

SUMMARY

# S. SUMMARY

This Southwest Corridor Light Rail Project (Project) Final Environmental Impact Statement (EIS) has been prepared by the Federal Transit Administration (FTA), Metro (the designated Metropolitan Planning Organization for the Portland, Oregon, region) and the Tri-County Metropolitan Transportation District of Oregon (TriMet) in compliance with the implementing regulations of the National Environmental Policy Act (NEPA). A Draft EIS for the Project was

Sec	tion Page
S.1	Project Overview S-1
S.2	Purpose and Need S-3
S.3	Background on Southwest Corridor PlanningS-4
S.4	Identification and Adoption of the Preferred Alternative S-4
S.5	Public Involvement S-5
S.6	Alternatives Considered S-7
S.7	Transportation and Environmental ImpactsS-17
S.8	Other Federal Regulatory Processes S-22
S.9	Evaluation of Alternatives S-24
S.10	Project Milestones and Schedule S-24

published in June 2018. FTA is the federal lead agency for the NEPA process, and TriMet and Metro are the local co-lead agencies. If the Project receives FTA funding, TriMet would be the direct recipient. The Federal Highway Administration (FHWA) is a cooperating federal agency, because the Project would involve the use of land from the federal interstate highway system.

The analysis in this Final EIS is based on information and projections that were completed before the COVID-19 pandemic. FTA acknowledges the current impacts of the recent social response to the COVID-19 pandemic and the resulting decline in travel demand. Chapter 3, Transportation Impacts and Mitigation, summarizes the impacts of the pandemic on TriMet's transit service and ridership as of 2021. At this time, it is not possible to predict future changes to the Purpose and Need, schedule and impacts that may result from a COVID-19 response of an unpredictable nature and length. Should a prolonged COVID-19 response result in significant changes to the planning assumptions, project schedule, project scope or surrounding project environment, FTA will consider additional evaluation and public input consistent with applicable and current implementing environmental regulations.

# S.1 Project Overview

The Project consists of a light rail investment and related transportation improvements that would serve the southwestern portion of the Portland metropolitan area (see Figure S-1). This Final EIS focuses on the Preferred Alternative for the light rail investment, which is the lead agencies' favored course of action to meet the Project's Purpose and Need. The Preferred Alternative is a new 11-mile Metropolitan Area Express (MAX) light rail line extending from downtown Portland through southwest Portland and Tigard, terminating near Bridgeport Village in Tualatin. The Preferred Alternative also includes a connection to Marquam Hill, a shuttle to the Portland Community College (PCC) Sylvania campus, park and rides, streetscape elements and a new operations and maintenance (O&M) facility. The Final EIS also evaluates two terminus options, which are portions of the Preferred Alternative that could be constructed if there is insufficient funding for the full-length alignment.

The related transportation improvements consist of the Ross Island Bridgehead Reconfiguration and station access improvements. These are options for additional access and mobility improvements that could be phased to be built before, with or after the light rail investment, depending on funding availability, including other federal grants or local funding initiatives.

Section S.6 describes the Project in more detail, including a table summarizing the elements of the Project. Chapter 2, Alternatives Considered, provides further information on the Project.



# S.2 Purpose and Need

Federal environmental regulations for an EIS require a statement of the purpose a proposed project is intended to address, along with reasons why the project is needed. The Purpose and Need is used to define the EIS alternatives to be considered, and it guides FTA, Metro, TriMet and their local agency partners in other decisions about the Project. The Project's Purpose and Need, provided below, remains as stated in the Draft EIS. Chapter 1, Project Introduction, of the Draft EIS has more background on the need for the Project.

The COVID-19 pandemic has caused unprecedented shifts in social, economic and transportation conditions and behaviors at regional, national and international levels. Although it is not possible to predict future changes to the Purpose and Need, the basis for the Purpose and Need is long range urban growth in the Portland region, including growth in population, employment and travel demand. While the pandemic immediately reduced economic and transportation demand, a resumption in growth is still expected to occur in the coming decades. Regional plans to manage growth sustainably through high capacity transit also remain in place. Therefore, the basis for the Purpose and Need remains intact.

### **Purpose of the Project**

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

## **Need for the Project**

A light rail transit project in the Southwest Corridor is needed for the following reasons:

- 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 facilities create barriers and unsafe conditions for transit access and active transportation.
- Travel is slow and unreliable on congested roadways.
- There are both a limited supply and a limited range of housing options in the Southwest Corridor that have good access to multimodal transportation networks. In addition, 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.

# S.3 Background on Southwest Corridor Planning

The EIS for the Project builds on years of previous regional planning. In 2009, Metro adopted the 30-year *High Capacity Transit System Plan*, also known as the HCT Plan, to guide investments in light rail, commuter rail, bus rapid transit and rapid streetcar in the Portland region. The HCT Plan identified the Southwest Corridor, the area between downtown Portland and Sherwood including Tigard and Tualatin, as a priority. Between 2011 and 2016, Metro and its local agency partners<sup>1</sup> developed the Southwest Corridor Plan to identify a high capacity transit project and other investment strategies to help improve safety and quality of life, and to support regional and local land use plans and economic development. This plan and its accompanying alternatives analysis and public engagement created the framework for the Purpose and Need (see Section S.2) and the alternatives considered in the Draft EIS. Appendix I of the Draft EIS, Project Background and Alternatives Considered, provides more information about project planning prior to the Draft EIS.

# S.4 Identification and Adoption of the Preferred Alternative

The Draft EIS identified a preliminary version of a preferred alternative, known as the initial route proposal, to solicit comments during the Draft EIS comment period. Metro's Southwest Corridor Steering Committee made its recommendation for the Preferred Alternative in August 2018, informed by the Draft EIS and its public comments, as well as recommendations from project partner staff and Metro's Southwest Corridor Community Advisory Committee (CAC). These project committees and the outreach efforts associated with the Draft EIS public comment period are described in Section S.5, and in more detail in Chapter 6 of this Final EIS, Community Participation, Agency Coordination and Required Permits. Appendix I of this Final EIS, Preferred Alternative Selection and Project Refinements, describes the initial route proposal and the project partner staff, CAC and steering committee recommendations for the Preferred Alternative.

<sup>&</sup>lt;sup>1</sup> In addition to Metro, the local agency partners at that time were: TriMet; Oregon Department of Transportation; the cities of Beaverton, Durham, King City, Portland, Sherwood, Tigard and Tualatin; and Washington County.

The steering committee recommendation was endorsed by several local partner agencies before it was presented to the Metro Council for consideration. The following entities provided endorsements of the Preferred Alternative in the fall of 2018:

- Beaverton City Council
- Oregon Department of Transportation (ODOT)
- Portland City Council
- Tigard City Council
- TriMet Board of Directors
- Tualatin City Council
- Washington County Commission

In November 2018, after the above endorsements, the Metro Council adopted a resolution to endorse the Preferred Alternative as described in the steering committee recommendation, and to direct staff to include the Preferred Alternative in the 2018 *Regional Transportation Plan*. The Preferred Alternative was included in the 2018 *Regional Transportation Plan* adopted by the Metro Council in December 2018.

