. Frisbee added that she is looking forward to working together as college strives to complete their master plans, and expand their programs in the Southwest corridor.

Ms. Lisa Avery, PCC – Sylvania Campus President, urged the committee to partner with PCC staff to find effective, efficient and sustainable connection alternatives. Ms. Avery emphasized the importance of connecting students and also staff to PCC-Sylvania, and pointed out that the number of students is only expected to grow due to Oregon Promise Grant. In addition, the college is discussing the possibility of

building housing for students, specifically international students who are also heavy users of transit.

Mr. R. A. Fontes, a Lake Oswego resident, opposed light rail as a preferred mode option. Mr. Fontes opined that Bus Rapid Transit (BRT) would have a significantly lower cost and greater demand. He expressed disappointment that several bus lines that were part of the TriMet's service enhancement plan have not been running at the frequent service capacity yet. Document was provided and included as part of the meeting record.

Mr. Ron Swaren, a Southeast Portland resident, opposed light rail as a preferred mode option due to high cost and low ridership. Mr. Swaren also pointed out that a light rail system is hard to expand to additional destinations and it would take away valuable road space on Barbur Blvd. He suggested to use project funds elsewhere and noted that, for example, double-decker buses move easily in and out of traffic and have less costly infrastructure than MAX.

Mr. Jim Howell, a member of the Association of Oregon Rail and Transit Advocates (AORTA), expressed concern about the proposed 2-way alignment option in Tigard Triangle. He noted that, compared to the old AORTA proposal, this alignment does not serve all the major destinations. He agreed that the proposal to modify branch service concept to branch in the Tigard Triangle would reduce time and cost. In addition, Mr. Howell expressed concern about lack of ridership while the region experiencing vast population growth. Document was provided and included as part of the meeting record.

Ms. Marcia Leslie, Chair of the Far Southwest Neighborhood Association (FSNA), stressed the importance of addressing equity in the Southwest Corridor project. She noted that it is essential for all the local communities to connect to jobs, schools, and other amenities. Ms. Leslie thanked the committee and project staff for the work that's been done so far.

Mr. John Charles, president of Cascade Policy Institute, disagreed with one of the reasons for the light rail mode option from the Staff Recommendations for May 2016 Decisions document. The reason stated that light rail would be more cost-effective to operate, with a projected lower cost per boarding. Mr. Charles opposed this statement and called for the committee to be more skeptical with information that is being presented to them.

Mr. Doug Allen, a member of AORTA, requested postponement of decisions on mode option and PCC-Sylvania tunnel connection until after review of AORTA's proposal. Mr. Allen supported the proposal to modify the branch service concept to branch in the Tigard Triangle, and noted that it would be a significant improvement on travel time. He asked the committee to refine that alignment to ensure it connects to BRT and WES at the Tigard Transit Center and that good service is maintained on both branches during the off-peak hours.

Mr. Steve Schopp, a Tualatin resident, expressed disappointment with project staff and members of the committee for not scrutinizing information that is being presented to them by the project staff. Mr. Schopp criticized the way Southwest Corridor project is being conducted and stated that the committee's actions make this project illegitimate.

Co-chair Bob Stacey disagreed with Mr. Schopp's statement, noting that members of the committee do scrutinize information that is being presented to them and that he, personally, reviewed and researched all the information before deriving to any conclusions.

Mr. Steve Schopp argued that the committee members and staff are not being honest and stated that no one

follows up with the projects to ensure their effectiveness.

Ms Elise Shearer, a Tigard resident, thanked project staff for continued planning for the future by investing in all transportation options. Ms. Shearer stated that BRT has a limited capacity and efficiency, and would not be able to expand in the future as light rail would. She asked the committee to ensure service to downtown Tigard and consider the alignment next to WES rail.

Ms. Marianne Fitzgerald, a member of Southwest Neighborhoods Inc. (SWNI), expressed support for selecting light rail as the preferred mode option and the recommendation to remove a light rail tunnel serving PCC-Sylvania campus. Ms. Fitzgerald urged the committee to find alternative connection options to PCC that benefit neighborhoods and improving livability. She also noted that transit service to PCC-Sylvania campus can be improved today. Document was provided and included as part of the meeting record.

Mr. Roger Averbeck, a member of SWNI, expressed support to the proposed updates to the project Purpose and Need statement. Mr. Averbeck strongly encouraged the general public to review and comment on the updates. He advocated for improved opportunities for multiple modes along the corridor and serving the communities by improving access to businesses.

Mr. Allen Alley, Allen Alley for Governor, suggested to the members of the committee to invest in infrastructure for autonomous vehicles. He noted that investing in personal transportation modules, which can be publicly owned, and improvement of roadways would create a platform for the future transit.

Ms. Linda Cohn, a Northwest Portland resident, opposed light rail as a mode option, opining that it benefits very few at the expense of the majority. She inquired where exactly light rail would be on Barbur Blvd and if the public in the area was aware of the light rail plans. Ms. Cohn urged the committee to vote against the light rail, stating that it would be too costly and disruptive.

Mr. Brad Perkins, president of Cascadia High Speed Rail, asked the committee to consider their proposal for the tunnel near the Southwest Corridor. He stressed the importance of high speed rail and alternate corridors when connecting the cities and planning for the future. Document was provided and included as part of the meeting record.

# 4.0 Recap of staff recommendations regarding mode and PCC tunnel. Summary of public input on staff recommendations.

Mr. Chris Ford, Metro staff, gave an overview of the staff recommendations regarding mode and PCC tunnel, which included:

- To select light rail as preferred High Capacity Transit mode for the Southwest Corridor
- To remove a light rail tunnel directly serving PCC Sylvania campus from advancement into the Draft Environmental Impact Statement (DEIS), and continue to explore and refine alternative options for improved transit connections to the Sylvania campus

Mr. Ford explained that the reasons for recommending a light rail as a mode option included greater long term carrying capacity, better transit performance, integration into the existing MAX system, and a higher level of public support. He continued by discussing the reasons to not study PCC Sylvania tunnel in DEIS, which included higher cost versus ridership gains, several substantial trade-offs, major neighborhood impacts, unclear return on investment on campus, and potentially having other viable alternate connections to the campus.

Ms. Noelle Dobson, Metro staff, presented on public engagement. Main takeaways from the community forum and online survey included:

- Strong support for the light rail as a mode option
- Most supported removing tunnel, but there were some that opposed that option

#### 5.0 Consideration of preferred transit mode and further study of a light rail tunnel to PCC Sylvania

**MOTION:** Co-chair Bob Stacey moved to advance light rail as the preferred High Capacity Transit (HCT) mode for the Southwest Corridor, based on the staff recommendations.

Mayor John Cook commented that personally he would vote today to advance light rail option as the preferred HCT mode, however there is a citizens vote that would possibly occur in November.

Mr. Neil McFarlane commented that light rail and BRT options were carefully compared. He noted that key justification for the light rail option is that it attracts developers. Mr. McFarlane stressed the importance of working on effective connection to PCC.

Mayor Krisanna Clark thanked the committee and staff for the work on the project. Ms. Clark expressed concern that if the light rail is selected it would not provide service to the Sherwood area but nonetheless its citizens would be financially impacted by it. She echoed Mayor Cook that citizens still would have a say as far as the mode choice, and noted that she would support BRT.

Co-chair Craig Dirksen expressed disappointment that the recommendation was not in support for BRT. However, he noted that BRT has capacity limitations and is not as cost effective as light rail. He stated that BRT would not provide the level of service that light rail can.

Commissioner Roy Rogers expressed support for light rail mode option stating that it is the most viable option. Mr. Rogers urged the committee members to think long term and to make decisions for the future generations.

Co-chair Craig Dirksen commented that adding a HCT line in the Southwest Corridor is not a single solution to transportation issues. He pointed out that it is only a part of the solution and the corridor would need additional transportation improvements.

Bob Stacey commented on the power and importance of each mode alternative when deciding on the mode option. He explained that light rail would have a greater capacity than BRT, whereas BRT serves better as a way to extend, supplement, and inter connect the transit corridors. Mr. Stacey added that ideally all modes will work together to create a better transit system.

**ACTION:** Without further comments, the motion passed with Ms. Krisanna Clark and Mr. Al Reu opposed.

<u>MOTION:</u> Co-chair Bob Stacey moved to remove a light rail tunnel directly serving PCC Sylvania campus from advancement into the Draft Environmental Impact Statement (DEIS) and to continue to explore and refine alternative options for improved transit connections to the Sylvania campus.

Co-chair Stacey expressed regret for not connecting directly to PCC-Sylvania campus via light rail, but stressed the importance of instead being able to connect to Tigard and Tualatin.

**ACTION:** Without further comments, the motion passed unanimously.

## 6.0 Refinements to alignment options in Tigard

Mr. Matt Bihn, Metro staff, gave an overview of the HCT technical modifications in Tigard Triangle alignments and branch service. The proposed modifications included:

- Tigard Triangle replace 68<sup>th</sup>/70<sup>th</sup> couplet with 70<sup>th</sup> two-way alignment option
- Modify branch service concept to branch in the Tigard Triangle instead of in downtown Tigard

Mr. Bihn continued presentation by going over the next steps, which included:

- May 13 Release of staff recommendation for June decision
  - o Adopt 70<sup>th</sup> Ave two-way and new Tigard branch service alignment
  - o Remove 68<sup>th</sup>/70<sup>th</sup> couplet
- June 13 Steering Committee meeting
  - Consideration of staff recommendations

### 7.0 Update on Shared Investment Strategy projects

Mr. Chris Ford, Metro staff, gave an update on Shared Investment Strategy (SIS) projects. He reminded the committee that SIS projects focus on bicycle, pedestrian and roadway projects that can improve safety and access throughout Southwest Corridor communities. The priority project characteristics included:

- Leverage and support HCT line
- Highly support community land use vision
- Important to meet freight and capacity needs in employment and industrial districts
- Improve pedestrian connectivity, provide safe crossings or create high-demand bike connections

Mr. Ford concluded that, after the public scoping, the next step would be to determine which projects to study in the Draft Environmental Impact Statement (DEIS).

### 8.0 Proposed update to project Purpose & Need

Mr. Chris Ford, Metro staff, gave a brief overview of proposed updates to project Purpose and Need. He explained that the Federal Transit Administration (FTA) has recommended updating the Purpose & Need to more clearly define the project in light of decisions made during the Refinement Phase. Highlights of updates proposed by staff included:

- Improved clarity about what, where and how
- Specific mention of downtown Tigard
- Enhanced definition of multimodal project types to be included
- Added emphasis on access to educational opportunities
- Added need about meeting local and regional goals around land use and development
- Removal of Lake Oswego and Multnomah County from project partners

Mr. Ford concluded his presentation by going over the next steps of the proposed Purpose and Need update process.

Co-chair Dirksen commented on the perception that transit projects compete against the road projects for funding. He clarified that funding for the projects is separate and designated for either transit improvements or for road improvements. Therefore, if the committee chooses not to proceed with a transit projects, the funds would be used elsewhere and they cannot be used for the road projects instead.

Commissioner Steve Novick commented on the SIS projects update presentation. He supported Mr. Ford's statement that SIS projects can still be considered and pursued even if they are not studied in the DEIS or funded by the FTA.

# 9.0 Adjourn

There being no further business, Co-chair Craig Dirksen adjourned the meeting at 11:14 am.

