

SR 165 Carbon River Fairfax Bridge Planning Study

August 2025



**Washington State
Department of Transportation**

Olympic Region Multimodal Planning
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List of Acknowledgements

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Federal, State and Regional Partners

- Federal Highway Administration
- National Park Service
- U.S. Forest Service

Tribes

- Muckleshoot Indian Tribe
- Puyallup Tribe of Indians

Local Communities

- Community of Carbonado
- Community of Wilkeson

School Districts

- White River School District
- Carbonado School District

Local Government

- Pierce County Emergency Management
- Pierce County Parks & Recreation
- Pierce County Planning and Public Works
- Pierce County Sheriff

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Executive Summary

Introduction

The State Route (SR) 165 Carbon River Fairfax Bridge was closed to all users on April 14, 2025. The Washington State Department of Transportation recognized the impact of this closure and conducted an accelerated planning study to identify and evaluate potential alternatives.

This study evaluated seven potential alternatives across three categories (refer to Figure 1. Map of Alternatives):

- (1) Keep SR 165 closed south of Carbonado and remove the bridge
- (2) Replace the bridge in the same vicinity
- (3) Reroute SR 165 to bypass parts of the Carbon River Canyon

Study Origin

An inspection in March 2024 resulted in restricting legal loads to 16,000 pounds effective July 2024. In response, WSDOT secured emergency access permits along a 9-mile logging road adjacent to SR 165 for overweight vehicles and emergency access. On April 22, 2025, WSDOT announced that the bridge was closed permanently to all users due to advanced structural deterioration. Since then, an east bypass following the current gated access route has been used by property owners, agencies, and others with land interests south of the bridge. However, the east bypass remains closed to the public, including recreational users.

The closure has eliminated public access on SR 165 south of Carbonado to Mount Rainier National Park (MRNP), U.S. Forest Service (USFS) recreational areas, and private properties south of the bridge. There is no alternative public road access to these areas. Communities, businesses, and recreational users are concerned about the closure's impact.

Study Area

This study focuses on the Fairfax Bridge over the Carbon River and the surrounding corridor along SR 165 in Pierce County, Washington. The study area includes the towns of Wilkeson and Carbonado, extends south to the Carbon River entrance of MRNP, and considers adjacent private lands for potential alternative alignments. Nearby communities such as Buckley and Orting were also included in the comparative geographic analysis (refer to Figure 2. Study Area Map.)

In April 2025, WSDOT initiated consultation with five Tribes, including the Puyallup Tribe of Indians and Muckleshoot Indian Tribe, whose off-reservation trust lands are near the study area. While no reservations lie within the study area, Tribal communities use nearby MRNP and USFS lands for cultural and recreational purposes.

Wilkeson and Carbonado are historically rich towns that reflect their coal mining heritage while offering a high quality of life for residents. These towns serve as gateways to the northwestern quadrant of MRNP and are characterized by small populations, strong community identity, and scenic surroundings. Both towns are part of a broader region experiencing moderate population growth, with Pierce County projecting continued expansion through 2044 (Pierce County 2025).

Community Engagement Summary

WSDOT conducted community engagement to evaluate potential solutions for the SR 165 Carbon River crossing. Each alternative was assessed for feasibility, cost, community impact, and alignment with long-term transportation needs.

To ensure broad participation, WSDOT mailed postcards to 14,115 addresses in the study area and promoted engagement opportunities through social media and a news release. In-person open houses were held in the towns of Carbonado and Wilkeson, drawing 194 attendees and collecting 90 feedback forms. An online open house, available for 3 weeks, received more than 45,000 views and 2,752 responses, significantly expanding the reach of community input. The survey gathered data on travel habits, preferences among the seven alternatives, and demographic information to assess outreach equity.

Key findings from 2,842 individual public comments showed strong community preference for options that replace the bridge on or near its current alignment (Alternatives 2, 3, and 4; refer to Figure 1. Map of Alternatives), citing access, cost, and community impact. The no-build option (Alternative 1; refer to Figure 1. Map of Alternatives) received the least support due to the loss of access to MRNP and economic impact on local businesses. Respondents also expressed frustration with the prolonged closure and lack of a public detour.

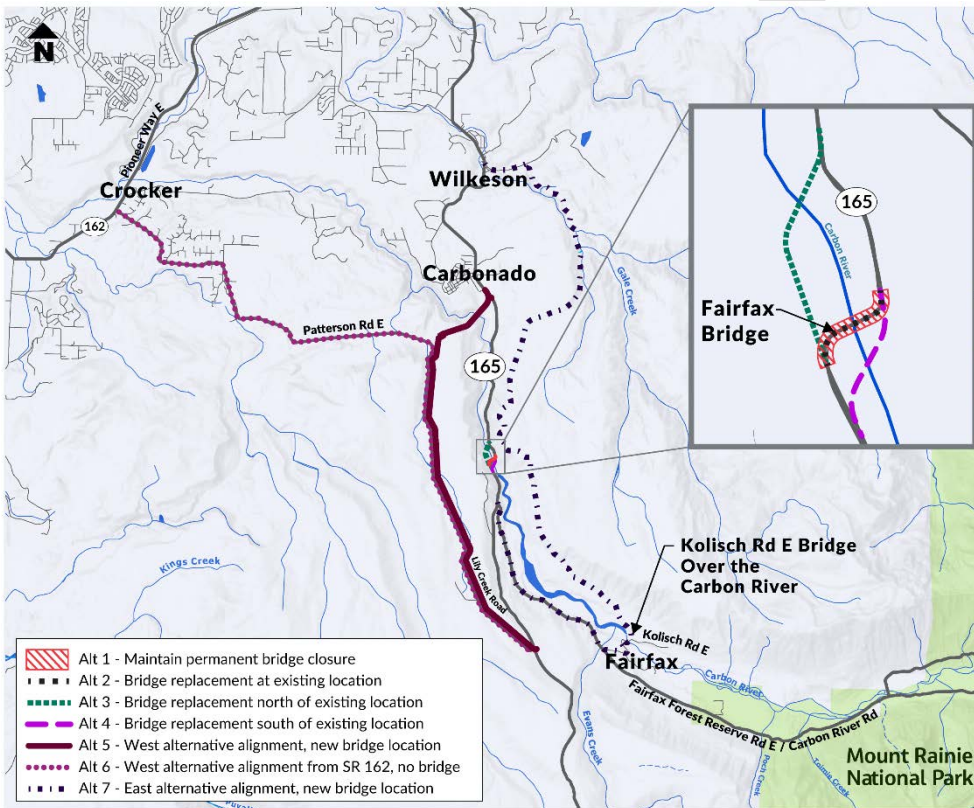
These insights will guide WSDOT's next steps in selecting a preferred alternative.

Alternatives Summary

Following the July 2024 weight restriction, WSDOT began evaluating options to provide access for emergency services and commercial vehicles, narrowing down the list to seven alternatives (refer to Figure 1. Map of Alternatives). In 2025, these were presented to agency partners and the public through in-person and online open houses. The seven alternatives included:

- (1) Alternative 1 – Maintain Permanent Bridge Closure
- (2) Alternative 2 – Bridge Replacement at Existing Location
- (3) Alternative 3 – Bridge Replacement North of Existing Location
- (4) Alternative 4 – Bridge Replacement South of Existing Location
- (5) Alternative 5 – West Bypass Alignment, New Bridge Location near Carbonado
- (6) Alternative 6 – West Bypass Alignment from SR 162, No Bridge
- (7) Alternative 7 – East Bypass Alignment, New Bridge Location

Figure 1. Map of Alternatives



Recommendation

Based on a qualitative evaluation of the alternatives, this planning study recommends advancing two options for additional consideration:

- Build option: Replace the bridge within the first half mile north of the existing bridge and remove the existing bridge.
- No-build option: Maintain the permanent closure, compensate property owners for lost access, and remove the existing bridge.

Implementation and Next Steps

WSDOT will finalize and release the planning study for review by the public and decision makers. Then, WSDOT will start preliminary engineering to refine and select a preferred alternative for the SR 165 Carbon River Fairfax Bridge. As part of this effort, WSDOT will determine the level of investment funds to advance critical path activities such as geotechnical exploration, topographic survey, environmental documentation, and preliminary design. Although full construction funding has not yet been identified, these funds will support preliminary engineering.

WSDOT is actively coordinating with state and local agencies to support local community needs. Throughout this process, WSDOT will continue to engage with local community members, partner agencies, state and federal leaders, and recreational users to understand their priorities and identify viable solutions for the future of the bridge.

Chapter 1. Introduction

This report documents the accelerated planning study, conducted from April to August 2025, in response to the closure of the Carbon River Fairfax Bridge on State Route (SR) 165. This report presents the planning process, summarizes the public feedback received, and recommends two options for additional development. The findings in this document are planning-level and intended to inform, but not predetermine, future National Environmental Policy Act (NEPA) analysis. Final decisions regarding environmental impacts and avoidance, minimization, or mitigation will be made during the NEPA process.

The purpose of the planning study was to identify and evaluate potential alternatives for restoring connectivity by incorporating community input, technical assessments, key considerations and constraints, and high-level cost and risk evaluations. This study evaluated seven alternatives, which fell into three categories (refer to Figure 1. Map of Alternatives):

- (1) Keep SR 165 closed south of Carbonado and remove the bridge
- (2) Replace the bridge in the same vicinity
- (3) Reroute SR 165 to bypass parts of the Carbon River Canyon

Study Origin

An inspection in March 2024 resulted in restricting legal loads to 16,000 pounds effective July 2024. Due to the weight restrictions, the Washington State Department of Transportation (WSDOT) secured emergency access permits along a 9-mile section of logging road adjacent to SR 165 for overweight vehicles and emergency access. On April 22, 2025, the 104-year-old bridge was permanently closed to all users due to advanced structural deterioration. Since the closure, the east bypass has been used by property owners, government agencies, and others with land interests south of the bridge. However, the alternate route is closed to the public, including recreational users.

This closure has eliminated public access south of Carbonado. The bridge provided access to Mount Rainier National Park (MRNP), U.S. Forest Service (USFS) recreational areas, and several private



Photo: View looking north from beneath the Carbon River-Fairfax Bridge, showing the bridge's steel structure and surrounding forested landscape.

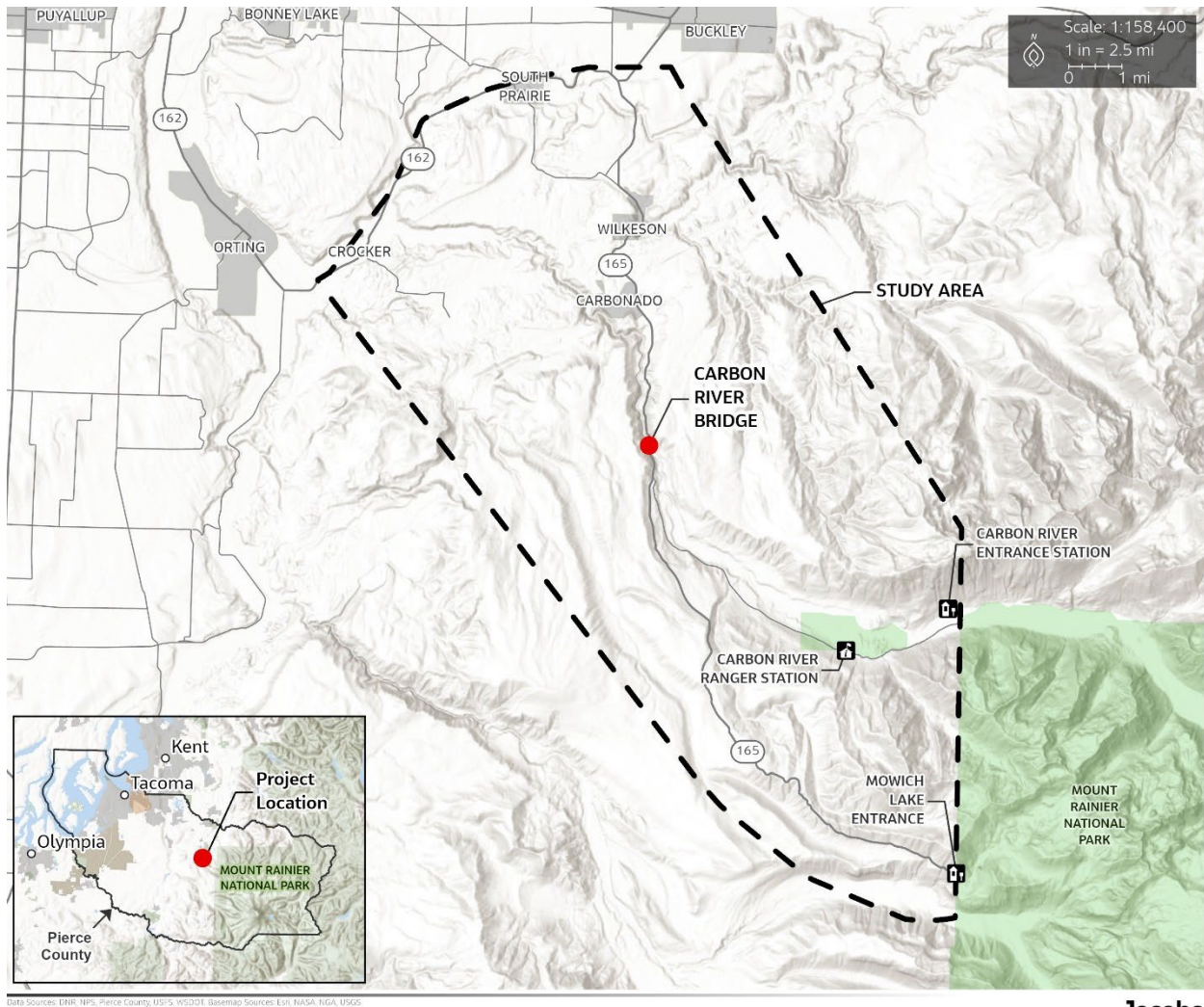
properties. No alternative public access currently exists, raising concerns among local communities, businesses, and recreational users.

Study Area

The study area focuses on the Fairfax Bridge over the Carbon River and its surrounding vicinity along SR 165 in Pierce County, Washington. The area extends southward to the Carbon River and Mowich Lake entrances of MRNP, USFS lands, and includes the towns of Wilkeson and Carbonado along SR 165 (refer to Figure 2. Study Area Map). To the east and west, the study area encompasses lands with private roads that were considered as potential alternative alignments during the planning study.

For comparative geographic analysis, the cities Buckley and Orting were used to contextualize the communities of Wilkeson and Carbonado. Further details about study area communities and context are provided in Chapter 3 and Appendix A.

Figure 2. Study Area Map



Transportation Summary

In 2023, the average annual daily traffic over SR 165 Carbon River Fairfax Bridge was approximately 270 vehicles (WSDOT 2025). Peak traffic to MRNP via SR 165 occurs in July, with a 10-year monthly average of 3,185 vehicles, or roughly 107 vehicles per day. During the lowest visitor months (November through February), the 10-year average vehicle count to MRNP via the Fairfax Bridge is from 650 to 810 vehicles, or roughly 22 to 27 vehicles per day (NPS 2025a).

Most traffic crossing the bridge consists of residents and people visiting recreational areas.

Summary of Findings from Existing Plans

A review of relevant planning documents reveals several key themes shaping access, conservation, and development of the Mount Rainier region:

- **Mount Rainier National Park General Management Plan (2002):** The National Park Service (NPS) prioritizes wilderness preservation and visitor safety over vehicle access, especially in primitive areas like Mowich Lake and Carbon River. This limits infrastructure development and Americans with Disabilities Act (ADA) accessibility (NPS 2002).
- **Carbon River Access Management (2010):** Following repeated flood damage, MRNP permanently closed Carbon River Road to private vehicles. The area now emphasizes nonmotorized recreation, increasing hiking and biking distances to key destinations (NPS 2010).
- **Carbon River Landscape Analysis (2025):** This reconciled the *1994 Northwest Forest Plan* with current laws, regulations, and trust obligations. USFS evaluated management practices and ongoing maintenance of the portion of SR 165 south of the Fairfax Bridge. Proposed timber activities depend on access via SR 165, which also affects aquatic habitats and hydrology (USFS 2025).
- **Pierce County Comprehensive Plan (2025):** This plan directs growth to urban areas while preserving rural and resource lands. SR 165 is identified as a vital rural highway for east Pierce County, though it is not currently listed as deficient in state transportation plans (Pierce County 2025).
- **Washington State Game Management Plan (2015–2023):** The Washington Department of Fish and Wildlife (WDFW) plan emphasizes sustainable game population management, regulated hunting access, and habitat protection. No changes are proposed to hunting access in the study area's game management units (WDFW 2023).

Chapter 2. Alternatives Development

Following the legal load weight restrictions that went into effect in July 2024, WSDOT began evaluating potential alternatives to provide access for emergency services. When the bridge was subsequently closed to all public access in April 2025, the planning study was accelerated to identify a range of viable alternatives that could address the closure.

WSDOT considered a broad set of concepts before narrowing the list to seven alternatives, which were presented to agency partners and the public for feedback (refer to Figure 1. Map of Alternatives). These alternatives fell under three categories:

- (1) Keep SR 165 closed south of Carbonado and remove the bridge
- (2) Replace the bridge in the same vicinity
- (3) Reroute SR 165 to bypass parts of the Carbon River Canyon

Bridge rehabilitation was determined unfeasible due to the age of the bridge, the advanced structural member corrosion, the bridge's historic status, and the challenging bridge location.