# S.5 Public Involvement

The Project's public engagement objectives and desired outcomes guided the outreach efforts for both the EIS analysis and the identification of the Preferred Alternative. The public involvement efforts by Metro and TriMet are summarized below. For more information on public involvement conducted since the publication of the Draft EIS, see Chapter 6 of this Final EIS. For more information on the Project's public involvement leading up to the publication of the Draft EIS, including scoping, see Chapter 6 of the Draft EIS.

## **Project Committees**

Metro and TriMet have led the planning for the Project. After the Metro Council endorsed the Preferred Alternative in late 2018, leadership for project planning and public engagement transitioned from Metro to TriMet. This transition point marked the end of the steering committee that had been convened by the Metro Council and the CAC convened by Metro's steering committee. In early 2019, TriMet created a new steering committee and a new CAC to advise on decisions through project construction. TriMet's steering committee and CAC are described below and in more detail in Chapter 6. Both committees were put on hiatus in December 2020 after a regional transportation funding measure did not pass, resulting in a pause on further planning and design work (see Section S.10 for more information about this pause and next steps). These committees would be reconvened if future funding is identified to allow planning and design work to continue.

## Steering Committee

TriMet's steering committee advises the TriMet General Manager on decisions through project construction. The steering committee focuses on addressing issues in the jurisdictions that would be most directly affected by the light rail investment: Portland, Tigard, Durham, Tualatin, Washington County, ODOT, TriMet and Metro. The latest roster for the steering committee and notes and materials from past meetings are posted on TriMet's project website, <u>trimet.org/swcorridor</u>. The steering committee meetings are open to the public and include opportunities for public comment before decisions occur.

### Community Advisory Committee

Since 2019, TriMet's CAC has been serving as a sounding board for design issues by providing feedback to project partner staff and decision-makers at monthly meetings.<sup>2</sup> The CAC is composed of business owners; technical experts; active transportation and affordable housing advocates; and representatives of major employers, education institutions and other organizations. The latest roster for the CAC and materials from past meetings are posted on TriMet's project website. The CAC meetings are open to the public and include public comment opportunities.

### **Draft EIS Publication and Comment Period**

On June 7, 2018, Metro notified its interested parties email list of the availability of the Draft EIS and the opportunity to submit comments. The 45-day comment period began when a Notice of Availability was issued in the Federal Register on June 15, 2018. The comment period closed on July 30, 2018. All comments received between June 7 and July 30, 2018, are included as Draft EIS comments within this Final EIS.

Chapter 7, Draft EIS Comment Summary, lists the commenters, summarizes the comments and reviews how they were addressed. Appendix J, Draft EIS Comments and Responses, contains the comments received along with the responses provided by FTA, Metro and TriMet.

During a period starting just before the release of the Draft EIS, and continuing through the close of the public comment period, project partner staff attended or hosted 33 community meetings and events attended by more than 650 people, including: 2 open house events (including translation services); 2 public hearings; 1 multilingual event/hearing; 4 informational hours at libraries near the proposed alignments; and 24 association, commission or organization visits by project partner staff.

During the Draft EIS comment period, FTA, TriMet and Metro received comments in the form of mailed letters, petitions, online form submissions, emails and associated attachments, comment cards filled out at public events and spoken testimony at public hearings. Comments were submitted by individuals, businesses, organizations, public agencies and a tribe (the Confederated Tribes of the Grand Ronde Community of Oregon).

### **Final EIS Public Outreach**

The Preferred Alternative identified in 2018 included several areas where refinements were still needed. The areas for refinement included confirming the light rail alignment in the Crossroads area, selecting a Marquam Hill connection option, and making adjustments to park and rides. For more information, see Chapter 6.

In addition, TriMet considered several other refinements to reduce impacts and optimize the cost-effectiveness of the light rail investment, including some options that were considered but not pursued further. Outreach related to these refinements is summarized in Appendix I.

<sup>&</sup>lt;sup>2</sup> Project partner staff include staff from TriMet, Metro and partnering agencies.

# S.6 Alternatives Considered

This Final EIS evaluates the impacts of the Project and the No-Build Alternative, which represents future conditions without the proposed Project. The Draft EIS, published in June 2018, considered a range of alternatives for the Project. The Draft EIS analysis and public comments informed the selection of a Preferred Alternative for the light rail investment in December 2018. The Preferred Alternative is the focus of this Final EIS. The environmental impacts of the other alternatives considered in the Draft EIS are incorporated by reference in this Final EIS. See Chapter 2 for more information on alternatives considered.

### **No-Build Alternative**

The No-Build Alternative is the environmental baseline for evaluating the benefits and impacts of the Project. The No-Build Alternative represents transportation and environmental conditions without light rail to connect Portland, Tigard and Tualatin, and without the roadway, bicycle and pedestrian improvements included in the proposed light rail investment or the related transportation improvements. It assumes regionally adopted forecasts for future population and employment growth through the year 2035, as well as adopted land use plans and other transportation investments in the region.

### Southwest Corridor Light Rail Project

As described in Section S.1, the Project consists of a light rail investment and related transportation improvements. This Final EIS focuses on the Preferred Alternative for the light rail investment. The Final EIS also evaluates two terminus options, which are portions of the Preferred Alternative that could be constructed if there is insufficient funding for the full-length alignment. The elements of the Project are described in the following sections and summarized in Table S-1.

### Preferred Alternative: Overview

The Preferred Alternative would extend the existing MAX network with a new 11-mile light rail line serving southwest Portland, Tigard and Tualatin. The light rail alignment would generally be either center-running within existing or new streets, or adjacent to roadways or railroads, and would serve up to 13 new stations with up to 2,020 park and ride spaces. Figure S-1 shows a map of the Preferred Alternative for the full corridor from Portland to Tualatin. Table S-2 lists the proposed stations associated with the Preferred Alternative. See Appendix A, Detailed Maps and Descriptions of the Alternatives, for a detailed map of each station. Chapter 2 provides additional information on the project infrastructure, including tables of park and rides, roadway crossings, track crossovers and substations.

The Preferred Alternative is divided geographically into three segments for analysis purposes: Segment A, Inner Portland; Segment B, Outer Portland; and Segment C, Tigard and Tualatin. To allow for comparison with the Draft EIS alignment alternatives, the analysis in this Final EIS separates the discussion of the Preferred Alternative into the alignment and stations for each segment, the Marquam Hill Connection, the PCC-Sylvania Shuttle and the Hunziker O&M Facility. The term "alignment and stations" in the Final EIS covers all the fixed physical elements needed for light rail to operate, including the light rail trackway and shared transitway, overhead catenary wires and poles, stations, park and rides, transit centers, bus stops, streetscape elements, and other associated infrastructure such as systems buildings and stormwater treatment and detention facilities.

