



**What is the Southwest Corridor Light Rail Project?**

The project is a proposed 12-mile MAX line connecting downtown Portland to Tigard and Tualatin.

After several years of early planning, the project is now undergoing environmental review.

**What is the purpose of the decision briefing books?**

Several project decisions remain, including options for alignments, stations, maintenance facilities and station access improvements.

Through fall 2017, individual decision briefing books will be released to inform conversations about the key considerations for each major decision. Because the environmental impact analysis is ongoing, briefing books will be updated as new information becomes available.

**When will the decisions be made?**

The steering committee is anticipated to narrow down the remaining options to a "Preferred Alternative" in early 2018.

Further outreach, design and environmental analysis will occur before a final decision on what to construct.

**Decision Overview**

The Southwest Corridor Light Rail Project includes a new connection to link the light rail line with the jobs and services at the medical facilities located on Marquam Hill, including Oregon Health & Science University (OHSU), the Veterans Affairs (VA) Portland Health Care System and the Portland Shriners Hospital for Children. Metro models project that over 10,000 daily trips (including both directions) would use this connection in 2035, including trips connecting to and from light rail, local buses and the Lair Hill neighborhood. Walking time along the proposed connection, which would link Barbur Boulevard with OHSU's Kohler Pavilion, is estimated to be about six minutes.



Four connection options are under consideration, which include combinations of tunnels, elevators and bridges. This initial version of the Marquam Hill Connection briefing book introduces these options, while subsequent versions will explore the trade-offs between them.

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## About Marquam Hill

Marquam Hill is a major employment, health and educational center located in Southwest Portland. OHSU, the VA and Portland Shriners Hospital are all located here, along with residences and some supporting businesses in the Homestead neighborhood.

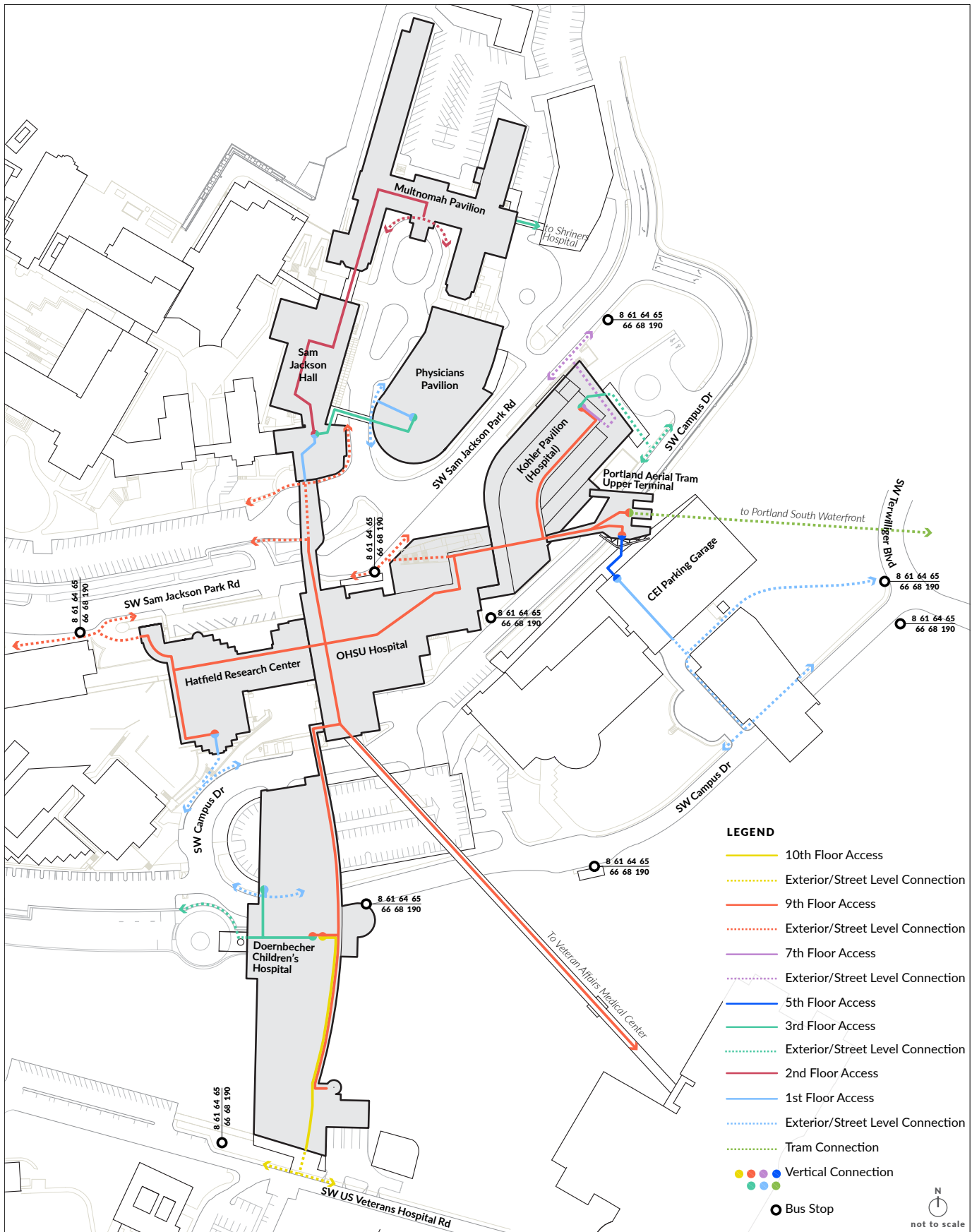
Vehicle access to Marquam Hill is primarily via SW Sam Jackson Park Road and SW Terwilliger Boulevard. Both streets become congested, affecting cars and buses. Transit routes include TriMet lines 8, 61, 64, 65, 66, 68, CTRAN route 190 and the Portland Aerial Tram.