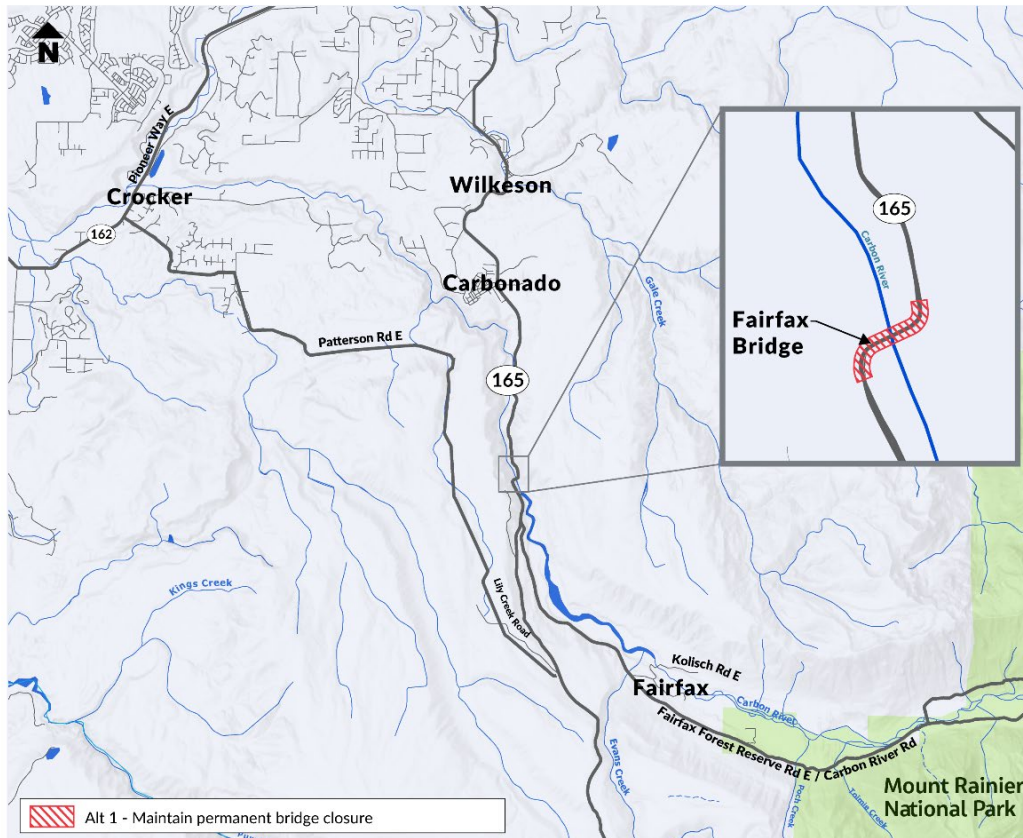
The following sections summarize each alternative, identifying preliminary cost estimate, implementation timelines, and key elements and considerations. Later in the planning study, these alternatives were refined and their costs updated.

Alternative 1 – Maintain Permanent Bridge Closure

Under Alternative 1, the Fairfax bridge and SR 165 would remain permanently closed south of Carbonado. The bridge would be removed, and no alternative access would be provided.

- Estimated cost: \$70 million to \$80 million (original estimate was updated during the planning study)
- Implementation timeline: 3 years
- Key considerations:
 - Controlled removal of the existing bridge
 - Approximately 178 parcels located between Fairfax Bridge and MRNP could be impacted
 - Potential cost to compensate private landowners who lose access to residential use is around \$46.6 million
 - Loss of access to public lands (MRNP, USFS, and Pierce County)

Figure 3. Alternative 1 – Maintain Permanent Bridge Closure

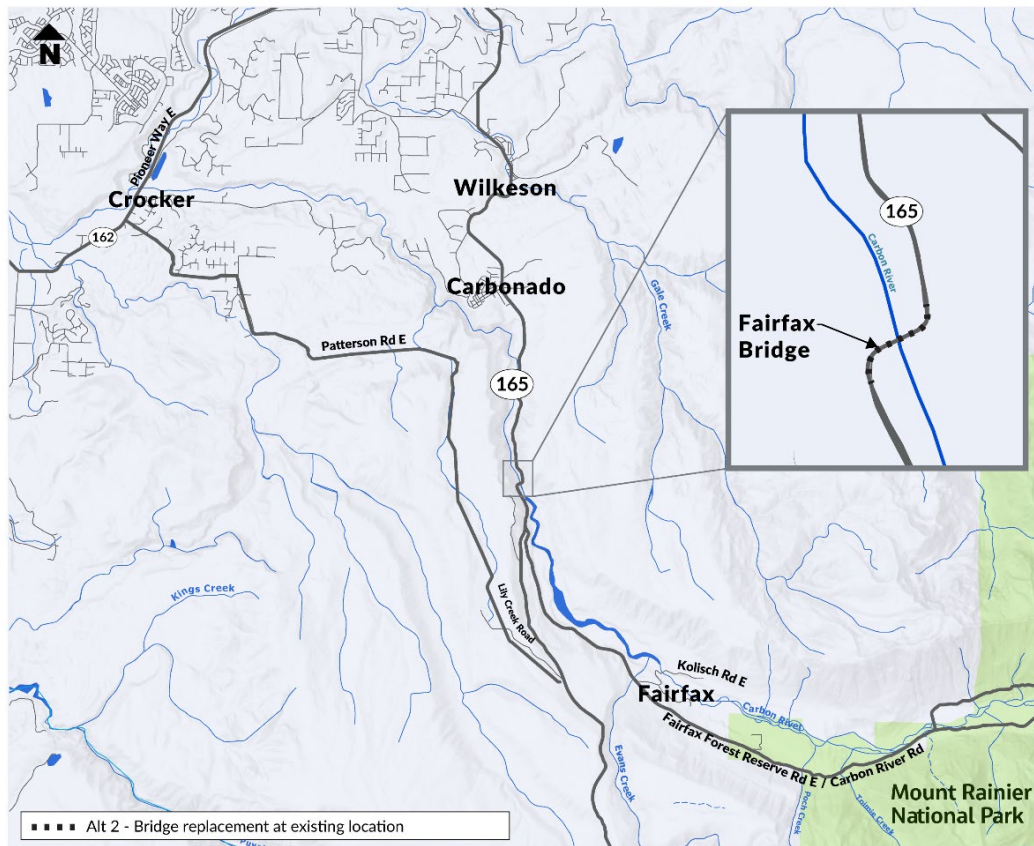


Alternative 2 – Bridge Replacement at Existing Location

Under Alternative 2, a new bridge would be constructed at the existing bridge location. This would first require the existing structure to be removed.

- Estimated cost: \$175 million (original estimate was updated during the planning study)
- Implementation timeline: 6.5 years
- Key considerations:
 - Minimizes environmental impact by remaining within existing bridge footprint
 - No loss of access to public lands

Figure 4. Alternative 2 – Bridge Replacement at Existing Location

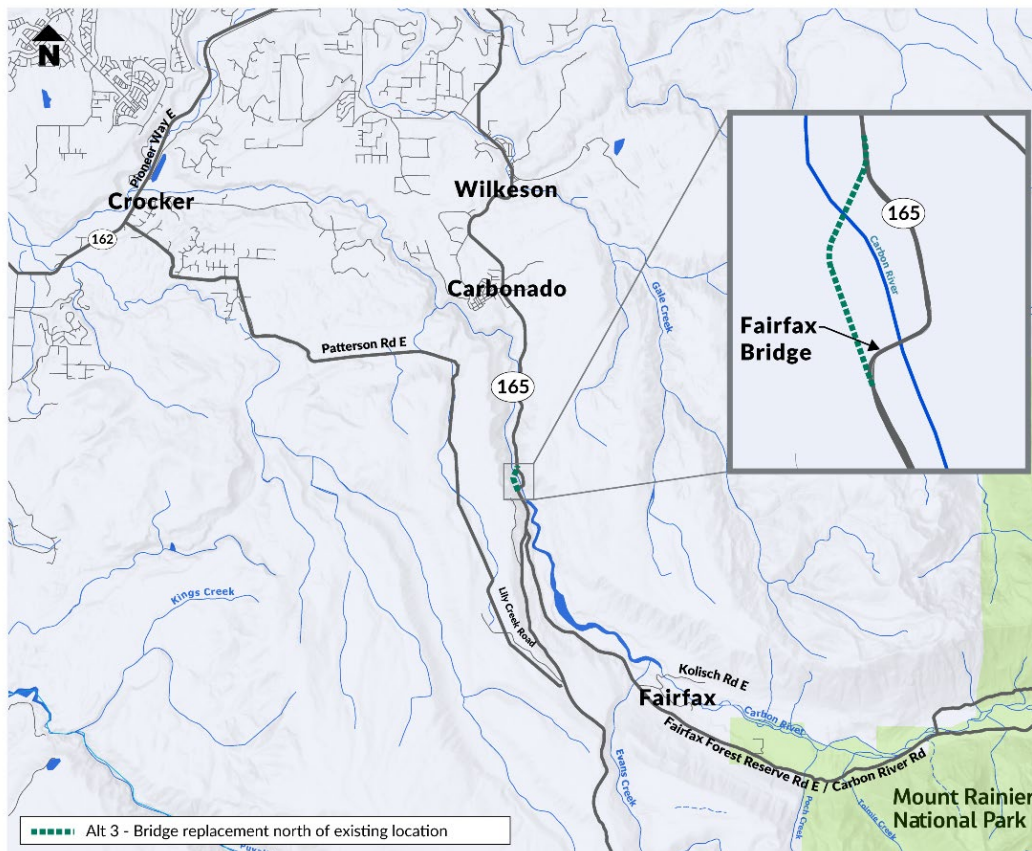


Alternative 3 – Bridge Replacement North of Existing Location

Under Alternative 3, a new bridge would be built north of the existing structure, requiring approximately 0.4 mile of roadway realignment on SR 165.

- Estimated cost: \$160 million (original estimate was updated during the planning study)
- Implementation timeline: 6 years
- Key considerations:
 - Can be designed to avoid the existing bridge, potentially accelerating construction permitting and timelines
 - No loss of access to public lands

Figure 5. Alternative 3 – Bridge Replacement North of Existing Location

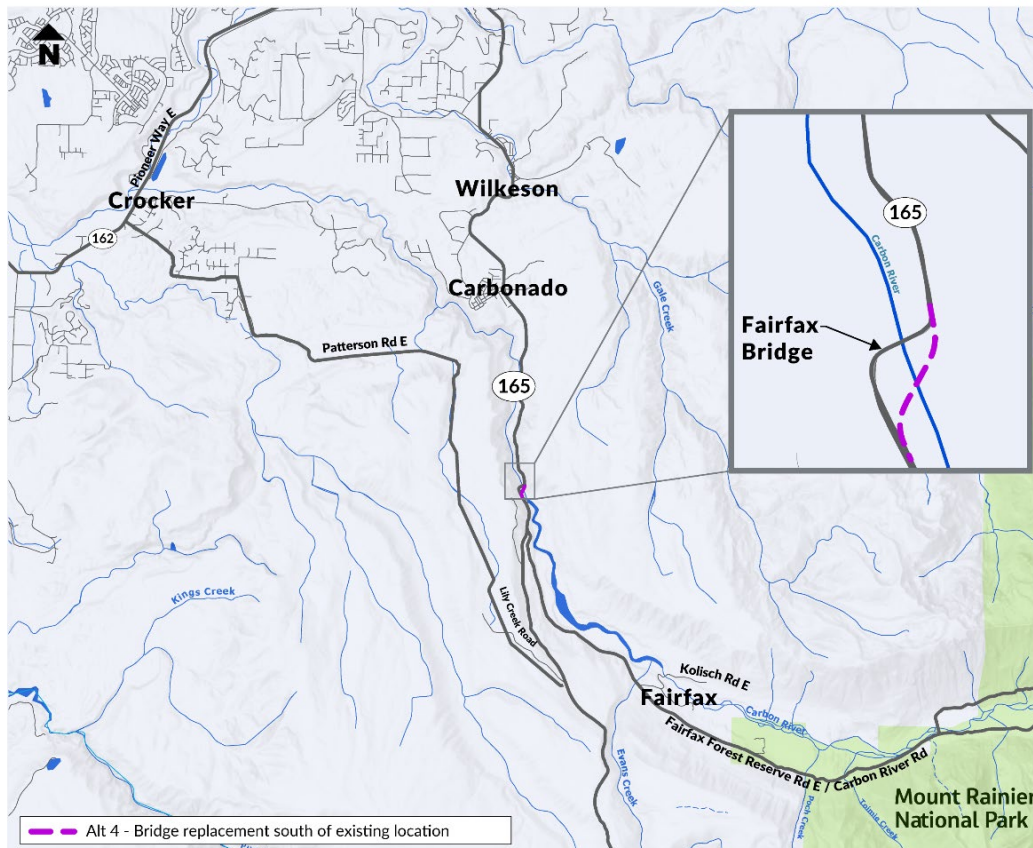


Alternative 4 – Bridge Replacement South of Existing Location

Under Alternative 4, a new bridge would be constructed south of the existing bridge, requiring minor realignment of SR 165.

- Estimated cost: \$160 million (original estimate was updated during the planning study)
- Implementation timeline: 6 years
- Key considerations:
 - Geotechnical considerations due to unstable slopes, with less competent rock, south of the existing bridge
 - Can be designed to avoid the existing bridge, potentially accelerating construction permitting and timelines
 - No loss of access to public lands

Figure 6. Alternative 4 – Bridge Replacement South of Existing Location

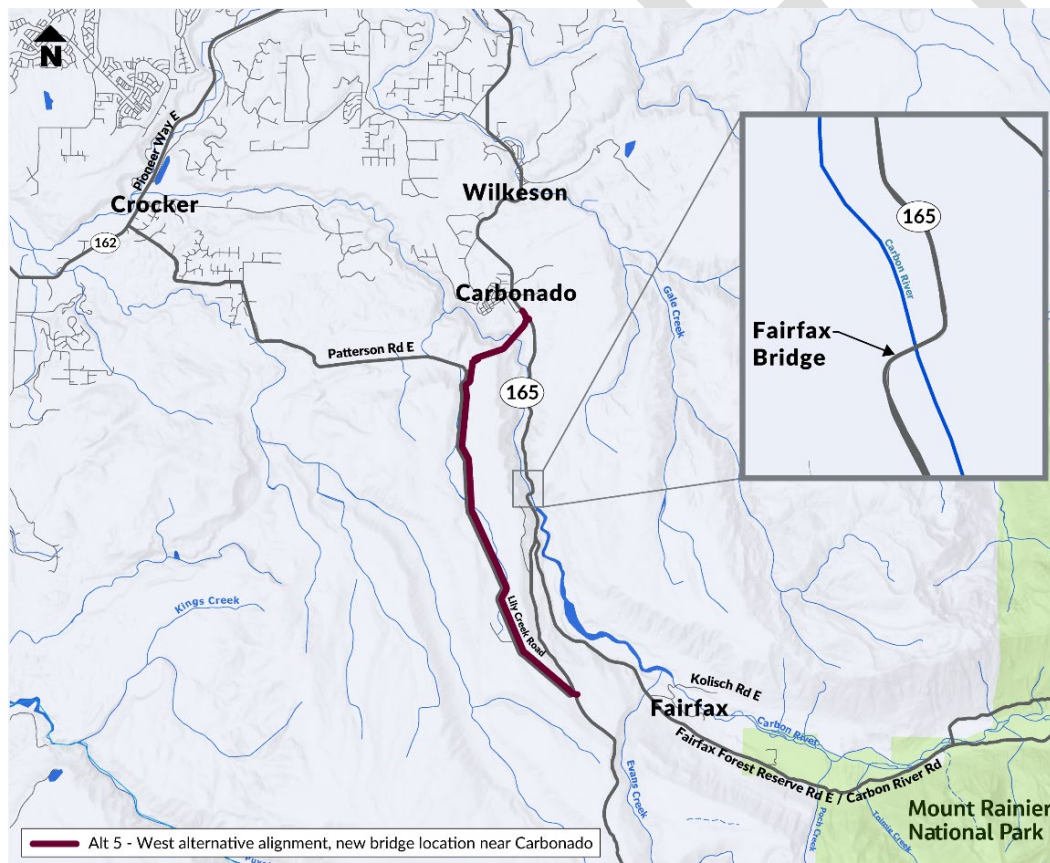


Alternative 5 – West Bypass Alignment, New Bridge Location near Carbonado

Under Alternative 5, SR 165 would be realigned south of Carbonado, beginning near Wilkeson-Carbonado Road. A new bridge would span the Carbon River, south of Carbonado. West of the Carbon River, the new alignment would follow Lily Creek and reconnect to the existing SR 165 alignment near Lily Creek Road East.