The following sections describe the Preferred Alternative by geographic segment.

#### Table S-1. Elements of the Southwest Corridor Light Rail Project

#### Light Rail Investment

#### Preferred Alternative<sup>1</sup>

• Light rail alignment: an 11-mile light rail line between downtown Portland and Tualatin via Tigard, which would primarily run at grade, with approximately 2.3 miles of elevated trackway or bridges and one cut-and-cover undercrossing

**Stations and park and rides**: 13 light rail stations with platforms up to 200 feet long, including five new or modified park and rides with up to 2,020 spaces total, one reconfigured transit center, third tracks at some stations to allow vehicles to dwell (similar to operations with tail tracks), and one pedestrian bridge connecting a station and park and ride

Light rail vehicles: purchase of 32 light rail vehicles (including spare vehicles) to add to the TriMet fleet, which would operate in two-car train sets

**Light rail service**: service frequencies ranging from 7 to 15 minutes in the forecast year 2035, depending on the location along the alignment and the time of day<sup>2</sup>

**Bus routing changes**: elimination or modification of bus routes to improve coverage and service levels and avoid duplicating light rail service (service hours mostly reallocated to other bus routes in the corridor)

**Marquam Hill Connection**: dual 370-foot-long inclined elevators on an angled structure to make a new pedestrian connection between the Gibbs Station on SW Barbur Blvd. and the medical and educational facilities on Marquam Hill

**Shared transitway**: 2 miles of paved light rail transitway in South Portland (between SW Lincoln St. and the 4900 block of SW Barbur Blvd.) to allow shared use by buses to and from downtown, with one station for buses located at SW Gibbs St.

**PCC-Sylvania Shuttle**: shuttle route connecting the PCC-Sylvania campus with the nearby light rail station at SW 53rd Ave., including the purchase of three van-sized shuttle buses

**Hunziker O&M Facility**: new light rail O&M facility in Tigard to accommodate about 36 light rail vehicles (includes storage for 4 additional vehicles than is needed for the Preferred Alternative to allow for system growth and operations flexibility)

**Streetscape elements**: modifications to roadways along or intersecting the light rail alignment, including addition or reconstruction of signalized intersections, gated rail crossings, bicycle facilities, sidewalks and water quality treatments

#### Upper Boones Ferry Terminus Option<sup>3</sup>

All elements of the Preferred Alternative, except for the following differences:

• Light rail alignment: a 10-mile light rail line between downtown Portland and Tigard, with approximately 2.1 miles of elevated trackway or bridges and one cut-and-cover crossing

• Stations and park and rides: 12 light rail stations, including four new or modified park and rides with 1,060 spaces total

#### Hall Terminus Option<sup>3</sup>

All elements of the Preferred Alternative, except for the following differences:

• Light rail alignment: an 8-mile light rail line between downtown Portland and Tigard, with approximately 1.5 miles of elevated trackway or bridges and one cut-and-cover crossing

Stations and park and rides: 10 light rail stations, including four new or modified park and rides with 1,060 spaces total

· Light rail vehicles: purchase of 30 light rail vehicles to add to the TriMet fleet

#### **Related Transportation Improvements<sup>4</sup>**

#### **Ross Island Bridgehead Reconfiguration**

An option to modify the roads and ramps at the west end of the Ross Island Bridge to reduce regional traffic on SW Naito Pkwy., add new signalized intersections, and add or enhance facilities for walking and bicycling

#### **Station Access Improvements**

Options for new walking and bicycling infrastructure to improve access to stations, including sidewalks, bicycle facilities, three pedestrian bridges and one multi-use path on a light rail structure

Note: O&M = operations and maintenance; PCC = Portland Community College; TriMet = Tri-County Metropolitan Transportation District of Oregon. <sup>1</sup> To allow for comparison with the Draft EIS alignment alternatives, the analysis in this Final EIS separates the discussion of the Preferred Alternative into

the alignment and stations for each segment, the Marquam Hill Connection, the PCC-Sylvania Shuttle and the Hunziker O&M Facility. <sup>2</sup> 2035 is the forecast year used in the regional travel demand modeling for this Final EIS. Opening year frequencies have not yet been determined.

<sup>3</sup> The terminus options are portions of the Preferred Alternative that could be constructed if there is insufficient funding for the full-length alignment.

<sup>4</sup> The related transportation improvements are options for additional access and mobility improvements that could be phased to be built before, with or after the light rail investment, depending on funding availability, including other federal grants or local funding initiatives.

Station	Station Characteristics
Gibbs Station	Split platforms in roadway median that serve light rail on the outside and buses using the shared transitway on the inside
Hamilton Station	Center platform in roadway median
13th Station <sup>1</sup>	Center platform in roadway median
19th Station	Split side platforms in roadway median on far sides of SW 19th Ave./SW Capitol Hill Rd. crossing
30th Station	Split side platforms in roadway median on far sides of SW 30th Ave. crossing
Barbur TC Station	Center platform in roadway median Existing surface P&R and bus facility reconstructed with access modifications and 300 parking spaces
53rd Station	Center platform next to I-5 New surface P&R with 310 spaces
68th Station	Side platforms in side-running configuration next to Pacific Hwy. (designated as Oregon Route 99W) New surface P&R with 350 spaces
Elmhurst Station	Center platform in side-running configuration next to SW Elmhurst St.
Hall Station <sup>2</sup>	Platforms at three tracks in side-running configuration next to SW Hall Blvd. New surface P&R with 100 spaces
Bonita Station	Side platforms on elevated structure
UBF Station	Split side platforms on near sides of SW UBF Rd. crossing
Bridgeport Station	Platforms at three tracks away from roadway on north side of SW LBF Rd. Pedestrian bridge over SW LBF Rd. Existing surface P&R replaced with structured P&R with up to 960 spaces on south side of SW LBF Rd. Transit center with bus bays on ground level of P&R structure

#### Table S-2. Preferred Alternative Light Rail Stations

Note: I-5 = Interstate 5; LBF= Lower Boones Ferry; N/A = not applicable; P&R = park and ride; TC = Transit Center; UBF = Upper Boones Ferry.

<sup>1</sup> The 13th Station was named the Custer Station in the Draft EIS.

<sup>2</sup> The Hall Station was named the Tigard Transit Center Station in the Draft EIS.

#### Preferred Alternative: Segment A

Segment A encompasses the area from the southern edge of downtown Portland to just north of the intersection of SW Barbur Boulevard and SW Brier Place (see Figure S-2). In this segment, light rail would primarily run in the center of SW Barbur Boulevard. Segment A includes the Marquam Hill Connection in addition to the alignment and stations.

