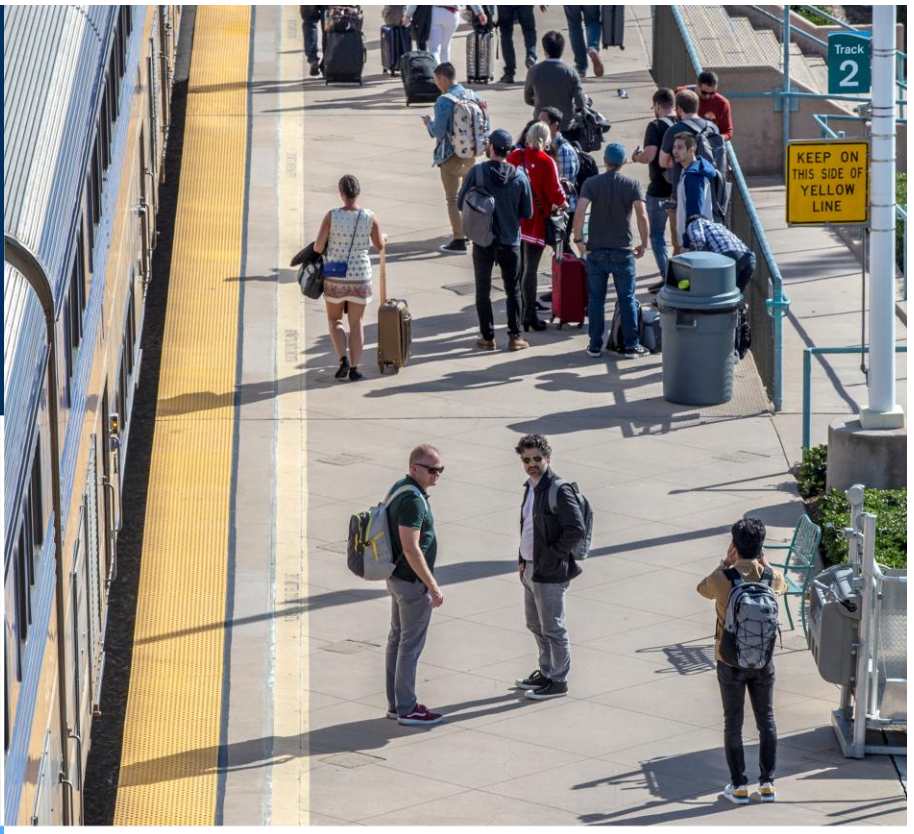

LET'S RIDE
TREASURE VALLEY

Planning and Environmental Linkages Study Report

Community Planning Association of Southwest Idaho (COMPASS)

January 2026

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Acronyms and Abbreviations

Acronym	Definition
BAT	business access and transit
BRT	bus rapid transit
BUILD	Better Utilizing Investments to Leverage Development
BVRR	Boise Valley Railroad
CAAA	Clean Air Act and amendments
CIG	Capital Investment Grant
CIM 2050	*Communities in Motion 2050*
COMPASS	Community Planning Association of Southwest Idaho
CRISI	Consolidated Rail Infrastructure and Safety Investments
CWG	community working group
EIS	environmental impact statement
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
I-84/I-184	Interstate 84/Interstate 184
ITD	Idaho Transportation Department
LRT	light rail transit
NHPA	National Historic Preservation Act
NOI	notice of intent
P3	public-private partnership
PDB	progressive design-build
PEL	planning and environmental linkages
ROW	right-of-way
RTAC	Regional Transportation Advisory Committee
SAP	station-area planning
TIFIA	Transportation Infrastructure Finance and Innovation Act
TSP	transit signal priority
TWG	Technical Working Group

U.S.C.	*United States Code*
UPRR	Union Pacific Railroad
USDOT	U.S. Department of Transportation
USFWS	U.S. Fish and Wildlife Service
UTA	Utah Transit Authority
VRT	Valley Regional Transit

1 Introduction

Rapid population growth, increasing travel demand along east-west corridors, and the forecasted increase in travel time on the Interstate 84/Interstate 184 (I-84/I-184) corridor prompted the Community Planning Association of Southwest Idaho (COMPASS) and its member agencies to initiate the Let's Ride Treasure Valley Study (Study). COMPASS serves as the Metropolitan Planning Organization for Ada and Canyon counties. Consistent with the vision and goals outlined in the region's long-range transportation plan, *Communities in Motion 2050* (CIM 2050) (COMPASS 2022), this Study examines a future high-capacity transit connection east to west, south of the Boise River, across Ada and Canyon Counties, Idaho, (locally referred to as the "Treasure Valley"). In combination with land use planning and policies pursued by local jurisdictions, high-capacity transit solutions evaluated in this Study are intended to support the goals and objectives of CIM 2050, as well as other relevant local and regional plans.

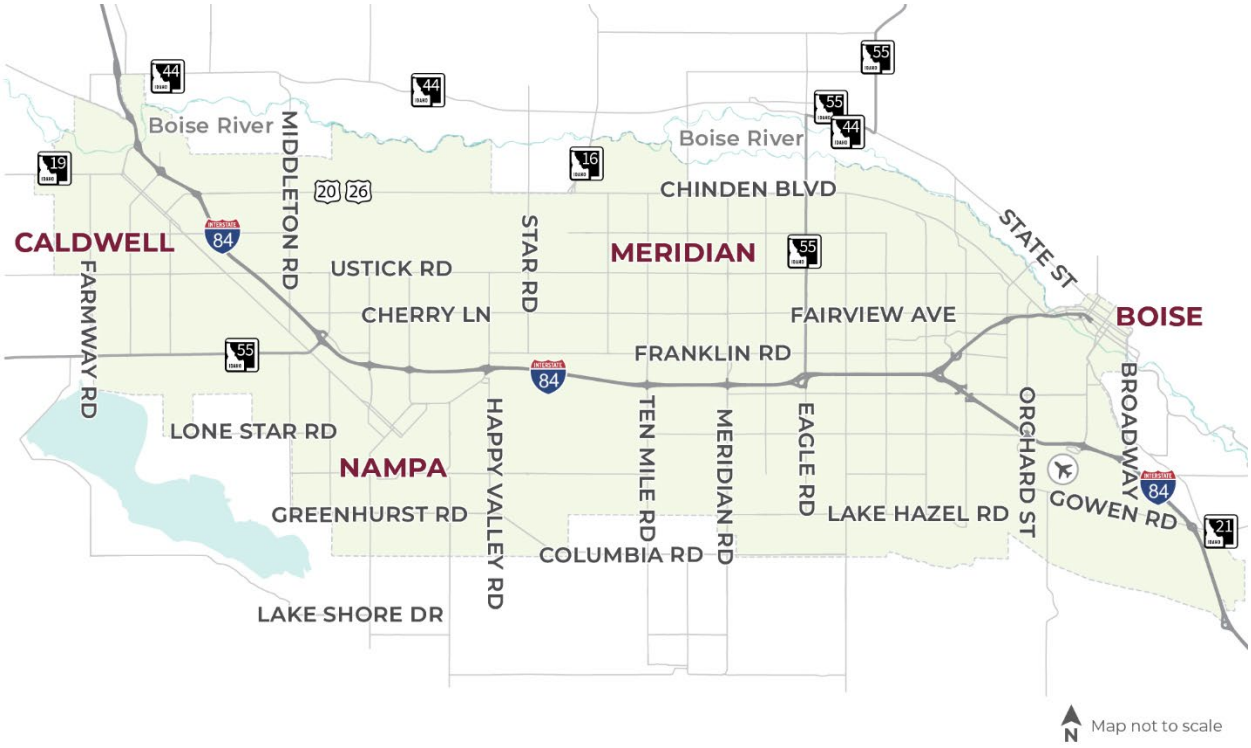
This Study was conducted using a Planning and Environmental Linkages (PEL) approach consistent with Title 23 of *United States Code* (U.S.C.) Section 168, Integration of Planning and Environmental Review. This approach uses the information, analysis, and products developed during planning to inform the environmental review process, which can shorten the time required to take projects from planning to implementation. This PEL Study marks a formal (but early) step in the federal environmental process to begin to position a potential future project for federal transit funding. The lead federal agency for this PEL Study is the Federal Transit Administration (FTA).

Planning decisions from this PEL Study can be adopted or incorporated by reference during a future National Environmental Policy Act (NEPA) phase provided all conditions in 23 U.S.C. 168(d) are met. These decisions may include the travel corridor or mode choice, purpose and need, preliminary evaluation of alternatives and elimination of unreasonable alternatives, description of the environmental setting, methodologies for analysis, and identification of programmatic level mitigation. FTA has reviewed this PEL Study and its letter of acceptance is provided in Appendix A along with the PEL questionnaire.

1.1 PEL Study Area

The study area encompasses portions of Ada and Canyon Counties in southwestern Idaho, spanning approximately 25 miles between the cities of Boise and Caldwell, south of the Boise River. Along with the cities of Meridian and Nampa, also in the study area, these communities comprise four of the five largest cities in the state of Idaho. Figure 1-1 displays the study area, which captures the major east-west transportation corridors connecting the metropolitan region, including I-84/I-184, US Highway 20/26 (US 20/26, or Chinden Boulevard), and arterial corridors such as Fairview Avenue and Cherry Lane. The limits of the study area were determined by these major transportation corridors as well as COMPASS-defined demographic areas called Transportation Analysis Zones.

Figure 1-1. Study Area



Source: COMPASS, Study Team

1.2 Study Area Planning Context

Planning for high-capacity transit within the Treasure Valley region has been occurring for more than two decades. This PEL Study builds on these planning efforts, including local and regional planning, prior high-capacity transit studies, and associated public outreach results. These planning efforts

and the prior public input regarding high-capacity transit were reviewed to understand the planning context of the study area and inform development of the purpose and need for this project.

1.2.1 Prior Treasure Valley High-Capacity Transit Studies

The *Treasure Valley High Capacity Transit Study Priority Corridor Phase 1 Alternatives Analysis* (COMPASS 2009) developed an initial purpose and need and evaluated a range of corridors and modes for high-capacity transit in the Treasure Valley. The *Treasure Valley High Capacity Transit Study 2020 Update* (COMPASS 2020) documents updates to the alternatives analysis, including a refined purpose and need and current (2019) and projected (2040) demographics and travel demand. The range of alternatives explored in this study was expanded to include additional corridors. The recommendations from the 2009 study were refined but still included multiple corridors and modes. Trends that point to the need for high-capacity transit identified in both studies included population and employment growth, deteriorating transportation performance, change in work trip patterns, and growth in downtown Boise. Both efforts involved coordination with staff from COMPASS member agencies, including Ada County, Canyon County, City of Boise, City of Caldwell, City of Eagle, City of Garden City, City of Meridian, City of Middleton, City of Nampa, Boise State University, Idaho Transportation Department (ITD), and Valley Regional Transit (VRT).

1.2.2 *Communities in Motion 2050*

CIM 2050 (COMPASS 2022) is the regional long-range transportation plan for Ada and Canyon Counties. The plan sets regional goals, identifies investment needs for all transportation modes, and includes strategies for managing congestion and achieving identified goals. Based on the results of the prior Treasure Valley high-capacity transit studies, CIM 2050 envisions high-capacity transit between the cities of Boise and Caldwell and includes an east-west high-capacity transit system (regional rail) in the list of unfunded public transportation projects. High-capacity transit is an integral part of achieving the goals and objectives outlined in the regional plan. Specific objectives from the plan that high-capacity transit would strongly support include the following:

- Access and mobility for all users.
- High connectivity that preserves capacity of the regional system and encourages walk and bike trips.
- A reliable transportation system with consistent travel times.

The plan included three public surveys between 2019 and 2021 that together received more than 18,500 responses. The third survey solicited public input on destinations, preferences, and tradeoffs regarding high-capacity transit service. This PEL Study highlights four key takeaways from this survey:

- Willingness to use high-capacity transit if it meets needs.
- Service must be convenient, frequent, and reliable with ample and well-placed /stations.
- Support for investment in a quality system, even at a higher cost.
- Would primarily be used for work, school, or a night out.

1.2.3 Comprehensive Plans

The following plans were referenced to identify community goals and objectives relevant to this PEL Study.

- ***Blueprint Boise (City of Boise 2011).*** This plan seeks to ensure "…future growth is supportive of mass transit (e.g., density in appropriate locations, pedestrian-oriented design, public spaces)…" and supports completion of the "Treasure Valley High Capacity Transit Study that will identify service options for the downtown streetcar system, the Downtown location of a multimodal center, and the options for regional travel to Downtown Boise."
- ***City of Meridian Comprehensive Plan (City of Meridian 2019).*** This plan identifies future transit stations along I-84 at Ten Mile Road and along the Boise Cutoff alignment at Ten Mile Road, Meridian Road, and Eagle Road. The plan states that these designations are "used for areas where transit supported uses are envisioned along the railroad and other predefined corridors… [T]he City seeks projects that incorporate features which enhance alternative transportation and are transit friendly."
- ***Nampa 2040 (City of Nampa 2023).*** This plan includes mixed-use land use designations intended to be "transit friendly" and notes an "emphasis on transit-oriented development and conservation of open space and agricultural land."

- ***Caldwell Comprehensive Plan, Guiding Growth, Embracing Tomorrow (City of Caldwell 2025)***. The planning process resulted in a general goal to encourage the use and expansion of public transit and more specifically to:
  - "Foster partnerships with regional transit agencies to improve commuting options, maximize ridership, and integrate Caldwell into the broader regional transportation network."
  - "Support high capacity transit connections from Caldwell through the region."
  - "Support higher density residential development near downtown, commercial centers, mixed-use areas, and along transit corridors."

1.3 Study Area Conditions

Existing and future land use, demographics, and travel conditions in the study area were assessed to build on previous high-capacity transit planning and establish the foundation on which to build this PEL Study. This section summarizes the assessment documented in the *Existing and Future Conditions Final Report* available in Appendix B. Consistent with the CIM 2050 (COMPASS 2022) long-range transportation plan for the Treasure Valley, the planning horizon year for this PEL Study is 2050.

1.3.1 Land Use

Current land use in the study area is primarily residential, as shown on Figure 1-2. A wide swath of agricultural land lies in the center of the study area between Caldwell, Nampa, and Meridian. Commercial areas are at the city centers and line many of the major roadways. Industrial areas are primarily near the Boise Airport and along I-84 near Caldwell and Nampa.

Land use plans indicate that the study area will continue to develop in the future, as shown on Figure 1-3. The existing agricultural areas are planned to become largely residential. Commercial areas and mixed-use areas are planned to grow in downtown areas and along major roadways and develop in new locations. Industrial areas will largely remain as they are today, except for a planned increase in industrial (conversion from public lands) in the southeast corner of the study area around Gowen Road and north of Nampa.

Figure 1-2. Current Land Use

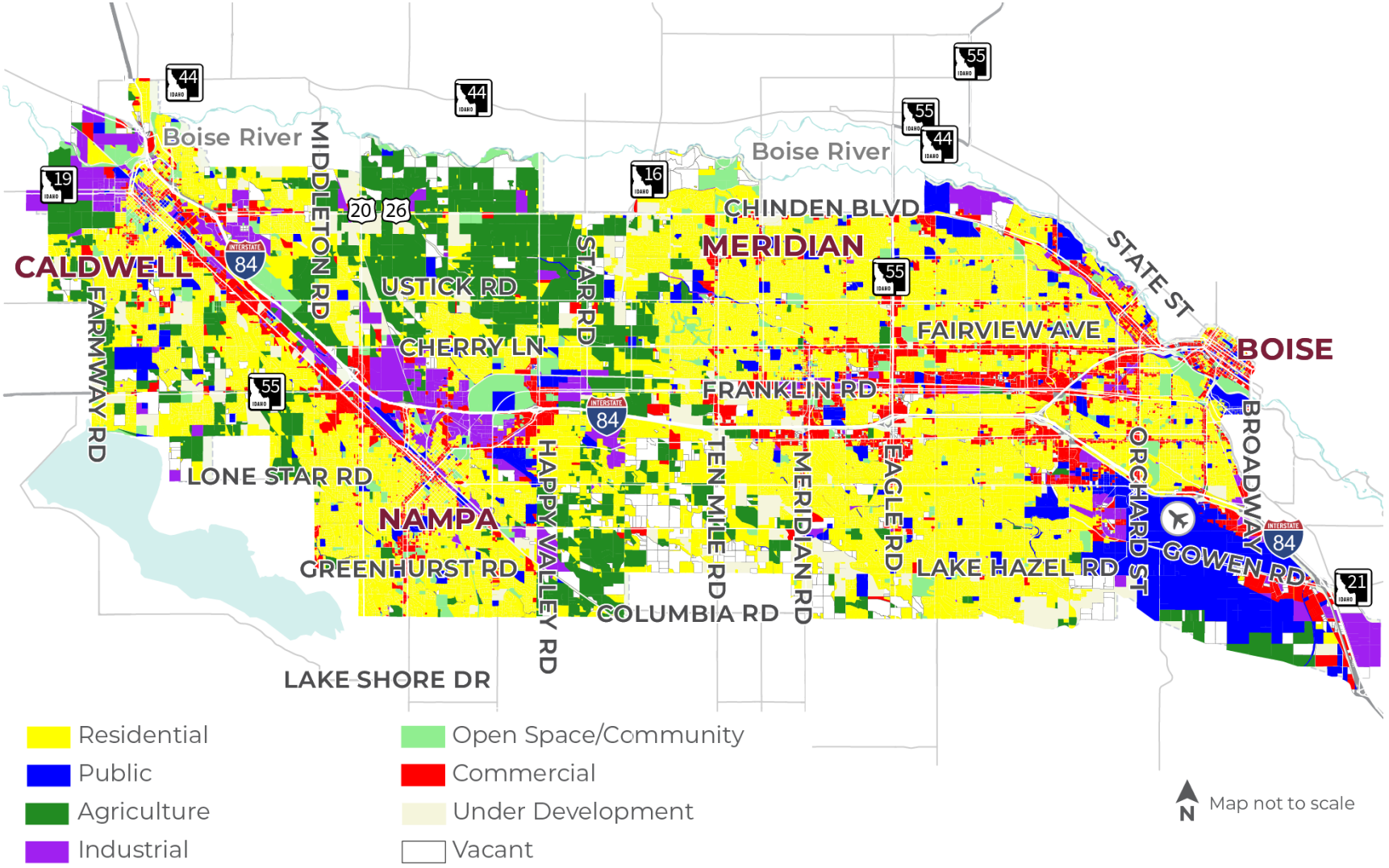
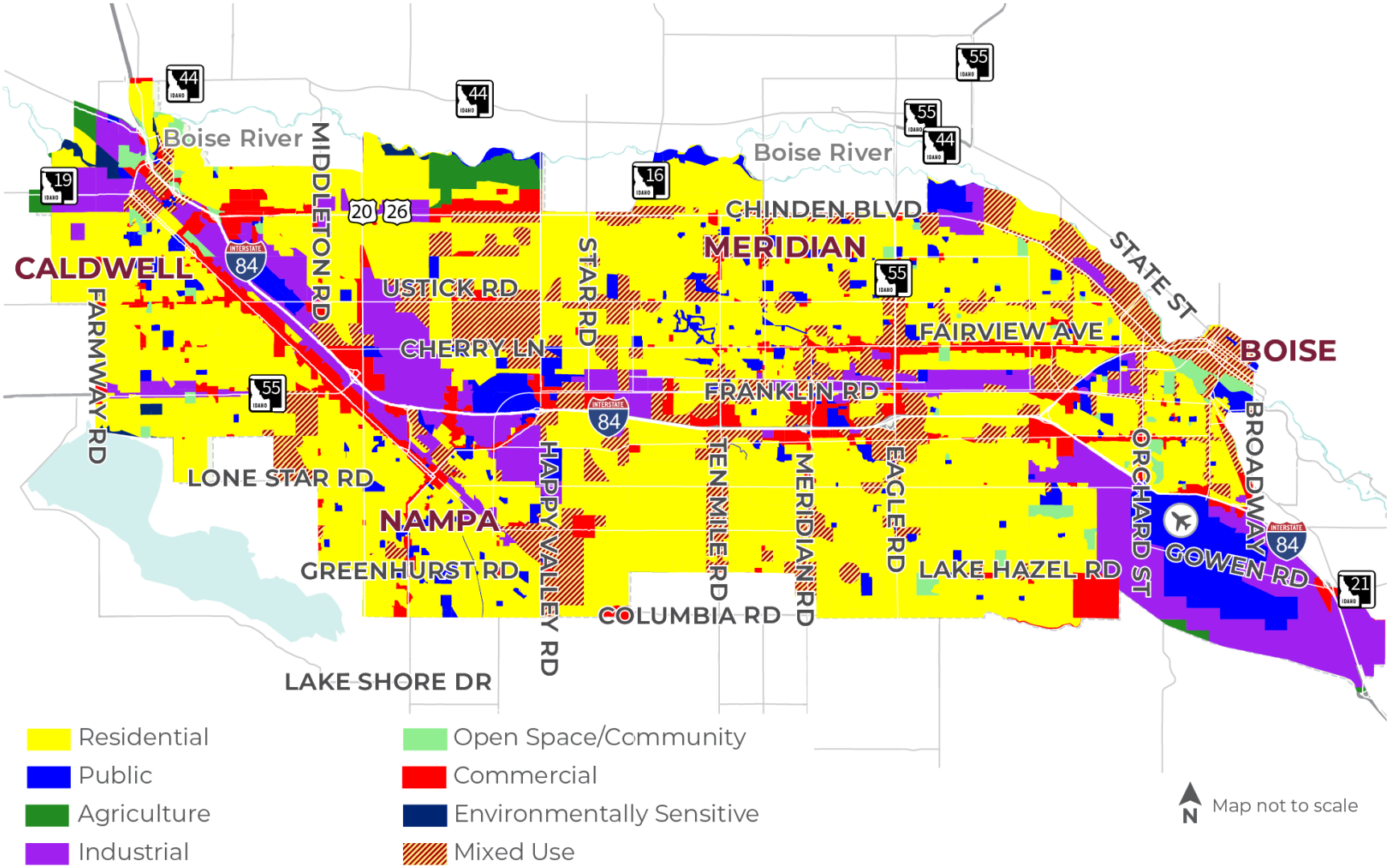


Figure 1-3. Future Land Use



1.3.2 Population and Employment

Population Trends

Between 2000 and 2023, Canyon County's population increased approximately 95% to 257,000 residents, and Ada County's population increased approximately 81% to more than 545,000 residents. The region is projected to continue growing, and between 2023 and 2050, Canyon County's population is projected to increase another 40% to approximately 359,000 residents, and Ada County's population is projected to increase another 35% to 733,000 residents.

The major cities in the study area will experience substantial growth. Nearly 66% of the region's residents live in the portions of the study area within the city limits of Boise, Meridian, Nampa, and Caldwell. The portions of these cities within the study area are forecasted to absorb 54% of the region's growth between 2023 and 2050 and contain 63% of the region's population by 2050. Downtown Boise itself is forecasted to see a 63% increase in population from 2023 to 2050.

Employment Trends

Growth in jobs is projected to exceed the growth rate of the population within the study area. Between 2023 and 2050, employment is projected to grow from approximately 261,000 jobs to 372,000 jobs (a 43% increase in 27 years). These forecasts are based on land use jurisdictions' most current land use plans. This indicates that some new jobs will be filled by residents commuting from outside the study area.