### Attachments to the Record:

|      |          | Document |   |                 |
|------|----------|----------|---|-----------------|
| Item | Туре     | Date     | Description                                       | Document Number |
| 1    | Agenda   | 05/09/16 | Meeting agenda                                    | 050916SWCSC-01  |
| 2    | Summary  | 04/11/16 | 04/11/16 meeting summary                          | 050916SWCSC-02  |
| 3    | Document | 04/14/16 | HCT alignment technical modifications: New Tigard | 050916SWCSC-03  |
|      |          |          | Triangle and branch service alignment options     |                 |
| 4    | Memo     | 05/02/16 | HCT Purpose & Need memo                           | 050916SWCSC-04  |
| 5    | Document | 05/02/16 | HCT Purpose & Need proposed updates               | 050916SWCSC-05  |
| 6    | Мар      | 05/09/16 | Southwest LRT Corridor – Concept "A"              | 050916SWCSC-06  |
| 7    | Document | 05/09/16 | New Columbia River Bridge & Multi-Network         | 050916SWCSC-07  |
|      |          |          | Transportation Plan                               |                 |
| 8    | Letter   | 05/06/16 | SW Neighborhoods letter to SWC Steering           | 050916SWCSC-08  |
|      |          |          | Committee   |                 |
| 9    | Document | 05/09/16 | Do We Really Want To Do This: Some SWC            | 050916SWCSC-09  |
|      |          |          | Concerns and Discrepancies                        |                 |



# October 2014 - May 2016 Public Engagement Summary

In fall 2014 Southwest Corridor project partners defined an 18-month workplan to refine the proposed set of high capacity transit (HCT) alignments and roadway, bicycle and pedestrian projects that would enter federal environmental review in the fall of 2016. Another major milestone of this refinement period was to determine if light rail or bus rapid transit would be the preferred mode. The purpose of this public engagement summary is to document the activities and outcomes of Southwest Corridor Plan outreach from October 2014 through May 2016. This work builds on public engagement activities conducted from the beginning of the Southwest Corridor Plan process.

| Overview  |  |  |  |
|---|--|--|--|
| Key place-based themes 2  |  |  |  |
| Tabling events  |  |  |  |
| Key themes on steering committee decisions 4  |  |  |  |
| Online map tool 6   |  |  |  |
| Transit rider intercept survey 6  |  |  |  |
| Who did we hear from?   |  |  |  |
| Engagement methods and activities 8   |  |  |  |
| Appendices (online version) 10  |  |  |  |
| Metro News stories 10   |  |  |  |
| Earned media coverage 18  |  |  |  |
| Public input summaries July 2015, October-July 2015, October 2015, December 2015, February 2016, May 2016 |  |  |  |
| Survey data 41  |  |  |  |
| Public comment letters and public testimony   |  |  |  |



# **Creating a Preferred Package**

Six years ago, regional leaders began envisioning a set of transportation and land use solutions to address key challenges and enhance livability in the Southwest Corridor. The Southwest Corridor Plan is a package of transit, roadway, bicycle and pedestrian solutions that can help reduce congestion, improve circulation and improve quality of life in the corridor. The Southwest Corridor Plan defines transportation investments to help realize the local land use visions adopted by each community in the area. Community members, business leaders, transit providers, the state and local governments are working together now to plan for these transportation and community development improvements in this corridor.

### **CONNECT**

www.swcorridorplan.org

@SWCorridor

swcorridorplan@oregonmetro.gov

503-797-1756

#### **Overall themes**

Throughout the refinement period staff repeatedly asked the public what they felt were the most important outcomes that the Southwest Corridor Plan should deliver. In multiple online and in-person settings, key desired benefits rose to the top:

- Delivers fast, reliable transit travel times
- Attracts a significant number of new transit riders
- Increases access to employment and education centers in the corridor
- Results in fewer cars on the road
- Includes walking and biking improvements to transit stations and throughout local communities.

Much of our outreach was place-based, asking residents to tell us what they valued about their neighborhoods, what they wanted to preserve and how they hoped high capacity transit could bring benefit. While each community has unique history and perspective, here are some key themes that emerged from our conversations:

- Desire for less congestion on the roads
- Concern that HCT may take away driving lanes
- Provide fast, reliable transit service with adequate park and rides
- Improve local bus service



- Safety concerns for people who take transit, walk and ride bikes
- Residents want to maintain the local character of neighborhoods and businesses
- Provide benefit to neighborhoods, don't just pass through on the way to someplace else
- Avoid or mitigate negative impacts to local traffic and business access
- High capacity transit should link parts of the community together, not be a wall that divides the community
- Improved sidewalks and bike lanes are important to local livability and safety
- Interest in how transportation investment can serve other communities not immediately on the HCT alignment, including Lake Oswego, Kruse Way, Wilsonville, King City.

# **Public Engagement Objectives**

- Provide relevant information to the public about upcoming project deliberations
- Generate public feedback and ideas and ensure that feedback is presented to decision makers
- Communicate with stakeholders in a way that generates understanding and enthusiasm for the project
- Build on existing relationships with engaged members of the public and build new relationships with public whose perspectives have been underrepresented to date
- Demonstrate that decision makers are receiving and considering community input when deliberating decisions

# **Public Engagement Desired Outcomes**

- Input on key issues and trade-offs specific to each key community in the corridor
- Summary of stakeholder perspectives on HCT alignment choices
- Input on desired benefits that Southwest Corridor Plan investments can bring to communities in the region
- Elevated voices of champions for the project
- Public stakeholders feel they have access to project details, technical staff and decision makers
- Decision-makers understand and consider public input in their decision making

# **Tabling events**

Throughout the year project staff attends a number of tabling events at communities, local colleges and business centers, especially in the summer months when we can connect with residents at the area's farmers markets and community celebrations.

These events are a great opportunity to meet people who may not be familiar with the project and to ask people what benefits they want to see a Southwest Corridor project deliver to their community. Here's what we heard at our tabling events:

- Improve safety and quality of streets in my neighborhood
- Reduce negative impacts of climate change, improve air quality
- Provide more options for me to get where I need to go
- Reduce traffic congestion
- I want to spend less time in traffic, more time with family and friends
- Increase access to jobs and education in the region
- Provide transportation options for the young, elderly and people with disabilities
- Provide reliable travel times.

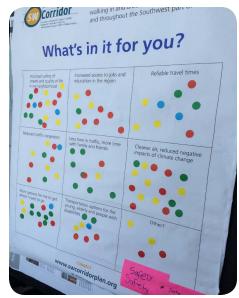
- National College of Natural Medicine, November 2014
- PCC Sylvania Earth Day, April 2015
- Tualatin Movies on the Commons, May 2015
- OHSU Farmers Market, June 2015
- Tualatin Farmers Market, July 2015
- Sherwood, OR Robinhood Festival, July 2015
- Tigard Farmers Market, September 2015
- Orange MAX line opening day, September 2015
- PCC Sylvania Student Welcome Day, September 2015
- PCC Sylvania Staff In-service Day, September 2015
- Well and Good Coffee House, Tigard June 2016











# Key themes on major steering committee decisions

Each major decision by the steering committee is informed by a public comment period that includes public forums or open house, online survyes and solicitation of public testimony regarding the upcoming decision. The following is a summary of input received for major steering committee decisions July 2015-May 2016. Summaries of each outeach period and the input we received have been previously published in multiple documents available on our website, and collected into the online appendix of this document.



July 2015 steering committee decisions

Should the Marquam Hill-Hillsdale light rail tunnel continue to be part of the project?

Should the Hillsdale loop cut-and-cover tunnel for bus rapid transit and light rail continue to be part of the project?

When asked via online surveys, an open house and other community dialogues which factors were most important for decision makers to consider, respondents highlighted:

- High construction cost: input was divided among those who felt tunnel cost was too high and others who felt the cost was worth the benefit
- Desire for high ridership
- Desire for fast travel times
- Desire for direct connection to Marquam Hill

- Need to include walk and bike improvements to Capitol Highway and Barbur Boulevard
- Neighborhood construction impacts: input was divided among those with strong concern over neighborhood construction impacts and others who felt this should not be a major factor in decision making.



# January 2016 steering committee decisions

Should the Ash Avenue, Branch Service, Clinton Crossing, Commercial Loop and Downtown Loop alignment options in Tigard continue to be part of the project?

Should the downtown Tualatin terminus be removed from consideration?

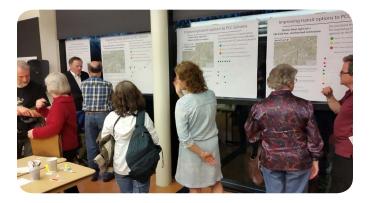
When asked via online surveys and the online map tool which factors were important to consider when selecting Tigard alignments for further study, respondents highlighted:

- Faster travel times
- Better connected streets, bicycle and pedestrian facilities between downtown Tigard and Tualatin.

When asked which factors were most important for decision makers to consider when deciding where a future high capacity transit line should end (called the terminus), respondents highlighted:

- Ease of access by bikes and pedestrians
- Effect on travel times
- Potential for extending line in the future
- Effect on ridership.

People also highlighted additional issues including concern for removing auto lanes for transit capacity, concerns about potential property impacts, support for viable alternatives to driving to reduce congestion and questions about how a high capacity transit line will interact with WES.



# May 2016 steering committee decisions

What is the preferred mode-bus rapid transit or light rail-for the Southwest Corridor?

Should a light rail tunnel directly serving the PCC Sylvania campus be advanced into the Draft Environmental Impact Statement?

When asked via an online survey, open house and other community dialogues about the choice between light rail and bus rapid transit, respondents echoed the desire for overall project benefits including fast, reliable travel times, high ridership and access to key places. Other important factors regarding the mode decision included:



- Capacity to serve future rush hour demand
- Capacity to extend the line in the future
- Lower ongoing cost to operate per rider
- Flexibility under road blockages and extreme weather.

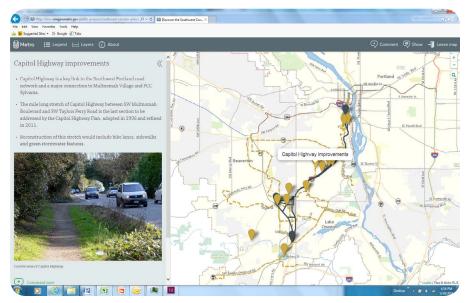
The public had a diverse set of opinions regarding the benefits and trade offs of a light rail tunnel to serve the PCC Sylvania campus. Overall themes from online surveys, open houses and community dialogues include:

- Finding ways to improve transit service to campus is very important
- Many felt the high cost of tunnels exceeded their benefit; others felt the cost was worth the long term benefit to the region
- Some residents felt strongly that negative construction impacts to neighbors should be a major factor in deciding to build a tunnel
- Improving connections to the campus from communities in Washington County is important.



# **Southwest Corridor map tool**

In 2015 the project team launched an online map tool where users can click on various points thoughout the corridor to learn more and provide feedback. Thousands of people have visited the map and shared input through survey questions and open ended comment boxes throughout the map. In spring 2015 the map tool provided information on HCT alignment options and gathered feedback on HCT tunnels being considered. In fall 2015 staff updated the map to focus information and



survey questions on HCT alignments in the Tigard and Tualatin areas and possible HCT terminus locations. In spring 2016 staff updated the map again to highlight a variety of bicycle, pedestrian and roadway projects that are crucial components of the Southwest Corridor Plan.

We want to continue to better understand how our online map tool can be a useful resource for project stakeholders and an opportunity to provide feedback. Please let us know what you think and how we can continue to improve the map tool.

# **Transit rider intercept surveys**

In Spring 2016, Metro public involvement staff worked with the Bicycle Transportation Alliance and TriMet to design a transit rider intercept survey that assessed the following:

- Current ridership habits including how frequently riders use transit and how they access their current transit stop
- Desired safety/access improvements at existing Southwest Corridor-area transit stops
- High-priority destinations in the Southwest Corridor
- Riders' feelings on potential negative impacts of a new light rail line.



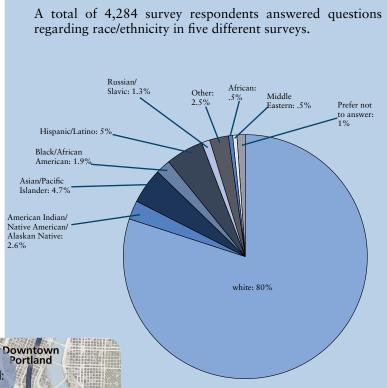
A total of 134 rider surveys were completed at four different transit stations in the Southwest Corridor during late afternoons in April 2016. Of the 134 respondents:

83% frequently ride transit ("Most Days")

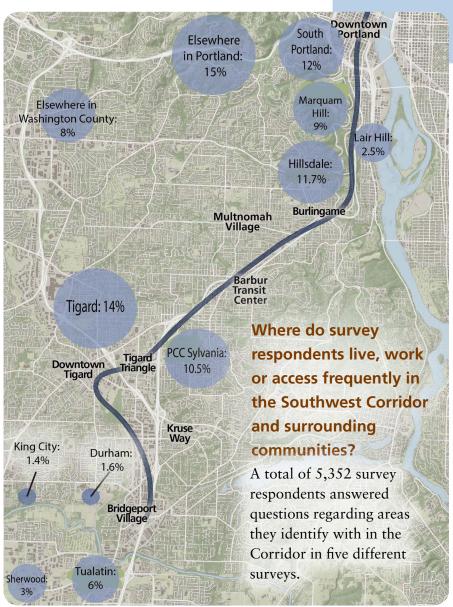
- 75% walk to their bus stop
- 49% did not identify any needed improvements to access their stop, while 27% said complete sidewalks were needed to access their stop
- 31% identified downtown Portland as a priority destination, 28% identified PCC Sylvania, 21% identified the Tigard Triangle and 18% identified Bridgeport Village
- 35% had no concerns about negative impacts, 28% chose air quality as a priority impact to address, 21% chose impacts to homes and 19% chose interference with auto traffic.