The Preferred Alternative light rail alignment would tie in to the Downtown Portland Transit Mall, which runs along SW Fifth and Sixth Avenues. The Transit Mall currently supports MAX Green, Yellow and Orange Lines. The Project would extend MAX Green Line service to the south from its terminus at SW Fifth Avenue and SW Jackson Street near Portland State University.

The Preferred Alternative would diverge from the existing MAX tracks at SW Fifth Avenue and SW Lincoln Street. It would cross Interstate 405 (I-405) on a new structure east of and parallel to the SW Fifth Avenue bridge and on-ramp. The alignment would continue south on this structure to cross over the on-ramp, SW Broadway, SW Caruthers Street and SW Sheridan Street. The alignment would land in the center of SW Barbur Boulevard just south of SW Sheridan Street and match the roadway grade just north of SW Hooker Street. The alignment would continue running in the center of SW Barbur Boulevard at grade until the segment break point near SW Brier Place.



For nearly 2 miles of the light rail alignment along SW Barbur Boulevard, the Preferred Alternative would have a shared transitway to accommodate buses as well as light rail. Starting at SW Lincoln Street and continuing south to a new signalized intersection at the 4900 block of SW Barbur Boulevard, the shared transitway would allow buses to avoid traffic congestion, improving transit travel times and reliability.

In Segment A, one light rail station would be near SW Gibbs Street and one near SW Hamilton Street. Platforms for buses using the shared transitway would be incorporated into the Gibbs Station. The Preferred Alternative would add a signalized pedestrian crossing of SW Naito Parkway at SW Gibbs Street to provide access across SW Naito Parkway and onto the pedestrian bridge over Interstate 5 (I-5) at SW Gibbs Street.

Three crossover tracks are assumed to be located in Segment A, one on the new light rail structure just south of I-405, one just south of SW Hooker Street and one just north of SW Capitol Highway in The Woods. Approximately two substations would be required in Segment A. These would be placed on parcels that would need to be acquired for the light rail trackway, one near SW Bancroft Street and one near SW Capitol Highway in The Woods.

The Marquam Hill Connection would feature dual 370-foot-long inclined elevators on an angled structure up the hillside between the Gibbs Station on SW Barbur Boulevard and the intersection of SW Terwilliger Parkway and SW Campus Drive. This connection would serve the large complex of medical and educational facilities on Marquam Hill, including the Oregon Health & Science University (OHSU), the Veterans Affairs (VA) Portland Health Care System and the Portland Shriners Hospital for Children. Following the Draft EIS, the details of this connection were developed and refined based on public and agency comments and involvement, including close coordination with OHSU and the City of Portland.

## Preferred Alternative: Segment B

Segment B extends from SW Barbur Boulevard at SW Brier Place to the Portland/Tigard city boundary, near the intersection of SW Barbur Boulevard and Pacific Highway (designated as Oregon Route 99W) with SW 65th Avenue (see Figure S-3). The Preferred Alternative would run in the center of SW Barbur Boulevard through the northern portion of this segment, and then transition to run adjacent to I-5 south of the Barbur Transit Center. Segment B includes the PCC-Sylvania Shuttle in addition to the alignment and stations.

The Preferred Alternative would run in the center of SW Barbur Boulevard until the Barbur Transit Center. SW Barbur Boulevard would be widened to accommodate light rail tracks, bicycle facilities and sidewalks. Part of the widening would be accomplished by removing continuous center turn lanes and on-street parking where they exist.

The Preferred Alternative would reconstruct the existing SW Barbur Boulevard bridges over SW Multnomah Boulevard and SW 26th Way. The Preferred Alternative would construct additional signalized intersections on SW Barbur Boulevard to accommodate left turns and U-turns. Other side-street and driveway access along SW Barbur Boulevard would be limited to right-in and right-out only.

The alignment would depart from the center of SW Barbur Boulevard at SW Taylors Ferry Road, including a signalized crossing of the northbound lanes of SW Barbur Boulevard. The trackway would run through a portion of the existing park and ride at Barbur Transit Center. The alignment would cross over I-5, SW Capitol Highway and SW Barbur Boulevard on a new light rail structure, and then continue adjacent to I-5 until SW 60th Avenue.



S-12

Just west of SW 60th Avenue, the alignment would cross over I-5 on a new light rail structure parallel to and north of the existing SW Barbur Boulevard bridge over I-5. On the west side of I-5, the trackway would land in between SW Barbur Boulevard and the southbound I-5 off-ramp, and then drop into a cut-and-cover underpass below SW Barbur Boulevard between SW 64th Avenue and SW 65th Avenue.

Stations would be located at grade in the center of SW Barbur Boulevard at SW 13th Avenue, SW 19th Avenue, SW 30th Avenue and the Barbur Transit Center. Another station would be located adjacent to I-5 at SW 53rd Avenue. The existing Barbur Transit Center surface park and ride would be reconstructed with underground stormwater tanks and would have a slightly reduced capacity of about 300 spaces. The 53rd Station would include a new surface park and ride with about 310 spaces.

A short pocket track for vehicle storage would be located along the north side of the trackway just east SW 60th Avenue. The pocket track would be approximately 230 feet long, which would provide space for one train (a two-car set). Two crossover tracks are assumed to be located in Segment B, one just north of the 30th Station and one between the 53rd Station and the pocket track. Approximately three substations would be required in Segment B. These would be placed on parcels that would need to be acquired for the light rail trackway or stations, and are assumed to be located near SW Troy Street, SW Baird Street and the 53rd Station.

The Preferred Alternative alignment and stations would rebuild SW 53rd Avenue between the 53rd Station and the PCC-Sylvania with new pavement, sidewalks, stormwater treatment and lighting to improve the walking and bicycling access. The Preferred Alternative would also include purchase and operation of the PCC-Sylvania Shuttle, which is analyzed separately from the alignment and stations in Segment B. For the PCC-Sylvania Shuttle, TriMet would purchase three van-sized shuttle buses that would operate in mixed traffic on an up to 0.5-mile route along SW 53rd Avenue between the campus and the 53rd Station.

## Preferred Alternative: Segment C

This segment extends from the Portland/Tigard city boundary to Bridgeport Village in Tualatin, which would be the southern terminus of the light rail alignment (see Figure S-4). In this segment, the light rail trackway would primarily run adjacent to existing roads or railroads. Segment C includes the Hunziker O&M Facility to support light rail operations.

The light rail trackway would cross below SW Barbur Boulevard in an undercrossing between SW 64th Avenue and SW 65th Avenue, continuing below SW Coronado Street to emerge on the south side of Pacific Highway. The alignment would then cross over SW 68th Parkway and turn south into the Tigard Triangle to connect with SW 70th Avenue (see Exhibit 2.2-2 for more information on the Tigard Triangle).