- Estimated cost: \$465 million to \$785 million
- Implementation timeline: 7 years
- Key considerations:
 - Significant right-of-way (ROW) impacts
 - Long bridge length

Figure 7. Alternative 5 – West Bypass Alignment, New Bridge Location near Carbonado

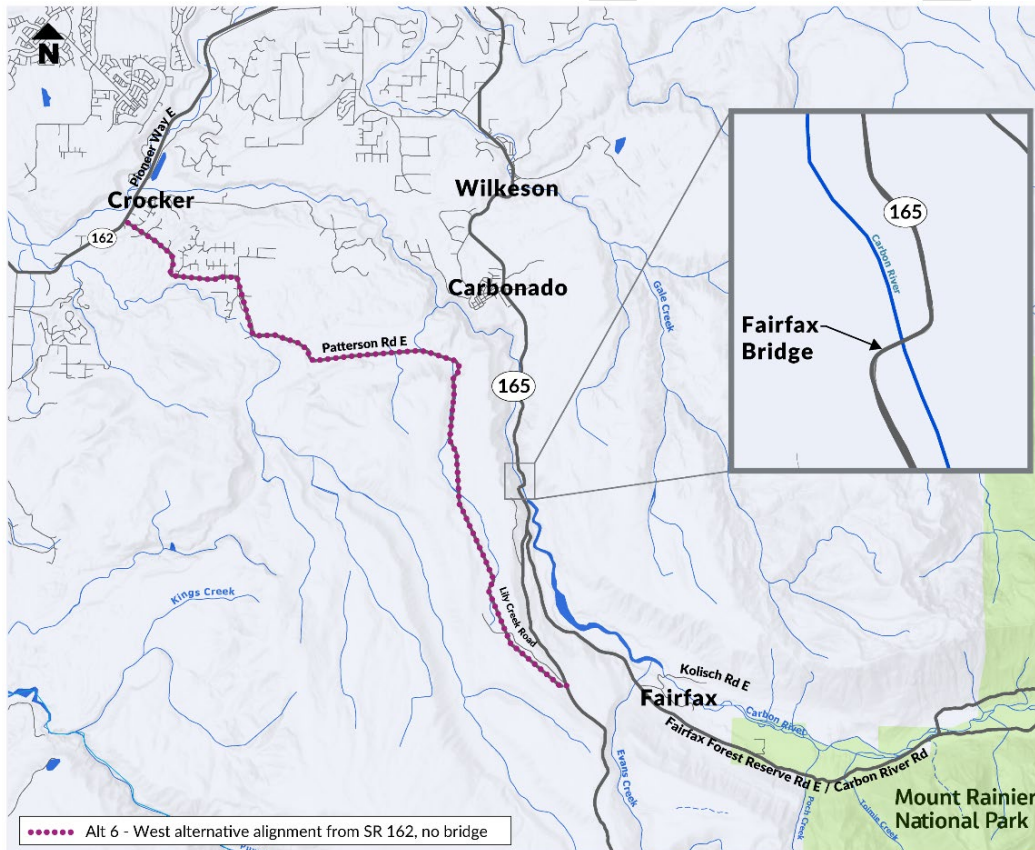


Alternative 6 – West Bypass Alignment from SR 162, No Bridge

Under Alternative 6, SR 165 would be realigned to connect with SR 162 near Crocker, eliminating the need for a new bridge over the Carbon River. The new alignment would follow Lily Creek and connect to the existing SR 165 alignment near Lily Creek Road East.

- Estimated cost: \$440 million to \$735 million
- Implementation timeline: 7 years
- Key considerations:
 - Significant ROW impacts
 - Bypasses Carbonado and Wilkeson, impacting local businesses
 - No new bridge over the Carbon River is required

Figure 8. Alternative 6 – West Bypass Alignment from SR 162, No Bridge

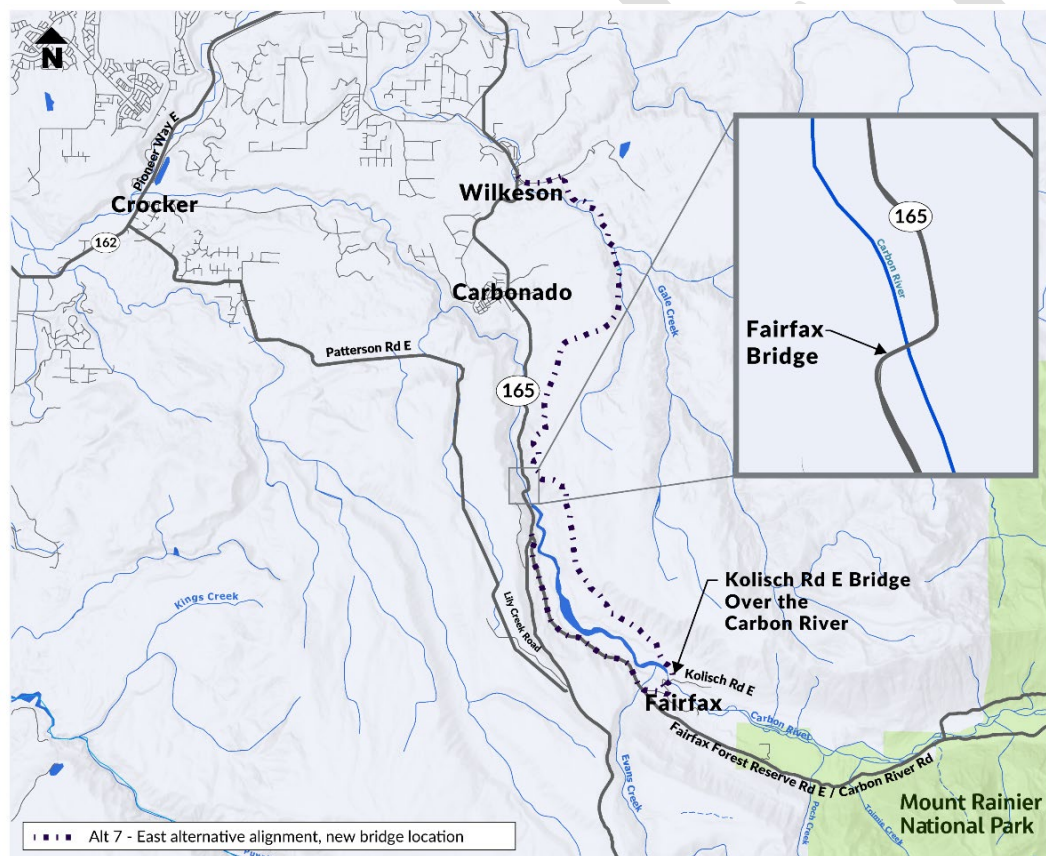


Alternative 7 – East Bypass Alignment, New Bridge Location

Under Alternative 7, SR 165 would be realigned along the limited-access route east of Wilkeson and Carbonado, reconnecting to the existing SR 165 south of the current Fairfax Bridge. It would upgrade 12 miles of road to highway standards and include a new or upgraded Kolisch Road bridge over the Carbon River.

- Estimated cost: \$375 million to \$610 million
- Implementation timeline: 6 years
- Key considerations:
 - Longest alignment and
 - Requires two bridge replacements: Kolisch Bridge (400 feet) and South Prairie/Wilkeson Creek Bridge (300-400 feet)

Figure 9. Alternative 7 – East Bypass Alignment, New Bridge Location



Chapter 3. Community Engagement

To support the evaluation of long-term solutions for the SR 165 Carbon River Fairfax Bridge Planning Study, WSDOT launched a comprehensive community engagement effort. It was designed to gather meaningful input from residents, partners, travelers, and recreational users to inform the development and evaluation of potential alternatives. Engagement materials, presentations, and summary are provided in Appendix C.

Study Engagement Goals

The primary objective of the study was to engage the community in evaluating a range of potential solutions for the SR 165 Carbon River crossing. These include:

- (1) Keep SR 165 closed south of Carbonado and remove the bridge
- (2) Replace the bridge in the same vicinity
- (3) Reroute SR 165 to bypass parts of the Carbon River Canyon

Each alternative will be evaluated for its feasibility, cost, community impact, and alignment with long-term transportation needs.

Community Profiles

SR 165 serves as primary access from the more developed areas of Pierce County and the Puget Sound region to the historic coal towns of Wilkeson and Carbonado, as well as the northwestern quadrant of MRNP and adjacent forest lands. Neither Wilkeson nor Carbonado are employment hubs; most residents commute to work in other communities. Larger communities accessible from SR 165 and SR 162, like the cities of Buckley and Orting, offer moderate employment opportunities, allowing approximately 12% of the working population to live and work in the same community (U.S. Census Bureau 2022).

Table 1 summarizes select demographic and socioeconomic characteristics of the communities within the study area. Pierce County is projected to experience moderate population growth through 2044 (Pierce County 2025). Further socioeconomic data about study area communities and context are provided in Appendix A.

Table 1. Select Population Characteristics

Population Characteristic	State of Washington	Pierce County	Carbonado	Wilkeson	Buckley	Orting
Total population	7,606,327	903,313	631	551	5,306	8,754
Minority population	36%	38%	8%	9%	7%	21%
Hispanic population	14%	13%	4%	6%	3%	10%
Low-income population	10%	9%	0%	13%	8%	4%
Median household income	\$94,952	\$96,632	\$121,719	\$105,469	\$120,994	\$106,042
Unemployment rate	5%	5%	3%	0%	8%	4%
Limited English proficiency	1.9%	1.0%	0.0%	0.2%	0.1%	0.0%
Under 18	22%	23%	24%	24%	26%	21%
Working age (20 to 64)	60%	60%	57%	55%	54%	60%
Older than 65	16%	14%	8%	15%	16%	23%

Source: U.S. Census 2019-2023 American Community Survey 5-Year Estimates. Tables B16004, B03002, C17002.

Notes:

Limited English Proficiency – Speaks Spanish and Speaks English "Not Well" or "Not at All."

Percentage of the population at or below poverty level.

CDP = census-designated place; no municipal structure

Wilkeson

Wilkeson was established in 1877 for coal mining, sandstone quarrying, and forestry before incorporation in 1909. Known as the “Gateway to Carbon Glacier,” the town retains much of its historic character, with homes, businesses, and public spaces listed on the National Register of Historic Places (Town of Wilkeson 2024).



Photo: Buildings in the town of Wilkeson (Jacobs 2025)

According to U.S. Census estimates, Wilkeson has a population of 551 residents. It has the lowest unemployment rate (0%) when compared to neighboring cities, a Hispanic population of 6% (compared to 13% for Pierce County), and the highest low-income population of 13% (compared to 9% for Pierce County). The median income is \$105,489,

and limited English proficiency (LEP) is 0.2%. Youth make up 24%, working age adults account for 55%, and seniors represent 15% of the population.

Carbonado

Located just south of Wilkeson, Carbonado was founded in 1880 and grew to more than 1,000 people by 1900 (Carbonado 2024). This small town has a rich coal mining history. Today, it is home to residents who value its natural setting, affordability, and small-town atmosphere (Carbonado 2024).

According to U.S. Census estimates, Carbonado's population is approximately 631 residents. It has an 8% minority population, half of which is Hispanic residents. The town has no low-income or LEP population, and a low unemployment rate of 3%. Carbonado has the highest median household income among the towns in the study area, at \$121,719. The youth population is 24%, working age adults comprise 57%, and seniors make up 8%.

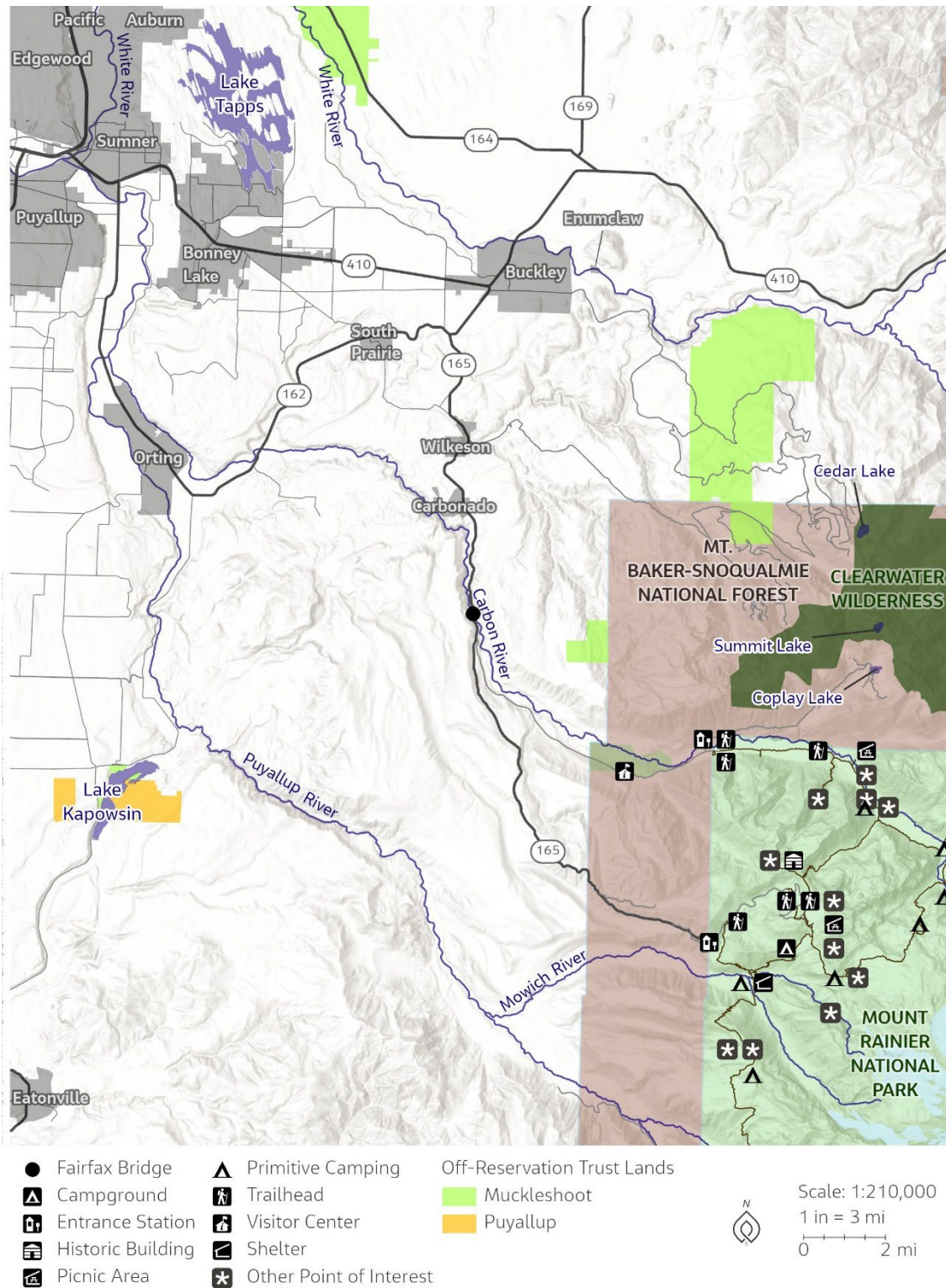


Photo: Structures in the town of Carbonado (Jacobs 2025)

Tribal Communities and Tribal Coordination

The Puyallup and Muckleshoot Tribes' off-reservation trust lands are near the study area, but there are no reservations located nearby. Tribal communities rely on lands in the study area managed by MRNP and USFS, for cultural and recreational purposes.

Figure 10: Off-Reservation Tribal Trust Lands Near the Study Area



Data Sources: Pierce County, National Park Service, United States Forest Service, Washington State Department of Natural Resources, Washington State Department of Transportation.
 Basemap Sources: Esri, NASA, NGA, USGS

Jacobs

WSDOT initiated Tribal consultation with the following tribes in April 2025:

- Puyallup Tribe of Indians
- Nisqually Indian Tribe
- Muckleshoot Indian Tribe
- Squaxin Island Tribe
- Confederated Tribes and Bands of the Yakama Nation

Both Puyallup and Muckleshoot Tribes responded to WSDOT's outreach and provided information about their land interests in the study area and questions about environmental impacts. As the preferred alternative is further developed, WSDOT will continue Tribal consultation.

Agency Coordination

Between April and June 2025, WSDOT conducted coordination meetings with key federal and state agencies, including:

- Federal Highway Administration (FHWA)
- Mount Rainier National Park (MRNP)
- U.S. Forest Service (USFS)

These agency partners provided information about their facilities, land management responsibilities, and ongoing projects and plans within the study area. As the recommended options are additionally developed, WSDOT will continue to engage additional federal and state resource agencies to ensure alignment with regulatory requirements and priorities.

Public Events

To ensure meaningful engagement, WSDOT prioritized meeting people where they are by going directly into the communities it serves. This approach guided the decision to host two in-person open houses—one in Carbonado on June 2 and another in Wilkeson on June 11, 2025—making it easier for residents to engage in a familiar, local setting.

To promote the events, WSDOT sent postcards to 14,115 addresses in the study area. The events drew a total of 194 attendees and collected 90 in-person comment forms, helping

ensure community voices were heard. Project partners were present at each session to answer questions and engage with attendees through genuine, face-to-face conversations.



Photo: Carbonado open house event on June 2, 2025.