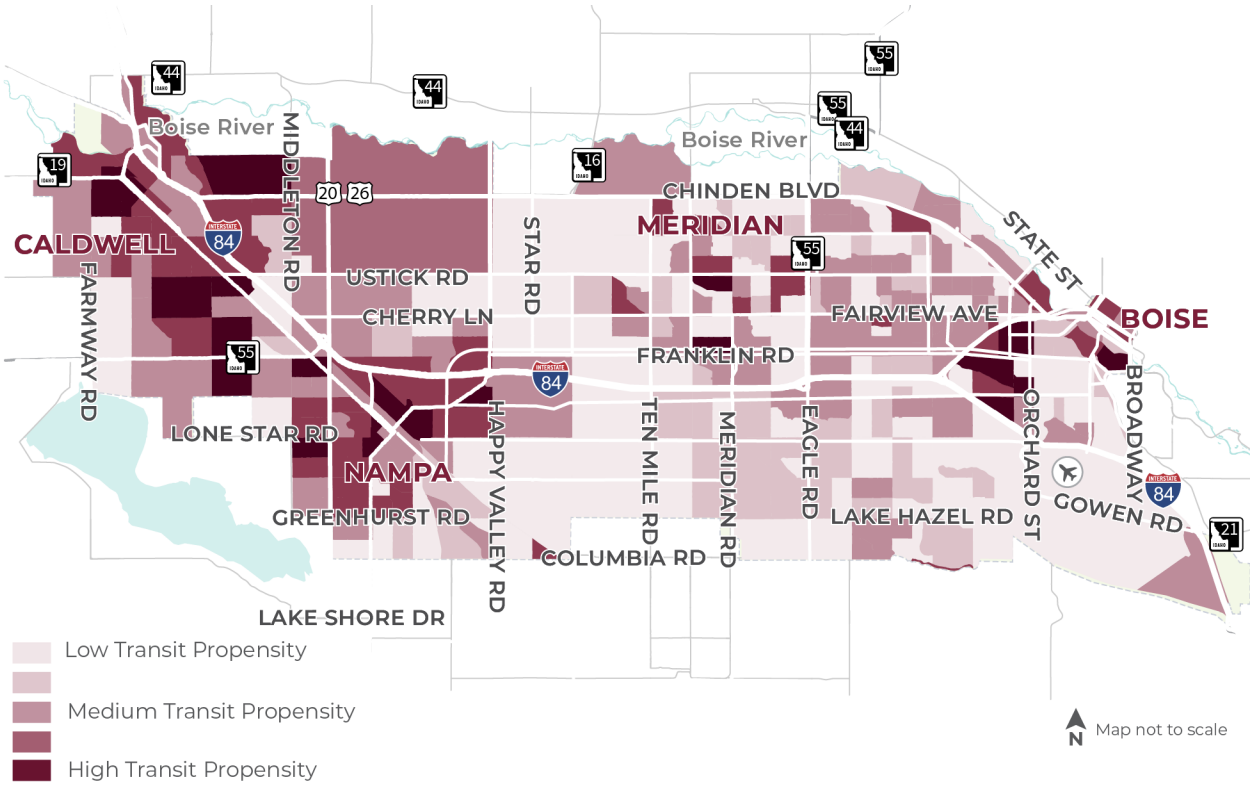
In 2023, more than 79% of the region's jobs were in the city areas of Boise, Meridian, Nampa, and Caldwell. Between 2023 and 2050, it is projected that approximately 70% of the region's job growth will be concentrated in these city areas. The study area is projected to account for approximately 372,000 jobs, which is more than 78% of the region's projected 475,000 total jobs by 2050, and 98% of the study area's employment growth will be concentrated within the city areas of Boise, Meridian, Nampa, and Caldwell.

Downtown Boise (within the study area) will retain its status as the major employment center, making up 16% of the total jobs within the study area and 12% of the jobs in the two-county region in 2050. Downtown Boise is forecast to experience a 39% increase in employment between 2023 and 2050, and will continue to be the major business, governmental, cultural, and educational center for southwest Idaho.

1.3.3 Areas of Potentially High Transit Use

Areas of potentially high transit use were identified based on socioeconomic conditions, including population, employment, minorities, poverty, disabled persons, zero-automobile households, youth (less than age 18), and seniors (more than age 65). Each census block group within the study area was scored based on the density of each factor to generate an overall indication of which areas are more likely to use transit (Figure 1-4). The Caldwell and Nampa areas show relatively high potential for transit use, as do downtown Boise, west Boise, and some areas of north Meridian, as compared to the rest of the study area.

Figure 1-4. Potential for Transit Use



1.3.4 Transportation Network

Transit Network

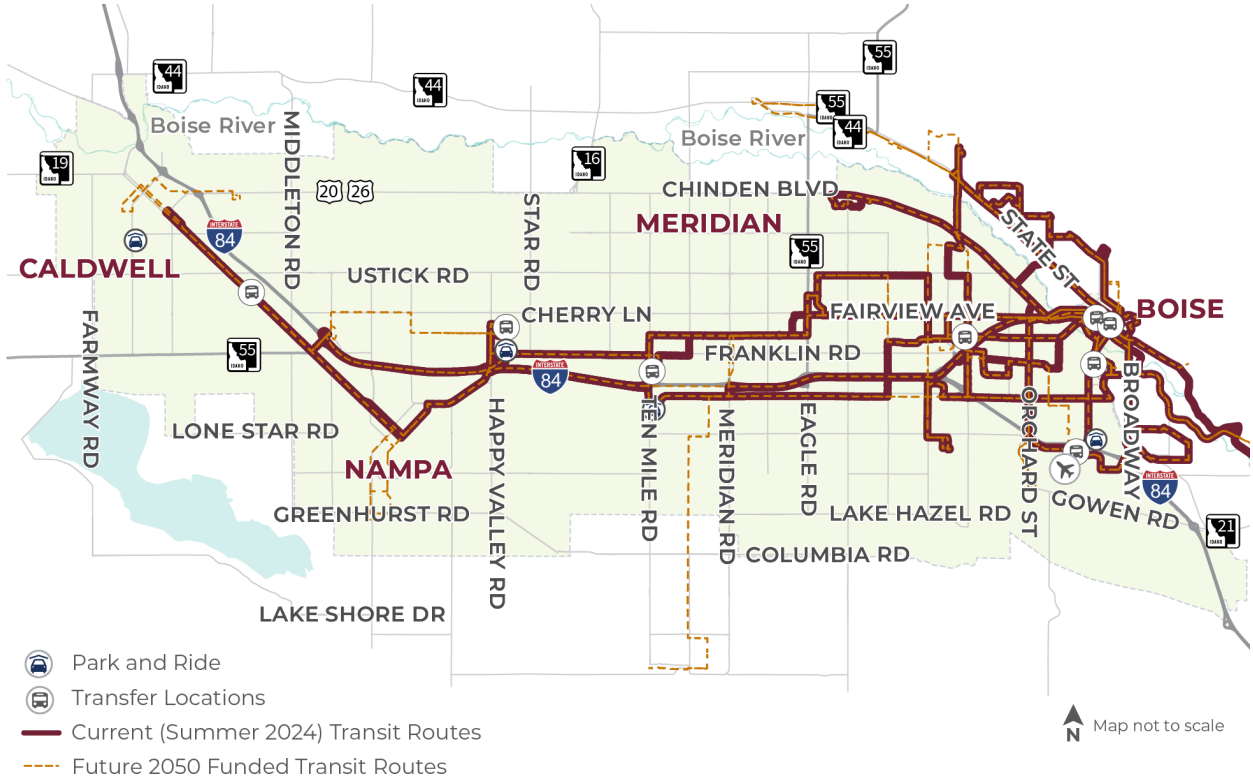
VRT is the transit agency that serves Ada and Canyon Counties. The agency operates bus service with a variety of local routes and two principal regional routes that cover the study area. Service is concentrated in the east end of the study area. VRT also maintains several transit centers and park and ride lots.

VRT's long-range funded plan will build on the existing system and expand its service with extensions of existing routes and service to communities currently unserved by transit (Figure 1-5). For example, new routes to Eagle, Kuna, and south Nampa are planned.

Other transit or commuter services within the study area include the following:

- Ada County Highway District Commuteride provides commuter services, including vanpools and carpool options.
- Treasure Valley Transit, Inc. provides non-emergency medical transportation services.
- Metro Community Services provides transportation to those 60 years of age or older with disabilities in Canyon County.

Figure 1-5. Current and Future Transit Network



Freight Rail Network

The study area is served by three freight rail lines: an embargoed rail line entering Boise from the southeast, which is a track closed to rail traffic for safety, maintenance, or economic reasons; the Boise Cutoff line of the Boise Valley Railroad between Boise and Nampa; and the Union Pacific Railroad (UPRR) between Nampa and Caldwell (USDOT 2025).

Characteristics of these rail lines are provided in Table 1-1. Figure 1-6 shows a map of the freight rail lines within the study area.

Table 1-1. Freight Rail Lines in the Study Area

Name	Owner	Classification	At-grade Crossings in Study Area
Embargoed Rail Line	City of Boise	Inactive line	1
Boise Cutoff	Boise Valley Railroad (Watco Company)	Class III short line	27
UPRR	UPRR	Mainline	12

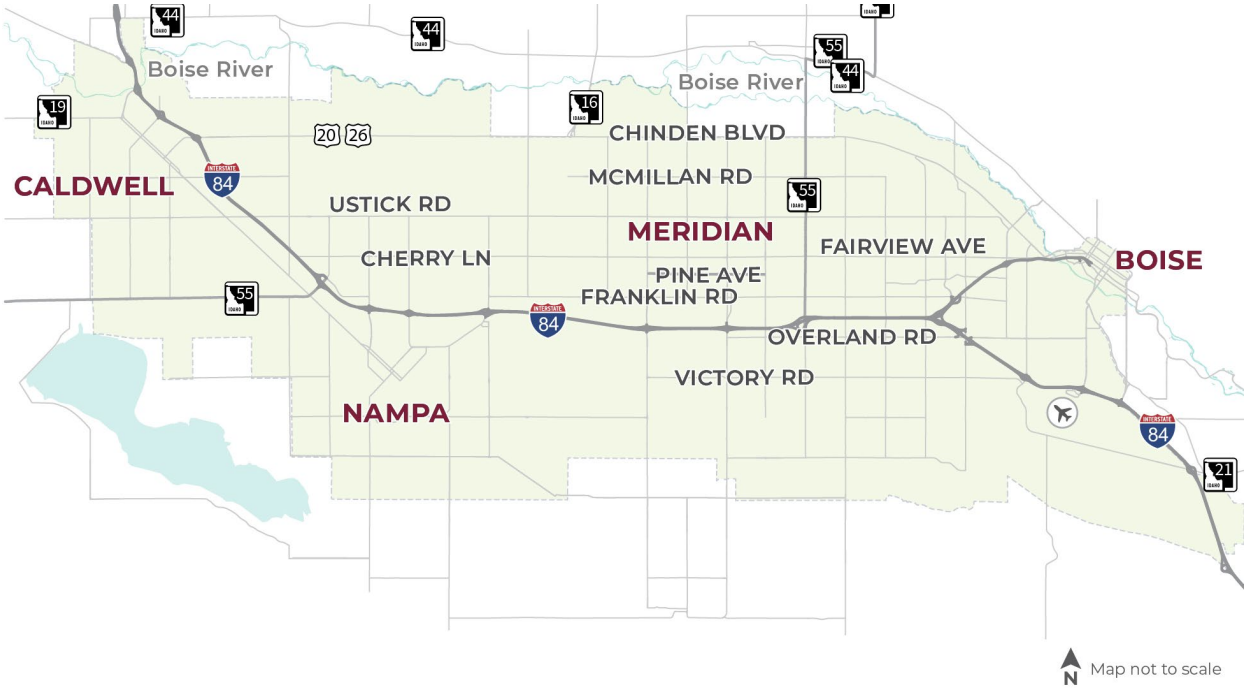
Sources: USDOT 2025; Google Maps

Figure 1-6. Freight Rail Lines

Roadway Network

East-west travel in the study area is primarily served by I-84, US 20/26 (Chinden Boulevard), and four arterials that span the majority of the study area: Ustick Road, Fairview Avenue/Cherry Lane, Franklin Road, and Victory Road (Figure 1-7). Additional east-west arterials serving portions of the study area include McMillan Road, Pine Avenue, and Overland Road.

Figure 1-7. Primary East-West Road Corridors



1.3.5 Travel Patterns

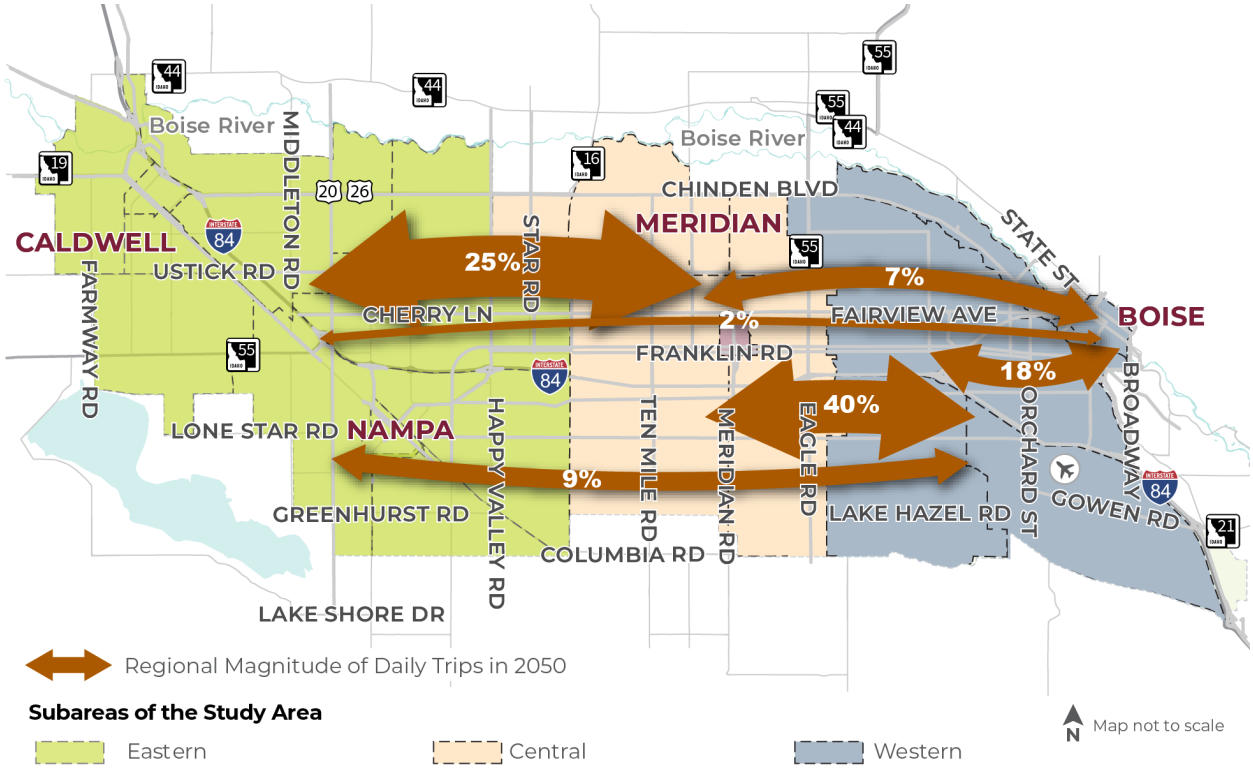
Trip Origins and Destinations

The COMPASS travel demand model shows that 27% of all east/west study area trips and 31% of east/west study area commuter trips will begin or end in downtown Boise by 2050. Most of the trips (83%) are projected to be relatively short-distance trips,[1] as shown on Figure 1-8. The other 17%[2] are longer-distance trips between downtown Boise and Meridian and between Boise and the Nampa and Caldwell areas.

[1] Subareas are defined as a grouping of traffic analysis zones that generally reflect the geographic area of the county, city, or community within the study area. The subareas were created to help understand and explain east-west travel patterns.

[2] This percentage is based on origin and destination data used in the *Existing and Future Conditions Final Report* (available in Appendix B to this report). Because trip percentages presented in that report are rounded to the nearest whole number, they do not add up to 100%.

Figure 1-8. 2050 Trip Origins and Destinations



Mode Share

According to U.S. Census Bureau data for 2015 to 2020, approximately 88% of commuters in Ada and Canyon Counties use a private vehicle to travel to work, with only 0.2% of residents indicating they travel to work using transit (U.S. Census Bureau 2020).

Travel Times

The I-84 corridor was used for a travel time analysis because it is the primary east-west travel corridor and carries a considerable portion of the east-west trips in the study area. Based on the COMPASS travel demand model, between 2023 and 2050, travel times on I-84 between 10th Avenue in Caldwell and Front/Myrtle Streets in downtown Boise are projected to increase by approximately 50% in the peak travel directions during the morning (6:00 a.m. to 9:00 a.m.) and evening (3:00 p.m. to 7:00 p.m.) commuting periods. During the eastbound morning commute, travel times are projected to increase from approximately 29 minutes to 43 minutes, and during the westbound evening commute, times are projected to increase from approximately 30 minutes to 45 minutes.

2 Purpose and Need

A purpose and need statement is used in PEL and NEPA studies to focus on the specific transportation problems to be addressed. The purpose and need statement is the foundation of the alternatives development and evaluation process, because alternatives are developed and evaluated based on their ability to meet the purpose and need. The PEL Study outcomes will include recommendations to advance alternatives that best meet the purpose and need. The purpose and need statement is not intended to address all of the regional goals and objectives identified in CIM 2050 (COMPASS 2022) and other relevant local and regional plans; it focuses on transportation problems and transportation outcomes specific to implementing high-capacity transit.

The FTA Office of Planning and Environment issued guidance that identifies the purpose, needs, and objectives as components of a purpose and need statement (FTA 2019). The purpose defines the transportation problem to be solved and "should be stated as the positive outcome that is expected." The needs "should establish the evidence that the deficiency or problem exists or will exist if projected population and planned land use growth are realized." Regarding objectives, Section 4.3 of this FTA guidance states "…FTA must include a clear statement of the objectives that the proposed action is intended to achieve in the purpose and need (23 U.S.C. § 139(f))." Objectives should be achievable and measurable and may be used to evaluate alternatives, especially for complex projects.

The purpose and need statement for high-capacity transit in the Treasure Valley is based on demographic and transportation trends in the study area, input from the public and stakeholders regarding the transportation issues in the study area, and the regional planning context summarized in Section 1.2 of this report. More information on the process undertaken to develop the purpose and need statement and the federal guidelines and requirements for establishing purpose and need are available in the *Purpose and Need Memorandum* in Appendix C. Data to substantiate the needs are documented in the *Existing and Future Conditions Report* in Appendix B.

23 U.S.C. 168, Integration of Planning and Environmental Review, identifies the purpose and need as one of the planning decisions (planning products) that can be adopted or incorporated by reference during the environmental review process. Following all conditions listed in 23 U.S.C. 168(d) allows the project

sponsor, with FTA concurrence, to carry the purpose and need sand other planning products from this PEL Study forward into a future NEPA process.

2.1 Purpose and Need Statement

The purpose of the project is to improve the mobility, accessibility, and efficiency of east-west travel between Boise, Meridian, Nampa, and Caldwell, providing reliable and convenient high-capacity transit service that links key origins and destinations with strong potential for transit use.

2.1.1 Needs

Lessen Future Stress on the Region's Transportation Infrastructure due to Population and Employment Growth

- Between 2000 and 2023, Canyon County's overall population increased approximately 95% to 257,000 residents. This is projected to increase another 40% by 2050, to approximately 359,000 residents.
- Between 2000 and 2023, Ada County's population increased 81% to over 545,000 residents. This is projected to increase another 35% by 2050, to approximately 733,000 residents.
- Today, approximately 66% of the region's residents live in portions of the study area within the cities of Boise, Meridian, Nampa, and Caldwell. Between 2023 and 2050, 54% of the region's population growth is projected in just these city areas.
- In 2023, more than 79% of the region's jobs were in the cities of Boise, Meridian, Nampa, and Caldwell. Between 2023 and 2050, it is projected that approximately 70% of the region's job growth will be concentrated in these cities.
- By 2050, study area employment is forecast to grow to approximately 372,000, accounting for 78% of the region's projected 475,000 jobs.

Provide Greater Mobility Choice Given the Region's Forecasted Deteriorating Transportation Travel Times

- Between 2023 and 2050, travel times on I-84 between Caldwell and downtown Boise are projected to increase by approximately 50% in the peak travel directions during the morning (6:00 a.m. to 9:00 a.m.) and evening (3:00 p.m. to 7:00 p.m.) commuting periods.

- For example, travel times on I-84 between Caldwell and downtown Boise during the morning and evening commutes are about 30 minutes in 2023 on a typical day. This could increase to about 45 minutes by 2050 on a typical day.[3]
- Overall travel times (transit, passenger vehicles, and freight) in the study area will continue to degrade because of increased traffic and congestion, based on forecasted 2050 travel demand.

Support the Region's East-West Travel Patterns

- Downtown Boise sits at the eastern end of the valley and additional population centers radiate to the west. The study area is bounded by the Boise River facilitating the predominant east-west travel patterns.
- The focused east-west travel patterns will persist between the region's business, governmental, cultural, and educational centers.
- Trips between the Boise and Meridian subareas are projected to account for 40% of all daily trips in 2050. Trips between the Caldwell/Nampa and Meridian subareas are projected to account for 25% of all daily trips in 2050.
- Employment will continue to concentrate in downtown Boise, with 58,000 jobs by 2050, representing approximately 12% of the region's employment.
- Many study area commute trips remain oriented to downtown Boise, forming 31% of all commuter trips by 2050.

2.1.2 Goals and Objectives

As stated in the introductory text of this section, the purpose and need must include a clear statement of achievable and measurable objectives that the proposed action is intended to achieve. These objectives, which are stated in the second column of Table 2-1, were developed by the Let's Ride Treasure Valley Team (study team) to address the transportation needs identified in the study area. The objectives are organized by a set of overarching goals for the project, listed in the first column of Table 2-1.

[3] This estimate does not account for crashes, weather-related incidents, or travel time to and from I-84.

Table 2-1. Goals and Objectives

Goals	Objectives
Improve Transit Connectivity and Mode Share	• Establish a high-capacity transit corridor connecting key regional origins and destinations with strong potential for transit use. • Maximize transit ridership.
Improve Transit Reliability	• Promote reliable and predictable travel through design, operations, and transit priority strategies. • Provide transit service with reliable operations and predictable travel times. • Minimize transit travel times between major origins and destinations. • Appropriately manage impacts to traffic operations.
Expand Travel Choices and Mobility	• Provide regional transit service. • Provide service throughout the day. • Provide efficient transit transfer opportunities for the existing and planned future bus system, active transportation, and potential park and rides. • Manage parking at key transit destinations to promote transit ridership.
Develop Compatible Plans for High-Capacity Transit, Land Use, and Transportation	• Prioritize service to areas with opportunities for transit-supportive development, growing populations, or growing employment. • Expand transportation choices to improve access to jobs, services, and resources. • Manage impacts and enhance opportunities to support freight/ goods movement.
Advance Financially Feasible Solutions	• Develop high-capacity transit solutions and promote local policies that align with federal funding criteria, including FTA Capital Investment Grants (CIG) Program, FTA regional formula funds, and U.S. Department of Transportation (USDOT) discretionary grants. • Preserve the corridor(s) identified for high-capacity transit service. • Develop high-capacity transit solutions with the potential for other funding sources. • Develop high-capacity transit solutions with the potential for phased implementation. • Maintain opportunities for future network expansion.

3 Agency Coordination and Public Engagement

The study team conducted a comprehensive outreach program to engage agencies, stakeholders, and the public in the PEL Study process. Input received was used to help formulate the purpose and need for high-capacity transit in the study area, identify the transit solutions considered in this PEL Study, and develop recommendations.