In the Tigard Triangle, the alignment would be side-running along the east side of SW 70th Avenue. Between SW Baylor Street and SW Elmhurst Street, the Preferred Alternative would construct missing portions of the SW 70th Avenue roadway. At the intersection of SW 70th Avenue and SW Dartmouth Street, light rail would cross over SW Dartmouth Street on a new structure, while the auto lanes and sidewalks would remain at grade. The route would turn west on SW Elmhurst Street and then cross over Highway 217 on a new light rail structure to reach downtown Tigard. The alignment would cross SW Hunziker Street at grade at SW Knoll Drive, and then run adjacent to SW Hall Boulevard until SW Commercial Street. SW Hunziker Street would be reconstructed to align with SW Scoffins Street at the intersection with SW Hall Boulevard.



South of downtown Tigard, the alignment would turn southeast to run along the east side of the existing freight rail and WES Commuter Rail tracks. Between SW Tech Center Drive and SW Bonita Road, the alignment would cross to the west side of the tracks on a new light rail structure. The trackway would continue on this structure over SW Bonita Road, over Ball Creek, and over the WES Commuter Rail and freight rail tracks again to land on the east side of the freight rail tracks. The alignment would continue south on the east side of the freight rail tracks, with at-grade gated crossings at SW 72nd Avenue and SW Upper Boones Ferry Road. At I-5, the alignment would turn southwest to cross over the freight rail tracks and then run along the west side of I-5 until the terminus just north of SW Lower Boones Ferry Road.

The Preferred Alternative would include two stations in the Tigard Triangle (68th and Elmhurst Stations) and one serving downtown Tigard (Hall Station). The 68th Station would be at grade on the south side of Pacific Highway just east of SW 68th Parkway. The Elmhurst Station would be on SW Elmhurst Street between SW 72nd Avenue and SW 70th Avenue. The Hall Station would be located on the southeast side of SW Hall Boulevard between SW Commercial Street and SW Hunziker Street. The WES Commuter Rail station and the Tigard Transit Center bus facilities would remain co-located in their existing location, approximately 0.25 mile from the Hall Station, and would not be impacted by the Project.

South of downtown Tigard, stations would be included at SW Bonita Road, SW Upper Boones Ferry Road and Bridgeport Village. The Bonita Station would be an elevated station located on the north side of SW Bonita Road between SW Milton Court and the WES Commuter Rail tracks. The Upper Boones Ferry Station would be at grade, with near-side platforms on either side of SW Upper Boones Ferry Road. The Bridgeport Station would be located on the north side of SW Lower Boones Ferry Road between SW 72nd Avenue and I-5.

The Preferred Alternative would include a new surface park and ride with about 350 spaces at the 68th Station, a new surface park and ride with about 100 spaces at the Hall Station, and a structured park and ride with up to 960 spaces on five levels at the Bridgeport Station. The Bridgeport Park and Ride structure would be located on the site of an existing surface park and ride south of SW Lower Boones Ferry Road, and a new pedestrian bridge would connect the park and ride to the station and transit center.

Both the Hall Station and the Bridgeport Station would include three tracks and a combined center and side platform to allow vehicles to cross tracks or switch direction if needed. Three crossover tracks are assumed to be included in Segment C, located just south of SW Hunziker Street, just north of SW Wall Street and just north of the Bridgeport Station. Approximately six substations would be required in Segment C. These would be placed on parcels that would need to be acquired for the light rail trackway or stations, and are currently assumed to be located near SW 68th Avenue, SW Hermoso Way, the Hall Station, SW Bonita Road, the Upper Boones Ferry Station and the Bridgeport Station.

The Preferred Alternative would include a new light rail O&M facility in Segment C to accommodate the added light rail vehicles in the TriMet system. The Hunziker O&M Facility would be located along the light rail alignment in the industrial area east of downtown Tigard. The facility would encompass about 15 acres, which would be bounded by the Red Rock Creek floodplain to the southeast and the WES Commuter Rail and freight rail tracks to the southwest.

The facility layout would be designed to provide storage track for approximately 36 light rail vehicles and to accommodate most maintenance functions necessary to operate the light rail system, including five maintenance bays, a space for wheel-truing, a vehicle wash area, a unit repair facility (for vehicle parts) and

parts storage areas (both indoor and outdoor). The storage track would accommodate four additional vehicles than the 32 that would be purchased for the Project to allow for system growth and operational flexibility. The facility site would have space to add more storage tracks later, for up to 60 vehicles total, to accommodate further system growth.

## **Terminus Options**

This Final EIS considers two terminus options for phasing the construction of the Preferred Alternative in the event that there is insufficient funding to construct the full length of the alignment:

- Upper Boones Ferry Terminus Option
- Hall Terminus Option

In accordance with FTA's Capital Investment Grants Program guidance, a project that would construct a portion of a preferred alternative, referred to as a minimum operable segment (MOS), "must be able to function as a stand-alone project and not be dependent on any future segments being constructed" (FTA Circular C9300.1B). Either terminus option could meet these requirements and function as an MOS. If additional funding were identified at a later date, either terminus option could ultimately be extended to build the full-length Preferred Alternative alignment described in this Final EIS.

The Upper Boones Ferry Terminus Option is defined as a 10-mile alignment terminating at the Upper Boones Ferry Station. The Hall Terminus Option is defined as an 8-mile alignment terminating at the Hall Station, but including trackway extending beyond the station to access the adjacent Hunziker O&M Facility. Figure S-4 shows the location of each terminus station. Both terminus options would include the Marquam Hill Connection, the PCC-Sylvania Shuttle and the Hunziker O&M Facility. See Chapter 2 for more information about the elements of the Preferred Alternative that would or would not be constructed with each terminus option. See Appendix I for information on how the terminus options studied in this Final EIS compare to the MOS options studied in the Draft EIS.

## **Related Transportation Improvements**

The related transportation improvements are options for additional access and mobility improvements, separate from the light rail investment, that would extend the benefits of light rail. The related transportation improvements consist of:

- **Ross Island Bridgehead Reconfiguration.** This is an option to improve neighborhood access to light rail in South Portland. It would supplement the circulation changes made by the Preferred Alternative in South Portland with several measures to improve circulation for bicycles, pedestrians and local vehicles.
- **Station access improvements.** There are 30 options for walking and bicycling investments that would enhance access to the light rail stations with the Preferred Alternative. The improvements include adding bikeways, sidewalks, enhanced pedestrian crossings, and pedestrian bridges or multi-use paths over I-5 and Highway 217.

These optional improvements could be phased to be built before, with or after the light rail investment, depending on funding availability, including other federal grants or local funding initiatives.