OHSU's Kohler Pavilion provides a central circulation point for many of the medical facilities. The 9th floor provides access to the tram terminal, and connects to the OHSU Hospital and the Hatfield Research Center. It also leads to skybridges to both the VA and OHSU's Doernbecher Children's Hospital. From SW Sam Jackson Park Road, exterior ramps or stairs lead to Kohler Pavilion entrances at the 7th or 9th floors. From SW Campus Drive, an entrance to the building is at the 3rd floor.

Three of the four Marquam Hill connection options described in this briefing book would reach the 7th floor terrace of the Kohler Pavilion. This is considered the preferred connection location because it would provide a large, open location with multiple ADA-compliant exit points that could accommodate crowds without causing congestion, and because of the convenient access points to multiple destinations on the hill. These include elevator and stair access to the 9th floor and its connections, as well as stairs and ramps to either Sam Jackson Park Road or Campus Drive.

The map below illustrates general pedestrian circulation around Marquam Hill and Barbur Boulevard, with the approximate location of a Marquam Hill connection. The map on the following page shows circulation on the OHSU Marquam Hill campus in more detail.





# OHSU MARQUAM HILL CAMPUS HOSPITAL PUBLIC ACCESS

AUGUST 30, 2017



## Background on Marquam Hill Connection

Original concepts for a connection between Barbur Boulevard and Marquam Hill were developed in 2014 by two consultant design teams with input from project partners and interested stakeholders, including OHSU, the VA, City of Portland staff, the South Portland Neighborhood Association, the Homestead Neighborhood Association, Friends of Terwilliger and the Southwest Corridor Steering Committee.

In July 2015, a direct light rail tunnel connection to Marquam Hill was removed from further study by the Southwest Corridor Steering Committee because of the adverse construction impacts and high costs relative to the projected ridership gains. As a result, the project's proposed pedestrian and bicycle connection between the light rail alignment and the hilltop became critically important.

## Overview of Connection Options

All connection options would connect OHSU's Kohler Pavilion (at the 3rd or 7th floor) to Barbur Boulevard, crossing Campus Drive and Terwilliger Boulevard. At Barbur, the connection would begin south of the location of the Congregation Ahavath Achim synagogue. The following table summarizes differences between the options.

