Oregon Passenger Rail
Eugene - Portland
CHOOSING A PATH FORWARD

Tier 1 Combined Final Environmental Impact Statement and Record of Decision

Prepared by

Oregon Department of Transportation

U.S. Department of Transportation
Federal Railroad Administration

April 2021

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FEDERAL RAILROAD ADMINISTRATION

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Tier 1 Combined Final Environmental Impact Statement and Record of Decision

Prepared by
U.S. Department of Transportation
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and
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Pursuant to
National Environmental Policy Act (42 U.S.C. §4332 et seq.), and implementing regulations (40 CFR Parts 1500-1508), 64 FR 28545, 49 U.S.C. §303 (Section 4(f), formerly Department of Transportation Act of 1966, Section 4(f)); National Historic Preservation Act (54 U.S.C. §300101 et seq.); Clean Air Act as amended (42 U.S.C. §7401 et seq. and 40 CFR Parts 51 and 93); the Endangered Species Act of 1973 (16 U.S.C. §§1531-1544); and the Clean Water Act (33 U.S.C. §§1251-1387).

April 14, 2021

Date of Approval

Paul Nissenbaum
Associate Administrator, Office of Railroad Policy and Development
Federal Railroad Administration

April 2, 2021

Date of Approval

Karyn Criswell
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ABSTRACT

This Tier 1 Final Environmental Impact Statement (FEIS) evaluates for the Oregon Passenger Rail Project (Project). Because the Federal Railroad Administration (FRA) is only modifying the Tier 1 Draft Environmental Impact Statement (DEIS) in response to comments that are minor and limited to factual corrections or explanations of why the comments do not warrant additional agency response, FRA is issuing the FEIS using errata sheets. FRA's use of the combined FEIS/Record of Decision (ROD) and errata sheets is consistent with 49 United States Code (U.S.C.) 304a.[1]

The primary purpose of the FEIS is to present responses from FRA and the Oregon Department of Transportation (ODOT) to public and agency comments received on the Tier 1 DEIS for the Project, which was published in October 2018.

This Tier 1 FEIS/ROD evaluates alternatives for improved passenger rail service for the 130-mile north-south corridor between Eugene-Springfield and Portland, Oregon. A No Action Alternative and two Build Alternatives are evaluated. The Build Alternatives would provide improved passenger rail service to meet future intercity travel demand, improve rail facilities, reduce journey times and improve connections with regional public transit services. FRA and ODOT identified Alternative 1 as the Preferred Alternative in the DEIS. Alternative 1 remains the Preferred Alternative in this FEIS/ROD.

[1] For FRA, the statutory authority for a combined FEIS/ROD originates with Section 1319 of the Moving Ahead for Progress in the 21st Century Act (MAP-21) (Public Law 112-141). On December 4, 2015, the Fixing America's Surface Transportation Act (FAST Act) (Public Law 114-94) was signed into law. Its provisions became effective on October 1, 2015, after the DEIS for this Project was initiated. Section 1304(j) repealed Section 1319 of MAP-21 but included a new provision providing FRA with similar authority. This authority was codified in 49 U.S.C. 304a.

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Acronyms and Abbreviations

BNSF	BNSF Railway
CFR	Code of Federal Regulations
CIP	Corridor Investment Plan
DEIS	Draft Environmental Impact Statement
EIS	Environmental Impact Statement
EPA	US Environmental Protection Agency
FAST Act	Fixing America's Surface Transportation Act
FEIS	Final Environmental Impact Statement
FRA	Federal Railroad Administration
MAP-21	Moving Ahead for Progress in the 21st Century Act
N/A	not applicable
NEPA	National Environmental Policy Act
ODOT	Oregon Department of Transportation
PNWRC	Pacific Northwest Rail Corridor
ROD	Record of Decision
SDP	Service Development Plan
UPRR	Union Pacific Railroad

Part 1: Final Environmental Impact Statement

1.1 Introduction

This combined Tier 1 Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) evaluates alternatives for improved passenger rail service for the 130-mile corridor between Eugene-Springfield and Portland, Oregon. A No Action Alternative and two Build Alternatives were evaluated in the Draft Environmental Impact Statement (DEIS). The Build Alternatives would provide improved passenger rail service to meet future intercity travel demand, improve rail facilities, reduce journey times, and improve connections with regional public transit services. This FEIS is Part 1 of the combined Tier 1 FEIS and ROD (hereinafter referred to as Tier 1 FEIS/ROD).

The Oregon Passenger Rail Project (the Project) is a planning effort developed under a cooperative agreement between the Oregon Department of Transportation (ODOT) and the Federal Railroad Administration (FRA). The first phase of the process is the development of a Corridor Investment Plan (CIP). The process of completing a CIP consists of conducting an environmental review in accordance with the National Environmental Policy Act (NEPA), as documented in the Tier 1 Environmental Impact Statement (EIS), and developing a Service Development Plan (SDP). The SDP is a detailed definition of the service improvements and transportation network, and the operational and financial aspects for the alternative for passenger rail service that is selected through the NEPA process. The intent of the CIP is to provide sufficient information to support future decision-making at the Federal, State and/or local level regarding investments in the Oregon segment of the Pacific Northwest Rail Corridor (PNWRC).

ODOT and FRA used a tiered environmental process for the Project, which is a phased approach to environmental review used in the development of complex projects (as provided in 40 Code of Federal Regulations [CFR] 1508.28). The tiered NEPA review and decision-making process allows for a broad-level programmatic decision with a first-tier EIS, followed by more specific analyses and decisions through one or more second-tier NEPA evaluations.

The Project's Tier 1 EIS and the SDP address corridor-level improvements to passenger rail service in the Project study area, including the following:

- Rail corridor – Reasonable and feasible rail alignment improvement alternatives from Eugene-Springfield, OR, to Vancouver, WA
- Service characteristics – Passenger rail operational elements, train speeds, travel time, train frequency and train technology
- Potential stations – The general location of potential passenger rail stations

Selection and advancement of project components within the Preferred Alternative as described in this Tier 1 FEIS/ROD would require additional planning, design and engineering work, which would be evaluated in a Tier 2, or project-level, NEPA document or documents.

This document contains a combined Tier 1 FEIS/ROD for the Project. The Tier 1 FEIS includes clarifications, errata-style edits and specific responses to comments related to information provided in the Tier 1 DEIS, and reflects changes noted during the public and agency review and comment period (October 19, 2018, to December 18, 2018). This information is presented in a table format. The entire Tier 1 DEIS, including appendices, is attached as Appendix A. The Tier 1 ROD is presented as Part 2 of this documentation, and identifies FRA's Selected Alternative for the Project, which may be carried forward for further planning, design and construction subject to future available funding.

Subsequent Tier 2 environmental reviews would evaluate more detailed, site-specific proposals implementing the Selected Alternative. The Tier 2 NEPA documents would address stand-alone projects

with logical termini and independent utility. In other words, one or more corridor sections that together make up the complete passenger rail system could be developed as individual projects. Depending on the scope and potential environmental impacts of Tier 2 projects, the appropriate class of Tier 2 NEPA analyses may be an EIS, Environmental Assessment, and/or Categorical Exclusion. The specific class of NEPA document for more detailed analysis of any Tier 2 section has not yet been defined. Preliminary design and environmental studies would be conducted in support of a Tier 2 analysis. Finally, coordination and outreach would occur as appropriate during any Tier 2 analysis to engage the public and other stakeholders. Input from the outreach effort would be incorporated into the NEPA analysis and into the project design if warranted.

The remainder of this section defines key concepts and terminology used in the environmental analyses, and presents the overall organization of this combined Tier 1 FEIS/ROD.

1.1.1 Key Concepts and Terminology

To maintain consistency between the evaluation of the No Action Alternative and the Build Alternatives, and the identification of the Preferred Alternative, FRA and ODOT used the same key concepts presented in the Tier 1 DEIS for the Tier 1 FEIS/ROD. These key concepts are defined below.

Pacific Northwest Rail Corridor: The PNWRC runs from Eugene, OR, to Vancouver, BC. The PNWRC is one of eleven Federally designated high-speed rail corridors in the U.S. The 462-mile PNWRC serves the most densely populated areas of the Cascadia megaregion, linking Vancouver, BC, to Seattle, Portland and Eugene. The Oregon segment of the PNWRC is approximately 125 miles long, from the Eugene-Springfield urban area to Portland. The entire Oregon portion of the PNWRC that comprises the Project study area is within the Willamette Valley. In the next 20 years, the population of Oregon's Willamette Valley is projected to grow by approximately 27 percent to reach 3.6 million residents (Oregon DAS, 2015). During the same period, freight volume in the state is expected to grow by approximately 60 percent (ODOT, 2011). These increases will result in transportation demand that exceeds the available freight and passenger rail capacity in the Willamette Valley, as both utilize the same rail facilities within the corridor.

Preferred Alternative: ODOT used the evaluation criteria previously developed and based on the Project Goals and Objectives to compare the two Build Alternatives and subsequently identified Alternative 1 as the Preferred Alternative. During Project scoping, ODOT conducted an open, interactive process to develop the Project Purpose and Need Statement and high-level goals and objectives. ODOT used the Project Goals and Objectives to develop an evaluation framework, which served as the basis for the analysis and screening of corridor concepts and preliminary alternatives. In association with the technical analyses conducted for the DEIS, ODOT used the evaluation framework to compare the alternatives. Based on the comparison of performance attributes, ODOT and FRA proposed that Alternative 1 be identified in the DEIS as the Preferred Alternative.

Selected Alternative: The Selected Alternative is the alternative selected by FRA in the ROD and will be the alternative carried forward for future Tier 2 analysis, as required by NEPA.

Study Area: ODOT and FRA established a preliminary Project study area during the NEPA scoping period in fall 2012 (Figure 1-1). The preliminary Project study area was generally bounded by the Eugene- Springfield, OR, area to the south and the Oregon-Washington state line (Columbia River) to the north in Vancouver, WA. The Cascade foothills bounded the study area to the east, and the Coast Range bounded it to the west. This study area was broad enough to encompass a variety of potential rail alignments and potential station locations suggested by stakeholders and the public during the scoping period. As corridor concepts and potential station locations were considered and eliminated, FRA and ODOT narrowed the study area boundaries to assess a more localized range of potential impacts associated with each of the corridor concepts. ODOT and FRA also developed discipline- and resource-specific study areas for each environmental impact analysis topic studied in the Tier 1 DEIS.

