

# Southwest Corridor Community Advisory Committee

August 6, 2020

Public comments can be submitted  
in writing to: [SWCorridor@trimet.org](mailto:SWCorridor@trimet.org)

*Include “CAC Comment” in the subject line.*





# The Southwest Corridor Light Rail Project Historic Resource Impacts



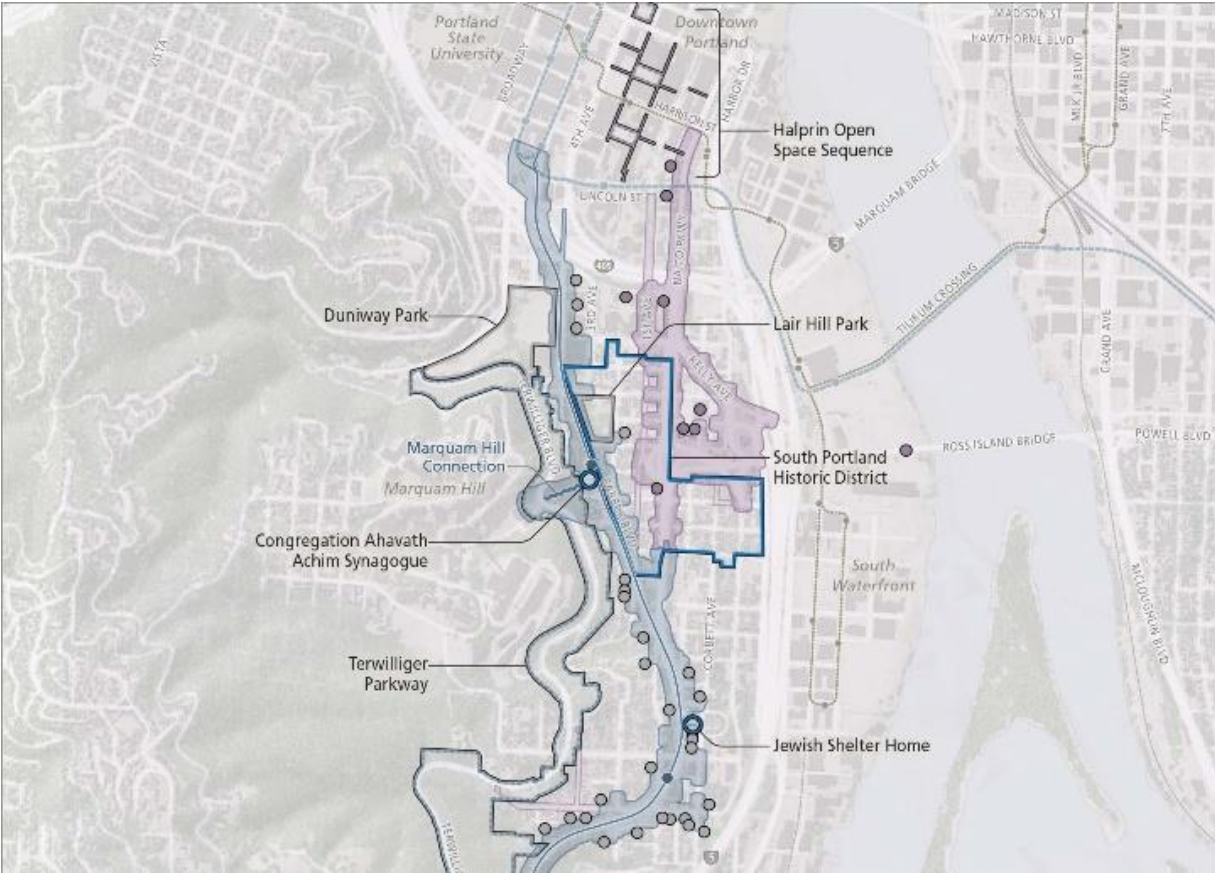
# Historic Resource Impacts Comparison

	DEIS June 2018	June 2020
Inner Portland	10 – 19 adverse impacts	Up to 7 adverse impacts
Outer Portland	3 – 6 adverse impacts	4 adverse impacts

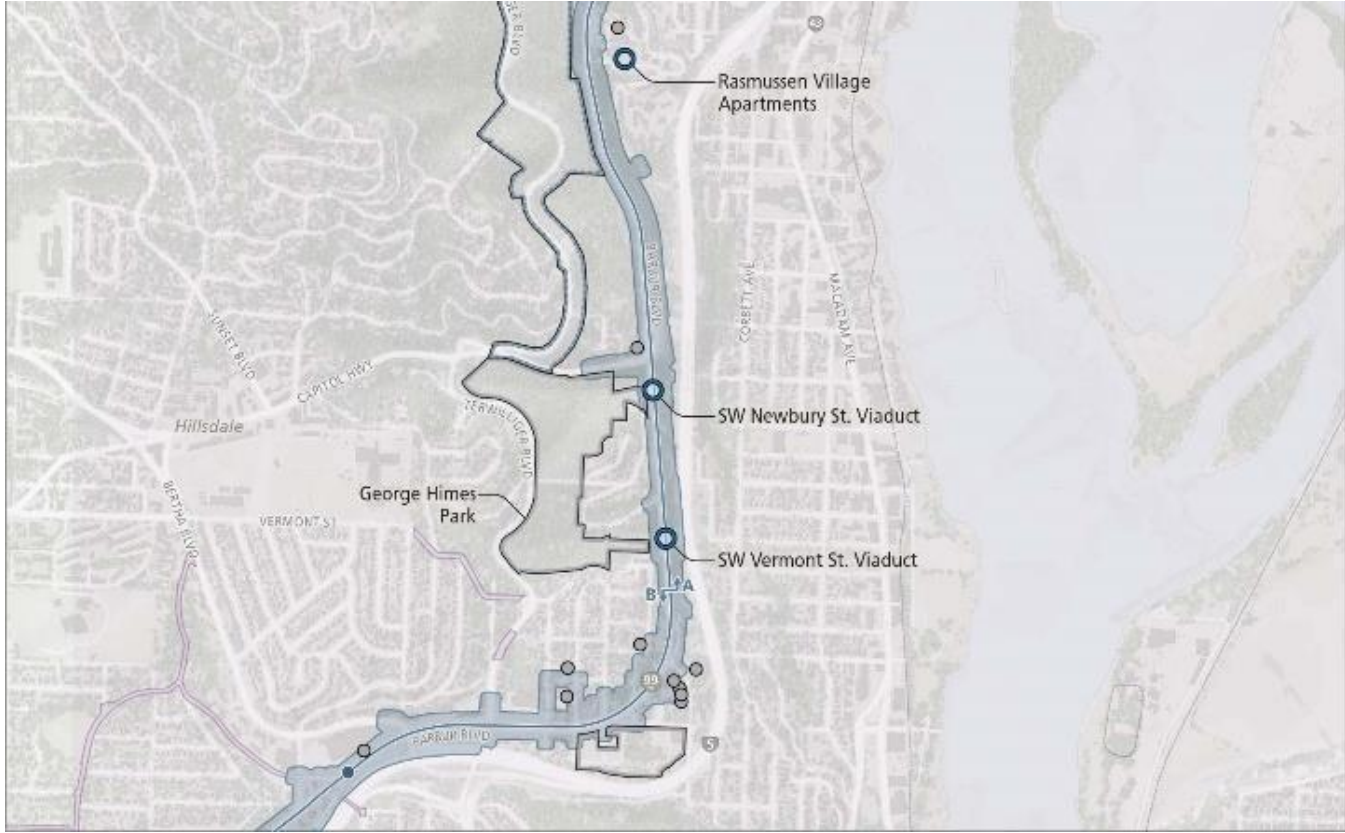
# Overview

- **Section 106** – Historic and cultural resources
- **Section 4(f)** – Park and recreation lands, wildlife and waterfowl refuges and historic sites

