SW Corridor Plan: Options for Connecting PCC Sylvania Campus to High Capacity Transit

There are several options currently under consideration for connecting the Southwest Corridor high capacity transit (HCT) line to the PCC Sylvania campus. High capacity transit could connect directly to the PCC Sylvania campus via Capitol Highway or an underground transit tunnel, or could remain on Barbur Blvd. and provide other walk/bike/shuttle connections to campus. Options include:

- Light rail to PCC Sylvania campus via bored tunnel
- Light rail to PCC Sylvania campus via cut-and-cover tunnel
- Light rail/bus rapid transit on Barbur + improved local bus service
- Bus rapid transit to PCC Sylvania campus via Capitol
- Light rail/Bus rapid transit on Barbur + enhanced walk/bike connection
- Light rail/Bus rapid transit on Barbur + new shuttle or mechanized connection

This information is derived from reports previously published by project staff and available on the project library at www.swcorridorplan.org and via the link below.

Technical updates to PCC Sylvania light rail connection options
Key Issues memo: PCC Sylvania area (updated) *Note that some information in the Key Issues memo has become outdated; e.g. the Key Issues memo only analyzes a cut and cover tunnel option, whereas bored tunnel options are now under consideration.*

Next Steps: In October 2015 the project steering committee will consider which connection options are most promising for further study. Decision-makers will need to balance many factors including construction cost, impacts on the Mount Sylvania neighborhoods (displacement, noise, temporary traffic controls), community input, future development plans for PCC Sylvania campus, ridership gains and implementing adopted land use plans.

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Light rail to campus via bored tunnel options

To serve PCC Sylvania campus directly with light rail (MAX) requires construction of an underground transit tunnel due to steep grades. A short bored tunnel would depart Barbur Blvd. at a tunnel portal near SW 53rd Ave. and exit at a portal near Lesser Road. A long bored tunnel would begin at the same location and exit near the Tigard Triangle.

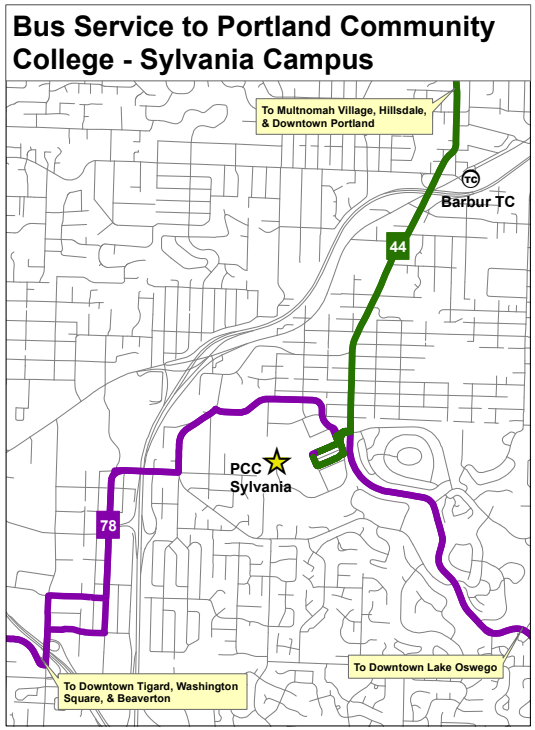
- An underground station would serve PCC Sylvania near the northern edge of campus.
- Travel time and ridership for each option have not yet been analyzed. However, it is believed that the long bored tunnel would have a shorter travel time and may cost less to construct than a cut-and-cover tunnel.
- These options significantly increase project costs compared to a Barbur Blvd. light rail alignment.
- A bored tunnel would have a shorter duration of construction, lower capital costs and a reduced level of community impacts (fewer property displacements and traffic impacts) than a cut-and-cover tunnel; yet still have significant community impacts and construction risk.

