

Oregon Passenger Rail

Eugene - Portland

CHOOSING A PATH FORWARD

Appendices

Public Outreach and Comments Fall 2015

Prepared for

Oregon Department of Transportation
Salem, Oregon

Prepared by

JLA Public Involvement

November 2015



Appendices

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Appendix 1 - Earned Media

The following radio interview about the Oregon Passenger Rail project occurred during the outreach phase:

- Oregon Works to Improve Trains for People
Jefferson Public Radio – *November 19, 2015*
- KGAL's Morning Update- November 19
KGAL Radio – *November 19, 2015*

Appendix 2 - Community Newspapers, Newsletters and Social Media Outreach

Various jurisdictions and organizations helped ODOT spread the word about the online open house by including information in their newsletters, websites, and social media. This outreach included:

Organization	Type of Outreach
Neighbors West- Northwest Neighborhood Association	Included a short excerpt with information in the November newsletter.
McLouglin Neighborhood Association (Oregon City)	Shared information to association via email blast.
Northeast Neighbors Association (Salem)	Posted information to the association's announcement page on October 29, 2015 with a link to the OPR website.
Sellwood Moreland Improvement League (Portland)	Shared information in email blast to over 6,000 community members in Sellwood and Moreland neighborhoods.
Amazon Neighborhood Association (Eugene)	Shared information to association via email blast.
City of Eugene	Included online meeting information on City newsletter and website.
Amtrak Cascades	Posted information and a link on their Facebook page.
Milwaukie Rules	Posted information and a link on the website and Facebook page.
Westside Transportation Alliance	Posted information on the non-profit's Facebook page.
South Tabor Neighborhood	Posted information on the association's Facebook page.
South University Neighborhood Association (Eugene)	Included information in November newsletter.
Downtown Neighborhood Association (Eugene)	Posted information on the home page of website.
Concordia Neighborhood Association (Portland)	Association was late to respond to initial pitches, but will have information about the project in the December newsletter.
Northeast Salem Community Association	Included information in November newsletter.

Appendix 3 - Online Open House Participant Information and Feedback

The online open house asked participants for the following information.

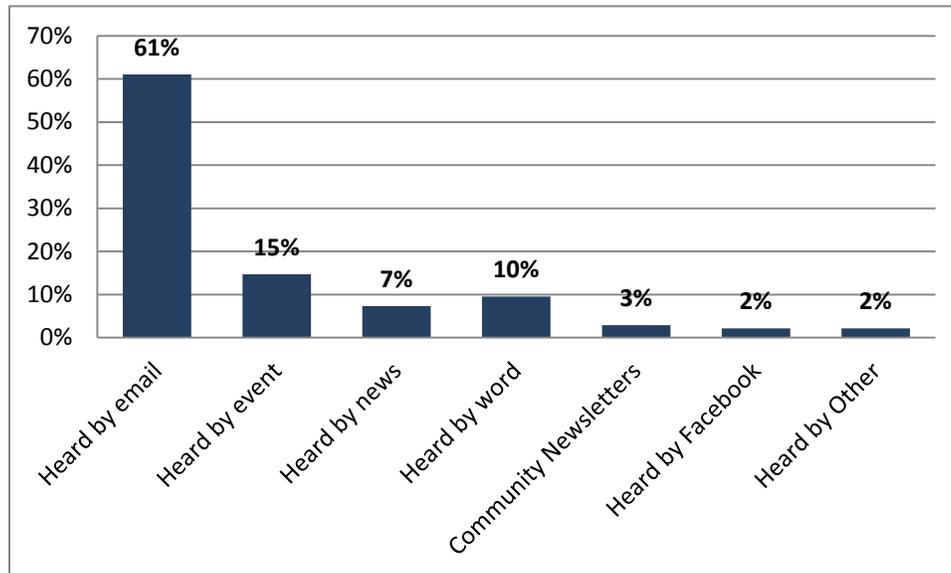
1) Zip Code

44 participants provided their zip codes. The most common zip codes were from Eugene (12 in zip codes 97404, 97405, 97401, 97402, and others), Portland (8 in zip codes 97206, 97202, 97207 and others), Salem (4 in zip codes 97301 and 97303), Oregon City (3 in zip code 97045), and Corvallis (3 in zip codes 97331, 97333, and 97339).

