

## 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

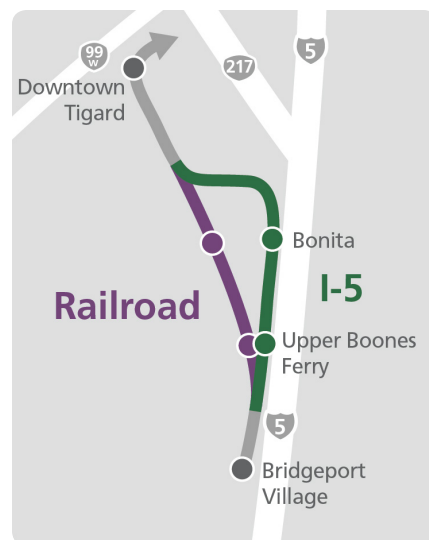
For "through-routed" light rail that would travel through downtown Tigard to reach Bridgeport Village, the line could run alongside either a freight railroad or I-5 south of downtown Tigard. (For a "branched" route that would split to serve each place separately, running next to I-5 is the only possible alignment south of downtown Tigard.)

Both alignments would run alongside the WES Commuter Rail tracks just south of downtown Tigard and along the west side of I-5 just north of Bridgeport Village, but would differ between Landmark Lane and south of Upper Boones Ferry Road.

The **Railroad alignment** would run alongside the freight rail tracks through the stretch where the two alignments differ. The alignment would be elevated from just north of Landmark Lane to just south of Bonita Road, and would include an elevated station at Bonita. The alignment would cross 72nd Avenue and Upper Boones Ferry Road at-grade with gated crossings, and would include an at-grade station on the north side of Upper Boones Ferry.

The **I-5 alignment** would split from the commuter and freight rail tracks near Landmark Lane, cross 72nd Avenue at grade, and turn south to run along the west side of I-5 just south of the interchange with Highway 217. The alignment would continue along I-5 to the last station at Bridgeport Village, passing under Bonita Road and Upper Boones Ferry Road. The alignment would include stations on the south side of both Bonita and Upper Boones Ferry. The stations would be at-grade, but somewhat lower than the level of the adjacent roadway because Bonita and Upper Boones Ferry both rise to cross over I-5.

More detailed maps of the Railroad and I-5 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).



## CONNECT

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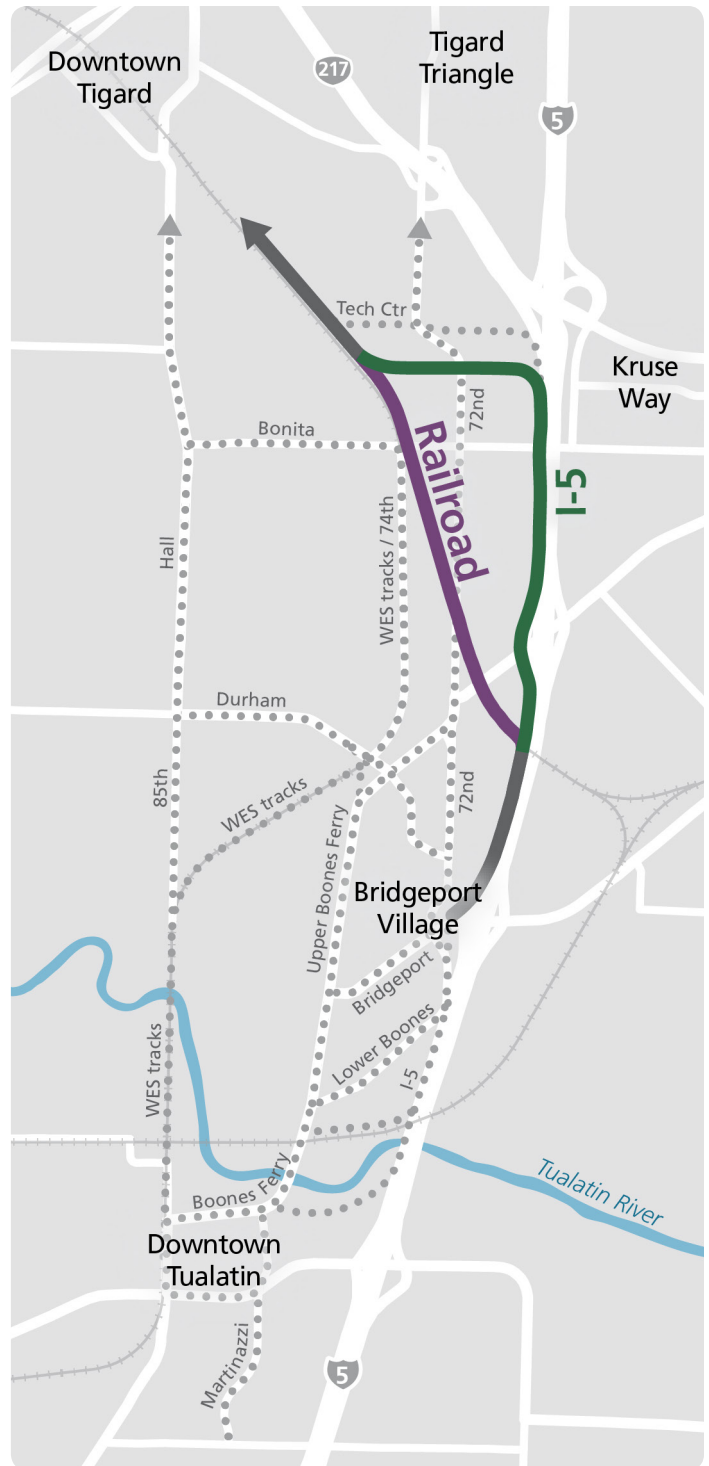
503-813-7535