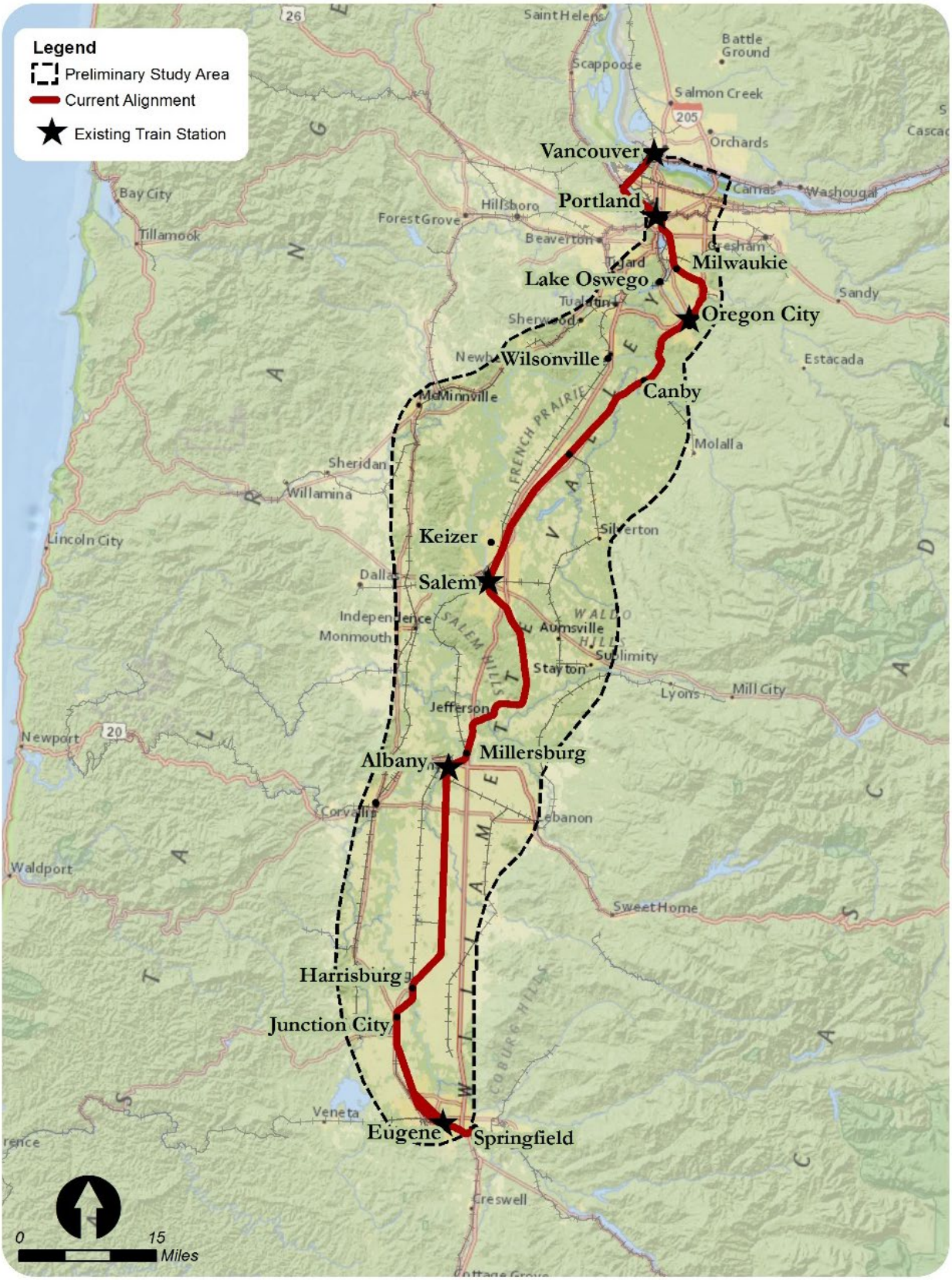

Figure 1-1. Oregon Passenger Rail Study Area and Existing Route

Level of Detail: The level of detail presented in the Tier 1 EIS is consistent with FRA's tiered environmental review process. FRA's guidance suggests that a tiered NEPA process is appropriate for FRA-funded projects where broad program decisions for large expansive corridor programs: (1) are too complex to be addressed in one document; (2) are phased over time; (3) do not have fully defined future phases; or (4) have major routing or service alternatives that need to be evaluated.

Effects Assessment and Methodologies: The Tier 1 FEIS uses the same effects assessments and methodologies, data sources and data sets presented in the Tier 1 DEIS to evaluate the No Action Alternative and the Build Alternatives.

Definition of the No Action Alternative: The definition of the No Action Alternative remained the same from the Tier 1 DEIS to the Tier 1 FEIS. The No Action Alternative consists of the continuation of the existing Amtrak Cascades passenger train route, stations and service between Eugene and Portland. A mix of freight and passenger trains currently use the Union Pacific Railroad (UPRR) and BNSF Railway (BNSF) trackage that also serves as the Amtrak Cascades route in Oregon. The No Action Alternative also includes all committed improvements (that is, projects with dedicated or obligated funding) to the existing intercity passenger rail system, the intercity highway system, and other modes of transportation available to the public (particularly aviation and intercity bus services) in the Project study area.

Section 4(f) Evaluation: The Tier 1 EIS identifies properties within the study area that are protected by Section 4(f) of the United States Department of Transportation Act of 1966 (Section 4[f]) and Section 6(f) of the Land and Water Conservation Fund Act of 1965 (Section 6[f]), and discusses legal requirements, methods of analysis, study area, affected environment, potential environmental impacts and potential mitigation strategies. This Tier 1 EIS does not provide the level of detail that FRA would need to make final determinations regarding uses of Section 4(f)-protected or Section 6(f)-protected resources. Final decisions on specific location and design will be made at the project level, when more detailed information is available for analysis, and specific properties can be evaluated for impact and mitigation, if necessary.

Mitigation: In a Tier 1 EIS, potential impacts are identified using high-level data and analysis. For the Project, ODOT used existing information on known resources and estimated impacts based on a lesser level of engineering than is used at a project-level analysis. Because of this, the available information is not detailed enough to formulate site-specific mitigation measures. Therefore, each resource evaluation includes a list of potential mitigation strategies that would be considered and further developed in the future as part of the Tier 2 or project-specific environmental analysis (see Chapter 4 of the DEIS). Representative mitigation strategies listed in Chapter 4 of the DEIS include avoidance and minimization measures that could be developed in greater specificity as design of the Project advances.

1.1.2 Contents of this Combined Tier 1 FEIS/ROD

This Tier 1 FEIS/ROD contains the Tier 1 FEIS (Part 1), the Tier 1 ROD (Part 2), and the following Tier 1 FEIS/ROD appendices:

- **Appendix A:** Tier 1 DEIS and Appendices.
- **Appendix B:** Tier 1 DEIS Public and Agency Involvement Summary Report, including materials presented to the public during the DEIS public and agency comment period.
- **Appendix C:** Copies of all correspondence received from Native American Tribes, and Federal, State and local agencies, and the public, including letters and emails, during the Tier 1 DEIS public and agency review period and a comments and responses matrix that includes responses from FRA and ODOT to all comments received during the public comment period.
- **Appendix D:** Revised Tier 1 DEIS Sections. FRA and ODOT amended portions of the DEIS based on public and agency comments, and based on changes in existing conditions. In this FEIS, Section 1.6, Tier 1 DEIS Errata, details the changes made, and Appendix D shows the revised DEIS text.

The Tier 1 FEIS/ROD builds in the Tier 1 DEIS, which was published in October 2018. Appendix A contains the Tier 1 DEIS in its entirety, and:

- Considers all significant issues related to the Project identified during scoping;
- Establishes the Purpose and Need for the Project;
- Discloses the alternatives considered and evaluates the alternatives against the Purpose and Need;
- Discloses all environmental effects potentially associated with the Project's alternatives, whether they are adverse or beneficial;
- Identifies a Preferred Alternative; and
- Establishes a public and agency review and comment period for the DEIS, including public meetings and how to participate in the public and agency review and comment period.

The Tier 1 DEIS appendices present detailed technical documentation and relevant coordination materials that support the information and findings presented in the Tier 1 DEIS chapters.

FRA indicated in the Tier 1 DEIS that the agency intended to issue a combined FEIS/ROD pursuant to provisions under the Moving Ahead for Progress in the 21st Century Act (MAP-21) and the Fixing America's Surface Transportation Act (FAST Act).

The Tier 1 FEIS discloses potential environmental effects associated with the Project identified at this early phase of project development and whether they are adverse or beneficial, and identifies the Preferred Alternative. The Tier 1 FEIS includes all comments received on the Tier 1 DEIS and responds to those comments. Responses are in the form of factual corrections or clarifications and are presented as errata-style edits in a table format attached to the Tier 1 DEIS, which documents the changes made to the DEIS that are now reflected in this Tier 1 FEIS/ROD.

The Tier 1 ROD provides a written public record of FRA's decision, identifies FRA's Selected Alternative, describes the alternatives considered in the Tier 1 EIS process, and states how FRA's decision was made. The Tier 1 ROD completes the Tier 1 NEPA process and provides the basis for future Tier 2 NEPA studies that may occur in subsequent phases of the Project.

1.2 Errata Sheets and Combined FEIS/ROD

1.2.1 Use of Errata Table and Sheets

The use of an errata table and sheets in lieu of rewriting the Tier 1 DEIS to a Tier 1 FEIS is appropriate when comments received on the Tier 1 DEIS are minor and the responses to those comments are limited to factual corrections or explanations of why the comments do not warrant further response. Errata sheets are being made available to the public and agencies to the same extent as the Tier 1 DEIS, and ODOT and FRA will ensure the Tier 1 DEIS remains available.

Comments received from the public and agencies require only factual corrections and minor clarifications to the Tier 1 DEIS; however, no comments on the Tier 1 DEIS warranted further response in the form of additional alternatives or consideration of undisclosed environmental consequences or impacts. The Tier 1 DEIS is available on the ODOT Project website and FRA's website, and is included as **Appendix A** of this combined Tier 1 FEIS/ROD. The Tier 1 DEIS errata are included in this combined Tier 1 FEIS/ROD. Section 1.6 of this FEIS presents the Tier 1 DEIS Errata Table, which indicates where changes were made to the Tier 1 DEIS document. The revised DEIS sections are included in **Appendix D**.

1.2.2 Combined Tier 1 FEIS/ROD

In accordance with the Council on Environmental Quality Regulations set forth in 40 CFR 1506.10(b)(2), FEIS and ROD documents, including Tier 1 FEIS and Tier 1 ROD documents, are typically issued separately, and

there is a minimum 30-day period between the FEIS and the ROD. However, to the maximum extent practicable, FRA must develop a combined FEIS/ROD, unless:

- The FEIS or Tier 1 FEIS makes substantial changes to the proposed action that are relevant to environmental or safety concerns, or
- There are significant new circumstances or information relevant to environmental concerns and that bears on the proposed action or the impacts of the proposed action.

This combined Tier 1 FEIS/ROD for the Project does not include substantial changes to the proposed action in terms of environmental or safety concerns, nor are there significant new circumstances or information relevant to environmental concerns of the proposed action or its impacts, as set forth in the law.

FRA has determined it is appropriate to issue a combined FEIS/ROD. FRA and ODOT will announce the availability of the combined FEIS/ROD on the Project website. In addition, ODOT and FRA will send email notifications to the individuals and groups on the Project email list, post the document on the Project website, and make a limited number of printed copies available at ODOT offices.

This combined Tier 1 FEIS/ROD documents the FRA decision on the Project, discusses the Preferred Alternative and other alternatives, and explains potential mitigation measures, if required for future project actions. Because this is a Tier 1 NEPA document, most mitigation measures represent commitments to further assess and refine mitigation requirements and coordinate with the public, resource and regulatory agencies, stakeholders, and Native American Tribes during Tier 2 analysis as a rail improvement project-level design is developed. FRA and ODOT will make the Tier 1 FEIS/ROD available to the public, and will publish it on their respective websites.