There were two respondents from each of the following zip codes: 97070 and 97222. There was one respondent each from these zip codes: 66208, 97202, 97207, 97209, 97212, 97214, 97221, 97321, 97322, 97330, 97331, 97333, 97338, 97339, 97391, 97420, 97477 and 97759.

2) Outreach for online open house

114 participants specified how they found out about the online open house. 61% of people found out about the meetings through an email, 15% at an event, 8% through city/organization newsletters, and 8% through a family or friend.



3 participants said they found out about the meetings through some other source, and specified:

- ODOT website (2)
- Jefferson Public Radio interview with Jim Cox.

3) Demographic Information

In total, approximately 100 people provided their demographic information.

Race/Ethnicity

96 participants described their race/ethnicity as follows:

Race/Ethnicity	Online Open House
White	89%
Hispanic/Latino	1%
Black or African American	2%
Asian	1%
Native American	1%
Native Hawaiian	0%
Ethnicity Unknown	3%
Other	3%

Language Spoken

91 participants indicated whether any languages besides English are spoken in their homes:

Language Spoken	Online Open House
English	94%
Spanish	4%
Russian	0%
Other	2%

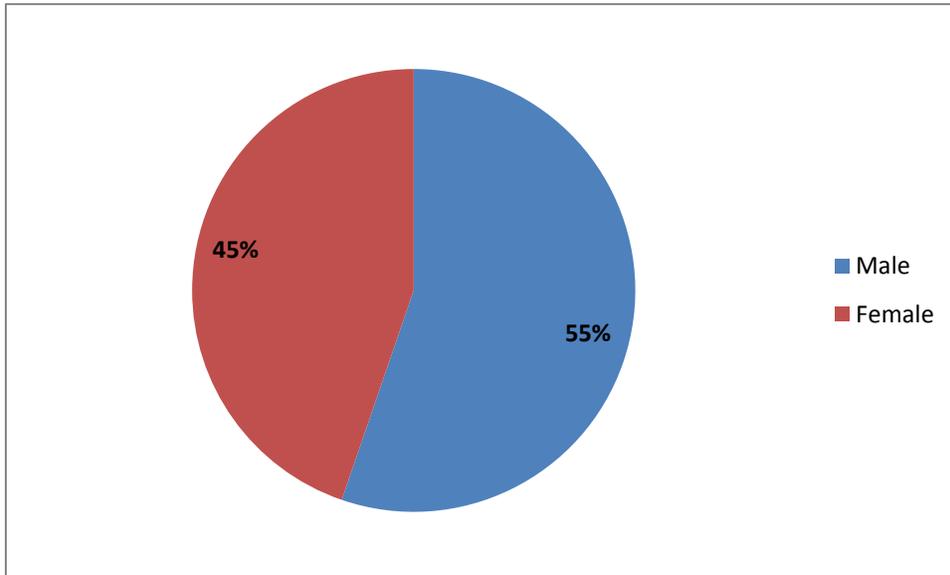
Age Range

90 participants indicated their age range:

Age Range	Online Open House
18 or under	1%
19 to 35	17%
36 to 55	28%
56 to 75	51%
Over 75	3%

Gender

95 participants indicated their gender:



Appendix 4 - Community Advisory Group Briefing Summary

Community Advisory Group

Online Briefing Summary

November 4, 2015

5:30 – 6:30 p.m.