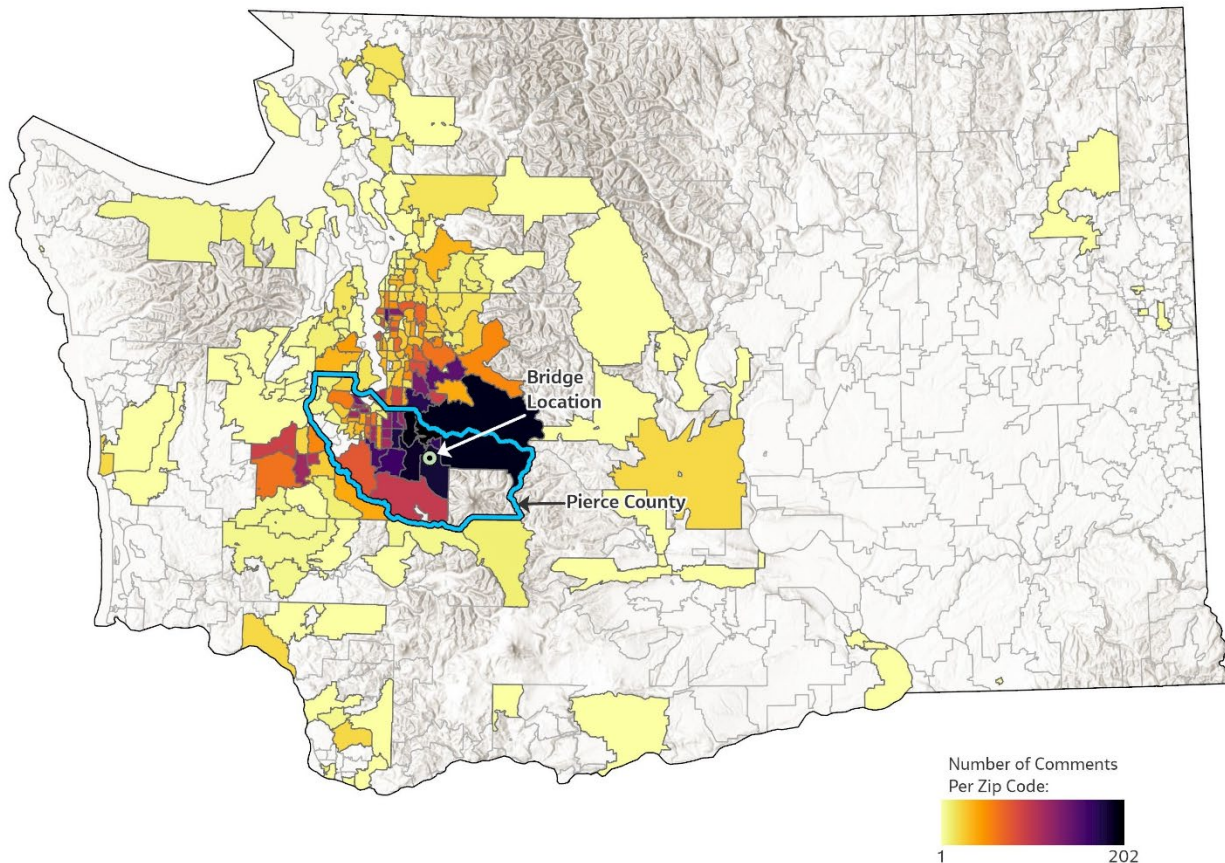
Photo: Wilkeson open house event on June 11, 2025.

Online Open House and Survey

To complement the in-person events, WSDOT launched an online open house, available from May 28 through June 17, 2025. It was promoted through a news release and WSDOT's various social media channels, resulting in a combined total of 45,523 page views. To ensure consistency across engagement methods, the online open house included the same core questions featured on the in-person comment forms—focusing on feedback regarding the proposed alternatives. This approach allowed for broader engagement while maintaining consistency in the type of input collected. Individual responses submitted through the online open house additionally expanded the range of community voices represented in the engagement process.

The accompanying survey asked participants questions to better understand their relationship to the study area and gather input on proposed alternatives. Respondents were asked about their average travel frequency across the SR 165 Carbon River Fairfax Bridge before its closure. They were also asked to rank the seven alternatives from most to least preferred, including maintaining the bridge closure, replacing the bridge at its existing or nearby location, and exploring new alignments. To ensure the outreach reached a representative sample of the community, demographic questions included zip code, age, race and ethnicity, gender identity, and household income. These helped WSDOT understand the diversity of engagement and identify any outreach gaps. All demographic data were collected anonymously.

Figure 11. Heatmap of Survey Responses



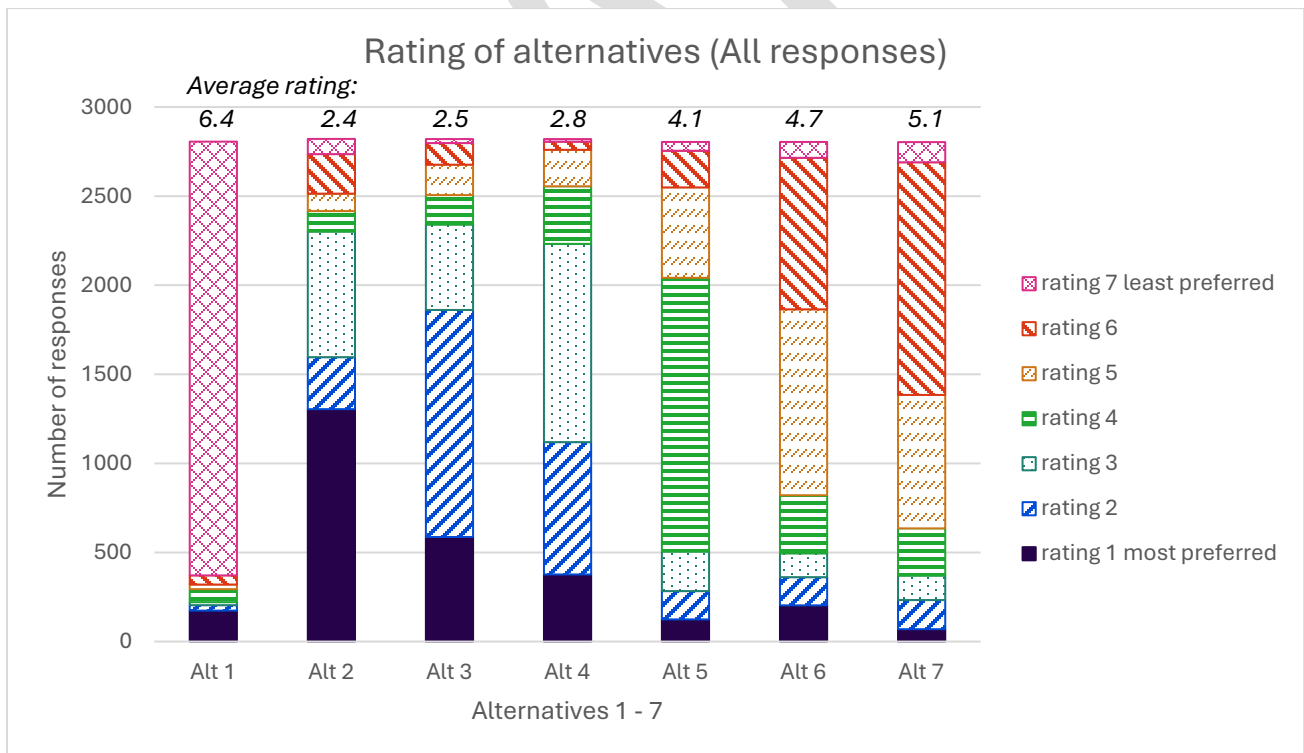
Summary of Survey Results

The survey included ranked choice, multiple choice, and open-ended questions. Clear preferences and concerns emerged from the community responses, some of which included:

- The most favored alternatives were those that replaced the bridge on or near the current alignment (Alternatives 2, 3, and 4). The open-ended responses indicate that these were favored due to their familiarity and relative low cost compared to Alternatives 5, 6, and 7.
- The least favored option was Alternative 1, which proposes permanently closing and removing the bridge without replacement. Respondents were concerned about the loss of access to MRNP and the associated economic impacts on local communities.
- The open-ended responses highlighted community preferences for the different alternatives, based on the following considerations:

- Access and connectivity
- Community impact
- Cost and efficiency
- Preservation and personal connections
- More than 2,800 people shared their thoughts on the project, with comments coming from 236 different zip codes—over 80% of respondents reside outside the study area. While most were from Washington, 33 comments came from other states such as Oregon, California, Texas, and Georgia, with Oregon contributing the most out-of-state responses (13 comments). Additionally, 134 comments were submitted without a listed zip code, underscoring that the bridge holds significance beyond just the local communities.
- Community members expressed frustration with the current situation and what they perceive as deferred maintenance that led to the bridge closure. They expressed dissatisfaction with the project timeline and lack of public access to the east bypass with the bridge closed.

Figure 12. Rating of Alternatives



Conclusion

The engagement process yielded a robust community response, representative of the study area population, and provided clear direction to WSDOT in favor of alternatives that

replace the SR 165 Carbon River Fairfax Bridge on or near its current alignment. This includes Alternatives 2, 3, and 4. Alternative 1, the no-build option, was almost universally dismissed by the public. Community feedback highlighted several key themes:

- Overwhelming support for restoring access to Mount Rainier National Park and surrounding areas.
- Strong support for replacing or rebuilding the bridge, ideally in the same or nearby location, to preserve connectivity and community vitality.
- Concern about the high-cost alternatives that involve extensive new road construction or rerouting SR 165 away from Carbonado and Wilkeson.
- Significant opposition to permanently closing access to the area, with concerns about impacts on recreation, local economies, and community identity.
- Concern about economic impact to local communities and businesses from multi-year reconstruction or maintained permanent closure.
- Frustration with WSDOT and elected officials over past decisions that led to the permanent bridge closure.

WSDOT will use these findings, along with cost, constructability, and environmental evaluation, to determine recommended options and a path forward. For additional detail on outreach to the community, refer to Community Engagement Summary Report.

Chapter 4. Alternatives Evaluation

The alternatives were compared across a common set of screening criteria. The screening criteria were high-level constraints or opportunities that could affect the cost or implementation of any alternative. There was inherent uncertainty in evaluating these alternatives at the planning stage because of limited information.

WSDOT coordinated with internal and external subject matter experts (SMEs) to evaluate each alternative using these criteria. Two site visits and subsequent workshops were held to gather information and discuss alternatives. The result was identification of high-level risks and opportunities for each alternative that helped determine the options to advance. The SMEs included representatives from:

- The WSDOT Olympic Region Multimodal Planning Office
- The WSDOT Bridge and Structures Office
- The WSDOT State Geotechnical Office
- The WSDOT HQ Environmental Services Office
- The WSDOT Olympic Region Environmental and Hydraulic Services Office
- The WSDOT Maintenance Office
- Consultant Construction Management engineer
- Consultant Bridge engineer
- Consultant Geotechnical engineers
- Consultant Civil and Roadway engineer

Evaluation Criteria and Considerations

The following is a list of considerations used to qualitatively evaluate each alternative:

- Planning-level cost estimation
- Roadway and bridge design elements
- Geotechnical factors and potential risks
- Constructability and site characteristics
- Bridge type, size, and location, including bridge demolition
- Schedule drivers and opportunities for streamlining
- Environmental considerations

Planning-level Cost Estimation

To account for uncertainties in site conditions and project unknowns, several risk factors were incorporated into the planning-level cost estimates for each alternative. The proposed bridge site is in a remote area characterized by steep terrain and unknown subsurface conditions, including soil and rock composition. Access to the west side of the

Carbon River poses additional challenges due to the existing bridge closure and the presence of undeveloped logging roads, which would require significant upgrades to support construction activities.

Cost estimates for each alternative were developed in coordination with WSDOT and Consultant SMEs. The unique geographic constraints of the study area—such as limited accessibility and difficult terrain—resulted in elevated base cost estimates. To reflect these constraints, the high-level cost estimates were adjusted using two contingency multipliers: a factor 2.0 for site condition risks and a factor of 1.5 for planning-level estimating.

Roadway and Bridge Design Considerations

Key design elements were assumed as the basis for conceptual design as well as preliminary cost estimation. These basic design assumptions were applied to all alternatives:

- The new roadway width would be 34 feet, with two 12-foot lanes and two 5-foot shoulders.
- The new bridge width would be 36 feet, adding an additional one foot to each side for the barrier.
- Route classification in the State Highway System is Rural Major Connector.
 - Design speed limit would be 35 mph, limiting sharpness of corners.
 - Roadway slope would be up to 8%.
- If permanent ROW purchase was needed, width would be 60 feet for the corridor.

U.S. Geological Survey (USGS) maps were used to estimate rough quantities of rock cut, retaining wall and bridge length. The risk factor applied took into account the difficult construction access and the uncertainty of the terrain. WSDOT conducted two site visits in May and June 2025 and the team used ConceptStation as the preliminary design tool. To a certain extent, this mitigated some of the many unknowns due to lack of survey, geologic, or geotechnical data.

Site Visit Photos



Photo: Site visit photos (Jacobs 2025)

Geotechnical Considerations

The planning study did not acquire survey or geotechnical information. Historical reports from the Washington State Geological Survey Library were reviewed to evaluate the type and location of subsurface conditions (WDNR 2025). These maps and visual observations made by geotechnical design engineers during site visits provided the background for using this evaluation criteria.

The area presents several geotechnical challenges that must be carefully managed to ensure long-term stability and safety. One of the primary challenges involves rock cuts associated with the bypass alternative alignments (Alternatives 5, 6, and 7), which would increase the risk of slope instability and other geotechnical considerations. This is particularly true for Alternative 4, where the likelihood of encountering poor-quality rock, unstable slopes, or even legacy mineshafts and mining debris is significantly higher than in other locations. There is evidence of recent landslides and rockfall in the area, so the recommendation is to avoid an alternative that would be located within any of these unstable locations.

A key early consideration was the potential reuse of foundations from the existing bridge. While its current condition is fair, the existing foundations would not meet today's design requirements in terms of reinforcement or seismic capacity and cannot be reused.

To reduce both geotechnical risk and project costs, it was determined that an alternative that minimized the amount of new roadway construction involving rock cuts would be preferred. For any new alignments, geotechnical investigation, including drilling, sampling, and strength testing of the rock, will be necessary as the next step.