## Alignments Considered and Removed

During the refinement phase of the project, many alignment options were considered to connect downtown Tigard and Tualatin, as illustrated in the map on the right.

During this process, the Southwest Corridor Steering Committee decided to remove the station in downtown Tualatin and study a Bridgeport Village terminus because the costs and impacts of accessing a downtown Tualatin station outweighed the anticipated ridership gains.

More information on options considered and removed is provided in the *Project Background and Alternatives Considered* document, available on the project website: [www.swcorridorplan.org/light-rail-study](http://www.swcorridorplan.org/light-rail-study).



..... Alignments considered and removed

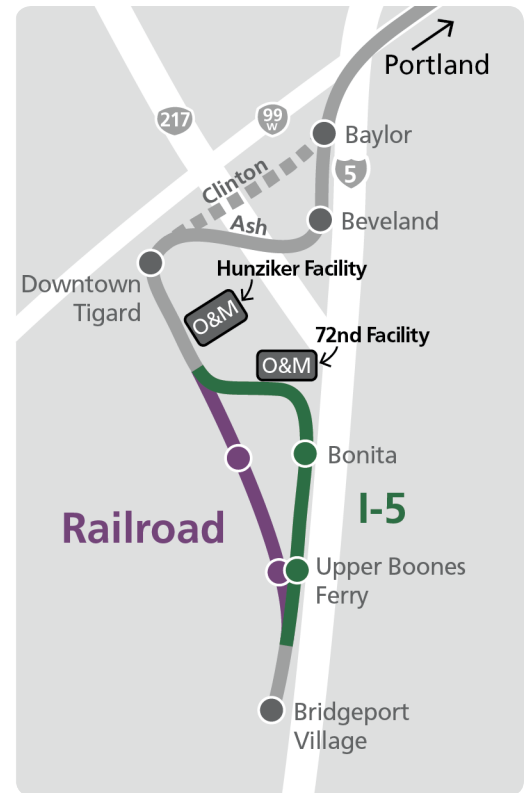
## Related Decisions

The decision between the Railroad and I-5 alignments is only applicable to the **Through route configuration**. The **Branched route configuration** would connect with the I-5 alignment via a new structure over Highway 217 east of SW 72nd Avenue. More information on the route configuration options is included in a separate briefing book (released April 2017).

For the environmental analysis, the light rail project has been divided into three segments. The Railroad and I-5 alignments represent only a portion of Segment C, Tigard and Tualatin. Segment-based information in this document assumes the Ash alignment connecting downtown Tigard and the Tigard Triangle for the purpose of comparison. More information on the trade-offs between the **Ash and Clinton alignments** will be provided in a separate briefing book.