Participants (and staff) Who Logged In

Robyn Bassett, *Corvallis Public Works*
Terry Beyer, *Better Eugene-Springfield Transit*
Jeff Broderick, *Portland Area At-Large*
Georgia Edwards, *City of Tangent*
William Gifford, *Oregon City Business Alliance*
Dave Hauser, *Eugene Chamber of Commerce*
Peter Klæbe, *Rosewood Neighborhood Association/CPO*
Jeff Leach, *South East Salem Neighborhood Association*
Ron Litwillier, *South Albany Area Plan*
Carla Mikkelson, *Friends of French Prairie*

Shannon Mudge, *Downtown Springfield Citizens Advisory Committee*
Karen Odenthal, *Mid-Willamette Valley Council of Government*
Brad Perkins, *Cascadia High Speed Rail*
Carleen Reilly, *River Road Community Organization*
Alan Scott, *Northeast Neighbors Neighborhood Association*
Don Slack, *Oregon City*
Russ Stoll, *Ardenwald Neighborhood Association*
Kari Westlund, *Travel Lane County*

Project Team

Jim Cox, *ODOT*
Stacy Snider, *ODOT Rail*
Scott Richman, *David Evans and Associates*

Theresa Carr, *CH2M Hill*
Stacy Thomas, *JLA Public Involvement*
Jeanne Lawson, *JLA Public Involvement*

Welcome, Introductions and Agenda Review

Jeanne Lawson, meeting facilitator, welcomed participants and audience members to the third Community Advisory Groups meeting. She introduced project staff participating in the briefing, reminded the CAGs of their role in the project and reviewed the agenda.

Jeanne explained that the purpose of the briefing was to receive a project update and learn more about the recommended Preferred Alternative and ask questions of project staff.

Project Update

Jim Cox, ODOT project manager, provided a brief overview of the project. In December 2013, the Leadership Council recommended two “Build” Alternatives and one “No Action” Alternative to analyze in the Tier 1 Draft Environmental Impact Statement (DEIS), which the Federal Railroad Administration (FRA) approved.

Alternative 1 follows the existing Amtrak Cascades passenger rail route with improvements. Alternative 1 originally assumed double tracking along a lot of the alignment and many sidings and elevated structures. Some of these improvements were reduced, minimizing costs while still keeping Alternative 1 functional. Alternative 2 is primarily a new route between Springfield and Oregon City located along I-5, an existing freight rail line, and I-205. It would follow the existing alignment north of Oregon City.

The team conducted additional analysis:

- *How many riders a day can we expect on the system?*
- *How many train trips should we have each day?*
- *What are the costs to build, operate and maintain the two build alternatives?*

In a separate process, the project team prepared a long-range (beyond 20 years) vision for what high speed rail might eventually look like in this corridor. You can access the High Speed Rail Concept Vision Report in the project library and on the online open house.

Jim then handed the presentation over to Scott Richman, David Evans and Associates, who explained the initial assessment of the two build alternatives.

Initial Assessment of the Alternatives

Scott Richman presented the results of the initial assessment of the alternatives. All of the results discussed can be found on the project’s website (www.oregonpassengerrail.org).

After conducting the analysis, the team has identified Alternative 1 as the recommended Preferred Alternative (PA). Scott explained that the team is recommending a PA now because of recent federal guidance. The guidance stated that in order to streamline the NEPA process, it is advisable to take a recommended PA going into the DEIS whenever possible.

Scott reviewed the evaluation criteria that stand out the most or differentiate the two build alternatives, including: travel time, stations and transportation connections, the ability to build incrementally, building towards true high speed rail, cost and ridership, community and social impacts, and the natural environment.

Questions & Discussion

Participants asked the following questions or made the following comments to the project team:

Q: Travel time of Alternative 1 is only fifteen minutes less than No Action Alternative. Does this justify the cost?

One of the goals of the Oregon Passenger Rail Project is to provide service that is competitive with highway travel. Reducing the passenger rail trip time between Eugene and Portland to 2:20 brings us much closer to that goal. The projected large increases in Willamette Valley population and freight traffic and a lack of funds for highway expansion are expected to lead to increases congestion of major highways. This will lead to longer travel times and make passenger rail even more competitive.