Figure 13. USGS Geologic Map

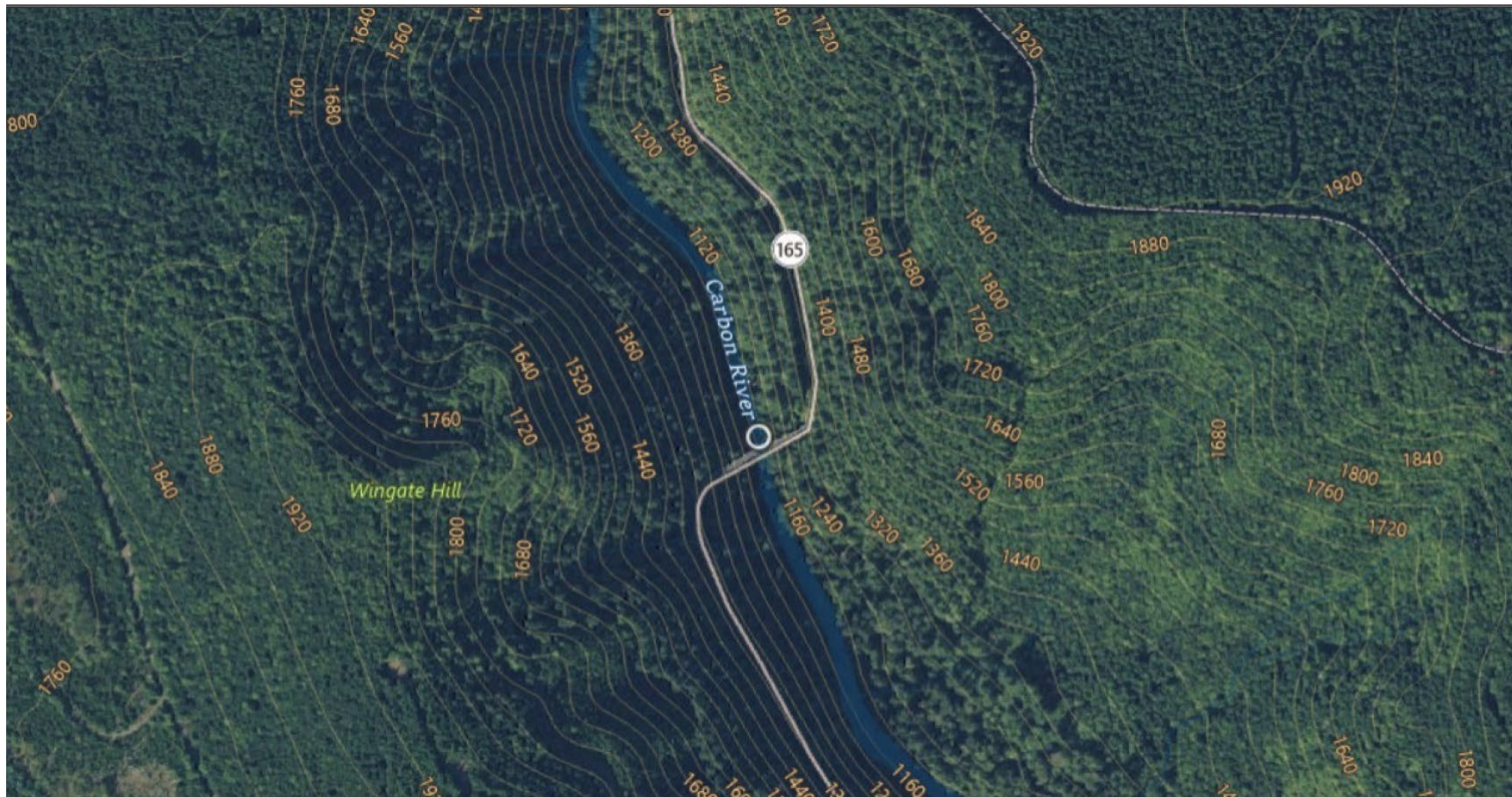
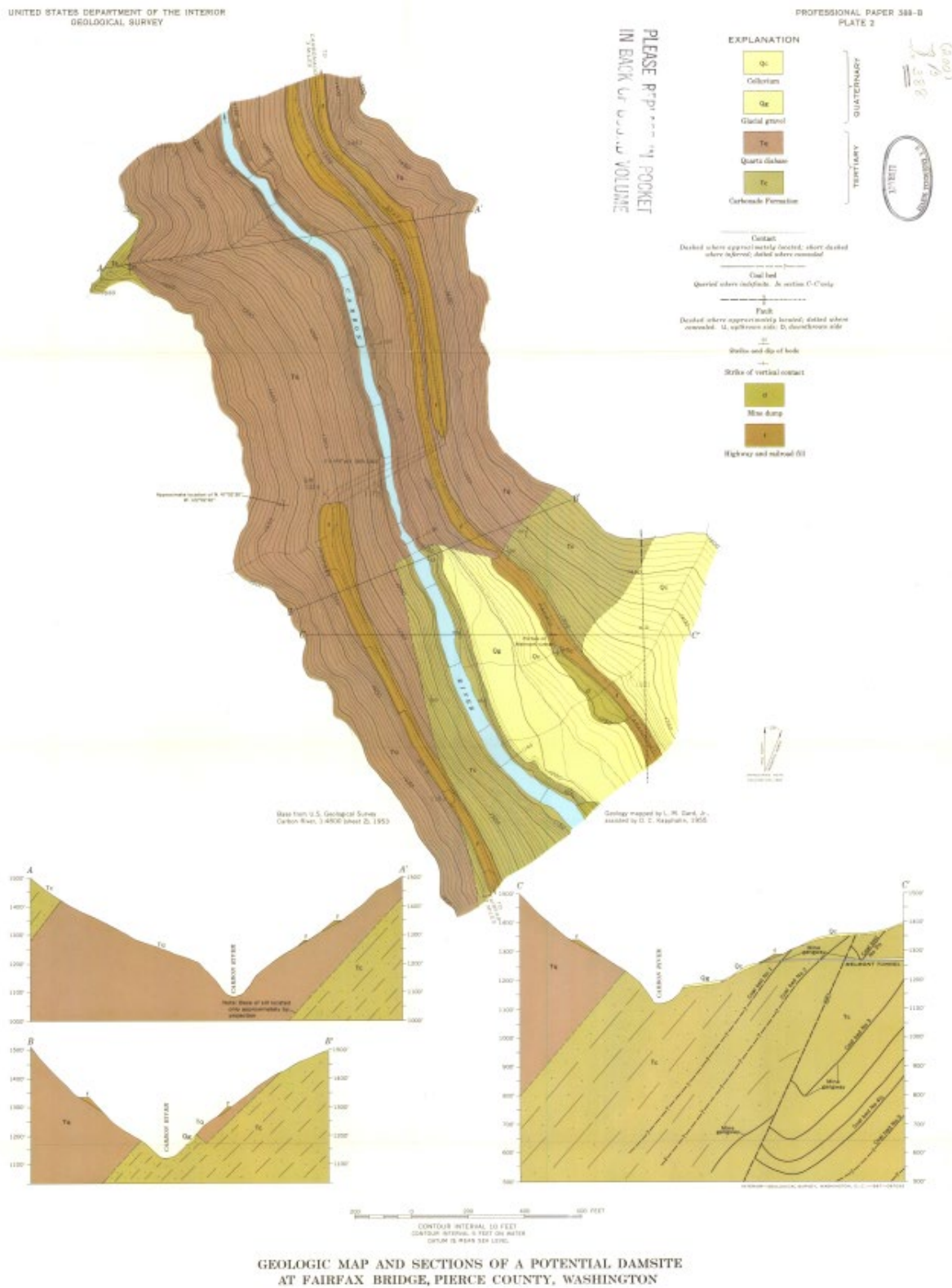


Figure 14. USGS Topographic Map



Constructability and Site Considerations

Bridge Demolition and Challenges

Environmental factors must be addressed during demolition, including the presence of creosote in the bridge approaches and lead-based paint on steel components. These materials require specialized handling and disposal procedures.

Additionally, the bridge's arches must be temporarily supported during demolition, necessitating detailed structural planning. Adequate staging areas near the site will also be required to store dismantled bridge components safely and efficiently.

To construct the new bridge on or near the current bridge, the existing structure must first be demolished. This process is expected to extend the overall project timeline by approximately 2 to 3 years.

Construction Access Constraints

Accessing the construction site presents several logistical challenges. The use of temporary work platforms (trestles) is not feasible due to the steep canyon, and launching girders is impractical without significant rock excavation. The canyon's geometry and seismic design requirements potentially complicate the use of conventional vertical supports.

Access to the southern end of the bridge will require coordination with private landowners and may involve upgrading existing logging roads. If the new bridge is constructed adjacent to the existing road, additional land acquisition will be necessary. On the northern side, large rock outcrops may obstruct crane operations, and areas with loose soil will require the construction of a new access road.

Construction Timing Considerations

Before demolishing the existing bridge, compliance with Section 106 of the National Historic Preservation Act (NHPA) is required. However, early demolition may be pursued as a separate project phase. For Alternatives 3 and 4, demolition activities could proceed concurrently with new bridge construction. Roadway construction may also begin independently of bridge work, potentially expediting the overall schedule.

Impacts on Other Bridges along SR 165

Several bridges along State Route 165 and the designated truck route are no longer rated for heavy loads. This limitation may affect the transportation of construction materials and equipment to the project site and should be factored into logistics planning.

Bridge Type, Size, and Location Considerations

WSDOT evaluated several bridge types and construction methods to find the best fit for the site's unique challenges. Both steel and concrete arch designs were considered.

However, any chosen design must avoid using oversized girders that cannot be transported along SR 165 or on nearby logging roads.

Foundation types were reviewed, including drilled shafts and spread footings. Drilled shafts are more expensive and construction access for the drill rig would cause greater site disturbances compared to shallow footings with anchors that can be constructed with smaller equipment.

One option for the bridge is the incremental launching of steel girders, which offers a balance between cost and construction risk. This method involves launching the girders into place from one side of the canyon, but it requires a large amount of space at the launch site. Because of the bridge's location and shape, this option may be difficult to implement due to onsite space requirements.

Alternatives 3 and 4 offer flexibility in alignment and can be adjusted to better fit the terrain. Due to weight limits on existing bridges along SR 165, lighter bridge designs and modular construction methods are preferred. These approaches make it easier to transport materials and assemble the bridge onsite.

To address limited access at the construction site, WSDOT may consider using a cable-based system in addition to cranes. This method was used during the construction of the original bridge and could help overcome space and terrain limitations. If the new bridge is built close to the existing one, it may even be possible to use the new structure to assist with the removal of the old bridge.

From a construction and engineering standpoint, a steel plate girder bridge is considered the lowest-risk option. Continuous steel spans can meet the required length for both Alternatives 3 and 4. Another option is an arch bridge built using cable-supported methods, which could reduce some construction risks but would require more complex engineering and a skilled workforce.

Schedule Drivers and Opportunities for Streamlining

To accelerate the bridge replacement project, avoiding interaction with the existing structure may significantly reduce the overall construction timeline. One effective strategy is to divide the project into early work packages—such as rock excavation and roadway improvements—that can be executed under separate contracts. This approach enables certain activities to begin ahead of the main construction phase.

Alternative delivery methods, including design-build and progressive design-build, should be considered. These approaches allow for concurrent design and construction phases, potentially reducing the project duration by up to 2 years.

Constructing the new bridge adjacent to the existing one may simplify future demolition efforts and reduce overall costs. Initiating roadway construction as early as possible would also contribute to schedule compression.

To streamline the permitting process, it may be feasible to separate the Section 106 historic review from other project approvals. This would allow non-historic work to proceed while the review is underway.

Finally, establishing reliable construction access to the southern side of SR 165 is critical. Potential access routes include the Crocker and Lily Creek logging roads, as well as the existing east bypass.

Environmental Considerations

Environmental factors that influence the implementation of bridge alternatives include the timing and duration of regulatory permitting processes, the potential presence of sensitive species and habitats, and the National Register of Historic Places. These conditions may impose restrictions on construction methods or seasonal timing to minimize ecological and cultural impacts.

Sensitive Species and Habitat Overview

A preliminary review of publicly available species and habitat data was conducted using resources such as the U.S. Fish and Wildlife Service's Information for Planning and Conservation system (USFWS n.d.) and the National Marine Fisheries Service recovery database. This review identified several species listed under the Endangered Species Act (ESA) and designated critical habitats that may occur within the study area:

- Gray wolf (*Canis lupus*) – endangered
- North American wolverine (*Gulo gulo luscus*) – threatened
- Marbled murrelet (*Brachyramphus marmoratus*) – threatened
- Mt. Rainier white-tailed ptarmigan (*Lagopus leucura rainierensis*) – threatened
- Yellow-billed cuckoo (*Coccyzus americanus*) – threatened
- Bull trout (*Salvelinus confluentus*) – threatened
- Chinook salmon – threatened
- Steelhead – threatened
- Monarch butterfly (*Danaus plexippus*) – proposed threatened
- Suckley's cuckoo bumble bee (*Bombus suckleyi*) – proposed endangered

In addition, the Washington Department of Fish and Wildlife's Priority Habitat and Species public database (WDFW n.d.) identifies the Northern goshawk as a candidate species, with several mapped nests located within the study area. Federally protected fish species, including coho salmon, are also documented in the Carbon River (Northwest Indian

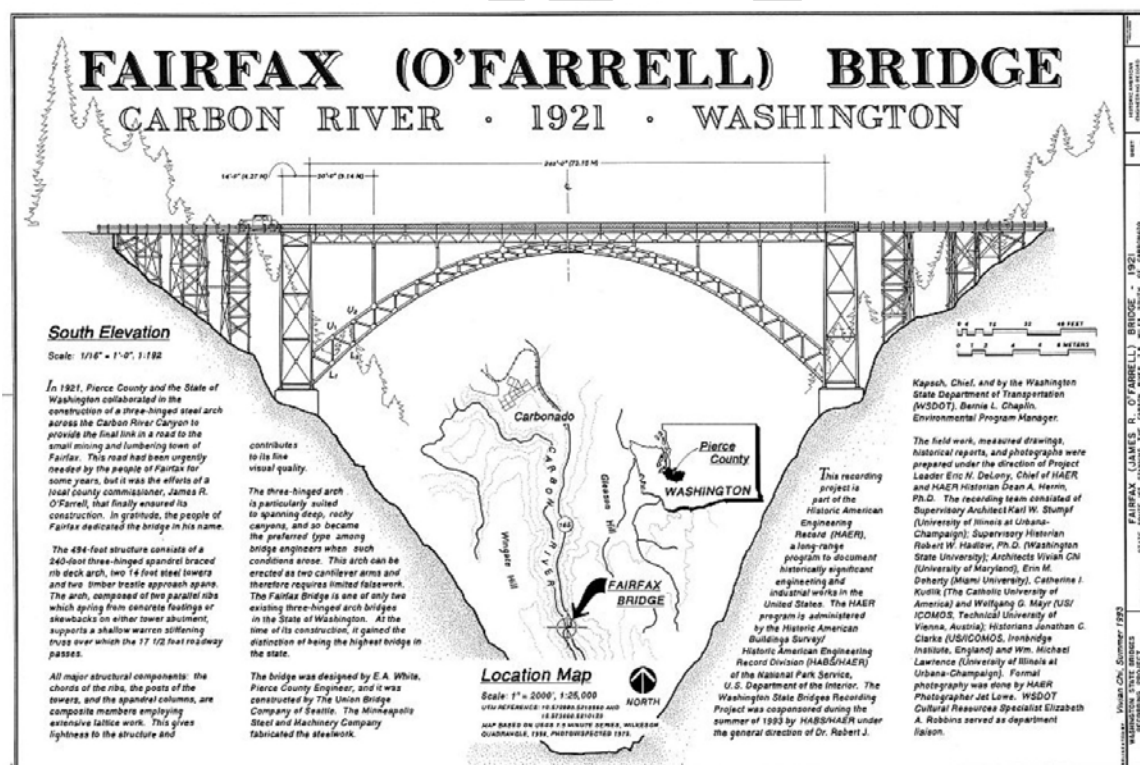
Fisheries Commission n.d.). Several wetlands are mapped within the project area, as recorded in the National Wetlands Inventory (USFWS n.d.).

As recommended options advance into detailed design and next steps, these species and habitats will be evaluated more thoroughly to assess potential direct and indirect impacts. At the planning level with publicly available data, the presence of these environmental resources does not disproportionately affect any one alternative over the others.

Historic Preservation and Section 106 Compliance

Section 106 of the National Historic Preservation Act (NHPA) mandates the evaluation of potential impacts to historic properties listed or eligible for listing in the National Register of Historic Places (NRHP). The existing bridge is listed in the NRHP, and any proposed modifications or removal must follow the Section 106 process. This includes identifying potential adverse effects, consulting with the State Historic Preservation Officer, Tribal representatives, and other partners, and documenting mitigation measures in a binding agreement.

Figure 15. Historic Drawing of the Fairfax Bridge over Carbon River



(Source: Library of Congress, Historic American Engineering Record WA-72)

Completion of the Section 106 process is required before any physical impacts to the historic bridge can occur. This review and consultation process may take over one year,

potentially extending the timeline for any alternative that involves modification or demolition of the existing structure.

Dismissed Alternatives

The following alternatives were dismissed through the evaluation process during this planning study.

Full Bridge Rehabilitation Alternative

In August 2024, WSDOT bridge engineers evaluated the feasibility of rehabilitating the existing structure following the imposition of a 16,000-pound load restriction. However, due to several factors—including the bridge's age and historic status, significant corrosion of gusset plates and other structural components, its challenging location, and associated costs—rehabilitation was not pursued further.

Strengthening or replacing the existing steel would require extensive corrosion removal. In many areas, the corrosion has severely compromised the steel's structural integrity, rendering it unsalvageable. Additionally, the current load rating prevents the bridge from supporting the weight of repair equipment. As a result, a temporary structure would be necessary to support equipment during rehabilitation. Given the deep river canyon and the need for a 240-foot-long temporary span, this solution would be both complex and costly.

Rehabilitation would extend the bridge's service life by approximately 20 to 30 years, whereas a new structure could be designed for a 75-year lifespan, with routine maintenance. Furthermore, long-term preservation costs would be higher for the rehabilitated bridge compared to a new one. This is due to higher maintenance frequency and material degradation in the original construction and the technological advancement in new construction. For these reasons, this planning study focused on evaluating new bridge construction alternatives and did not consider rehabilitation as a viable option.

Figure 16. Bridge gusset plate



Source: WSDOT 2025

In the 2024 image, advanced corrosion is visible in the center of the gusset. By 2025, additional deterioration resulted in cracks through the steel. Other steel pieces are no longer there.

Figure 17. Bridge support column



Source: WSDOT 2025

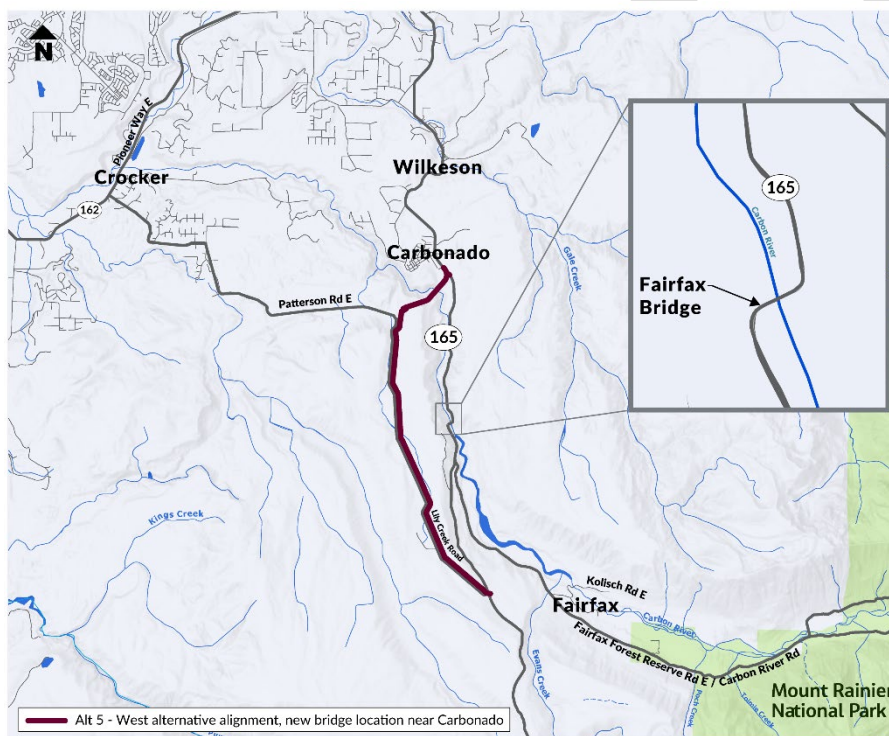
One of the steel columns holding up the SR 165 Carbon River Fairfax Bridge has buckled, also affecting nearby supports. This compromises the column's ability to carry weight from above.