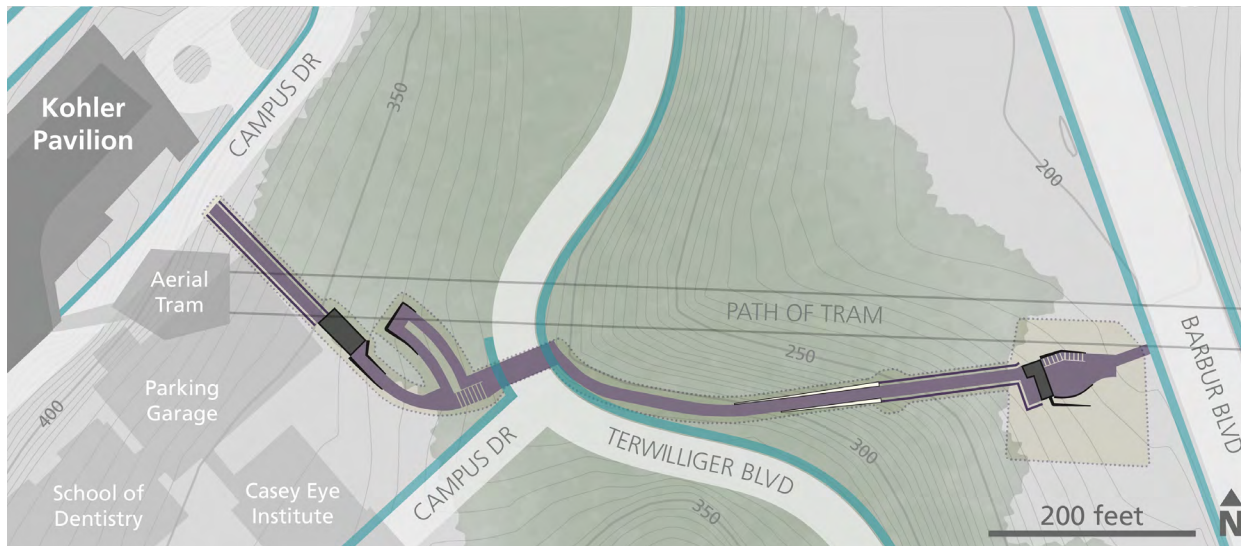
	Access to Kohler Pavilion	Crossing Campus Drive	Campus Drive to Terwilliger	Crossing Terwilliger	Terwilliger to Barbur
<b>1A</b> <i>Elevator/Bridge and Path</i>	3rd floor	at-grade crossing	stairs and ramps stairs and elevator bridge	at-grade crossing	at-grade path stairs and elevator bridge
<b>1B</b> <i>Elevator/Bridge and Recessed Path</i>	7th floor	bridge	stairs and ramps recessed path stairs and elevator	underpass	at-grade path stairs and elevator bridge
<b>1C</b> <i>Elevator/Bridge and Tunnel</i>	7th floor	bridge	stairs and ramps tunnel stairs and elevator	underpass	at-grade path stairs and elevator bridge
<b>2</b> <i>Full Tunnel</i>	7th floor	bridge	tunnel stairs and elevator	tunnel	at-grade path tunnel

The nearest light rail station would be just north of Gibbs Street on either Barbur Boulevard or Naito Parkway, depending on the light rail alignment. More detailed maps of the Naito and Barbur alignments are provided in the *Light Rail Alternatives for Environmental Review* document, available on the project website: [www.swcorridorplan.org/light-rail-study](http://www.swcorridorplan.org/light-rail-study).

The station location would not affect the Marquam Hill connection designs. With either station location, the stairs from the east side of Barbur Boulevard to Gibbs Street would be improved and ADA-accessible ramps would be added, and a new pedestrian crossing would be added across Naito Parkway at Gibbs Street to connect to the existing pedestrian bridge over I-5.