Another goal of the project is to increase the frequency of trips between the Eugene/Springfield area and the Portland/Vancouver, Washington urban area. Along with a fifteen minute savings for each individual trip, there will ultimately be six round trips per day instead of just 2.

Q: Will there be upgrades to railroad crossings so trains won't need to sound their alarm? Salem, for example, has upgraded crossings. Will the rest of the areas be upgraded?

At this stage of the planning process, we don't have the details as to how that will look for this project. We will be looking into safety upgrades at crossings during the next step of the study, particularly in more urbanized areas.

Q: Will you add double tracking so trains can come into Portland, as other trips are leaving?

We do not have details on where double tracking will be added, but more will likely be added to Portland. We do not foresee double tracking in urbanized areas or river crossings, but the area north of Oregon City is a likely area to add double track.

Q: Why are we paying to upgrade the passenger rail line, if the end result might be that the state has to pay "rent" to freight operators to use the track?

By law, freight rail has to give passengers the right of way. But, sidings have been too short for freight trains to pull off. The upgrades to the railroad would add additional siding, so that freights can yield to passenger trains.

Q: Is there double- tracking between Eugene, Salem and Albany with Alternative 1?

It is expected that a second mainline track would be added in some locations, existing sidings would be lengthened and some new sidings added.

Q: What is the timeline now for finishing the project?

See next section for the next steps.

Q: Will there be coordination with local transit for upgrades to local rail lines in conjunction with the Oregon Passenger Rail (in particular Corvallis)?

ODOT recognizes that good transit connections are a key factor in successful passenger rail service and that the connections between Corvallis and Albany Amtrak Station need to be improved. While improvements to local transit service is beyond the scope to the Oregon Passenger Rail Project, the ODOT Rail and Public Transit division is actively working to improve that connection in the near future.

Q: Why don't we plan for any separated crossings? Elevate either the rail or the highway? *The main reason is because of the cost related to raising or lowering roadways or railways. We don't want to disrupt service between Portland and Eugene during the project, and changing the elevation of either would be an impact.*

Q: Would the project be faster if we only used state funds and didn't seek any federal funding?

Any projects we would pursue require federal approval, regardless of funding. Any federal approval requires a study like this Oregon Passenger Rail project. Successful completion of this project will make Oregon eligible to compete for federal funding to finish the design and construct the project. With federal funding, the State of Oregon would only have to come up with a 20% match, which would be a smaller match with Alternative 1 than it would be with Alternative 2.

Q: One of the advantages of Alternative 1 is that it allows for more feasible "incremental improvements." What are the first improvements that would happen with Alternative 1?

Initial improvements would probably include adding additional track at the Eugene Station that would allow passenger trains to over-night at the station and improving junctions in the Portland area that would allow freight trains to move faster through the junctions and clear the way for passenger trains.

Next Steps

DEIS Publication & Public Hearings

Jim Cox reviewed the upcoming events and next steps for the project. The team will publish the Draft Tier 1 EIS report and then hold a series of public hearings for public review and comments in about a year. The public hearings will be both in person and online. In-person CAG meetings will be held at this time as well. ODOT will then recommend the Selected Alternative after the public review period has closed. The Oregon Passenger Rail Leadership Council will review that recommendation. The FRA will make the final selection and publish the Final Tier 1 EIS.

There will be an upcoming Corridor Forum online briefing on November 17, 2015 and a Leadership council meeting on December 8, 2015.

Online Open House

To learn more about recommended Preferred Alternative, go to www.oregonpassengerrail.org and take part in the online open house. The online open house will be available from November 2- 22 and will be collecting input and comments from anyone who participates. Please invite your community groups to participate.

Closing

Jeanne thanked everyone for their participation and closed the briefing.

Appendix 5 - Corridor Forum Briefing Summary

Corridor Forum

Online Briefing Summary

November 17, 2015

3:00 – 4:00 p.m.