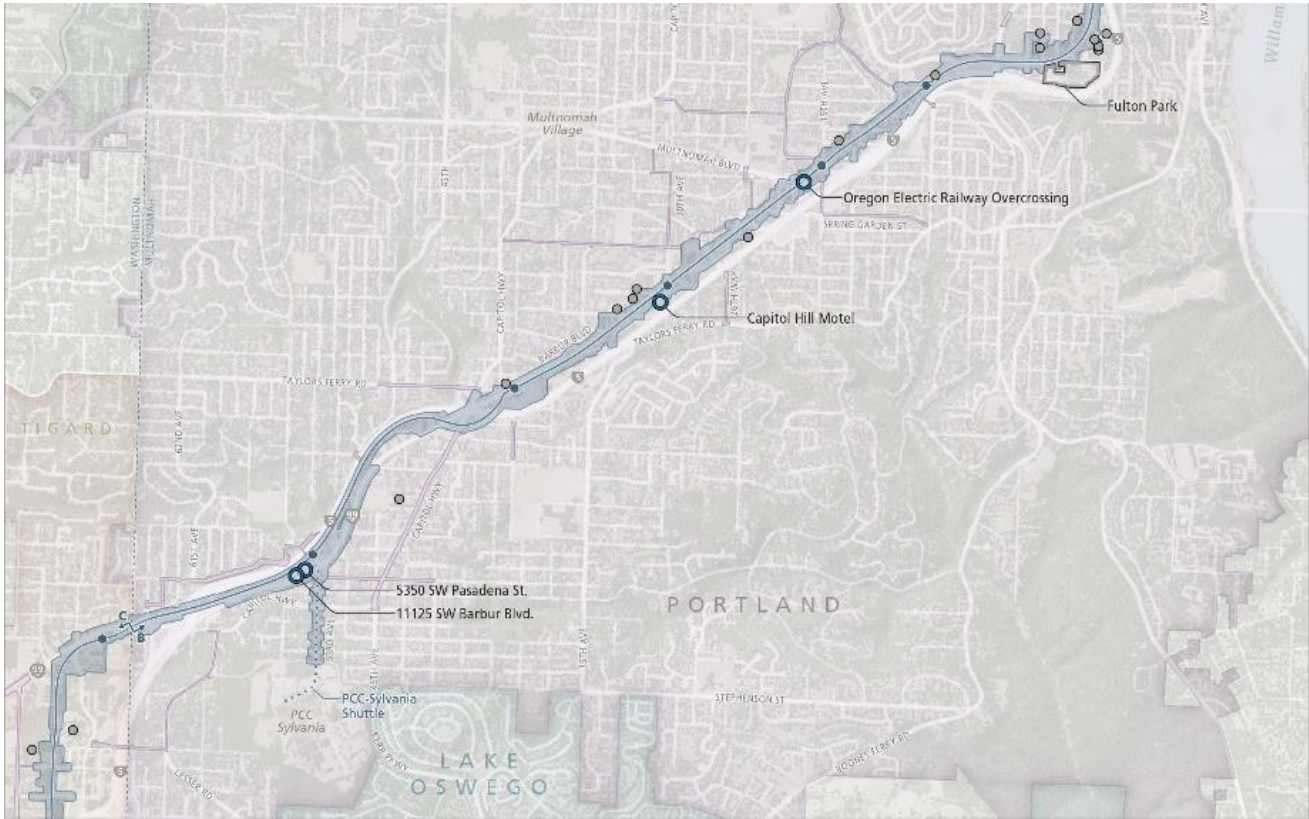
# Inner Portland Resource Map



# Inner Portland Resource Map



# Outer Portland Resource Map



# Historic Resources Virtual Public Meeting

- Thursday, July 23<sup>rd</sup> - 35 participants
  - Presentation and meeting recording:  
<https://trimet.org/swcorridor/library.htm#historic>
- Purpose:
  - Increase transparency about impacts to historic resources
  - Increase literacy around public comment opportunities
- Feedback:
  - Concerns about impacts to historic homes in the Lair Hill Neighborhood, impacts to the former Synagogue, and Terwillger Parkway impacts
  - Concerns and questions from impacted property owners of historic resources



# Stakeholder Engagement Next Steps

- Follow-up conversations with property owners and interested residents
  - Continue to try to reduce impacts as design progresses
  - Possible group meeting with Lair Hill neighbors, depending on community interest
- Public involvement plan for former Synagogue
  - How we can best honor cultural and architectural properties
- Meeting with Friends of Terwilliger Board
- Draft MOA posted to website for public comment
  - Late August or September

# Questions? Comments?

[trimet.org/swcorridor](http://trimet.org/swcorridor)



# June/July Engagement Report

- Bridlemile Neighborhood
- SWNI Watershed
- Durham City Council
- Wash Co. CPO4M
- WPTC CAG
- South Portland NA
- West Portland Park Neighborhood
- Hayhurst Neighborhood
- SWNI Land Use
- SWNI Board
- Historic Resource Virtual Event



## Upcoming August Presentations: **STAFF OFFICE HOURS**

**TriMet staff is holding virtual office hours**  
Tuesday, August 18 from 5:30-7 p.m.

Staff will not be presenting, but will use information from the project [website](#) to answer questions.

# Conceptual Design Report (CDR): Final Draft

## Continues to summarize:

- Project principles, goals and objectives
- Community benefits
- Corridor-wide design elements, improvements, major structures
- Stations and amenities

Tool to communicate conceptual design to the community



SOUTHWEST CORRIDOR LIGHT RAIL PROJECT  
CONCEPTUAL DESIGN REPORT  
FINAL DRAFT | SUMMER 2020



PROJECT PARTNERS



SOUTHWEST CORRIDOR LIGHT RAIL PROJECT  
CONCEPTUAL DESIGN REPORT  
CDR WORKING GROUP DRAFT | 2020



PROJECT PARTNERS



# Conceptual Design Report (CDR): Final Draft

## What's new?

- Responses to comments received through community engagement process
- How project intends to achieve affordable housing commitments
- More on station access by all modes, including bikes and future mobility services
- Additional “toolkits” indicating intention for design elements and project improvements



SOUTHWEST CORRIDOR LIGHT RAIL PROJECT  
CONCEPTUAL DESIGN REPORT  
FINAL DRAFT | SUMMER 2020



SOUTHWEST CORRIDOR LIGHT RAIL PROJECT  
CONCEPTUAL DESIGN REPORT  
CDR WORKING GROUP DRAFT | 2020



# Principles, Goals, Objectives



MOVE AND  
**CONNECT** PEOPLE

Travel  
Patron Experience  
Active Partnerships  
First and Last Mile Connection



MAINTAIN AND  
CREATE  
**EQUITABLE**  
**COMMUNITIES**

Community Resource Preservation  
Access to Opportunity  
Inclusive Community Vision



PRESERVE AND  
RESTORE NATURAL  
**ENVIRONMENT**

Natural Resource Preservation  
Ecological Design  
Open Space Access



DESIGN FOR THE  
**FUTURE**

Flexible Infrastructure  
Sustainability  
Emergency Response



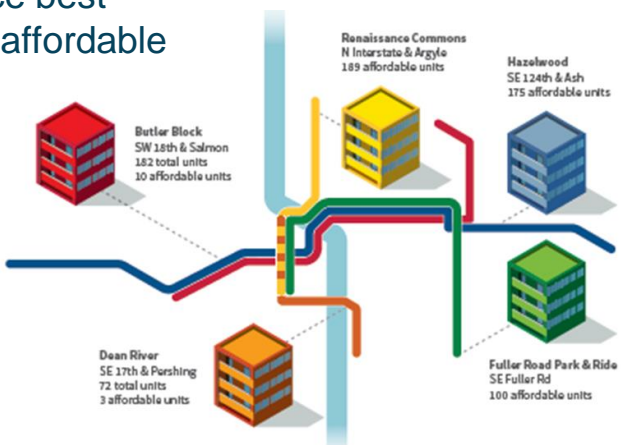
# Maintain and create equitable communities

## Transit Oriented Development (TOD)

TriMet's focus for supporting regional development is to maximize density, minimize gentrification and displacement and transform public spaces by creating mixed-use development near transit stations, with a diversity of uses and income levels.

We continue to advance best practices in facilitating affordable housing near transit.