## Connection 1A: Elevator/Bridge and Path

This option would include two elevators, two bridges and an on-grade path. A path would connect Barbur to an elevator tower to the west. A bridge would connect the elevator tower to a path along the hillside east of Terwilliger. The option would include an at-grade crossing of Terwilliger with an improved pedestrian crossing. On the west side of Terwilliger, stairs and ramps would lead to the second elevator tower. A bridge would connect the upper elevator to Campus Drive at the third floor base of Kohler Pavilion. Because the upper elevator tower and bridge would be directly under the path of the Aerial Tram, Connection 1A could not tie in directly to the seventh floor of Kohler Pavilion as the other connection options do. Instead, pedestrians would cross Campus Drive to an entrance to Kohler Pavilion to reach a bank of elevators, or continue along Campus Drive to other facilities.



### Connection Elements

- Path, ramp or plaza
  - Stairs
  - Bridge
  - Tower with elevator and stairs
  - Below-ground wall
  - Above-ground wall
  - Estimated construction footprint
- } Over about 5 ft tall  
Thicker line = taller

### Existing Conditions

- Sidewalk or path
- Tree cover



### Connection Elements

- Path, ramp, plaza or stairs
- Bridge
- Tower with elevator and stairs
- Wall (above or below ground)

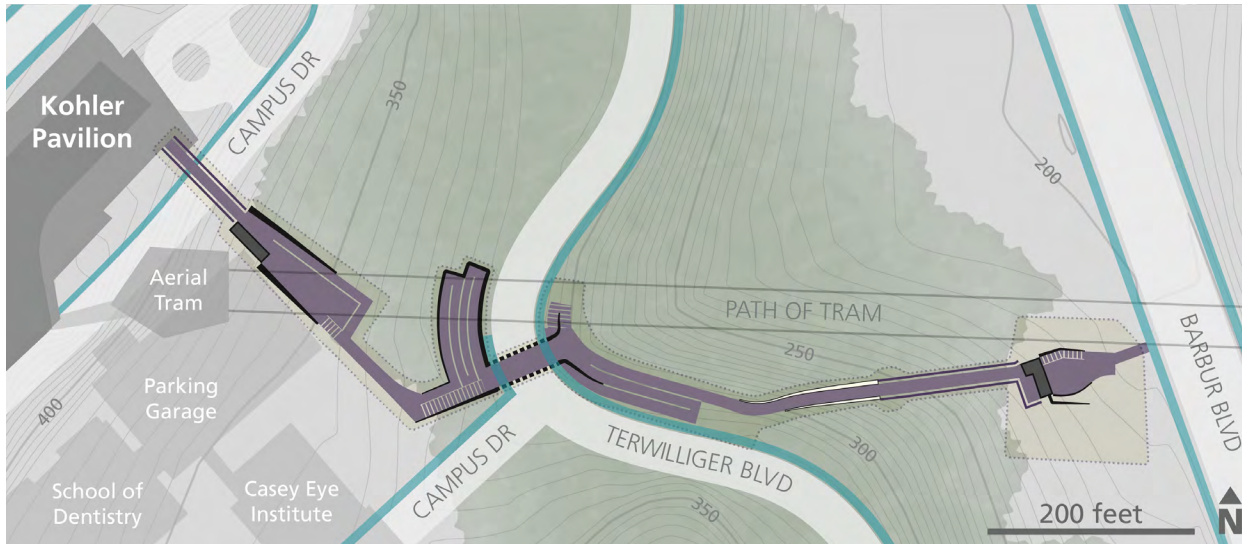
### Existing Conditions

- Ground level
- Sidewalk or path
- Tree cover

## Connection 1B: Elevator/Bridge and Recessed Path

This option would include two elevators, two bridges and an on-grade path. This option would be identical to Connection 1A for the lower elevator and bridge near Barbur, but would differ at Terwilliger and at the upper elevator and bridge west of Terwilliger.