#### Who did we hear from?

Project online surveys include a set of optional demographic questions. Asking respondents for their age, income, race/ ethnicity, gender, and areas where they live and work in the corridor helps us improve our outreach and strive for full participation by potentially affected communities in the transportation decision-making process. The charts on this page combine demographic data from multiple surveys. We realize that some of the same people responded to multiple surveys and there may be duplicate representation. Our intent in providing these charts is to provide a general sense of who is responding to project surveys.



**Racial/Ethnic Demographics** 



# Age Demographics

A total of 3,460 survey respondents answered questions regarding age in five different surveys.

- 4% of respondents, 20 or younger 8% of respondents, 20-24
  - 18% of respondents, 25-34
  - 32% of respondents, 35-50

- 25% of respondents, 51-65
- 12% of respondents, 66 or older

### **Tools/Methods**

# My Place Dialogues and Community Conversations

Meetings with formal and informal civic, business, resident and youth groups to connect with the public in key places in the corridor. These events focus on geographic, social and cultural issues to elevate the unique local benefits and impacts of the project and also set each community's choices in the context of corridor-wide project performance and decision-making.



## What we did/Who we met with

- National College of Natural Medicine
- South Portland Neighborhood Association
- Hillsdale Neighborhood Association
- Far Southwest Neighborhood Association
- Homestead Neighborhood Association
- Markham Neighborhood Association
- Southwest Neighborhoods, Inc. Transportation Subcommittee
- Hillsdale residents
- Concerned Citizens for Social Justice
- Drinking Liberally in Tigard
- Portland Business Alliance
- Tigard Downtown Alliance
- Tigard Transportation Advisory Committee
- Westside Economic Alliance
- Washington County Coordinating Committee
- Tigard City Center Advisory Committee
- Tualatin Youth Advisory Council
- Tigard Youth Advisory Council
- Supa Fresh Farm, Youth Source
- Oregon Somali Family Education Center
- Greenburg Oaks residents, Community Partners for Affordable Housing
- Somali American Council of Oregon
- Lair Hill residents and business owners
- 1000 Friends of Oregon
- Coalition for a Livable Future
- Center for Intercultural Organizing

# Online information and surveys

Online surveys to generate specific feedback to staff and decision-makers on project decisions. Up-to-date web site that provides access to project materials, upcoming events and summaries of steering committee decisions. See appendix for online survey data.

- Online survey, May 8-22, 2015
- Online survey, June 12-26, 2015
- Online survey, September 15-October 5, 2015
- Online survey, October 19-November 9, 2015
- Online survey, December 4-31, 2015
- Online survey, January 4-February 15, 2016
- Online survey, April 18-28, 2016
- Monthly updates to web site design and content

## **Tools/Methods**

# **Corridor-wide planning forums**

Structured events geared at large numbers of public stakeholders, opportunities to provide in-depth project detail and generate feedback.

## Open houses and tabling events

Semi-structured opportunities for interested people to drop by to talk and ask questions of staff and decision makers.



# **ID Southwest**

Appointed committee of community leaders who can activate local dialogue that shapes transportation and land use investment in the corridor, and can make the most of public-private partnerships.

#### **Focused discussions**

Public meetings with a specific focus on technical or special interest topics.

#### What we did/Who we met with

- May 12, 2015, Wilson High School
- October 19, 2015 Tigard Public Works Building
- April 6, 2016, Southwest Community Center
- Southwest Corridor Plan Open House, June 2015
- National College of Natural Medicine, November 2014
- PCC Sylvania Earth Day, April 2015
- Tualatin Movies on the Commons, May 2015
- OHSU Farmers Market, June 2015
- Tualatin Farmers Market, July 2015
- Sherwood, OR Robinhood Festival, July 2015
- Tigard Farmers Market, September 2015
- Orange MAX line opening day, September 2015
- PCC Sylvania Student Welcome Day, September 2015
- PCC Sylvania Staff In-service Day, September 2015
- Well and Good Coffee House, Tigard, June 2016
- ID Southwest Meetings, May 2015, October 2015, March 2016
- Membership in ID Southwest is representative of communities and expertise throughout the study area.
- Technical Workshops: Southwest Neighborhoods Inc., April 2015, May 2016
- Marquam Hill Design Connection: Ahavath Achim synagogue, Friends of Terwilliger, OHSU, Veterans Hospital, Southwest Neighborhoods Inc.





600 NE Grand Ave. Portland, OR 97232-2736 503-797-1700 503-797-1804 TDD 503-797-1797 fax



Date: Friday, May 13, 2016

To: SW Corridor Plan Steering Committee

From: Matt Bihn, Metro

Subject: PTL recommendation regarding Tigard technical modifications

#### Recommendation

The Southwest Corridor Plan Project Team Leaders group (PTL) recommends the following:

- Replace the 68th/70th Couplet in the Tigard Triangle with the 70th Avenue two-way design option;
- Modify the branch service option to move the branching location from a Hunziker/Wall station west OR-217 to the Tigard Triangle, including the addition of a new LRT segment that crosses OR-217.

The recommendations are based on the analysis described in <u>High capacity transit alignment</u> <u>technical modifications</u>: <u>New Tigard Triangle and branch service alignment options</u>, released on April 14, 2016 and available on Metro's website.

# Replace the 68th/70th Couplet with the 70th Avenue two-way design option

Staff recommends replacing the 68th/70th Couplet with the 70th Avenue two-way alignment because the latter option increases roadway capacity, results in fewer traffic impacts than the couplet and costs an estimated \$30M less to construct. Further, it better supports the Tigard Triangle Strategic Plan's goal of a more connected street network in the Triangle.

This recommendation removes the 68th/70th Couplet from further consideration.

# Replace the existing branch service option that splits at Wall Street with a new branch service options that splits in the Tigard Triangle

Staff recommends shifting the point at which a branch alignment option would separate into routes to downtown Tigard and to Bridgeport Village. The separation point would move from the Hunziker/Wall Station near downtown Tigard to the Tigard Triangle (see figures 1 and 2). This modification results in a more direct route to Bridgeport and saves three- to four minutes of travel time.

This proposed modification introduces a new LRT segment as part of the branch to Bridgeport. The new segment would cross OR-217 connecting the LRT alignment from the branch point in the Tigard Triangle to the adjacent to I-5 LRT alignment south of the Triangle. The downtown Tigard branch could utilize the Clinton or Ash Avenue alignment or travel via Wall Street and adjacent to the WES rail.

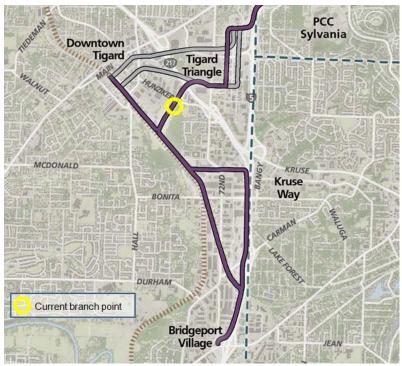


Figure 1: Current branch service option



Figure 2: Proposed branch service option

# **Next steps**

The Steering Committee will consider action on this staff recommendation at its June 13, 2016 meeting.

# Draft Proposed Range of Alternatives for Environmental Review

Southwest Corridor High Capacity Transit Package

Released May 13, 2016

Updated June 6, 2016 – see Errata, p. 12

# **CONNECT**

www.swcorridorplan.org

swcorridorplan@oregonmetro.gov



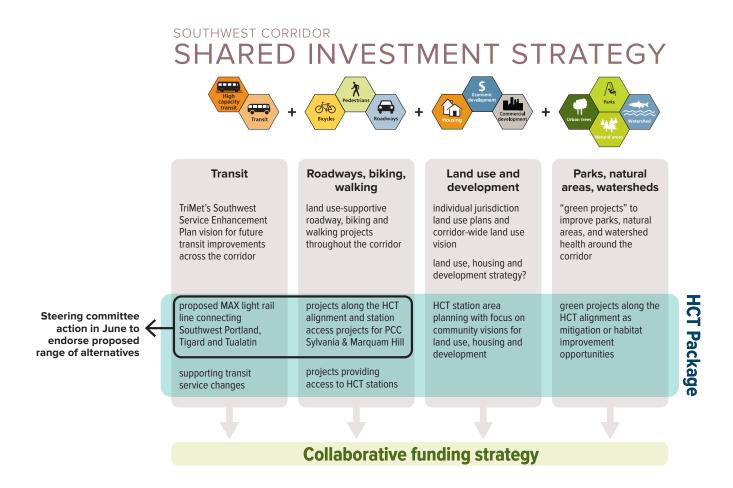
503-797-1756



# **Overview**

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

A new high capacity transit (HCT) line is a critical component of the broader Shared Investment Strategy. The HCT line acts as the spine of the improvements envisioned for the corridor and its design inherently includes roadway connectivity improvements, stormwater and streetscape improvements, and bikeways, sidewalks, and safe crossings along and to the HCT line. The HCT Package includes both the HCT line itself and these associated roadway, bike, pedestrian and "green" projects. Shared Investment Strategy projects not included in the HCT Package remain part of the overall Southwest Corridor Plan, but require a separate collaborative funding strategy.



# **Environmental review phase**

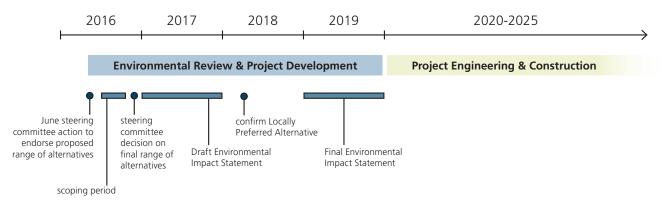
Based on technical analysis and public engagement, the steering committee identified light rail transit (LRT) as the preferred HCT mode for the Southwest Corridor in May 2016. The next phase of the planning process for a Southwest Corridor LRT line is a detailed review of anticipated environmental impacts and mitigation strategies under the National Environmental Policy Act (NEPA). An in-depth Environmental Impact Statement (EIS) will analyze the potential impacts of a range of reasonable alternatives and identify any necessary mitigation strategies. The EIS will analyze both the LRT line and the other projects contained in the HCT Package.

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

After scoping period, a final range of alternatives to study is identified, including consideration of any new alternatives suggested during scoping. A Draft Environmental Impact Statement (DEIS) is then completed to assess the impacts of these alternatives and help inform the selection of a Locally Preferred Alternative (LPA). The DEIS is circulated for public and agency comment.

After the DEIS and the LPA selection, a Final Environmental Impact Statement (FEIS) is completed. The FEIS includes responses to all comments on the DEIS and commitments to mitigate adverse impacts of the project.

This graphic illustrates the environmental review phase for the Southwest Corridor LRT line:



# Purpose and use of this document

This document defines the initial set of investments proposed for environmental review, including the high capacity transit mode, alignments and terminus, as well as associated roadway, bicycle, and pedestrian projects along the HCT alignment or providing critical access to PCC Sylvania and Marquam Hill. The Southwest Corridor Steering Committee is scheduled to consider endorsing this proposed range of alternatives at their June 2016 meeting.

During the scoping period, currently scheduled for August and September 2016, additional station access projects will be analyzed and considered for inclusion in the DEIS. In late 2016, the steering committee will consider this analysis and the comments received during the scoping period to decide on the final range of alternatives to study in the DEIS.

# **Proposed range of alternatives**

# Light rail alignment options and preliminary station locations

The proposed high capacity transit investment for the Southwest Corridor is a new 11- to 12-mile MAX line connecting Portland, Tigard and Tualatin with fast, reliable transit service. The line would include stations serving many destinations, including South Portland, Marquam Hill, Burlingame, the Barbur Transit Center, PCC Sylvania, Tigard Triangle, downtown Tigard and Bridgeport Village. These preliminary station areas and the remaining alignment options are described below, from north to south by general geographic area.

