

The Southwest Corridor Light Rail Project Conceptual Design Report



Executive Summary

For the full report and more design resources visit: trimet.org/swcorridor/route.htm



Executive Summary

After nearly a decade of planning, TriMet, Metro, Oregon Department of Transportation, Washington County, and the Cities of Portland, Tigard, Tualatin and Durham have developed a conceptual design for the Southwest Corridor Light Rail Project. The project is essential to offering alternatives to congested roadways by expanding the transportation choices in our region. The project allows the corridor to move more people to more places, increasing person-throughput capacity in segments such as historic SW Barbur Blvd by as much as 57 percent in the AM peak and 46 percent in PM peak. By reducing the daily passenger vehicle miles traveled by about 59,000 miles per day, the equivalent of about 7,000 to 8,000 metric tons of annual greenhouse gas emissions, the project helps fulfill state and local climate action plans. Regional growth anticipates 75,000 new residents and 65,000 new jobs by 2035 projections. In partnership with the Southwest Equitable Development Strategy, the project will also help retain and increase opportunities for people of color and low-income residents living in the corridor. Project partners aim to create 950 new affordable housing units in the corridor (**Appendix C**). The project also contributes to the local economy: Twenty seven Disadvantaged Business Enterprises are already employed through preliminary design work, and the opportunity to bring nearly \$1.33 billion in federal matching funds is expected to generate over 20,000 jobs.

This draft Conceptual Design Report (CDR) illustrates the project being analyzed in the Final Environmental Impact Statement (FEIS). The FEIS should be referenced for details of technical information about the project, such as traffic, wetland impacts and mitigation strategies. The CDR describes and illustrates the overall urban design vision as well as the conceptual designs for stations, major structures and other key corridor improvements. The document is intended to further public discussion about the project design as well as identify remaining challenges. A summary of feedback from the public engagement process will inform a final report in mid-2020 and ongoing

design efforts in the coming years.

The CDR begins by outlining project principles, goals and objectives developed with input from a variety of project stakeholders. To be truly successful, the project must support the transportation, urban design, environmental, social and economic goals of the region, and the diverse communities living along the alignment. Collectively, the principles, goals and objectives help guide design choices, promote project accountability, articulate values and priorities and identify the greatest project benefits.

Building on community input generated throughout project planning, the \$2.8 billion Southwest Corridor Light Rail Project scope was refined to propose an 11-mile extension of the region's MAX light rail system. Thirteen stations will connect Downtown Portland, Southwest Portland and the cities of Tigard and Tualatin in Washington County.

Station area concepts currently include:

Gibbs Street Station

Nestled between the historic Lair Hill neighborhood and the forested West Hills of Terwilliger Parkway, the Gibbs Street Station will provide a critical connection for the thousands of employees, patients and students visiting Marquam Hill every day. Enhanced pedestrian crossings will make it easier for South Portland residents to access Terwilliger Parkway's natural beauty and expansive views. With a new crossing of SW Naito Pkwy and the Marquam Hill Connector, a pedestrian connection will reach from the South Waterfront to Marquam Hill. These connections will provide direct access to the light rail station, and a new public plaza.

Marquam Hill Connector

Marquam Hill, home to numerous health care destinations, including Oregon Health & Science University (OHSU), attracts over 18,000 employees, patients and students each day from around the region. To serve this major

destination, the Southwest Corridor Light Rail Project will include a connection from the Gibbs Street Station on SW Barbur Blvd, up the steep inclines toward Marquam Hill to land at SW Terwilliger Blvd. Two technologies are described in the CDR, including:

- **Inclined Elevators:** An inclined elevator may provide a new form of transportation in Portland. Two elevator cabs would run on parallel tracks to move people up the steep slope toward OHSU. Small shelters at the upper and lower landings would protect riders from the elements as they board and alight. A potential adjacent staircase could provide a route for those who prefer to walk.
- **Bridge and Elevators:** An elevator tower and pedestrian bridge may provide a "tree walk" experience, framing city, Mt. Hood and Mt. St. Helens views from Terwilliger Parkway to OHSU's campus. Multiple elevators and a stairway provide redundancy and reliable access for what will be a heavily used connector.