This chapter summarizes outreach activities undertaken for this PEL Study, and input received in response to this outreach. For more details, refer to Appendices D and E, which provide correspondence, meeting announcements, meeting minutes, presentations, documentation of other outreach activities, and a complete list of the stakeholders discussed in the following sections.

3.1 Agency Coordination

3.1.1 Stakeholder Survey

The study team solicited input from nearly 250 people who serve on COMPASS committees and workgroups using an online questionnaire, with questions ranging from how high-capacity transit is perceived to where service should be provided. The 52 responses received represent a wide range of viewpoints, from strong support to opposition. Stakeholder responses addressing the prospective advantages of high-capacity transit informed the goals and objectives established for this project. Common responses included managing congestion; providing better access to employment, educational facilities, events, and services; supporting economic development, providing additional mode choices and affordable transportation options; and reducing emissions.

3.1.2 Key Stakeholder Interviews

The study team conducted eight interviews with senior leadership and elected officials from the study area representing the following agencies:[4]

- Canyon County
- Ada County

[4] COMPASS also extended an invitation to leadership at ITD.

- Ada County Highway District
- City of Caldwell
- City of Nampa
- City of Meridian
- City of Boise
- VRT

Similar to the online survey responses, feedback was wide-ranging. Some agencies view high-capacity transit as a critical part of sustainable development patterns and quality of life for people in the valley. Others questioned public acceptance for high-capacity transit and the region's ability to fund it. When asked what would make high-capacity transit a success, stakeholders noted community support, corridor preservation, high ridership, managing congestion, and advancing the previous high-capacity transit plans. Areas of broad agreement included the need to identify a stable funding source outside of municipal or county budgets and prioritizing convenience and efficiency in a high-capacity transit system. A summary of the stakeholder interviews is captured in the *Social and Political Risk Assessment* included in Appendix D.

3.1.3 Technical Working Group

The Technical Working Group (TWG) included local, state, and federal agency representatives in addition to members of the existing COMPASS Public Transportation and Environmental Review Workgroups. This group convened five times throughout the course of this PEL Study, as summarized in the bullets that follow. The subset of these representatives comprising COMPASS's existing Environmental Review Workgroup also met independently on one occasion to provide input on the *Environmental Resources Report* (Appendix G), as discussed in Chapter 6.

- **Meeting 1: Visioning Workshop.** The first meeting was a visioning workshop held on March 29, 2024, during which 24 participants provided input on priority areas for high-capacity transit service, problems to be solved, and what a successful outcome would look like. Activity centers identified were similar to those identified in the *Existing and Future Conditions Final Report* (Appendix B). Topics to be addressed were identified as congestion, quality of life, access to jobs and housing, and transportation costs. Successful outcomes included intermodal connectivity, reliable and efficient service, high ridership, corridor preservation, and sustainable funding. A summary of this meeting is available in Appendix D.

- **Meeting 2: Purpose and Need.** During and after the second meeting held on May 2, 2024, TWG members collaborated on developing a purpose and need statement that includes measurable goals and objectives. When presented with a working draft of the purpose and need statement, most members responded that the statement captured the issues to be addressed very well or reasonably well. The group discussed a variety of topics, including the importance of using plain language, specificity of geographic areas to be served, and how to frame the needs most effectively. The purpose and need statement was revised following the meeting to address input from the TWG. A summary of this meeting is available in Appendix D.
- **Meeting 3: Alternatives Evaluation Process and Range of Alternatives.** The third TWG meeting provided an overview of the alternative evaluation process proposed for this PEL Study and explained how the purpose and need statement and the goals and objectives were used to develop metrics for evaluating the alternatives. The range of alternatives to be considered in the Tier 1 alternatives evaluation were also presented. No changes to the transit routes identified for Tier 1 were made based on discussion with the TWG, but the following refinements were made to the evaluation measures based on input received from participants.
  - Adjusted the Tier 2 measure for community access to services to be inclusive of private facilities, in accordance with an FTA comment.
  - Adjusted the Tier 2 measure for transit ridership to be quantitative using population and employment data, in accordance with a VRT comment.
  - Added a Tier 3 evaluation measure for community impacts and benefits, in accordance with a U.S. Environmental Protection Agency comment.
  - Adjusted the Tier 3 measure for potential ridership to use the regional travel demand model to compare ridership of alternatives, in accordance with a VRT comment.

  The study team also considered detailed comments from VRT to determine how various evaluation measures would be executed and documented. A summary of this meeting is available in Appendix D.
- **Meeting 4: Tier 1 and Tier 2 Alternatives Evaluation.** The fourth TWG meeting reviewed the results of the Tier 1 fatal flaw evaluation and discussed preliminary results of the Tier 2 comparative evaluation. The analysis and findings for each of the Tier 2 evaluation criteria were presented, along with the recommendations resulting from the analysis.

The group discussed several questions about the scope and assumptions used in the Tier 2 evaluation. A three-question poll was conducted to understand the level of TWG agreement with evaluation rationale and results. The questions were as follows:

- *Question 1 – Is the Tier 2 evaluation process logical and clear?*
  There was substantial agreement that the process was logical and clear, with 77% agreeing, 12% neutral, and 10% disagreeing. The City of Meridian expressed some concerns about the Fairview/Cherry route, suggesting that a hybrid alignment using Fairview and Franklin be considered. City of Boise echoed this concern. VRT expressed concerns about any of the arterial alignments being effective in delivering reliable, high-capacity transit service from Boise to Caldwell.
- *Question 2 – Do you generally agree with the Tier 2 evaluation advancing Fairview/Cherry, I-84/I-184, and the Boise Cutoff?*
  Most of the TWG representatives agreed with the recommendation, but support was not as strong as it was for the first question with 55% in agreement, 35% neutral, and 10% disagreeing. Concerns about advancing the Fairview/Cherry route were raised again with suggestions to explore flexibility in the arterial route.
- *Question 3 – Are you generally confident advancing to the Tier 3 analysis?*
  Agreement with advancing to Tier 3 was substantial, with 79% agreeing and 21% disagreeing.

- **Meeting 5: Tier 3 Alternatives Evaluation.** The fifth TWG meeting provided a summary of public engagement and feedback on the Tier 2 alternatives process and presented preliminary evaluation results for the Tier 3 alternatives process. The analysis and findings for each of the Tier 3 evaluation criteria were presented. The group did not discuss recommendations, because they were developed after public engagement for the Tier 3 alternatives process. The group raised and discussed several issues, such as walkability metrics for the pedestrian connectivity criteria, the nature of estimated right-of-way (ROW) impacts, and assumptions used in the preliminary cost estimates. There was concern regarding the high number of parcels affected by the Fairview/Franklin alternative, with ITD noting that even partial acquisitions of adjacent parcels can be challenging.

3.1.4 Coordination with Transportation Leadership

During the PEL Study, touchpoints with leadership included approval of the PEL Study purpose and need and the final PEL Study recommendations. For each of these milestones, the study team presented results from the technical analysis, feedback from stakeholder engagement, and recommendations to the Regional Transportation Advisory Committee (RTAC) and the COMPASS Board of Directors (referred to herein as the COMPASS Board). The RTAC and the COMPASS Board approved both the purpose and need and the final PEL Study recommendations. During the PEL Study, the study team delivered four presentations to the Executive Committee of the COMPASS Board to keep them updated on the progress of the PEL Study. The dates and topics of this coordination are provided as follows, with meeting documentation available in Appendix D.

Study Initiation and Approval of Purpose and Need

- April 9, 2024, Executive Committee Meeting – reviewed the PEL Study scope, engagement plan, and data to inform the purpose and need.
- May 22, 2024, RTAC Meeting – presented the draft purpose and need and discussed definition of city areas within the study area. The purpose and need statement was approved with minor adjustments to population and employment numbers in the description of needs.
- June 17, 2024, COMPASS Board Meeting – presented the draft purpose and need statement and discussed a number of issues, including questions about ridership potential, the ability of the existing transportation system and modes to support forecasted travel demand, and the importance of reliability in a future transit system. The purpose and need statement was approved with the word “reliability” added to the purpose and acknowledgment in the needs that the current transportation system will have limitations in meeting future travel demand.

Coordination on Alternatives Development and Screening

- September 10, 2024, Executive Committee Meeting – reviewed the purpose and need statement and Tier 1 alternatives evaluation results.
- January 14, 2025, Executive Committee Meeting – reviewed prior steps and updated the Executive Committee on progress during the Tier 2 alternatives evaluation.
- June 3, 2025, Executive Committee Meeting – reviewed the Tier 3 alternatives evaluation.

Approval of Study Recommendations

- August 6, 2025, RTAC Meeting – presented the PEL Study results and recommendations. After discussing a variety of topics, including maintenance costs, railroad outreach, eminent domain, funding, and operations, RTAC members recommended COMPASS Board approval of commuter rail along the Boise Cutoff alignment as the preliminary, locally preferred alternative.
- August 18, 2025, COMPASS Board Meeting – presented the PEL Study results and recommendations. Board members approved the recommendation of commuter rail along the Boise Cutoff alignment as the preliminary, locally preferred alternative. Approval was not unanimous, with two board members expressing concerns about moving ahead with one alternative, noting that new information or policy changes arising prior to initiation of the NEPA process could influence alternatives recommendations.

3.2 Public Engagement

Public engagement strategies sought to share information being generated throughout the PEL Study and gather meaningful input from a diverse public to promote decision making sensitive to community needs. The study team maintained a study webpage throughout the course of the PEL Study and completed three rounds of meetings.

3.2.1 Study Web Page

A web page for the Study (https://compassidaho.org/public-transportation-high-capacity-transit/) is maintained on the COMPASS website, providing background, updates on key steps, links to public engagement materials, and a link to the final PEL Study Report. The web page also provides a link to an interactive map displaying the transit routes under consideration along with demographic, land use, environmental, and transit data used in the PEL Study.

3.2.2 Community Working Group

The study team convened a group of community representatives to identify issues in the community and to function as ambassadors for sharing information about the PEL Study and encourage participation. The Community Working Group (CWG) met prior to each of the two in-person public meetings, with participants representing different business and community perspectives in the region. Detailed meeting summaries, including participant lists, are available in Appendix E, with summations provided as follows.

Meeting #1 – August 20, 2024

Prior to the first public meeting, the study team convened the CWG to explain the PEL Study process and desired outcomes and review the content of the upcoming public meeting to get feedback on the material. Sixteen representatives participated in the meeting. The CWG helped the study team to refine the content for clarity and to best address anticipated areas of public interest or concern.

Meeting #2 – January 23, 2025

The study team met again with the CWG ahead of the second public meeting to share results of the alternatives process through the Tier 2 evaluation and solicit feedback. Similar to the first meeting, the study team sought to gauge how well attendees understood the information being presented and get insights on concerns with the process or results to help refine the presentation of this information to the general public. Fourteen representatives participated in the meeting. Questions from the CWG focused on the different transit modes under consideration, potential impacts to adjacent property along the routes, impacts of changes to state and federal funding sources, anticipated construction duration, and feedback from the first public meeting. When asked if the alternatives process was logical and clear and if the right alternatives were identified to advance to the Tier 3 evaluation, all participants agreed. Participants encouraged the study team to provide multiple ways for the public to comment and indicated that the following information may be of interest to the public:

- Identify how the project would be funded.
- Explain future conditions in the study area.
- Share examples of successful high-capacity transit projects in other cities.
- Help people understand how this transit system would be different than the current bus system.

3.2.3 Public Meetings

Multiple public meetings (in person and virtual) were held across the PEL Study's three phases of engagement. Engagement Phase #1 included two in-person open houses, each held on consecutive nights in Boise and Caldwell (east and west portions of the study area). Engagement Phase #2 also included two in-person open houses, each held on consecutive nights in Meridian and Nampa. Meeting materials were available on the study website throughout the comment period for each of these phases.

Engagement Phase #3 included an online virtual meeting that allowed participants to access presentation materials on demand for a 1-month period. Each phase of engagement also included the following:

- Extensive promotion to encourage public participation.
- Online questionnaires to capture the sentiments of stakeholders to help guide the PEL Study activities and decisions.

Detailed meeting summaries are available in Appendix E with brief summations provided as follows.

Engagement Phase #1

The focus of Engagement Phase #1 was to introduce the PEL Study and solicit input on the draft purpose and need statement and the range of potential high-capacity transit routes under consideration. This phase of engagement included a public survey available in hard copy during in-person meetings on September 24 and 25, 2025, and available online from September 22 to October 11, 2024. In total, COMPASS received 341 survey responses and 26 comments via email.

Boise Open House

Overall, most survey respondents agree or mostly agree (an average of 94%) with the purpose, objectives, and route proposals. There is a strong consensus on the need for improved high-capacity transit solutions to address rapid population growth and traffic congestion in the region.

Key themes from the open-ended survey responses and emailed comments are as follows:

- Need more detailed and transparent data to support the transit proposal, including information on travel patterns, job locations, environmental impacts, and accident rates.
- Should address both east-west and north-south transit routes.
- Excitement about the possibility of high-capacity transit, specifically rail, and also recognized the political challenges and barriers ahead.

- Importance of maintaining and improving existing transit routes, including the Chinden, Ustick, Overland, and Victory routes, because they are essential connections to areas with significant population growth.
- Concerns about ensuring that transit options are accessible and affordable for all residents, particularly those who cannot drive and lower-income communities.
- Should connect to key destinations, such as the Boise Airport, Boise State University, Micron Technology (Micron) campus, parks/recreation, healthcare, and government offices.

Engagement Phase #2

The focus of the engagement Phase #2 was to seek input from the public on the Tier 2 alternatives analysis and the transit routes and modes recommended for further evaluation in Tier 3. This phase of engagement included a public survey available in hard copy during in-person meetings on February 18 and 19, 2025, and available online from February 10 to March 2, 2025. In total, COMPASS received 98 survey responses and 8 comments via email.

The survey included seven questions. A summary of responses is provided as follows:

Meridian Open House

- *Transit Modes*: Respondents to the survey mostly agreed (83%) with the transit modes proposed for advancement to the Tier 3 alternatives process, which included commuter rail and bus rapid transit (BRT) with exclusive bus lanes. Those who did not agree noted a decline in rail ridership since the mid-2000s and COVID, a general preference for light rail, and expressed that bus service in mixed traffic would be less costly and less impactful.
- *Transit Routes:* Most respondents (72%) agreed with the transit routes proposed for advancement, which included the existing rail corridor, the interstate corridor, and the Fairview Avenue/Cherry Lane corridor. Respondents also suggested including other corridors such as Chinden Boulevard, routes north of the river, north-south routes, and routes that connected to the Boise Airport and/or the Micron campus. Respondents also noted the potential to choose the best parts of arterial corridors (i.e., mixing the Fairview Avenue and Franklin Road routes).

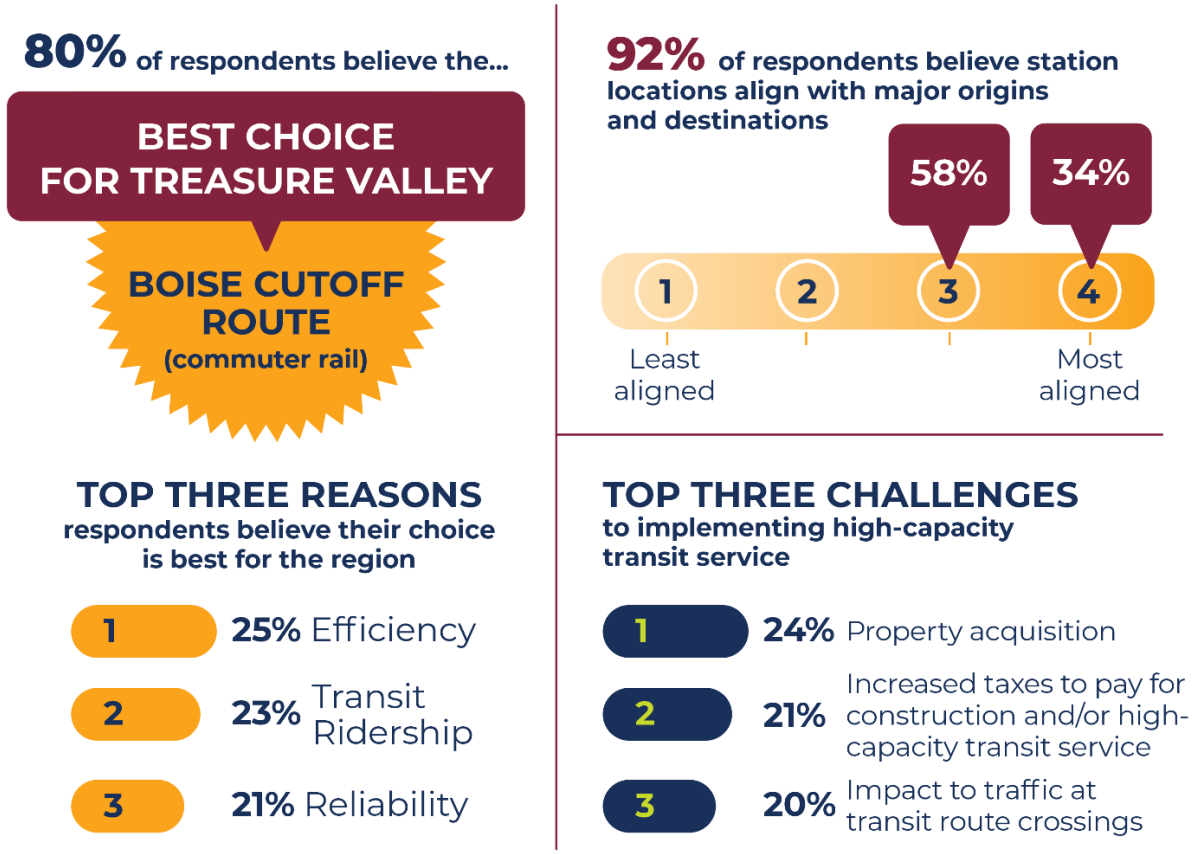
- *Transit Route/Mode Combinations*: When asked to rank the route/mode combinations, respondents preferred the Boise Cutoff Commuter Rail option, with the I-84/1-84 BRT and the Fairview Avenue/Cherry Lane BRT coming in second and third, respectively.
- *Boise Airport Connection*: Connecting to the Boise Airport was strongly favored to alleviate congestion and help solve parking issues at the airport. Of the 9% of respondents that did not believe this connection was necessary, respondents noted multiple existing modes of transportation to/from the airport and questioned if people would be willing to use transit for trips to the airport.
- *Micron Connection*: While more than half (60%) believed a connection to Micron is important to the success of the project, many respondents disagreed, noting that Micron has ample parking and is difficult to access, and they were not in favor of what they perceived to be privatized benefits from a publicly funded transit system.
- *Locations for Transit Stations*: Respondents believed the routes should connect to:
  - Boise, Nampa, Meridian, Caldwell, and other surrounding cities
  - Boise Towne Square Mall, parks, hospitals, and schools
  - Major roads and intersections
- *Other Comments/Feedback*:
  - Enthusiasm for improving transit in Treasure Valley.
  - Desire for faster, more accessible, and frequent transit options.
  - Support for buses and light rail.
  - Support for use of sustainable, fossil-free energy.
  - Need to ensure accessibility for all.
  - Need to examine infrastructure and mechanisms for bringing commuters from outlying areas to transit hubs.
  - Need to improve safety, reduce congestion, and address environmental concerns.
  - Concerns about the mode, speed, safety, crime, and funding.
  - Skepticism about the current feasibility and effectiveness of large-scale public transit in Boise.

Engagement Phase #3

The Engagement Phase #3 included a self-guided online public meeting available from June 6 to June 29, 2025. Information provided included an overview of the PEL Study, a summary of public feedback received, an explanation of the alternatives still under consideration, the results of the Tier 3 evaluation analysis, and the draft PEL Study recommendations based on the Tier 3 results. A public survey was available online during the period when the meeting was open.

A total of 1,937 people visited the site; 806 reviewed the presentation materials. COMPASS received 498 responses to the public survey. The results of the survey are summarized on Figure 3-1.

Figure 3-1. Summary of Survey Results



Support for Boise Cutoff Commuter Rail as Long-Term Solution

- Rail is seen as the highest-impact, visionary transit option for addressing congestion and future growth.
- Existing rail infrastructure and environmental benefits add to its appeal.

- There is an emphasis on the need for transit-oriented development around stations to create walkable, compact communities.

Bus Service Seen as Immediate, Flexible Transit Option

- Reliable, frequent bus service is preferred as a practical short-term or complementary solution.
- BRT with dedicated lanes and signal priority has conditional support but faces skepticism about its ability to compete with driving times and reduce congestion.
- The need for express buses running point-to-point with minimal stops to maximize convenience and ridership is noted.
- Some who oppose rail view bus service as the “least bad” choice.

Critical Importance of Accessibility, “Last Mile,” and Station Design

- Easy, safe access to stations by car, bike, foot, and connecting transit is essential for success.
- Ample and free park and ride facilities are needed, especially in suburban and rural areas.
- The need for shuttle services and local feeder buses to link stations to workplaces, schools, and amenities was frequently mentioned.

Funding, Costs, and Responsibility

- The high costs of rail and BRT lead to skepticism; many want developers, not taxpayers, to bear the financial burden.
- Respondents suggest using impact fees or developer taxes tied to population growth and new developments to pay for the service.
- Respondents voiced an urgency to secure ROW early to avoid rising costs.

Road Expansion

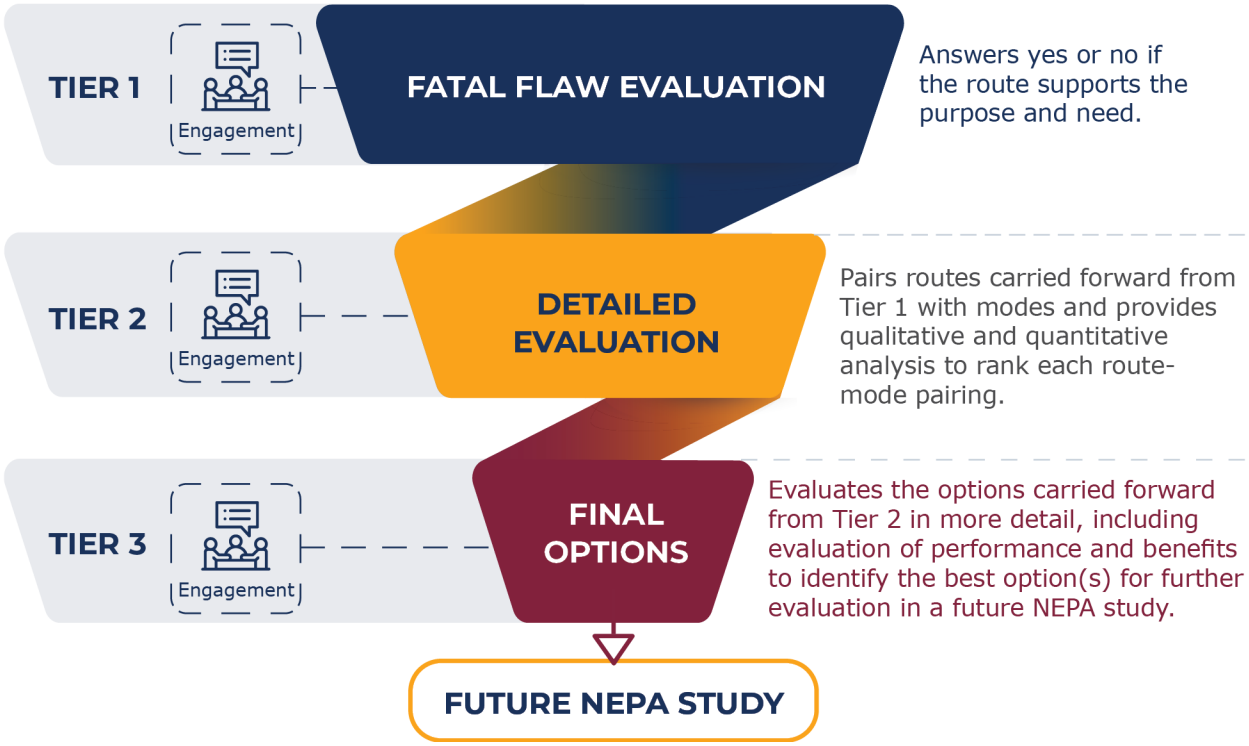
- Some strongly oppose transit investments, seeing them as costly, ineffective, or ill-suited to the Treasure Valley.
- Some stakeholders noted a desire for widening roads, adding lanes, increasing speed limits, and optimizing traffic signals.
- Some respondents raised concerns about transit-related crime, safety, and ridership levels.