1.3 Tiered NEPA Process

The Project's Tier 1 EIS is the first of two potential environmental review tiers. The Tier 1 process concludes with the publication of this Tier 1 FEIS/ROD. Any required subsequent Tier 2 environmental reviews will evaluate more detailed, site-specific rail improvement projects implementing in whole or in part the Preferred Alternative selected in the Tier 1 ROD. The Preferred Alternative has a wide variety of phasing options. Because the Preferred Alternative follows the existing UPRR rail line between Eugene and Portland, infrastructure investments could be separated into relatively small, lower-cost elements, so that ODOT could implement the Preferred Alternative incrementally as funding becomes available. ODOT could also implement the elements deemed most valuable to support expanded passenger rail service, and expand that service incrementally from two round trips to the six round trips that are considered full build-out for the Preferred Alternative. This approach would allow ODOT to add round trips over time as the demand for additional passenger rail service grows. To plan and implement phased investments, ODOT would coordinate with the host railroad and passenger rail service operator.

The Tier 2 NEPA documents would address stand-alone projects with logical termini and independent utility that are part of Selected Alternative identified in the ROD. In other words, one or more corridor sections that together make up the complete passenger rail system in Oregon could be developed as individual projects. The corresponding study area for each resource would be refined based on more detailed design. While the Tier 1 DEIS assessed potential impacts based on previously identified resources, a Tier 2 analysis may also include field investigations of previously unsurveyed areas to identify additional resources and impacts that are not known at this stage. Detailed design developed for Tier 2 projects would support analysis of potential impacts from construction and/or operation of passenger rail improvements and the development of specific mitigation measures. The analyses would consider avoidance and minimization of impacts on sensitive environmental resources. The following representative list presents the project-level analyses that may be required for each Tier 2 NEPA analysis:

- Special status species surveys and wildlife movement studies;
- Wetland delineations and identification of Section 404 permitting requirements;
- Cultural resource surveys and Section 106 consultation;
- Threatened and endangered species surveys and Section 7 consultation;
- Noise and vibration analysis;
- Section 4(f) evaluation;
- Section 6(f) analysis;
- Phase 1 Environmental Site Assessments;
- Air emissions analysis in nonattainment areas;
- Station-area traffic studies;
- Grade crossing and safety analysis; and
- Surveys, infrastructure inspections and engineering design.

ODOT anticipates seeking a combination of Federal and State funding to advance the Project into final design and construction, and anticipates that this would be done in phases; however, currently no funding has been identified to advance the Project. If ODOT advances the Project into final design and construction and Federal funding, Federal permits, and/or other Federal approval(s) are involved, a Tier 2 NEPA analysis, led by the appropriate Federal agency, would be required. The scope of such analysis would be based on the nature of the Federal action.

Depending on the scope and potential environmental impacts of Tier 2 projects, as individual stand-alone projects that are part of the Preferred Alternative, the appropriate level of Tier 2 NEPA analyses may be an EIS, Environmental Assessment, and/or a Categorical Exclusion. Preliminary design and additional environmental studies would be conducted in support of a Tier 2 NEPA analysis. Additional coordination and outreach would also occur as appropriate during any Tier 2 NEPA analysis to engage the public and other stakeholders. Input from the outreach effort would be incorporated into the NEPA analysis and into the Tier 2 project design if warranted.

1.4 Preferred Alternative

FRA's and ODOT's Preferred Alternative is Alternative 1. The Preferred Alternative consists of the existing route traveled by Amtrak Coast Starlight and Cascades trains between Eugene, OR, and Vancouver, WA, with capital improvements implemented adjacent to the existing Amtrak alignment in specific locations. Track modifications or additions would consist of mainline track, sidings, crossovers, switches, signaling and communications, and industry connections constructed or reconfigured as needed to optimize freight and passenger rail operations throughout the full route. Under the Preferred Alternative, passenger trains would continue to share track with freight trains, and the route would serve seven passenger rail round trips per day—six on the Amtrak Cascades and one on the Coast Starlight (a "6+1" schedule). Between Eugene and Portland, this reflects an increase in the number of trips from the No Action Alternative, which would continue to follow the existing schedule (three round trips per day, or a 2+1 schedule). North of Portland's Union Station, the Preferred Alternative would be the same as under the No Action Alternative (eight round trips per day, or a 6+2 schedule). The Preferred Alternative would have the same existing stations (Eugene, Albany, Salem, Oregon City and Portland) as the No Action Alternative.

1.5 Overview of Public and Agency Outreach and Coordination Since Release of the Tier 1 DEIS

This section provides an overview of the public and agency outreach and coordination that has occurred since the release of the Tier 1 DEIS. **Appendix B** contains the complete Tier 1 DEIS Public and Agency Involvement Summary Report, which provides more detail regarding outreach and coordination activities.

1.5.1 Distribution of the Tier 1 DEIS

ODOT and FRA released the Tier 1 DEIS for the Project in October 2018 for public review and comment. The U.S. Environmental Protection Agency (EPA) published a Notice of Availability in the Federal Register on October 19, 2018 (83 FR 53053). The public was invited to provide comments on the Tier 1 DEIS through various opportunities and communication methods from October 18 through December 19, 2018.

The distribution of the Tier 1 DEIS emphasized the use of electronic media to provide cost-effective access to the public. The Tier 1 DEIS was available on the internet on the ODOT Oregon Passenger Rail Project website (http://www.oregonpassengerrail.org) and on the FRA website (http://www.fra.dot.gov/).

Federal agencies, Native American Tribes, state agencies, regional and local agencies, and the other selected interested parties and organizations (listed in **Appendix B**) were sent a link to the electronic copy of the DEIS via e-mail. Additional local elected officials and agency representatives, along with others on the mailing list (approximately 3,700 contacts), were mailed a notification that included information about how to access the DEIS; timing for the formal DEIS comment period; and public hearing dates, times and locations.

In addition, during the public comment period, the public was able to review hard copies of the Tier 1 DEIS at multiple locations throughout the Project corridor. Copies were available at the following locations:

Oregon Department of Transportation
ODOT Region 1 Office
123 NW Flanders Street
Portland, OR 97209

Oregon Department of Transportation
Transportation Building
355 Capitol Street NE
Salem, OR 97301

Eugene Public Library
Downtown Library
100 W. 10th Avenue
Eugene, OR 97401

Albany Public Library
2450 14th Avenue SE
Albany, OR 97322

Albany City Hall
333 Broadalbin Street, SW
Albany, OR 97321

Salem Public Library
585 Liberty Street SE
Salem, OR 97301

Oregon City Public Library
606 John Adams Street
Oregon City, OR 97045

Multnomah County Central Library
801 SW 10th Avenue
Portland, OR 97205

1.5.2 Public Meetings/Open Houses

In-person open houses and public hearing events were held in five locations along the Project corridor in November and December 2018. The purpose of these events was to provide the public information presented in the Tier 1 DEIS in a drop-in style format involving display boards, a presentation by members of the Project team, and an opportunity for interested persons to give verbal or written testimony. Table 1-1 shows the locations, dates and number of attendees of the open houses.

Table 1-1: Public Hearing and Open House Events Held During DEIS Public Comment Period

Open House	Date	Location	Number of Attendees
Portland	November 28, 2018	ODOT Region 1 123 Flanders St., Portland	30
Oregon City	November 29, 2018	Pioneer Community Center 615 5th St., Oregon City	26
Albany	December 4, 2018	Linn Benton Community College 6500 Pacific Blvd., Albany	31
Salem	December 5, 2018	Pringle Hall 606 Church St. SE, Salem	16
Eugene	December 6, 2018	Main Public Library 100 W 10th Ave., Eugene	73

Attendees received informational handouts about the Tier 1 DEIS findings as well as a public comment card. Participants were encouraged to review the information presented at the open house and discuss the findings with the several Project team members (i.e., ODOT and FRA staff and consultants) who attended the events. At each event, a presentation highlighted the results of the Tier 1 DEIS.

1.5.3 Additional Public Outreach Activities

Additional public outreach activities included an online open house and informational tables set up at the Eugene Saturday Market, Salem Station 100 Year Anniversary event, and Union Station in Portland.

The online open house hosted on ODOT's Project website was available from November 28 to December 18, 2018. The purpose of the online event was to:

- Present the Preferred Alternative for the Project;
- Present the findings from the Tier 1 DEIS; and
- Provide the opportunity for public comment on the Tier 1 DEIS prior to the selection of the Preferred Alternative by FRA.

The same information and materials that were presented or displayed during the in-person open houses and public hearing events were available during the online open house.

A total of 345 people visited the online open house.

In addition to the online open house, the Project team hosted informational tables at Union Station in Portland, at the Salem Station 100 Year Anniversary Event, and at the Saturday Market in Eugene in September and October 2018. The purpose of these events was to promote the public comment period, the

five open houses/public hearings and the online open house, and to outline the findings included in the Tier 1 DEIS. These three informational tables resulted in 77 people speaking with Project team members and 14 people leaving comments.

1.5.4 Comments and Responses on the Tier 1 DEIS

During the public comment period for the Tier 1 DEIS, ODOT and FRA received a total of 212 comments from members of the public and agency/organization representatives at five public events, through ODOT's Project website, and by email and letter. Of the 212 comments, 60 were received via the website comment form, 59 through the online open house, 58 at the open house/public hearing events (51 via comment form and 9 via public testimony), 30 by email and 3 by mail. The comments are presented in their entirety in **Appendix C**.

The key comment topics were:

- Support for Alternative 1 as the Preferred Alternative
- Frequency, schedule and reliability
- Technology, innovation, implementation and "phase-ability"
- Funding and cost
- Station locations and expanding service
- High speed and speed
- Ridership and capacity
- Support for Alternative 2

Several other themes emerged that received fewer comments than the key topics mentioned above (see **Appendix B** for more detail on comment topics and supporting themes).

Agencies, organizations and local governments submitted a total of 14 comments. Of these submissions, 11 provided feedback directly related to the alternatives presented in the Tier 1 DEIS. The commenters included the EPA, the U.S. Department of the Interior, the Oregon Department of State Lands, Washington State Department of Transportation Rail Freight and Ports Division, the City of Eugene, the Tangent City Council, the University of Oregon Association of Oregon Rail and Transit Advocates, Oregon Environmental Council and Travel Oregon. The Project team also received three submissions from the Central Lane Metropolitan Planning Organization, the Federal Transit Administration and TriMet that were process-related questions.

FRA and ODOT reviewed all of the public and agency comments and have taken the comments into consideration in the decision-making process for the Tier 1 FEIS/ROD. Comments and responses are included in **Appendix C**.

1.6 Tier 1 DEIS Errata Table

Table 1-2 documents changes that have been made to the Tier 1 DEIS based on comments received during the public comment period, and corrections or updates noted by FRA or ODOT after the publication of the DEIS. The table is organized into two sections based on the two types of errata: revised DEIS sections and minor text revisions. **Appendix A** contains the Tier 1 DEIS as published on October 19, 2018. **Appendix D** contains the revised DEIS sections that are summarized in Table 1-2. The Tier 1 DEIS, combined with the Tier 1 DEIS Errata Table, is issued by FRA and ODOT as the Tier 1 FEIS for the Project under this Tier 1 FEIS/ROD.