### **Construction Activities**

The construction of the Project would be a major undertaking, similar in scale, duration and complexity to other major public works projects that have been built in the region, such as the MAX Orange Line extending light rail from downtown Portland to Milwaukie. The timing of project construction is currently unknown, because planning and design efforts for the Project were paused in late 2020 (see Section S.10 for more information). Construction would last approximately four years, followed by system testing. Although construction activities would occur along the length of the Project during this time, the impact would not be continuous along the corridor for the full duration, because the Project would likely be divided into various segments or line sections for construction. Construction would include activities such as demolitions, utility relocations and construction of the light rail elements. Staging areas would be required for activities such as stockpiling materials, assembling project elements and locating field administration offices. To minimize impacts to properties, parcels that would be needed for the project footprint could be used as staging areas before the construction of project elements on those parcels.

Where possible, construction activities would be coordinated with other capital improvement projects, including projects carried out by the local jurisdictions, to help minimize construction impacts. In addition, TriMet will actively engage with local jurisdictions as the Project nears construction to develop a conduct of construction plan that would guide coordination throughout construction.

# S.7 Transportation and Environmental Impacts

### **Preferred Alternative**

Table S-3 summarizes notable impacts associated with the Preferred Alternative by geographic segment, paired with associated mitigation measures. These impacts and mitigation measures are described in more detail in Chapter 3, Transportation Impacts and Mitigation, and Chapter 4, Environmental Impacts and Mitigation. Mitigation measures are also summarized in Appendix M, Mitigation Plan.

### **Terminus Options**

The terminus options, described in Section S.6, would have most of the same impacts as the Preferred Alternative, except that they would avoid, at least temporarily, the impacts associated with the portion of the Preferred Alternative that would not be constructed. The Upper Boones Ferry Terminus Option would not construct 1 mile of the Preferred Alternative south of the Upper Boones Ferry Station, and the Hall Terminus Option would not construct 3 miles of the Preferred Alternative south of the Hall Station and the Hunziker O&M Facility. If and when the remaining part of the line is built, the total impacts would be the same as the full-length Preferred Alternative, except that the construction-period effects would be extended because they would occur in two phases.

The terminus options would impact motor vehicle operations at one intersection that would not be impacted by the Preferred Alternative (SW 65th Avenue/SW Haines Street/I-5 northbound ramps). See Chapter 3 for more information about this impact and the associated mitigation.

The terminus options would still bring transportation benefits compared to the No-Build Alternative, but these benefits would be reduced compared to the full-length Preferred Alternative (see Chapter 3 for ridership projections). Other benefits, such as improvements in air quality, would be slightly lower, and a shorter light rail line would be less supportive of regional plans for land use and the transportation system.

EIS Section/Resource	Adverse Impacts	Segment A <sup>1</sup>	Segment B <sup>2</sup>	Segment C <sup>3</sup>	Summary of Mitigation Measures	
3 Transportation	Intersections with operations exceeding mobility target	4 intersections	7 intersections	3 intersections	During final design and permitting, TriMet would coordinate with relevant jurisdictions to ensure vehicle throughput (V/C ratio) would not exceed both the No-Build Alternative and the jurisdictional standards.	
	Impacts due to queue lengths that would require mitigation <sup>4</sup>	2 queuing impacts	None	1–2 queuing impacts	During final design and permitting, TriMet would coordinate with relevant jurisdictions to ensure that queues would not result in safety concerns.	
4.1 Acquisitions, Displacements and Relocations	Residential displacements	35 residential units	39 residential units	21 residential units	When acquiring properties and relocating existing residents and businesses, TriMet would comply with the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and 49 CFR Part 24; Chapter 35 of the Oregon Revised Statutes; and TriMet's acquisition and relocation policy, procedures and guidelines.	
	Business displacements	13 businesses	66 businesses	35 businesses	No additional mitigation beyond compliance with the measures listed above, which include compensation and business relocation assistance.	
4.2 Land Use	Acres of land converted to transportation use	6.3 acres	19.8 acres	51.5 acres	No mitigation required.	
4.3 Economics	Affected employees	150 employees	447 employees	821 employees	No mitigation required beyond the measures identified in Section 4.1.	
4.4 Communities	Neighborhood cohesion, neighborhood quality of life, community facilities	Church parking impact	Church parking impact, childcare facility	Childcare facility	No mitigation required beyond what is identified in other disciplines (e.g., the property acquisition compensation and relocation assistance identified in Section 4.1).	
4.5 Visual Quality	Overall visual impact	High for Marquam Hill Connection (Moderate elsewhere)	Low to Moderate	Moderate/High in Tigard Triangle (Low elsewhere)	For locations where the Preferred Alternative could be visible from an identified scenic resource, such as the variety of regulated views, corridors, and/or design districts, the Preferred Alternative would consider applicable design review standards.	
4.6 Historic and Archaeological Resources	Anticipated adverse effects to historic properties (including partial acquisitions and historic parks)	7 adverse effects	4 adverse effects	None	TriMet and FTA would comply with the stipulations in the Section 106 of the National Historic Preservation Act Memorandum of Agreement that was developed in consultation with the State Historic Preservation Office and other consulting parties, as attached in Appendix K to this Final EIS.	
4.7 Parks and Recreation Resources	Parks with partial acquisitions or easements	3 parks	1 park	None	Mitigation would include restoring or replacing altered features including facilities, landscaping and trees, and providing offsetting improvements supporting trails. parks	

EIS Section/Resource	Adverse Impacts	Segment A <sup>1</sup>	Segment B <sup>2</sup>	Segment C <sup>3</sup>	Summary of Mitigation Measures	
					signage, and natural area management plans. Additional detail is provided in Appendix D, Final Section 4(f) Evaluation, of this Final EIS.	
4.8 Geology, Soils and Hydrogeology	No significant adverse impacts	N/A	N/A	N/A	No mitigation required. The Preferred Alternative would be developed to minimize risk in accordance with engineering standards and applicable regulations.	
4.9 Ecosystems	Permanent wetland impacts	0.2 acre	0.3 acre	0.8 acre	TriMet would mitigate unavoidable impacts to wetlands and waters consistent with state and federal regulations.	
4.10 Water Resources	Floodplain impacts	N/A	N/A	Bridge columns placed within the mapped floodplain	During final design and permitting, TriMet would lengthen the crossing spans to reduce the number of piers in the floodplain, size the crossing pier structures to minimize increase in water surface elevation for the 100-year peak flood discharge, and design pier shaping to minimize energy losses.	
4.11 Noise and Vibration	Severe noise impacts	12	0	0	TriMet would mitigate severe noise impacts using measures such as special trackwork or sound insulation.	
	Moderate noise impacts	64	59	46	TriMet would evaluate additional noise reduction measures to address moderate impacts considering costs and the noise reduction benefits offered. Measures could include special trackwork, sound walls or sound insulation.	
	Vibration impacts	20	9	5	TriMet would mitigate vibration impacts exceeding FTA's thresholds through additional detailed design and the implementation of vibration dampening trackways and trackwork.	
4.12 Air Quality and Greenhouse Gases	No significant adverse impacts	N/A	N/A	N/A	No mitigation required. Long-term effects would be beneficial.	
4.13 Energy	No significant adverse impacts	N/A	N/A	N/A	No mitigation required. Long-term effects would be beneficial.	
4.14 Hazardous Materials	Acquired sites with contamination issues	1 site	4 sites	2 sites	For sites with defined contamination based on site investigations, TriMet would conduct clean up and remediation activities. Applicable federal, state and local regulations would guide handling of hazardous materials.	
4.15 Utilities	No significant adverse impacts	N/A	N/A	N/A	No mitigation required. All affected utility companies would be contacted during the preliminary engineering phase to help locate and map potentially affected utilities, and to develop plans to coordinate either protection of the facilities	