<https://trimet.org/equity/>



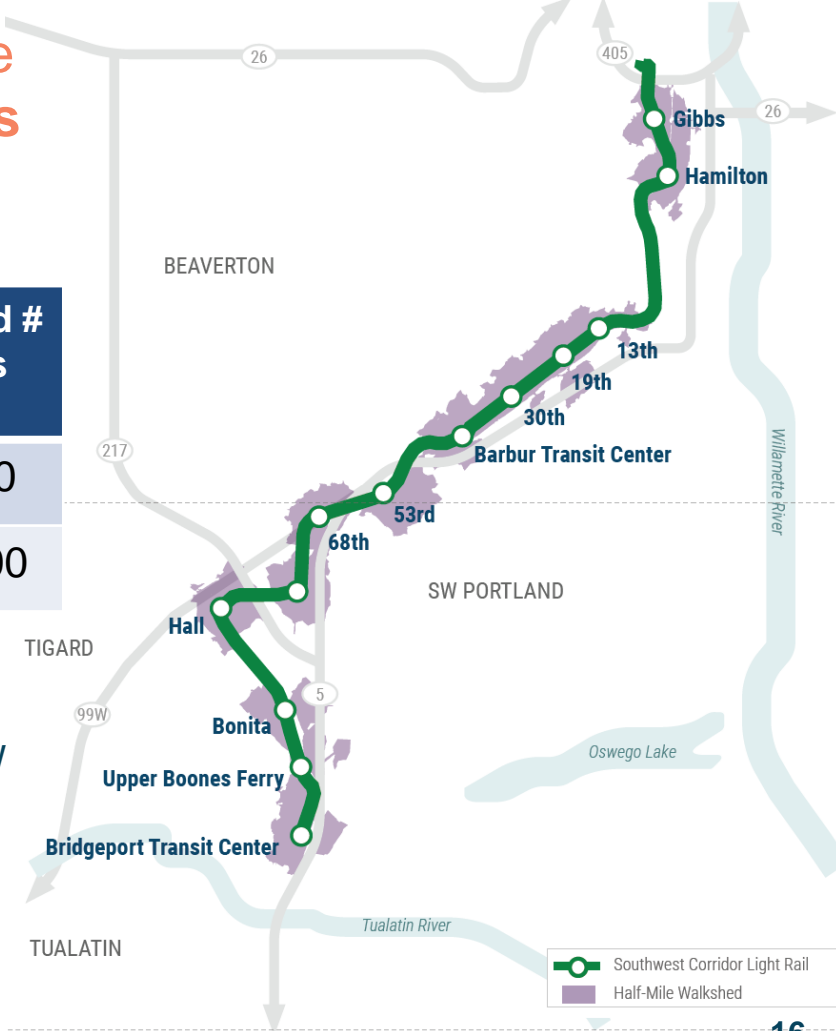


# Maintain and create equitable communities

## Affordable Housing Commitments

City	Unit Goal (min)	Estimated # of Units
Portland	600	610-930
Tigard	150	710-1300

Potential units on surplus land parcels will be evaluated again at 60% phase of design, when ROW acquisition process is completed



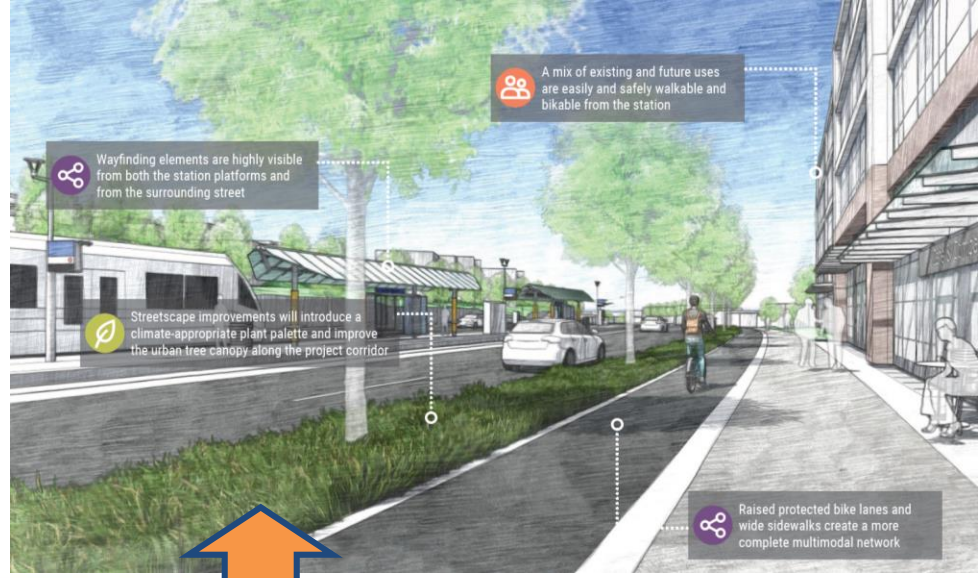
- Southwest Corridor Light Rail
- Half-Mile Walkshed





# Move and connect people

## Project vision for corridor improvements



### Existing Conditions





# Station Access Framework



## WALK

Mixed use and mixed income development at stations increase walk access to transit.

*Tools: TOD, public realm improvements, pedestrian facilities*



## BIKE

Bicycling increases access to transit and provides an alternative to single-occupancy vehicle use.

*Tools: Bike parking facilities, lanes and sharing*



## TRANSFER

Local bus service feeds high capacity transit.

*Tools: Bus routes and stops, WES connection*



## MOBILITY SERVICES

Transportation technologies increase mobility and access to transit.

*Tools: Allocate space for mobility solutions*

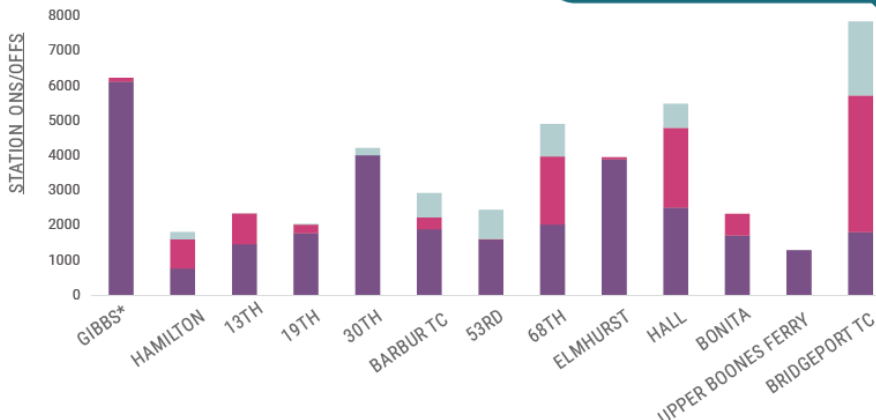


## AUTO

Private vehicles provide access to transit.

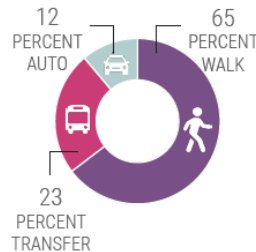
*Tools: Park & Rides, roadway and access improvements*

## Project ridership



What about bikes? Section 3.7 outlines how projected bike demand has been studied along the corridor

### Total Mode of Access (Ons/Offs)



#### Legend

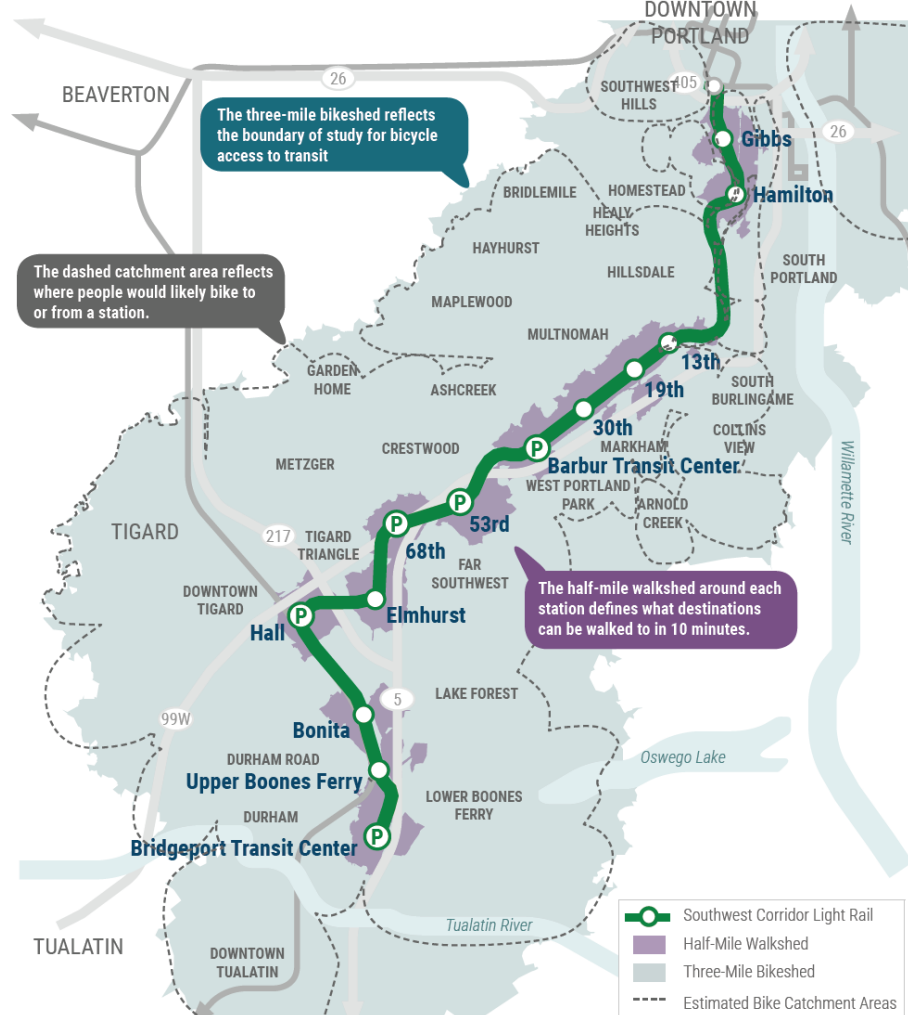
- Walk
- Transfer (Bus/WES)
- Auto (Park & Ride, Pick-up/ Drop-off)