Alternatives 5, 6, and 7 – Bypass Alternatives

Alternatives 5, 6, and 7 were collectively referred to as bypass alternatives. These alternatives involved realigning SR 165 to maintain access south of the Fairfax Bridge. These alternatives were dismissed due to being significantly more expensive and, in the case of Alternatives 6 and 7, isolate the communities of Carbonado or Wilkeson.

New corridor: West Alternative

Figure 18. Alternative 5 – West Bypass Alignment, New Bridge Location near Carbonado

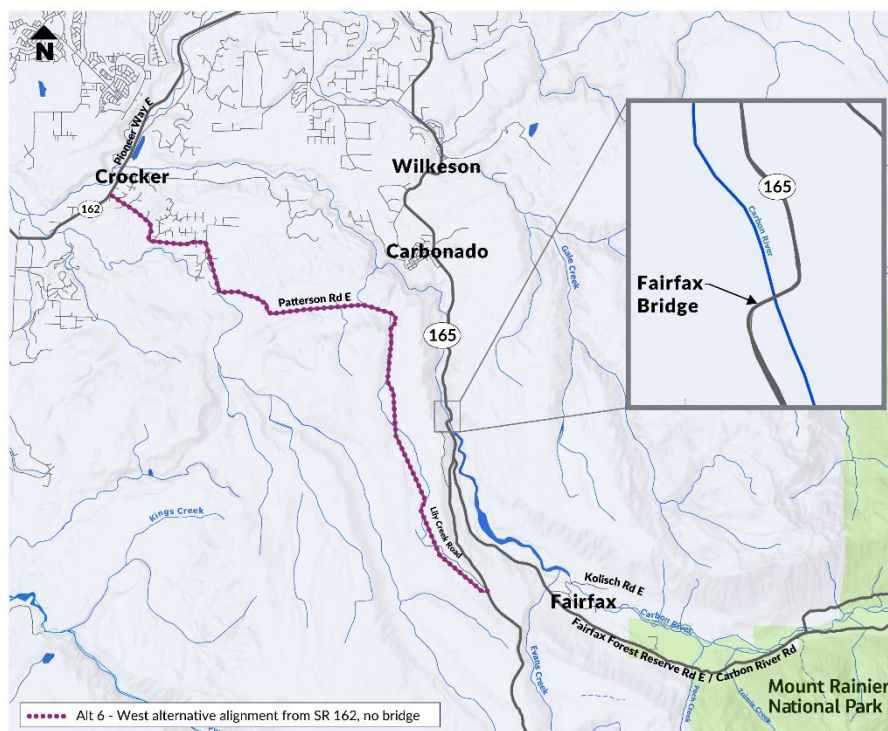


Key considerations and risks:

- Approximate cost: \$465 million to 785 million
- A new, approximately 1,400-foot bridge is needed to cross the Carbon River
- Five miles of new roadway construction
- Steep topography requires large areas of rock cuts, retaining walls, and fill
- ROW is needed
- Difficult construction access

New Corridor: Crocker Alternative

Figure 19. Alternative 6 – West Bypass Alignment from SR 162, No Bridge

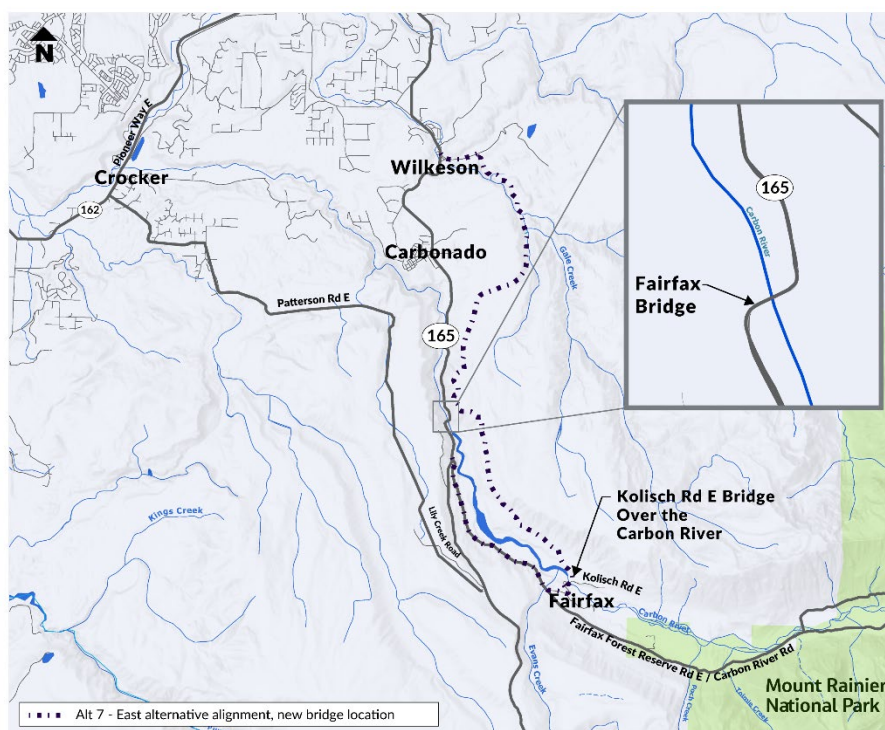


Key considerations and risks:

- Approximate cost: \$440 million to 735 million
- Approximately 11 miles of new roadway construction
- Steep topography requires large areas of rock cuts, retaining walls, and fill
- ROW is needed
- Difficult construction access

New Corridor: East Alternative

Figure 20. Alternative 7 – East Bypass Alignment, New Bridge Location

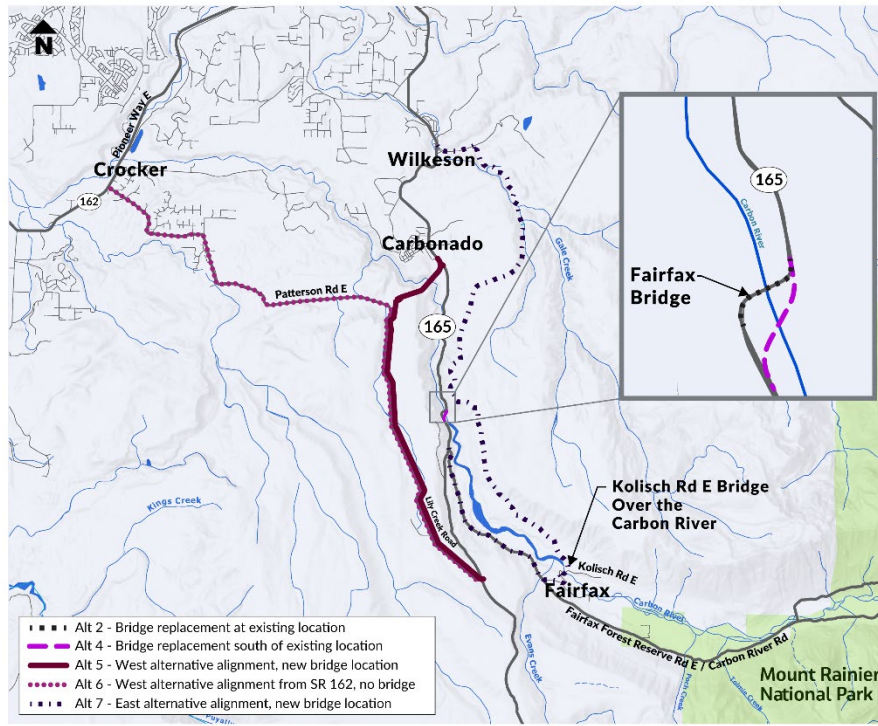


Key considerations and risks:

- Approximate cost: \$375 million to \$610 million
- Approximately 12 miles of new roadway construction
- Steep topography requires large areas of rock cuts, walls, and fill
- Two new bridges are needed, Kolisch Road and Wilkeson Creek
- ROW is needed
- Difficult construction access

Alternatives 2 and 4 – Bridge Replacement Alternatives

Figure 21. Dismissed Alternatives



Alternatives 2 and 4 were referred to as bridge replacement alternatives (refer to Dismissed Alternatives). These alternatives involved 0.2 to 0.4 mile of realignment for SR 165 on the existing corridor—significantly less in comparison to the bypass alternatives. The bridge replacement alternatives shared similar cost estimates ranges, key considerations, risks, and challenges.

Bridge replacement within the footprint of the existing bridge (Alternative 2) was estimated to approximately cost \$175 million (cost estimate was updated during planning study). It would require removal of the existing bridge first. As discussed before, the Carbon River Canyon site provides difficult construction access.

Bridge replacement south of the existing bridge location (Alternative 4) was estimated to approximately cost \$160 million (cost estimate was updated during planning study). A new 650-foot bridge would be needed, as well as retaining walls and rock cuts for bridge approaches.

Risks and Opportunities for Bridge Replacement Alternatives

Table 2 describes the engineering risks and opportunities used to evaluate viable bridge alternatives.

Table 2. Risks and Opportunities for Bridge Replacement

Risks	Opportunities
<ul style="list-style-type: none"> • If using same alignment, existing bridge must be removed before rebuilding on same alignment, adding 2 to 3 years. • Work trestles are not feasible; construction access to the south approach is challenging. • Girder launching is not possible without rock clearing for all alternatives. • Rock cuts may increase geotechnical and slope instability risks. • Construction access to the south abutment may require agreements and private road upgrades. • Southern alignments face poor rock conditions, unstable slopes, and legacy mineshafts. • Bridge design must consider canyon geometry and seismic needs. 	<ul style="list-style-type: none"> • Avoiding the existing structure could shorten the construction timeline. • Minimizing new roadway length reduces cost and geotechnical risk. • Incremental steel girder launch likely has the lowest risk and cost. • Steel or concrete arch bridge types should be evaluated. • Avoid oversized girders that can't travel SR 165 or logging roads. • Early work packages (e.g., rock clearing, roadwork) could accelerate the construction timeline. • Building close to the existing bridge may reduce future removal costs. • Alternative delivery methods should be considered to speed up implementation.

Preliminary Alternatives Comparison Matrix

To support the planning-level evaluation, a preliminary comparison matrix was developed for all seven alternatives (Table 3). The matrix summarizes key characteristics of each alternative, including estimated cost ranges, new roadway and bridge lengths, ROW needs, implementation timelines, and notable risks and opportunities. This side-by-side comparison provided a high-level overview of tradeoffs and informed decision-making on dismissed alternatives.

Table 3. SR 165 Carbon River Fairfax Bridge Summary of Alternatives

Description	Alt. 1. Maintain Permanent Closure	Alt. 2 Replace Bridge	Alt. 3 North Bridge	Alt. 4 South Bridge	Alt. 5 West Bypass	Alt. 6 SR 162 Bypass	Alt. 7 East Bypass
*Cost (2025, in millions)	\$70M – \$80M	\$175M	\$160M	\$160M	\$465M – \$785M	\$440M – \$735M	\$375M – \$610M
New roadway	N/A	0.4 mile	0.4 mile	0.2 mile	6 miles	11 miles	12 miles
Bridge length	N/A	TBD	650 feet	650 feet	1,400 feet	None	400 feet (Kolisch) 300 to 400 feet (South Prairie/ Wilkeson Creek)
Permanent ROW	N/A	0 acres	3 acres	2 acres	44 acres	80 acres	95 acres
Implementation timeline (Open to traffic for Alt. 2-7)	3 years	6.5 years	6 years	6 years	7 years	7 years	6 years
Key risks	Unknown compensation for loss of access	Requires removal of existing bridge first	0.4-mile of rock cut with unknown geotechnical risk	Unstable slopes Rock is less competent south of existing bridge Legacy mineshafts and debris	Significant ROW impacts Long bridge length	Significant ROW impacts Bypasses Carbonado and Wilkeson	Longest alignment Requires two bridge replacements
Key opportunities	May save cost	Minimizes environmental impact by staying within existing footprint	Can be designed to avoid existing bridge, accelerating timeline	Can be designed to avoid existing bridge, accelerating timeline	N/A	No new bridge required	N/A

M = million(s)

N/A = not applicable

*All costs are preliminary, for discussion purposes, and subject to change. Note: Estimates for Alternatives 1-4 were updated later in the planning study, following public events.

Chapter 5. Options to Advance

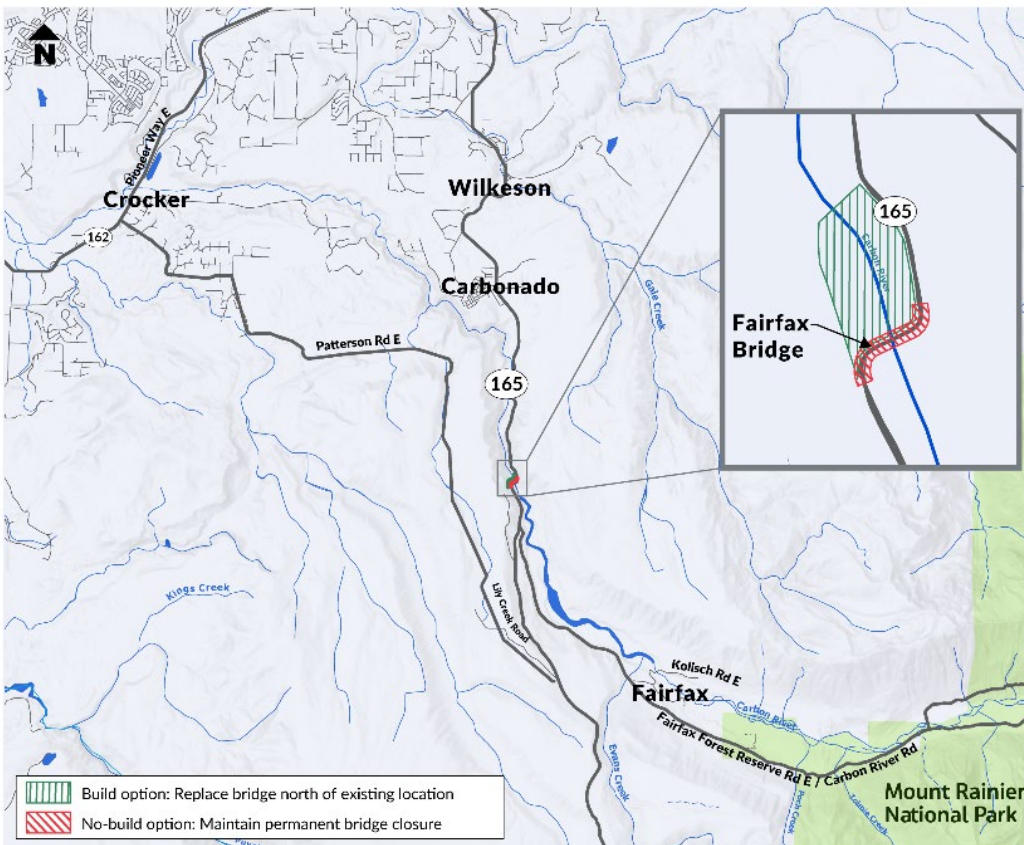
This study evaluated seven alternatives across three categories:

- (1) Keep SR 165 closed south of Carbonado and remove the bridge
- (2) Replace the bridge in the same vicinity
- (3) Reroute SR 165 to bypass parts of the Carbon River Canyon

Based on the qualitative evaluation of all seven alternatives, this planning study recommends advancing two options for additional consideration (refer to Figure 22. Map of Options to):

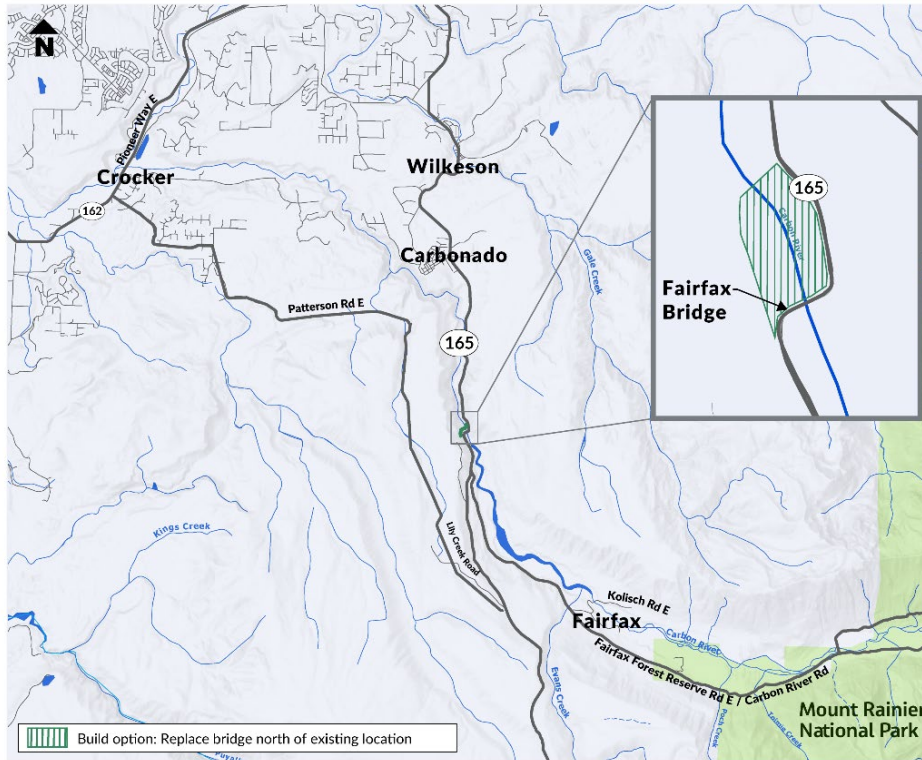
- Build option: Replace the bridge within the first half mile north of the existing bridge and remove the existing bridge.
- No-build option: Maintain the permanent closure, compensate property owners for lost access, and remove the existing bridge.