Participants *(Members who signed in)*

Sharon Konopa, *Mayor of Albany*
Rob Inerfeld, *City of Eugene*
Brian Latta, *City of Harrisburg*
Georgia Edwards, *City of Tangent*
Loel Trulove, *Mayor of Tangent*
Bill Monahan, *City Manager of Milwaukie*
Anna Peterson, *Mayor of Salem*
Nancy Kraushaar, *City of Wilsonville*
Biff Traber, *Mayor of Corvallis*
Bruce Agnew, *Director of Cascadia Center*
Emma Newman, *City of Springfield*
John Russell, *Co-Chair of Corridor Forum*
Dan McFarling, *AORTA*
Barb Cartmill, *Clackamas County*
Mark Ottenad, *City of Wilsonville*

Arthur Poole, *OSU/AORTA*
Rick Robinson, *City of Canby*
Brenda Wilson, *Lane COG*
Paul Thompson, *Lane COG*
Jon Nuxoll, *Eugene/ AORTA*
Marjean Cline, *Mayor of Halsey*
Rob Eaton, *Amtrak*
Mike Morrison, *AORTA*
Richard Ross, *American Planning Association - Oregon*
Bill Holmstrom, *Department of Land Conservation and Development*
Dan Heilig, *Hill Int'l (FRA Monitoring & Technical Assistance Contract [MTAC] Consultant)*

Project Team

Jim Cox, *ODOT*
Scott Richman, *David Evans and Associates*
Theresa Carr, *CH2M Hill*

Stacy Thomas, *JLA Public Involvement*
Jeanne Lawson, *JLA Public Involvement*

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Scott reviewed the evaluation criteria that stand out the most or differentiate the two build alternatives, including: travel time, stations and transportation connections, the ability to build incrementally, building towards true high speed rail, cost and ridership, community and social impacts, and the natural environment.

Questions & Discussion

Participants asked the following questions or made the following comments to the project team:

Q: Is there a more detailed set of maps available?

We will refine the alternatives maps and post to the project website.

Q: Will you have to add a second set of rails on the present alignment from Oregon City to Portland?

For Alternative 1, our refinement included more detailed work on operations and engineering. By taking out additional track in a number of constrained areas, we're still able to improve operations for passenger rail and maintain acceptable operations for freight. For example, through the most constrained area of Alternative 1 in the Oregon City area, no additional track is assumed. However north of Oregon City and through southeast Portland and the Brooklyn yard, additional track would be added.

Q: Does this plan suggest specific sidings, signaling and/or double track? If so, where?

With Alternative 1, we were aiming to minimize the improvements we needed to make, specifically avoiding new major river crossings and routes through urbanized areas. We will need to double track in some sections through Eugene. We have identified some locations to receive improvements, but unless we started constructing this fairly soon, these locations will likely get adjusted as we moved ahead due to changes in train schedules and other factors.

Q: What is the time frame for the next steps?

On November 4th, the team hosted an online briefing with all of the Community Advisory Groups. A project online open house outlining the recommended Preferred Alternative is open until November 22nd and a Leadership Council meeting will be held on December 8th. The Tier 1 Draft Environmental Impact Statement is going to be written over the next year and will be published in Fall 2016. At that time in-person public hearings will be held throughout the project area. We anticipate completing the process with a Record of Decision in early 2018.

Q: When will the project be constructed?

Completing the environmental process will make the project eligible to compete for federal funds. When funds are secured, additional engineering, evaluation of potential impacts and benefits would be completed, and then construction can begin. When federal funds are used, states are generally required to match 20%, which is more feasible with the lower cost of Alternative 1. We don't have any specific funding available that would allow us to move forward with construction at this time.

Q: Is there a way to get to the Record of Decision (ROD) faster than 2 years?