Source: Metro, 2019



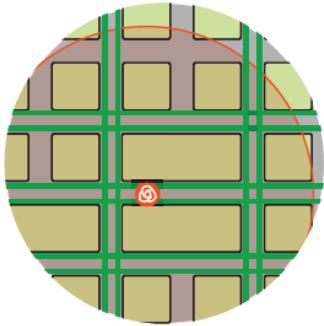
# Add 3-mile 'bikesheds'

- Catchments areas show neighborhoods and destinations accessible to cyclists; used to prioritize improvements (protected intersections, RPBLs, shared streets).

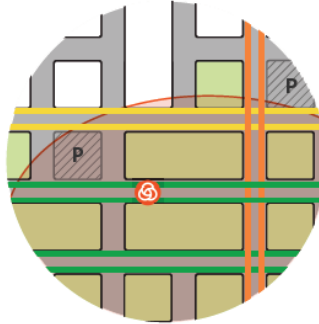


# Bike typology

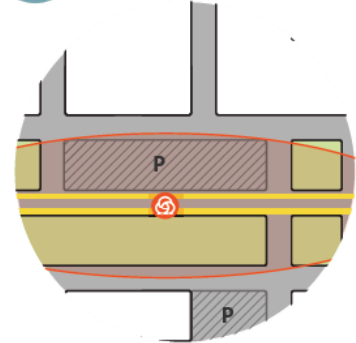
## HIGH STATION BIKE USE



## MEDIUM STATION BIKE USE



## LOW STATION BIKE USE



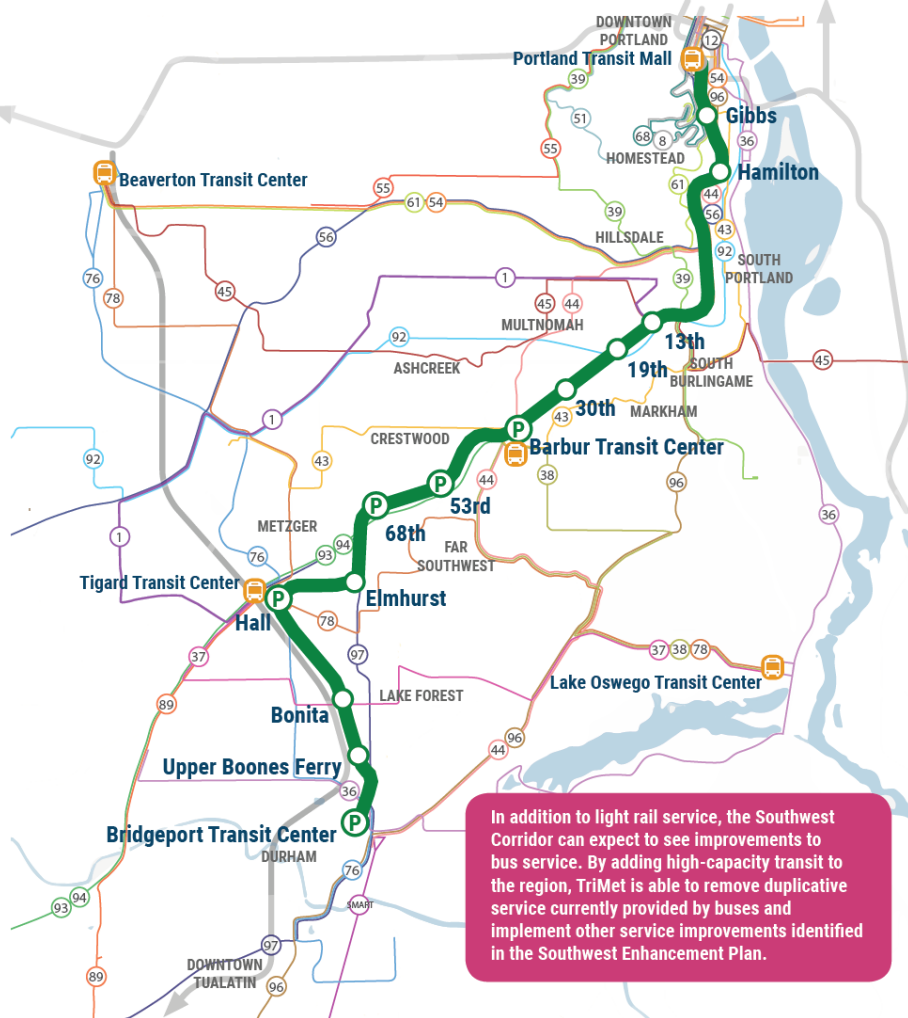
- Analysis of many factors to understand needs for cyclists and estimate demand for parking



# Station Acces

## Bus transfers

- SWC LRT will continue to provide nearly 23% of light rail riders with a connection to other local and regional transit



In addition to light rail service, the Southwest Corridor can expect to see improvements to bus service. By adding high-capacity transit to the region, TriMet is able to remove duplicative service currently provided by buses and implement other service improvements identified in the Southwest Enhancement Plan.

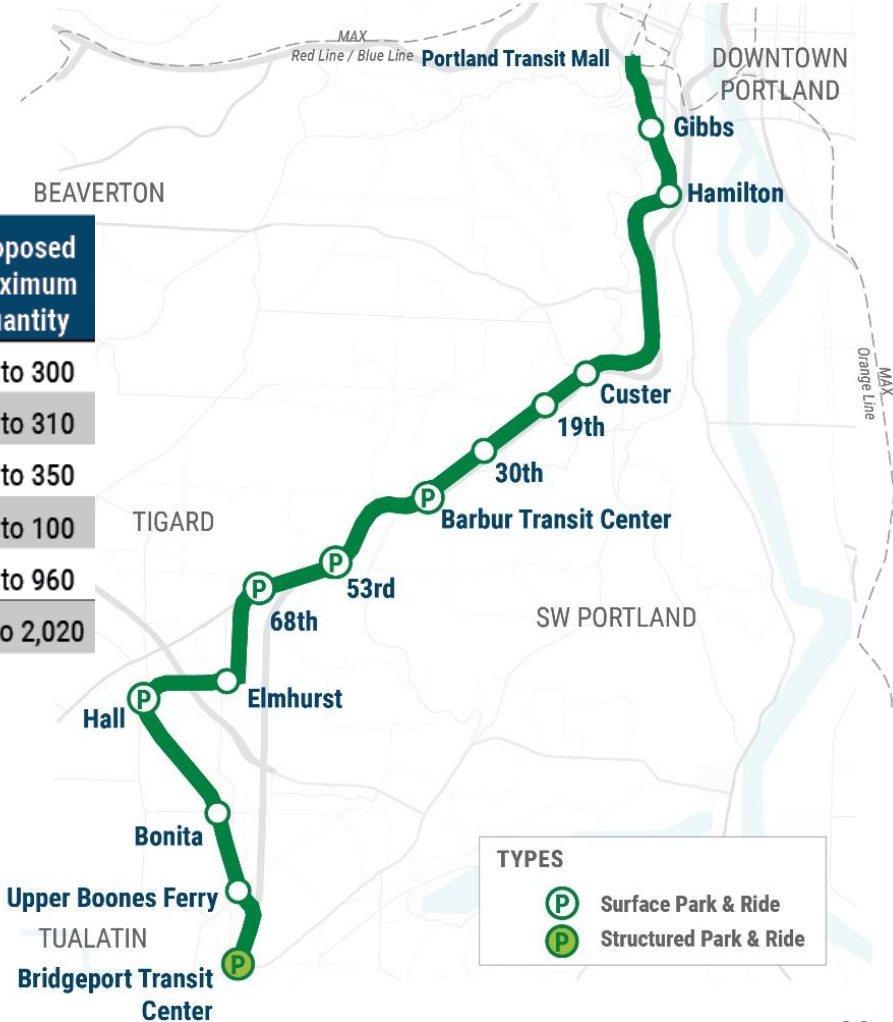


# Station

## Access: Autos

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

*All station surface lots except Bridgeport Transit Center.*



**TYPES**

- Surface Park & Ride
- Structured Park & Ride



# Station Access : emerging mobility services



- Emerging connections to transit
- Adapt stations to travel choices to serve vulnerable population
- Ongoing coordination with partners/local jurisdictions is key to flexible design