Connection 1B would feature a below-grade crossing of Terwilliger, which would include ramps and stairs on the east side of the roadway to connect to the existing multi-use path. West of Terwilliger, a series of stairs and ramps would connect the pedestrian underpass to a wide recessed path at the base of the upper elevator. A bridge would connect the top of the elevator to the seventh floor of Kohler Pavilion.

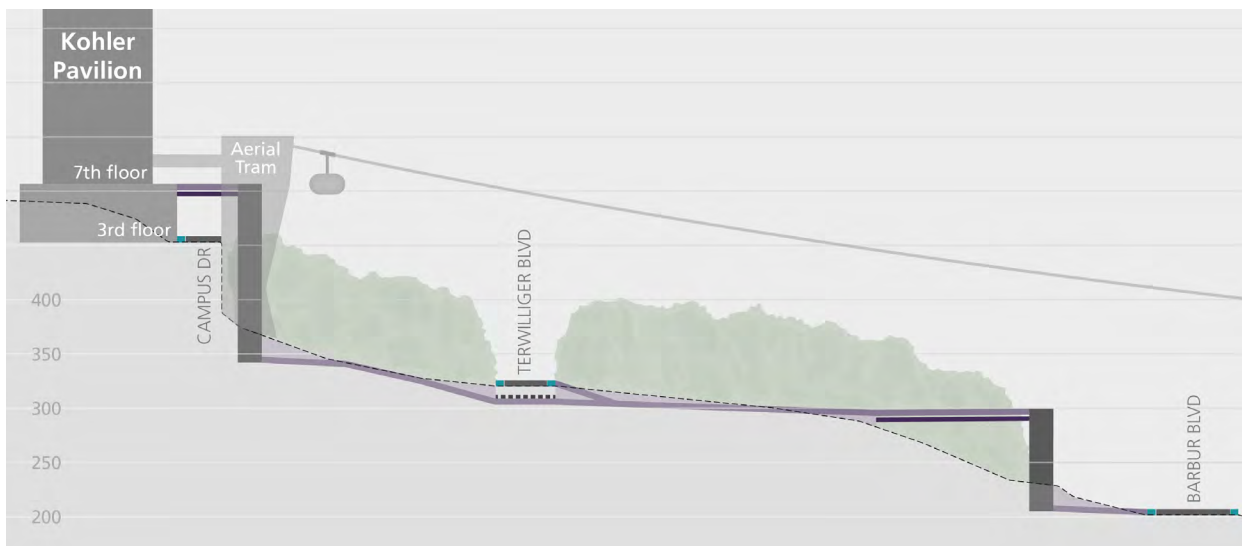


### Connection Elements

- Path, ramp or plaza
  - Stairs
  - Tunnel
  - Bridge
  - Tower with elevator and stairs
  - Below-ground wall
  - Above-ground wall
  - Estimated construction footprint
- Over about 5 ft tall  
Thicker line = taller*

### Existing Conditions

- Sidewalk or path
- Tree cover



### Connection Elements

- Path, ramp, plaza or stairs
- Tunnel
- Bridge
- Tower with elevator and stairs
- Wall (above or below ground)