EIS Section/Resource	Adverse Impacts	Segment A <sup>1</sup>	Segment B <sup>2</sup>	Segment C <sup>3</sup>	Summary of Mitigation Measures
					within the construction area or relocation of impacted facilities.
4.16 Public Services	No significant adverse impacts	N/A	N/A	N/A	No mitigation required. As standard practice and as part of the permitting process, TriMet would coordinate with service providers before opening day of the Preferred Alternative to plan for operational service.
4.17 Safety and Security	No significant adverse impacts	N/A	N/A	N/A	No mitigation required. Design and operations would consider best management practices including Crime Prevention through Environmental Design approaches and engagement with existing local agencies and emergency service providers to address site-specific needs.

Note: CPTED = Crime Prevention through Environmental Design; DSL = (Oregon) Department of State Lands; EIS = Environmental Impact Statement; N/A = not applicable; O&M = operations and maintenance; ODOT = Oregon Department of Transportation; OHSU = Oregon Health & Science University; PBOT = Portland Bureau of Transportation; PCC = Portland Community College; V/C = volume-to-capacity.

<sup>1</sup> Includes the Preferred Alternative alignment and stations for Segment A and the Marquam Hill Connection.

<sup>2</sup> Includes the Preferred Alternative alignment and stations for Segment B and the PCC-Sylvania Shuttle.

<sup>3</sup> Includes the Preferred Alternative alignment and stations for Segment C and the Hunziker O&M Facility.

<sup>4</sup> Queue length refers to the length of the line of vehicles when there is a delay at an intersection. The typical impacts of concern involve queuing that blocks adjacent intersections, or when queuing backups extend to the deceleration zone of highway off-ramps or into freeway lanes.

#### **Related Transportation Improvements**

#### Ross Island Bridgehead Reconfiguration

The Ross Island Bridgehead Reconfiguration would result in changed traffic patterns and increased connectivity of local streets, and would involve limited property acquisitions and associated environmental impacts. The Ross Island Bridgehead Reconfiguration would result in three impacts to motor vehicle operations for which mitigation is proposed. See Chapter 3 for more information about these impacts and the associated mitigation, specifically Section 3.2.5, Motor Vehicle Queuing Impacts, and Section 3.6.1, Long-Term Impacts Mitigation. The Ross Island Bridgehead Reconfiguration would also result in changes to traffic noise as a result of realigning roadways; further analysis would be completed based on final design. See Section 4.11, Noise and Vibration, for more information about these changes in traffic noise.

The Ross Island Bridgehead Reconfiguration would not require full property acquisitions and would not displace any existing residents or businesses, though it would require partial parcel acquisitions. The Ross Island Bridgehead Reconfiguration would not result in long-term adverse impacts to public parks or historic properties.

The benefits of the Ross Island Bridgehead Reconfiguration would include reducing the barrier effect of SW Naito Parkway within the South Portland neighborhood, improving walking and bicycling access, and rerouting regional traffic off of local residential streets.

#### Station Access Improvements

The impacts of the station access improvements would be minor because they are anticipated to be constructed within existing right of way. One station access improvement, a pedestrian bridge over I-5 at the 13th Station (SA08), would require a permanent easement where the bridge would cross over a portion of Burlingame Park (see Appendix D, Final Section 4(f) Evaluation, for more information).

The station access improvements would provide improved safety and access for people walking and bicycling, including providing new routes across existing barriers such as I-5 and Highway 217.

### **Comparison to Impacts of the Draft EIS Light Rail Alternatives**

Table S-4 summarizes quantifiable impacts for the Preferred Alternative and the range of light rail alternatives evaluated in the Draft EIS. More detailed information comparing the impacts of the Draft EIS light rail alternatives to the Preferred Alternative is provided for each discipline in Chapters 3 and 4 of this Final EIS.

Table S-4. Full-Corrido	r Comparison of Quai	ntitative Long-Term Impacts
-------------------------	----------------------	-----------------------------

EIS Section/Resource	Impact	Draft EIS Light Rail Alternatives <sup>1</sup>	Preferred Alternative
3. Transportation	Intersections with operations exceeding V/C ratio targets	19–24 intersections	14 intersections
	Impacts due to queue lengths <sup>2</sup>	9–11 queuing impacts	3–4 queuing impacts
4.1 Acquisitions,	Residential displacements	78–293 residential units	95 residential units
Relocations	Business displacements	106–156 businesses	114 businesses
4.2 Land Use	Acres of land converted to transportation use	64.4–91.5 acres	77.6 acres
4.3 Economics	Affected employees	961–2,284 employees	1,418 employees
4.6 Historic and Archaeological Resources	Anticipated adverse effects to historic properties (includes partial acquisitions and parks)	14–27 adverse effects	11 adverse effects
4.9 Ecosystems	Permanent wetland impacts	1.3–1.6 acres	1.3 acres
4.11 Noise and Vibration	Severe noise impacts	Up to 24	12
	Moderate noise impacts	Up to 572	169
	Vibration impacts	Up to 126	34
4.14 Hazardous Materials	Affected sites with higher risk for hazardous materials	5–8 sites	7 sites

Note: EIS = Environmental Impact Statement; V/C = volume-to-capacity.

<sup>1</sup> This information is based on the range of impacts of the alignment alternatives from each segment, as well as the Marquam Hill connection options, the PCC-Sylvania shuttle options, and the operations and maintenance facility options.

<sup>2</sup> Queue length refers to the length of the line of vehicles when there is a delay at an intersection. The typical impacts of concern involve queuing that blocks adjacent intersections, or when queuing backups extend to the deceleration zone of highway off-ramps or into freeway lanes.

# S.8 Other Federal Regulatory Processes

This section provides a summary of certain federal regulations, apart from NEPA, that require major consultation or approvals to be completed as part of the environmental review process. For more information on agency and tribal consultation, as well as other federal, state and local permits and approvals, see Chapter 6 of this Final EIS.