## TRIMET ACCESS TOOLS



**SOUTHWEST  
CORRIDOR LIGHT  
RAIL PROJECT**

- PEDESTRIAN FACILITIES
- INTEGRATED STATION ACCESS
- BIKE FACILITIES AND PARKING
- BUS STOPS AND TRANSIT CONNECTIONS
- SPACE FOR MOBILITY SOLUTIONS
- PARK & RIDE FACILITIES
- ROADWAY IMPROVEMENTS

## SHARED RESPONSIBILITIES



**TRANSIT-ORIENTED  
COMMUNITIES**

- SUPPORTING TRANSIT-ORIENTED COMMUNITIES**
- Enabling developments near stations and within the project footprint
- Enabling transit-oriented development on publicly-owned sites such as Barbur Transit Center, Tigard Park & Ride (at Pacific Highway/99W), Bridgeport Transit Center /Park & Ride
- Other potential opportunities along the corridor as coordinated by jurisdictions and housing developers

## ACCESS TOOLS BY OTHERS

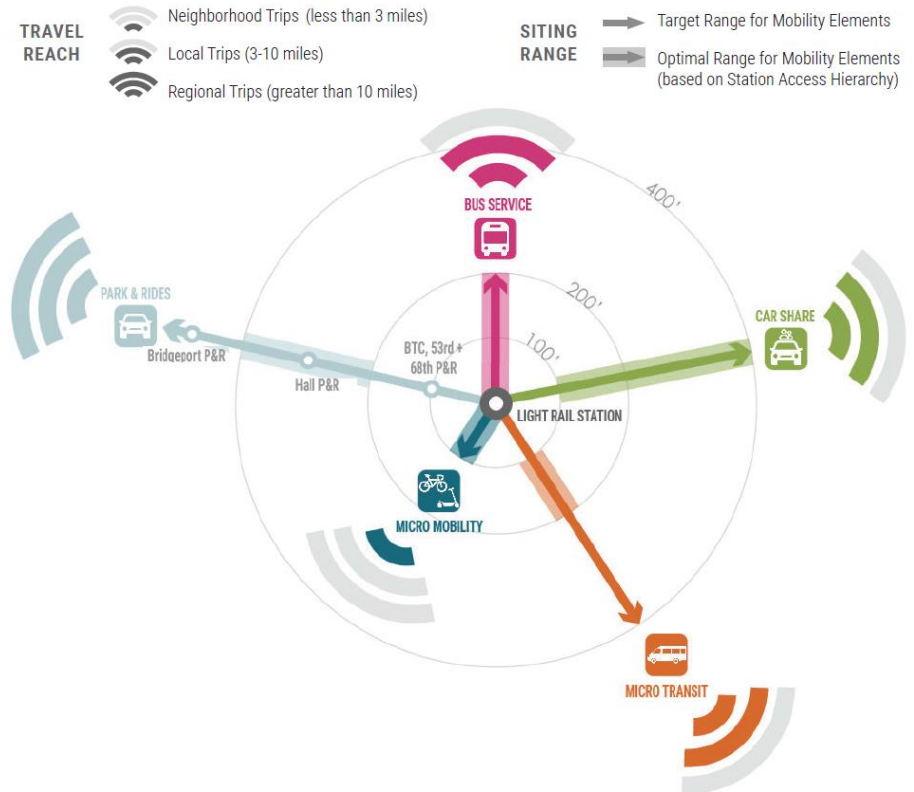


**MOBILITY  
SOLUTIONS BY  
OTHERS**

- MOBILITY SERVICE ACCESS TOOLS**
- Coordinating with privately operated mobility solutions beyond the project footprint to provide more and better travel choices that increase convenient access to transit service
- PARTNER PROJECTS**
- Southwest Corridor infrastructure and access projects that are not included in the project scope

# Station Access Framework : location guidance

- STATION ADJACENT**  
 Less than half a minute (or approximately 100') from the station by foot, these solutions benefit from good visibility from the station platform and direct interface with the project.
- ONE BLOCK FROM STATION**  
 Less than a minute (or approximately 200') from the station entrance by foot, solutions may be located where passengers may be willing to walk slightly further to access them.
- ONE BLOCK FROM STATION AND BEYOND**  
 Roughly 1.5 minutes (or approximately 400') from the station entrance by foot, these solutions include Park & Ride, as well as less frequent local services, and a variety of private operators, including car share.





# Design for the **Future**: explore opportunities for mobility solutions



## **A** New Transit-Oriented Places

Mobility solutions can be integrated into buildings at the ground floor, in a parking garage or associated exterior area.



## **B** Adapting Existing Places

Property owners may work with the city and mobility providers on solutions such as in a parking lot or other exterior area.



## **C** Adapting the Right-of-Way

Future mobility solutions may be located along the curb or along the sidewalk within a public or private street - outside of the project boundary.



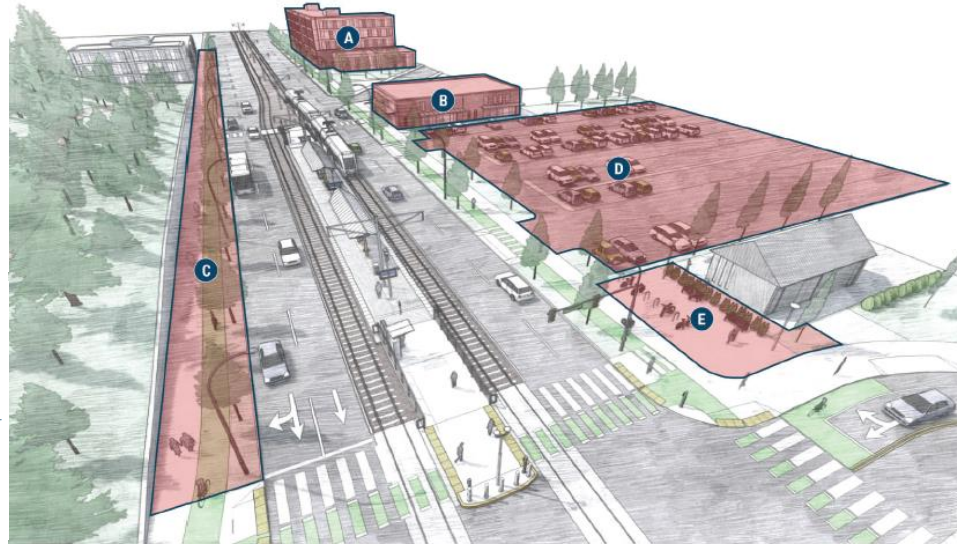
## **D** Adapting Park & Rides

Mobility solutions may be introduced into dedicated Park & Rides, such as pick-up/drop-off zones or space for other mobility services.