Yes, it is possible. The schedule is based on the time it normally takes for Federal Railroad Administration to go through their review process of both the DEIS and the final EIS. The project team is working with them to find ways to streamline the process. For example, we are sending them the draft of chapter 1 by the end of this week. We will send FRA DEIS chapters as they are completed, so they can do their initial review while the team works on subsequent chapters. This tactic should help accelerate the process but time savings will also depend on the extent of the comments we receive on the DEIS. We are looking for other ways to accelerate this process and get it done as early as possible.

Q: Have you calculated the capital cost of six round trips between Eugene and Portland? With six round trips have you calculated what the increased operating and maintenance cost would be that the state of Oregon would also have to cover?

One advantage of Alternative 1 is that we can incrementally increase round trips. We don't plan on going from two to six roundtrips overnight, but instead we begin with three 3, then increase to four and so on. The ultimate goal is to get to six. The project team is estimating \$25 million in annual operations and maintenance costs for Alternative 1 and closer to \$43 million annually for Alternative 2. With Alternative 2, ODOT would own much of passenger rail infrastructure which would be a new responsibility.

Q: What's the approximate budget for the operations and maintenance ODOT is in charge of now, with only 2 round trips?

The annual operations and maintenance costs for the Oregon part of the Amtrak Cascades service is \$14 million.

Q: Considering the O & M cost increases with more roundtrips, has ODOT looked at the current fleet (2 trains)? As Washington adds additional trips on their end, their trains are going to be needed north of Portland. Are you looking at additional equipment?

The capitol cost includes the cost to purchase additional train sets. We would need at least one more train set, if not two.

Q: It is sounding like transportation will be a big issue in the 2017 Legislature. I am concerned that this plan may give legislators an excuse to wait for a final recommendation and, maybe, federal funding sometime later.

The project team believes the legislature will likely support the recommended Preferred Alternative over Alternative 2 because it gives us improved service and ridership, and costs significantly less than Alternative 2. If the legislature chooses not to fund the existing service it will have to stop in mid-2017. Identifying the recommended Preferred Alternative gives everybody a more clear idea of where we think we're going, even though it's not a final decision.

The legislature will have to address finding a more sustainable source of funding for passenger rail, according to Rob Eaton of Amtrak. It would ultimately cost more to decommission passenger rail and re-establish it in 10 years, than it would to continue with funding.

Next Steps

DEIS Publication & Public Hearings

Jim Cox reviewed the upcoming events and next steps for the project. The team will publish the Draft Tier 1 EIS and then hold a series of public hearings for public review and comments in about a year. The public hearings will be both in person and online. In-person CAG, Corridor Forum and Leadership Council meetings will be held at this time as well. ODOT will then recommend the Selected Alternative after the public review period has closed and all comments considered. The Oregon Passenger Rail Leadership Council will review that recommendation. The FRA will make the final selection and publish the Final Tier 1 EIS and Record of Decision.

There will be a Leadership council meeting on December 8, 2015.

Online Open House

To learn more about recommended Preferred Alternative, go to www.oregonpassengerrail.org and take part in the online open house. The online open house will be available from November 2- 22 and will be collecting input and comments from anyone who participates. Please invite your community groups to participate.

Appendix 6 - Tabling Events Summary

Willamette University, 11/3/15

- 24 members of the campus community stopped at the project booth to explore our maps, newsletter and handouts.
- They asked questions regarding station locations, why certain cities (Junction City & Corvallis) were not included in the current alternative options, the many differences between Alternatives 1 and 2, and the projected costs of construction and maintenance.
- 3 individuals signed up to be added to the project stakeholder database.

Linn Benton Community College, 11/4/15

- 20 members of the campus community stopped at the project booth to explore our maps, newsletter and handouts.
- Booth visitors asked questions regarding the preservation of the historic train stations located in Salem and Albany, why Corvallis is excluded from inclusion among the current alternatives, funding for the project, future construction, and ticket price differences between the two alternatives.
- One individual signed up to be added to the project stakeholder database.