Figure 22. Map of Options to Advance



Build Option: Replace Bridge North of Existing Location

Figure 23. Map of Build Option



The build option proposes constructing a new bridge to the north of the existing structure and is closely aligned with the concept outlined in Alternative 3 (refer to Figure 23. Map of Build Option). It is recommended to advance this option into the preliminary engineering phase, including design activities in preparation for NEPA review of alternatives.

Key elements and considerations of the build option include:

- Construction of a new bridge north of the existing alignment
- Specific bridge location to be determined after geotechnical and environmental fieldwork
- Requires up to 0.5 miles of new roadway, including rock cuts
 - Potential to shift the alignment closer to the existing bridge to reduce excavation and facilitate future bridge removal
- Construction access is challenging due to terrain and site constraints
- This option presents the least geologic risk among all alternatives
- Preliminary cost range is \$160M
- Implementation timeline: 6 years

Because the existing bridge is listed on the NRHP, its removal would trigger a Section 106 consultation process, which could extend the project timeline by 2 to 3 years. Constructing the new bridge without first removing the existing structure may streamline permitting and accelerate implementation. The build option allows the bridge removal to be done concurrently or after construction of the new bridge.

During the planning study, the cost estimate for Alternative 3 was updated to reflect a more comprehensive understanding of site-specific risks and contingencies of the build option. The total estimated cost for this option is approximately \$160 million, as shown in Table 4. A risk multiplier was applied to reflect the difficulty of accessing the construction site. The cost estimate is based on planning-level assumptions and includes a 50% contingency to account for any other uncertainties.

Table 4. Build Option Preliminary Cost Estimate and Aging, by Biennium

Biennium	25-27	27-29	29-31	31-33	Total
Planning, NEPA & Permitting	\$1,600,000	\$400,000	\$ -	\$ -	\$2,000,000
Preliminary Engineering	\$8,000,000	\$12,000,000	\$ -	\$ -	\$20,000,000
Right-of-Way	\$ -	\$1,000,000	\$ -	\$ -	\$1,000,000
New Bridge Construction	\$ -	\$24,600,000	\$97,400,000	\$ -	\$122,000,000
Existing Bridge Removal	\$ -	\$ -	\$ -	\$15,000,000	\$15,000,000
Total	\$9,600,000	\$38,000,000	\$97,400,000	\$15,000,000	\$160,000,000

Cost estimation assumptions include:

- Early NEPA and permitting work, such as biological surveys, ESA Section 7 consultation, and Section 106 historic resource review are estimated at approximately \$250,000 and included in the Planning, NEPA & Permitting line item above.
- Preliminary engineering costs are estimated at 12% of construction costs, consistent with typical design-bid-build delivery methods.
 - Design work supporting NEPA and environmental permitting is included in the design phase and estimated at \$2 million.
 - Geotechnical investigations are estimated at \$1.6 million.
 - Contract procurement costs are included with an additional \$1 million.
 - Design for removal of the existing bridge is incorporated into the design phase.
- ROW costs are based on prior estimates and do not include compensation for potential loss of access to private properties south of the existing bridge.

- Construction costs include:
 - Roadway and retaining walls: approximately \$43 million
 - Rock stabilization along SR 165: approximately \$6 million
 - New bridge construction (based on WSDOT estimates and adjusted with a risk multiplier): approximately \$74 million
 - Existing bridge removal: based on WSDOT estimates
- The estimate excludes utility relocations, inflation, escalation of material costs, mobilization, and sales tax.

The estimated implementation timeline is approximately 6 years. A possible high-level phasing for the build option is shown on Figure 24 (refer to Figure 24. Build Option Timeline), including:

- Phase 1:
 - Geotech investigations and survey
 - NEPA environmental documentation
 - Bridge Type, Size & Location
 - Bridge removal
- Phase 2:
 - Design engineering
 - Permitting
- Phase 3:
 - Construction
 - Early work packages

Figure 24. Build Option Timeline

	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				Year 7				Year 8			
Build option (Alt 3)	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Preliminary Engineering																																
Design, Bidding & Contracting																																
Property acquisition (ROW purchase)																																
New Bridge Construction																																
Existing Bridge Removal																																

This conceptual schedule is based on the following assumptions:

- NEPA activities are expected to be front-loaded within the first 2 years of the project.
- Permitting activities will follow the completion of NEPA work.
- Preliminary engineering is expected to occur primarily within the first 3 years and include support for environmental permitting and construction planning.

- Construction activities—including bridge and roadway work—will follow the completion of design and permitting phases.
- The existing bridge can remain in place during construction, which may reduce delays associated with historic resource consultation and demolition sequencing and prepare the new bridge for earlier opening to traffic.

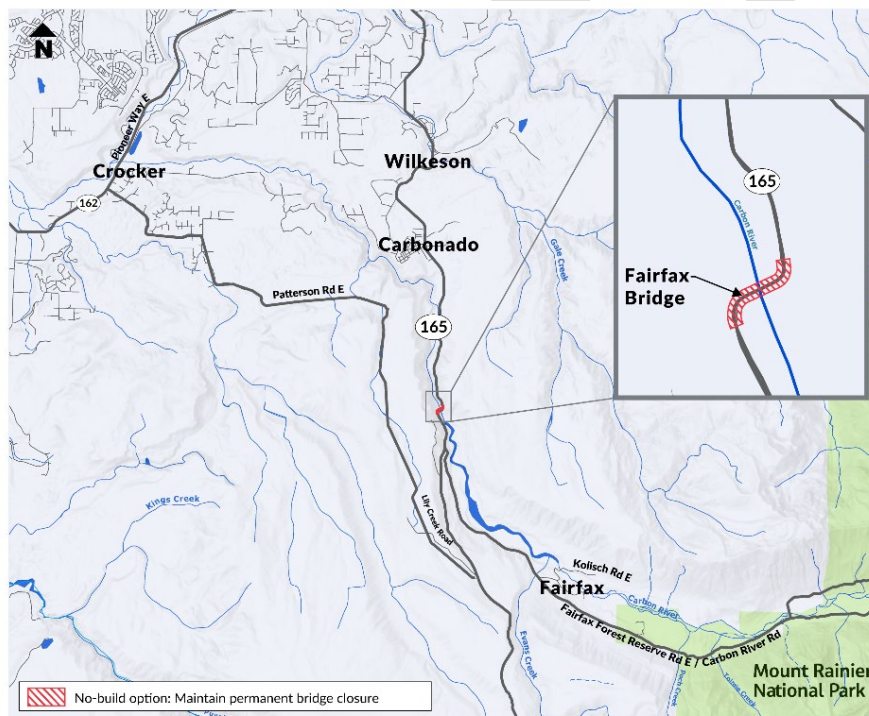
Public engagement indicates strong support for bridge replacement alternatives, including this option. Many respondents view these alternatives as the most cost-effective and practical solutions.

Several items remain unresolved and will require further evaluation as the project advances:

- Completion of technical investigations, including geotechnical studies.
- Continued assessment of construction logistics, schedule optimization, community input, and funding constraints.

No-Build Option: Maintain Permanent Bridge Closure

Figure 25. Map of No-build Option



The no-build option proposes maintaining the permanent closure of SR 165 south of Carbonado, removing the existing bridge, and evaluating compensation for private property owners who have lost access along SR 165. This option is consistent with the concept outlined in Alternative 1 and recommended for inclusion in the environmental review process to ensure a full range of alternatives is considered.

Under this option, SR 165 would be terminated at Carbonado, and no alternative access route would be provided. The existing bridge would be removed through a controlled deconstruction process. This option would require compensation related to property access rights for landowners south of the bridge and would result in the loss of public access to lands managed by MRNP, USFS, and Pierce County. It also raises questions about future jurisdiction and maintenance responsibilities for SR 165 south of the Carbon River.

During the planning study, key considerations and impacts of the no-build option were evaluated at a high-level. The following summarizes the findings. For more detail, refer to Appendix B. Special Considerations for Alternative 1 Technical Memorandum.

- Alternative 1 is the permanent closure of Fairfax Bridge on SR 165. The bridge is closed due for safety reasons. Crossing the Fairfax Bridge on SR 165 is the only public vehicle access point to MRNP and USFS recreational lands.
- The permanent bridge closure would potentially reduce economic activity to the towns and region and limit access to recreational and cultural resources. These conclusions are supported by several case studies across the United States, contextualizing the potential long-term impacts on rural communities and public land access.
- Benefits associated with Alternative 1 include wildlife and habitat impact reduction, improved safety, and reduced litter.
- The Fairfax Bridge is listed on the NRHP. The permanent closure of the bridge does not trigger a Section 4(f) analysis due to the existing baseline condition. However, permanent bridge closure could have an indirect impact to 4(f) resources because it would impair access to recreational lands.

Community input indicates that the no-build option is the least favored among the alternatives. Nearly 40% of public responses emphasized the urgency of restoring access, with many linking it directly to the economic survival of the region.

The estimated cost for the no-build option ranges from \$70 million to \$80 million, with an anticipated implementation timeline of approximately 3 years.

As part of the next steps to advance the no-build option for further evaluation, WSDOT would need to refine cost estimates related to property access rights and compensation and continue to assess long-term impacts to local communities, public land access, and regional connectivity.

Chapter 6. Next Steps

This planning study recommends advancing both build and no-build options into the preliminary engineering and NEPA phases. These alternatives should be further refined through additional technical investigations and updates to the implementation timeline and cost estimates.

WSDOT will initiate the NEPA process and preliminary engineering to refine and select a preferred alternative for the SR 165 Carbon River Fairfax Bridge. As part of this effort, WSDOT will determine the level of investment funds to advance critical path activities such as geotechnical exploration, topographic survey, environmental documentation, and preliminary design. Although full construction funding has not yet been identified, these funds will support preliminary engineering.

WSDOT is actively coordinating with state and local agencies and exploring funding opportunities to further evaluate the two identified options. Throughout this process, WSDOT will continue to engage with local community members, agency partners, state and federal leaders, and recreational users to understand their priorities and identify viable solutions for the future of the bridge.

Summary of immediate next steps:

- Start preliminary engineering to select a preferred alternative and refine risks and opportunities, delivery timelines, and estimated costs.
 - Conduct NEPA and geotechnical studies and fieldwork to identify a specific location for a build option.
 - Conduct fieldwork and analysis to refine bridge removal costs and risks.
 - Refine costs related to compensation to private property owners due to loss of access under the no-build option.
- Continue to coordinate with state and local agencies to support long-term community needs.

As the evaluation of alternatives progresses, WSDOT will continue to prioritize transparency and responsiveness in its engagement with the community. Communication will remain ongoing with key partners, including business and property owners, emergency service providers, and partner agencies. The findings of this study will be shared publicly to ensure that community members are informed and actively involved in the decision-making process.

WSDOT remains committed to working collaboratively with local communities, agency partners, state and federal leaders, and recreational users to understand their priorities and identify viable long-term solutions for the SR 165 Carbon River Fairfax Bridge.

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Appendix A. Study Area Context

DRAFT

Study Area Context

OR GEC Task Order BT – SR 165 Fairfax Bridge (Work Order MS9331)

July 2025



Olympic Region Multimodal Planning
7407 31st Avenue NE
Lacey, WA 98516

Prepared by:

Washington State Department of Transportation

In association with:

Jacobs

1100 112th Ave NE Suite 500, Bellevue, WA 98004

Introduction

This technical memorandum defines the study area and study area context for the Washington State Route (SR) 165 Fairfax Bridge Planning Study. Built in 1921, the Fairfax Bridge is currently closed because the structure became unsafe for any use. The town of Carbonado is 3 miles north and the Town of Wilkeson is 5 miles north of Fairfax Bridge on SR 165. For residents and commercial interests south of Fairfax Bridge, the eastern alignment is available for restricted (resident-only) access to SR 165 and points north.

Study Area

The study area is the towns of Wilkeson and Carbonado on SR 165. The cities of Buckley and Orting and Pierce County are used as comparison geographies (Figure A-1). Figure A-2 shows the alternatives under consideration as of May 2025.

Figure A-1. Study Area

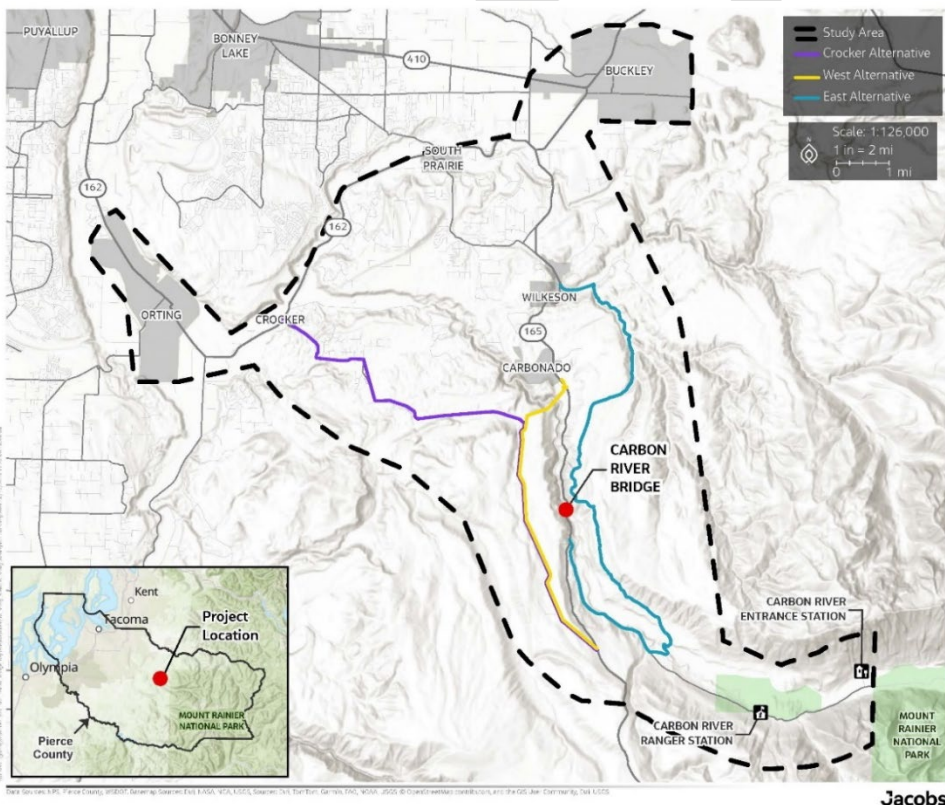
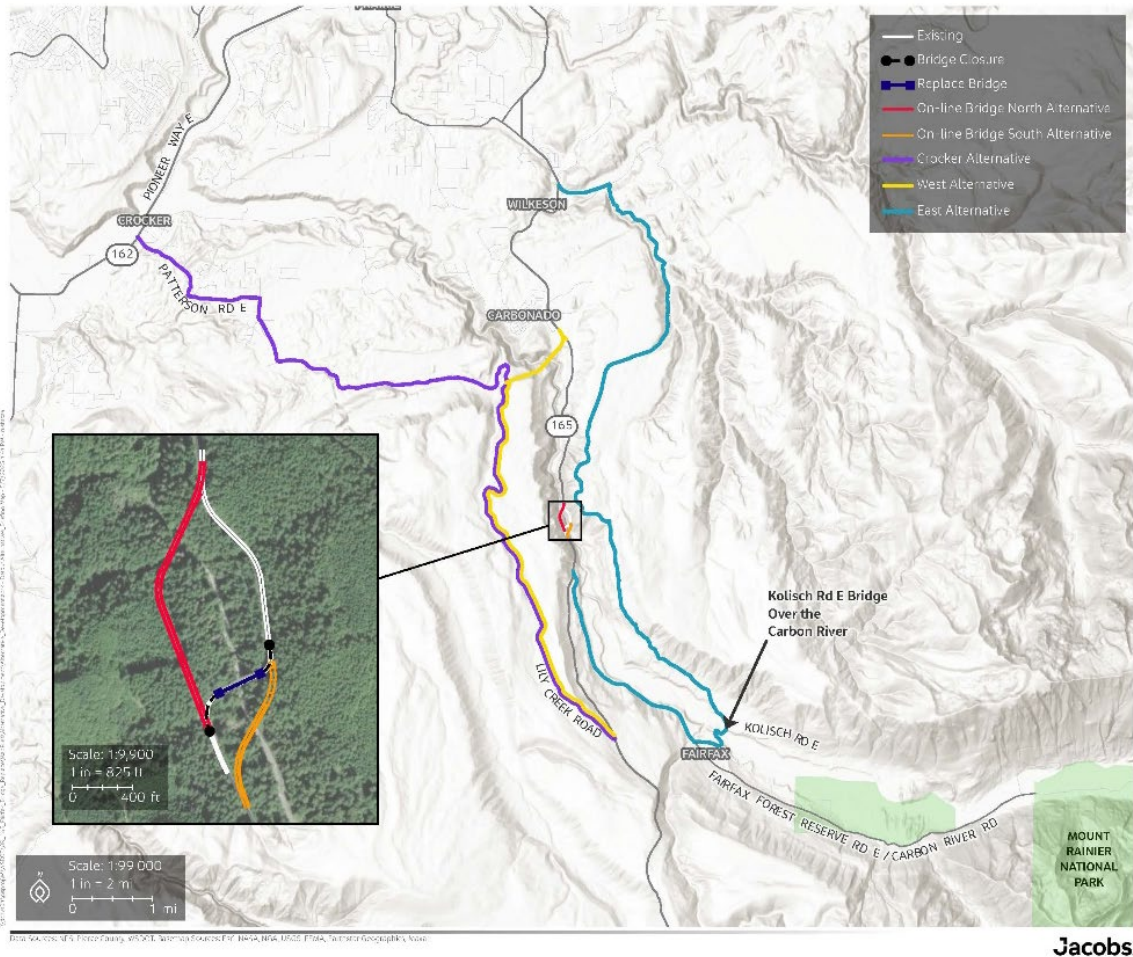


Figure A-2. Alternatives



Traffic

SR 165 and SR 162

In 2023, the Fairfax Bridge on SR 165 had an average annual daily traffic (AADT) of approximately 270 vehicles. Although the bridge has traditionally been open throughout the year, traffic typically reaches its highest levels in late summer (WSDOT 2025). Spot seasonal traffic volume data collected in October 2024 on SR 165, immediately south of the Fairfax Bridge, showed daily traffic ranging from approximately 500 to 700 vehicles. Table A-1 summarizes the AADT/traffic on segments of SR 165.

