



SPIRE Rail Modernization Plan for Regional Mobility: Seattle to Olympia, Wash.

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For: Public Distribution

LEGEND

- | | |
|-----------------------------------|------------------------------|
| — Stamped Pass Main Line | Streets, Impacted: |
| — UPRR Main Line | — New Grade Separation |
| — Woodland Trail | — Partial Rebuild |
| — Retaining Wall | Structures, Impacted: |
| — Future Overtake Track | — Destroyed |
| — Alternative Passenger Alignment | |
| — High-Speed Rail Tracks | |
| — SPIRE Passenger Tracks | |
| — Viaduct | |
| — Freight Corridor Track Bed | |
| — Passenger Track Bed | |
| — Tunnel | |
| — Trench | |
| — Bridge, Decommissioned | |
| — Former Rail Right-of-Way | |
| — New Rail Yard | |
| — Rail Yard, Decommissioned | |
| — Existing Rail Area | |

NOTE: This new high-speed rail bridge over busy BNSF tracks, one of the most critical structures of the entire proposal, features a maximum 2.0% grade to lift the rail line to 7.9m (26ft) above the top of the rails. This provides adequate clearance for BNSF trains below.

Employing a tight curve radius and a significant equilibrium cant (or superelevation) to maintain top speed, this complex piece of engineering will just barely—though successfully—snag into the area's limited available space. While the bridge will avoid clipping Costco's SODO warehouse by 12.2m (40ft), the company parking lot will see spaces removed where they rest in the right-of-way of the aerial structure. Despite the bisection of the lot, Costco customer's will be able to access spaces on either side of the new structure, mitigating capacity loss.

Due to the prefabricated and predictable nature of modern aerial structures, a high water table, and the likelihood of disturbing active infrastructure systems buried underground or situated nearby, a tunnel or trench here is almost certainly unworthy of their risk. Though a bridge will require deep support anchors, it is believed that these can be sited with far less risk than any underground alternative. Nonetheless, these options should be evaluated further.

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