

# West Seattle / Duwamish – Level 1

# West Seattle / Duwamish evaluation

## Evaluation Measures

Qualitative Capital Costs




Station proximity to Urban Centers/Villages

|  | Reliable Service | Travel Time | Regional Connectivity | Transit Capacity | Protected Transit Demand | Regional Centers Served | ST Long Range | Mode, Route, and Station Consistency | Potential ST3 Locations (per ST3) | Engineering Constraints | Constructability Issues | Operational Constraints | Qualitative Capital Cost Comparison | Historically Underserved Populations | Station Land Use Plan Consistency | Station Proximity to Urban Centers/Villages | Bus/Rail Integration | Bicycle/Pedestrian Connectivity | Station Area Development Potential | Protected Natural Resources | Burden on Environment | Traffic Circulation/Access | Freight Access | Business/Commerce |
|--|------------------|-------------|-----------------------|------------------|--------------------------|-------------------------|---------------|--------------------------------------|-----------------------------------|-------------------------|-------------------------|-------------------------|-------------------------------------|--------------------------------------|-----------------------------------|---|----------------------|---------------------------------|------------------------------------|-----------------------------|-----------------------|----------------------------|----------------|-------------------|
| ST3 Representative Project (Baseline)      | ●                | ●           | ●                     | ●                | ●                        | ●                       | ●             | ●                                    | ●                                 | ●                       | ●                       | ●                       | ●                                   | ●                                    | ●                                 | ●   | ●                    | ●                               | ●                                  | ●                           | ●                     | ●                          | ●              | ●                 |
| Pigeon Ridge / West Seattle Tunnel         | ●                | ●           | ●                     | ●                | ○                        | ●                       | ●             | ●                                    | ○                                 | ●                       | ○                       | ●                       | ●                                   | ●                                    | ●                                 | ○   | ○                    | ●                               | ○                                  | ●                           | ●                     | ●                          | ○              | ●                 |
| West Seattle Bridge / Fauntleroy           | ●                | ●           | ●                     | ●                | ●                        | ●                       | ●             | ●                                    | ●                                 | ○                       | ●                       | ○                       | ○                                   | ●                                    | ○                                 | ●   | ○                    | ●                               | ●                                  | ●                           | ○                     | ○                          | ○              | ○                 |
| Yancy Street / West Seattle Tunnel         | ●                | ●           | ●                     | ○                | ●                        | ○                       | ●             | ○                                    | ●                                 | ○                       | ○                       | ○                       | ○                                   | ○                                    | ○                                 | ○   | ○                    | ○                               | ○                                  | ○                           | ○                     | ○                          | ○              | ○                 |
| Oregon Street / Alaska Junction            | ●                | ●           | ●                     | ●                | ●                        | ●                       | ●             | ●                                    | ●                                 | ○                       | ●                       | ●                       | ●                                   | ●                                    | ●                                 | ○   | ○                    | ○                               | ○                                  | ○                           | ○                     | ○                          | ○              | ○                 |
| West Seattle Golf Course / Alaska Junction | ●                | ●           | ●                     | ○                | ●                        | ○                       | ●             | ○                                    | ●                                 | ●                       | ○                       | ○                       | ○                                   | ○                                    | ○                                 | ○   | ○                    | ○                               | ○                                  | ○                           | ○                     | ○                          | ○              | ○                 |







Freight Access / Business Concerns

● Higher Performance    ● Comparable Performance    ○ Lower Performance

# West Seattle / Duwamish summary

|                                      |   |  |
|--------------------------------------|---|--|
| Alternatives with more potential     | ST3 Representative Project                         | <ul style="list-style-type: none"> <li>• Baseline for comparison</li> </ul>  |
|                                      | Oregon Street/Alaska Junction                      | <ul style="list-style-type: none"> <li>• Avoids Fauntleroy and Alaska; better orientation south</li> <li>• Affects Oregon St and 44<sup>th</sup> Ave</li> </ul>  |
|                                      | West Seattle Bridge/Fauntleroy                     | <ul style="list-style-type: none"> <li>• Lessens effects to Junction and Delridge; better orientation south</li> <li>• Creates isolated Delridge Station</li> </ul>  |
|                                      | Pigeon Ridge/West Seattle Tunnel                   | <ul style="list-style-type: none"> <li>• Lessens effects to Port, Junction, Delridge; better orientation south</li> <li>• Requires two tunnels; may require 3<sup>rd</sup> Party funding</li> </ul>  |
| Alternatives with greater challenges | Yancy Street/West Seattle Tunnel                   | <ul style="list-style-type: none"> <li>• Lessens effects to Junction and Delridge; better orientation south</li> <li>• Consolidates stations; potentially not consistent with ST3 Plan</li> <li>• Requires tunnel; may require 3<sup>rd</sup> Party funding</li> </ul> |
|                                      | West Seattle Golf Course/Alaska Junction (Tunnel)  | <ul style="list-style-type: none"> <li>• Crosses golf course, Section 4(f)</li> <li>• Lessens effects to Junction, Delridge</li> <li>• Eliminates station; potentially not consistent with ST3 Plan</li> </ul>   |
| Not practical suggestions            | Tunnel under Duwamish   | <ul style="list-style-type: none"> <li>• Impractical tunnel depth and length</li> </ul>  |
|                                      | West Seattle Bridge   | <ul style="list-style-type: none"> <li>• Existing structure not built to accommodate LRT</li> <li>• Constructability issues</li> </ul>   |
|                                      | Gondola, rail/bus bridge  | <ul style="list-style-type: none"> <li>• Mode not consistent with ST3 Plan</li> </ul>  |
|                                      | Extensions to Alki, Admiral, etc.   | <ul style="list-style-type: none"> <li>• Not included in ST3 Plan or long range plan</li> </ul>  |

# West Seattle / Duwamish – SAG recommendations

|                                      | Alternative                                       |   | Carry forward? | Do not carry forward? | Notes/Comments                                   |
|--------------------------------------|---|---|----------------|-----------------------|--|
| Alternatives with more potential     | ST3 Representative Project                        |  |                |                       |  |
|                                      | Oregon Street/Alaska Junction                     |  | ✓              |                       | Explore elevated and tunnel options              |
|                                      | West Seattle Bridge/Fauntleroy                    |  |                | ✓                     |  |
|                                      | Pigeon Ridge/West Seattle Tunnel                  |  | ✓              |                       |  |
| Alternatives with greater challenges | Yancy Street/West Seattle Tunnel                  |  |                | ✓                     |  |
|                                      | West Seattle Golf Course/Alaska Junction (Tunnel) |  |                | ✓                     | Add Avalon station, modify to reduce 4(f) impact |
| Not practical suggestions            | Tunnel under Duwamish                             |   |                | ✓                     |  |
|                                      | West Seattle Bridge                               |   |                | ✓                     |  |
|                                      | Gondola, rail/bus bridge                          |   |                | ✓                     |  |
|                                      | Extensions to Alki, Admiral, etc.                 |   |                | ✓                     |  |