



December 17, 2013

**Project Team Recommended Alternatives**



## Preliminary Staff Recommendations

### Alternatives to Move Forward into Tier 1 Draft Environmental Impact Statement (DEIS)

As of: December 13, 2013

The tables below summarize preliminary staff recommendations for alternatives to move forward into the Tier 1 DEIS, based on a number of considerations, including the technical evaluation findings, guidance from the Federal Railroad Administration, maintenance considerations, and feedback from agency stakeholders and the public at the round of committee meetings and open houses held in fall 2013. Consistent with the evaluation, the recommendations below are organized by Section.

#### Section A: Eugene/Springfield to Albany

Alternative	Recommended Action	Rationale
Blue	Advance	<ul style="list-style-type: none"><li>• <i>Goal 3:</i> Most flexible construction phasing because of the extent of existing, functional rail infrastructure. Lowest cost when compared with the other alternatives in this section.</li><li>• <i>Goal 6:</i> Because it follows the existing UP line impacts to residential and community resources are lower.</li><li>• <i>Goal 7:</i> Fewer impacts to farmland, wetlands, and miles of track through known unstable slopes.</li></ul>
Red	Advance	<ul style="list-style-type: none"><li>• <i>Goal 1:</i> Shortest travel time (36 minutes) of all alternatives in this section, compared to 49 minutes for blue and 54 minutes for yellow. No congestion due to freight interface and only one shift in ownership at the alternative's southern terminus. Greatest potential to allow for future passenger rail improvements including increased frequencies and higher speeds over time.</li><li>• <i>Goal 2:</i> Fewest number of at-grade crossings (1 total, compared to 55 for blue and 95 for yellow). Removes passenger rail from existing freight rail line.</li></ul>
Red Central Albany Option	Advance	<ul style="list-style-type: none"><li>• <i>Goal 1:</i> Shorter travel time (41 minutes) of all alternatives in this section apart from main Red alternative. Limited congestion due to freight interface. Three shifts in ownership (two in Albany vicinity to serve the central Albany station). High potential to allow for future passenger rail improvements including higher speeds over time.</li></ul>

<p><b>Red Central Albany Option, cont.</b></p>	<ul style="list-style-type: none"> <li>• <i>Goal 2:</i> Although at-grade crossings are higher than the main Red alternative (12 total, compared to 1 for the main Red alternative) they are lower than the other alternatives in this section. Removes passenger rail from freight rail for most of this section.</li> <li>• <i>Goal 7:</i> Serves the historic Albany train station.</li> </ul>
<p><b>Purple</b> Do not advance</p>	<ul style="list-style-type: none"> <li>• <i>Goal 1:</i> Highest number of rail infrastructure ownership and operations switches – from UP to O&amp;E line back to UP, back to O&amp;E, and finally back to UP in Albany. This causes a concern about reliability.</li> <li>• <i>Goal 3:</i> Much lower ability to phase improvements over time than blue alternative as the purple alternative assumes completely rebuilding the railway bed of the portions using the O&amp;E line. Approximately 40% higher construction costs than lowest cost alternative.</li> <li>• <i>Goal 7:</i> higher impacts to farmland and wetlands than blue alternative.</li> <li>• <i>NOTE:</i> The purple alternative does not perform poorly per se. Staff recommends eliminating it from further evaluation as it replicates the blue alignment to a large extent in terms of service, yet requires the level of construction associated with the Red alternative (reconstruction of rail bed), does not perform as well as either the Red or Blue alternatives, and shows substantially higher construction costs as compared to the Blue alternative.</li> </ul>
<p><b>Yellow</b> Do not advance</p>	<ul style="list-style-type: none"> <li>• <i>Goal 1:</i> Higher travel times in Section A compared to all other alternatives except the Yellow Highway 34 option (54 minutes).</li> <li>• <i>Goal 2:</i> Highest number of at-grade crossings (95 total) of all other alternatives in Section A.</li> <li>• <i>Goal 3:</i> Low opportunity to phase improvements in over time due to relatively long segments that would need to be constructed to provide a serviceable link. Construction cost is over 60% higher than the blue alternative.</li> <li>• <i>Goal 6:</i> Main yellow alternative impacts substantially more residential parcels (644 residential parcels) than the other alternatives. Yellow main alternative impacts more than 300 more residential parcels than the next most impactful alternative.</li> <li>• <i>Goal 7:</i> High potential to impact non-listed fish and wildlife species due to new greenfield alignment required through natural area between Corvallis and Albany.</li> </ul>