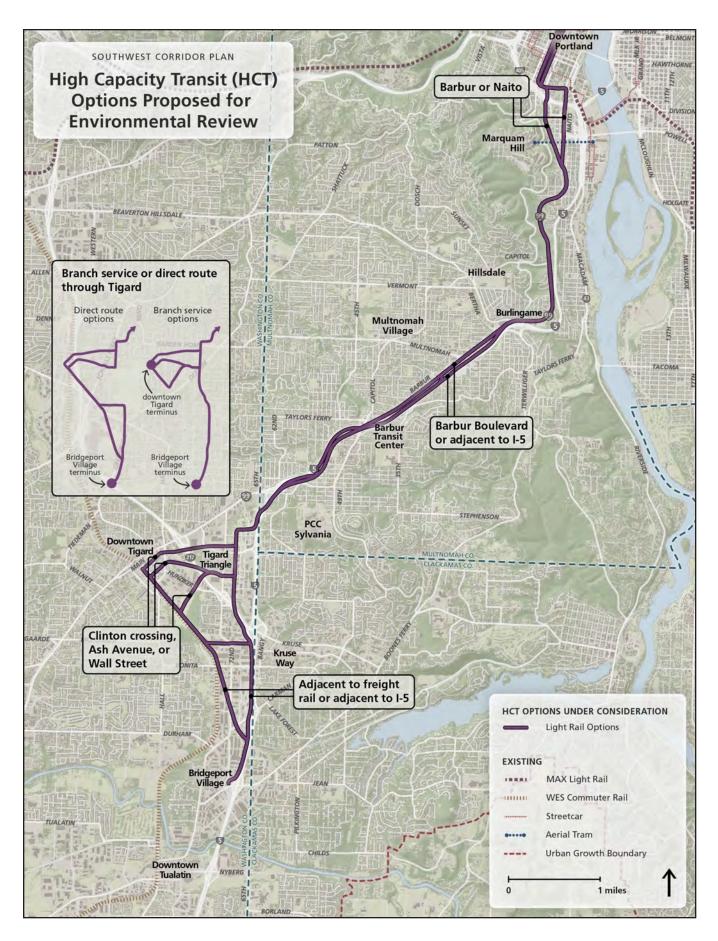
The alignments proposed in this document reflect changes proposed in a staff recommendation released in May 2016. Staff recommends replacing the 68th/70th Avenue couplet with a 70th two-way option in the Tigard Triangle and replacing the branch service option that splits at Hunziker Street with a branch option that splits in the Triangle. At their June 2016 meeting, the steering committee will act on this recommendation prior to considering the proposed range of alternatives.

# **South Portland**

The light rail line would extend south from the existing Green/Yellow/Orange Line MAX tracks that run through the downtown Portland Transit Mall. Two alignment options remain in the South Portland area: Barbur Boulevard or Naito Parkway. With the Barbur option, the Southwest Corridor light rail line would cross over I-405 on a new structure parallel to the 4th Avenue bridge, then run in the center of Barbur Boulevard south of Caruthers Street. With the Naito option, the light rail line would follow the Yellow/Orange Line tracks to the existing station on Lincoln Street, then turn south at Naito Parkway to cross over I-5 and continue south to Barbur on Naito.

Both alignments would include a station near Gibbs Street to serve both Marquam Hill and the Lair Hill area, including the Oregon Health & Science University (OHSU), the Veterans Affairs (VA) Medical Center and the National College of Natural Medicine (NCNM). Either alignment would include a new mechanized connection between Barbur Boulevard and Marquam Hill (included in the roadway, bicycle and pedestrian projects on page 10). A station near Gibbs Street would also serve the South Waterfront via the Hooley Pedestrian Bridge, which is located three blocks east of Naito and five blocks from Barbur.

South of the point where Barbur and Naito converge, the line would continue in the center of Barbur, with a second South Portland station located near Hamilton Street.



#### Southwest Portland

South of Hamilton, the light rail line would continue in Barbur Boulevard to 13th Avenue. No stations have been identified for "The Woods" section of the alignment, which has relatively little development and is largely bordered by parks. Construction of the light rail alignment through this area would require reconstruction of the Vermont and Newbury viaducts, which would be widened to accommodate transit as well as bike lanes and sidewalks.

Between 13th Avenue and the Portland-Tigard city limits near 60th Avenue, the light rail line could run in the center of Barbur Boulevard. The line could also start on Barbur and switch to run adjacent to I-5 at 13th Avenue, 26th Avenue or near the Barbur Transit Center. The line could then switch back over to Barbur near the Barbur Transit Center or continue adjacent to I-5 to 60th Avenue.

Several station locations are proposed through the Southwest Portland area along the Barbur/I-5 corridor, with a few variations:

- Both the adjacent to I-5 and the Barbur alignment would include a station near 13th Avenue to serve the area around the Burlingame Fred Meyer.
- The Barbur alignment would include a station at Capitol Hill Road and 19th Avenue to serve the area around Safeway. Because of the existing bridges and I-5 ramps, the adjacent to I-5 alignment would not be able to serve a station at 19th. Instead, a station at 22nd Avenue and Spring Garden Street would be served with the adjacent to I-5 alignment.
- Either alignment could include a station near 26th Avenue, which has an existing underpass under I-5 to connect to the adjacent neighborhood. For the Barbur alignment, a station in this general area could also be located at 30th Avenue instead of 26th.
- Both alignments would include stations at the Barbur Transit Center, which could include additional park-and-ride capacity. The Barbur Transit Center would provide transfer opportunities to bus lines and walk access to the surrounding West Portland town center.
- Both alignments would include a station and a new park-and-ride lot at 53rd Avenue. This station would also include improvements to 53rd Avenue between Barbur and the PCC Sylvania campus to provide a safer and more accessible walk/bike connection to the campus.

Near the Portland-Tigard city limits, just west of where Barbur crosses over I-5 and turns into Pacific Highway, the light rail line would turn south to cross over I-5 and into the Tigard Triangle on a new structure.

# **Tigard and Tualatin**

After crossing over I-5 from Southwest Portland into the Tigard Triangle, the light rail alignment would run along the west side of I-5 and then merge into the center of Atlanta Street.

Through Tigard, there are two general service scenarios: a direct route through downtown Tigard continuing to Bridgeport Village or a branched route with a split in the Tigard Triangle, where every other train would either continue south to Bridgeport Village or turn west to serve downtown Tigard.

For the direct route scenario, there are two options for traveling through the Triangle and downtown Tigard.

- With the Ash Avenue option, the light rail line would run on 70th Avenue to Beveland Street, including construction of new segments of 70th Avenue that do not exist today. From 70th, the line would run on Beveland Street and a new structure over Highway 217 extending from Beveland to Hall Boulevard near Knoll Drive, then connect to Ash Avenue. The Ash Avenue option would include light rail stations near Baylor Street in the northern Tigard Triangle, on Beveland Street in the southern Tigard Triangle and on Ash Street to serve downtown Tigard and the Tigard Transit Center.
- With the Clinton crossing option, the light rail line would turn south onto 69th Avenue then cut west near Clinton Street on a long structure extending from 70th over Dartmouth Street and Highway 217. The alignment would cross Hall Boulevard at grade just south of OR-99W (Pacific Highway), and run on a new street segment connecting Scoffins Street and Commercial Street near the Tigard Transit Center. The Clinton option would include a station near Baylor street in the northern Tigard Triangle and on the new street between Scoffins and Commercial to serve downtown Tigard and the Tigard Transit Center.

South of downtown Tigard, both direct route options would run adjacent to the WES commuter rail tracks toward Bridgeport Village. South of Tech Center Drive, light rail could either continue adjacent to freight rail tracks or run east between industrial buildings and then adjacent to I-5 south to Bridgeport Village. Both alignment options would include stations near Bonita Road, Upper Boones Ferry Road and Bridgeport Village.

For the branched service scenario, the downtown Tigard leg of the branch could run on the Clinton crossing option, the Ash Avenue option or on a Wall Street alignment. Similar to the Ash Avenue alignment, the Wall option would run along 70th Avenue and Beveland Street in the Triangle with stations near Baylor Street and Beveland Street. The Wall alignment would cross over Highway 217 on a new structure extending from Beveland Street to Hunziker Street, then continue on Wall Street and run parallel to the WES tracks into downtown Tigard with a station at the Tigard Transit Center. The Bridgeport Village leg of the branch would continue south on 70th Avenue and cross over Highway 217 on a new structure, then run adjacent to I-5 to Bridgeport Village. The Bridgeport Village branch would include stations near Baylor Street, Beveland Street, Bonita Road, Upper Boones Ferry Road and Bridgeport Village.

# Roadway, bicycle and pedestrian projects

The process of identifying which roadway, bicycle and pedestrian projects are studied in the DEIS along with light rail will continue into the scoping period. Project partners have already identified several such projects, included in the blue "bucket 1" below.

# Bucket 1: Proposed for environmental review

Walking and biking improvements along the light rail alignments

Critical station access projects serving Marquam Hill and PCC Sylvania

Priority roadway connectivity projects that could be constructed with the light rail line

# Bucket 2: Based on analysis and input during scoping, sort projects into buckets 1 and 3

Projects providing walk or bike access to light rail stations

Additional roadway connectivity projects that could be constructed with the light rail line

# Bucket 3: Pursue separately from HCT project

Projects not providing access to stations or along light rail alignments

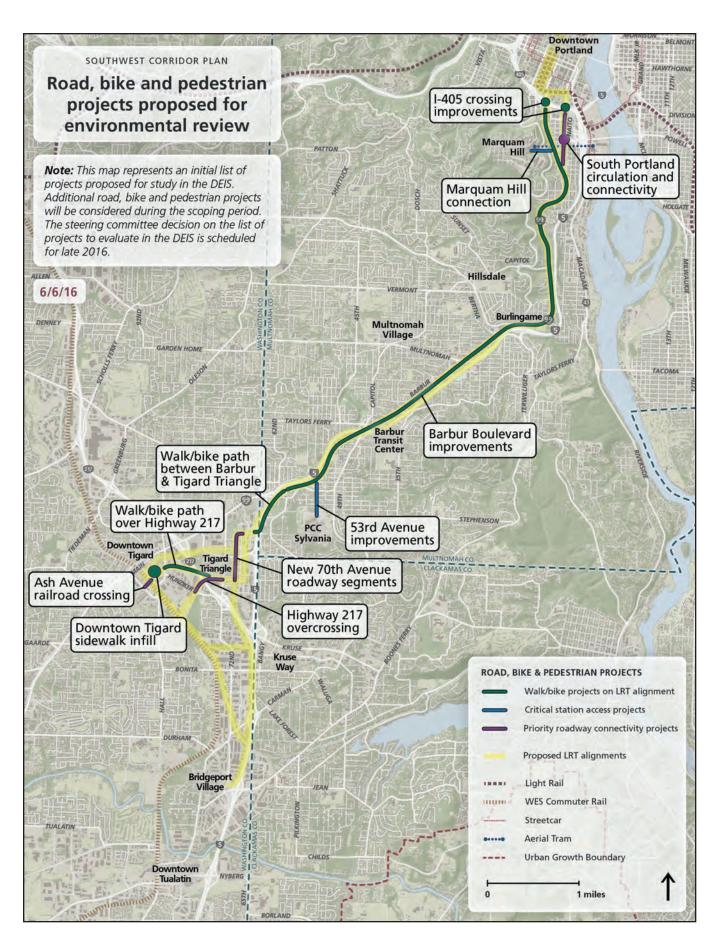
Projects moving forward in the near term with other funding sources

Bicycle and pedestrian improvements along the light rail alignments and critical station access projects are integral to the light rail line and are already incorporated into the transit design. The major roadway connectivity projects are key priorities of the partner jurisdictions and include improvements for autos, bikes and pedestrians. Because these projects fall along the proposed light rail alignments and some may be eligible for federal New Starts funds, they could be constructed together with the transit project and merit joint environmental analysis.

While some of the projects proposed for environmental review were included in the 2013 Shared Investment Strategy (SIS) list of roadway and active transportation projects, others have emerged as opportunities during the design process. In the project descriptions on page 10, related SIS project ID numbers are listed where applicable. See the appendix for a full list of SIS roadway, bike and pedestrian projects organized into the three"buckets."

Prior to the scoping period, currently scheduled for August to September 2016, project staff will prepare a preliminary analysis of the "bucket 2" projects to inform public input solicited during scoping. Additional station access projects suggested by project partners will undergo this same analysis. Projects proposed during scoping will also be considered for inclusion in the DEIS. Staff analysis and public input will inform the steering committee decision on which projects to include in the final range of alternatives to study in the DEIS.

