

Example evaluation factors

2/12/14

On a separate project, the Sammamish-Juanita 115 kV Project, PSE worked with a stakeholder advisory group to identify a route for a new transmission line between Redmond and Kirkland. The Sammamish-Juanita 115 kV Project stakeholder advisory group decided to use the following evaluation factors to analyze the route alternatives as they made their recommendation for a preferred route.

- *Least proximity to community land use areas* – The location of the transmission line in relation to schools, parks, homes, etc.
- *Least impact to mature vegetation* – The amount of mature vegetation that must be removed or trimmed for construction and operation of the transmission line.
- *Least proximity to critical and designated areas* – The location of the transmission line in relation to currently mapped critical areas such as wetland, streams, steep slopes, designated view corridors, Native Growth Protection Areas and Transfer of Development Rights, etc.
- *Public support* - Public support for the transmission line route balanced against established Comprehensive and Functional Plans adopted by both cities.
- *Opportunity areas* - The location of the transmission line in relation to the Kirkland railroad corridor, arterial streets (by classification or traffic counts), and existing utility lines/corridors.
- *Least proximity to commercial uses* – The location of the transmission line in relation to places of employment, businesses, stores, etc.

Criteria Data - Route Alternatives East of I-405

| Criteria | Route Alternative 1 | Route Alternative 2 | Route Alternative 3 |
|---|--|---|---|
| 1 Least proximity to residential | | | |
| Approx # of houses adj or across street from alignments | Route side: 70 Opposite side: 60 Total: 130 | Route side: 50 Opposite side: 75 Total: 125 | Route side: 0 Opposite side: 0 Total: 0 |
| 2 Least impact to mature vegetation (tall growing trees and bushes)^{1,2,3} | | | |
| Approx # of significant trees affected (6" diameter at breast height (dbh) or greater) | 180 | 240 | 330 |
| Approx # of other trees affected | 90 | 125 | 250 |
| Total | 270 | 365 | 580 |
| 3 Least proximity to critical and designated areas | | | |
| Approx linear feet of wetlands | 4,500 | 2,850 | 5,675 |
| Number of stream crossings | 4 | 2 | 5 |
| Approx linear feet of slopes >40% | 2,350 | 3,250 | 2,525 |
| Approx linear feet of designated view corridor | 0 | 0 | 1,950 |
| Approx linear feet of Transfer of Development Right properties / Native Growth Protection Easements | 300 | 300 | 1,590 |
| 4 Public support | | | |
| Alternative rankings from online questionnaire (Entire alternative, not segments) | Least preferred (159) | Second choice (172) | Most preferred (254) |
| Alternative rankings from comment forms (Entire alternative, not segments) | Least preferred (22) | Second choice (21) | Most preferred (37) |
| Information from comp plans | See attached | See attached | See attached |
| 5 Opportunity areas | | | |
| Kirkland railroad corridor | Not applicable | 1,255 feet | 5,740 feet |
| Street classification (arterials) / approx traffic counts ⁴ | Principal (NE 116th Street, 124th Ave NE): 11,700-16,400 Minor (132nd Ave NE): 11,500 Collector (NE 95th Street): 1,015 | Principal (NE 124th Street): 29,820 Minor (NE 120th Street, Slater Ave NE, 132nd Ave NE): 9,670-15,100 | Minor (Willows Road): 21,200 |
| Existing utility lines/corridors | 14,860 feet | 13,855 feet | 1,425 feet |
| 6 Least proximity to community sensitive land uses | | | |
| Schools and childcare facilities | Mark Twain Elementary School (130th Ave NE) Boys and Girls Club (124th Ave NE) Kindercare Learning Center (Slater Ave) The City Church (132nd Ave NE) | Lake Wash Tech College - Early Learning Center (132nd Ave NE) The City Church (132nd Ave NE) | |
| Parks | Forbes Lake Park (124th Ave NE) | Mark Twain Park (132nd Ave NE) | Totem Lake Watershed Park |

Notes

- 1 Vegetation counts were estimated based on field review and general assumptions. Actual impact will be determined in the final design.
- 2 Vegetation counts do not included vegetation on PSE-owned property.
- 3 Impacts could be removal or trimming of vegetation.
- 4 City of Kirkland Traffic Counts (2007) and City of Redmond Traffic Counts (2009)