The Railroad alignment is only compatible with the **operations and maintenance (O&M) facility** location on SW Hunziker Street, while the I-5 alignment could use either the Hunziker or 72nd location. These two O&M facility locations are shown in the map on the right.

For more information on the full range of alternatives under consideration, see 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).





## Key Considerations

Based on currently available information, the key considerations in the decision between the Railroad and I-5 alignment are station locations, park and rides, travel time, property impacts, ridership and traffic impacts.

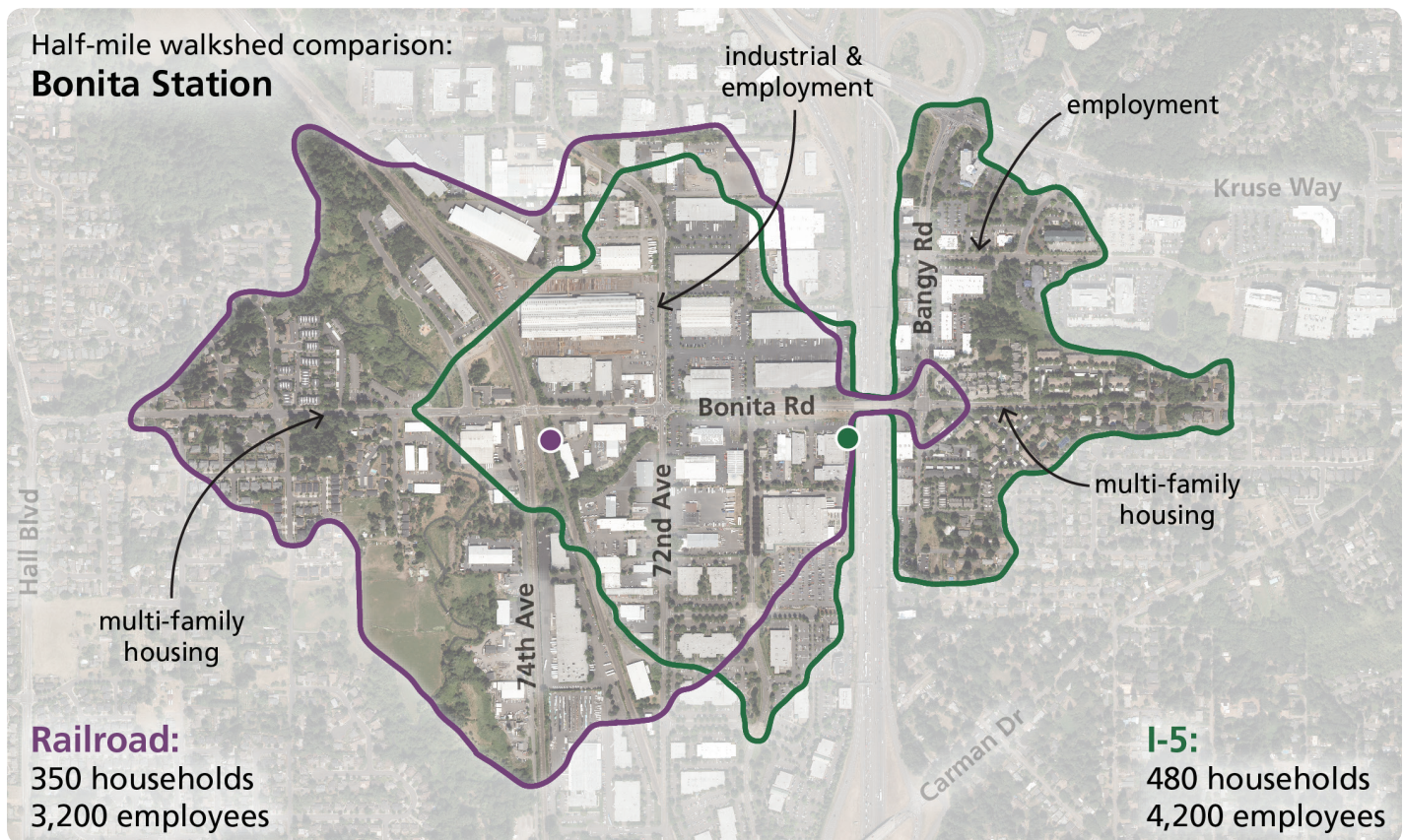
These considerations are examined individually on the following pages. A summary table is provided on the back page of this document. This document may be updated to include new relevant information resulting from the ongoing environmental analysis or updates to travel forecasts or cost estimates.