4 Alternatives Development and Evaluation

This chapter explains how the various transportation concepts and elements for achieving the purpose and need were identified and evaluated to develop recommendations for the PEL Study. The goal of the alternatives analysis was to generate potential solutions for the identified transportation needs that could be advanced into future NEPA processes as funding becomes available. The process and outcomes support an efficient transition to NEPA processes, final design, and construction when funding is identified.

This PEL Study included three tiers of evaluation to explore a range of alternatives and ultimately develop recommendations. The evaluation result was a final route and mode recommendation to the COMPASS Board. A multi-tiered evaluation approach allowed routes to be narrowed from a wide range down to a select set and assigned a mode to each route. This process is summarized on Figure 4-1 and described in more detail in Sections 4.2, 4.3, and 4.4. As part of this process, a 2050 No Action Alternative was established as a baseline from which to evaluate the effectiveness of alternatives. The No Action Alternative is described in Section 4.1.

Figure 4-1. Tiered Evaluation to Explore Range of Alternatives

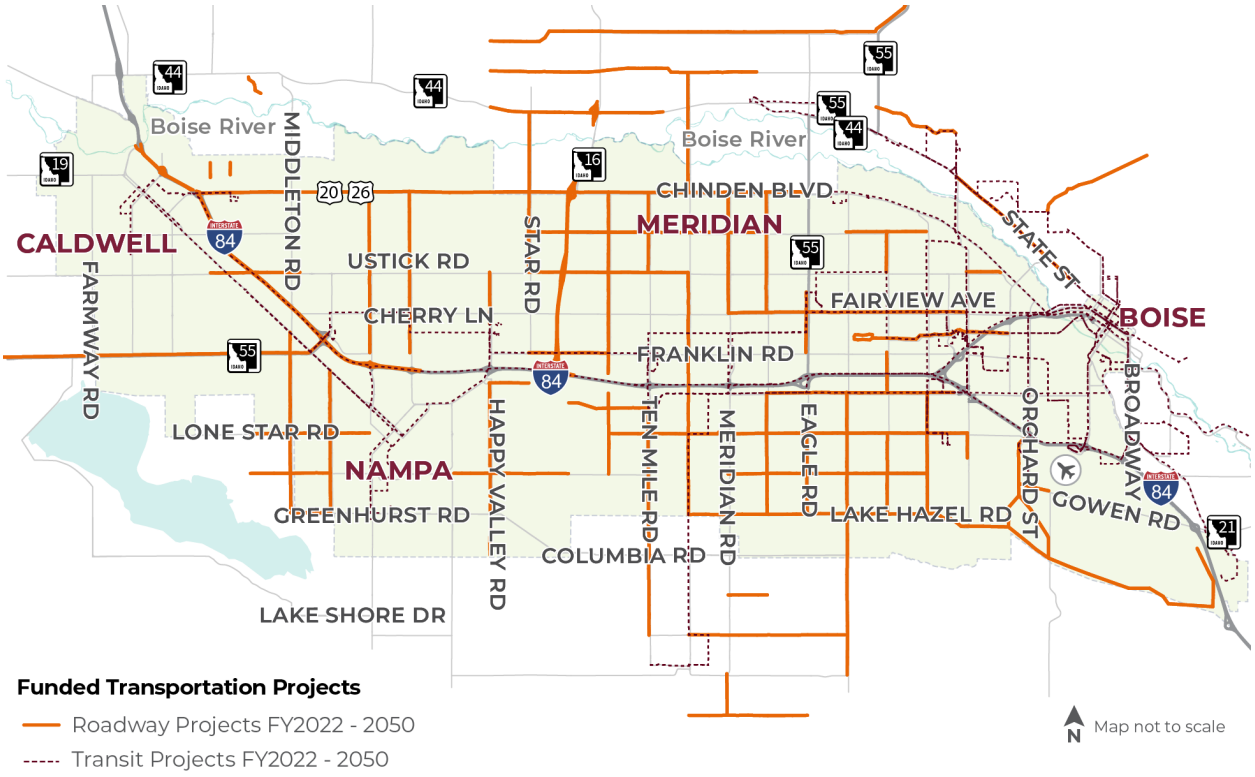


4.1 No Action Alternative

The No Action Alternative is a baseline option that includes all the funded projects identified in CIM 2050. The No Action Alternative assumes that only these transportation projects will be completed by 2050. This does not include the addition of high-capacity transit since Idaho does not have a dedicated funding source for public transportation, which is needed to operate any sort of high-capacity transit system.

Each potential high-capacity transit option in this PEL Study was compared to the others and to the No Action Alternative, to determine its relative benefits and challenges. The funded projects in the No Action Alternative are shown on Figure 4-2.

Figure 4-2. No Action Alternative



Source: Study Team

4.2 Tier 1 Alternatives Evaluation

The initial set of alternatives evaluated in Tier 1 included the No Action Alternative and 10 potential transit routes. Tier 1 routes were developed based on those examined in the *Treasure Valley High Capacity Transit Study* (COMPASS 2020) and additional stakeholder input (COMPASS 2021).

Tier 1 routes identified the transportation corridors where transit service would travel but did not consider operations, service levels, or specific transit modes.

Eight primary transit routes were evaluated. Each route on existing roadways would originate at the Main Street Station in downtown Boise and terminate at Kimball Avenue in downtown Caldwell. The commuter rail route would originate at the Boise Depot (a historic train station) and terminate at 5th Avenue in Caldwell.

Two additional routes were evaluated to consider connections to the Boise Airport and the Micron campus. These routes were not considered in the *Treasure Valley High Capacity Transit Study* but were identified by stakeholders as a key origins and destinations.

The potential transit routes evaluated in Tier 1 are shown on Figure 4-3 and described in the following bulleted list.

Figure 4-3. Tier 1 Potential Transit Routes

- **Chinden Boulevard** – Enters/exits downtown Boise via the Fairview Avenue and Main Street one-way couplet. Travels along Chinden Boulevard and US 20/26 to North 21st Avenue in Caldwell. Enters/exits the Caldwell area via the Cleveland Boulevard and Blaine Street one-way couplet.

- **Ustick Road** – Enters/exits downtown Boise via the Fairview Avenue and Main Street one-way couplet. Travels along Chinden Boulevard to Curtis Road. Travels along Ustick Road. Enters/exits the Caldwell area via the Cleveland Boulevard and Blaine Street one-way couplet.
- **Fairview Avenue/Cherry Lane** – Enters/exits downtown Boise via the Fairview Avenue and Main Street one-way couplet between downtown Boise and Orchard Street. Travels along Fairview Avenue/Cherry Lane. Travels on Idaho Center Boulevard/Garrity Boulevard and 11th Avenue into downtown Nampa. Travels through downtown Nampa via the 2nd Street and 3rd Street one-way couplet. Travels northwest from Nampa to Caldwell via Nampa-Caldwell Boulevard. Enters/exits the Caldwell area via the Cleveland Boulevard and Blaine Street one-way couplet.
- **Boise Cutoff Railroad**
  - BRT or light rail transit (LRT) route option – Enters/exits downtown Boise via the Fairview Avenue and Main Street one-way couplet between downtown Boise and Orchard Street. Heading south on Orchard Street, it enters/exits the Boise Branch railroad and then follows the Boise Cutoff to Nampa. Entering Nampa, the route crosses the UPRR at 16th Avenue and transitions to on-street service in downtown Nampa. Travels east/west through downtown Nampa via the 2nd Street and 3rd Street one-way couplet. Travels northwest to from Nampa to Caldwell via Nampa-Caldwell Boulevard. Enters/exits the Caldwell area via the Cleveland Boulevard and Blaine Street one-way couplet.
  - Commuter rail route option – Follows the Boise Cutoff freight rail corridor from the Boise Depot to Nampa. Transitions to the UPRR mainline heading north to Nampa and continues in the UPRR corridor to the Caldwell area.
- **Franklin Road**
  - BRT-mixed traffic route option – Enters/exits downtown Boise via the Fairview Avenue and Main Street one-way couplet between downtown Boise and Orchard Street. At Orchard Street, turns onto Franklin Road. Travels on Garrity Boulevard and 11th Avenue into downtown Nampa. Travels through downtown Nampa via the 2nd Street and 3rd Street one-way couplet. Travels northwest from Nampa to Caldwell via Nampa-Caldwell Boulevard. Enters/exits the Caldwell area via the Cleveland Boulevard and Blaine Street one-way couplet.

  - BRT-exclusive route option – Enters/exits downtown Boise via the Fairview Avenue and Main Street one-way couplet between downtown Boise and Orchard Street. Travels on Orchard Street to Irving Street. Enters/exits the Boise Branch railroad to connect with Franklin Road. Travels on Garrity Boulevard and 11th Avenue into downtown Nampa. Travels through downtown Nampa via the 2nd Street and 3rd Street one-way couplet. Travels from Nampa to Caldwell via Nampa-Caldwell Boulevard. Enters/exits Caldwell via the Cleveland Boulevard and Blaine Street one-way couplet.

- **I-84/I-184** – Enters/exits downtown Boise via the Fairview Avenue and Main Street one-way couplet, accessing I-184 at the Fairview Avenue interchange. Follows I-184 onto I-84 to Exit 29 in Caldwell. Travels on 21st Avenue and turns at the Cleveland Boulevard and Blaine Street couplet to access the Caldwell area.
- **Overland Road** – Enters/exits downtown Boise via the 9th Street and Capitol Boulevard one-way couplet. Continues along Capitol Boulevard/Vista Avenue to Overland Road. Travels along the future planned Airport-Overland Connection to 11th Avenue in downtown Nampa. Travels through downtown Nampa via the 2nd Street and 3rd Street one-way couplet. Travels from Nampa to Caldwell via Nampa-Caldwell Boulevard. Enters/exits the Caldwell area via the Cleveland Boulevard and Blaine Street one-way couplet.
- **Victory Road/Powerline Road**
  - Orchard Street option – Enters/exits downtown Boise via the Fairview Avenue and Main Street one-way couplet between downtown Boise and Orchard Street. Travels along Victory Road until it transitions to 3rd Street in Nampa. Turns onto 16th Avenue into downtown Nampa. Travels through downtown Nampa via the 2nd Street and 3rd Street one-way couplet. Travels from Nampa to Caldwell via Nampa-Caldwell Boulevard. Enters/exits the Caldwell area via the Cleveland Boulevard and Blaine Street one-way couplet.
  - Vista Avenue route option – Enters/exits downtown Boise using the 9th Street and Capitol Boulevard one-way couplet. Continues on Capitol Boulevard/Vista Avenue to Wright Street. At Orchard Street, continues onto Victory Road. Turns onto 16th Avenue into downtown Nampa. Travels through downtown Nampa via the 2nd Street and 3rd Street one-way couplet. Travels from Nampa to Caldwell via Nampa-Caldwell Boulevard. Enters/exits the Caldwell area via the Cleveland Boulevard and Blaine Street one-way couplet.

- **Boise Airport Connection**
  - Boise Airport to downtown Boise via Vista Avenue – From Main Street Station, enters/exits downtown Boise using the 9th Street and Capitol Boulevard one-way couplet. Continues on Capitol Boulevard/Vista Avenue to Airport Way, terminating at the Boise Airport.
  - I-84 to Boise Airport (modification to I-84/I-184 route) – From Main Street Station, enters/exits downtown Boise using the 9th Street and Capitol Boulevard one-way couplet. Continues on Capitol Boulevard/Vista Avenue to Airport Way. Stops at the Boise Airport. Continues on I-84 using the Vista Avenue interchange (Exit 53).
  - Boise Cutoff to Boise Airport (modification to Boise Cutoff route) – From the Boise Depot, follows the Boise Cutoff to the Boise Airport Spur Rail Line, terminating at the Boise Airport.
- **Micron Connection**
  - Federal Way – From Main Street Station, enters/exits downtown Boise using the 9th Street and Capitol Boulevard one-way couplet. Continues on Capitol Boulevard/Federal Way, terminating at the Micron campus.
  - I-84 – From Main Street Station, enters/exits downtown Boise using the 9th Street and Capitol Boulevard one-way couplet. Continues on Capitol Boulevard/Vista Avenue to I-84. Enters/exits I-84 via the Vista Avenue interchange (Exit 53). Travels south along I-84 from the Vista Avenue interchange to the Eisenman Road interchange, terminating at the Micron campus.
  - Boise Cutoff (modification to Boise Cutoff route) – From the Boise Depot, follows the Boise Cutoff to a location west of the Micron campus.

4.2.1 Tier 1 Evaluation Criteria

The Tier 1 evaluation used three criteria to determine if each route would meet the purpose and need of the project as defined in the PEL Study's *Purpose and Need Memorandum* (Study Team 2024). Only routes meeting all three criteria were advanced to Tier 2 for further analysis. The following criteria were used to screen the Tier 1 routes:

- Does the route improve regional mobility and accessibility for east-west travel across the study area?
- Does the route provide convenient high-capacity transit service that links key origins and destinations with strong potential for transit use in Boise, Meridian, Nampa, and Caldwell?

- Does the route provide efficient and reliable high-capacity transit service across the study area?

Terminology used in these criteria is defined as follows:

- Regional mobility: Traveling from one place to another within the Treasure Valley region.
- Accessibility: Ease of entering and exiting a transit station.
- Convenience: Making transit simple and intuitive for the user.
- Key origins and destinations: Places where trips are more likely to begin or end.
- Efficiency: Providing maximum quality and coverage for transit service while minimizing travel time for users.
- Reliability: Predictable performance of the transit service, arriving and departing at the scheduled times.

4.2.2 Tier 1 Evaluation Results

As described in Sections 3.1 and 3.2, the study team collaborated with stakeholders to conduct the evaluation and vet results with the public. Based on the results of the Tier 1 evaluation, the No Action Alternative and four potential transit routes were carried forward for further evaluation: Fairview Avenue/Cherry Lane, Boise Cutoff Railroad, Franklin Road, and I-84/I-184. The study team also recommended further consideration for the Boise Airport connection and the Micron connection, but did not recommend these as standalone routes. The other four routes (Chinden Boulevard, Ustick Road, Overland Road, and Victory Road/Powerline Road) were removed from further analysis. These results and the rationale for the decisions are presented in Table 4-1. More details on the Tier 1 evaluation are available in the *Tier 1 Evaluation Process Memorandum* in Appendix F.

Table 4-1. Tier 1 Evaluation Results and Rationale

Route Name	Meets Purpose and Need	Summary of Rationale	Evaluation Result
No Action	Not applicable	Not applicable	Carried forward as a baseline condition.
Chinden Boulevard Route	No	• Bypasses established and developed areas of Meridian and Nampa. • Lies north of most regional destinations. • Passes through areas with a lower share of potential transit users.	Removed from further analysis.
Ustick Road Route	No	• Bypasses established and developed areas of Meridian and Nampa. • Lies north of most regional destinations. • Passes through areas with a lower share of potential transit users.	Removed from further analysis.
Fairview Avenue/ Cherry Lane Route	Yes	• Connects Boise to Caldwell while providing direct access to Meridian and Nampa. • Intersects with numerous current and future transit routes. • Provides access to higher education institutions, hospitals, and event centers. • Passes through areas with a lower share of potential transit users.	Carried forward for further analysis.
Boise Cutoff Railroad Route	Yes	• Connects Boise to Caldwell while providing direct access to Meridian and Nampa. • Intersects with numerous current and future transit routes. • Provides access to higher education institutions, hospitals, and event centers. • Passes through areas with a higher share of potential transit users.	Carried forward for further analysis.
Franklin Road Route	Yes	• Connects Boise to Caldwell while providing direct access to Meridian and Nampa. • Intersects with numerous current and future transit routes. • Provides access to higher education institutions, hospitals, and event centers. • Passes through areas with a higher share of potential transit users.	Carried forward for further analysis.

Route Name	Meets Purpose and Need	Summary of Rationale	Evaluation Result
I-84/I-184 Route	Yes	• Connects Boise and Caldwell via the interstate. • Intersects with numerous current and future transit routes to provide access to Nampa and Meridian. • Provides access to higher education institutions, hospitals, and event centers. • Passes just north of areas with a higher share of potential transit users.	Carried forward for further analysis.
Overland Road Route	No	• Connects Boise and Caldwell and provides direct access to Meridian and Nampa. • Does not directly link key regional origins and destinations. • Passes through areas with a lower share of potential transit users. • Requires more turning movements, potentially adding to total travel time.	Removed from further analysis.
Victory Road/ Powerline Road Route	No	• Connects Boise to Caldwell but is too far south to serve Meridian. • Lies south of most regional origins and destinations. • Passes through areas with a lower share of potential transit users. • Travels south of downtown Boise, potentially adding to total travel time.	Removed from further analysis.
Boise Airport Connection Route	No	• Connects to the Boise Airport, the primary airport for the region. • Does not provide access to other key destinations, including Meridian, Nampa, and Caldwell.	Removed as standalone route.
Micron Connection Route	No	• Connects downtown Boise and the Micron campus (the region's largest private, for-profit employer). • Does not directly link to Meridian, Nampa, or Caldwell.	Removed as standalone route.

Source: Study Team

4.3 Tier 2 Alternatives Evaluation

The Tier 2 evaluation was broken into two parts. The first was an initial examination of modes for compatibility with each route advanced from Tier 1. Mode generally describes the transit vehicle type (technology) and associated operating characteristics. Modes considered included regional commuter rail, LRT, and three types of BRT. The modes considered are discussed in more detail in Section 4.3.1. Considering compatible mode options for each route allowed the study team to remove incompatible modes from consideration based on the most logical, efficient, and cost-effective route-mode pairings. Each route then underwent a more detailed evaluation using criteria and measures developed from the PEL Study's purpose and need statement and goals and objectives. These measures combined qualitative and quantitative assessments, and the results incorporated agency and stakeholder feedback. The Tier 2 evaluation of alternatives is summarized in the sections that follow with more detailed information available in Appendix F.

4.3.1 Tier 2 Mode Assessment

The initial modes for consideration were built on the *Treasure Valley High Capacity Transit Study* (COMPASS 2020), which narrowed the mode options to commuter rail, LRT, and BRT. These mode options are described in Table 4-2.

Table 4-2. Modes Considered

Modes	Mode Description
BRT-Mixed Traffic 	Bus-based transit service that uses the general-purpose lanes with no exclusive BRT lanes. BRT-mixed traffic improves service and reliability compared with standard bus service through technology such as transit signal priority (TSP) or queue jump lanes that allow buses to gain priority at traffic signals and move through intersections more quickly than general traffic. BRT-mixed traffic service also has increased station spacing and enhanced stations where users pay fares before boarding, which reduces the time spent at each station. Service efficiency is dependent on traffic conditions along the route and measures to improve travel times and reliability.

Modes	Mode Description
BRT-Business Access and Transit (BAT) Lanes 	BRT-BAT lanes offer the same features to improve travel time and reliability as BRT-mixed traffic but also include semi-exclusive BRT lanes. Under this scenario, there are lanes primarily for the use of BRT; however, general traffic may use the lanes to enter or exit adjacent businesses or residences, or share the space as right-turn lanes. BRT-BAT lanes can provide better service than BRT-mixed traffic, but interaction with other traffic can affect travel times and reliability of the service.
BRT-Exclusive Guideway 	BRT-exclusive guideway offers the same features to improve travel time and reliability as BRT-mixed traffic and BRT-BAT lanes, but transit service is in a dedicated transit lane where buses have no interaction with other traffic. When coupled with enhanced stations, queue jump lanes, and TSP, BRT-exclusive guideway can offer travel times and reliability that are competitive with LRT service.
LRT 	LRT provides transit service along a fixed guideway rail corridor that is typically used in urban areas. LRT has less capacity than commuter rail because of shorter trains but has more flexibility because it can operate on streets or in dedicated ROW. Street crossings require protection in the form of technology or physical barriers, with major crossings often grade-separated. In cases where LRT is adjacent to freight rail, LRT requires substantial physical separation from the freight rail services, so there are no interactions between the two services. LRT generally travels at slower speeds with more frequent stations than commuter rail, but speeds can be increased when operated in dedicated ROW.
Commuter Rail 	Commuter rail provides transit service along a fixed guideway rail corridor intended to connect communities in a region, often providing service between a city center and surrounding communities in a metropolitan area. The passenger rail vehicles used for this type of service typically offer comfortable seating and less standing room than local transit service to facilitate longer trips at higher speeds. As compared with other modes being considered in this PEL Study, commuter rail typically has longer spacing between stations and uses trains with higher passenger capacities. Commuter rail often shares track or ROW with freight trains or other heavy rail services, and the passenger rail vehicles need to meet Federal Railroad Administration (FRA) safety requirements given the potential interactions between freight and passenger services.

Common Attributes of Transit Modes Considered

All modes considered have similar attributes, such as:

- **Level or Near-Level Boarding:** Level boarding simplifies and accelerates the boarding and disembarking processes by creating a level plane between the station platform and the transit vehicle. This avoids more time-consuming steps and wheelchair ramps, and it supports schedule reliability.
- **Priority Measures:** Priority can take various forms depending on the alternative. Rail priority can include full protection and higher speeds through level crossings with roadways. BRT priority could include measures such as queue jumps, dedicated lanes, and TSP. TSP provides a dynamic signaling system for the BRT service, integrated with traffic signals. TSP anticipates bus movements and prioritizes buses at intersections while managing other traffic flows.
- **Off-Board Fare Collection:** Off-board fare collection avoids the time needed to collect fares on the transit vehicle. Tickets are purchased manually or electronically before the rider enters the transit vehicle, saving considerable boarding time and supporting efficient payment management.
- **Enhanced Bus/Rail Stations and Amenities:** Regional rail and BRT are considered enhanced transit services. The transit stations and stops reflect this with higher-quality infrastructure and amenities. This may include enhanced weather protection, seating, lighting, bike parking, accessible connections, real-time transit information, and branding.

Mode Assessment Criteria

The criteria to evaluate modes were tailored to compare the technologies and operating characteristics based on the identified goals of the project. Each mode was evaluated using the criteria listed in Table 4-3.

Table 4-3. Mode Assessment Criteria

Goals	Criteria Used to Evaluate Modes
Improve Transit Connectivity and Reliability	Does the mode improve transit connectivity and reliability?
Develop Compatible Plans for High-Capacity Transit, Land Use, and Transportation	How does the mode fit into the context of the corridor? Does it impede freight operations? Does it support existing and planned development patterns, including transit-oriented development?
Advance Financially Feasible Solutions	Is the mode financially feasible and constructable?

Mode Assessment and Conclusions

Because the Study considered transit routes in different types of transportation corridors, ranging from arterials to interstate to heavy rail, the range of transit modes were evaluated using the mode criteria listed in Section 4.3.1 to identify the corridors in which each mode would be viable. This assessment informed the mode and route pairing for the Tier 2 evaluation.