Table 1-2: Tier 1 DEIS Errata Table

Chapter/ Section	Description of Action	Section/ Page(s) in Tier 1 DEIS	Comment Number Addressed (see Appendix C)
Revised DEIS Sections (See Appendix D)			
Executive Summary, Section 1.1.1	Added "or connect to" to the statement about existing freight operations: *"Union Pacific Railroad (UPRR) owns the existing PNWRC railroad infrastructure in Oregon south of Portland's Union Station. A mix of freight and passenger trains (operated by BNSF Railway, UPRR, Oregon Pacific, Portland Terminal Railroad, Willamette Valley Railway, Portland & Western Railroad, and Amtrak) currently utilize **or connect to** BNSF Railway and UPRR trackage that serves as the PNWRC."*	ES-1, 1-1	Not applicable (N/A): Errata identified by FRA
Executive Summary, Section 1.1.1	Changed name of Burlington Northern Santa Fe (BNSF) Railway to BNSF Railway to reflect current naming convention.	ES-1, 1-1	Comment I-75: Dan Hoffman
Section 3.1.4, Ridership (No Action Alternative)	ODOT updated ridership forecasts using data on ridership trends since publication of the DEIS; Tier 1 DEIS passenger ridership and revenue forecasts for the future No Action Alternative have been updated and adjusted to account for the recent ridership trends in the PNWRC.	3-5	N/A: Update to match the forecast developed for the Project's Service Development Plan
Section 3.2.4, Ridership (Build Alternatives)	ODOT updated ridership forecasts using data on ridership trends since publication of the DEIS; Tier 1 DEIS passenger ridership and revenue forecasts for the future Alternative 1 (Preferred Alternative) have been updated and adjusted to account for the recent ridership trends in the PNWRC.	3-24	N/A: Update to match the forecast developed for the Project's Service Development Plan
Section 3.2.6.1	Adjustment in cost estimate for Alternative 1 during development of Service Development Plan; cost estimates were refined to support the benefit-cost analysis in that plan. Costs for Alternative 1 increased by approximately 20%.	3-27	N/A: Revision in cost estimate for Preferred Alternative developed during development of the Service Development Plan
Section 3.2.6.2	Added statement that ODOT is considering need to build maintenance facility in Oregon for the Cascades service.	3-28	Comment A-6: Washington State Department of Transportation
Section 3.2.6.2	Updated estimated Operations and Maintenance costs for consistency with the Service Development Plan.	3-28	N/A: Revision in cost estimate for Preferred Alternative developed during development of the Service Development Plan
Section 4.6	Updated narrative on Section 6(f) to reflect information that three additional parks are encumbered by the provisions of the Land and Water Conservation Fund Act: Armitage County Park, Fish Eddy Landing and Eastmoreland Golf Course.	Table 4-6-1; Section 4.6	Comment A-2: U.S. Department of the Interior
Section 4.12.6	Added sentence within the wildlife corridor mitigation strategies to note that existing rail infrastructure could be retrofitted to provide hydrological and ecological connectivity.	4-125	Comment A-1: US EPA
Section 4.15.6	Added statement regarding Oregon's new guidelines for establishing mitigation requirements, the Aquatic Resources Mitigation Framework.	Page 4-144	Comment A-1: US EPA
Section 4.18.4	Updated narrative regarding railroad history in Oregon.	Pages 4-159, 4-160	N/A: Refinement identified by Project team

Chapter/ Section	Description of Action	Section/ Page(s) in Tier 1 DEIS	Comment Number Addressed (see Appendix C)
Section 4.18.4	Added statement that the proposed Southwest Corridor transit project is in the fiscally constrained regional plan.	Page 4-162	Comment A-8: TriMet
Section 4.18.5	Added text from Section 4.17.6 regarding climate change to the statement about cumulative effects.	Page 4-168	Comment A-1: US EPA
Minor text revisions to DEIS–Revisions are noted in this table only, they are not included in Revised DEIS sections (Appendix D)			
Executive Summary, Table ES-2	Updated number of potentially affected 6(f) resources from 6 to 4 for Alternative 1, and 4 to 6 for Alternative 2. *(Updated narrative provided in Section 4.6, listed above.)*	ES-16	Comment A-2: U.S. Department of the Interior
Chapter 1, Section 4.2 Transportation	Revised text on pages 1-12 and 4-12 referencing the planned addition of two round trips between Portland and Seattle and corresponding a schedule change on December 18, 2017. These additional trips and schedule change have been postponed due to the Amtrak derailment that occurred on that date.	1-12, 4-12, 4-15, 4-18	N/A: Errata identified by Project team
Section 3.1.3, Section 4.2.4.2, Section 4.18.4	ODOT has modified the Thruway bus service; the current service does not include the Portland-Salem bus and does not include a stop in Oregon City. Text adjusted to reflect.	3-4, 4-5, 4-161	N/A: Change in existing conditions identified by Project team
Section 3.2.1, Section 4.22	After publication of the DEIS, grant and matching UPRR funds were secured to pay for the Peninsula Junction project. Text was adjusted to reflect the funding.	3-12, 3-14, 3-27, 4-173	N/A: Change in existing conditions, noted by Project team
Section 4.2.4.3	The at-grade crossing at Lawnfield Road has been closed; it was cited in the DEIS as causing delay under existing conditions.	4-6	N/A: Change in existing conditions identified by Project team
Section 4.2.5	Ridership numbers for the No Action Alternative and the Preferred Alternative have been refined to reflect updated modeling presented in Section 3.	4-10, 4-12, 4-13, 4-14	N/A: Update to match the forecast developed for the Project's Service Development Plan
Section 4.10.4	The Albany Depot has been listed on the National Register of Historic Places. The DEIS had noted that the depot was eligible for listing; the correction is that it has been listed.	4-99	N/A: Change in existing conditions identified by Project team
Section 4.8.4	Updated information on quiet zones in the existing conditions section. A quiet zone in Salem was extended and another was added in Portland.	4-84	N/A: Change in existing conditions identified by Project team
Section 4.14	Added accounting of all stream crossings, in addition to Section 303(d) listed crossings. Adjusted methods statement to reflect the change and added statement to mitigation section to reflect that anti-degradation provisions of the Clean Water Act apply to listed or non-listed waterbodies in the Project area.	Section 4.14.1, Table 4-14-3, Section 4.14.6	Comment A-1: US EPA
Throughout document	Minor spelling or grammatical errors; updates to cross-referenced data for consistency throughout document.	-	N/A: Editorial updates identified by Project team

References

ODOT (Oregon Department of Transportation). 2011. Oregon Freight Plan. Adopted by the Oregon Transportation Commission on June 15, 2011.

Oregon DAS (Department of Administrative Services). 2015. Demographic forecast. https://www.oregon.gov/das/OEA/Pages/forecastdemographic.aspx

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Oregon Passenger Rail
Eugene - Portland
CHOOSING A PATH FORWARD

Tier 1 Record of Decision

Prepared by

Oregon Department of Transportation

U.S. Department of Transportation
Federal Railroad Administration

April 2021

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FEDERAL RAILROAD ADMINISTRATION

Oregon Passenger Rail
Tier 1 Combined Final Environmental Impact Statement and Record of Decision

Prepared by
U.S. Department of Transportation
Federal Railroad Administration
and
Oregon Department of Transportation

Pursuant to
National Environmental Policy Act (42 U.S.C. §4332 et seq.), and implementing regulations (40 CFR Parts 1500-1508), 64 FR 28545, 49 U.S.C. §303 (Section 4(f), formerly Department of Transportation Act of 1966, Section 4(f)); National Historic Preservation Act (54 U.S.C. §300101 et seq.); Clean Air Act as amended (42 U.S.C. §7401 et seq. and 40 CFR Parts 51 and 93); the Endangered Species Act of 1973 (16 U.S.C. §§1531-1544); and the Clean Water Act (33 U.S.C. §§1251-1387).

April 14, 2021

Date of Approval

Paul Nissenbaum
Associate Administrator, Office of Railroad Policy and Development
Federal Railroad Administration

The following persons may be contacted for additional information concerning this document:

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ABSTRACT

The Federal Railroad Administration (FRA) is issuing this Record of Decision (ROD) concurrently with the Final Environmental Impact Statement (FEIS) pursuant to Section 1311 of the Fixing America's Surface Transportation Act (Pub. L. 114-94). Through this ROD, FRA selects Alternative 1, which would improve passenger rail service on the existing rail alignment between Eugene and Portland, Oregon.

The ROD states FRA's decision; identifies the alternatives considered in reaching the decision; summarizes avoidance, minimization, and mitigation strategies and future design practices appropriate for a Tier 1 FEIS; and states the next steps in the environmental review process that may occur with subsequent phases of the Project as it moves though further planning, design, and construction subject to available future funding. Members of the public; stakeholders; local governments; elected officials, non-governmental organizations; Native American Tribes; and Federal, State and local agencies have been and will continue to be involved in the Project throughout subsequent phases of the Project, as appropriate.

Contents

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Acronyms and Abbreviations

APE	Area of Potential Effect
BMPs	best management practices
BNSF	BNSF Railway
CFR	Code of Federal Regulations
CIP	Corridor Investment Plan
DMU	diesel multiple unit
DSL	Oregon Department of State Lands
EIS	Environmental Impact Statement
EJ	Environmental Justice
EPA	US Environmental Protection Agency
EPSC	erosion prevention and sediment control
FRA	Federal Railroad Administration
LEP	limited English proficiency
MOA	Memorandum of Agreement
mph	miles per hour
NEPA	National Environmental Policy Act
NOI	Notice of Intent
NRHP	National Register of Historic Places
ODOT	Oregon Department of Transportation
PNWRC	Pacific Northwest Rail Corridor
ROD	Record of Decision
ROW	right-of-way
SDP	Service Development Plan
SHPO	State Historic Preservation Office
UPRR	Union Pacific Railroad
U.S.C.	United States Code

Part 2: Tier 1 Record of Decision

2.1 Introduction

In this Record of Decision (ROD), the Federal Railroad Administration (FRA) selects Alternative 1 (referred to in this ROD as the "Selected Alternative"), which was described and evaluated as the Preferred Alternative in the Oregon Passenger Rail Project Tier 1 Draft and Final Environmental Impact Statements (EISs), technical reports, and supporting documentation.

The Oregon Passenger Rail Project (the Project) is a planning effort developed under a cooperative agreement between the Oregon Department of Transportation (ODOT) and FRA. The first phase of the process is the development of a Corridor Investment Plan (CIP). The process of completing a CIP consists of conducting an environmental review in accordance with the National Environmental Policy Act (NEPA), as documented in this Tier 1 EIS, and developing a Service Development Plan (SDP). The SDP is a detailed definition of the service improvements, transportation network, and the operational and financial aspects for the alternative for passenger rail service that is selected through the NEPA process. The intent of the CIP is to provide sufficient information to support future decision-making at the Federal, State and/or local levels regarding investments in the Oregon segment of the Pacific Northwest Rail Corridor (PNWRC).

ODOT and FRA used a tiered environmental process for the Project, which is a phased environmental review used in the development of complex projects (as provided in 40 Code of Federal Regulations [CFR] 1508.28). The tiered NEPA review and decision-making process allows for a broad-level programmatic decision with a first-tier EIS, followed by more specific analyses and decisions through one or more second-tier NEPA evaluations.