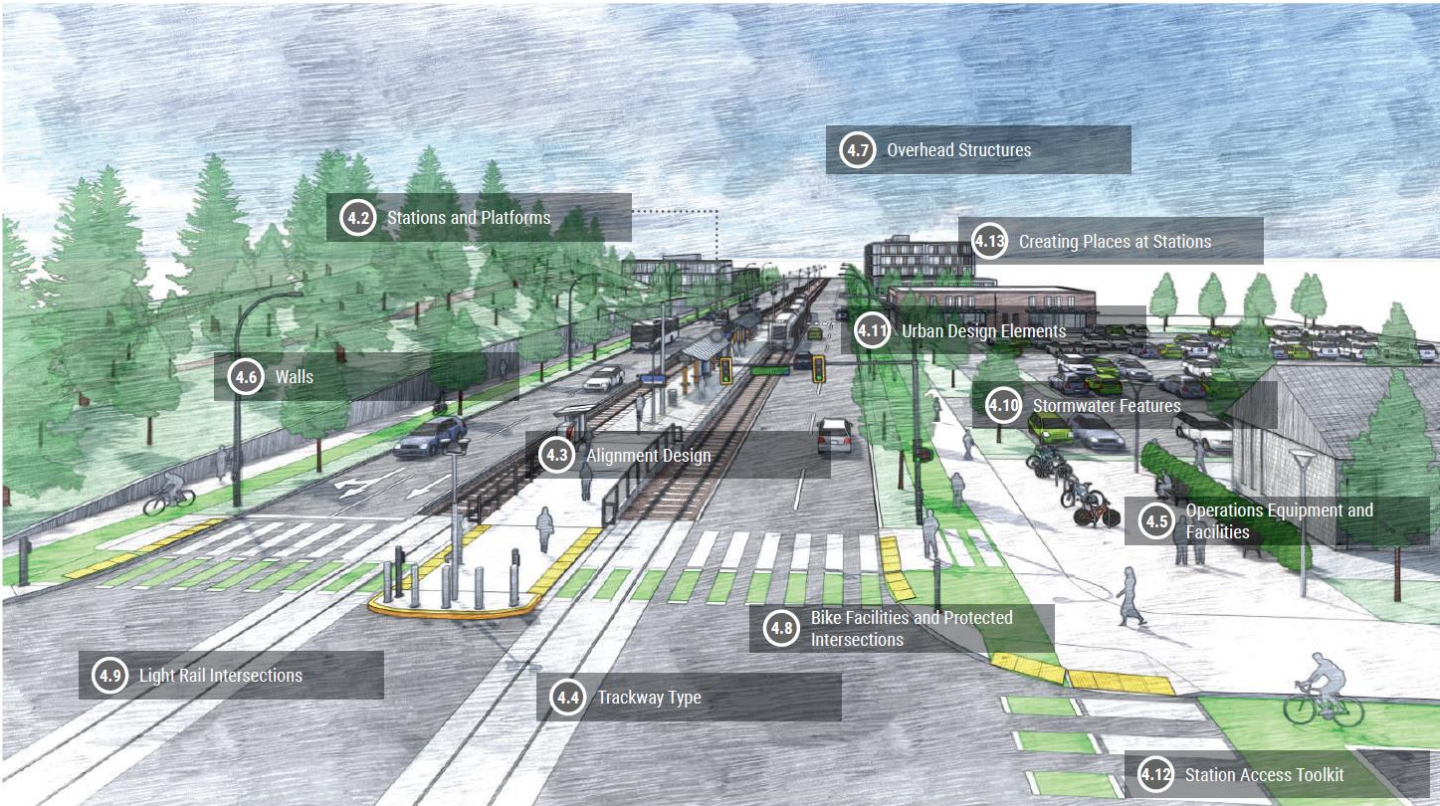
## **E** Public Realm

Mobility solutions may be integrated in an area set aside for stormwater needs, systems buildings or hardscaped plaza.