Modes Removed from Further Consideration

- BRT-mixed traffic was not carried forward because it would not meet the purpose and need of the PEL Study. The corridor length, lack of exclusivity, and probable travel times make the service less reliable and unlikely to draw high ridership. The technology is better suited for shorter arterial routes and connecting key destinations with communities.
- LRT was not carried forward because it was not considered a financially feasible solution for any of the routes under consideration.

Modes Carried Forward for Further Analysis

- BRT-BAT lanes were carried forward in the arterial and interstate corridors because they were deemed financially feasible, are compatible with surrounding land uses and transportation facilities, and could provide enough exclusivity for reliable and efficient transit service. This mode was not carried forward for the rail corridor due to the complexity and cost of implementing BRT in a freight rail corridor.
- BRT-exclusive was carried forward in the arterial corridors because it was deemed financially feasible, is compatible with surrounding land uses and transportation facilities, and could provide enough exclusivity for reliable and efficient transit service. This mode was not carried forward for the rail corridor due to the complexity and cost of implementing BRT in a freight rail corridor. This mode was not carried forward for the interstate corridor because BRT service in the center of an interstate creates access challenges for passengers and results in fewer transit supportive land uses in proximity to stations.
- Commuter rail was carried forward for the Boise Cutoff Railroad Route only. This mode likely provides the greatest reliability and fastest travel times of all modes considered, is compatible in an existing freight rail corridor, and may require less investment than LRT if the existing freight tracks can be used for passenger service.

Table 4-4 summarizes the mode conclusions for each transit route.

Table 4-4. Mode Assessment Outcome for Each Transit Route Option

Modes	Fairview Avenue/ Cherry Lane	Boise Cutoff Rail	Franklin Road	I-84/I-184
Commuter Rail	⊘	✓	⊘	⊘
LRT	⊘	⊘	⊘	⊘
BRT-Exclusive Guideway	✓	⊘	✓	⊘
BRT-BAT Lanes	✓	⊘	✓	✓
BRT-Mixed Traffic	⊘	⊘	⊘	⊘

✓ = Mode Carried Forward

⊘ = Mode Not Carried Forward

4.3.2 Tier 2 Alternatives

The Tier 2 mode-route pairings are listed as follows with the routes shown on Figure 4-4. The mode-route pairings are referred to as alternatives from this point forward in this report.

- Fairview Avenue/Cherry Lane BRT-Exclusive
- Fairview Avenue/Cherry Lane BRT-BAT Lanes
- Boise Cutoff Commuter Rail
- Franklin Road BRT-Exclusive
- Franklin Road BRT-BAT Lanes
- I-84/I-184 BRT-BAT Lanes

The term “alternative” is used in NEPA to describe an action proposed to meet the project’s purpose and need. In this PEL Study, each route and its associated mode are referred to as an alternative. These alternatives are further developed in Tier 3 to also include stations, park and rides, and various operating assumptions.

Figure 4-4. Tier 2 Potential Transit Routes

For each of these Tier 2 alternatives, the route was divided into several sections based on the number of lanes in the corridor plus any planned widening identified in the No Action Alternative. The width of proposed transit lanes or guideways was added to the corridor width expected under the No Action Alternative. For the freight rail corridor, this included adding a second track the entire length of the corridor. While this method accounted for some of the variable width along these roughly 30-mile-long corridors, there is far more variability than could be captured at this stage in the planning process. For example, this method does not capture the additional width at intersections from right- and left-turn lanes, or the additional width at interchanges from on-ramps and off-ramps. Figure 4-5 through Figure 4-8 show representative cross sections with the added transit lanes or guideways along the Tier 2 transit route options. Additional information on the design assumptions used to develop representative cross sections and footprints for the Tier 2 evaluation are available in the *Tier 2 Design Assumptions Memorandum* in Appendix F.

Figure 4-5. Side-running BRT-BAT on Franklin Road or Fairview Avenue/Cherry Lane Corridors

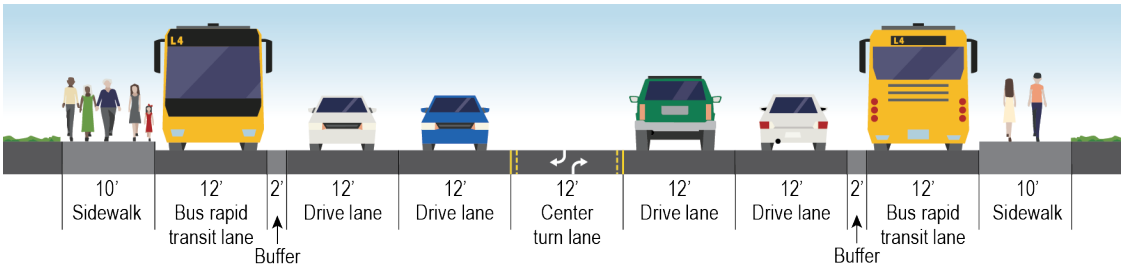


Figure 4-6. Center-running BRT-exclusive on Franklin Road or Fairview Avenue/Cherry Lane Corridors

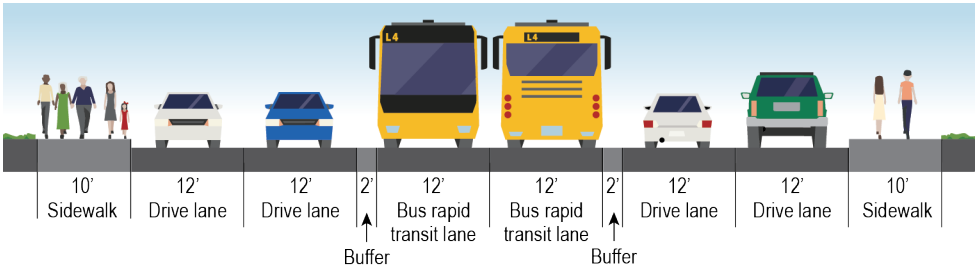


Figure 4-7. Side-running BRT-BAT on I-84/I-184 Corridor

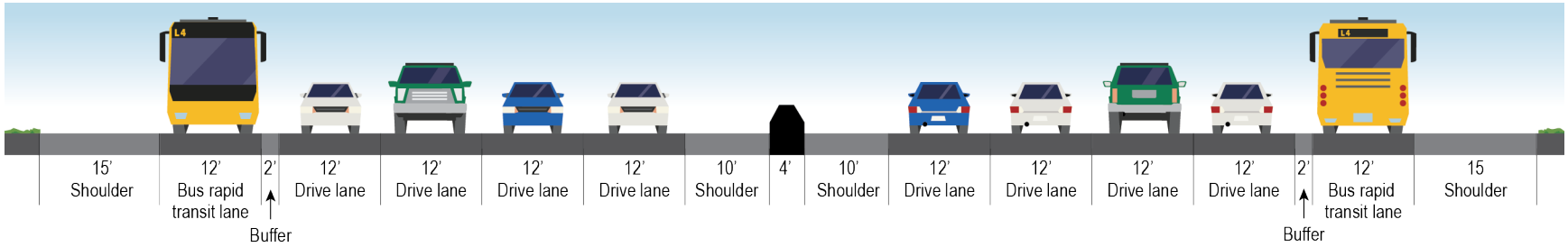
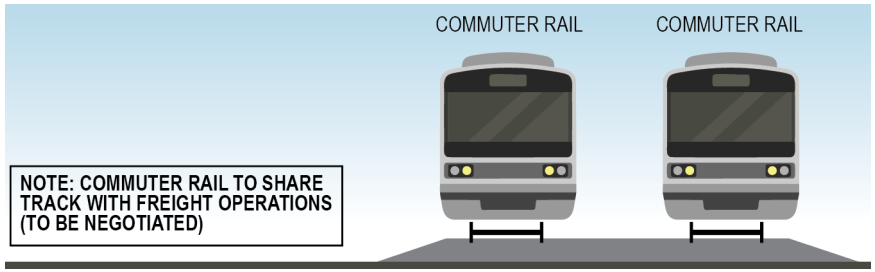


Figure 4-8. Commuter Rail in Boise Cutoff Rail Corridor



4.3.3 Tier 2 Evaluation Criteria

The Tier 2 criteria presented in Table 4-5 include specific evaluation measures developed to assess how well the alternatives align with the goals and objectives from the purpose and need statement. Qualitative measures were used to compare the relative performance of routes against one another based on research and the study team's professional experience. Quantitative measures relied on data-driven numeric metrics to identify the advantages and disadvantages of each alternative. These qualitative and quantitative measures included a range of criteria to determine each alternative's performance related to mobility, connectivity, reliability, land use, and funding options.

Table 4-5. Tier 2 Evaluation Criteria

Goals	Objectives - Measures
Improve Transit Connectivity and Mode Share	• **Transit service coverage:** How well does the alternative link major existing and future origins/destinations in Caldwell, Nampa, Meridian, and Boise? • **Active transportation (first/last mile) connectivity:** How effective are the existing or potential active transportation networks providing the first and last mile links along the alternative? • **Transit ridership:** Does the alternative connect areas with the potential for high transit usage, including populations of seniors, those without a vehicle, students, and low-income residents?
Improve Transit Reliability	• **Reliability through design:** Does the alternative include sufficient exclusivity and priority for transit to maximize reliability and predictability for users? • **Travel time:** What are the comparative travel times for alternatives between major origins and destinations? • **Traffic operations:** To what magnitude are traffic operations potentially impacted?
Expand Travel Choices and Mobility	• **Regional service and operations:** Does the alternative connect regional destinations with the transit planned for regular service (service span, 7 days a week)? • **Transit network integration:** To what extent does the alternative integrate into the existing and planned transit network, including transit opportunities in CIM 2050 (COMPASS 2022)? • **Parking and park and ride:** Does the alternative encourage mode shift, minimizing the need for users to drive to access the new transit service?

Goals	Objectives - Measures
Develop Compatible Plans for High-Capacity Transit, Land Use, and Transportation	• **Transit-oriented communities:** Does the alternative prioritize service to areas with existing or future transit-supportive development opportunities, specifically in areas growing or planned for growth in population and employment? • **Community access to services:** Does the alternative expand mobility choices to important community resources and services, including healthcare, grocery stores, government facilities, and community facilities, to/from transit-dependent communities? • **Greater transportation network:** Does the alternative manage impacts and/or enhance opportunities to support freight/goods movement?
Advance Financially Feasible Solutions	• **Funding options:** To what extent does the alternative align with the general federal, local, and private funding opportunities, including FTA's CIG Program, other discretionary grants, and private partnerships? • **Corridor preservation:** Can the alternative's corridor reasonably be protected or preserved for future high-capacity transit service? • **Implementation:** How complex are the alternative infrastructure improvements in relation to implementation, phasing, and maintaining opportunities for future expansion?

4.3.4 Tier 2 Evaluation Results

Using the criteria identified in Table 4-5, the Tier 2 evaluation resulted in a general rating for each alternative to further differentiate the benefits and impacts and to narrow the options. Each alternative was evaluated and either advanced or removed from further analysis based on the evaluation outcomes. Fairview Avenue/Cherry Lane BRT-Exclusive, Boise Cutoff Commuter Rail, and I-84/I-184 BRT-BAT performed the best relative to the Tier 2 criteria and were recommended for further evaluation in Tier 3. A summary of the Tier 2 evaluation is presented in Table 4-6.

In the Tier 2 evaluation, there were substantial issues identified for the BRT-BAT service on the arterial corridors (Fairview Avenue/Cherry Lane and Franklin Road). The BRT-BAT configuration allows general-purpose traffic to use the bus lanes when entering and exiting the corridor. Due to the high number of cross streets on these corridors where this interaction between general-purpose traffic and buses would occur, the exclusivity of the transit lanes would be degraded, resulting in less travel time reliability for transit than the other options considered. Additionally, the BRT-BAT option would have a wider cross section along these corridors than the BRT-exclusive option. This is because the BRT-BAT lanes would be added along each side of the

corridor, whereas the BRT-exclusive lanes would be added in the center of the corridor in lieu of the center left-turn lane that currently exists along much of these routes (refer to Figure 4-5 and Figure 4-6). As a result, the BRT-BAT option in these corridors would have the highest impacts to adjacent properties compared with other alternatives under consideration. For these reasons, the BRT-BAT options in the Fairview Avenue/Cherry Lane and Franklin Road corridors were not carried forward for further evaluation.

The Franklin Road BRT-Exclusive Alternative was not carried forward because the route would serve fewer important community services such as grocery stores and hospitals than other alternatives. It is also a regional freight route, and BRT-exclusive through the center of this corridor may limit access to warehouses or transfer centers.

More details on the Tier 2 evaluation are available in the *Tier 2 Evaluation Process Memorandum* in Appendix F.

Table 4-6. Tier 2 Alternatives Evaluation Summary

Alternatives	Summary of Evaluation	Evaluation Result
Fairview Avenue/ Cherry Lane BRT-Exclusive	• Moderate connection to key origins and destinations • Moderate reliability and exclusivity • High connection to high-ridership demographics, community resources, jobs, and existing transit and active transportation network • High level of ROW acquisition to preserve corridor • Impacts to high number of historic properties • Moderate capital cost	Carried forward for further analysis[a]
Fairview Avenue/ Cherry Lane BRT-BAT	• Moderate connection to key origins and destinations • Poor reliability and exclusivity • High connection to high-ridership demographics, community resources, jobs, and existing transit and active transportation network • Highest level of ROW acquisition to preserve corridor • Highest number of impacts to historic properties • Moderate capital cost	Not carried forward

Alternatives	Summary of Evaluation	Evaluation Result
Boise Cutoff Commuter Rail	• High connection to key origins and destinations • Highest reliability and exclusivity • Moderate traffic impacts at at-grade crossings • Moderate impacts to wetlands and floodplains • High connection to high-ridership demographics, community resources, jobs, and existing transit and active transportation network • Few property impacts outside of established rail corridor • Requires negotiation with railway owners and coordination with freight operations • Highest capital cost	Carried forward for further analysis
Franklin Road BRT-Exclusive	• High connection to key origins and destinations • Moderate reliability and exclusivity • High connection to high-ridership demographics, jobs, and existing transit and active transportation network • Highest level of freight impacts • Impact to property protected under Section 6(f) of the Land and Water Conservation Fund Act • High impacts to adjacent properties • Impacts to high number of historic properties protected under Section 106 of the National Historic Preservation Act (NHPA) and Section 4(f) of the USDOT Act • Moderate capital cost	Not carried forward [a]
Franklin Road BRT-BAT	• High connection to key origins and destinations • Poor reliability and exclusivity • High connection to high-ridership demographics, jobs, and existing transit and active transportation network • Highest level of freight impacts • Impact to property projected under Section 6(f) of the Land and Water Conservation Fund Act • Impacts to highest number of historic properties protected under Section 106 of the NHPA and Section 4(f) of the USDOT Act • Highest impacts to adjacent properties • Moderate capital cost	Not carried forward

Alternatives	Summary of Evaluation	Evaluation Result
I-84/I-184 BRT-BAT	• Low connection to key origins and destinations • High reliability and exclusivity • Negligible impacts to interstate traffic • Moderate impacts to wetlands and floodplains • Serves high-ridership demographics and jobs • Moderate property impacts • Lowest capital cost	Carried forward for further analysis

Source: Study Team

[a] Following the Tier 2 evaluation and Engagement Phase #2, the study team created a hybrid alternative from the Fairview Avenue/Cherry Lane route and the Franklin Avenue route in response to feedback from stakeholders that this alignment would optimize service to key activity centers.

4.3.5 Micron and Boise Airport Route Connections

The Micron and Boise Airport route connections were not included in the Tier 2 evaluation because they did not meet the intended purpose and need of the PEL Study. However, the stakeholders and the public were asked to weigh in on whether a connection to these facilities is important to the success of the high-capacity transit system under evaluation.

More than 72% of participants agreed or strongly agreed that a Boise Airport connection is important, with several participants noting that another alternative to driving or ride sharing would benefit the region. Others believe there is not a strong enough need and options already exist to access the airport.

Roughly 60% of participants agreed or strongly agreed that a Micron connection is important to the success of high-capacity transit in the region. A quarter of the participants were neutral. While some community members believed transit to a large employer would benefit the region, others argued that the company should provide the service to its employees.

While not carried forward as standalone routes, these connections were considered further in the Tier 3 evaluation.

4.4 Tier 3 Alternatives Evaluation

The three alternatives carried forward from Tier 2 were further developed and evaluated in Tier 3. In addition to the routes and modes, conceptual design process in Tier 3 included service plan assumptions, potential station locations, and park and ride facility locations. This allowed a more detailed evaluation of the benefits and performance of each alternative relative to the identified purpose, needs, goals, and objectives.

4.4.1 Tier 3 Alternatives

The Tier 3 evaluation compared three routes: two carried forward from the Tier 2 evaluation and one hybrid route that altered the Fairview Avenue/Cherry Lane BRT-Exclusive route based on feedback from stakeholders to consider a combination of the Fairview Avenue and Franklin Road corridors that would optimize service to key activity centers (refer to the fourth TWG meeting discussion under Section 3.1.3). After coordination with stakeholders on this suggestion, the study team agreed the combination of these routes could better serve key activity centers and reduce undesirable impacts. The hybrid route follows the original Fairview Avenue route from Main Street Station in downtown Boise to Meridian Road where it turns south to Franklin Road and continues east along the original Franklin Road route to Caldwell. Tier 3 alternatives are depicted on Figure 4-9, with the alignment for each described in Table 4-7.

Figure 4-9. Tier 3 Alternatives

Source: Study Team

Table 4-7. Tier 3 Alternatives

Route	Mode	Description
Boise Cutoff	 Commuter Rail (shared use in freight rail corridor)	Connects the Boise Depot to city centers in Meridian, Nampa, and Caldwell via the existing UPRR and Boise Valley Railroad (BVRR) freight corridors. Existing local bus service (Route #3) along S. Vista Avenue/S. Capital Boulevard and S. 9th Street one-way couplet connects to Main Street Station in downtown Boise.
Fairview Avenue and Franklin Road	 BRT-exclusive Guideway (along center of roadway)	Connects Main Street Station in downtown Boise to city centers in Meridian, Nampa, and Caldwell via local arterials on exclusive center-running BRT lanes.
I-84/I-184	 BRT-BAT Lanes (along each side of interstate)	Connects Main Street Station in downtown Boise to downtown Caldwell, primarily using semi-exclusive BRT lanes along the outside of interstate corridors.

Source: Study Team

To conduct the Tier 3 evaluation, the study team further developed the basic design layouts for each of the final Tier 3 alternatives. For the purposes of this pre-NEPA analysis and given the length of the routes, this design was a simple concept-level plan-view layout, scaled to high-resolution orthorectified aerial imagery. The transit station assumptions were also incorporated as physical footprints along each route. Other elements identified included potential changes to bridge structures, interchanges, and rail and road crossings. This was not a three-dimensional design; however, the layouts provided a sufficient understanding of the physical infrastructure and the changes required to implement each route to develop planning-level cost estimates. The conceptual layouts included a range of high-level design assumptions presented in Table 4-8.

Table 4-8. General Concept Assumptions

Route	Assumptions
Fairview Avenue/ Franklin Road BRT-Exclusive Guideway	• BRT lanes would be 12 feet wide with a 2-foot striped transit buffer. • BRT-exclusive lanes would be center-running on two-way streets. • On two-way streets, center BRT lanes would replace the existing center-turn lane (if present). • On two-way streets, existing sidewalk/planter widths would be maintained adjacent to improvements. • One-way couplets would feature side-running BRT-BAT lanes to accommodate access needs. • On one-way couplets, parking lanes and/or planters would be repurposed to accommodate BRT without widening. A minimum 7-foot sidewalk width would be maintained. • Bridges that cannot accommodate the design cross section would be identified for modification/replacement. • Additional width at intersections would be needed to support added BRT lanes. This additional width is not reflected in the proposed footprint. • Buses would have doors on both sides. • Single-center platforms would be used when applicable. • Additional storage and maintenance requirements and constraints would be identified at a future stage.
I-84/I-184 BRT-BAT	• BRT lanes would be 12 feet wide with a 2-foot striped transit buffer. • BRT lanes and transit buffers would be added to the outside of the existing interstate. • Existing shoulder widths would be maintained. • Stations would be located at side-running transitways, on-ramps and off-ramps, intersections, or cross streets. • Any additional circulation required to support transit re-entering the freeway would be accommodated on existing local streets, with improvements limited to TSP modifications. • Bridges that cannot accommodate the design cross section would be identified for modification/replacement. • Additional storage and maintenance requirements and constraints would be identified at a future stage.

Route	Assumptions
Boise Cutoff Commuter Rail	• There would be shared operations for commuter and freight on two tracks along the alignment (to be negotiated). • Existing freight operations would continue and not prohibit continuous passenger rail service during daytime hours (to be negotiated). • One track would need to be added to create a double-track configuration from Boise to Caldwell. • Continued coordination with railroads is needed regarding location, type, and height of station platforms. • There would be a minimum 15-foot spacing between tracks. • Bridges and culverts that cannot accommodate the design cross section would be identified for modification/replacement. • Additional storage and maintenance requirements and constraints would be identified at a future stage. • The eastern terminus would be the Boise Depot, with a bus connection between the depot and the Main Street Station in downtown Boise.

Source: Study Team

Station Location Selection

Station locations were first identified in the *Treasure Valley High Capacity Transit Study 2020 Update* (COMPASS 2020) and were used as the basis for the initial analysis. Station locations were adjusted based on a data-driven evaluation process and refined further based on input from COMPASS staff and on-the-ground realities. These station locations were identified for the purpose of the Tier 3 analysis and are not considered final. Station locations will need to be further refined in the future. Table 4-9 shows the criteria used to evaluate station locations against the PEL Study goals.

Table 4-9. Station Location Criteria

Goals	Evaluation Criteria
Improve Transit Connectivity and Mode Share	• How many people live within 0.5 mile of the station location? • How many transit routes (existing and future) are within 0.25 mile of the station location? • How many major trip generators are within 0.5 mile of the station location (downtown areas, employment centers, universities, hospitals, commercial hubs, etc.)?
Improve Transit Reliability and Expand Travel Choices and Mobility	• Are there existing or planned bike lanes, sidewalks, or shared-use paths within 0.25 mile of the station location? • Is the transit station in an area with a high likelihood of transit usage?
Develop Compatible Plans for High-Capacity Transit, Land Use, and Transportation	• Is the station located within 0.5 mile of transit-supportive development (high-density residential, commercial/retail, office, and institutional)?
Advance Financially Feasible Solutions	• Are there prohibitive space requirements or engineering challenges?