The Project's Tier 1 EIS and the SDP address corridor-level improvements to passenger rail service in the Project study area, including the following:

- Rail corridor – Reasonable and feasible rail alignment improvement alternatives from Eugene-Springfield, OR, to Vancouver, WA
- Service characteristics – Passenger rail operational elements, train speeds, travel time, train frequency and train technology
- Potential stations – The general location of potential passenger rail stations

If a Federal agency, including FRA, provides grant funding, a permit, or other approval to advance the Project, it may use this Tier 1 FEIS/ROD as the basis to undertake a Tier 2 NEPA environmental review process, or processes, and subsequently make and document future NEPA decisions. Tier 2 NEPA studies may, for example, further define improvements to intercity passenger rail service to meet future travel demand through construction of new or improvements to existing rail facilities and infrastructure, reduction in journey times, and improved connections with regional public transit services. During a Tier 2 NEPA process, ODOT and FRA (or other lead Federal agency) will conduct more detailed environmental analyses, refine components of the Project within the Selected Alternative, identify all applicable permits, and define location-specific avoidance and mitigation measures.

FRA is issuing this Tier 1 ROD based on the analysis in the DEIS and FEIS, all technical reports and supporting documentation, and after consideration of public comments.

2.2 Tier 1 EIS Process for the Project

FRA is the lead Federal agency responsible for conducting the Tier 1 NEPA environmental review process for the Project and issuing this Tier 1 FEIS/ROD. FRA, in cooperation with ODOT, prepared a Tier 1 EIS to evaluate a broad-level programmatic decision regarding the rail corridor, service characteristics and

potential station locations. For FRA, this tiered NEPA approach allows for incremental decision-making for large corridor projects that are unsuited for analysis in a traditional project-level EIS.

ODOT received a grant under FRA's Fiscal Year 2010 High Speed Intercity Passenger Rail Program, with the funding to be used for the development of planning and environmental analysis for the improvement of passenger rail service on the PNWRC between Eugene and Portland, OR. The Tier 1 NEPA process began with FRA's publication of a Notice of Intent (NOI) to prepare a Tier 1 EIS in the Federal Register on August 17, 2012. Following publication of the NOI, FRA and ODOT initiated a scoping process to inform the public and interest groups, and actively solicit feedback from agencies about the proposed Project, corridor alternatives, and issues for public and agency review and input. Comments and recommendations received during the scoping process from the public, stakeholders and agencies were used by FRA and ODOT to refine the Project's Purpose and Need Statement, corridor alternatives, and the scope of the environmental analysis to be included in the Tier 1 EIS process. ODOT and FRA released the Tier 1 DEIS for the Project in October 2018 for public review and comment. The U.S. Environmental Protection Agency (EPA) published a Notice of Availability in the Federal Register on October 19, 2018 (83 FR 53053). The public was invited to provide comments on the Tier 1 DEIS through various opportunities and communication methods from October 18 through December 19, 2018, including five public hearing meetings held along the project corridor. FRA and ODOT reviewed the public and agency comments and have taken the comments into consideration in the decision-making process for the Tier 1 FEIS. Comments and responses are included in Appendix C of the FEIS.

2.3 Purpose and Need for the Project

FRA and ODOT developed the following Purpose and Need for the Project. The Purpose and Need Statement was informed by public input, was used to identify the reasonable range of alternatives, and was included in the Tier 1 DEIS. The Purpose and Need Statement remained consistent between the Tier 1 DEIS and the Tier 1 FEIS, and it is presented in Section 1.2 of the Tier 1 DEIS and below.

The purpose of the Project is to improve the frequency, convenience, speed and reliability of passenger rail service along the Oregon segment of the Federally designated PNWRC in a manner that will:

- Provide riders with an efficient, safe, equitable and affordable alternative to highway, bus and air travel;
- Be a cost-effective investment;
- Protect freight-rail carrying capability;
- Support the ongoing implementation of regional high-speed intercity passenger rail in the PNWRC between the Eugene-Springfield, OR metropolitan area and Vancouver, BC;
- Be compatible with the Washington state portion of the PNWRC;
- Promote economic development;
- Avoid or minimize community and environmental impacts; and
- Integrate with existing and planned multimodal transportation networks.

The need for the Project arises from multiple transportation, land use, socio-economic and environmental considerations, including the following:

- Increasing intercity and regional travel demands;
- Existing limited rail-system capacity and competing service needs;
- Constrained state and local roadway funding;
- Increasing economic vitality of the corridor;
- Declining transportation system safety and security; and
- Changing transportation demand resulting from demographic changes.

2.4 Alternatives Considered in the Tier 1 DEIS

The alternatives considered in the Tier 1 DEIS did not change in the Tier 1 FEIS. Chapter 3 of the DEIS describes the Project alternatives advanced for further study, which include a No Action Alternative and two Build Alternatives (Alternative 1 and Alternative 2).

The No Action Alternative consists of the continuation of the existing Amtrak Cascades passenger train route and service, including existing stations between Eugene, OR, and Vancouver, WA. It includes all committed improvements to the existing intercity passenger rail system, the intercity highway system and other modes of transportation available to the public in the Project study area.

The two Build Alternatives are:

- ***Alternative 1*** – This Build Alternative would be constructed within or immediately adjacent to the existing Amtrak Cascades passenger rail route (i.e., the Union Pacific Railroad [UPRR] line) between Eugene and Portland. Alternative 1 would rely on existing railroad right-of-way for much of the route. Sections of mainline track and sidings would be added where needed to accommodate additional passenger rail service while maintaining the current level of freight rail operations. The route would serve seven passenger rail round trips per day—six on the Amtrak Cascades and one on the Coast Starlight (a "6+1" schedule). Alternative 1 would serve existing stations (Eugene, Albany, Salem, Oregon City and Portland).
- ***Alternative 2*** – This Build Alternative would involve construction of new mainline track and sidings throughout the majority of the route, where it would be adjacent to the existing I-5 and I-205 highway alignments. New mainline track would also be added adjacent to the existing Portland & Western Railroad line between Keizer and Wilsonville and to the existing UPRR line north of Oregon City to Portland's Union Station. The route would serve seven round trips per day—six on the Amtrak Cascades and one on the Coast Starlight (a "6+1" schedule). Alternative 2 would serve the existing Portland station, and would have new stations in Springfield, Albany, and in Salem or Keizer. A station to serve the southern portion of the Portland metropolitan area could be located in Wilsonville or Tualatin. Alternative 2 has one option:

  The Alternative 2 with Central Albany Option – This option would be the same as Alternative 2 except in the vicinity of Albany, where the route would diverge from the I-5 area to serve the existing Albany station.

2.5 Identification of the Selected Alternative

ODOT conducted an open, interactive scoping process (see Chapter 5 of the DEIS) to develop the Project Purpose and Need as well as high-level Goals and Objectives (see Chapter 2 of the DEIS). ODOT and FRA used the Project's Goals and Objectives to develop an evaluation framework, which served as the basis for the analysis and screening of corridor concepts and preliminary alternatives. In association with the technical analyses conducted for the Tier 1 DEIS, ODOT and FRA used the evaluation criteria previously developed and based on the Goals and Objectives to compare the two Build Alternatives and subsequently identified Alternative 1 as the Preferred Alternative in the DEIS.

Table 2-1 below shows the Goals and summarizes the objectives-based performance attributes that differentiate one or more of the DEIS alternatives. Based on the analysis conducted for the DEIS and the subsequent public and agency engagement and comment, ODOT and FRA identified Alternative 1 as the Preferred Alternative. A high-level summary of impacts of the alternatives considered in the DEIS can be found in the DEIS in Table ES-2. More information on the Preferred Alternative can be found in Chapter 4 of the DEIS, Section 4.22.

Table 2-1. DEIS Alternatives Evaluation Findings

Performance Attribute	No Action Alternative	Alternative 1	Alternative 2
Goal 1: Improve passenger rail mobility and accessibility to communities in the Willamette Valley			
Passenger rail trip time: Eugene to/from Portland	2:35	2:20	2:02
Ability to accommodate higher speeds in the future	Maintains current maximum speed (79 miles per hour [mph])	Maintains current maximum speed (79 mph)	Maximum speeds of 120 mph on portions of new alignment
Goal 2: Protect freight-rail capacity and investments in the corridor, and maintain safety			
Future freight-rail capacity	No improvement	Build alternatives designed to protect capacity	
At-grade (street level) crossings	Two passive crossings closed; no additional safety modifications to existing at-grade crossings	Widening of 64 existing crossings to accommodate additional track; safety improvements as needed	Widening of 52 existing crossings; safety improvements as needed, 1 new crossing (widening of 65 existing crossings for Central Albany Option)
Goal 3: Plan, design, implement, maintain and operate a cost-effective project			
Ability to phase improvements over time	Not applicable	Could be constructed incrementally in smaller phased projects	Would require building in large sections; if phased, could require improvements to existing alignment
Capital costs through 2035 (2015 dollars)	Not applicable	$870 million–$1,025 million	$3.62 billion–$4.44 billion
Ridership (2035)	390,000	739,000	723,000
Goal 4: Provide an affordable and equitable travel alternative			
Cost and access	No change	Improved train service for both Build Alternatives	
Goal 5: Be compatible with passenger rail investments planned in Washington State			
Compatibility	No change	Build alternatives were designed to meet this goal	
Goal 6: Promote community health and quality of life for communities along the corridor			
Produces benefits and minimizes negative impacts	No change	Higher frequency and ridership, improves service to central cities	Higher frequency and ridership, but service focused outside central cities
Goal 7: Protect and preserve the natural and built environment			
Support preservation of land, avoid and minimize negative impacts	No change	Lower footprint and construction impacts than Alternative 2	New alignment, thus higher right-of-way and environmental impacts than Alternative 1

Based on analysis of the performance of the Build Alternatives and the No Action Alternative for each of the Goals and Objectives established for the Project and the potential environmental consequences, described in Chapter 4 of the DEIS, Sections 4.1 through 4.22, and consideration of public comments on the DEIS, FRA selects Alternative 1 in this ROD. This selection is made with the consideration of economic and technical factors, consistent with NEPA's implementing regulations issued by the Council on Environmental Quality. The key differentiating factors between the alternatives are summarized below, with a focus on the comparison between Alternative 1 and Alternative 2. Generally, the impacts for Alternative 2 with the Albany Option would be similar to Alternative 2.