Light rail to campus via cut-and-cover tunnel

To serve PCC Sylvania campus directly with light rail (MAX) requires construction of an underground transit tunnel due to steep grades. A cut-and-cover tunnel would depart from Barbur Blvd., begin at a tunnel portal near SW 53rd Ave. and exit through a portal near Lesser Road.

- An underground station would serve PCC Sylvania near the northern edge of campus.
- This option increases ridership and improves travel time compared to a Barbur light rail alignment; yet also significantly increases project costs.
- This option significantly increases construction risks and impacts including residential displacements, traffic disruption during construction, and complexities of the tunnel design and construction.
- Cut-and-cover tunnel construction involves excavating a trench and then covering up the transit tracks after construction.

HCT on Barbur + improved local bus service



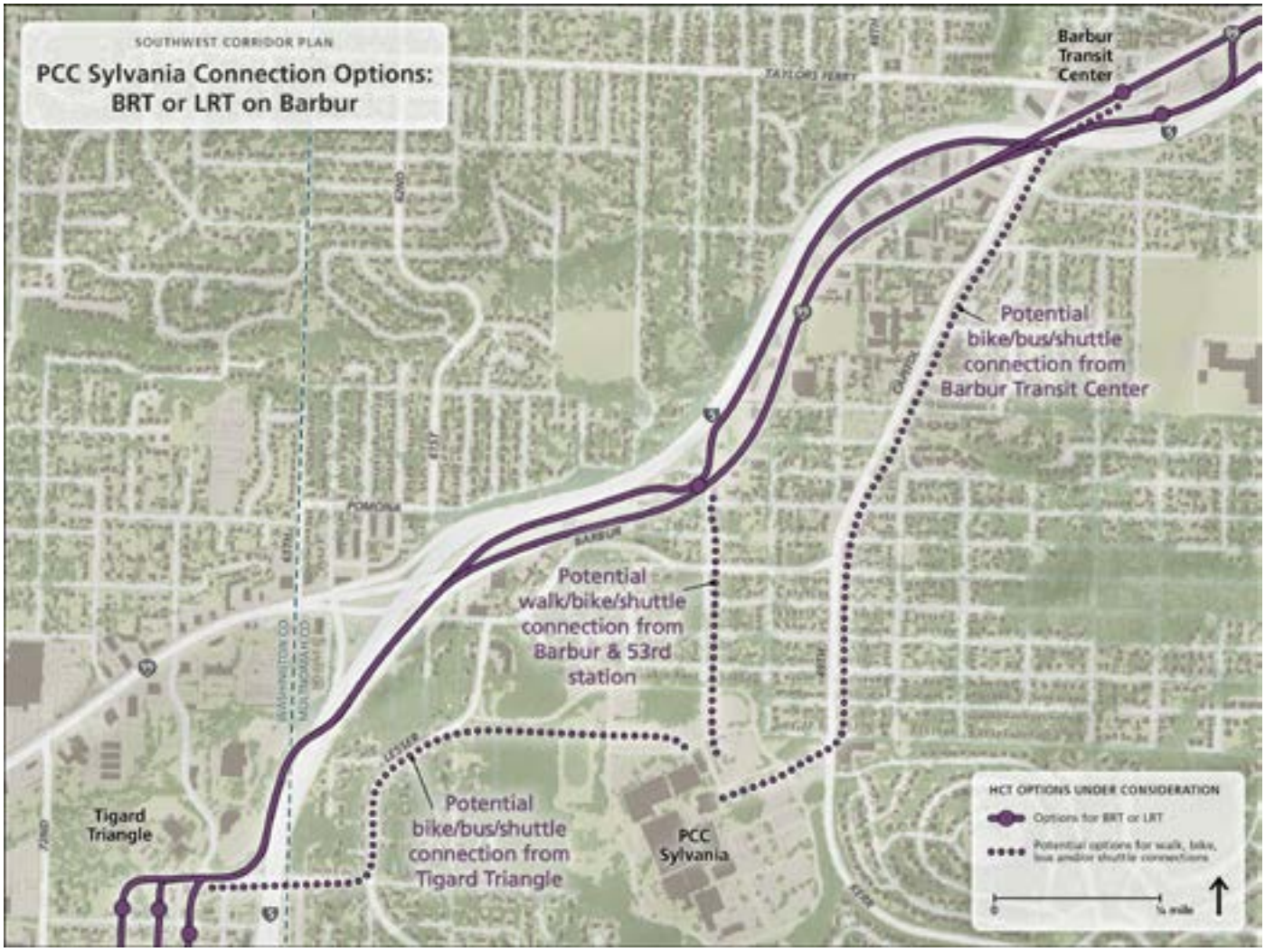
If an HCT alignment runs on or adjacent to Barbur Blvd. between Crossroads and Tigard, improved local bus service between Barbur Transit Center and Tigard Triangle to the PCC Sylvania campus could provide improved connectivity from HCT stops on Barbur Blvd.