Hamilton Street Station

The Hamilton Street Station is located near the South Portland community hub, between SW Bancroft St and SW Hamilton St. Safer, easier pedestrian connections across SW Barbur Blvd will help link the Homestead neighborhood uphill and the South Portland neighborhood downhill. The station will serve as a major transfer point for local bus lines.

Custer Drive Station

Custer Drive Station is located on the east side of the West Hills and is the gateway to the SW Barbur Blvd commercial corridor. Adjacent to a Fred Meyer store and between the South Burlingame and Hillsdale neighborhoods, it is the closest station to Hillsdale Town Center and the SW Terwilliger Blvd crossing of I-5, serving as a key connection point for people walking, biking, driving and taking buses traveling toward Downtown Portland or Tigard/Tualatin.

19th Avenue Station

19th Avenue Station is nested within a neighborhood serving the commercial area located at the intersection of SW Capitol Hill Rd, SW 19th Ave and SW Barbur Blvd. The SW 19th Ave and SW Spring Garden St overcrossings of I-5 provide convenient multimodal access from the station to the South Burlingame neighborhood east of I-5. The station is adjacent to a recently remodeled Safeway store and is one of two stations within close proximity to Multnomah Village. A number of schools, housing and parks are clustered near this station.

30th Avenue Station

30th Avenue Station is located on SW Barbur Blvd providing direct access to the Markham and Multnomah neighborhoods. Nearby SW 26th Ave provides convenient access from residential areas east of I-5. Located near existing commercial and office areas, 30th Avenue Station also provides access to neighborhood amenities and supports future growth.

Barbur Transit Center

With views to Mt. Hood and centered within the West Portland Town Center, the Barbur Transit Center is the high-visibility flagship station of the new Southwest Corridor Light Rail Project within the City of Portland. With access to I-5, SW Capitol Hwy, SW Taylors Ferry Rd, multiple bus routes, an existing pedestrian bridge across I-5 and nearby connections to SW Trails, Barbur Transit Center is at the crossroads of multimodal mobility. The transit center consists of bus amenities, a light rail connection a surface Park & Ride with up to 300 spaces, improved pedestrian access, and bike parking facilities.

53rd Avenue Station

53rd Avenue Station is located in the Far Southwest neighborhood off SW 53rd Ave between SW Barbur Blvd and I-5. Adjacent to the wooded slopes of Mt. Sylvania, the station serves the neighborhood and the PCC-Sylvania campus. Complementing walk and bus access to the station, the site includes a proposed surface Park & Ride with up to 310 spaces, and improvements on SW 53rd Ave for people walking and biking.

68th Parkway Station

Positioned south of Pacific Hwy/99W, the station's prominent presence atop a natural amphitheater above Red Rock Creek provides views over the Red Rock Creek watershed. 68th Parkway Station acts as the portal into the burgeoning Tigard Triangle neighborhood. Sidewalk improvements and improved pedestrian crossings on Pacific Hwy/99W at SW 68th Pkwy and SW 64th Ave connect the station to the residential areas to the north. Adjacent bus stops and a surface Park & Ride with up to 350 spaces will make it a quick and easy transfer point for people coming from King City, Sherwood and other communities southwest of Tigard.

Elmhurst Street Station

Located at the heart of the Tigard Triangle, the station is a central magnet supporting mobility in all directions for the growing number of residents and workers in this mixed-use neighborhood. Street improvements near the station will promote safe and convenient access to mixed use neighborhoods and regional trails.

Hall Boulevard Station

Sitting at the intersection of a dense mixed-use center and regional employment hub, Hall Boulevard Station is a critical node for the project. To emphasize bus and WES Commuter Rail transfers, the SW Commercial St transit corridor will be designed for pedestrian comfort and integrate the station into Downtown Tigard. Design elements include bus shelters, landscaping, pavement treatments and wayfinding. Similar pedestrian and bicycle improvements along SW Hall Blvd and SW Hunziker St will help continue to make Tigard one of the most walkable cities in the region.