- **Provide a viable alternative to auto, air and bus travel between Eugene, OR, and Vancouver, WA:** Alternative 2 would provide an 18-minute travel time savings compared to Alternative 1 and a 33-minute travel time savings compared to the No Action Alternative. However, as noted below, this travel time savings does not result in higher ridership for Alternative 2. Reliability would substantially increase from current conditions under both Build Alternatives. Both Build Alternatives would align schedules with the state of Washington passenger rail service.
- **Provide reliable and frequent passenger rail service:** The Build Alternatives would greatly outperform the No Action Alternative in terms of ridership, and Alternative 1 shows slightly higher projected ridership than Alternative 2 (approximately 6.25 percent), despite slower anticipated travel times. Both Build Alternatives would provide the capacity to serve six round trip trains per day between Eugene and Portland, plus the existing Amtrak long-distance service. The No Action Alternative would serve two round trips per day, plus the existing Amtrak long-distance service.
- **Support multimodal integration at each potential passenger rail station:** More people and jobs are potentially served with Alternative 1, because the existing stations are located in existing urban and employment centers. These station locations are currently connected to the community via pedestrian and bike facilities, and existing transit services. Alternative 2 stations near I-5 would exhibit lower ridership due to lack of development at the station areas and a reliance on park-and-ride trips. In addition, new pedestrian and bike facilities, and new transit services would presumably need to be extended to these new stations to increase multimodal integration. The Central Albany Option would increase the potential of Alternative 2 to support multimodal integration, because the station would be located in downtown Albany near existing transit services and a bicycle and pedestrian network.
- **Allow for future passenger rail improvements, including higher speeds:** Alternative 2 (120 miles per hour [mph] maximum) could support higher maximum speeds than Alternative 1 or the No Action Alternative (79 mph maximum) on portions of the new alignment. Both Build Alternatives would allow for future passenger rail improvements.
- **Do not increase conflicts between passenger rail and/or freight rail and vehicles:** Neither Build Alternative would increase conflicts between passenger/freight rail and vehicles. However, Alternative 2 would have far fewer existing at-grade crossings (up to 100 fewer crossings) than Alternative 1. ODOT and UPRR would close two of the 147 existing at-grade crossings for Alternative 1.
- **Phasing of improvements:** Alternative 1 could be built in phases, with the potential to be developed in smaller, reasonably fundable segments. Alternative 2 would have to be built in large sections. In addition, improvements for Alternative 2 would have to be made on the No Action Alternative/Alternative 1 alignment to allow additional round trips if the full Alternative 2 alignment was not ready for operation. Those improvements on the Alternative 1 alignment would benefit freight rail but would not benefit passenger service after Alternative 2 is completed.
- **Construction costs:** The cost of Alternative 2 is estimated to be more than four times higher than Alternative 1. Capital costs for Alternative 1 would be approximately $1.3 billion, and capital costs for Alternative 2 would be approximately $4.5 billion (2015 dollars).
- **Serve the maximum number of people with every dollar invested:** The capital cost per new rider is estimated to be five times higher for Alternative 2 than for Alternative 1. The annual operations and maintenance costs are estimated to be $38 million for Alternative 1 and $44 million for Alternative 2.
- **Environmental Justice (EJ) impacts:** Alternative 2 could have greater impacts to EJ populations than Alternative 1. With Alternative 2, much of the new railroad alignment would be constructed through rural agricultural areas that have lower overall populations, but which contain EJ populations, and in a few urban areas along I-5. Alternative 2 would include the addition of new track throughout the full alignment and the potential for up to four new stations. Therefore, it is anticipated that Alternative 2

would result in a greater degree of displacements and impacts to EJ or limited English proficiency (LEP) populations. Because the double-track portions of Alternative 1 would be constructed adjacent to an existing railroad alignment, social cohesion issues related to community resources used by EJ LEP populations are not anticipated, because the communities have historically adapted and built around the existing UPRR and BNSF Railway (BNSF) rail lines. Fewer displacements would be likely for Alternative 1 compared to Alternative 2. However, these rail lines would continue to be a barrier in communities along the alignment and would periodically have wider at-grade crossings than in existing conditions and marginally more potential for delays.

- **Benefit communities within the corridor:** Alternative 1 would have more employment density and development near the station locations. Alternative 1 would use existing Amtrak stations, which generally are located in or near downtown areas. With the exception of Portland and Albany in the Alternative 2 with Central Albany Option, Alternative 2 would include new stations that are located outside of downtown areas.
- **Impacts to sensitive noise receptors along the corridor:** Overall, more potentially noise-sensitive and vibration-sensitive land uses are located within incorporated areas than within unincorporated areas. Because the Alternative 1 noise study area contains more incorporated areas than that of Alternative 2, Alternative 1 would have a higher relative potential to impact noise- and vibration-sensitive land uses. A slightly higher proportion of lands in the Alternative 1 noise study area are designated for residential uses than in the Alternative 2 noise study area. Therefore, Alternative 1 would have a higher potential for residential noise impacts. Finally, substantially more institutional land uses (e.g., parks/open spaces, schools, libraries, places of worship, cemeteries, museums, hospitals and community centers) were identified within the Alternative 1 noise study area than within the Alternative 2 noise study area.
- **Farmland impacts:** Alternative 1 would have less potential overall impact on farmland because of its reliance on existing right-of-way (ROW). Alternative 2 would have greater potential impact on farmland, because it would convert land that is currently available for farmland to non-agricultural use (i.e., new rail ROW) in several of its segments.
- **Impacts to the Willamette River Greenway:** Alternative 1 would not require new Willamette River crossings, while Alternative 2 would require three new crossings of the Willamette River. Goal 15 of the Oregon Statewide Planning Goals aims to protect, conserve, enhance and maintain the quality of land along the Willamette River. The Alternative 2 crossings would likely require an exception through a local plan amendment process.
- **Threatened and endangered species impacts:** Overall, Alternative 1 would be expected to have less of an impact on threatened and endangered species than Alternative 2. Alternative 1 would have a smaller construction footprint and shorter construction duration than Alternative 2. The Alternative 1 study area has the highest number of known locations of special status species. There is, however, only one known location of a Federally listed species, Nelson's sidalcea (*Sidalcea nelsoniana*), within the direct impact study area. Alternative 1 has less potential than Alternative 2 to directly impact natural wildlife habitats generally and Oregon Conservation Strategy habitats specifically. Alternative 1 has less potential to directly impact wildlife linkages than Alternative 2. Alternative 1 has approximately 1.8 acres of conservation easements, while Alternative 2 has approximately 2.8 acres, and Alternative 2 with Central Albany Option has no conservation easements. Using new stream crossings as an indicator for potential impacts to aquatic resources, Alternative 1 has less potential than Alternative 2 to directly impact streams, because Alternative 1 could impact 10 streams with protected fish and Alternative 2 could impact 22 streams.
- **Wetland and waterway impacts:** Alternative 1 would likely have considerably fewer impacts on wetlands and waterways than Alternative 2. Alternative 1 would have the lowest potential direct impacts, both in terms of overall wetland acreage and acres of high-value wetlands (32 acres and

7 acres, respectively, for Alternative 1, compared with 144 acres and 49 acres, respectively, for Alternative 2). The amount of hydric soils (excluding areas mapped as wetland) within the Alternative 1 direct impact study area is less than half of Alternative 2 (378 and 818 acres, respectively). Therefore, Alternative 2 would have a notably larger potential direct impact on wetland and waterway resources.

- **Geology impacts:** Alternative 1 would have fewer geology-related impacts than Alternative 2. Alternative 1 would be constructed within and parallel to an existing rail alignment; therefore, limited earthwork is anticipated. No large fills would be required, so settlement because of compressible soil is expected to be minimal. Alternative 2 would require considerably more earthwork than Alternative 1. Fills placed in areas with compressible soil, historic landfills, or unconsolidated debris flow fans would need to be evaluated for settlement; mitigation could be required if the anticipated settlement could not be accommodated. Several rock cuts would be required along the Alternative 2 alignment, and multiple cuts alternating with viaduct structures would be required between Turner and Salem.
- **Cultural resource impacts:** There are 48 known historic properties in the study area for Alternative 1, including the five existing rail stations. The study area for Alternative 2 includes 33 known historic properties. Impacts associated with these properties would depend on the need for acquisitions and future design. In general, historic properties adjacent to the existing, active UPRR alignment are not expected to be adversely affected, because the impacts to these historic properties, which are already adjacent to an active rail line, would likely be negligible.
- **Section 4(f) impacts:** The Tier 1 DEIS identified properties potentially protected by Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 United States Code [U.S.C.] 303). Alternative 1 would likely have fewer impacts to Section 4(f) resources than Alternative 2. Alternative 1 would result in potential direct impacts to 10 Section 4(f) parks/recreation resources, whereas Alternative 2 would result in potential direct impacts to 18 (19 for Central Albany Option) Section 4(f) parks/recreation resources. Based on this high-level assessment, neither Build Alternative would result in an impact on a Section 4(f) park/recreation resource that would be greater than *de minimis* in nature.
    - Built Property Impacts: Alternative 1 has more historic properties (48 National Register of Historic Places [NRHP]-listed or NRHP-eligible historic [built] properties adjacent to proposed new track compared to Alternative 2, which has 33 [37 for Alternative 2 with Central Albany Option] historic properties). However, with Alternative 1, most acquisition of historic properties for new ROW would consist of linear strips of unimproved property, although removal of historic properties is possible. Alternative 2 has a greater potential for demolition of historic (built) properties, particularly near proposed new stations and the cut-and-cover tunnel. Alternative 2 would also result in existing historic passenger rail stations (in Eugene, Albany [except the Central Albany Option], Salem and Oregon City) being taken out of their historic and current use, and replaced with new stations in other locations.
    - Archaeological Site Impacts: Alternative 1 would likely have a slightly lesser impact related to archaeological resources. Eight (8) known archaeological sites are within the No Action Alternative/Alternative 1 Area of Potential Effect (APE), and 10 known sites are within the Alternative 2 APE.

2.5.1 Selected Alternative Route and Rail Improvements

The Selected Alternative would improve the existing passenger rail route between Eugene and Portland, OR, with the addition of parallel track in multiple sections within or immediately adjacent to the existing alignment. The current Amtrak Cascades passenger rail service operates on existing UPRR track between Eugene and Portland's Union Station. North of Union Station, the Amtrak Cascades service operates on existing BNSF track. The proposed track improvements would be built adjacent to the existing host railroad mainlines, as shown schematically in Figure 2-1.