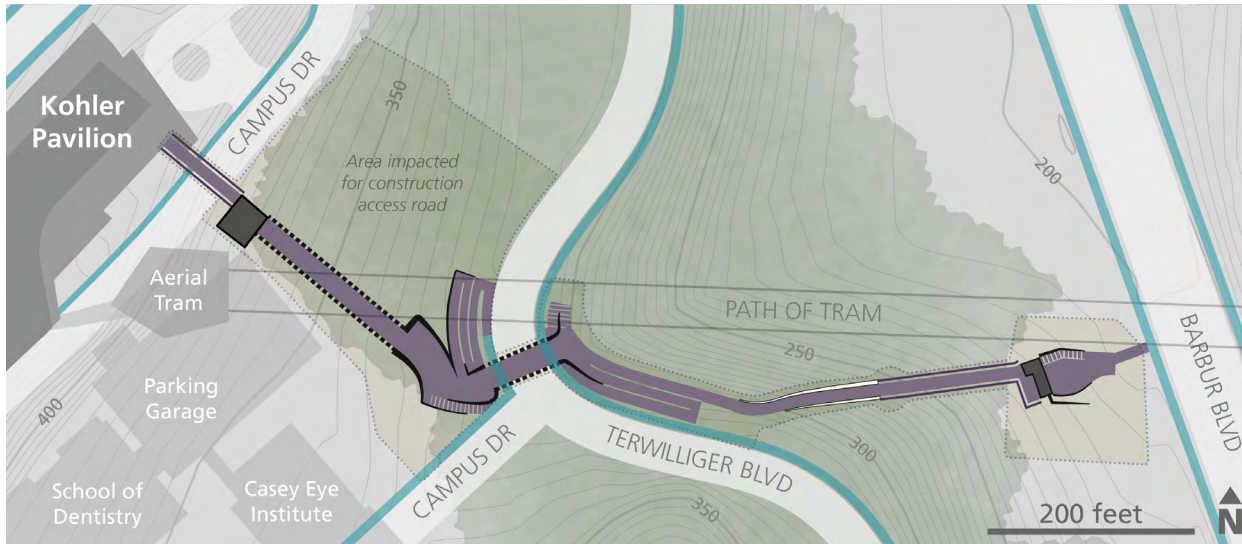
### Existing Conditions

- Ground level
- Sidewalk or path
- Tree cover

## Connection 1C: Elevator/Bridge and Tunnel

This option would include two elevators, two bridges and an on-grade path. This option would be identical to Connection 1B from Barbur to the below-grade crossing of Terwilliger, but would differ west of Terwilliger.

The pedestrian underpass below Terwilliger would emerge into an open recessed area west of the roadway, about 30 feet below the level of the surrounding ground. A series of ramps and stairs would connect this open area to the sidewalks on Campus Drive and the west side of Terwilliger. A 180-foot-long tunnel would lead from the open area to the upper elevator tower. A bridge would connect the top of the elevator to the seventh floor of Kohler Pavilion.



### Connection Elements

- Path, ramp or plaza
  - Stairs
  - Tunnel
  - Bridge
  - Tower with elevator and stairs
  - Below-ground wall
  - Above-ground wall
  - Estimated construction footprint
- } Over about 5 ft tall  
} Thicker line = taller

### Existing Conditions

- Sidewalk or path
- Tree cover



### Connection Elements

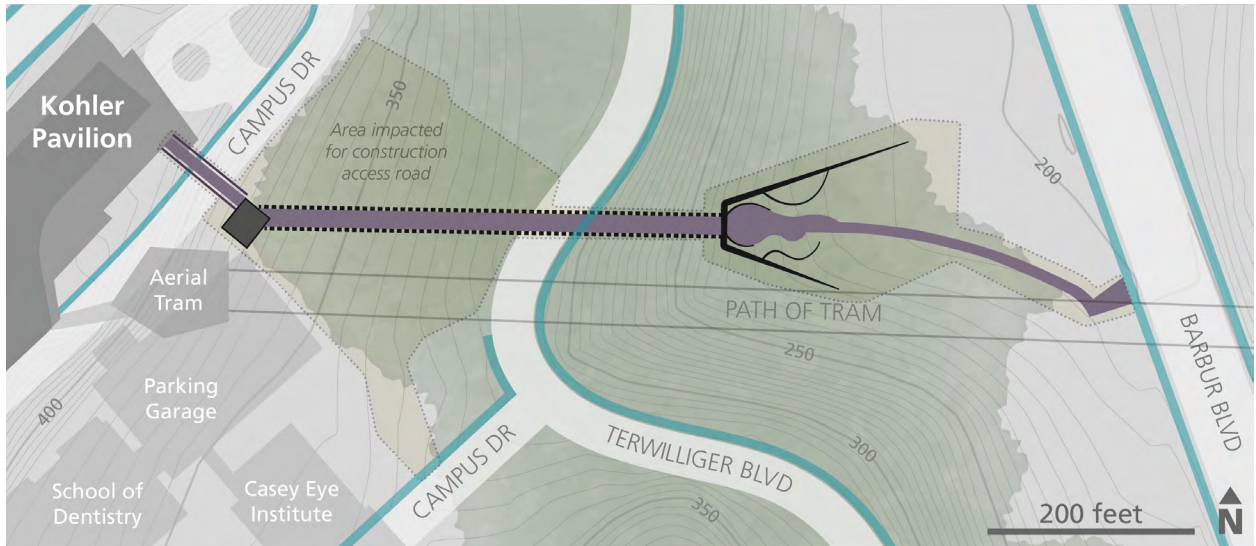
- Path, ramp, plaza or stairs
- Tunnel
- Bridge
- Tower with elevator and stairs
- Wall (above or below ground)