: Opportunity areas along the light rail alignment for mobility solutions

# Design elements



# Toolkits: 4.4 Trackway types

EMBEDDED



EMBEDDED TRACK DETAIL

IMAGE SOURCE: ZGF

BALLASTED



BALLASTED TRACK DETAIL

IMAGE SOURCE: ZGF

DIRECT FIXATION



DIRECT FIXATION TRACK DETAIL

IMAGE SOURCE: MTA CONSTRUCTION & DEVELOPMENT FLICKR



EMBEDDED TRACK ON SHARED TRANSITWAY

IMAGE SOURCE: ZGF



BALLASTED TRACK AT DEDICATED LIGHT RAIL STATION

IMAGE SOURCE: TRIMET FLICKR



DIRECT FIXATION TRACK THROUGH TUNNEL

IMAGE SOURCE: ZGF

# Toolkits: 4.5 Operations/Facilities

OCS POLES



INDUSTRIAL OCS POLE - GENERAL AREAS  
IMAGE SOURCE: ZGF



ROUND OCS POLE - HIGH VISIBILITY AREAS  
IMAGE SOURCE: TRIMET FLICKR



OCS INTEGRATED WITH LIGHTING - URBAN AREAS  
IMAGE SOURCE: ZGF

SYSTEMS BUILDINGS



SYSTEMS BUILDING WITH METAL SCREEN  
IMAGE SOURCE: ZGF



SYSTEMS BUILDING WITH MURAL  
IMAGE SOURCE: VIA ARCHITECTURE



SYSTEMS BUILDING WITH MURAL  
IMAGE SOURCE: KENJI HAMAI STOLL

# Toolkits: 4.6 Walls

BASE OF WALL



TREE AND PLANTING SCREEN  
IMAGE SOURCE: GOOGLE EARTH

FACE OF WALL



WALL WITH PATTERN RELIEF  
IMAGE SOURCE: ZGF

TOP OF WALL



GALVANIZED GUARDRAIL WITH UNIFORM PATTERN  
IMAGE SOURCE: TRIMET FLICKR



GABION WALL  
IMAGE SOURCE: MAYER/REED



LARGE PANEL TEXTURED WALL  
IMAGE SOURCE: PETER EHRLICH



GALVANIZED GUARDRAIL WITH NATURAL PATTERN  
IMAGE SOURCE: DAVID EVANS AND ASSOCIATES



PLACEMAKING AND IDENTITY  
IMAGE SOURCE: ZACH YARRINGTON



TEXTURED WALL PATTERNS  
IMAGE SOURCE: MAYER/REED



CONCRETE WALL CAP AND PAINTED GUARDRAIL  
IMAGE SOURCE: TRIMET FLICKR

# Toolkits: 4.7 Overhead structures

## STANDARD DESIGN



IMAGE SOURCE: TRIMET FLICKR



IMAGE SOURCE: ZGF

TYPICAL CONCRETE COLUMNS AND GUIDEWAY STRUCTURE

## ELEVATED STATION



IMAGE SOURCE: ZGF



IMAGE SOURCE: VIA ARCHITECTURE

GUIDEWAY INTEGRATED INTO ELEVATED STATION DESIGN

## URBAN BRIDGES (HIGHLY VISIBLE FROM PUBLIC REALM)



IMAGE SOURCE: TRIMET



IMAGE SOURCE: TRIMET

STEEL STRUCTURE OR INTEGRATED PLACEMAKING

## NATURAL AREAS



IMAGE SOURCE: PORTLAND TRIBUNE

SPANNING WATERBODIES AND OPEN SPACE

# Toolkits: 4.10 Stormwater



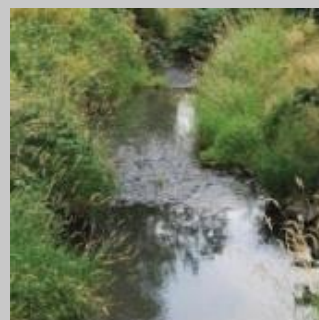
PONDS/BASINS



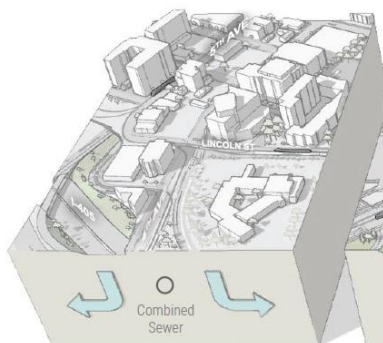
UNDERGROUND DETENTION



SWALE



STREAM RESTORATION



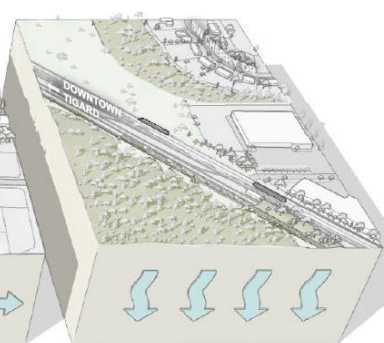
SOUTH PORTLAND



BARBUR CORRIDOR

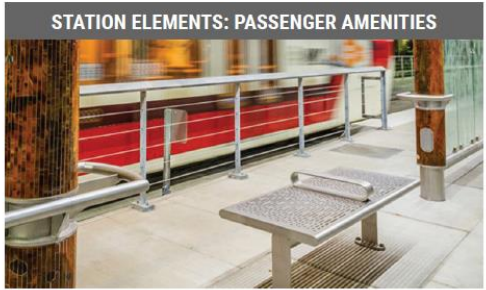


URBAN TIGARD



RAILROAD RIGHT-OF-WAY

# Toolkits: 4.11 Urban design elements



**BENCHES**  
IMAGE SOURCE: MAYER/REED



**LIGHTING**  
IMAGE SOURCE: MAYER/REED



**TRANSIT SHELTER AND SCREENING**  
IMAGE SOURCE: TRIMET FLICKR



**PLATFORM RAILING**  
IMAGE SOURCE: TRIMET FLICKR



**WASTE RECEPTACLES**  
IMAGE SOURCE: LANDSCAPE FORMS



**TACTILE PAVING**  
IMAGE SOURCE: TRIMET FLICKR



## STATION ELEMENTS: SIGNAGE & WAYFINDING



TICKETING EQUIPMENT

IMAGE SOURCE: TRIMET FLICKR

## PUBLIC REALM



SCREENING

IMAGE SOURCE: TRIMET FLICKR

## PUBLIC REALM



PLAZA ELEMENTS

IMAGE SOURCE: GREENWORKS



STATION WAYFINDING SIGNAGE

IMAGE SOURCE: TRIMET FLICKR



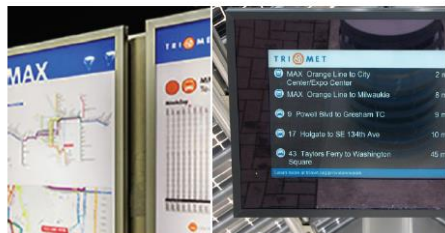
LANDSCAPING AND STREET TREES

IMAGE SOURCE: GREENWORKS



LOW WALLS

IMAGE SOURCE: TRIMET FLICKR



RIDER INFORMATION (MAPS & REAL-TIME ARRIVALS)

IMAGE SOURCE: TRIMET FLICKR



PLAZA PAVING

IMAGE SOURCE: TRIMET FLICKR



BUS FACILITIES

IMAGE SOURCE: TRIMET

# Corridor walk through



- Southwest Corridor Light Rail
- Streetscape Improvements
- Connection Improvements
- Park & Ride
- Other Rail Transit
- Major Freeway

# Downtown Tie-in: sketch view



# Gibbs Street Station



# Gibbs Street Station: Marquam Hill Connector

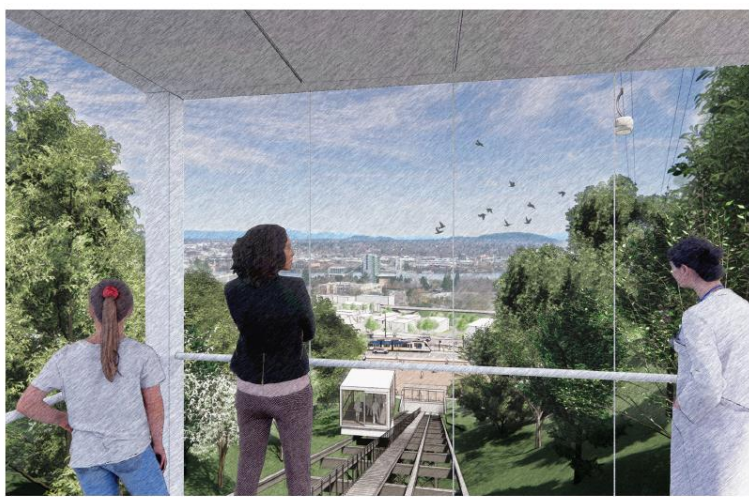


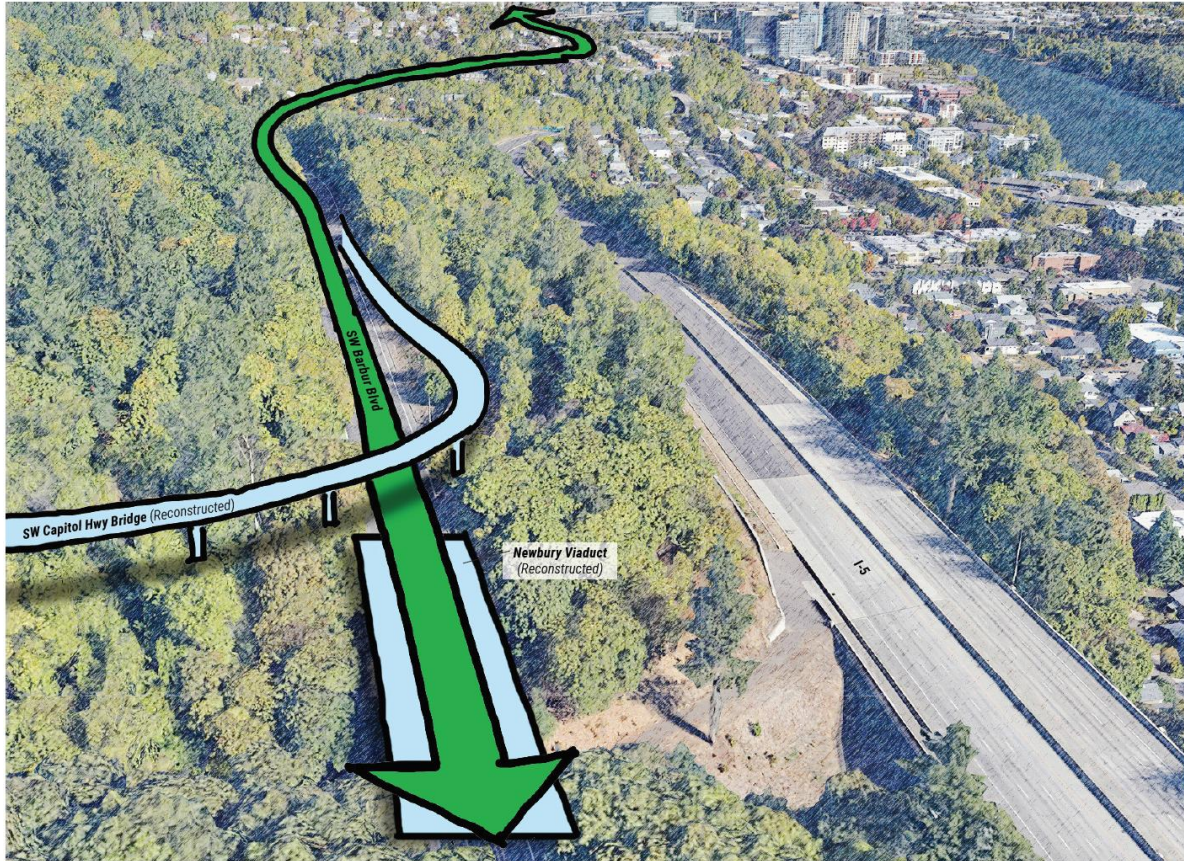
Figure 5.5.3 View from inside the inclined elevator, looking east toward Gibbs Street Station and the plaza below.



