The Southwest Corridor Light Rail Project
Project Principles

- MOVE AND CONNECT PEOPLE
- MAINTAIN AND CREATE EQUITABLE COMMUNITIES
- PRESERVE AND RESTORE NATURAL ENVIRONMENT
- DESIGN FOR THE FUTURE
Conceptual Design Report (CDR)

Preliminary designs for:

- Overall vision
- Project benefits
- Stations
- Major structures
- Other corridor improvements
- Public engagement tool to inform future design
# Conceptual Design Report (CDR)

## Conceptual Design Report
- Project principles and preliminary designs
- Public-friendly diagrams and sketches
- Broader understanding of project improvements

## Environmental Impact Statement
- Impacts and mitigations
- Engineering drawings
- Detailed documentation of all impacts and changes
Moving more people, more places

- 10 miles of new sidewalks
- 6 miles of improved bike facilities
- 1.6 miles of transit-only lanes
- 2,000 Park & Ride spaces
Project Overview

Marquam Hill Connector: A quick, accessible connection from Gibbs Street Station to Marquam Hill will connect the 18,000 patients, employees, students, and residents that visit the campus every day.

Newbury & Vermont Viaducts: Two 100-year-old viaducts on SW Barbur Blvd will be replaced with seismically sound structures, making them safer for all users.

Shared Transitway: Buses traveling to/from destinations to the west will be able to skip traffic from SW Capitol Highway to the Portland Transit Mall by sharing a dedicated transit-only lane with light rail.

An improved SW Barbur Blvd streetscape with landscape, sidewalks, and raised protected bike lanes.

SW 53rd Ave Improvements for people biking and walking, with a potential shuttle to PCC-Sylvania, the college’s largest campus.

Bridgeport Transit Center: A structured Park & Ride will increase capacity for regional commuters and bus connections to create seamless regional connections.

Portland Transit Mall: Connection to MAX lines, Portland Streetcar, and buses.

The project coordinates with planned improvements for the SW Nafto Parkway Main Street.

Tigard Transit Center: Downtown Tigard will have more transportation choices with improved bus connections and the new MAX station a short walk from the WES station.
Corridor Context

- History
- Neighborhoods and Communities
- Natural Features
- Trails and Parks
2035 Station Ridership

37,500
trips per day by 2035

Source: Metro, 2019
Walking and Biking

Station Access Hierarchy

three-mile bike catchment area

half-mile walkshed
Bus Transfers

Potential 2035 Bus Network

[Map showing bus routes and transfer points including Beaverton Transit Center, Barbur Transit Center, Lake Oswego Transit Center, and others.]
Station Access
Park & Rides

<table>
<thead>
<tr>
<th>Station Name</th>
<th>Existing</th>
<th>Proposed Maximum Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barbur Transit Center</td>
<td>368</td>
<td>up to 300</td>
</tr>
<tr>
<td>53rd Avenue</td>
<td>0</td>
<td>up to 310</td>
</tr>
<tr>
<td>68th Avenue</td>
<td>0</td>
<td>up to 350</td>
</tr>
<tr>
<td>Hall Boulevard</td>
<td>0</td>
<td>up to 100</td>
</tr>
<tr>
<td>Bridgeport Transit Center</td>
<td>368</td>
<td>up to 960</td>
</tr>
<tr>
<td>Total Spaces</td>
<td></td>
<td>up to 2,020</td>
</tr>
</tbody>
</table>

All station surface lots except Bridgeport Transit Center.
Design Elements

- Stations and Platforms
- Overhead Structures
- Urban Design Elements
- Stormwater Features
- Operations Facilities
- Walls
- Trackway and Alignment
- Bike Facilities and Protected Intersections
- Light Rail Intersections
Station Design Concepts
Inner Portland

Lair Hill/South Portland
Inner Portland - Downtown Tie-In
Inner Portland
Downtown Tie-In
Inner Portland
Gibbs Street Station
Marquam Hill Connector

Green Ribbon Committee and Public Process
Feb – June 2019

Narrowed to 2 connector types
Marquam Hill Connector

Two current option types

Inclined Elevator

Bridge and Elevator
Inclined Elevator

- Inclined Elevators Alignment
- Inclined Elevators Landing
- Integrated Stairs
- Path of Pedestrian Travel
- Existing Path of Pedestrian Travel
- Platform
- Plaza

Above ground, an inclined elevator connects the hospital to the tram stop, facilitating accessible transportation. Beneath, the tram trackway supports indicate infrastructure considerations for wildlife passage, ensuring minimal obstruction of movement.
Bridge and Elevators