Shared Investment Strategy projects not recommended to be included in the DEIS <u>will continue to be included</u> in the broader Southwest Corridor Plan, but will be pursued separately from the light rail project.



# Walking and biking improvements along the proposed light rail alignments

- *I-405 crossing improvements:* Improve opportunities for bicycles and pedestrians to cross over/under I-405. (SIS project ID: 6022)
- *Walk/bike improvements on Barbur Boulevard:* Add new and upgrade existing sidewalks, bike lanes and safe crossings on Barbur Boulevard from 3rd Avenue to 60th Avenue, including reconstruction of Vermont and Newbury viaducts. (SIS project IDs: 3044, 4002, 5005, 6003, 6004, 6005)
- Walk/bike path between Barbur Boulevard and the Tigard Triangle: Build new multi-use path connecting Barbur Boulevard near 60th Avenue to the northern Tigard Triangle area.
- Walk/bike path over Highway 217: Include new multi-use path on the light rail structure over Highway 217, between Hall Boulevard and either Clinton Street or Beveland Street.
- *Downtown Tigard sidewalk infill:* Build sidewalks, where there are none, along the light rail alignment in downtown Tigard. (SIS project ID: 2080)

# Critical station access projects serving Marquam Hill and PCC Sylvania

- *Marquam Hill connection:* Construct a new pedestrian connection between Marquam Hill and Barbur Boulevard to access a light rail station on Barbur Boulevard or Naito Parkway near Gibbs Street. (SIS project ID: 2999)
- 53rd Avenue improvements: Reconfigure and improve intersection of Barbur Boulevard, 53rd Avenue and Pomona Street to manage traffic turning speeds and improve safety of pedestrians and bicyclists. Build neighborhood greenway connection on 53rd Avenue between Barbur and PCC Sylvania. Potential designs include updated sidewalks, bike lanes, pervious pavement, landscaping and ramp connection to campus. (SIS project IDs: 5057, 6013)

# Major roadway connectivity projects that could be constructed with the light rail line

- South Portland circulation and connectivity: Reconfigure ramp access to the west end of the Ross Island Bridge. Reconnect streets and pedestrian/bike facilities across Naito Parkway. (SIS project IDs: 1044, 5013)
- *New 70th Avenue roadway segments:* Construct new segments of 70th Avenue to improve connectivity in the Tigard Triangle street grid, including one auto lane each direction and sidewalks.
- *Highway 217 overcrossing:* Build new connection of Beveland Street to Hunziker Street over Highway 217 for cars, bikes and pedestrians. (SIS project ID: 1107)
- *Ash Avenue railroad crossing:* Extend Ash Avenue at-grade across the railroad tracks between Commercial Street and Burnham Street, including sidewalks. (SIS project ID: 1077)

# **Next steps**

At their June 2016 meeting, the steering committee will be asked to consider endorsement of the proposed range of alternatives. Subsequently, project staff will release a final proposed range of alternatives taking into account any steering committee changes and the outcome of anticipated decisions on technical modifications to light rail alignments in Tigard.

During the DEIS public scoping process, currently scheduled for August and September 2016, the final proposed range of alternatives will be available on the project website (<a href="www.swcorridorplan.org">www.swcorridorplan.org</a>) and provided at public scoping meetings. In addition, project staff will provide information on the roadway, bike and pedestrian projects considered for inclusion in the DEIS ("bucket 2" projects and other station access projects proposed by project partners). The public will be invited to submit comments on the proposed range of alternatives, including suggestions on which roadway, bike and pedestrian projects to study, other reasonable alternatives that meet the project's Purpose and Need, and impacts to be evaluated in the DEIS. After the public scoping period, the steering committee will decide on the range of alternatives to be evaluated in the DEIS.

### **Errata**

This document has been updated to correct minor errors in the original version and provide current information about the status of sorting the Shared Investment Strategy roadway, bike and pedestrian projects.

The following two walk/bike paths were incorrectly listed as "bucket 1" projects included in the draft proposed range of alternatives for environmental review:

- Walk/bike path west of Highway 217: Add new multi-use path along the light rail alignment between Varns Street and Sandburg Street.
- Walk/bike path south of Bonita Road: Build new multi-use path along the light rail alignment between Bonita Road and Cardinal Lane.

These projects were not in the Shared Investment Strategy project list adopted by the steering committee in 2013. However, the two walk/bike paths are connectivity projects of interest along the proposed light rail alignments, and will be considered for inclusion in the final range of alternatives for environmental review during the scoping period along with the "bucket 2" projects.

In addition, the Appendix has been updated to identify the Shared Investment Strategy roadway, bike and pedestrian projects for all three "buckets," as described on page 8 of this document. The Appendix also now includes the list of additional station access projects proposed by project partners to undergo the same level of analysis as the "bucket 2" projects for consideration during scoping, including the two bike/walk projects listed above. Pages 8 and 11 have been updated to reflect these changes.

Draft Proposed Range of Alternatives for Environmental Review:

# **Appendix**

# Shared Investment Strategy roadway, bike and pedestrian projects and new station access projects for consideration

The following lists sort the Shared Investment Strategy roadway, bike and pedestrian projects into three "buckets," as defined in more detail on page 8 of this document. The "bucket 1" projects are included in the Draft Proposed Range of Alternatives as likely to be included in the Draft Environmental Impact Statement (DEIS). "Bucket 2" projects could be studied in the DEIS, but merit further analysis to identify which projects are critical to include. "Bucket 3" projects are not proposed to be included in the DEIS. Project partners have also identified a list of additional station access projects that were not part of the 2013 Shared Investment Strategy to analyze along with the "bucket 2" projects.

During the scoping period in August and September 2016, there will be an opportunity for public input on which projects to include in the DEIS. The steering committee is scheduled to decide on the final list of projects to study in the DEIS in late 2016.

# **Bucket 1:** Proposed for environmental review

Location/
SIS ID# Ownership Project Title Project Description

| SIS ID# | Ownership         | Project Title   | Project Description  |
|---------|-------------------|---|--|
| 1019    | Portland<br>ODOT  | Barbur complete street: Capitol to Hamilton   | Reduce number of northbound lanes from three to two from Capitol Hwy (north) to 1/4 mile south of Hamilton to reduce speeds and improve safety, improve pedestrian/bike crossing safety and add protected bike lanes.                        |
| 1044    | Portland<br>ODOT  | South Portland circulation<br>and connectivity (Ross Island<br>Bridge ramp connections) | Reconfigure ramp access to the west end of the Ross Island Bridge. Reconnect streets and pedestrian/bike facilities across Naito Parkway.  |
| 1077    | Tigard            | Ash Avenue railroad crossing (new roadway)  | Extend Ash Avenue at-grade across the railroad tracks from Burnham to Commercial Street.   |
| 1107    | Tigard<br>WashCo. | Hwy. 217 over-crossing -<br>Beveland connection   | Build new connection of Beveland Street over-crossing of Hwy 217, including auto, bike and pedestrian facilities.  |
| 2080    | Tigard            | Tigard Transit Center side-<br>walk infill.   | Complete sidewalks along SW Scoffins St. & SW Ash St. to provide access to Tigard Transit Center, and extend sidewalks to Hall street.   |
| 2999    | Portland          | Pedestrian connection from<br>Barbur to Terwilliger at<br>Gibbs                         | Construct a new pedestrian walkway under the tram within the Gibbs right-of-way through the Terwilliger Parkway. The steep grade and forested area will require lighting and stairs. Could include mechanized connections such as elevators. |
| 3044    | Portland<br>ODOT  | Middle Barbur bikeway<br>-from SW 23rd Ave to SW<br>Capitol Hwy-Barbur Blvd<br>Ramp.    | Create separated bicycle route in roadway. Listed as a Regional Bicycle Parkway in the Regional Active Transportation Plan (5/9/13).   |
| 4002    | Portland<br>ODOT  | Barbur Blvd, SW (3rd - Ter-<br>williger): Multimodal Im-<br>provements                  | Construct improvements for transit, bikes and pedestrians. Transit improvements include preferential signals, pullouts, shelters, left turn lanes, sidewalks, and crossing improvements.   |
| 5005    | Portland<br>ODOT  | Barbur Blvd, SW (Terwillig-<br>er - City Limits): Multimodal<br>Improvements            | Complete boulevard design improvements including sidewalks and street trees, safe pedestrian crossings, enhance transit access and stop locations, and bike lanes (Terwilliger - SW 64th or Portland City Limits).                           |
| 5006    | Portland<br>ODOT  | Barbur complete street: Ter-<br>williger to Capitol                                     | Add bike lanes over Newbury and Vermont bridges.   |
| 5013    | Portland<br>ODOT  | S. Portland/Naito (related to 1044)   | Reconstruct Naito Pkwy as 2-lane road w/ bike lanes, sidewalks, left turn pockets, and on-street parking. Remove grade separation along Naito at Barbur, the Ross Island Bridge, Arthur/Kelly viaduct, and the Grover pedestrian bridge.     |

# **Bucket 1:** Proposed for environmental review (continued)

Location/
SIS ID# Ownership Project Title Project Description

| 212 ID# | Ownership        | Project little   | Project Description   |
|---------|------------------|--|---|
| 5057    | Portland         | SW 53rd and Pomona (improve safety of pedestrian/bike users) | Reconfigure and improve intersection to manage traffic turning speeds, and improve safety of pedestrians/bike users between Barbur and Pomona.  |
| 6003    | Portland         | Multnomah viaduct bicycle and pedestrian facilities          | Construct new bicycle and pedestrian facilities at/<br>parallel to Multnomah St. viaduct  |
| 6004    | Portland<br>ODOT | Newbury viaduct bicycle and pedestrian facilities            | Construct new bicycle and pedestrian facilities at/<br>parallel to Newbury St. viaduct.   |
| 6005    | Portland<br>ODOT | Vermont viaduct bicycle and pedestrian facilities            | Construct new bicycle and pedestrian facilities at/<br>parallel to Vermont St. viaduct  |
| 6013    | Portland         | Barbur/PCC pedestrian/bike connection                        | Provide neighborhood greenway connection<br>between Barbur and PCC via SW 53rd, including<br>updated sidewalks, bike lanes, pervious pavement,<br>landscaping and ramp pedestrian connection to<br>PCC. |
| 6022    | Portland<br>ODOT | I-405 bike/pedestrian cross-<br>ing improvements             | Improve opportunities for bicycles and pedestrians to cross over/under I-405 on Harbor Drive, Naito Parkway, 1st, 4th, 5th, 6th and Broadway. TSP # 20106   |

**Bucket 2:** Based on analysis and input during scoping, sort projects into buckets 1 and 3

Location/
SIS ID# Ownership Project Title Project Description

| SIS ID# | Ownership        | Project Litle   | Project Description   |
|---------|------------------|---|---|
| 1078    | Tigard           | Atlanta Street extension (new roadway)                                    | Extend Atlanta Street west to Dartmouth Street.   |
| 1100    | Tigard<br>ODOT   | Hall/Hunziker/Scoffins inter-<br>section realignment                      | Realign offset intersection to alleviate congestion and safety issues. Include standard sidewalks.  |
| 2004    | Portland         | 26th Ave, SW (Spring Garden - Taylors Ferry): Pedestrian improvements     | Construct a walkway for pedestrian travel and access to transit and install street lighting   |
| 2027    | Portland<br>ODOT | Pedestrian overpass near<br>Markham School                                | Construct pedestrian path and bridge over Barbur Blvd. and I-5 to connect SW Alfred and SW 52nd to the rear of Markham School. Could instead be located near 53rd Avenue with proposed light rail station.            |
| 2041    | Portland         | SW 19th Ave sidewalks:<br>Barbur - Spring Garden                          | Construct new sidewalks where none exist.   |
| 2045    | Tigard           | 72nd Avenue sidewalks:<br>99W to Bonita                                   | Fill gaps in sidewalk on both sides of street from<br>Highway 99W to Bonita Road  |
| 2046    | Tigard           | 72nd Avenue sidewalks: Upper Boones Ferry to Durham                       | Install sidewalk on both sides of street from Upper<br>Boones Ferry Road to Durham Road   |
| 2077    | Tigard<br>ODOT   | Tigard Transit Center cross-<br>ing improvements.                         | Shorten crossing distances, make crosswalks more visible, and provide more time for pedestrians to cross at the intersections of 99W and SW Greenburg Rd., 99W & SW Hall Blvd., and 99W & SW Dartmouth St.            |
| 3017A   | Portland         | Capitol Hill Rd bikeway<br>-from SW Barbur Blvd to SW<br>Bertha Blvd.     | Create multiple bicycle facility types: bicycle boulevard or enhanced shared roadway (Barbur - Troy; 21st - Custer); bicycle boulevard or advisory bike lane (Troy - 21st); enhanced shared roadway (Custer - Bertha) |
| 3017B   | Portland         | Capitol Hill Rd sidewalks<br>-from SW Barbur Blvd to SW<br>Bertha Blvd.   | Install sidewalks on Capitol Hill Road from Barbur to Bertha.   |
| 3028    | Portland         | Inner Hamilton bikeway<br>-from SW Terwilliger Blvd to<br>SW Corbett Ave. | Enhance roadway for bike use. Includes connection to Terwilliger on SW Hamilton Terrace.  |
| 3033    | Portland         | Inner Troy bikeway -from SW<br>Capitol Hwy to SW Capitol<br>Hill Rd.      | Create bike boulevard from SW Capitol Hwy to SW Capitol Hill Rd   |