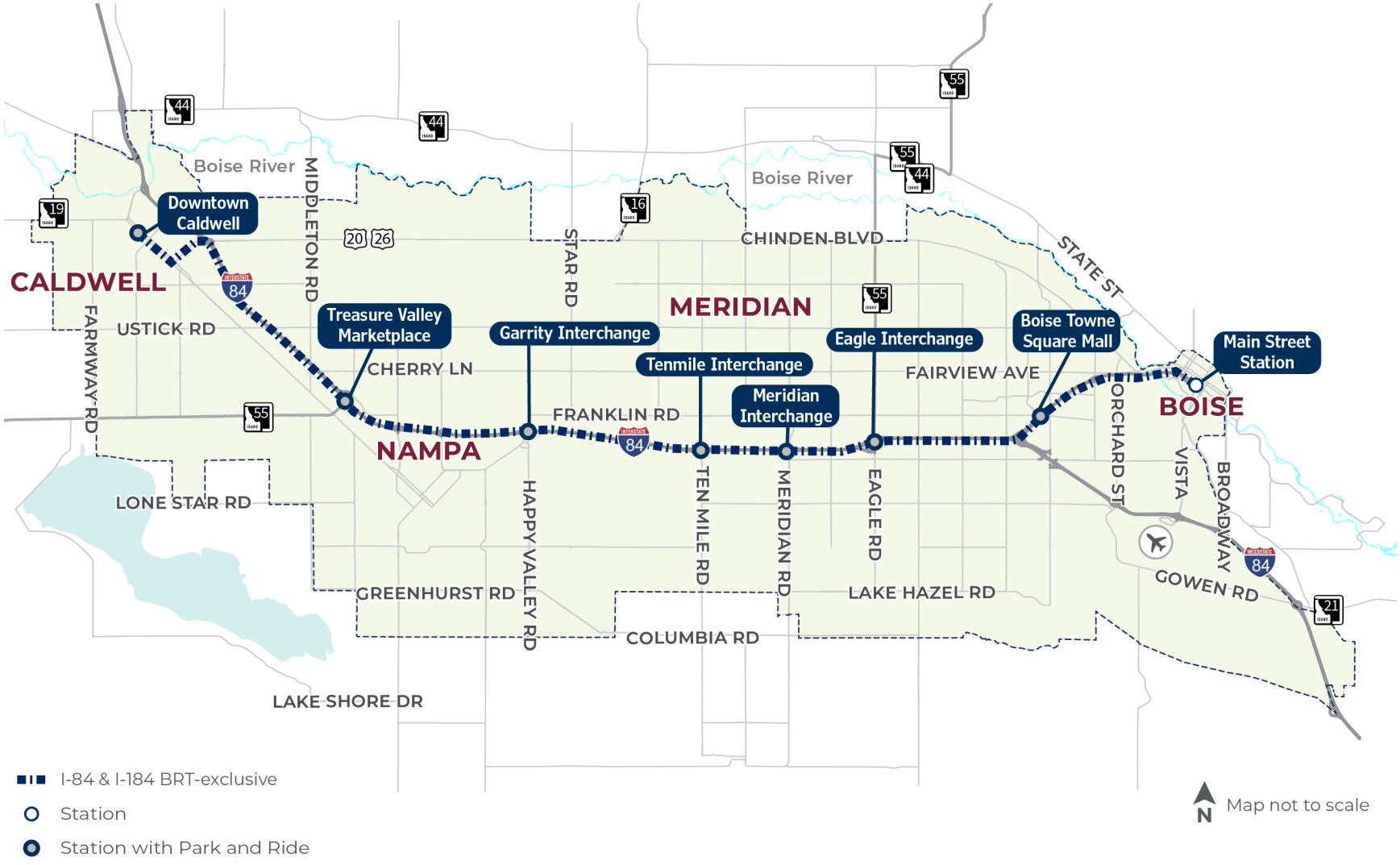
Source: Study Team

Based on conversations with COMPASS staff, it was determined that all stations except Main Street Station in downtown Boise should provide some parking, because much of the region's land use is lower density. Parking is not necessary at Main Street Station because it is primarily served by transit, walking, and biking. Figure 4-10, Figure 4-11, and Figure 4-12 present each alternative and their preliminary station locations assumed for the Tier 3 analysis.

Figure 4-10. Boise Cutoff Commuter Rail Alternative Preliminary Station Locations

Source: Study Team

Figure 4-11. I-84/I-184 BRT-BAT Alternative Preliminary Station Locations



Source: Study Team

Figure 4-12. Fairview Avenue/Franklin Road BRT-Exclusive Alternative Preliminary Station Locations

Source: Study Team

4.4.2 Tier 3 Evaluation Criteria

Overall, 18 criteria reflecting the PEL Study's purpose, need, goals, and objectives were used to help differentiate among the alternatives. The Tier 3 criteria are listed in Table 4-10.

Table 4-10. Tier 3 Evaluation Criteria

Goal	Evaluation Criteria
Improve Transit Connectivity and Mode Share	• What level of ridership is estimated for the route? • What level of capacity could be achieved by the route in consideration of future growth? • To what extent does the alternative expand access to key destinations that can be accessed via transit? • To what extent does the alternative reduce vehicle miles traveled compared to the No Build Alternative? • How well do the alternative's station areas provide service to important community resources and services, including healthcare, grocery stores, government facilities, and community facilities?
Improve Transit Reliability	• What are the comparative travel times for the alternative between major origins and destinations? • To what extent do the alternative's potential maintenance facility options support efficient operations of the service, specifically considering deadhead travel? • What level of delay would be anticipated given the alternative's interaction with general traffic or other modes at major intersections/level rail crossings, and number of grade separations?
Expand Travel Choice and Mobility	• To what extent do the existing and future pedestrian connections at station locations meet the first and last mile needs? • To what extent do the existing and future bicycle connections at station locations meet the first and last mile needs?
Develop Compatible Plans for High-Capacity Transit, Land Use, and Transportation	• How well do the alternative's station areas compare in relation to future growth in population and employment, specifically considering potential economic impact in transit station areas, overall economic development plans, and land use policies? • To what extent does the alternative impact or benefit built and natural environmental resources? • Does the alternative manage impacts or enhance opportunities to support freight/goods movement?

Goal	Evaluation Criteria
Advance Financially Feasible Solutions	• How does the alternative perform when comparing the conceptual capital cost? • How does the alternative perform when comparing the conceptual operating cost? • To what extent does the alternative's conceptual cost align with the federal, regional, and local funding opportunities? • Can the alternative's corridor reasonably be acquired or secured (by lease agreement or other mechanism) for future high-capacity transit service? • How does the refined alternative rank, based on the complexity of construction, construction impacts, and construction risks when considering phasing?

Source: Study Team

4.4.3 Tier 3 Evaluation Results

The results of the Tier 3 evaluation revealed that the remaining alternatives each have benefits and drawbacks. Table 4-11 presents an overview of the evaluation, demonstrating the Boise Cutoff Commuter Rail Alternative as the top-performing alternative resulting from the Tier 3 evaluation. Details on the evaluation of each alternative and specific criteria are presented in the subsequent sections.

Table 4-11. Tier 3 Summary Evaluation Results

Goal	Screening Criteria	Fairview Ave/ Franklin Rd BRT-Exclusive	I-84/I-184 BRT-BAT	Boise Cutoff Commuter Rail
Improve Transit Connectivity and Mode Share	Potential ridership?	O	–	+
	Capacity to accommodate future growth?	O	O	+
	Transit connectivity to/from local routes?	O	O	+
	Potential mode shift and congestion mitigation?	–	–	O
	Access to critical community services and demographics?	O	O	O
Improve Transit Reliability	Reliability through design and travel time?	–	O	+
	Maintenance facility considerations?	O	O	O
	Traffic impacts and challenges?	–	+	O
Expand Travel Choice and Mobility	Pedestrian connectivity?	+	O	–
	Bicycle connectivity?	+	O	O
Develop Compatible Plans for High-Capacity Transit, Land Use, and Transportation	Supports growth and economic development?	O	–	+
	Environmental impacts and benefits?	–	O	O
Advance Financially Feasible Solutions	Impacts to movement of freight/goods?	–	+	O
	Conceptual capital and operating costs?	–	+	O
	Funding options?	O	O	O
	Corridor preservation?	–	O	+
	Phasing and constructability?	–	O	+
Draft Tier 3 Rating		–	O	+

Source: Study Team

Legend: + = Greatest benefit or lowest impact; O = Medium benefit or impact; – = Lowest benefit or greatest impact

Boise Cutoff Commuter Rail

Commuter rail service along the Boise Cutoff corridor scored the highest overall in the evaluation, outperforming other alternatives across several key criteria. The regional travel demand model indicated that the alternative would be more likely to generate higher regional transit demand, reflecting stronger ridership potential. The service would be the most effective at moving more people efficiently across the region as demand continues to grow.

The Boise Cutoff Commuter Rail Alternative would also offer shorter end-to-end travel times, with a total trip time of approximately 58 minutes from downtown Caldwell to the Boise Depot and around 5 additional minutes to downtown Boise. This speed advantage, combined with stations that service areas with high population and employment densities, positions the alternative as both a competitive and convenient option for commuters. Additionally, it likely would have fewer impacts on private property than other alignments, with approximately 15 parcels affected and 5 potential displacements anticipated. Operating costs are also expected to be lower compared to other alternatives.

The Boise Cutoff Commuter Rail Alternative scored less favorably in two areas. Conceptual capital costs for construction are higher compared to the other routes. At the early level of concept development, conservative assumptions for design have been applied. Future levels of design (beyond this PEL Study) should examine options to lower the cost of infrastructure.

Furthermore, the alternative scored lower related to pedestrian access and connectivity. This is not surprising given that the alternative is along an existing freight rail corridor, with most pedestrian and cycling connections having been historically designed to avoid the rail corridor. These industrial areas lack walkable infrastructure and act as a physical barrier, limiting access to surrounding neighborhoods and destinations. It is assumed that bicycle and pedestrian connections would be developed to serve future commuter rail stations.

I-84/I-184 BRT-BAT

The I-84/I-184 BRT-BAT Alternative scored lower than commuter rail in the evaluation due to limited ridership potential and community connectivity. It is projected to capture the smallest share of total regional transit demand by 2050, limiting growth potential. The alternative would serve the fewest community destinations and is in areas with the lowest population densities,

as it operates on the limited-access freeway. Station areas would be located at major interchanges, and considerable improvements would be required to make the environment desirable for pedestrians.

However, the alternative would offer several advantages. It is estimated to have the least impact on general traffic, as buses would operate within new dedicated lanes adjacent to the shoulders, and it would minimally affect truck freight operations. It also would serve select areas with the highest employment densities—compared to other routes—providing direct service to job centers. Finally, the I-84/I-184 BRT-BAT Alternative was estimated to have the lowest capital costs based on conceptual design.

Fairview Avenue/Franklin Road BRT-Exclusive Guideway

The Fairview Avenue and Franklin Road BRT-Exclusive Alternative scored the lowest overall in the evaluation due to traffic and community impacts. The route scored in the middle range for projected transit demand in 2050, falling between the higher-performing Boise Cutoff and the lower-performing I-84/I-184 alternatives. This route is likely to have the longest end-to-end travel time, which may affect its overall competitiveness as a transit option.

This route presents several challenges related to community and transportation impacts. It would have the highest traffic impact of all routes due to the likely removal of midblock left-turn lanes, which may divert vehicle trips onto adjacent roadways. It also may have the highest potential property impacts, with approximately 750 parcels affected and more than 60 potential displacements. Numerous affected parcels are historic sites, some of which are in historic downtown districts. It is assumed that future design beyond this PEL Study could minimize property impacts; however, even with minimization, this alternative has more adjacent private property impacts than the other alternatives. This alternative would also have more potential for impacts to truck freight because it runs along a designated urban freight corridor and the center-running transit lanes may limit access and mobility of freight vehicles. The route is also projected to have the highest operating costs.

However, the Franklin/Fairview route would offer some important community benefits. The station areas would serve the highest share of restricted affordable housing units, improving access for transit-dependent populations. The station locations would have stronger pedestrian and bicycle connectivity than the other options because they would serve a greater mix of commercial areas and residential neighborhoods.

Boise Airport and Micron Connections

The Micron and Boise Airport connections were broadly considered during the Tier 3 evaluation, although they were not measured against the same criteria as the primary east-west routes, because they would not operate as standalone routes. Figure 4-13 and Figure 4-14 show the Boise Airport and Micron connections. Considerations for these connections included the following:

- What type of existing transit service already makes these connections?
- What types of transit services are planned to make these connections?
- What type of transit service is required for each destination?
- Is the connection compatible with the route recommended for further development?

Figure 4-13. Boise Airport Connections

Source: Study Team

Boise Airport Connection

VRT currently operates high-frequency local bus service (Route #3) between downtown Boise and the Boise Airport. This existing local bus service could connect transit riders on any of the Tier 3 alternatives under consideration with the Boise Airport. However, three options to directly serve the Boise Airport with high-capacity transit service were considered. These routes are explained in Table 4-12 and shown on Figure 4-13.

Table 4-12. Boise Airport Connection Options

Connection	Route Description	Compatible Alternatives
Vista Avenue Connection	From the eastern terminus of Tier 3 routes, extend BRT service to the Boise Airport along the 9th Street and S. Capitol Boulevard one-way couplet and S. Vista Avenue.	• I-84/I-184 BRT-BAT • Fairview Avenue/Franklin Road BRT-Exclusive Guideway • Boise Cutoff Commuter Rail (bus transfer required)
Boise Cutoff Connection	From the eastern terminus of the Boise Cutoff Commuter Rail at the Boise Depot, extend commuter rail service to the Boise Airport along the existing Boise Airport Spur Rail Line.	• Boise Cutoff Commuter Rail
I-84 to Vista Avenue Connection	From the I-84/I-184 interchange along the I-84/I-184 BRT-BAT route, continue along I-84 to the Boise Airport before proceeding to Main Street Station in downtown Boise via S. Vista Avenue and the 9th Street and S. Capitol Boulevard one-way couplet.	• I-84/I-184 BRT-BAT (This option is an alternate route option rather than an extension of the I-84/I-184 BRT-BAT Alternative)

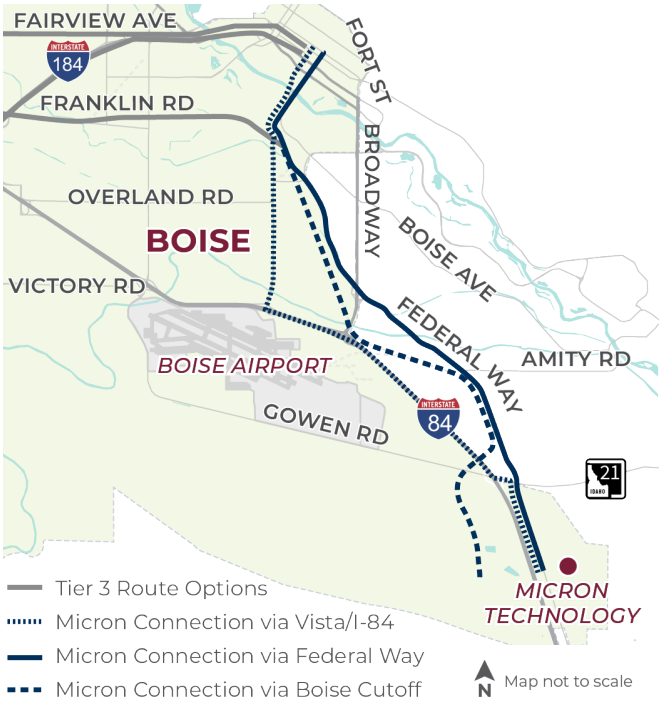
Source: Study Team

Micron Connection

Transit service does not currently exist between downtown Boise and the Micron campus, which houses the region's largest private, for-profit employer. Three route options to provide high-capacity transit service to the Micron campus were considered. These routes are explained in Table 4-13 and shown on Figure 4-14.

A peak period express bus route is already planned to connect Nampa, Meridian, the Boise Airport and Micron (VRT 2022). This peak period express service is likely a more efficient way to provide transit service to the campus than high-capacity transit providing all day service, as is assumed for the alternatives being evaluated in this PEL Study.

Figure 4-14. Micron Connections



Source: Study Team

Table 4-13. Micron Connection Options

Name	Route Description	Compatible Alternatives
Vista Avenue/ I-84 Connection	From the eastern terminus of Tier 3 alternatives, extend BRT service to the Micron campus along the 9th Street and S. Capitol Boulevard one-way couplet, S. Vista Avenue, I-84, and S. Federal Way.	• I-84/I-184 BRT-BAT • Fairview Avenue/Franklin Road BRT-Exclusive Guideway • Boise Cutoff Commuter Rail (bus transfer required)
Federal Way Connection	From the eastern terminus of Tier 3 alternatives, extend BRT service to the Micron campus along the 9th Street and S. Capitol Boulevard one-way couple to S. Federal Way.	• I-84/I-184 BRT-BAT • Fairview Avenue/Franklin Road BRT-Exclusive Guideway • Boise Cutoff Commuter Rail (bus transfer required)
Boise Cutoff Connection	From the eastern terminus of the Boise Cutoff Commuter Rail at the Boise Depot, extend commuter rail service along the UPRR mainline to the vicinity of the Micron campus. The connection from the freight rail corridor to the campus is not defined.	• Boise Cutoff Commuter Rail

Source: Study Team

5 Study Recommendations

Based on the Tier 3 Evaluation, the Boise Cutoff Commuter Rail Alternative is recommended for future project development steps as the preliminary locally preferred alternative. Commuter rail service along the Boise Cutoff freight corridor scored the highest overall in the evaluation, outperforming other alternatives across several key criteria. This chapter summarizes why this alternative was recommended and documents the key assumptions and design elements of this alternative. Much of this information is drawn from prior chapters with the intent of capturing all relevant information about the alternative in one place.

The evaluation supporting this recommendation (as presented throughout this report) reflects available desktop data, high-level analyses of benefits and impacts, input from stakeholders and the public, and the current planning and regulatory landscape at the local, state, and federal levels. This recommendation does not preclude revisiting alternatives along the interstate or arterial corridors in the future if warranted by changing conditions. Refer to Section 7.6 for more information about the transition from this PEL Study to a future NEPA phase of the project.

Key Benefits of the Boise Cutoff Commuter Rail Alternative Compared to Other Alternatives Considered:

- Projected to attract the most transit riders
- Greatest ability to accommodate future transit demand as the population in the region increases
- Fastest and most reliable travel times between Boise, Meridian, Nampa, and Caldwell
- Best potential to preserve a high-capacity transit corridor in the Treasure Valley
- Strongest economic development potential
- Fewest potential residential and commercial property acquisitions/relocations

5.1 Boise Cutoff Commuter Rail Description

The Boise Cutoff Commuter Rail Alternative uses existing freight rail corridors to provide passenger rail service between Boise and Caldwell. The eastern terminus for rail service is the Boise Depot southwest of downtown Boise near the intersection of S. Capitol Boulevard and S. Vista Avenue. There is existing bus service from this location connecting to Boise Airport along S. Vista Avenue and to Main Street Station in downtown Boise along S. Capital Boulevard. From the Boise Depot, the alternative uses the Boise Cutoff freight rail corridor owned by BVRR to travel west to Nampa. From Nampa, the route travels northwest along the UPRR mainline to the western terminus at the Caldwell Depot near 6th Avenue in downtown Caldwell. The route is depicted on Figure 5-1.

5.1.1 Rail Corridor Assumptions

The following assumptions were used in developing the conceptual design for the Boise Cutoff Commuter Rail:

- The project would construct one track parallel to an existing freight rail track inside the existing railroad ROW to create a double-track configuration between Boise and Caldwell.
- There would be shared operations for commuter and freight along the two tracks. This would need to be negotiated with the railroads.
- Existing freight operations would continue and not prohibit continuous passenger rail service during daytime hours. This would need to be negotiated with the railroads.
- There would be a minimum 15-foot spacing between tracks.
- There are 10 existing bridges and 16 existing culverts that cannot accommodate the design cross section and would require modification or replacement.
- Additional storage and maintenance requirements and constraints would be identified at a future stage.

These planning-level assumptions are subject to change during future phases of design.

Figure 5-1. Boise Cutoff Commuter Rail Alternative with Preliminary Station Locations

Source: Study Team

5.1.2 Station Assumptions

The conceptual design for the Boise Cutoff Commuter Rail Alternative includes nine stations along the rail corridor as shown on Figure 5-1 and listed in Table 5-1. The existing Main Street Station in downtown Boise would be linked to this rail corridor through an existing local bus connection (Route #3). The station locations were selected to achieve project goals and considered surrounding population density, proximity to transit-supportive development likely to generate transit trips (downtown areas, high-density residential, employment centers, universities, hospitals, and commercial hubs), and connectivity to existing transit routes, bike lanes, shared-use paths, and sidewalks. Table 5-1 lists the stations and the planning assumptions used for the conceptual design. These planning-level assumptions are subject to change during future phases of design.

Table 5-1. Station Assumptions

Station	Location	Park and Ride	Parking Capacity	Parking Type
Boise Depot	Boise	Yes	250	Structure
Boise Town Square Mall	Boise	Yes	150	Surface lot
Eagle Road	Meridian	Yes	150	Surface lot
Downtown Meridian	Meridian	Yes	250	Surface lot
Ten Mile Road	Meridian	Yes	150	Surface lot
Idaho Center	Nampa	Yes	250	Surface lot
Downtown Nampa	Nampa	Yes	250	Structure (shared with existing parking garage)
Happy Day Transit Center	Caldwell	Yes	250	Structure
Caldwell Train Depot	Caldwell	Yes	250	Structure

Source: Study Team

5.1.3 Operating Assumptions

The operating assumptions for the Boise Cutoff Commuter Rail Alternative were developed for comparative purposes only, as part of this PEL Study.

These planning-level assumptions will change based on refining needs, discussions with the railroads, optimization of the system, and future phases of design.

- Five trains in operation, each with six train cars
- 58-minute travel time between the Boise Depot and Caldwell Depot
- Train frequency and service hours on weekdays:
  - 30 minutes between trains
  - 16 hours of service daily
- Train frequency and service hours on weekends/holidays:
  - 60 minutes between trains
  - 14 hours of service on Saturdays
  - 12 hours of service on Sundays/holidays

5.1.4 Boise Airport and Micron Connections

While Boise Airport connections were eliminated as standalone routes, an extension of the Boise Cutoff Commuter Rail route to the Boise Airport is recommended to be considered further during a future NEPA phase. While this transit connection could be served by the existing high-frequency bus route (Route #3) or an enhanced route along Vista Avenue, which currently connects between downtown Boise and the Boise Airport passing by the Boise Depot (VRT n.d.), a rail connection could be made by extending commuter rail service from the Boise Depot along the existing Boise Airport Spur Rail Line, which terminates at Boise Airport. Stakeholders and the public identified the airport as a key connection to help alleviate congestion and address parking issues at the airport.

Micron connections are not recommended for further analysis as part of the PEL Study. This destination may be better serviced by peak period express bus service already planned by VRT to connect Nampa, Meridian, the Boise Airport, and Micron (VRT 2022). A separate project could explore specific transit demand and service needs for the Micron campus.

6 Environmental Resource Considerations

This PEL Study included consideration of environmental resources in the development and evaluation of high-capacity transit solutions to address the purpose and need. Available desktop data were used to identify resources in the study area. No field data collection was undertaken, and limitations of available desktop data remain to be addressed. Additional data collection will be necessary during future NEPA phases, including data for resources not covered in this report such as visual impacts, general wildlife species, and water quality. These and other resource issues are not addressed in this report because the PEL Study considered resource topics for which stakeholders expressed concern, resource topics with regulatory requirements relevant during early project planning, and resource topics with the potential to influence decision making during this PEL Study. All environmental resources as required by NEPA will be identified and evaluated during future project-level NEPA phases. Research for environmental resources in the study area, including regulatory context, data sources, resource conditions, and scoping input, is documented in the *Environmental Resources Report* available in Appendix G.

Scoping input on environmental resources in the study area was provided by members of the Environmental Review Workgroup, who participated in the kickoff meeting for the PEL Study, reviewed the *Environmental Resources Report* and provided comments, and met with the study team for a discussion of environmental resource considerations in the study area. During this meeting, held on October 31, 2024, the study team presented the purpose and need, explained the PEL Study process, and reviewed the environmental data presented in the *Environmental Resources Report*. The meeting summary is available in Appendix D.

A summary of existing resource conditions, potential impacts and mitigation strategies, and anticipated next steps as the Boise Cutoff Commuter Rail Alternative progresses into future NEPA phases is presented in Table 6-1. A more detailed discussion on these topics is available in the *Environmental Resource Impacts and Considerations for NEPA* report in Appendix G.