Chemeketa Community College, 11/9/15

- 20 members of the campus community stopped at the project booth to explore our maps, newsletter and handouts.
- Many visitors expressed familiarity and support for the project. Most indicated a preference for Alternative 1, the recommended Preferred Alternative
- No one signed up to be added to the project stakeholder database.

Portland Union Station, 11/10/15

- 24 people stopped at the project booth to explore our maps, newsletter and handouts.
- The following comments were made/ questions asked:
 - More bikes on buses would be helpful. Trains allow more than one bike and buses only allow one, so the bus isn't always an alternative to trains for some.
 - SB departures on Sat/Sun should be later than 6:00a.m.
 - Increasing train service/frequency would make it more convenient for riders- very inconvenient to get off train from Vancouver and wait 3 hours for SB train to Eugene.
 - 6:00 a.m. train is dead! Usually only 14 passengers.

- A rider from Salem would use rail to commute to work if there were more frequent trips (and reliable schedule).
- Need a non-disrupted service between Vancouver B.C. and Eugene.
- 5 individuals signed up to be added to the project stakeholder database.

University of Oregon, 11/10/15

- 12 people stopped explore our project maps, newsletter and handouts.
- Following comments were made/questions asked:
 - Concern/frustration for the Republican Party and their lack of support/funding for passenger rail projects.
 - Preference for the recommended Preferred Alternative because it allows train passengers to see different scenery away from the I-5 corridor.
 - The current Amtrak service in Oregon needs great improvement; it's too slow and expensive.
 - Concern for large earthquake; trains may be the best way for supplies to reach those impacted. What geological studies have been made, analyzing the two alternatives and which would hold up better against a large earthquake? Which alternative is more prone to landslides?
- One individual signed up to be added to the project stakeholder database.

Oregon State University, 11/13/15

- Tabling required sponsorship from on-campus organization, so the project sought and received sponsorship from OSU's student chapter of the Institute of Transportation Engineers.
- Tabling was outside. Inclement weather caused lack of interest/visitors so project staff closed the booth early.



The project team has recently completed an initial analysis of how the alternatives would affect a variety of community and environmental resources. Engineering requirements, transportation impacts, cost, and potential benefits associated with each alternative were also reviewed. Based on this assessment, the project team is recommending that Alternative 1 be carried forward as the Preferred Alternative in the DEIS. The recommended Preferred Alternative is not a final decision – all alternatives will be fully studied in the DEIS.

- Better
- No Substantial Difference
- Worse

The following matrix includes a summary of the initial findings.

Performance Evaluation Measures	No Action	Alternative 1 (Recommended Preferred Alternative)	Alternative 2
1. Improve passenger rail mobility and accessibility to communities in the Willamette Valley.			
A. Travel time	2:35	● 2:20	● 2:02
B. Capacity to serve 6 round trips/day	No	● Yes	● Yes
C. Multimodal connections	Good at existing stations	● Good at existing stations	● Fewer than No Action/Alt 1
D. Ability to serve higher speeds in the future	Maintains current maximum 79 mph speed	● Maintains current max 79 mph speed. Increased ridership strengthens market for future service enhancements.	● Supports max speeds of 120 mph on portions of new alignment
2. Protect freight-rail capacity and investments in the corridor, and maintain safety.			
A. At-grade (street level) crossings	140 existing at-grade crossings, no modifications	● 140 existing at-grade crossings, 64 crossings are modified for additional track and trains	● 49 existing at-grade crossings, 44 are modified, plus 1 new at-grade crossing
B. Ability to accommodate freight	Would get worse without investment	● Meets (by design)	● Meets (by design)
3. Plan, design, implement, maintain, and operate a cost-effective project.			
A1. Ability to phase improvements	N/A	● Could be constructed incrementally	● Limited to major sections of new alignment and upgrades to sections of existing track to accommodate
A2. Costs (capital cost)	N/A	● \$660-\$775 million	● \$3.65-\$4.47 billion (over 5 times higher than Alt 1); and does not account for upgrades to portions of track south of Oregon City that would later be abandoned
A2. Costs (operations and maintenance)	Ongoing based on railroad agreements	● ~ \$25 million annually	● ~ \$43 million annually New operations and maintenance responsibility for ODOT
B1. Population close to station areas	74,385	● 74,385	● 65,215
B2. Employment close to station areas	180,905	● 180,905	● 123,145
C. Projected Annual Ridership (2035)	390,000	● 739,000	● 723,000
4. Provide an affordable and equitable travel alternative.			
A. Availability of travel options	No change	● Improved train service	● Improved train service
B1. Proximity of low income populations to stations	8,929	● 8,929	● 10,724
B1. Proximity of minority populations to stations	27,994	● 27,994	● 32,595
B2. Low income populations impacted	14,540	● 14,540	● 16,664
B2. Minority populations impacted	44,024	● 44,024	● 43,313