### Station locations: Bonita

The Railroad and I-5 alignments would both include stations at SW Bonita Road, but at different locations along Bonita. Based on the current project designs, the **station along the railroad would be elevated** with stairs and an elevator to access the street level. The **station along I-5 would be at-grade, but somewhat lower than the level of Bonita Road**, which rises to cross over the freeway.

Both stations would provide a transfer opportunity to potential future bus service on Bonita Road, which is envisioned in TriMet's Southwest Service Enhancement Plan.

The map below shows the areas accessible within a half-mile walk from each station location. The I-5 alignment would better serve the employment and multi-family housing east of I-5 in Kruse Way, while the Railroad alignment would better serve the multifamily housing west of the railroad tracks in Tigard. Both alignments would serve the industrial and employment area between I-5 and Fanno Creek. Overall, **the station along I-5 would have 130 more households and 1,000 more employees within a half mile walk** compared to the Railroad station (based on 2015 data).

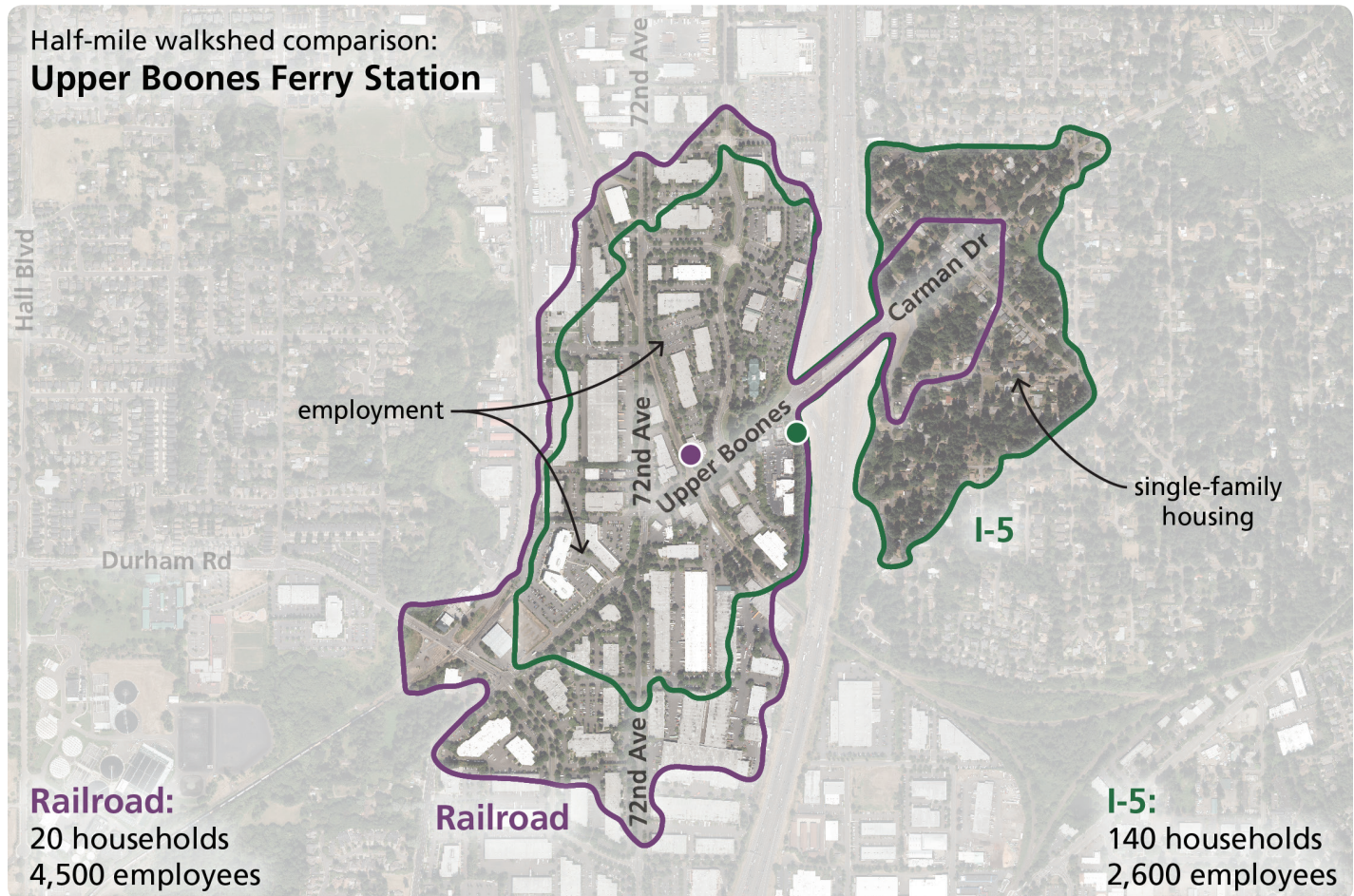




## Station locations: Upper Boones Ferry

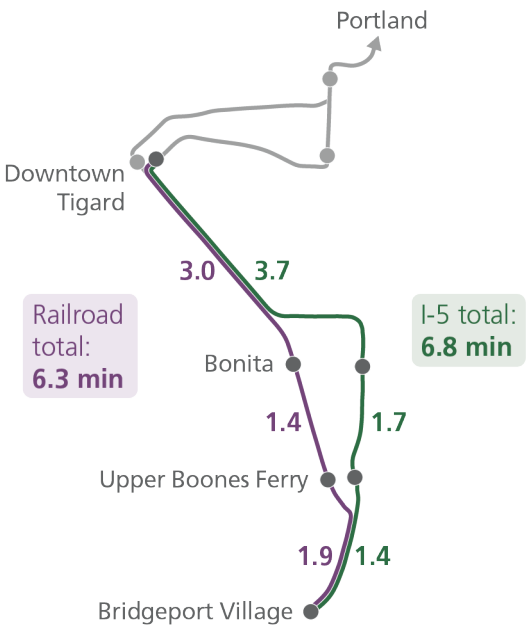
As with the Bonita station, the Railroad and I-5 alignments would have slightly different locations for a station at Upper Boones Ferry Road. **Both stations would be at-grade**, though the station along I-5 would be somewhat lower than the level of Upper Boones Ferry Road, which rises to cross over the freeway.