Table 6-1. Environmental Resource Considerations for the Boise Cutoff Commuter Rail Alternative

Resource	Existing Conditions	Potential Impacts	Potential Mitigation and Next Steps	Anticipated Permits and Authorizations
Farmland	Areas of prime farmland and farmland of statewide importance along the commuter rail corridor are concentrated between Tenmile Road and Idaho Center Boulevard.	The Boise Cutoff Commuter Rail Alternative may impact about 1 acre of prime farmland and farmland of statewide importance. However, if planned growth and development in the study area occurs, land currently designated as prime or statewide-important farmland may no longer be subject to Farmland Protection Policy Act requirements.	If future projects affect farmland, a Farmland Conversion Impact Rating form will be completed and coordination with the Natural Resources Conservation Service will occur to comply with Farmland Protection Policy Act and minimize adverse effects on agricultural lands.	None.
Historic Resources	Numerous historic resources exist along the proposed commuter rail corridor, including historic buildings, historic structures, linear resources, and historic districts.	The Boise Cutoff Commuter Rail Alternative directly intersects 32 linear resources and 3 structures previously determined eligible for listing in the National Register of Historic Places. Several historic properties may be adversely affected. In addition, historic properties directly adjacent to the project footprint may be adversely affected if aboveground elements of the alternative affect the integrity of setting of these properties.	In compliance with Section 106 of the NHPA, consultation during NEPA will involve identifying consulting parties, establishing the project area of potential effects, performing field surveys to inventory historic-era properties within the area of potential effects, and evaluating National Register of Historic Places eligibility and project effects. If adverse effects to historic resources occur and avoidance is not possible, a Memorandum of Agreement will be developed to outline mitigation measures to address the adverse effects.	Concurrence from the State Historic Preservation Officer and consulting parties on project effects to significant historic resources in compliance with Section 106 of the NHPA. FTA approval under Section 4(f) of the USDOT Act for any use of historic resources.
Recreation Properties/ Section 4(f)/ Section 6(f)	Twelve recreational sites, including multi-use paths, parks, a golf course, and sports fields, are adjacent to the commuter rail corridor, some of which may be subject to Section 4(f). No Section 6(f) resources are near the commuter rail corridor.	The Boise Depot Park and a section of unnamed trail near North Milwaukee Street may be impacted.	Comprehensive inventory, mapping, and assessment of park and recreational resources is needed to determine impacts and appropriate mitigation strategies. Coordination with the City of Boise is needed to determine if the unnamed trail and Boise Depot Park are significant recreational resources protected under Section 4(f). If protected and impacts to these resources are unavoidable, a formal Section 4(f) finding will be prepared with FTA and the Official with Jurisdiction.	FTA approval under Section 4(f) of the USDOT Act for any use of recreation resources determined to be subject to protection under this regulation.
Transit Noise and Vibration	Land uses with noise- and vibration-sensitive receptors exist along the corridor. Pockets of residential land use, which is more sensitive to noise than other uses like commercial or industrial, are spread throughout the corridor. Vibration-sensitive receptors may include research and manufacturing labs, specialized equipment, historic properties, or other sensitive facilities.	Noise-sensitive receptors along the Boise Cutoff Commuter Rail Alternative may experience impacts from increased train operations, horn noise at at-grade rail crossings, and increased vehicle traffic near stations with park and ride facilities. Train movement over tracks can cause ground vibration, which may be felt in nearby buildings. If sensitive properties are located near the rail alignment, they could experience vibration impacts.	A general noise assessment is recommended to evaluate potential noise and vibration impacts, as defined in the 2018 FTA manual. A detailed noise analysis may be needed in areas with severe impacts or where mitigation is required. If severe impacts are identified, mitigation measures should be considered where feasible at the noise source, along the source-to-receiver propagation path, or at the receiver. Treatments at the noise source might include resilient or damped wheels, vehicle skirts, undercar absorption, and quiet fan design and placement. Establishing quiet zones can also reduce the occurrence of horn noise where the rail line crosses roads at-grade. Coordination with businesses and institutions may be needed to confirm the presence of vibration-sensitive receptors.	FRA approval to establish a quiet zone.

Resource	Existing Conditions	Potential Impacts	Potential Mitigation and Next Steps	Anticipated Permits and Authorizations
Air Quality	All of the study area is designated by the U.S. Environmental Protection Agency as an attainment area for all criteria pollutants. However, the Idaho Department of Environmental Quality has identified the Treasure Valley as an area of concern for $PM_{2.5}$ [particulate matter less than 2.5 microns in diameter] and ozone, as levels of these pollutants are approaching limits established by the Clean Air Act and amendments (CAAA).	The Boise Cutoff Commuter Rail Alternative is expected to be federally funded and regionally significant. The project is located in an attainment area, so it would not be subject to air quality conformity under the CAAA. Because the project is not expected to add substantial new capacity or create a meaningful increase in mobile source air toxics (harmful emissions), air quality impacts are expected to be minimal.	If the air quality status of Ada and Canyon Counties changes before a NEPA analysis, future projects may need to meet air quality conformity requirements under the CAAA, possibly requiring interagency consultation. If the project were funded and approved by the FRA, general conformity rules would also apply.	None.
Hazardous Materials	Numerous hazardous materials sites were identified within the study area and along the proposed commuter rail corridor. No National Priorities List Superfund sites are located near the proposed commuter rail corridor.	Five hazardous material sites, identified at locations where potential property acquisition may be required for the Boise Cutoff Commuter Rail Alternative, may pose a moderate risk of impacting excavation during construction and property acquisition due to potential soil and groundwater contamination. Impacts may include increased costs related to site investigations, remediation before or during construction, disposal of contaminated materials, and health and safety considerations. Additionally, bridge replacements and building renovations or demolitions may require surveys for regulated materials such as asbestos and lead, potentially leading to abatement efforts.	Additional hazardous materials investigation would be needed to identify and mitigate potential impacts. Where substantial or full ROW acquisition is needed, ASTM International standard environmental site assessments would be warranted prior to construction.	None.
Aquatic Resources	Along the proposed commuter rail corridor, surface waters such as creeks and canals are present. Based on a review of aerial imagery and National Wetlands Inventory (NWI) identified wetlands (USFWS 2023), the highest potential to encounter wetland areas along the rail corridor are where it parallels Indian Creek in several locations between Nampa and Caldwell.	Conceptual design of the Boise Cutoff Commuter Rail Alternative identified 24 waterway crossings that may be impacted from modification or replacement of bridges and culverts to accommodate a second track. Preliminary analysis also indicates potential impacts to approximately 0.24 acres of NWI wetlands.	Delineations and functional assessments will be conducted during future NEPA studies to establish the boundaries of wetlands and other waters of the United States and determine affected wetland types and functional values. Future design efforts will focus on avoiding and minimizing impacts. Coordination with the U.S. Army Corps of Engineers will be necessary to identify features regulated under the Clean Water Act (CWA).	Individual or nationwide permits under Section 404 of the CWA.
Floodplains	The proposed commuter rail corridor intersects several floodplains, primarily near Meridian, Nampa, and Caldwell, associated with Fivemile Creek, Eightmile Lateral, Ninemile Creek, Mason Creek, and Indian Creek.	The Boise Cutoff Commuter Rail Alternative may impact approximately 2.6 acres of designated floodplain where it parallels Indian Creek and crosses several other waterways. At these crossings, the conceptual design identified nine locations in or directly adjacent to designated floodplains where floodplain encroachment is possible based on modification or replacement of existing bridges or culverts needed to accommodate the second track.	Coordination with local planning departments and agencies that enforce federal floodplain regulations will need to be conducted throughout the design process regarding potential impacts and permitting of work within floodplains and floodways. Floodplain modeling would likely be required to evaluate how the project might affect floodplains at crossings and to obtain necessary permits.	Floodplain development permits will be required from local agencies. Federal Emergency Management Agency map revisions (Conditional Letter of Map Amendment/Letter of Map Amendment) may also be needed.

Resource	Existing Conditions	Potential Impacts	Potential Mitigation and Next Steps	Anticipated Permits and Authorizations
Sensitive Species	Numerous state-listed species, four federally listed species, and several migratory bird species may occur in the vicinity of the proposed commuter rail corridor, particularly where the commuter rail alignment would cross or parallel riparian corridors.	Construction of the Boise Cutoff Commuter Rail Alternative would mostly occur within existing railroad ROW and previously disturbed areas, limiting habitat loss. Because the alignment follows an active freight corridor, no new habitat fragmentation is expected; however, disturbance to migratory birds and natural areas resulting in habitat loss to state or federally protected species could occur in riparian corridors where the alternative parallels or crosses waterways.	During the NEPA process, updated species lists and occurrence data should be reviewed for listed species to identify changes since the PEL Study and guide further analysis and coordination with the U.S. Fish and Wildlife Service (USFWS), the Idaho Department of Fish and Game (IDFG), and the Idaho Office of Species Conservation. This coordination may include field surveys and consultation to assess habitat conditions and potentially confirm the presence or absence of listed species. Consultation with USFWS and IDFG is anticipated to assess potential impacts and identify appropriate conservation measures.	USFWS authorization under Section 7 of the Endangered Species Act.

7 Implementation Strategy

The Tier 3 evaluation resulted in the Boise Cutoff Commuter Rail Alternative as the top-performing route and transit mode. On August 18, 2025, the COMPASS Board adopted commuter rail along the Boise Cutoff route as the preliminary locally preferred alternative. Due to that action, this implementation strategy focuses on the Boise Cutoff Commuter Rail Alternative.

This chapter presents potential concepts for implementation of the Boise Cutoff Commuter Rail Alternative, discusses the project's independent utility and logical endpoints (termini), and presents the following:

- Options for phased implementation and funding.
- Roles and responsibilities for subsequent project steps.
- Recommended future station-area planning (SAP) to optimize the investment in transit.
- Requirements to complete NEPA documentation.

The Boise Cutoff Commuter Rail Alternative is discussed in Chapter 5 of this report and the conceptual layout is in Appendix F.

7.1 Independent Utility and Logical Termini

FTA's environmental regulations outline three general principles to confirm that a project is not improperly segmented during environmental review (*Code of Federal Regulations*, Title 23 Section 771.111(f)). To ensure meaningful evaluation of alternatives and to avoid commitments to transportation improvements before they are fully evaluated, the proposed alternatives must achieve the following:

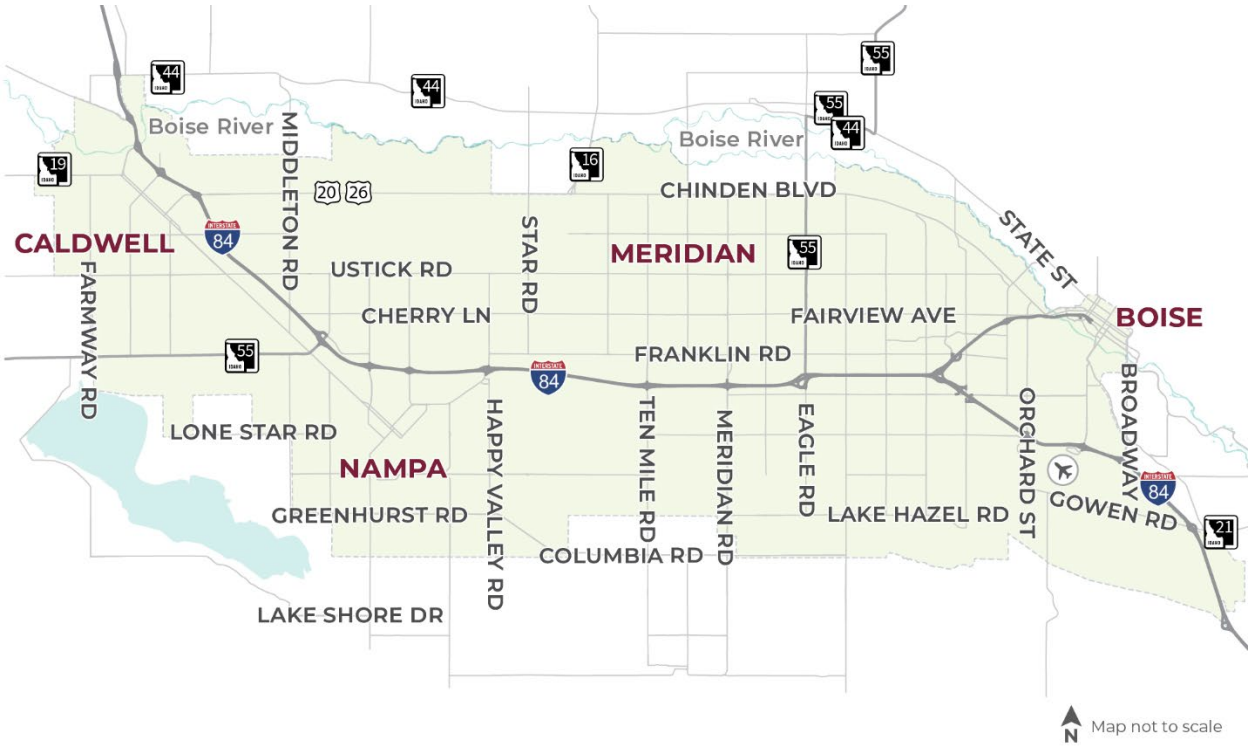
- Connect logical termini and be of sufficient length to address environmental matters on a broad scope.
- Have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made.
- Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

This section describes how the Boise Cutoff Commuter Rail Alternative fulfills these three requirements.

7.1.1 Logical Termini

Project termini are end points for both transportation improvements and a review of environmental impacts. This PEL Study addresses both. The east terminus of the Boise Cutoff Commuter Rail Alternative is the Boise Depot and the west terminus is the Caldwell Depot. The termini represent the eastern and western boundaries for the proposed commuter rail service and include the local travel markets represented in the purpose and need statement. These limits were identified based on current and forecasted travel demand between the communities of Boise, Meridian, Nampa, and Caldwell. The study area for review of environmental impacts covers a broader area to adequately address environmental matters (Figure 7-1).

Figure 7-1. Study Area



Source: COMPASS, Study Team

7.1.2 Independent Utility

The Boise Cutoff Commuter Rail Alternative is a reasonable expenditure without the need for additional direct transportation improvements. The proposed commuter rail service would serve as the "spine" of the existing VRT system, improving the system as a whole. When implementation of the Boise Cutoff Commuter Rail Alternative is complete, the system may evolve to gain the benefits provided by the investment of high-capacity transit; however, the recommended improvements independently serve the local travel markets provided in the purpose and need.

7.1.3 Consideration of Other Transportation Improvements

The Boise Cutoff Commuter Rail Alternative has been developed to not preclude or limit the implementation of other reasonably foreseeable transportation improvements in the study area. The alternatives were identified and evaluated in coordination with projects included in the No Action Alternative, as defined in Section 4.1. The No Action Alternative is based on *Communities in Motion 2050* (COMPASS 2022), the region's adopted long-range transportation plan for Ada and Canyon Counties. Coordination with local, regional, and state transportation representatives (as discussed in Section 3.1) throughout the alternatives screening process for this PEL Study promoted consistency with regional transportation planning efforts, including future multimodal improvement strategies. Coordination with UPRR and BVRR did not identify freight projects to be included in the No Build Alternative. Additional coordination with freight rail companies is needed during subsequent project steps to determine how passenger service and freight service would coexist in the corridor.

7.2 Phasing and Potential Cost Savings Considerations

This section investigates phasing opportunities for the implementation of the Boise Cutoff Commuter Rail Alternative. The evaluation considers criteria such as costs, passenger operations, freight operations, ROW, environment, permitting, and other projects such as future private developments.

7.2.1 Phasing and Cost Savings

Capital Cost

Cost is often a substantial hurdle for implementing major projects. For linear projects, the length of the improvements is a factor, along with more costly spot improvements such as structures and station-area improvements. It is recommended that various strategies be explored to reduce capital costs. Example phasing options may include the following:

1. Phased Double-track Construction: Limiting the construction of the second track to sidings required for freight or passenger operations may reduce the construction cost. This would eliminate track work and bridge/structure construction required to accommodate the second track but would require additional signaling infrastructure.
2. Phased Platform Construction: Constructing single platforms (that serve both passenger directions), shorter platforms, and/or low-level platforms would reduce the cost of the first phase of project implementation.
3. Operational Reductions: Reducing the frequency of service would reduce the required initial investment in rolling stock.

Passenger Operations

The passenger operations schedule developed for the Tier 3 analysis assumes a 30-minute headway during weekday service and a 60-minute headway during weekend service. The headway speaks to the time between trains. To reduce the operational cost of providing service, this standard headway could be lengthened, which means that trains would run less frequently most of the time; potential peak-hour service could provide reduced headways (higher-frequency train service) only at certain high-volume times of the day to better meet riders' needs. With a more refined service plan design, this option may reduce the rolling stock required to implement the service. The development of the service plan will advance in future project phases and will be dependent on agreements with the host railroads.

Freight Operations

Coordination with the host railroads to determine the ultimate passenger rail service plan is needed to avoid impacting the freight operations with the introduction of passenger rail service. Based on the FRA inventory, current freight operations in the rail corridors for the Boise Cutoff Commuter Rail Alternative are as follows:

- Freight operations on the Boise Cutoff rail line consist of two eastbound trains departing from Nampa in the morning. Based on available information, these trains serve clients along the Boise Cutoff as far east as I-84 near the Gowen Road interchange before returning to Nampa in the afternoon. Rail car switching operations are completed directly from the Boise Cutoff rail line.[5] Customers are switched from both sides of the Boise Cutoff rail line throughout the route. The current freight operations block the main line for most of the daytime operating hours.
- The double UPRR tracks between Nampa and Caldwell serve multiple purposes: through trains travel along the route, personnel perform crew changes, and freight trains waiting for permission or space to get into the Nampa rail yard are stopped on the tracks. In this segment, there are multiple freight rail customers with industrial lead tracks on both sides of the current track.

Phasing the level of infrastructure over time may lessen the challenges of maintaining freight operations (access to freight clients) and integrating future passenger rail operations. Formal consultation, negotiations, and ultimately agreements with the freight railroads will be required to advance the project. While passenger rail has been successfully implemented along shared freight corridors, each corridor is unique. Engagement with the railroads has been initiated through this PEL Study process, but the process must continue to evolve with more information, analysis, and relationship building with the host railroads.

ROW and Environmental

The existing rail corridors have adequate width in most locations for an additional track. For this reason, the project would have limited direct acquisition of additional ROW regardless of the phasing approach. Given the ROW is an active freight rail corridor with ongoing maintenance, there are likely limited impacts to the natural environment, assuming construction remains primarily within the railroad's ROW. While the park and ride infrastructure at station areas is currently proposed on properties outside the existing railroad ROW, most are planned in existing parking lots where shared parking agreements could be proposed as a capital cost savings measure.

[5] Railcar switching is the process of breaking up trains and their cars and modifying them to fit the specific needs of a particular shipment.

Project Delivery Method

To be conservative, the current cost estimates assume a construction manager/general contractor approach for project delivery. Similar recent rail transit projects have used a progressive design-build (PDB) method to deliver projects under a single contract that combines the design and construction teams. This approach is currently being used by the Utah Transit Authority (UTA) to deliver the FrontRunner 2X project, which will double track the Wasatch Front region's commuter rail service (along a freight rail corridor).

The study team recommends that a PDB approach be explored in the future for delivery of the Boise Cutoff Commuter Rail Alternative. The PDB delivery approach simplifies the contracting process (single contract) and integrates the design and construction teams, who are involved from start to finish of the project. This allows the construction team early influence on the design to avoid later changes. The key benefit is clarity of costs, where the contractor can validate early cost estimates to avoid the differences between estimates and actual costs that arise on many projects. Depending on the delivery schedule, the combined design and construction team through a PDB can also allow early construction packages to begin in advance of full design completion. Efficiencies associated with combining the design and construction teams, early contractor input on costs, and expediting the schedule, may reduce overall construction costs.

Other Projects

The study team identified no substantial active or planned projects that could affect the phasing options presented in this PEL Study. More information will be required from the host railroads to verify any improvement plans they may have within their ROW. Private industrial development along the rail corridor could impact project plans, creating more industrial leads that require accommodation with the passenger rail operations. Private development along the corridor is unlikely to impact the current railroad ROW, and therefore would not limit phasing options. Private development at planned station locations could impact assumptions for station parking, access, and amenities. Advancing SAP, discussed further in Section 7.5, will help to set land use expectations, and allow for planning that complements (as opposed to conflicts with) planned station areas.

Proposed efforts that may benefit implementation include the growing momentum around restoring the Pioneer Corridor (Amtrak) from Salt Lake City to Boise passenger rail service. The City of Boise, ITD, the Utah Department of Transportation, and the UTA are actively pursuing inclusion for the Pioneer

Corridor in the federal Corridor Identification and Development Program and other funding opportunities to advance planning and design with the FRA. Should this effort move toward implementation, there is an overlap within the corridor. Economies of scale could be achieved with shared infrastructure such as track, signaling, select stations, and maintenance. Advancing the Pioneer Corridor could expedite the implementation of this project.

7.2.2 Phased Implementation Options

Table 7-1 presents phased implementation options as scenarios and discusses the magnitude of potential cost savings.

Table 7-1. Implementation Options

Scenario	Savings (order of magnitude)	Description
Peak-hour service	Low	Reduce operations for initial phase to provide transit service only during hours of peak daily demand, rather than providing service 12 to 16 hours per day as was assumed in this PEL Study. Reduces the number of locomotives, rolling stock, and staff required.
Reduced headway service	Low	Reduce operations for initial phase to provide less frequent transit service. For example, trains every hour rather than every 30 minutes. Reduces the number of locomotives, rolling stock, and staff required.
Phased double-track construction	Medium/Low	Limit the construction of the second track to sidings required for maintaining a minimum level of operations—savings based on operational/headway decisions. This would require agreements with freight operators.
Minimal-length trainset with previously used railcars/equipment	Medium	Reduce the number of cars in a trainset and purchase previously used passenger railcars and equipment for initial startup service. Additional analysis would be needed to determine the minimum fleet based on an amended service plan. Reduces rolling stock and associated costs, and limits the required station length.
Minimal station footprints	Medium	Construct shorter or simpler platforms to lower capital construction costs. Platforms could be extended in the future. Initial platforms could be low floor to minimize station infrastructure (depending on the fleet selected).
Project delivery method	Medium	Deliver through a PDB delivery approach, which simplifies the contracting process (single contract) and integrates the design and construction teams from start to finish of the project.

Scenario	Savings (order of magnitude)	Description
Shorter Boise to Nampa service	High	Reduce the length of the initial phase to terminate at Nampa instead of Caldwell. This would lessen the overall infrastructure including reducing track, systems, and rolling stock requirements. Potential need to revisit planning products used or adopted into NEPA, because it does not meet the purpose and need. Primary savings are in capital expenses.
Coordinate with Pioneer Corridor efforts to share infrastructure	Not Determined	Re-establish the Pioneer Corridor Boise to Salt Lake City service to prime the route for commuter rail service. If the Pioneer Corridor were to advance in the near term, this provides the opportunity to share in major elements including infrastructure, maintenance, and host railroad agreements.

7.3 Funding Strategies

Currently, no funding has been committed to advance the project. Implementation will depend on securing considerable engineering and construction funding. This section provides an overview of potential funding sources that could advance the design and construction of the project—specifically, the Boise Cutoff Commuter Rail Alternative—and provides case studies highlighting the funding sources that supported the development of recent commuter rail projects in other areas.