### Existing Conditions

- Ground level
- Sidewalk or path
- Tree cover

## Connection 2: Full Tunnel

Connection 2 is distinct from the other three Marquam Hill connection options and has a single tunnel, an elevator and a bridge. A path from Barbur would lead to an open plaza area partially embedded into the hillside. A 450-foot-long tunnel would extend into the hillside under Terwilliger and connect to an elevator. A bridge would connect the top of the elevator to the seventh floor of Kohler Pavilion.

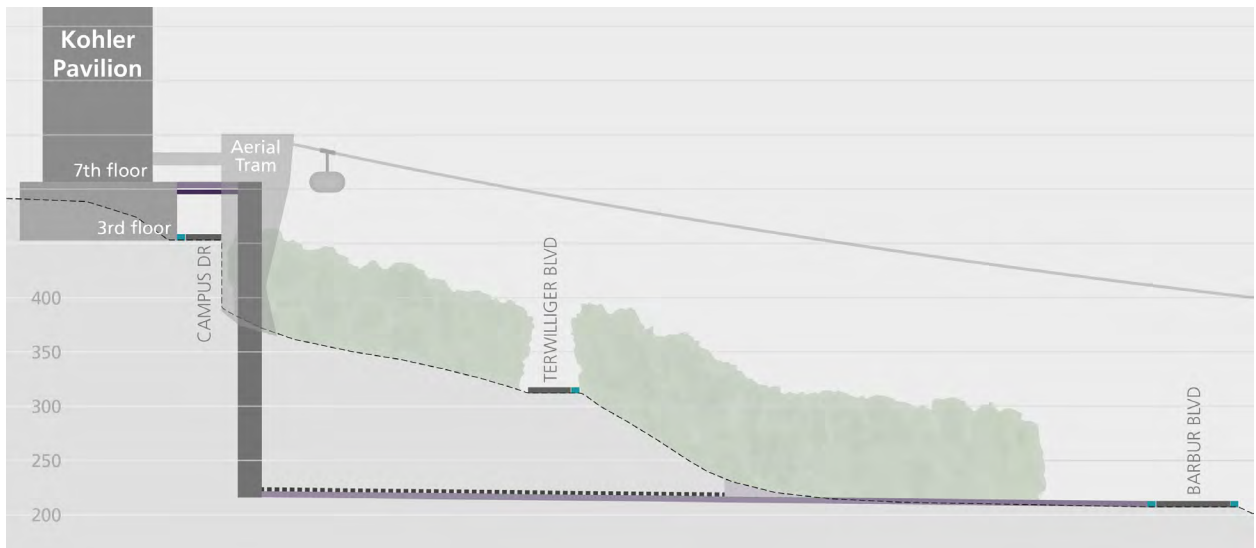


### Connection Elements

- Path, ramp or plaza
- Stairs
- Tunnel
- Bridge
- Tower with elevator and stairs
- Below-ground wall } *Over about 5 ft tall*  
 } *Thicker line = taller*
- Estimated construction footprint

### Existing Conditions

- Sidewalk or path
- Tree cover



### Connection Elements

- Path, ramp, plaza or stairs
- Tunnel
- Bridge
- Tower with elevator and stairs
- Wall (below ground level)

### Existing Conditions

- Ground level
- Sidewalk or path
- Tree cover