**Bucket 2:** Based on analysis and input during scoping, sort projects into buckets 1 and 3 (continued)

| SIS ID# | Ownership  | Project Title   | Project Description  |
|---------|--|---|--|
| 3038    | Portland   | Lower SW 1st bikeway -from SW Barbur Blvd to SW Lincoln)  Add bicycle facilities: separated in-roadway bett: Gibbs - Grover); bicycle boulevard (a segments). Includes connection to SW Ke on SW Grover St and SW Corbett Ave |  |
| 3069A   | Portland   | Spring Garden, SW (Taylors<br>Ferry - Capitol Hwy): Bike-<br>way  | Complete bicycle boulevard and bike lanes.   |
| 3069B   | Portland   | Spring Garden/Dolph Ct,<br>SW (Capitol Hwy - Barbur):<br>Sidewalks  | Install sidewalk along Dolph Ct from Capitol Hwy to 26th Way and along Spring Garden from 26th Way to Barbur.  |
| 3093    | Portland   | Terwilliger bikeway gaps  | Create separated bicycle route in-roadway. Eliminate key gaps in the Terwilliger Blvd bikeway  |
| 3101    | Portland   | Vermont-Chestnut bikeway<br>-from SW Capitol Hwy to<br>SW Terwilliger Blvd.   | Complete bicycle boulevard.  |
| 3117    | Tigard<br>Tualatin   | 72nd Avenue bikeway: 99W Install bike facilities on both sides of the to city limits from Highway 99W to South City Limits  |  |
| 3121    | Tigard Lake<br>Oswego  | Bonita Road bike lanes:<br>72nd to I-5  | Install bike lanes in eastbound direction from 72nd<br>Avenue to I-5 Bridge  |
| 3129    | Tigard   | Tigard Transit Center bicycle hub   | Provide bicycle hub at Tigard Transit Center   |
| 5009    | Portland   | Capitol Hwy improvements<br>(replace roadway and add<br>sidewalks)  | Improve SW Capitol Highway from SW Mult-<br>nomah Boulevard to SW Taylors Ferry Road per the<br>Capitol Highway Plan. Replace existing roadway<br>and add sidewalks, bike lanes and green storm<br>water features.       |
| 5059    | ODOT multimodal Project (roadway in the SW Portland TC, including realignments and modificator barbur Blvd., Capitol Hwy., and |   | Implement Barbur Concept Plan recommendations in the SW Portland TC, including modifications to Barbur Blvd., Capitol Hwy., and the I-5 south-bound on-ramp to support safer and more efficient operation for all modes. |
| 6001    | Tigard Lake<br>Oswego  | Bonita Rd. sidewalks and<br>bike lanes - Carman Dr. to<br>Bangy Rd.   | Complete sidewalk gaps and install bike lanes; supplement to Tigard project #3121 which continues to 72nd.   |
| 6002    | Lake Oswe-<br>go   | Carman Dr. sidewalks and Add bike lanes and pedestrian pathway. bike lanes  |  |
| 6026    | Portland   | Pomona St: Bicycle and Pedestrian improvements (35th to Barbur)   | Provide bike lanes and sidewalks   |

**Bucket 2:** Based on analysis and input during scoping, sort projects into buckets 1 and 3 (continued)

| SIS ID# | Location/<br>Ownership | Project Title   | Project Description   |
|---------|------------------------|---|---|
| 6034    | Portland               | Taylors Ferry, SW (Capitol<br>Hwy - 49th): Bicycle & pe-<br>destrian improvements | Provide bicycle lanes, including shoulder widening and drainage, and construct sidewalks for access to transit.   |
| 9014B   | Tigard                 | Fanno Creek Trail gaps  | Complete gaps along the Fanno Creek multi-use path from Bonita Road to 85th Avenue (other segments have been funded). Listed as a Regional Bicycle Parkway and Regional Pedestrian Parkway in the Regional Active Transportation Plan (5/9/13). |
| 9053    | Portland<br>Tigard     | Pedestrian/Bike connection<br>between Tigard Triangle and<br>PCC Sylvania         | Provide pedestrian/bicycle connection between the Tigard Triangle area and PCC Sylvania.  |

## **Bucket 3:** Pursue separately from HCT project

| SIS ID# | Ownersnip                       | Project litie  | Project Description  |
|---------|---------------------------------|--|--|
| 1020    | Portland                        | Beaverton Hillsdale/ Bertha/<br>Capitol Hwy. Intersection<br>improvements  | Redesign intersection to improve safety  |
| 1048    | Portland                        | Traffic calming  | Calm traffic in the Burlingame and Hillsdale retail districts.   |
| 1062    | Sherwood                        | Arrow Street (Herman Road):<br>Build 3 lanes with sidewalks<br>and bike lanes  | Construct new road to collector standards. Build<br>new 3 lane roadway with stream crossing and<br>with bike lanes and sidewalks from Langer Farms<br>Parkway Phase 2 to Gerda Lane/Galbreath Drive.                   |
| 1068    | Sherwood                        | Town center signal & intersection improvements (Downtown Sherwood)   | Improve 3-leg intersection at Edy & Borchers; remove traffic signal at Baler; on Sherwood Blvd. remove traffic signal at Langer and disallow left turns from Langer to Sherwood, and add traffic signal at Century Dr. |
| 1129    | Tigard<br>ODOT                  | Highway 99W access man-<br>agement in Tigard   | Implement access management strategies and median projects, including additional pedestrian crossing locations, in Hwy 99W Plan.   |
| 1154    | Tualatin<br>Sherwood<br>WashCo. | Tualatin-Sherwood Rd.<br>(Langer Parkway to Teton<br>Ave.): Widening to 5 lanes<br>with ped./bike  | Widen from 3 to 5 lanes with bike lanes and sidewalks from Langer Parkway to Teton Ave.  |
| 2001    | King City<br>ODOT               | King City Town Center pe-<br>destrian improvements   | Improve sidewalks, lighting, bus shelters and benches, and pedestrian crossings for Highway 99W.   |
| 2011    | Portland<br>ODOT                | Connections to transit/transit improvements: Barbur & Taylors Ferry  | Construct new steps/ramp connecting SW Taylors Ferry frontage road to Barbur across from transit center at existing signalized crossing. [COMPLETED]   |
| 2054    | Tigard                          | Commercial Street side-<br>walks: Main to Lincoln  | Install sidewalks on both sides of the street from<br>Main Street to Lincoln Street. [FUNDED]  |
| 2058    | Tigard                          | Hunziker Street Sidewalks:<br>72nd to Hall   | Install sidewalk on both sides of the street from 72nd Avenue to Hall Boulevard  |
| 2070    | Tigard<br>King City<br>ODOT     | 99W pedestrian improve-<br>ments to serve King City<br>transit stops  Provide pedestrian access and crossing op<br>nities at transit stops on 99W in the vicini<br>Royalty Parkway and Durham Rd in King G |  |
| 2079    | Tigard                          | Tigard Transit Center pedes-<br>trian path   | Pave, make ADA accessible, provide lighting and signage for the informal path running from Center Street connection from SW Commercial St. to SW Hall Blvd. [FUNDED]   |

## **Bucket 3:** Pursue separately from HCT project (continued)

| SIS ID# | Ownership                 | Project Title  | Project Description   |  |
|---------|---------------------------|--|---|--|
| 5004    | Lake Oswe-<br>go          | Boones Ferry Road Boule-<br>vard improvements (turn<br>lanes with bike/ped Ma-<br>drona to Kruse Way)                              | Widen to include bike lanes, sidewalks, and turn lanes. This project is Phase 2, Oakridge/Reese to Kruse Way.   |  |
| 5010    | Portland                  | Capitol Hwy, SW (Terwilliger - Sunset): Multimodal Improvements  | et): Multimodal access to transit and bike improvements, and  |  |
| 5020    | Sherwood                  | Oregon-Tonquin intersection & street improvements  Oregon at Tonquin Road, providing sidewal bike access through the intersection. |   |  |
| 5024    | Tigard                    | 68th Ave (widen)   | Widen to 3 lanes or for transit way including sidewalks and bike lanes between Dartmouth/I-5 Ramps and south end  |  |
| 5037    | Tigard<br>WashCo.<br>ODOT | Hall Boulevard widening, Oleson to 99W  Widen to 3 lanes; build sidewalks and bike safety improvements                             |   |  |
| 5047    | Tualatin<br>WashCo.       | Cipole Rd. (widen to 3 lanes with ped./bike)   | Reconstruct/widen to 3 lanes from 99W to Tualatin-Sherwood Road with sidewalks and bike lanes.  |  |
| 5048    | Tualatin                  | Herman (multimodal improve to urban standard from Teton to the provements, Teton to Tualatin Rd.)                                  |   |  |
| 5049    | Tualatin                  | Herman (multimodal improvements, Cipole to 124th)  | Reconstruct road from Cipole to 124th with side-<br>walks and bike lanes  |  |
| 6042    | Sherwood<br>ODOT          | 99W - Sherwood TC bicycle/<br>ped. bridges   | Ped/bike under/overcrossings of 99W at Sunset,<br>Meinecke, Edy. Listed as a Regional Bicycle Park-<br>way in the Regional Active Transportation Plan<br>(5/9/13).  |  |
| 9003    | Sherwood                  | Tonquin Trail  | Construct multi-use trail with some on-street segments connecting multiple communities in Washington and Clackamas County. Listed as a Regional Bicycle Parkway and Regional Pedestrian Parkway in the Regional Active Transportation Plan (5/9/13).                      |  |
| 9005    | Portland                  | Red Electric Trail: Fanno<br>Creek Trail to Willamette<br>Park   | Provide east-west route for pedestrians and cyclists in SW Portland that connects and extends the existing Fanno Creek Greenway Trail to Willamette Park. Listed as a Regional Bicycle Parkway and Regional Pedestrian Parkway in the Regional Active Transportation Plan |  |

## **Bucket 3:** Pursue separately from HCT project (continued)

| שו כוכ | Ownership                           | rioject ride  | Project Description   |
|--------|-------------------------------------|---|---|
| 9007   | Portland                            | Slavin Road to Red Electric<br>Trail: Barbur to Corbett | Build multi-use trail on Slavin Road from Barbur<br>to Corbett. The Red Electric Trail is listed as a<br>Regional Bicycle Parkway and Regional Pedestrian<br>Parkway in the Regional Active Transportation Plan<br>(5/9/13).  |
| 9023   | Tigard<br>Tualatin                  | Tualatin River pathway                                  | Develop a continuous multi-use pathway along<br>the Tualatin River from Boones Ferry Road under<br>I-5 to the Tualatin River Greenway and Browns<br>Ferry Park. Listed as a Regional Bicycle Parkway<br>and Regional Pedestrian Parkway in the Regional<br>Active Transportation Plan (5/9/13). [COMPLETED] |
| 9029   | Sherwood                            | Westside Trail segments                                 | Construct trail segments within easements of BPA and PGE for connectivity. Listed as a Regional Bicycle Parkway and Regional Pedestrian Parkway in the Regional Active Transportation Plan (5/9/13).  |
| 9061   | Tualatin/<br>Wash Co./<br>King city | Westside Trail - Tualatin River<br>Bridge               | Construct new bike/ped bridge over the Tualatin River. Listed as a Regional Bicycle Parkway in the Regional Active Transportation Plan (5/9/13).  |