Performance Evaluation Measures	No Action	Alternative 1 (Recommended Preferred Alternative)	Alternative 2
5. Be compatible with passenger rail investments planned in Washington State.			
A. Compatibility with WA State (assumed same for all alternatives)	<i>Requires intermodal transfer</i>	● Seamless intercity rail service	● Seamless intercity rail service
6. Promote community health and quality of life for communities along the corridor.			
A. Location Quotient Score (factor considering land use, employment, and social attributes, provides estimate of development potential)	1.1	● 1.1	● 0.8
B1. Community resources, commercial and residential parcels potentially impacted by rail	0	● 34	● 49
B2. Percent of adjacent land designated for residential use (noise sensitive)	9.6%	● 9.6%	● 9.9%
7. Protect and preserve the natural and built environment.*			
A1. Acres of farmland potentially impacted	0	● 399 acres	● 1,312 acres
A2. Assessment of consistency with adopted regional and local comprehensive plans	N/A	● Cities and Counties support or are neutral regarding development of passenger rail	● Cities and Counties support or are neutral regarding development of passenger rail
A3. Impacts to Willamette River Greenway	None	● None anticipated; No existing crossings of the Willamette River anticipated to be modified; no goal exception work would be required	● Up to three new crossings would require goal exception work
B. Qualitative assessment of greenhouse gas emissions from corridor options, based on anticipated vehicle miles traveled (VMT) reduction due to mode shift and temporary construction-related emissions	<i>Relatively low</i>	● Long term: Mode shift from bus or car to train saves energy; Construction requirements would create GHG	● Long term: Mode shift from bus or car to train saves energy; Construction requirements would create greenhouse gas (GHG) [approx 3 times Alt 1]
C1. Qualitative assessment of impacts to habitat, populations, or individuals of threatened or endangered species and their critical habitat, as well as impacts to non-listed fish and wildlife	<i>Minimal, same as current conditions</i>	● Smaller construction footprint than Alt 2; higher train frequency than no action; one listed plant potentially affected	● Larger construction footprint; higher train frequency than no action; Alt 2 has a higher number of stream crossings with new or modified bridge/culverts at designated critical fish habitat than Alt 1.
C2. Percent of study area that is high value wetlands plus percent of all wetlands potentially impacted	None	● 4.4%	● 6.6%
C3. Construction adjacent to relatively high-risk slopes	None	● 4.4 miles	● 9.7 miles
C4. Number of known Section 4(f) resources within 100 feet of the alignment (construction areas only)	0	● More sites within 100 feet of alignment (122), but less unavoidable direct impacts (up to 3 parks)	● Less sites within 100 feet of alignment (64), but more unavoidable direct impacts (up to 5 parks)
C5. Known cultural resources (historic properties and archaeological resources) within 100 feet of the rail alignment (construction areas only)	0	● 381	● 392

*The environment MOEs are not equal in terms of relative importance. For example, if one alternative results in more severe 4(f) impacts, such a finding could more than counterbalance other measures where the other alternative scores worse.