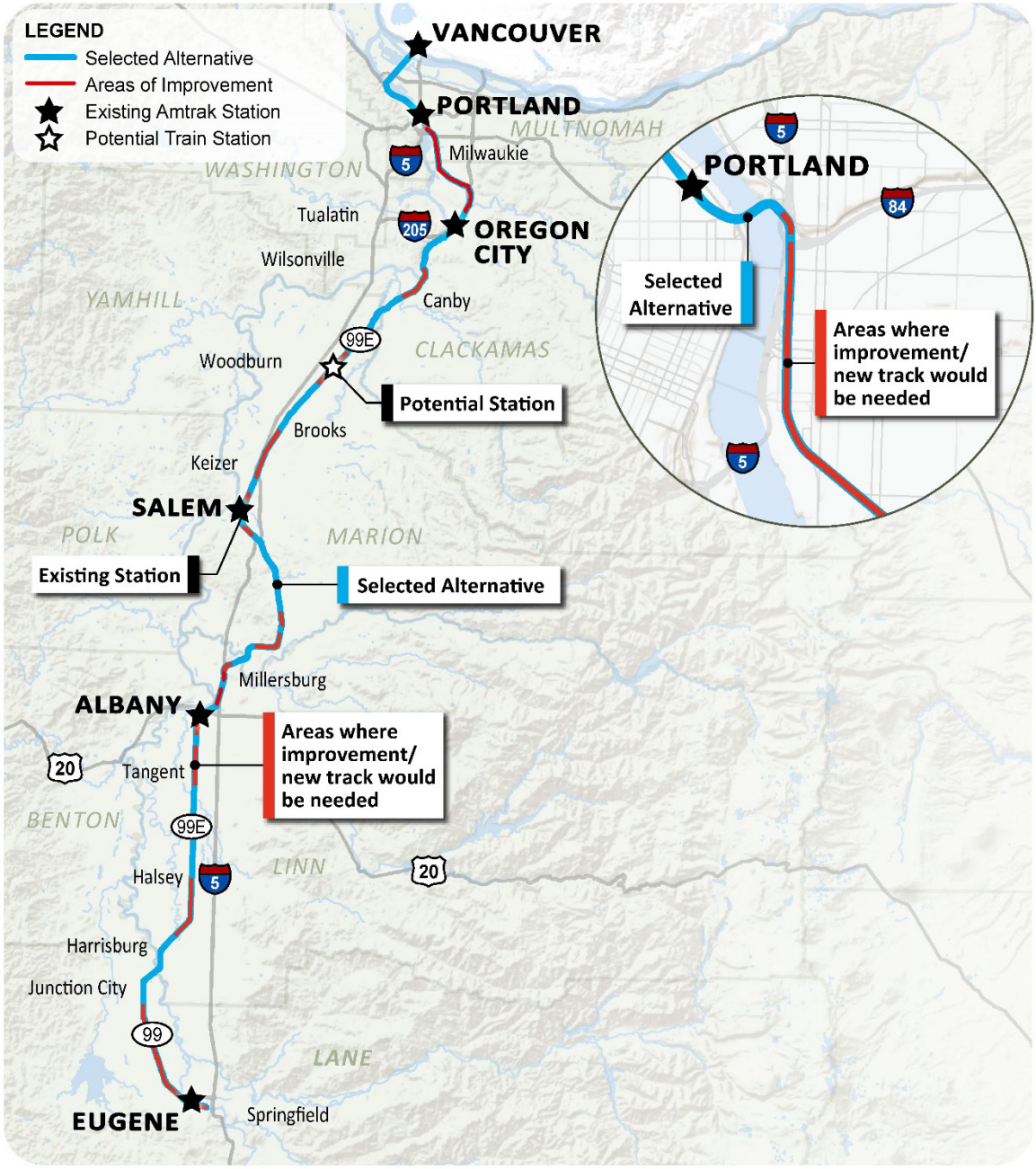

Figure 2-1. Selected Alternative

2.5.2 Selected Alternative Train Engine Technology

Train engine technologies considered for the Project's Build Alternatives include the existing technology (diesel locomotive-hauled) as well as the diesel multiple unit (DMU) technology. These technologies, as well as those screened out from further analysis, are introduced in Chapter 2 of the DEIS, Section 2.2.3.

Locomotive-hauled trains are diesel-powered and are paired with passenger coaches that are capable of operating at speeds up to 125 mph. The existing Amtrak Cascades fleet uses locomotive-hauled trains, and their continued use would not introduce new maintenance or operational training requirements. Additionally, in 2017, Washington State purchased eight next generation diesel-electric locomotives to include in the fleet for Amtrak Cascades service throughout the PNWRC, including the Oregon segment.

DMUs are multiple-unit trains powered by on-board diesel engines that are also capable of operating at speeds up to 125 mph. A DMU requires no separate locomotive, because the engines are incorporated into one or more of the carriages. DMUs would introduce a new technology to the existing fleet, but would use the same type of fuel (diesel) and track infrastructure as diesel locomotive-hauled trains. Although it would be possible to integrate DMUs into the Amtrak Cascades service, DMUs would introduce new maintenance and operational requirements.

This Tier 1 FEIS/ROD assumes that either train engine technology would be suitable for the PNWRC. A preferred technology was not selected as part of the Tier 1 FEIS/ROD, but one may be selected in a Tier 2 NEPA analysis.

2.5.3 Selected Alternative Station Locations

The Selected Alternative uses the existing stations along the current Amtrak Cascades route, but improvements at the existing stations were not considered in the Tier 1 FEIS/ROD. Potential improvements to existing stations (e.g., parking facilities, multi-modal connections, gate or station improvements) may be evaluated in a Tier 2 analysis. Potential improvements to the stations at Eugene and Portland are or have been the subject of separate NEPA analyses conducted by FRA for other grants.

2.5.4 Selected Alternative Operational and Service Assumptions

Both of the Build Alternatives would include six Amtrak Cascades train round trips and one Amtrak Coast Starlight train round trip per day, as well as supplemental Thruway bus service between Portland and Eugene. Some of the current Thruway bus service is scheduled so that it connects in Portland with Amtrak Cascades trains that travel between Portland and Seattle. ODOT would incrementally replace Thruway bus service with passenger rail trips as the Selected Alternative is implemented. The new round trips between Springfield/Eugene and Portland would be scheduled to match with trains that currently start or end at Portland's Union Station.

2.6 Preliminary Mitigation Assessment and Strategy

In a Tier 1 EIS, potential impacts are identified using high-level data and analysis. For the Project, ODOT and FRA used existing information on known resources and estimated impacts with a lesser level of engineering than is used for a project-level analysis. As a result, the available information is not detailed enough to formulate specific mitigation measures. Therefore, each resource evaluation in the Tier 1 EIS includes a list of mitigation strategies that would be considered and further developed in the future as part of the Tier 2 environmental analysis (see Chapter 4 of the DEIS). Project-specific mitigation strategies for project-related impacts would be considered and implemented as necessary during subsequent Tier 2 environmental studies. If FRA funding or approval is associated with construction of the Project, FRA would require compliance with the commitments and measures described below and any additional measures as appropriate which may be developed during a Tier 2 environmental review.

Representative mitigation strategies listed in Chapter 4 of the DEIS include conceptual avoidance and minimization measures for the next phase of design, suggestions for interagency agreement documents, best management practices (BMPs), regulatory agency and tribal coordination, and further technical study requirements. These strategies are summarized in Table 2-2.

Table 2-2. Summary of Potential Interagency Agreement Documents, Best Management Practices, Regulatory Coordination and Further Study Requirements

Resource	Potential Mitigation and Best Management Practices[a]
Transportation	Future project-level mitigation measures could include, but would not be limited to, the following: • Additional signal upgrades and infrastructure improvements to decrease passenger and freight conflicts on shared track beyond the improvements incorporated into the Selected Alternative; • Additional crossing upgrades or closures to improve safety beyond those incorporated into the Selected Alternative; and/or • Implementation of a traffic management plan during construction activities to route roadway traffic away from construction zones, minimize traffic pattern disruptions, and reduce construction-related delays.
Land Use/Agricultural Lands	Future project-level mitigation measures could include, but would not be limited to, the following: • Ensuring that needed modifications that could extend beyond the existing ROW (such as new sidings) are not proposed to be located in areas where buildings are located very close to the existing roadway or railroad line; • Designing and siting modifications to avoid structures where possible and using the less constrained side of the ROW; • Complying with the Uniform Act requirements; and • Creating new crossings and alternative routes for farm uses.
Environmental Justice and Title VI of the Civil Rights Act	BMPs would be used to minimize construction effects as practicable. If effects cannot be avoided or minimized, mitigation strategies would be implemented. Specific mitigation measures are not identified as part of this Tier 1 analysis but would be identified during the project-level analysis when details on the proposed facilities and impacts are determined. These project-level analyses would pursue further outreach to and engagement with potentially affected EJ and LEP communities in order to communicate project information and potential impacts, and to discuss potential mitigation strategies, as appropriate. Tier 2 project-specific evaluations of disproportionately high and adverse impacts on EJ populations would include consultation with local governments and planning agencies and would consider minimizing barrier effects to maintain neighborhood integrity, including protected rail crossings, and improved visual quality of project facilities. In coordination with local jurisdictions, ODOT would develop and implement a traffic control plan to minimize traffic delays and periodic lane and/or access revisions during and after construction.
Social Resources	Mitigation strategies identified for the other resources (e.g., Noise and Vibration and Air Quality) would contribute to minimization and avoidance of impacts on social resources. During construction, temporary traffic control plans (including plans for transit stops, cyclists, and pedestrians) would be required to maintain needed access to destinations and provide necessary circulation within and between communities.

Resource	Potential Mitigation and Best Management Practices[a]
Economics	No mitigation is expected to be required for potential economic effects. Tier 2 environmental studies would consider and implement project-specific mitigation strategies for economic resources if impacts are identified that require mitigation.
Section 4(f) and Section 6(f) Resources	None of the alternatives considered at this Tier 1 level of NEPA analysis, including the preliminary alternatives that were considered and dismissed, would avoid all Section 4(f) resources in the Project study area. However, ODOT and FRA anticipate that: (1) the Preferred Alternative studied in the EIS could avoid most of the identified potential Section 4(f) impacts, and (2) those Section 4(f) resources that cannot be completely avoided would likely meet the criteria for a Section 4(f) *de minimis* impact finding. Subsequent project-level design efforts and Tier 2 environmental studies would more specifically identify Project impacts to Section 4(f) and Section 6(f) resources, and could result in modifications to Tier 1 conceptual infrastructure design in order to avoid and/or minimize impacts to these resources. Any mitigation provided to compensate for Section 4(f) *de minimis* impacts would be determined in association with Tier 2 environmental studies. If a specific Tier 2 passenger rail project could not avoid Land and Water Conservation Fund lands, replacement property of at least equal fair market value and of reasonably equivalent location and usefulness could be required as mitigation.
Visual and Aesthetic Quality	Future project-level mitigation measures could include, but would not be limited to, the following: • Design the most visually prominent elements (such as station buildings or elevated structures) to improve the aesthetic environment; • Employ context-sensitive design, taking into consideration regional, local and site-specific cues (such as color, texture, form and scale) in the designed appearance of bridge abutments, retaining walls, bridges, viaducts and other structures; and • Provide appropriate vegetated buffers, where space allows, to screen the tracks and trains from view by adjacent developments.
Noise and Vibration	Future project-level mitigation measures could include, but would not be limited to, the following: • Selection and use of equipment and construction techniques that produce the least noise and/or vibration; • Evaluation of the continued use of operational controls, such as the reduction of train horn noise, in compliance with the Quiet Zone requirements under FRA's whistle ban regulation in the Train Horn Rule (49 CFR 222); • Installation of noise barriers, building insulation, insulated windows and other noise buffering methods; and • Installation of ballast mats and other methods to reduce ground-borne noise and vibration.
Hazardous Materials	Avoidance, minimization and mitigation measures could include, but would not be limited to, the following: • Use of avoidance methods and procedures, including during design of engineering features, to limit and/or address conflicts with known and suspected contamination; and • Use of construction safety methods and procedures that protect human health and prevent/minimize hazardous materials releases during construction, including personal protection, workplace monitoring, and site-specific health and safety plans.

Resource	Potential Mitigation and Best Management Practices[a]
Cultural and Historic Resources	Forty-Eight (48) NRHP listed or eligible built/above-ground historic properties and eight (8) previously recorded NRHP eligible archaeological/below-ground historic properties are present in the Project study area. Cultural and historic resources would be further evaluated in Tier 2 project-specific analysis and consultation with the Oregon State Historic Preservation Office (SHPO), affected Native American Tribes, consulting parties, and other interested parties would occur as necessary regarding appropriate avoidance or mitigation measures. If a finding of adverse effect is made as part of any subsequent Tier 2 analysis, the product of Section 106 consultation would be a Memorandum of Agreement (MOA), as stipulated in 36 CFR 800.6(c). The MOA would include stipulations that specify measures to be implemented by ODOT, or other responsible party identified in the MOA, that would avoid, minimize or mitigate the adverse effects to historic properties. Avoidance measures for below-ground historic properties could include work stoppage if ground-disturbing activities encounter human remains or archaeological materials during construction. If this occurs, the affected area would be secured and ODOT would contact FRA, Oregon SHPO and the applicable county coroner. Mitigation measures for adverse effects could include redesigning aspects of individual Tier 2 projects, development and implementation of construction protection plans, relocation of historic buildings, recordation of buildings and structures, data recovery of archaeological sites, and/or alternative mitigation strategies.
Geology and Soils	Mitigation measures during construction would likely be required for the project design criteria to be met where unstable slopes, liquefiable soils, and/or compressible soils are present within the construction area. Mitigation measures could include retaining walls, slope re-grading, deep foundations, foundations designed to resist landslide-induced lateral loads, surcharge fills, ground improvement, rock bolts and other measures. Rock tunneling could be an approach to avoid unstable slopes and rockfall from the cliffs on both sides of the Willamette River through West Linn and Oregon City.