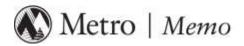
# **Additional station access projects:** Based on analysis and input during scoping, identify projects to include for environmental review

The following projects have been identified by project partners to consider for environmental review because they may improve access to proposed light rail stations. These projects will undergo the same additional analysis as the "bucket 2" Shared Investment Strategy projects prior to the scoping period. Projects highlighted in gray are new projects under preliminary review by project partners.

| Location/<br>Ownership | Project Title  | Project Description   | Source Plan   |
|------------------------|--|---|---------------|
| Portland               | Naito station connection<br>to Hooley Bridge   | Extend pedestrian and bike connection on Grover Street, between proposed light rail station on Naito and the Darlene Hooley Pedestrian Bridge at Gibbs Street.  | N/A           |
| Portland               | Sidewalks on Hamilton<br>Street  | Fill sidewalk gap on Hamilton Street between Barbur Boulevard and Terwilliger Boulevard to provide access to proposed light rail station at Hamilton Street.  | N/A           |
| Portland               | Pedestrian/bike connection on Condor Avenue  | Add pedestrian/bike connection to proposed light rail station near Hamilton Street between Condor Avenue, Slavin Road and 2nd Avenue  | N/A           |
| Portland               | Connection between Seymour Court and Corbett Avenue                                      | Build pedestrian/bike connection between Seymour Court and Corbett Avenue where stairs/trail exist today.   | N/A           |
| Portland               | Pedestrian bridge over I-5<br>to South Burlingame and<br>Collins View neighbor-<br>hoods | Add pedestrian/bike bridge over I-5 to connect<br>South Burlingame and Collins View neighbor-<br>hoods to proposed light rail station on Barbur<br>near 13th Avenue and Custer Street. Suggested<br>location between Multnomah Boulevard and<br>11th Avenue / Canby Street. | N/A           |
| Portland               | Custer Street sidewalks  | Add sidewalks on Custer Street between Capitol Hill Road and 13th Avenue. Sidewalks on both sides would require walls, stormwater and utility relocation.   | N/A           |
| Portland               | 24th Avenue bikeway  | Add bike and pedestrian facilities on 24th Avenue between Multnomah Boulevard and Spring Garden Street. Include improved crossings at 22nd Avenue / Barbur Boulevard and 22nd / Multnomah.  | TSP:<br>90061 |
| Portland               | 30th Avenue sidewalks  | Add sidewalks on 30th Avenue, Hume Street and 31st Avenue to connect Multnomah Village with proposed light rail station at either 26th Avenue or 30th Avenue.   | TSP:<br>90100 |
| Portland               | Pedestrian bridge over I-5 at 30th Avenue  | Add pedestrian/bike bridge over I-5 to connect 30th Avenue to Taylors Ferry Road.   | N/A           |

# **Additional station access projects:** Based on analysis and input during scoping, identify projects to include for environmental review (continued)

| Location/<br>Ownership | Project Title   | Project Description  | Source Plan                            |
|------------------------|---|--|--|
| Portland               | Marigold Street to 25th<br>Avenue connection                            | Add pedestrian/bike connection between Marigold Street / Quinault Court and 25th Avenue to connect neighborhood to potential light rail station at 26th Avenue.  | N/A                                    |
| Portland               | 40th Avenue sidewalks   | Add sidewalks on 40th Avenue between Huber Street and Wilbard Street to improve access to the Barbur Transit Center and proposed light rail station via existing bike/pedestrian bridge.   | N/A                                    |
| Portland               | 64th Avenue and Barbur<br>Boulevard pedestrian and<br>bike improvements | Provide sidewalk infill and bike lanes extending from 64th Avenue and Barbur Boulevard to Pomona Street and Pasadena Drive.  | TSP:<br>90011                          |
| Portland               | Outer Capitol Highway pedestrian improvements                           | Add curb extensions, improved crossings, medians and other pedestrian improvements on Capitol Highway from Barbur Boulevard to 49th Avenue   | TSP:<br>90027<br>90068                 |
| Tigard                 | Red Rock Creek green-<br>way  | New multi-use path connection parallel to and south of OR-99W in the Tigard Triangle. Extends existing connection at Walmart.  | Tigard Trian-<br>gle Strategic<br>Plan |
| Tigard<br>ODOT         | Walk/bike path west of<br>Highway 217                                   | Add new multi-use path along the light rail alignment between Varns Street and Sandburg Street   | N/A                                    |
| Tigard                 | Walk/bike path south of<br>Bonita Road                                  | Build new multi-use path along the light rail alignment between Bonita Road and Cardinal Lane  | N/A                                    |
| Tualatin               | I-5 bicycle and pedestrian<br>greenway                                  | Shared use path connecting proposed light rail station at Bridgeport Village to existing Tualatin River Greenway. Path runs parallel to I-5 with overpass or tunnel under Tillamook Branch Railroad, and a bridge over Tualatin River. | TSP: BP7                               |



Date: June 6, 2016

To: Southwest Corridor Steering Committee

From: Chris Ford, SW Corridor Plan Project Manager, Metro

Subject: Additional input on updates to SW Corridor HCT Purpose & Need

The Federal Transit Administration (FTA) has 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. The packet for the May 9, 2016 Southwest Corridor Steering Committee meeting included updates to the project Purpose & Need adopted in January 2014 proposed by project staff.

Since early May, project staff has received specific comments from FTA on the Purpose & Need. This memo characterizes those comments, suggests additional updates to those proposed at the May Steering Committee meeting and provides a timeline for further work on the Purpose & Need.

#### FTA comments on adopted Purpose & Need

In mid May, FTA staff provided comments and edits on the project Purpose & Need adopted by the Steering Committee in January 2014. FTA's input is generally as follows:

- 1. **Focus on the transit project.** The Purpose & Need should be oriented to justify and describe a high capacity transit project, with content limited to issues that are primary drivers of the project and would help decision-makers decide between alternatives. The adopted Purpose & Need includes statements that do not communicate the purpose of the project, but rather describe desired methods or outcomes, and needs that do not suggest high capacity transit as a solution.
- 2. **The purpose bullets should be more concise.** Multiple related statements should be combined into single bullets.
- 3. **Incorporate regional goals.** Discuss how current conditions in the corridor prevent us from attaining regional goals, and how the project addresses those conditions.
- 4. **More emphasis on regional growth.** The longer-term population and employment growth of the corridor and region are a more critical issue than in most places and are a driver for the project.
- 5. **Include graphics, if desired.** Not necessary but maps, charts, graphics can be helpful in illustrating things like projected growth.

### **Suggested additional updates**

While some members of the project team leads (PTL) contributed to the edits in this latest version of the Purpose & Need, the entire PTL has not had the opportunity to fully discuss FTA's direction and come to consensus.

The refined Purpose & Need reflects PTL suggestions and includes moderate adjustments to the changes suggested in early May to create a "working" Purpose & Need that can be updated again after DEIS scoping comments.

**Attachment 1** includes a proposed "working" Purpose & Need that takes into account staff's suggested comments from the May meeting, FTA's input and discussions with project partner staff. The additional changes from the May suggestions include the following:

- Updated document title
- Added opening statement clarifying that the light rail project is one component of the overall Southwest Corridor Plan.
- Combined several purpose bullets
- Added purposes related to serving future growth in the corridor, supporting adopted regional and local plans, connecting to WES commuter rail and meeting sustainability goals
- Removed purposes related to station locations (which was a new proposal in the May version) and improvements to natural resources, which FTA does not see as a driving purpose of a light rail project
- Added needs related to existing jobs and services not located near residences in the corridor and transportation investments to meet state, regional and local climate goals
- Removed needs related to natural resources, parks and trails, in response to specific FTA comments that these needs did not justify a high-capacity transit project and would not help decision makers deciding among different transit alternatives
- Made specific language changes proposed by FTA in the needs section
- Updated numbers related to existing and future transit demand
- Added language to more clearly link transit to jobs, housing and affordability
- Added need for adequate, distributed park and ride system to ensure access to light rail in light of limited local bus options in the corridor

**Attachment 2** includes the overall SW Corridor Plan Vision and Goals document, created in May 2012. This document describes the broader Southwest Corridor Plan aspirations on which that the project partners are working and the goals not captured by the light rail project Purpose & Need.

### Timeline for further work on the Purpose & Need

The Steering Committee will be asked to consider adopting the proposed updates to the project Purpose & Need at its June 13, 2016 meeting, creating a "working" Purpose & Need that will be considered for endorsement of the Metro Council, then posted and distributed for public and agency comments during the DEIS scoping period in August and September.

The Steering Committee will adopt a final project Purpose & Need in fall 2016 prior to start of the DEIS, based on public and agency comments received as well as further consideration,

The detailed timeline for this further work on the Purpose & Need follows (all dates in 2016):

| June 13          | Recommendation from Steering Committee on changes to the project Purpose & Need   |
|------------------|---|
| June 24          | Presentation to TPAC on updated project Purpose & Need (as part of the Proposed Range of Alternatives)  |
| July 21          | Presentation to JPACT on updated project Purpose & Need (as part of the Proposed Range of Alternatives)   |
| July 28          | Resolution before Metro Council for endorsement of updated project Purpose & Need (as part of the Proposed Range of Alternatives)   |
| Aug 15 – Sept 30 | DEIS scoping period, opportunity for public and agency comments on "working" project Purpose & Need   |
| November         | Steering Committee to consider additional updates to "working" Purpose & Need based on input during scoping period and further consideration, resulting in final project Purpose & Need |

#### **ATTACHMENT #1**

## Purpose and Need for the Southwest Corridor Light Rail Project

The Southwest Corridor light rail project is one component of the overall Southwest Corridor Plan Shared Investment Strategy.

### **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 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. Specifically, the project aims to, within the Southwest Corridor:

- Provide light rail transit service that is cost-effective to build and operate with limited local resources
- Serve existing transit demand and significant projected growth in ridership resulting from increases in population and employment in the corridor
- Improve transit service reliability, frequency, and travel times, and provide connections to existing and future transit networks including WES commuter rail
- Support adopted regional and local plans including the 2040 Growth Concept, the Barbur Concept Plan, the Tigard Triangle Strategic Plan and the Tigard Downtown Vision to accommodate projected significant growth in population and employment
- Complete and enhance multimodal transportation networks to provide safe, convenient and secure access to transit and adjacent land uses
- Advance transportation projects that increase active transportation and encourage physical activity
- Provide travel options that reduce overall transportation costs
- Improve multimodal access to existing jobs, housing and educational opportunities and foster opportunities for commercial development and a range of housing types adjacent to transit
- Ensure benefits and impacts promote community equity
- Advance transportation projects that are sensitive to the environment, improve water and air quality, and help achieve the sustainability goals and measures in applicable state, regional, and local plans

### **Project Need**

A light rail transit project in the Southwest Corridor is needed to address the following issues:

- Transit service to important destinations in the corridor is limited, and unmet demand for transit is increasing due to growth
- Limited street connectivity and gaps in pedestrian and bicycle networks create barriers and unsafe conditions for transit access and active transportation
- Travel is slow and unreliable on congested roadways
- 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
- Regional and local plans call for high capacity transit in the corridor to meet local and regional land use goals
- State, regional and local environmental and sustainability goals require transportation investments to reduce greenhouse gas emissions.

These project needs are described in more detail below:

Transit service to important destinations in the corridor is limited, and unmet demand for transit is increasing due to growth. There is a need to improve transit connections to the economic and educational opportunities and services in the corridor. The corridor has 11 percent of the region's population and 26 percent of the region's employment. The five colleges and universities in the corridor serve over 45,000 students. The region's largest shopping destinations are located in the corridor. However, transit service in the Southwest Corridor varies in availability and frequency and struggles to serve areas due to an incomplete and congested road network with congested bottlenecks. As a result, many of the corridor's more heavily-traveled areas, major employment centers, and industrial areas do not have frequent transit service. Taking transit between some of the major destinations in the corridor can take four to six times as long as driving and the corridor generally lacks sidewalk and bicycle connectivity, as discussed below. As a result, driving is the most functional travel option for many people, adding to the corridor's traffic congestion.