Bridge and Elevators Alignment
Bridge and Elevators Landing
Integrated Stairs
Path of Pedestrian Travel
Existing Path of Pedestrian Travel
Platform
Plaza

GREAT PLACES
Corridor

20
Inner Portland Viaducts
Station Design Concepts
Outer Portland

Barbur Transit Center

Southwest Corridor Light Rail
Greenspaces
Destinations
Road (size indicates scale)
Regional bike connection
Regional trail connection
Improved streetscape
Public opportunity site
Pedestrian Improvements
Barbur Blvd

LEGEND
- Southwest Corridor Light Rail
- Pedestrian District
- Traffic Signal (Vehicular Intersection)
- Enhanced Pedestrian Crossing (Full Crosswalk)
- Enhanced Pedestrian Crossing (Half Crosswalk to Platform)
- 500’ Spacing between Marked Crossings (feet)

EXISTING SIGNALIZED INTERSECTIONS

PROPOSED PEDESTRIAN CROSSINGS

GREAT PLACES
Corridor
Bike Facilities

[Map showing bike facilities along a route, with various markers and pathways indicated in different colors: Shared Streets, Buffered Bike Lanes, Raised Protected Bike Lanes (RPBL).]

BIKE FACILITY TYPES
- **Shared Streets**
- **Buffered Bike Lanes**
- **Raised Protected Bike Lanes (RPBL)**
Raised Protected Bike Lanes (RPBL)

8’ sidewalk  6’ RPBL  7’ landscape
21’

114’ minimum (often wider due to stations, turn lanes, etc.)

GREAT PLACES
Corridor
Protected Intersections

SIGNALIZED PROTECTED INTERSECTION TREATMENTS

- Target Locations for Type 1 (existing or planned bike facility on minor street)
- Target Locations for Type 2 or 3 (all other intersections)
Outer Portland - Barbur Transit Center
Barbur Transit Center - Public Opportunity Site
Outer Portland - Crossroads Bridge
Outer Portland - 53rd Avenue Station
Outer Portland - 53rd Avenue Improvements

Surface Park & Ride with up to 310 spaces

53rd Streetscape to PCC

Sylvania Natural Area Park

ROW

Sidewalk  Bike Lane  Travel Lane  Travel Lane/Downhill Sharrow  Potential to Alternate Parking/Stormwater  Sidewalk

GREAT PLACES

SW Corridor
Connection to PCC
Sylvania Campus
Station Design Concepts
Tigard & Tualatin

Tigard Employment Corridor

Bridgeport Transit Center

Southwest Corridor Light Rail
Greenspaces
Destinations
Road (size indicates scale)
Regional bike connection
Regional trail connection
Improved streetscape
Public opportunity site
Tigard & Tualatin - I-5/99W Crossings
Tigard & Tualatin - SW 70th Ave Improvements

TriMet and City of Tigard discussing potential SW 70th Ave Extension to future SW Atlanta St

Street grading and reconstruction of sidewalks

At-grade pedestrian and bike improvements at SW Dartmouth St and SW 70th Ave intersection

Light Rail Bridge over SW Dartmouth St

Sidewalk 70th Ave Alignment Sidewalk

Sidewalk 70th Ave Alignment Sidewalk

GREAT PLACES
SW Corridor
Tigard & Tualatin - Elmhurst Street Station

Intersection design will be updated to include curb return for future street extension.
Tigard & Tualatin - OR-217 Crossing
Tigard & Tualatin - Hall Boulevard Station

Third trackway provides light rail vehicles with access to the operations and maintenance facility.

Surface Park & Ride with up to 100 spaces.

Transfer to WES Commuter Rail.
Tigard & Tualatin
Bridgeport Transit Center
Tigard & Tualatin
Bridgeport Transit Center
Ongoing Design

Steering Committee

Management & Technical Staff

Community Advisory Committee (CAC)

Community Engagement
Project Timeline

- **Planning**
  - 2011–2016
  - 2017
  - 2018
  - 2019
  - 2020
  - 2021
  - 2022
  - 2023
  - 2024
  - 2025
  - 2026
  - 2027

- **Design**
- **Construction**

- **Federal Funding**
  - Potential regional funding vote: November 2020
  - Federal funding: September 2022

- **Environmental Review**

- **Draft conceptual design report**

- **Final conceptual design**

- **Testing and training**

- **Service begins**
  - September 2027