The map below shows the areas accessible within a half-mile walk from each station location. The station along the railroad would serve more of the employment area along 72nd Avenue, while the station along I-5 would serve more single-family housing across I-5. The **station along I-5 would have 110 more households and 1,900 fewer employees within a half-mile walk** compared to the Railroad station (based on 2015 data).



### Travel time

The **Railroad alignment would be 30 seconds faster** than the I-5 alignment between downtown Tigard and Bridgeport Village.



### Ridership

Overall, the **Railroad and I-5 alignments would have relatively similar ridership**. Although the Railroad alignment would be faster than the I-5 alignment, the I-5 alignment would attract more riders at the Bonita station because of its proximity to Kruse Way. Overall, the I-5 alignment would have about 1 percent more line riders and 2 percent more new transit trips in 2035 compared to the Railroad alignment.

### Park and rides

The **I-5 alignment could include more park and ride capacity and would provide better access from the freeway** than the Railroad alignment. The table below shows the currently assumed maximum park and ride capacity at the Bonita and Upper Boones Ferry stations. Information on expected park and ride usage and ease of access is currently being developed.

	Railroad	I-5
Bonita Park and Ride	100 spaces	150 spaces
Upper Boones Ferry Park and Ride	50 spaces	600 spaces

## Property impacts

For the Through route configuration, the **I-5 alignment would have a higher area of property impacts** than the railroad alignment. Based on current designs, the I-5 alignment would include about 13 more acres of full or partial property acquisitions. This difference equates to a 30 percent higher acreage of impacts for the I-5 alignment compared to the Railroad alignment within the Tigard and Tualatin segment of the project.