There is also increasing unmet demand for transit service in the corridor. In 2010, there were 85,100 households in the corridor; projections show this number growing to 126,000 households in 2035. In Metro's 2009 High Capacity System Plan the corridor between Portland City Center and Sherwood had the highest projected light rail ridership of any future corridor. The number of transit trips in the corridor is projected to increase by 81 percent in the next 25 years. In 2010, there were 121,000 average weekday transit trips in the corridor. The 2035 forecast shows an increase to 219,000 average weekday transit trips. Today eight bus lines serve the corridor with up to 26 buses per hour in each direction in peak periods, with buses arriving approximately every 2 minutes on average in some locations. In 2035, with service adjusted to accommodate projected demand, the number of buses would increase to over 35 per hour.

Limited street connectivity and gaps in pedestrian and bicycle facilities create barriers and unsafe conditions for transit access and active transportation. The lack of complete sidewalk networks and crosswalks in the corridor impedes walking to transit and other destinations. The bicycle network also has gaps that hinder connectivity. Travel options are also constrained by the geography and development patterns in the corridor, and roads in much of the corridor are winding and discontinuous. The area lacks well-connected street network that would facilitate transit access, make it easier and safer to make short trips on foot or by bike, and provide travelers alternative routes. A safe and complete pedestrian network is needed in order to maximize transit use.

Travel is slow and unreliable on congested roadways. A lack of arterials results in traffic funneling onto a few key travel routes, such as OR-99W and I-5. Because of the limited road network, transit operating in mixed traffic is often slowed by congestion, especially at key bottlenecks. Travel times for automobiles are expected to increase by 17 percent by 2035 with average speeds slowing to 20 mph. Bus trips operating in mixed traffic between the Portland central city and Tigard are projected to take 12 percent more time in 2035. These travel times are likely to vary more in the future than today due to increases in congestion, incidents, and variation in traffic levels. Unreliable travel times results in travelers in the corridor planning extra time to ensure they will arrive on time. Sections of OR-99W, the major transit route in the corridor, are among the most unreliable road segments in the corridor. Over a 1.7 mile segment in Portland (north of Multnomah Boulevard) and a 2.8 mile segment in Tigard travelers need to budget more than double the average travel time in the PM peak hour to ensure they arrive at destinations on time. Transit travel times are subject to the same lack of reliability and can be expected to vary significantly from the forecast "average condition" because of unreliable travel conditions on congested roadways.

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.

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.

Regional and local plans call for high capacity transit in the corridor to meet local and regional land use goals. To help meet expected levels of growth, Metro's 2040 Growth Concept for the Portland region calls for "town center" development in downtown Tigard, the Tigard Triangle and West Portland. A town center is intended to provide services to tens of thousands within a twoto three-mile radius with one- to three-story buildings for employment and housing, and well served by transit. This regional land use strategy is supported by Tigard's adopted *High Capacity* Transit Land Use Plan, which identifies preferred station community concepts. The Tigard Triangle, however, is surrounded by congested regional highways and has only basic transit service. Providing light rail transit service to this area, which has half the acreage of downtown Portland, would allow for multi-story mixed use development to accommodate a substantial proportion of population and job growth in locations that can be efficiently serviced. This regional strategy is also supported by the City of Portland's Barbur Concept Plan. Light rail transit service is critical to fulfillment of that plan, including higher intensity infill development and a continuous and safe bike/pedestrian corridor along Barbur Boulevard. High capacity transit service will also support access to jobs in Tualatin, Sherwood and other employment areas in the corridor that are planned for significant job growth.

The 2035 Regional Transportation Plan (RTP) identifies the investments in multiple modes of transportation that will help accommodate the location and types of development designated by the Growth Concept, noting that, "HCT investments help the region concentrate development and growth in its centers and corridors." The RTP designates a high capacity transit system interconnecting the central Tigard and West Portland town centers and Portland's central city as a near-term regional priority.

State, regional and local environmental and sustainability goals require transportation investments to reduce greenhouse gas emissions. State and regional policies support actions to increase energy efficiency and reduce harmful greenhouse gas (GHG) emissions, especially from transportation sources. The state has mandated that the Portland region develop and implement a strategy to reduce per capita greenhouse gas emissions from cars and small trucks by 2035. In 2014, Metro adopted the Climate Smart Strategy to meet that requirement by achieving a 29 percent reduction in per capita greenhouse gas emissions. A high capacity transit project in the Southwest Corridor would advance Climate Smart by making transit convenient, frequent, accessible and affordable; making biking and walking safe and convenient; and making streets and highways safe, reliable and connected. However, the HCT project would need to ensure safe and comfortable access to transit for pedestrians, bicyclists and drivers and address major gaps in biking and walking routes in the corridor.

The City of Portland's Climate Action Plan also addresses GHG emissions with objectives including reducing daily per capita vehicle miles traveled by 30 percent from 2008 levels, improving the

efficiency of freight movement within and through the Portland metropolitan area, and ensuring that 80 percent of residents can easily walk or bicycle to meet all basic daily, non-work needs and have safe pedestrian or bicycle access to transit. Light rail transit project in the Southwest Corridor would advance these objectives, especially since that segment of I-5 is the only freeway in Portland not matched with high capacity transit to provide an alternative to driving.

### **Purpose and Need Background**

This section provides additional information on previous planning and regional policy that led to the proposal for a transit project in the Southwest Corridor.

The Southwest Corridor High Capacity Transit Project proposal is based on extensive regional land use and transportation planning beginning in 1975, and regional policy to make better use of the existing transportation system and provide transportation options, including pedestrian, bike and transit, before adding new motor vehicle capacity. A HCT project in the vicinity of Barbur Boulevard and Oregon Highway 99W emerged as one of three near-term projects in the High Capacity System Plan (2009), a 30-year plan to guide investments in light rail, commuter rail, bus rapid transit and rapid streetcar in the region.

High capacity transit has played a significant role in defining the Portland, Oregon region for almost 40 years. Planning for high capacity transit began following the region's decision to move away from plans for large new freeways in favor of more modest street projects and a network of transitways to meet future travel demand. These plans were codified in the 1975 Interim Transportation Plan and refined in the Light Rail System Plan adopted by the Metro council in 1982. In 1978, the voters in the metropolitan areas of Clackamas, Multnomah and Washington counties made Metro responsible for coordinating the land-use and regional transportation plans of the region's 27 jurisdictions.

In 1995, the Metro Council adopted the 2040 Growth Concept to guide regional growth. The 2040 Growth Concept and the Regional Framework Plan, adopted in 1997 and updated in 2005, encourage growth in centers and corridors within an urban growth boundary and call for high capacity transit to serve the larger regional centers. The Regional Framework Plan requires transportation system management strategies, transit, bicycle and pedestrian system improvements, traffic calming, and land use strategies be considered to meet transportation needs before increasing motor vehicle capacity. The Regional Transportation Plan (RTP) links transportation investments to land use policy to implement the 2040 Growth Concept and sets the course for future transportation decisions. These plans and policies have resulted in over 80 miles of light rail, commuter rail and streetcar lines built or planned for construction by 2016.

Beginning in 2008, working in collaboration with regional partners and the public, Metro developed the High Capacity Transit System Plan (HCT Plan) to guide the next high capacity transit investments, including light rail, commuter rail, bus rapid transit and rapid streetcar. The HCT Plan included supportive land use, transit oriented development, comprehensive parking programs, access for pedestrians and cyclists, park and rides, and feeder bus networks. In 2009, based on and public input and the analysis conducted for the HCT Plan, the Metro council approved the plan and adopted 16 potential high capacity transit corridors in four priority tiers. The Barbur/OR-99W

corridor was in the top tier and was included as an element of the 2035 Regional Transportation Plan adopted by the Metro Council in 2010. In response, Metro initiated the Southwest Corridor Plan, a comprehensive transportation and land use planning effort, in 2011.

In July 2013, the Southwest Corridor Plan Steering Committee recommended further study of a set of high capacity transit alternatives, along with community investments in roadway, bicycle, pedestrian, parks, trails and natural area projects that would support the success of a transit project. The recommendations were based on the corridor vision adopted by the Steering Committee, which seeks to:

- balance enhancing employment, housing choices, the environment and quality of life
- use public resources efficiently, thoughtfully and equitably
- stimulate private and public investment.

The combination of transit and community investments is designed to support the land use vision for the Southwest Corridor. The land use vision, which is built on plans developed by the local jurisdictions, prioritizes areas where development would support high capacity transit.

Project partners include:

- City of Beaverton
- City of Durham
- City of King City
- City of Portland
- City of Sherwood
- City of Tigard

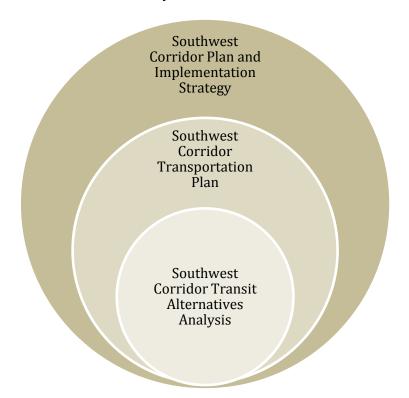
- City of Tualatin
- Washington County
- TriMet
- Oregon Department of Transportation
- Metro

# SOUTHWEST CORRIDOR PLAN AND IMPLEMENTATION STRATEGY: VISION AND GOALS

The vision statements for the Southwest Corridor Plan, Transportation Plan and Transit Alternatives Analysis provide a clear and compelling picture of the opportunities and challenges of the corridor. This information:

- Sets a foundation for successful decision-making;
- Establishes why there is a proposal to take action;
- Provides the basis for public support; and
- Lays the foundation for evaluation of alternatives.

The graphic below describes the relationship between the various components of the Southwest Corridor Plan and Implementation Strategy. The Southwest Corridor Transportation Plan and Transit Alternatives Analysis are a subset of the Southwest Corridor Plan with more specific focus.



The **Southwest Corridor Transportation Plan** is a subset of the overall Southwest Corridor Plan and Implementation Strategy and will have a similar vision statement (problem statement) and goals and objectives with a specific focus on transportation.

The **Southwest Corridor Transit Alternatives Analysis** is a subset of the overall Southwest Corridor Plan and Implementation Strategy and will have a similar vision statement and goals and objectives with a specific focus on transit. This vision statement will serve to define the purpose and need of any proposed transit alternative.

#### **Southwest Corridor Plan: Vision**

The vision for the Southwest Corridor Plan is to support, strengthen and connect livable and prosperous places from Portland to Sherwood. Through an open and inclusive community process we will select land use and transportation alternatives for implementation. We will seek to balance enhancing employment, housing choices, the environment, and quality of life. We will use public resources efficiently, thoughtfully and equitably, and stimulate private and public investment.

# Project goals and objectives: Southwest Corridor Plan and Implementation Strategy, Southwest Corridor Transportation Plan and Southwest Corridor Transit Alternatives Analysis

Integrated strategies will be mutually developed to meet the vision and needs of the communities in corridor and will strive to meet a balance of the following goals and objectives.

**Accountability and partnership** – Manage resources responsibly, foster collaborative investments, implement strategies effectively and fairly, and reflect community support.

- Build upon existing plans, private development and investments in public infrastructure
- Make investments that maximize limited resources
- Equitably distribute the benefits and burdens of growth geographically and demographically

**Prosperity** – People can live, work, play and learn in thriving and economically vibrant communities where everyday needs are easily met.

- Develop communities that provide education, jobs, services, shopping and recreation
- Stimulate potential for private investment
- Support a wide variety of employment
- Improve opportunities for affordable living, considering the combined housing, transportation and utility costs

**Health** – An environment that supports the health of the community and ecosystems.

- Develop transportation facilities and urban form that enhance the natural environment
- Support active and healthy lifestyles
- Strive to enhance the natural environment to improve ecosystem function and air and water quality

**Access and mobility** – People have a safe, efficient and reliable network that enhances economic vitality and quality of life.

- Improve access to places where people live, work, play and learn
- Improve access, mobility and safety for all transportation modes, ages and physical abilities
- Improve the freight transportation system to ensure that the region and its businesses stay economically competitive

#### Southwest Corridor Transportation Plan: Vision (Problem Statement) – work in progress

The role of the Southwest Corridor Transportation Plan is to evaluate the transportation systems necessary to connect and serve the livable and prosperous places identified though the Southwest Corridor Plan. The Transportation Plan will identify transportation strategies, systems, and improvements to support the achievement of the local land use plans and contribute to the overall access, mobility and economy of the state and region.

# Southwest Corridor Transit Alternatives Analysis (AA): Vision (Purpose and Need) – work in progress

The role of the Southwest Corridor Transit Alternatives Analysis is to identify transit strategies that support the achievement of the state, regional and local land use plans.