

Appendix C

Alternatives Analysis

SCREENING THE ALTERNATIVES

The PMT first met in 2007 to draft the project's purpose and need, and later, the project's goals, criteria, and measures. With the project's foundation established, the PMT held a design workshop to discuss several options for interchange locations and designs along US 26. This effort resulted in seven different alternatives.

Once the seven alternatives were developed, the PMT screened the alternatives to determine which options best satisfied the project's purpose and intent. Three alternatives then advanced to the evaluation phase: Alternative A, Alternative B, and Alternative C-2.¹

ALTERNATIVES DESCRIPTION

Alternative A is a partial cloverleaf interchange with a loop ramp in the southeast quadrant. The Springwater Trail would be elevated above the proposed arterial once the arterial is constructed with five lanes (Appendix C-2). If funding were not available to build the complete interchange, Alternative A would be phased with an overcrossing over US 26 extending to Telford Road and new roads primarily utilizing the existing rights-of-way of SE 267th Avenue and SE Anderson Road.

Alternative B is a partial cloverleaf interchange with loop ramps in the northwest and southeast quadrants to provide access to US 26 eastbound. In this alternative, the arterial is grade-separated over both Telford Road and the Springwater Trail with a jughandle ramp providing access to/from Telford Road (Appendix C-3). If funding were not available to build the complete interchange, Alternative B would be phased with an overcrossing over US 26 and Telford Road, a new road to the northwest of 267th Avenue, and a new road utilizing a portion of existing right-of-way on Jeanette Street.

Alternative C-2, the preferred alternative, is an urban diamond configuration. As with Alternative A, the Springwater Trail would be elevated above the proposed arterial once the arterial is constructed with five lanes (Exhibit 3 in the main document). If funding is not available to build the complete interchange, Alternative C-2 would be phased with an overcrossing over US 26 extending to Telford Road, with connections between the overcrossing and US 26.

EVALUATING THE ALTERNATIVES

Once the top three alternatives were established, the PMT started to refine the interchange designs based on input from stakeholder meetings with residents, realtors, the East Metro

¹ Alternative C-2 is named so because it was the second version of Alternative C.

Economic Alliance, JCWC, Audubon Society of Portland, Portland Parks and Recreation, and Metro.

Based on input from Portland Parks and Recreation and Metro about conflicts between vehicles and bicyclists/pedestrians on the Springwater Trail, the PMT re-designed Alternatives A and C-2, elevating the Springwater Trail over the proposed arterial to avoid conflicts between trail users and vehicles.

Based on feedback from City of Gresham natural resource staff, the PMT shifted the alignment of the proposed arterial road further south for Alternatives A and C-2 to reduce impacts to the Sunshine Creek Riparian Area.

In addition to stakeholder meetings, the PMT also held two public open houses—one in February 2009 and one in July 2010. The key issue raised during the open houses was potential property acquisitions. In response to this, the PMT eliminated the ramp in the northeast quadrant of Alternative B to reduce the alternative's footprint and its associated acquisitions.

At one open house, it was suggested that the interchange alignment be shifted south near Stone Road. The PMT had previously considered this option but had dismissed it because it does not adequately serve future industrial development in the Springwater area. In addition, it is not feasible given Stone Road's proximity to the Metro-adopted Urban and Rural Reserves, which would require exceptions to the Statewide Planning Goals. It is unlikely that a goal exception would be granted due to the fact that there is available land within the UGB for the interchange. See Appendix B-4 for more information about an interchange near Stone Road.

Once the alternative refinements mentioned above were complete, the PMT met on August 25, 2010, to score Alternatives A, B, and C-2 against the updated criteria. The potential impacts of each alternative were compared against each other and assigned an impact rank of 1, 2, or 3, with "3" assigned to the lowest level of impact and "1" assigned to the highest level of impact. The scores for each individual goal were averaged, and the averages were summed for each alternative; this normalized the scores so that goals with more measures did not receive a better score simply because they had more measures. See Exhibit 5 for a matrix of scores for each alternative.

Below is a brief description of each alternative's key differentiating impacts:

Alternative A

- Fewest residential displacements
- Moderate construction cost
- Moderate impact to the natural environment

Alternative B

- High residential displacements
- High construction costs
- High impact to the natural environment

Alternative C-2

- Moderate residential displacements
- Lower construction cost
- Lowest impact to the natural environment

PMT RECOMMENDATION

Based on scoring the alternatives, and on public and stakeholder input, the PMT recommends Alternative C-2 due to its comparatively low impact on the natural environment, low cost, moderate residential displacements, and its ability to meet the transportation needs for the Springwater area. Of the 31 measures meant to identify the alternative that best addressed the goals of the *Springwater Community Plan*, Alternative C-2 earned the best score (73), compared to Alternative A (69) and Alternative B (61).