<b>Yellow OR 34 Option</b>	Do not advance	<ul style="list-style-type: none"> <li>• <i>Goal 1:</i> Higher travel times in Section A compared to all other alternatives except the Yellow main alternative (54 minutes).</li> <li>• <i>Goal 2:</i> Highest number of at-grade crossings (83 total) of all other alternatives in Section A except for the Yellow main alternative.</li> <li>• <i>Goal 3:</i> Low opportunity to phase improvements in over time due to relatively long segments that would need to be constructed to provide a serviceable link. Construction cost is over 60% higher than the blue alternative.</li> <li>• <i>Goal 7:</i> Potential to impact listed, proposed, and non-listed fish and wildlife species higher than other alternatives due to new greenfield alignment required through natural area between Corvallis and Albany.</li> </ul>
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Please note: Section B below was split into two parts – one south of Keizer, and one north of Keizer.

**Section B (1): Albany to South of Keizer**

Alternative	Recommended Action	Rationale
<b>Blue</b>	Advance	<ul style="list-style-type: none"> <li>• <i>Goal 3:</i> Blue alternative has the greatest ability to phase improvements over time due to extent of existing, functioning rail infrastructure and has the lowest construction cost in Section B.</li> <li>• <i>Goal 7:</i> Lowest impact to farmland with Blue alternative.</li> </ul>
<b>Blue Parish Gap Option</b>	Do not advance	<ul style="list-style-type: none"> <li>• <i>Goal 1:</i> Parish Gap option does not improve overall travel time or otherwise improve reliability as compared to Blue alternative or other alternatives.</li> <li>• <i>Goal 3:</i> Parish Gap option costs approximately 20% higher than blue alternative and the cost to build the Parish Gap could not be phased over time.</li> </ul>
<b>Red</b>	Advance	<ul style="list-style-type: none"> <li>• <i>Goal 1:</i> Substantially lower travel times in this section compared to all other alternatives due to speed benefits from infrastructure south of Salem. No freight congestion or ownership shifts. Highest ability to allow for future passenger rail improvements including higher speed.</li> <li>• <i>Goal 2:</i> No at-grade crossings in this section, and no conflicts with freight rail.</li> <li>• <i>Goal 6:</i> Fewer noise impacts to residential and commercial parcels than any other alternative.</li> <li>• <i>Goal 7:</i> Fewer miles of track through unstable slopes than any other alternative.</li> </ul>

**Section B (2): Keizer to Wilsonville**

Alternative	Recommended Action	Rationale
<b>Blue</b>	Advance	<ul style="list-style-type: none"> <li>• <i>Goal 3:</i> Blue alternative has the greatest ability to phase improvements over time due to extent of existing, functioning rail infrastructure. Blue alternative has the lowest construction cost overall in Section B.</li> </ul>
<b>Red</b>	Do not advance	<ul style="list-style-type: none"> <li>• <i>Goal 1:</i> Travel time savings and improved mobility were seen primarily south of Keizer. Travel time savings were minor north of Keizer when compared to Purple.</li> <li>• <i>Goal 3:</i> Cost approximately 50 percent more than Blue and could not be phased like the Blue corridors.</li> <li>• <i>Goal 7:</i> Greater farmland impacts than other alternatives in Section B.</li> </ul>
<b>Purple Wilsonville Option</b>	Advance	<ul style="list-style-type: none"> <li>• <i>Goal 1:</i> Shorter travel time compared to the other Purple options (savings of approximately 6 minutes in all of Section B; 7 minutes compared to the Blue corridor in all of Section B) and opportunity to connect to TriMet Commuter Rail in Wilsonville.</li> <li>• <i>Goal 3:</i> Costs approximately 40 percent less than the Red alternative in all of Section B. North of Keizer, ODOT owns the right-of-way in the Purple corridor. A station in the vicinity of Wilsonville could serve the populous SW Portland metropolitan region.</li> </ul>
<b>Purple Aurora and Donald Options</b>	Do not advance	<ul style="list-style-type: none"> <li>• <i>Goal 1:</i> Travel time higher than Wilsonville option and same as Blue alternative with one additional shift in ownership than Purple alternative.</li> <li>• <i>Goal 3:</i> Costs are moderately higher than the Blue Alternative and Purple Wilsonville option.</li> <li>• <i>Goal 6:</i> Higher number of sensitive noise locations (residential and commercial parcels specifically) that could be impacted by noise than the Purple Wilsonville option.</li> <li>• <i>Goal 7:</i> Higher track mileage through unstable slope location than Purple Wilsonville option (1.6 miles vs. 0.04 miles respectively).</li> </ul>