The Railroad alignment designs assume a 25-foot buffer between the light rail and freight rail tracks. If it becomes necessary to increase that buffer to up to 50 feet away from the freight rail tracks, the Railroad alignment property impacts would increase significantly.

## Traffic impacts

The I-5 and Railroad alignments differ in their expected traffic impacts primarily at the crossing of SW Upper Boones Ferry Road.

The I-5 alignment, running adjacent to I-5, would run below-grade and pass underneath Upper Boones Ferry, with a station and large park and ride located just south of the road. Its primary impact on traffic would be from drivers accessing the park and ride, many of whom would be using I-5 and would travel through the interchange of I-5 and Upper Boones Ferry. The traffic analysis will look in detail at the impacts of the additional drivers traveling to and from the park and ride.

The Railroad alignment, running parallel to the Union Pacific RR/WES tracks, would cross Upper Boones Ferry at-grade, with a station and small park and ride just north of Upper Boones Ferry Road. Its primary impact on traffic would be the additional delay to drivers caused by more gate-down time at the railroad crossing. While light rail has shorter duration crossings than those of WES Commuter Rail and freight trains, the frequency of crossings would be much higher for light rail due to its higher service frequency. The traffic analysis will look in detail at the impacts of both the increased frequency of rail crossings and the small increase in drivers traveling to and from the park and ride.

## Pending information

Some information that may be relevant to the decision between the Railroad and I-5 alignments is still being developed, including capital costs and environmental impact analysis. The environmental analysis will consider impacts to both the natural and built environment, such as impacts to wetlands and displacement of residents and businesses.

An updated version of this briefing book will be released when new information becomes available.

## Summary Table

The following summary table will be updated as new information becomes available. The ongoing environmental impact analysis could reveal significant impacts associated with either the Railroad or I-5 alignment.

	Railroad	I-5
<b>Transit Performance</b> <i>(Full Corridor)</i>		
<b>New system transit trips</b> <i>2035 average weekday</i>	17,500 <i>range TBD</i>	17,800 <i>range TBD</i>
<b>Line ridership</b> <i>2035 average weekday</i>	41,200 <i>range TBD</i>	41,600 <i>range TBD</i>
<b>Travel time: PSU to Bridgeport Village</b> <i>2035 average weekday, peak period</i>	32.4 minutes <i>31.1 to 32.4</i>	32.9 minutes <i>31.6 to 32.9</i>
<b>Maximum park and ride capacity</b>	3,600 spaces <i>no change for Clinton</i>	4,200 spaces <i>no change for Clinton</i>
<b>Finance</b> <i>(Full Corridor)</i>		
<b>Capital cost</b>	TBD <i>(likely lower)</i>	TBD <i>(likely higher)</i>
<b>Operating cost</b> <i>based on 2035 operator hours</i>	TBD	\$18.4 million <i>range TBD</i>
<b>Access and Development</b> <i>(Segment C only)</i>		
<b>Specific measures TBD</b>	TBD	TBD
<b>Communities and Built Environment</b> <i>(Segment C only)</i>		
<b>Property acquisitions</b> <i>Includes full or partial acquisitions</i>	43 acres <i>43 to 47</i>	56 acres <i>56 to 60</i>
<b>Other specific relevant impacts TBD</b>	TBD	TBD
<b>Natural Environment</b> <i>(Segment C only)</i>		
<b>Specific relevant impacts TBD</b>	TBD	TBD

*With Ash alignment and Through route configuration*

*Full range for Ash and Clinton alignments with Through route configuration*

### Assumptions

The primary information in the summary table is based on the through routed Ash alignments in Segment C (alternatives C1 and C2). Ranges are also provided to encompass the full range of Segment C alternatives for the through route configurations (alternatives C1 through C4). For full-corridor information, Alternative A1 (Barbur) is assumed for Segment A and Alternative B2 (I-5 Barbur Transit Center to 60th) is assumed for Segment B.

For more information on the range of alignment alternatives under consideration, see the *Light Rail Project Alternatives for Environmental Review* document, available on the project website: [www.swcorridorplan.org/light-rail-study](http://www.swcorridorplan.org/light-rail-study).