Biological Resources	Mitigation measures for impacts to biological resources would follow a hierarchy of avoidance, minimization and compensation for impacts. Future project-level mitigation measures could include, but would not be limited to, the following actions:
	
	• Impacts to biological resources could be avoided or minimized during design by:
	  ○ Locating new tracks, sidings and other facilities away from known occurrences of listed species and critical habitats, and wetlands;
	  ○ Minimizing rail alignment impact areas with retaining walls instead of fill placement (these walls would need to be designed to minimize barrier effects); and
	  ○ Minimizing construction staging areas by utilizing the rail bed itself for staging.
	• The Project could maintain the preconstruction hydrologic regime of the area, creating replacement wildlife habitat and rehabilitating existing nearby habitat, and improving water quality.
	• The Project could mitigate for construction activities by revegetating disturbed areas.
	• For wildlife crossings within wildlife linkage areas, careful design and placement of culverts and bridges could be incorporated to include wildlife passage features. Furthermore, rail bed embankments alongside other ROWs are potential ecological corridors that could be used for providing connectivity between habitats. Existing rail corridor infrastructure that could be retrofitted to provide hydrological and ecological connectivity (i.e., using oversized bottomless culverts, underpasses, overpasses or specific smaller structures allowing for connectivity and species passage) may be used.
	• Potential direct impacts on streams and aquatic habitat would be associated with work in the water for stream crossings; this includes pile driving, culvert installation and placement of bridge-abutment footings. One potential strategy to avoid direct impacts to biological resources from this type of work would be to build crossings as full-span bridges; the engineering feasibility of this approach could be assessed in subsequent design efforts and Tier 2

Resource	Potential Mitigation and Best Management Practices[a]
	environmental studies. Mitigation strategies for unavoidable in-water construction activities would include BMPs for erosion and sediment control, spill prevention and pollution control measures, and seasonal work restrictions. • BMPs for the protection of migratory birds are to avoid disturbance between February 1 and July 31, when birds are nesting and rearing their young. If disturbance is anticipated during those months, conduct activities to prevent nesting prior to February 1.
Floodplain	Future project-level mitigation measures could include, but would not be limited to, the following actions: • Potential long-term and construction-period floodplain impacts could be avoided or minimized by use of appropriate BMPs during any future design and construction phases. Examples of potential BMPs that may be explored include: locating the station facility outside of a flood zone, elevating structures and utilities, and providing flood openings in new construction. Where no reasonable alternative location outside of a flood zone is available for a new station, designing the facilities to be flood-resistant may be an option. • Prior to construction, as specific unavoidable impacts are recognized, preferential mitigation measures and potential Federal Emergency Management Agency map revisions could be identified as project commitments. Other potential construction BMPs applicable to water quality/surface water/stormwater, and wetlands and waterways (and including such resources within floodplains) are listed in Section 4.14.6 of the Tier 1 EIS.
Water Quality/Surface Water/Stormwater	Future project-level mitigation measures could include, but would not be limited to, the following actions: • Mitigation would be required for treatment of stormwater from all new and redeveloped impervious surfaces within the specific project. Stormwater runoff from new impervious areas would require permits from local jurisdictions in addition to Oregon Department of Environmental Quality. Stormwater management would be required to meet all Federal and State requirements at the time of construction, including conditions from the Biological Opinion. • Erosion prevention and sediment control (EPSC) would be implemented prior to construction. The Project would need to have approved erosion and sediment control plans before the start of any construction. EPSC measures could include sediment fences and wattles for disturbed areas, inlet protection for storm systems, prevention of construction equipment leakage, gravel construction entrances, wheel washes and vegetative cover of disturbed areas. An in-water work plan would be required, where appropriate. The contractor would also be required to maintain a spill control kit to be used in case of a material spill. • Although construction impacts to water quality could occur as a result of soil erosion, sedimentation and potential construction pollutant loading of stormwater runoff, they would be temporary. Such impacts would cease after construction was completed. However, the prevention or minimization of construction and long-term pollution would be accomplished by use of appropriate stormwater BMPs, in accordance with State and Federal water quality runoff treatment and flow control requirements. Potential BMPs could include the following: • Prepare and follow a Temporary Erosion and Sediment Control Plan to minimize potential erosion, surface water runoff and dust generation. • Prepare and implement an approved Spill Prevention, Control, and Countermeasures Plan during construction that would address construction activities related to equipment fueling and maintenance, including types of hydraulic fluids used, emergency spill containment procedures and spill containment materials. • Prepare and implement a construction Stormwater Pollution Prevention Plan to minimize sediment, spills and dust from escaping the site. • Remove sediment prior to any stormwater runoff leaving the site using appropriate BMPs. • Handle and dispose of all on-site pollutants, including waste materials and demolition debris in accordance with sound practice to avoid contamination of stormwater.

Resource	Potential Mitigation and Best Management Practices[a]
	• Remove all waste oils and machinery fluids off-site when they are generated, and do not store any waste oils or fluids on-site. • Apply chemicals such as fertilizers and pesticides in accordance with sound practices to avoid loss of chemicals to stormwater runoff. • Provide separate handling of highly turbid stormwater and contaminated wastewater. • Maintain proper surface drainage to avoid unnecessary ponding. • Discharge drain flow back into affected areas, including wetlands, if it is necessary to install seepage drains for fill embankments. • Stabilize disturbed areas with native grass and plant species following construction. • Before the start of construction, identify on-track vehicle machinery/maintenance, fueling locations, work staging and construction material stockpile areas, and develop in upland locations. • Provide secondary containment equal to 150% of storage capacity for any on-site fuel storage. • Cover and stabilize disturbed soil areas so they would not remain open to become a possible source of off-site sediment pollution (i.e., stormwater runoff or construction dust) for more than 7 days. • Clearly mark clearing/grading limits with stakes/flagging or high visibility orange sediment fencing. • Contain and regularly manage construction waste. • Place and regularly maintain portable toilet facilities in the construction areas. • Provide and implement wheel washing to remove particulate matter that vehicles would otherwise carry off-site. • Remove particulate matter (mud and windblown dust) deposited on paved roadways.
Wetlands and Waterways	Wetland mitigation estimates are presented in the DEIS in Table 4.15-5, with the range of 16-129 acres for the Preferred Alternative. There is roughly an order-of-magnitude difference between the low and high estimates for the Preferred Alternative. In part, this is because a large amount of hydric soil occurs within the study area, and there is a high degree of uncertainty as to whether these hydric soils areas contain wetlands. The range in estimates is also large because the type of mitigation is unknown. The State of Oregon has finalized a new approach to compensatory mitigation, call the Aquatic Resources Mitigation Framework. This new approach to compensating for wetland and stream losses will be collaboratively implemented by the Oregon Department of State Lands (DSL), US Army Corps of Engineers-Portland District and the US EPA. Future projects requiring permits from the Oregon DSL or the Corps will be expected to conform to the State's new mitigation standards. It is likely that the Preferred Alternative would be implemented incrementally, and this should be factored into the overall mitigation strategy, whether using mitigation banks, project-specific mitigation or a combination of the two. Ultimately, the preferred solution for mitigation could be a combination of using wetland mitigation banks and project-specific mitigation.
Air Quality	Construction contractors would have to meet applicable standards and BMPs, such as those listed in Section 4.14.6 of the Tier 1 EIS and potential additional BMPs for air quality including: • Spraying haul roads with water to reduce dust and particulate matter emissions; • Maintaining construction equipment with required pollution-control devices; • Limit equipment idling to the extent practicable; and • Restricting burning.

Resource	Potential Mitigation and Best Management Practices[a]
Energy	No mitigation for operational energy use is currently proposed. The Project could be vulnerable to future effects related to climate change based on projections of increased storm intensity and duration, increased flood risks and increased risk of landslides. FRA and ODOT acknowledge that the future climate change effects could alter the function, sizing and operations of proposed Project infrastructure. For the proposed facilities to function as intended for their planned life spans, ODOT would design the proposed facilities to perform under the variable conditions expected as a result of climate change. For example, drainage culverts might need to be sized larger than warranted by existing conditions to accommodate more intense rainfall events and increased seasonal flows of surface water. Subsequent Tier 2 environmental studies would consider and implement climate change adaptation strategies, as appropriate.

[a] For each of the environmental resources considered in the EIS, Project-specific mitigation strategies for identified impacts would be considered and implemented as necessary during subsequent Tier 2 environmental studies.

2.7 Environmentally Preferable Alternative

The CEQ NEPA implementing regulations require federal agencies to identify the alternative or alternatives considered to be environmentally preferable, which is defined as "the alternative that will promote the national environmental policy as expressed in the NEPA, Section 101" (40 CFR 1505.2). Thus the "environmentally preferable alternative" means the alternative that causes the least damage to the physical environment; it also means the alternative that best protects, preserves and enhances historic, cultural and natural resources.

FRA considered the Build Alternatives, as well as the No Action Alternative, and weighed and balanced the environmental effects of each alternative. Based on the analyses documented in the Tier 1 Draft EIS and Final EIS, FRA determined that the adverse environmental impacts associated with the Selected Alternative would be less than those associated with Alternative 2, and benefits to ridership and communities would be higher. The Selected Alternative would rely on existing railroad right-of-way for much of the route between Eugene and Portland, with focused rail infrastructure improvements in expanded right-of-way where needed. Compared to Alternative 2, which would require a largely new route for the entire alignment, the Selected Alternative would require less property acquisition and construction activity, resulting in fewer impacts to many resources, including farmland, protected species and their habitats, wetlands and waterways, and land use, and fewer potential residential displacements and access disruptions. The No Action Alternative would not meet the Project's Purpose and Need, nor would it result in the benefits associated with the Selected Alternative, such as reduced air quality emissions, reduced energy consumption, and improved travel options and reliability.

FRA has determined that the Selected Alternative would result in the least overall impacts to the human and natural environment, while meeting the Purpose and Need of the Project, and is therefore environmentally preferable.

2.8 FRA Decision

Based on the consideration of the information presented in the DEIS and this combined FEIS and ROD, FRA selects Alternative 1 (the Preferred Alternative as presented in the DEIS and FEIS, and as described in the above sections of this ROD). Currently, there is no FRA funding or approval associated with advancing the Project toward or through final design or construction.

Having carefully considered the environmental record noted above, the mitigation strategies described herein, the written and oral comments offered by agencies and the public on this record, and the written responses to the comments, FRA has determined that the Selected Alternative represents the best option for the Project and includes all practicable measures to minimize harm to the environment. With this Record of Decision, FRA selects Alternative 1.

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