Bonita Road Station

Located at the intersection of SW Bonita Rd and SW 74th Ave, Bonita Road Station serves both the diverse residential communities to the west and the industrial employment center to the east. Perhaps more importantly, the station is just a few steps from an entry point to the Fanno Creek Trail, making it a perfect link for those walking and biking along this vital regional connector.

Upper Boones Ferry Road Station

Upper Boones Ferry Road Station is located in the heart of Tigard's bustling office park employment center. Commuters will be able to easily walk to dozens of offices, industrial buildings and business parks that surround the station. SW Upper Boones Ferry Rd also serves as the primary connection from the station to residential and retail areas to the east of I-5 and beyond.

Bridgeport Transit Center

The Bridgeport Transit Center will be more than just a light rail station. It will be an iconic mobility node and visible gateway to those traveling across the region. With a major Park & Ride, bus transfer center, direct access to I-5 and walkable connections to Bridgeport Village, the station will serve a wide range of communities in the southern metro area. Adjacent to the Bridgeport Village commercial center are numerous potential development sites. The area is set to become a new central hub of activity.

PROJECT SCOPE

The project scope includes improvements for people walking, biking, taking the bus, and driving. Examples include:

- 10 miles of new, standard bi-directional sidewalks and crosswalks to improve comfort and promote walkable access to transit and local station area amenities.
- Over six miles of enhanced bicycles facilities and bike parking, including areas with shared streets, raised protected bike lanes and protected intersections to encourage both bicycle commuting and access to transit.
- Up to 2,000 Park & Ride spaces along the alignment.
- 1.6 miles of shared transitway, allowing buses to travel within light rail guideway to enhance the speed, reliability and convenience of bus routes serving Hillsdale and other Southwest communities.
- A new operations and maintenance facility to support fast, reliable and cost effective MAX service in the corridor and bringing up to 150 new jobs to Tigard.
- SW 70th Ave improvements to complete portions of Tigard's planned bike and pedestrian network and increase access to the growing Tigard Triangle mixed use community.

- SW Hall Blvd, SW Commercial St and SW Hunziker St improvements to improve safety for people walking and biking, and promote comfortable access to transit throughout Downtown Tigard.
- A new pedestrian bridge over SW Lower Boones Ferry Rd in Tualatin to facilitate Bridgeport Transit Center becoming the portal to MAX service for people walking, biking, taking the bus and driving from communities throughout the Southwest.

In addition to the scope of the Southwest Corridor Light Rail Project, the CDR also describes opportunities for multiple transportation investments that would provide complementary mobility benefits in the corridor. The project partners seek input from stakeholders to help prioritize these related transportation investments as they seek additional funding for construction. These opportunities include:

- Station access improvements. These are additional pedestrian and bicycle facilities that would improve access to the light rail stations.
- SW Naito Parkway Main Street. This investment will not only improve connections for regional commuters and reduce cut-through traffic but will also open up publicly owned land for development of much needed housing. Redirection of traffic and improvements for people walking and biking will restore local connections between South Portland neighborhoods.

Lastly, this document defines a set of projects planned by relevant agencies. During previous outreach efforts, these projects were often referred to by the community as important investments for the corridor. While these projects are planned, designed, funded and constructed entirely by partner agencies, and are not part of the project, they have been included on pages in each station area for context. These projects further demonstrate the benefits of the Southwest Corridor Light Rail Project, to act as the backbone of high-capacity transit, leverage further investments and improve regional mobility.

Moving forward, the project will publish a final CDR in summer 2020. The final CDR will capture remaining mitigations identified in the FEIS and input received

during community engagement conducted in early 2020. Following the final CDR, the project will seek to secure 30 percent of local funding commitments through a potential funding measure in November 2020. These commitments are necessary to continue to advance toward a Full Funding Grant Agreement from the Federal Transportation Administration (FTA). The project anticipates starting construction in 2021, with the start of service in 2027.

The Southwest Corridor Light Rail Project is key to shaping the future of our region in line with Metro's 2040 Growth Concept. By working together, we can achieve a project that moves and connects people, provides transportation choices, maintains and creates equitable communities, preserves and restores the natural environment, and builds infrastructure for a sustainable future. The project partners look forward to ongoing collaboration with the many stakeholders in the region to realize the vision of this project.