**Section C: Portland Metropolitan Area (Wilsonville to Vancouver, WA)**

Alternative	Recommended Action	Rationale
Blue	Advance	<ul style="list-style-type: none"> <li>• <i>Goal 3:</i> Blue alternative has the lowest construction cost overall in Section C. Provides more opportunity to phase improvements over time.</li> <li>• <i>Goal 6:</i> Lower potential community cohesion impacts and potential impacts to sensitive noise receptors than the Red corridor alternatives.</li> <li>• <i>Goal 7:</i> The Blue alternative would serve the historic Union Station, the City’s designated passenger rail transportation hub. Lower anticipated impacts to proposed and listed bird, plant, and invertebrate species.</li> </ul>
Blue East Side Options	Do not advance	<ul style="list-style-type: none"> <li>• <i>Goal 3:</i> East side options do not show ability to phase, and construction costs are estimated at between 80% and 90% higher than main Blue alternative.</li> <li>• <i>Goal 7:</i> East side options would not provide service the historic Union Station, the City’s designated passenger rail transportation hub.</li> </ul>
Red between Wilsonville and Oregon City	Advance	<ul style="list-style-type: none"> <li>• <i>NOTE:</i> This portion of the red alternative is advanced as a way to connect the Purple Wilsonville option in Section B to the Blue line in Section C. Sufficient engineering analysis has been done to determine that feasible potential alignments exist that can make this connection.</li> </ul>
Red between Oregon City and Vancouver, WA	Do not advance	<ul style="list-style-type: none"> <li>• <i>Goal 1:</i> Travel time is substantially higher (35 minutes as opposed to the blue alternative’s 23 minutes) than the Blue alternative in Section C.</li> <li>• <i>Goal 3:</i> Costs are approximately 340% higher than the Blue alternative with less opportunity to phase improvements over time.</li> <li>• <i>Goal 6:</i> Substantially higher numbers of residential and commercial parcels potentially impacted by noise. Higher numbers of community resources and residential and commercial parcels that could be displaced by the Red alternative.</li> </ul>

<b>Red Eastside Options between Oregon City and Vancouver, WA</b>	Do not advance	<ul style="list-style-type: none"><li>• <i>Goal 1:</i> Travel time is substantially higher (35 minutes as opposed to the blue alternative’s 23 minutes) than the Blue alternative in Section C.</li><li>• <i>Goal 3:</i> Costs are between 360% and 370% higher than the Blue alternative with less opportunity to phase improvements over time.</li><li>• <i>Goal 6:</i> Substantially higher numbers of residential and commercial parcels potentially impacted by noise. Higher numbers of community resources and residential and commercial parcels that could be displaced by the Red alternative.</li></ul>
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Two basic alternatives exist when considering the corridor from end to end. One is the “existing corridor” – the blue alternative – which assumes major infrastructure investment shadows the current Amtrak service alignment. The second is a “new corridor” alternative – red from Springfield to Keizer, purple from Keizer to Wilsonville, and red between Wilsonville and Oregon City where the alternative would meet up with blue. Mix and match opportunities would remain between these two alternatives, and two areas lend themselves well to design options – Central Albany and connecting Wilsonville to the Blue Alternative). Following a discussion with and incorporation of comments from the FRA, the project team will present these recommendations to the Leadership Council at a meeting December 17.