# Hamilton Street Station



# Capital Highway Bridge replacement: sketch view



# 13<sup>th</sup> Avenue Station





# 19th Avenue Station



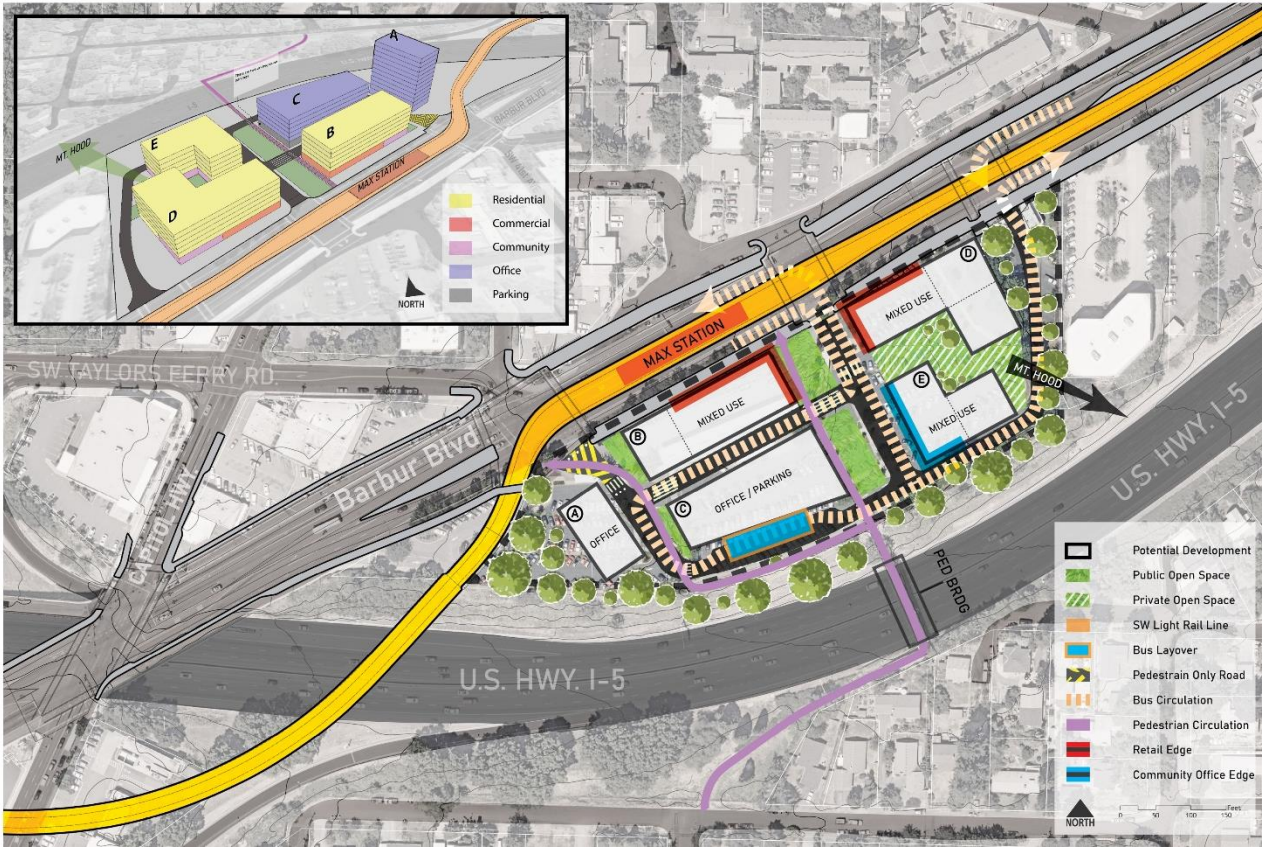
# 30th Avenue Station



# Barbur Transit Center



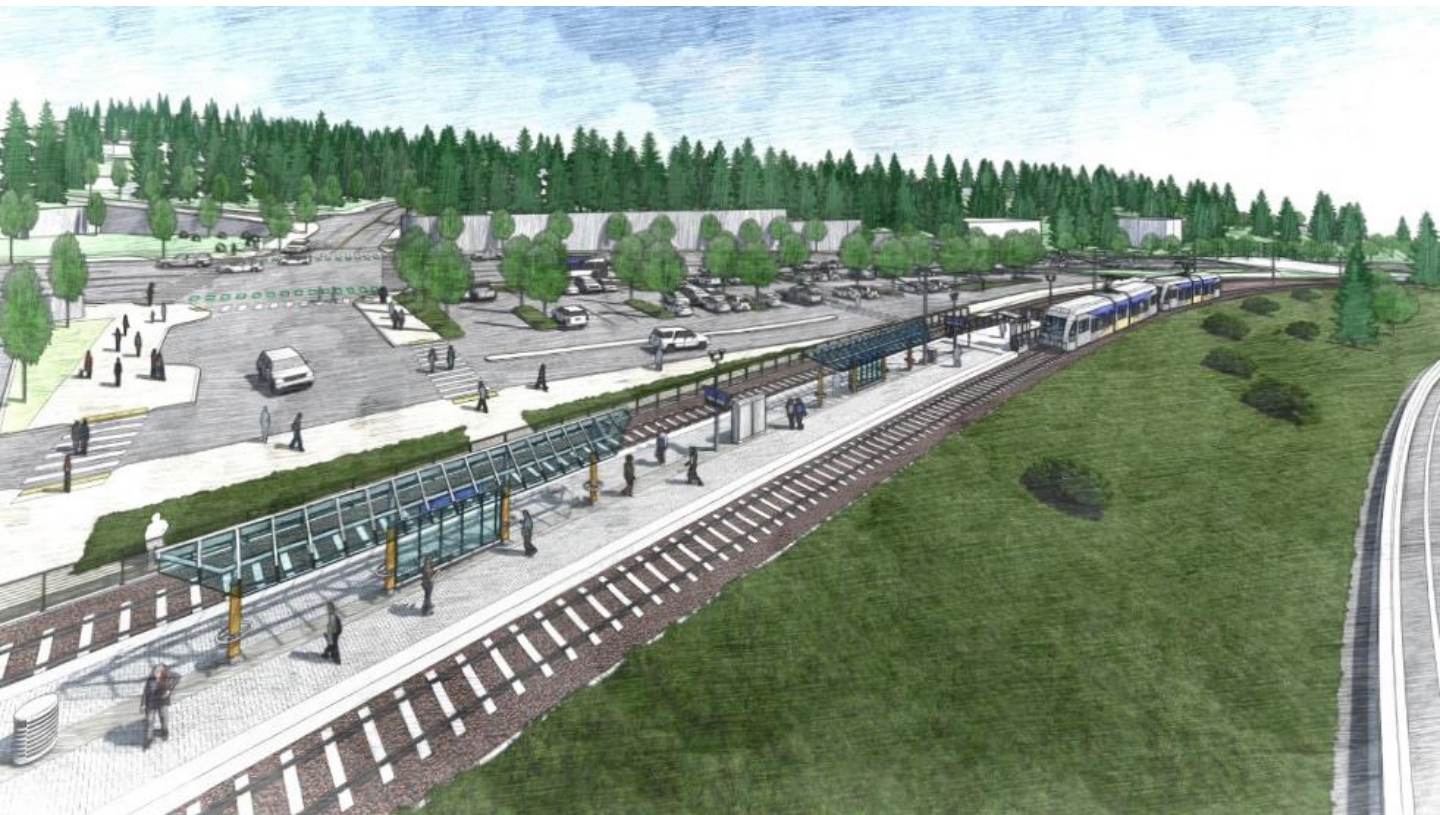
# Barbur Transit Center - Public Opportunity Site



# 1-5/SW Barbur Blvd, Crossroads structure: sketch view



# 53<sup>rd</sup> Avenue Station



# 68<sup>th</sup> Parkway Station



# 1-5 & Pacific Hwy/99W crossing: sketch view





# Elmhurst Station



# OR 217 crossing: sketch view



# Hall Boulevard Station



# Bonita Road Station



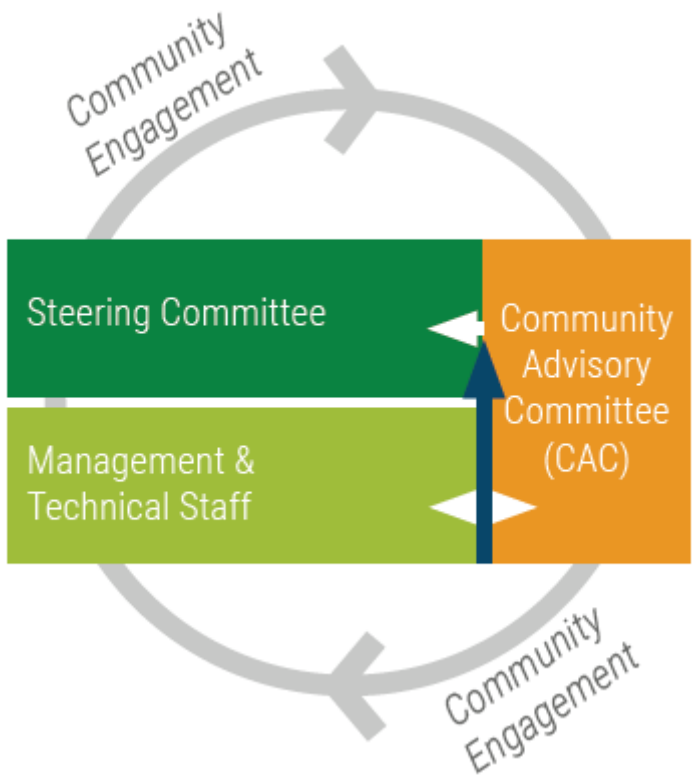
# Upper Boones Ferry Road Station



# Bridgeport Transit Center



# Ongoing Design



# Questions? Comments?

[trimet.org/swcorridor](http://trimet.org/swcorridor)