### Section 106 of the National Historic Preservation Act

Section 106 of the National Historic Preservation Act requires federal agencies to consider the effects on historic properties from projects with federal funding or approval. FTA coordinated with the Section 106 consulting parties regarding historic and archaeological resources, including by providing opportunities to review and comment on an updated area of potential effects, determinations of eligibility and findings of effect, and the proposed mitigations to address adverse effects.<sup>3</sup> FTA, the Oregon State Historic Preservation Office and TriMet signed a memorandum of agreement that outlines commitments to mitigate the Project's adverse impacts on historic and archaeological resources (see Appendix K, Memorandum of Agreement for Historic and Archaeological Resources). See Appendix E, Agency Coordination and Correspondence, for more information on Section 106 consultation, including copies of key

<sup>&</sup>lt;sup>3</sup> The Project's Section 106 consulting parties are: Confederated Tribes and Bands of the Yakama Nation, Confederated Tribes of the Grand Ronde Community of Oregon, Confederated Tribes of Siletz Indians of Oregon, Confederated Tribes of the Warm Springs Reservation of Oregon, Cowlitz Indian Tribe, Oregon Department of Transportation, Oregon State Historic Preservation Office, City of Portland, City of Tigard and Restore Oregon.

correspondence. See Attachment C, *Cultural Resource Survey for the Southwest Corridor Light Rail Project, Multnomah and Washington Counties, Oregon*, for more information on the Project's impacts to historic and archaeological resources.

## Section 4(f) of the U.S. Department of Transportation Act

Section 4(f) of the U.S. Department of Transportation Act protects park and recreation lands, wildlife and waterfowl refuges, and historic sites from projects funded by or requiring approval from the U.S. Department of Transportation. Section 4(f) properties may be used only if there is no prudent and feasible alternative to avoid the properties, and if all possible planning to minimize harm to the properties has been conducted. FTA, Metro and TriMet have consulted with the officials with jurisdiction over the Section 4(f) properties that would be affected by the Project, which are PP&R and the State Historic Preservation Office. In December 2020 and January 2021, TriMet held a public comment period focused on impacts to parks and historic resources, including the preliminary determinations of Section 4(f) uses. For more information about Section 4(f), see Appendix D.

## Section 6(f) of the Land and Water Conservation Fund Act

Section 6(f) of the Land and Water Conservation Fund (LWCF) Act provides federal assistance for land acquisition and improvements for public outdoor recreation areas and facilities, and also establishes protections for properties acquired or developed with this funding. These protections cover the entire area of a park at the time it received LWCF funding, in addition to the specific parcels or facilities within the park that were acquired or developed with these LWCF funds. The Draft EIS identified potential LWCF conversions for the Project at two separate parcels that are part of Terwilliger Parkway (a city park). FTA later provided documentation to the National Parks Service (NPS) showing that the Project as described in the Final EIS would now avoid impacts to properties associated with LWCF funding. The Preferred Alternative would avoid impacts to one of the two parcels identified in the Draft EIS. The other parcel would be partially or fully acquired for the Preferred Alternative, but based on additional information provided by FTA, NPS has determined that this parcel is not tied to any LWCF funding. For more information about both parcels, see Appendix N, Section 6(f) of the Land and Water Conservation Fund Documentation.

## Section 7 of the Endangered Species Act

Section 7 of the Endangered Species Act requires federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS), as appropriate, on actions that may affect a listed endangered or threatened species. FTA has consulted with NMFS, because the Project could affect listed fish species under NMFS jurisdiction. No listed species under the jurisdiction of USFWS are likely to be affected by the Project. FTA requested formal consultation with NMFS and submitted a biological assessment that addresses the effects of the Project on several fish species and essential habitat. Appendix L, Biological Opinion, contains the Biological Opinion for the Project issued by NMFS. NMFS determined that the Project is likely to adversely affect the populations and critical habitat of 15 listed endangered or threatened species of fish, but that the Project is not likely to jeopardize the continued existence of these species or destroy or adversely modify their designated critical habitat. Appendix E provides more information about consultation with NMFS, including copies of key correspondence.

### **Environmental Justice**

FTA has concluded that the Southwest Corridor Light Rail Project would not result in disproportionately high and adverse effects on minority and low-income populations, after mitigation and offsetting benefits have been considered. The primary source of impacts would result from residential and business acquisitions and related displacements and relocations. These impacts would be mitigated through TriMet's real property acquisition policy, including its compensation and relocation assistance program. More details are in Appendix C, Environmental Justice Compliance.

# S.9 Evaluation of Alternatives

Chapter 5 of this Final EIS, Evaluation of Alternatives, reviews the ability of the Project, focusing on the Preferred Alternative, to meet the Purpose and Need. It includes a summary of environmental and transportation impacts and covers capital and O&M costs, as well as a conceptual finance plan.

# S.10 Project Milestones and Schedule

The publication of this Final EIS is a major milestone in the Project's development. There are several immediate steps occurring concurrent with or shortly after the publication of this Final EIS to complete the environmental review process and the Project Development phase of the FTA Capital Investment Grants Program. Longer-term planning and design efforts are on hold at the time of this publication. The next steps of the Project are illustrated in Figure S-5 and described in the sections below.



### **Environmental Review**

Upon completion of this Final EIS, all entities and individuals that provided comments during the Draft EIS comment period, requested a copy of the Final EIS, or are otherwise participating in the environmental review process will be notified of its availability and how to access it through Metro's project website, <u>swcorridorplan.org</u>. Notification will require that a valid email address or mailing address has been

provided. In addition to the digital files available on the project website, physical copies of the Final EIS will be available at TriMet and Metro offices.

After the Final EIS has been distributed, a Notice of Availability for the Final EIS will be posted in the Federal Register. There will be a waiting period of at least 30 days following publication of the Notice of Availability, after which FTA will issue a Record of Decision (ROD) stating its determination and the basis of the Project's compliance with NEPA requirements. There is no formal public comment period for the Final EIS, but FTA will consider any public comments received during the waiting period. The ROD will identify the mitigation measures that will be incorporated in the Project, which are listed in Appendix M of this Final EIS.

## **Future Steps**

Planning and design efforts for the Project were paused in late 2020 after Measure 26-218 (also known as Get Moving 2020) did not pass. This measure would have provided a large portion of the local funding for further design and construction of both the Preferred Alternative and the Ross Island Bridgehead Reconfiguration.

The timing of remaining planning and design, project construction and opening of light rail service will depend on when the remaining local funding is identified and committed. After securing additional local funding, TriMet would request federal funds from FTA's Capital Investment Grants Program. After a federal funding agreement is executed, the major construction phase would take approximately four years, which would be followed by systems testing before the opening of service.

As noted in Section S.1, the related transportation improvements could be phased to be built before, after or with this light rail investment, depending on funding, including other federal grants or local initiatives.

This Page Intentionally Left Blank