- TriMet's Route 44 bus service (which links Barbur Transit Center and PCC Sylvania via Capitol Highway) could run every 15 minutes all day, every day, with more frequent service at key student and staff commute times.
- Route 44 could also extend south to Bridgeport Village and downtown Tualatin.
- Route 78 would run with increased frequency to connect PCC Sylvania with the Lake Oswego, Tigard, Washington Square and Beaverton transit centers.
- A new form of bus service to PCC Sylvania could also be considered, such as an express bus or bus rapid transit style connection.

Bus rapid transit to PCC campus via Capitol

This alignment is only being considered for bus rapid transit due to the steep slopes around the PCC campus that prohibit light rail operation. The route would depart Barbur Blvd. and run in the center of Capitol Hwy. and 49th Ave. to the PCC Sylvania campus. From the PCC campus, bus rapid transit would head west to a new bridge structure stretching from Lesser Road across I-5 to the Tigard Triangle.

- Bus rapid transit is a type of bus system that can carry more passengers, has more frequent service than local buses, and often runs in its own lane.
- The option could include conversion of one auto lane on Capitol Hwy. in each direction for exclusive bus rapid transit use to limit impacts to adjacent properties.
- A new bridge over I-5 could include bike and pedestrian facilities to provide a safe connection for those modes between PCC and the Tigard Triangle.



HCT on Barbur + enhanced SW 53rd walk/bike connection

If an HCT alignment runs on or adjacent to Barbur Blvd. between Crossroads and Tigard, a station near Barbur Blvd. and SW 53rd Ave. is likely. SW 53rd Ave. is a currently unimproved local roadway north of campus that provides the shortest access to the campus from Barbur and is used informally as a route for pedestrians and bicyclists to travel to PCC Sylvania. Investment would be necessary to create a walk/bike connection that is usable to the general public.

- The distance from SW 53rd Ave. to campus is approximately .5 mile with somewhat steep grades and limited paving and sidewalks.
- Improvements would include new bike lanes and sidewalks, lighting, safety and storm water management features; auto access would be maintained.
- Initial concepts for this walk/bike connection have been developed and would be refined into preliminary designs during the 2017 Draft Environment Impact Study phase of the Southwest Corridor Plan.

HCT on Barbur + new shuttle or mechanized connection

If an HCT alignment runs on or adjacent to Barbur Blvd. between Crossroads and Tigard, new shuttles or other types of mechanized connections could be developed to connect HCT stops on Barbur to campus.

- Possible options include a bus shuttle, autonomous vehicles, or personal rapid transit vehicles. These options will be further explored to determine feasibility, potential routes and destination.
- Potential routes for a shuttle or mechanized connection are on or near SW 53rd Ave. north of campus, Capitol Hwy., or Lesser Road coming from the Tigard Triangle.
- Shuttles or other mechanized connections could be timed to coincide with HCT arrivals on Barbur Blvd.