Typically, high-capacity transit projects are funded through a combination of local and federal funding sources, although there are exceptions. Even with generous federal support for the project, local funding will be needed for both capital construction and the ultimate operation of the system. At present, the State of Idaho and local jurisdictions lack a dedicated funding source to support public transportation. Elsewhere in the United States, many local agencies implement a dedicated sales tax for transit or identify another local revenue source to fund ongoing operations or to repay capital construction bonds.

Pursuing these types of funding sources would be an important first step to eventually securing federal funding from sources such as the FTA CIG discussed in Section 7.3.1. Typically, setting up a transit taxing district requires a change in state law and, often, voter approval. Once this step is complete, the transit district can take the first steps toward drawing on local funding sources such as sales tax or vehicle excise fees.

The project's eligibility and competitiveness for an FTA CIG is an area of focus in this chapter, given that most high-capacity transit projects in the United States are funded (up to 80%) with grants through this program. As the federal and state funding landscape may change during the coming months and years, it is noted that this section describes current funding sources, which are subject to change.

7.3.1 Funding Sources

FTA Capital Investment Grant Program

The FTA CIG program supports major transit projects through three categories of projects, which each have different requirements: New Starts, Small Starts, and Core Capacity. The New Starts project category specifically funds new fixed guideway transit projects or extensions with total costs exceeding $400 million and awards a minimum of $150 million per project. The CIG New Starts program can cover up to 80% of eligible project costs; however, projects that provide more than 50% of the project costs in local funding are far more competitive for CIG funding. As the largest federal discretionary grant program for any mode of transportation, CIG is particularly well-suited for high-cost, transformative investments—such as the construction of a new commuter rail line.

Initial Screening of the Boise Cutoff Commuter Rail Alternative for CIG Competitiveness

Screening for CIG will be a critical first step toward obtaining funding from this important source. The CIG program evaluates projects using two high-level criteria: project justification and local financial commitment.

Project Justification

Project justification includes the following criteria: mobility improvements, environmental benefits, congestion relief, cost effectiveness, economic development, and land use. Ridership and project cost are the most critical factors influencing the project justification element of the New Starts evaluation because those figures largely determine scores on mobility improvements, congestion relief, and cost effectiveness criteria.

Local Financial Commitment

Local financial commitment is evaluated based on the current condition of assets owned by the agency, whether funds for construction and operations in the first year are committed or budgeted, the reasonableness of the capital and operating cost estimates and planning assumptions, and the capital funding capacity of the applicant. The applicant must demonstrate stable and dependable financing sources to construct, maintain, and operate the CIG project without cutting transit service in other areas. The percent of funding contributed from local sources is also a factor: projects contributing more than 20% of the total cost from local funds are rated more favorably than projects that provide the 20% minimum local match, while projects that include more than 50% committed local funds are rated even more favorably. Local Financial Commitment was not evaluated in depth for this PEL Study. However, currently the Boise Cutoff Commuter Rail Alternative likely does not have the local financial commitment in place that would be required to move forward in the CIG program because local funds are not currently committed to the project.

CIG Competitiveness

Initial screening of the Boise Cutoff Commuter Rail Alternative indicates the project performs well in some categories and that additional work is needed to shore up performance in other categories. The project may score relatively well on the land use criteria due to relatively high density near the project area, especially if local municipalities adopt policies promoting density. If a large percentage of riders are transit dependent, this factor would also improve scoring for the CIG program.

The most significant factors for obtaining CIG funding are ridership and cost. The planning-level cost estimates and initial ridership projections prepared for this PEL Study are not suitable for obtaining New Starts funding. These analyses were high level and intended only to facilitate comparison of alternatives in this PEL Study. For ridership, the FTA Simplified Trips-on-Projects Software (STOPS) analysis is needed to develop ridership projections that meet FTA standards for CIG program applications. Cost savings measures as outlined in Table 7-1 should be evaluated in more detail to identify a cost-effective design proposal. These additional analyses could influence each of these factors substantially, making the project competitive for New Starts funding.

Other Discretionary Grant Programs

Additional discretionary grant programs include the USDOT Better Utilizing Investments to Leverage Development (BUILD) and FRA programs such as the Consolidated Rail Infrastructure and Safety Investments (CRISI) grant programs. Both funding programs may be good options for ancillary improvements that could support the project but offer small award sizes: BUILD grants offer a maximum award size of $25 million while CRISI grant awards are typically no more than $60 million. For example, a BUILD award could support station improvements or first and last mile access to stations, while CRISI awards could support grade crossing safety improvements.

Financing: TIFIA Program

The Transportation Infrastructure Finance and Innovation Act (TIFIA) program offers low-cost, long-term credit assistance to agencies undertaking major surface transportation infrastructure projects. Often, for large-scale projects, project sponsors are able to identify a local funding source such as a dedicated tax but struggle with cashflow. TIFIA loans can make projects possible in these instances, and could be a good option for the project if cashflow becomes a barrier in the future. TIFIA loans can cover up to 49% of eligible project costs, making it a powerful tool for financing large-scale investments. Unlike grant programs, TIFIA provides repayable loans, so participating agencies must demonstrate creditworthiness and have a reliable funding stream to repay the loan such as taxes or fare revenues.

TIFIA is designed to leverage limited public resources and attract private capital to transportation infrastructure. Its financing terms are highly favorable: interest rates are currently 4.75% (as of early September 2025), and repayment periods can extend up to 35 years. The program offers direct loans, loan guarantees, and standby lines of credit for projects of national or regional significance.

TIFIA supports a wide range of capital projects, including commuter rail, light rail, subway systems, toll roads, and station-area transit-oriented development. While the program has helped fund several major transit initiatives, one of the key challenges for agencies is ensuring a long-term, dependable revenue source to repay the loan. In addition, to qualify for a TIFIA loan, a project must have an investment-grade credit rating from a nationally recognized agency. Projects seeking less than $75 million need one investment-grade rating, while those requesting more than $75 million must obtain two.

TIFIA may be an attractive financing mechanism for the Boise Cutoff Commuter Rail Alternative, depending on the final project scope, budget, and sources of funding available. To be eligible for TIFIA, applicant agencies must identify a reliable funding stream to pay back the loan and demonstrate creditworthiness. Identifying a funding stream would be the next step toward exploring this option.

Public-Private Partnerships

Occasionally, commuter rail or similar projects have been funded through a Public-Private Partnership (P3) model, which can also be combined with financing through TIFIA. To attract a private partner, the project must have strong profit potential. It may be too early to determine whether the Boise Cutoff Commuter Rail Alternative would be a candidate for a P3. Additionally, more rigorous ridership projections would be a significant factor. For projects with private sector appeal and the potential to generate revenue, P3s can be an option that accelerates project delivery using private investment. Generally, P3s are used for large-scale transit projects with expected high ridership. In addition, some agencies have successfully used P3s to implement transit-oriented development projects.

7.3.2 Case Studies

The following case studies illustrate how transit agencies in the western United States have implemented commuter rail projects with similar characteristics to the Boise Cutoff Commuter Rail Alternative during the past two decades. While the local situations and ultimate implementation varied significantly, each of these cases demonstrates that strong local support for the project and tapping into a variety of funding sources are critical to success.

UTA FrontRunner

The FrontRunner is a commuter rail line operated by the UTA, connecting Salt Lake City to Ogden and Provo. It began service in 2008. Opening day ridership expectations for the service were 5,900 daily boardings, with projected ridership of 12,500 in 2025. Actual ridership in 2025 exceeded those expectations, reaching 13,800 – but only after the service was expanded from the original 44 miles to 83 miles in 2012. The service was initially proposed to run every 20 minutes during peak periods and 40 minutes off peak. Today, the FrontRunner has 16 stations and runs on 30-minute headways at peak hours and 60-minute headways off peak. Initially, the FrontRunner shared track with UPRR for a 6-mile segment of the corridor

between Ogden and Pleasant View. Challenges running on shared track with UPRR led to the discontinuation of service on that segment.

UTA was awarded an FTA CIG grant for the initial segment of the project's construction, connecting Salt Lake City to Weber. The remaining funding came from local sources, including local tax revenues. UTA expanded the FrontRunner to the south with an additional 40 miles in 2012 using a bond issue as well as local sales tax revenues and federal grants. Currently, UTA is seeking an additional CIG grant through the Core Capacity program to double-track the FrontRunner to increase service frequency to 15-minute headways on peak and 30 minutes off peak.

New Mexico Rail Runner Express

The New Mexico Rail Runner Express is a commuter rail line that connects Albuquerque and surrounding cities to Santa Fe, New Mexico's capital. The commuter rail, which opened in 2006, has 15 stations and is 97 miles long. The service uses diesel multiple units and bilevel (double-decker) cars. The daily weekday ridership is approximately 2,600 as of 2025. The Rail Runner project was sponsored and developed through a partnership between the New Mexico Department of Transportation and the Mid-Region Council of Governments. The Rio Metro Regional Transit District (Rio Metro) was established to manage and operate the Rail Runner in 2005 and eventually took over operations in 2009.

Unlike many commuter rail projects, the Rail Runner was primarily funded through state and local sources, with minimal reliance on federal grants. Project sponsors were able to capitalize on strong state-level political support, including leadership from the governor and legislature. This approach allowed for faster implementation and greater local control. New Mexico Department of Transportation used State of New Mexico general funds to purchase ROW from BNSF Railway and fund the initial infrastructure. A one-time program called Governor Richardson's Investment Partnership was a statewide transportation package that provided bond funding for capital costs. Voters approved a regional sales tax across multiple counties in 2008 to support ongoing operations and capital improvements. Finally, fare revenues contribute to operational costs. Recently, Rio Metro won a $22.4 million RAISE (now known as BUILD) grant to build a new operations and maintenance facility.

SPRINTER Hybrid Rail

The SPRINTER hybrid rail project in California opened in 2008 and runs through the North County area of San Diego along a 22-mile corridor serving 15 stations between Oceanside and Escondido. The service is a hybrid light rail commuter service, meaning it is a light rail with some commuter rail characteristics. The SPRINTER operates on shared track with BNSF freight trains, but freight rail only operates at night in the corridor, after the SPRINTER service shuts down for the day. Trains run every 30 minutes throughout the day. The corridor is currently double-tracked for approximately half of its length, and the North County Transit District has recently received a RAISE (now BUILD) grant for preliminary engineering and environmental clearance to double-track the remainder of the corridor. The project was initially projected to have 11,000 average daily weekday riders by the end of the first year. However, the project never met projections. In 2013, the SPRINTER had 8,500 weekday riders, but ridership has dropped since the pandemic; in the second quarter of 2025, the SPRINTER had 5,800 weekday riders on average. The SPRINTER was funded by a combination of an FTA CIG award and local and state sources, including a half cent sales tax approved by San Diego County voters in 1987 that generated $200 million for the project.

Case Study Summary

Exploring these three commuter rail case studies reveals a few key lessons learned. Most importantly, strong local and state political support can accelerate implementation, as exemplified by New Mexico's Rail Runner Express, which leveraged state bonds and regional sales taxes to maintain control and momentum. In addition, realistic ridership projections and flexible funding strategies—such as combining federal grants, local taxes, and fare revenues—are critical to long-term sustainability of commuter rail projects. Across all three of the case studies, prioritizing scalable infrastructure when possible to adapt to evolving demand and cultivating strong political and community support have been important components of long-term success.

7.4 Roles and Responsibilities

This section discusses the roles and responsibilities for organizations likely to be involved with subsequent project development steps, including planning, engineering, and environmental approval efforts.

7.4.1 COMPASS

COMPASS led this planning effort using the PEL process, and that effort led to the recommendation for the Boise Cutoff Commuter Rail Alternative. In its role as a metropolitan planning organization, COMPASS was in a good position to lead the PEL Study and facilitate the necessary discussions between various agencies and organizations. However, COMPASS does not own or operate transportation infrastructure and, as such, is not likely to be a local lead agency or project sponsor for the project during subsequent phases. COMPASS could potentially be a project partner, stakeholder, or participating agency under NEPA.

7.4.2 Valley Regional Transit

As the owner and operator of the Treasure Valley's transit system, VRT could assume the role of local lead agency and project sponsor during subsequent project steps. VRT's experience with implementing projects and owning and operating transit infrastructure positions the agency for this role. Additionally, VRT is in a position to continue to assess how the PEL Study recommendations could be impacted by transit system changes that are planned or how the transit system changes could be impacted by the PEL Study recommendations.

7.4.3 Federal Transit Administration

It is assumed that the FTA will be the federal lead agency under NEPA. During the PEL process, COMPASS has coordinated with FTA during milestones to understand FTA's expectations for the project during the planning phase and moving into NEPA. The federal lead agency is responsible for overseeing the NEPA process and would eventually take federal action. Additionally, FTA oversees the CIG program, and should funds be awarded in the future, FTA would work with the project sponsor to achieve the necessary requirements for funding and cost sharing.

7.4.4 Freight Railroads

The UPRR owns the freight rail tracks and ROW that overlap with the Boise Cutoff Commuter Rail Alternative. The north-south track between Nampa and Caldwell is referred to as the "mainline," and UPRR operates on this track. The east-west track between Boise and Nampa is referred to as the "Boise Cutoff," and BVRR operates this section of the freight rail track. The local lead agency and project sponsor will coordinate with freight railroad ROW owners and track operators to determine the best approach to achieve transit and

freight goals. This type of coordination typically involves a preliminary engineering agreement between the local lead agency and the freight railroad. Coordination with the freight railroads may include the following topics and result in additional agreements:

- Access easement
- Capital improvements to UPRR and BVRR infrastructure that enable joint commuter rail and freight rail service
- Non-UPRR and non-BVRR capital costs for stations and similar commuter rail-related infrastructure
- Track and other ongoing asset maintenance
- Rail operations and costs

7.4.5 Municipalities and Local Agencies

The municipalities along the proposed commuter rail corridor are the City of Boise, City of Meridian, City of Nampa, and City of Caldwell. The municipalities have participated in the PEL process and should continue to engage during subsequent project development steps. The Ada County Highway District, Ada County, and Canyon County also participated during the PEL process. The local lead agency will lead design and implementation for elements of the project, such as track improvements, new tracks, bridge and culvert extensions, at-grade crossing safety features at roadways, station platform development, and maintenance facility development. Each municipality has at least two stations within its boundaries. Local agencies would engage on two levels: (1) provide input to the local lead agency for elements being developed within their jurisdictions, and (2) update local ordinances and land use policies to optimize use of the Boise Cutoff Commuter Rail Alternative. One effective tool to accomplish this is through SAP (refer to Section 7.5), using the local planning process.

7.4.6 Idaho Transportation Department

ITD has developed a statewide rail plan and maintains a relationship with freight railroad owners and operators. ITD also has experience owning and operating transportation infrastructure, as well as implementing projects requiring NEPA documentation. Additionally, the proposed commuter rail corridor crosses multiple roadways (at-grade, over, or under) for which ITD has jurisdiction. With ITD's relationships and institutional knowledge, it should participate as a project partner, stakeholder, or participating agency under NEPA.

7.5 Station-Area Planning

The PEL Study process identified station locations for the Boise Cutoff Commuter Rail Alternative that require further exploration in the next stage of the process. To determine station areas at a high level, the study team used a data-driven approach that considered activity areas, transit-supportive existing and future land use, population and employment densities, transit demand, and multimodal access. Additionally, COMPASS staff and stakeholders provided input and expertise to refine station locations and modeled projected ridership.

To continue refining station-area locations, layout, and amenities, COMPASS and VRT should coordinate with local municipalities to ensure consistency across the region. The following steps could be taken based on best practices followed by Sound Transit (Washington State) and UTA.

7.5.1 Station Siting Criteria

The local lead agency should establish a set of clear siting criteria to verify station-area placement and document how each candidate meets those criteria. Criteria should include origin/destination clusters, multimodal connectivity, available ROW, constructability and cost, environmental constraints, and the potential for transit-oriented development.

7.5.2 Station-Area Planning Requirements

It is critical that the investment made in commuter rail can fully realize its benefits and maximize the return on the investment. This is not just about maximizing ridership, but also about creating strong communities around stations that are safe, affordable, and provide easy access across the region. This includes a role and shared commitment for local communities to confirm that land use is sufficient to support the placement of a station. Most potential station locations along the Boise Cutoff route are relatively lower density because they are currently on an existing freight corridor. With proper planning and community involvement, land use can be adjusted over time to support future commuter rail stations. The study team recommends that COMPASS support the local lead agency for the next phase of work and the local jurisdictions to prepare SAPs that include elements such as land use, parking, multimodal connectivity, streetscape, and zoning for each station. Developing SAPs helps stations align with the regional vision for transit service and creates station areas that actively support the service. It will be important for local jurisdictions to understand and share the commitment for more

concentrated land use and multimodal urban form near stations. Some peers have developed specific legislation requiring appropriate plans for station areas. For example, under Utah House Bill 462, municipalities with a fixed guideway public transit station are required to adopt plans for areas immediately surrounding stations. The intent was to promote a shared objective to increase transportation choice, housing affordability, and access to opportunities across the state. The local metropolitan planning organization, Wasatch Front Regional Council, provides technical assistance to municipalities that are developing an SAP.

7.5.3 Station Design Standards

Commuter rail users generally desire an intuitive design to guide them easily through the commuter rail system. This typically manifests at commuter rail stations as a consistent design layout, amenities, signage/wayfinding, access to connecting transit, and connections to the surrounding communities. It is suggested that COMPASS support and encourage the local lead agency for the next phase of work on the Boise Cutoff Commuter Rail Alternative to develop such design guidance for stations and station areas.

Sound Transit developed the *Station Experience Design Guidelines* (Sound Transit 2024) to provide guidance and requirements for stakeholders and design teams on what is expected as part of light rail station design and station environment design. The document provides details on considerations for quality passenger experience, expectations for station design, and direction for station siting and surrounding area improvements. This document creates design consistency across the entire system and region.

Sound Transit also created an accompanying document, *Planning and Project Development Guidelines* (Sound Transit 2021), which outlines access planning for station areas. The purpose is to help project teams provide appropriate access for people walking, biking, and using mobility devices.

7.5.4 Technical and Operational Coordination

Station-area designs should be coordinated with technical and operational design features such as platform length, track needs—double or single track and siding locations—and freight operational needs. In many cases, these technical requirements will be the primary driver for the layout of the commuter rail station infrastructure. Early collaboration as design advances will be critical between the designers and planners to verify that station area plans are consistent with technical requirements for rail infrastructure and operations.

Example Station Phasing

To support service start-up, station areas can be developed in phases. This allows service to get started without requiring a full build-out. The following is an example of how stations can be constructed over time.

- Phase A – Minimal functional station: low-level platforms, basic weather protection, pedestrian access, and temporary or no surface parking
- Phase B – Enhanced access and transfer facilities: bus bays, permanent bike facilities, parking, signalized crossings, and lighting
- Phase C — Transit-oriented development build-out: upgrade to level boarding platforms (on rail sidings), parking replaced by housing/retail, street upgrades, structured parking (if warranted), and public spaces (triggered by development commitments)

Phase C is how peer systems including Sound Transit and UTA often sequence investments to align capital constraints with long-term outcomes.

7.6 NEPA Process

This study followed a PEL process to support and streamline future environmental review under NEPA. All draft and final planning products produced during this PEL Study may be adopted during a subsequent environmental review process in accordance with 23 U.S.C. 168, with the goal of not revisiting during future NEPA processes.[6] These planning products include the purpose and need statement, existing conditions data, alternatives evaluation, agency coordination, and public involvement.

7.6.1 Potential NEPA Class of Action Determination

The Boise Cutoff Commuter Rail Alternative is recommended for future project development because it provides the fastest and most reliable travel times, demonstrates the greatest ability to accommodate future transit demand, and has the strongest economic development potential. Because this alternative would use existing freight rail corridors to connect Boise, Meridian, Nampa, and Caldwell, impacts to adjacent property would be low compared with other alternatives considered. However, even with these

[6] Under 23 U.S.C. 168(d)(10), planning products from a PEL study may be adopted or incorporated by reference into NEPA documentation, provided they were approved within the 5-year period ending on the date of adoption. If a NEPA study team wishes to use a planning product that is more than 5 years old, the sponsoring agency must verify that the information remains valid. If updates or new data are needed, that information should be addressed through the NEPA process rather than by revising the original planning product.

advantages, the scale and complexity of the project suggest that an environmental impact statement (EIS) will likely be required. This assessment is based on a conceptual-level design and assumes a conservative project footprint. As the project progresses through the NEPA review process and additional details become available, the design will be further refined to avoid and minimize potential impacts.

Based on the current design, the project would involve building a new passenger rail track alongside existing freight lines, which means modifying bridges and culverts and coordinating shared operations with freight companies. These changes could affect water systems, natural habitats, noise levels, and the visual landscape. In addition, the recommended plan includes nine new stations, each with platforms and most with parking. These facilities could change traffic patterns, require land acquisition, and prompt land use changes.

The introduction of commuter rail service is also expected to shift how people travel, increasing foot and bike traffic around stations and potentially changing how nearby neighborhoods function. Because of the recommended project's size, visibility, and potential to reshape transportation and development patterns across the region, implementation of the Boise Cutoff Commuter Rail in its entirety does not qualify for a categorical exclusion and is likely to result in reasonably foreseeable effects that exceed the scope of an environmental assessment. However, if the project is phased, or if elements of the project are advanced on their own, then it may be possible to process phases of the project or independent projects under a categorical exclusion or an environmental assessment.

7.6.2 Environmental Impact Statement Framework

The findings from the PEL Study, including the purpose and need, alternatives considered, and environmental context, will inform and support the completion of pre-Notice of Intent (NOI) activities as outlined in the FTA's NEPA readiness framework (FTA 2024). The NOI is a formal announcement that initiates the EIS process. Before issuing the NOI, FTA requires project sponsors to demonstrate that certain elements of a project are sufficiently developed for environmental review.

The PEL Study has successfully completed several key pre-NOI readiness tasks, including developing a draft purpose and need statement, screening a reasonable range of alternatives, identifying required permits or authorizations, and assessing funding availability (FTA 2024). Coordination plans can build on the outreach and engagement conducted during the PEL

Study, ensuring consistency moving forward. Additionally, the PEL Study helps inform the development of the project schedule by identifying key issues, permitting needs, and other factors that may affect timelines.

When the pre-NOI tasks are complete, FTA will issue an NOI to prepare an EIS, formally launching the NEPA process. The EIS will include the following:

- Ongoing public and agency involvement
- Detailed environmental analysis of the Build and No Build Alternatives
- Identification of a preferred alternative
- Development of mitigation strategies
- Preparation of a draft EIS
- Public and agency comment period
- Preparation of a final EIS and Record of Decision

This structured approach would ensure that the Boise Cutoff Commuter Rail project advances in a transparent, coordinated, and environmentally responsible manner, consistent with federal and state requirements.

7.6.3 Future Consideration of New or Changed Information

As stated in Section 7.6.2, FTA and the project sponsor will review the PEL Study to confirm that planning analyses, findings, and recommendations remain valid. The findings and recommendations are subject to change based on new information, elements of the PEL Study that no longer reflect current conditions, or relevant policy changes that may occur. In these instances, the PEL Study may need to be updated or supplemented in coordination with FTA before being used in NEPA.

FTA and the project sponsor can also revisit other alternatives evaluated in the PEL Study if warranted by new information, changed conditions, or changed policies that would make these options perform better relative to the purpose, needs, and goals of the project. If it is necessary to revisit other alternatives evaluated in the PEL Study, the project sponsor can prepare a PEL Study Addendum or address the supplemental analysis and documentation during future NEPA. While there is no formal process outlined in the federal regulations, exploring alternatives to the PEL Study recommendation would generally be done in coordination with FTA, stakeholders, and the public.

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