Table A-1. 2023 Annual Average VMT and Seasonal Spot VMT

Location	2023 AADT	October 2024 Spot Traffic Volumes
SR 162 North of Orting	17,000	N/A
SR 162 Orting	9,200	N/A

Location	2023 AADT	October 2024 Spot Traffic Volumes
SR 162 South of Orting	8,700	N/A
SR 162 West of South Prairie	6,600	N/A
SR 162 South Prairie	9,800	N/A
SR 165 South of Buckley	9,200	N/A
SR 162 at SR 165/SR 162 intersection	7,100	8,100-8,200
SR 165 at SR 165/SR 162 intersection	6,400	N/A
SR 165 South of Buckley	6,400	6,250 to 7,350
SR 165 South of SR 162 intersection	5,800	N/A
SR 165 Wilkeson	3,300	3,290 to 3,760
SR 165 South of Wilkeson	2,000	1,970 to 2,290
SR 165 North of Carbonado	1,700	N/A
SR 165 South of Fairfax Bridge	270	500 to 700
Source: WSDOT 2025. N/A = not available		

Mount Rainer National Park

Mount Rainer National Park (MORA) receives nearly a million vehicle visits annually (Table A-2).

Table A-2. Annual Vehicle and Visitor Traffic to Mt Rainier National Park

Year	No. Vehicles	No. Visitors	Recreation Visits
2022	962,128	2,371,585	1,622,395
2023	1,002,455	2,523,376	1,674,294
2024	975,773	2,490,729	1,620,006
Source: NPS 2025a. No. = number			

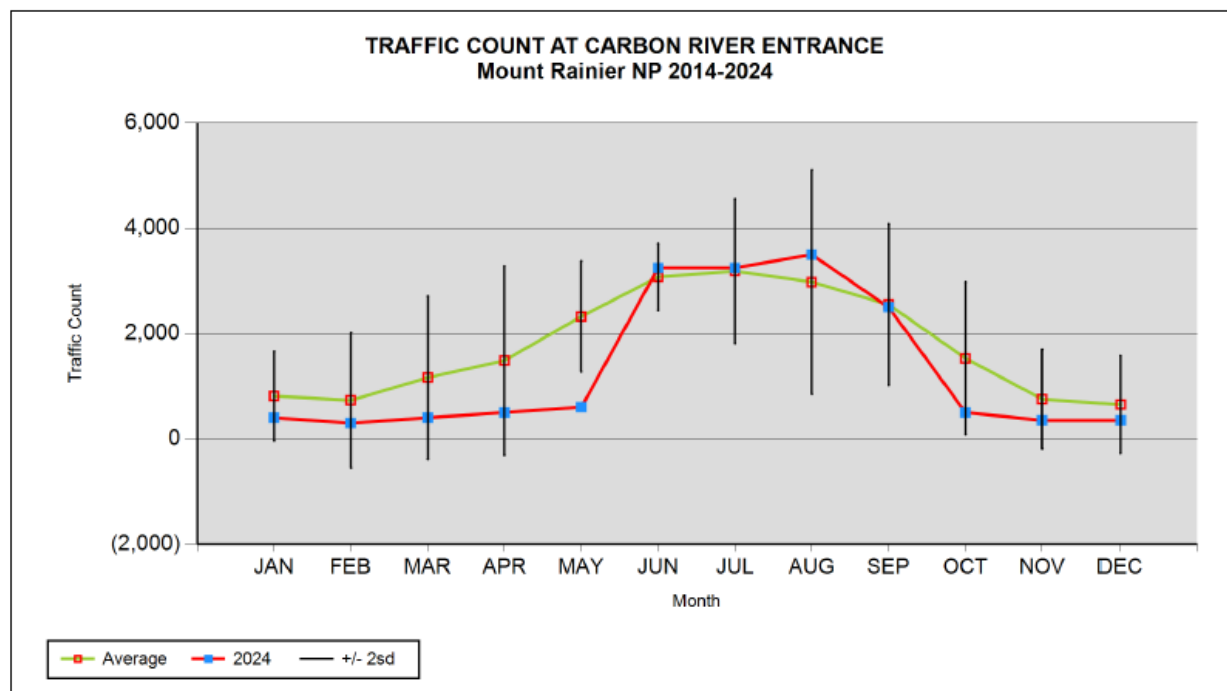
The Carbon River entrance to MORA is less popular than the main entrance at Nisqually. Table A-3 provides a breakdown of total visitors by entrance to MORA.

Table A-3. MORA Visitor Breakdown by Entrance

MORA Vehicle Entrance	Percentage of Visitors
Nisqually	46%
Stevens Canyon	20%
White River	23%
Carbon River/Mowich	11%
Source: NPS 2002.	

Historical seasonal peak traffic at the Carbon River entrance is in July (Table A-4).

Table A-4. Traffic County at Carbon River Entrance



	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2024	400	300	400	500	600	3,250	3,250	3,500	2,500	500	350	350
2023	250	250	400	700	2,500	3,000	3,000	2,250	2,000	200	250	250
2022	175	150	450	400	1,000	2,500	2,250	2,000	1,750	1,700	175	175
2021	1,250	500	1,750	2,000	2,500	3,000	3,000	1,000	1,250	2,000	150	75
2020	500	500	20	20	2,500	2,750	3,500	3,500	3,500	2,000	1,750	1,700
2019	500	400	2,000	2,000	3,000	3,500	4,000	4,000	2,500	2,000	1,250	1,000
2018	1,250	1,300	1,200	2,500	2,750	3,500	4,000	4,750	3,000	2,250	850	500
2017	1,500	2,000	2,500	2,300	2,500	3,500	4,000	4,000	4,000	2,500	700	550
2016	900	1,700	1,800	2,750	2,500	3,000	3,500	3,000	2,500	800	750	450
2015	900	250	750	1,100	2,000	3,000	2,300	2,300	2,500	750	750	900
2014	900	250	750	1,100	2,000	3,000	2,300	3,000	2,500	1,100	900	900
10 yr average	813	730	1,162	1,487	2,325	3,075	3,185	2,980	2,550	1,530	753	650
10 yr st dev	424	642	773	898	525	317	686	1,066	765	724	472	462
Avg + 2sd	1,660	2,014	2,708	3,283	3,375	3,709	4,556	5,112	4,080	2,979	1,696	1,575
Average	813	730	1,162	1,487	2,325	3,075	3,185	2,980	2,550	1,530	753	650
Avg - 2sd	-35	-554	-384	-309	1,275	2,441	1,814	848	1,020	81	-191	-275

Community Profiles

SR 165 serves as primary access from more heavily developed areas of Pierce County and the Puget Sound region to the two remaining historic coal towns of Wilkeson and Carbonado and the northwestern quadrant of MORA and forest lands. Neither Wilkeson nor Carbonado are employment hubs. Larger communities accessible from SR 165 and SR 162 like the cities of Buckley and Orting have moderate employment opportunities, allowing approximately 12% of the working population to live and work in the same community (U.S. Census Bureau 2022).

Table A-5 provides population and reported race and ethnicity data. Pierce County anticipates moderate population growth through 2044 (Pierce County 2025c).

Table A-5. Select Population Characteristics

	State of Washington	Pierce County	Carbonado	Wilkeson	Buckley	Orting
Total Population	7,606,327	903,313	631	551	5,306	8,754
Minority Population	36%	38%	8%	9%	7%	21%
Hispanic Population	14%	13%	4%	6%	3%	10%
Low-income Population	10%	9%	0%	13%	8%	4%
Median household income	\$94,952	\$96,632	\$121,719	\$105,469	\$120,994	\$106,042
Unemployment rate	5%	5%	3%	0%	8%	4%
Limited English Proficiency	1.9%	1.0%	0.0%	0.2%	0.1%	0.0%
Under 18	22%	23%	24%	24%	26%	21%
Working Age (20 to 64)	60%	60%	57%	55%	54%	60%
Over 65	16%	14%	8%	15%	16%	23%
Source: U.S. Census 2019-2023 American Community Survey 5-Year Estimates. Tables B16004, B03002, C17002. Notes: Limited English Proficiency - Speaks Spanish and Speaks English "Not Well" or "Not at All" Percentage of the population at or lower than the poverty level. CDP = census-designated place; no municipal structure						

Proxies for the economic health of each community are property value and sales tax revenue. Carbonado has a small number of retail businesses. The average cost of residential property in Pierce County is \$433,949 (Pierce County 2022). The data demonstrates a general pattern that more inaccessible/rural communities have lower residential property value. Table A-6 provides property value and property tax revenue. Table A-7 provides sales tax revenues as a combined tax rate.

The community profiles detail job counts and job commutes from U.S. Census Bureau data. It should be noted that the U.S. Census Bureau does not capture other economic activity happening within each town if it was not taxable.

Wilkeson

Wilkeson was established in 1877 for coal mining, sandstone quarrying, and forestry before incorporation in 1909. Historic Wilkeson, known as the “Gateway to Carbon Glacier,” currently has a population of approximately 555 people. The scale and character of the national register homes, businesses, and public spaces retain the flavor of the mining era (Town of Wilkeson 2024).

Running through town, SR 165/Church Street is level of service is C (3,100 to 6,000 average weekday traffic volume where “many times there is more than one vehicle in the queue and most drivers feel restricted, but not objectionably so”).

Demographics

Wilkeson has a younger population compared to the demographic profile of Pierce County. There is a smaller percentage of people older than 65 and less working-age people than compared to Pierce County. The low-income population of Wilkeson is larger than Pierce County, but the median household income is strong. Table A-5 summarizes demographics of the study area communities and comparison geographies.

Housing and Growth

The 2024 *Wilkeson Comprehensive Plan* anticipates a 27% population growth forecast between 2024 and 2044. Recent U.S. Census Bureau data supports this growth trend (Table A-6). The Wilkeson urban growth area is anticipated to grow by eight parcels, with only one of the parcels being residential (refer to Figure A-3). The City of *Wilkeson* is evaluating property adjacent to the City of *Wilkeson* boundary for future capital public facilities. There are sufficient buildable lands to meet the Pierce County Buildable Lands process (Town of Wilkeson 2024).

Table A-6. Population Projections

	Washington	Pierce County	Carbonado	Wilkeson	Orting	Buckley
Growth Rate 2023–2044	23%	28%	26%	24%	7%	55%
Projected Population (2044)	9,502,530	1,186,146	798	686	9,590	8,235
Total Population (2023)	7,740,984	924,106	631	555	8,957	5,306
2020	7,617,364	1,196,798	734	499	9,041	5,098
2010	6,561,297	782,681	609	392	6,276	4,362

2000	5,894,121	700,820	784	404	3,776	4,064
1990	4,866,692	586,203	495	366	2,106	3,516

Source: U.S. Census Bureau 2019-2023 American Community Survey 5-Year Estimates. Tables B01001.

Notes:

Projected Population: Pierce County 2022 Comprehensive Plan

1990 Census does not contain cities below 1,000 persons

Economy

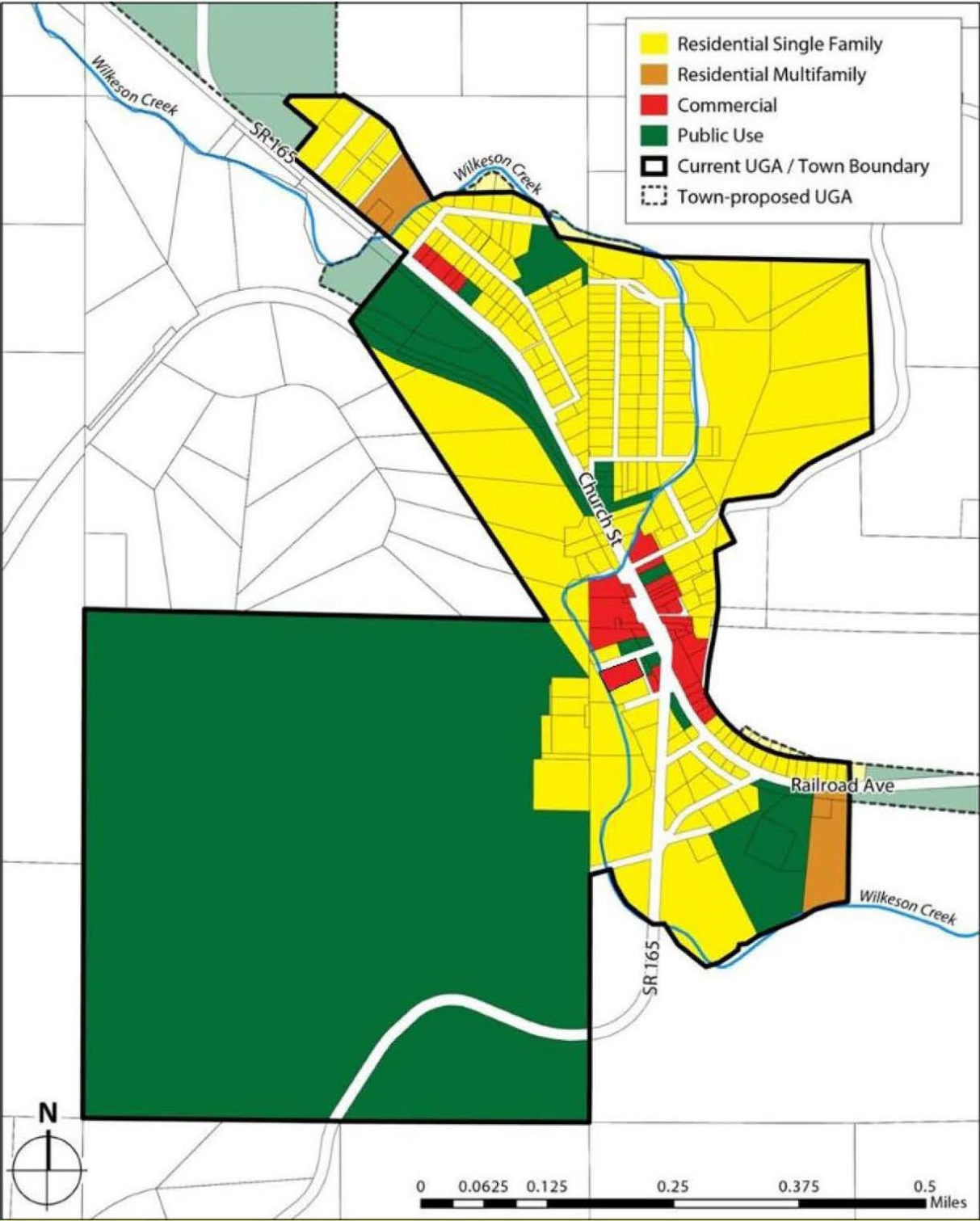
Average residential property value in the City of Wilkeson is \$325,501, the lowest in Pierce County (Pierce County 2022). The property tax rate per \$1,000 of assessed value in Wilkeson is 8.94 (Pierce County 2025a). The value of all property in Wilkeson is \$81,703,746, generating \$730,746 in tax revenue (Table A-7).

Table A-7. Property Value and Property Tax Revenue

City/Town	Total Property Value	Average Property Tax Rate	Property Tax Revenue
Buckley	\$1,180,797,430	0.00930	\$10,990,524
Carbonado	\$113,521,335	0.00748	\$850,210
Orting	\$1,435,362,788	0.00826	\$11,857,183
Wilkeson	\$81,703,746	0.00894	\$730,746

Source: Pierce County 2025a, 2025b.

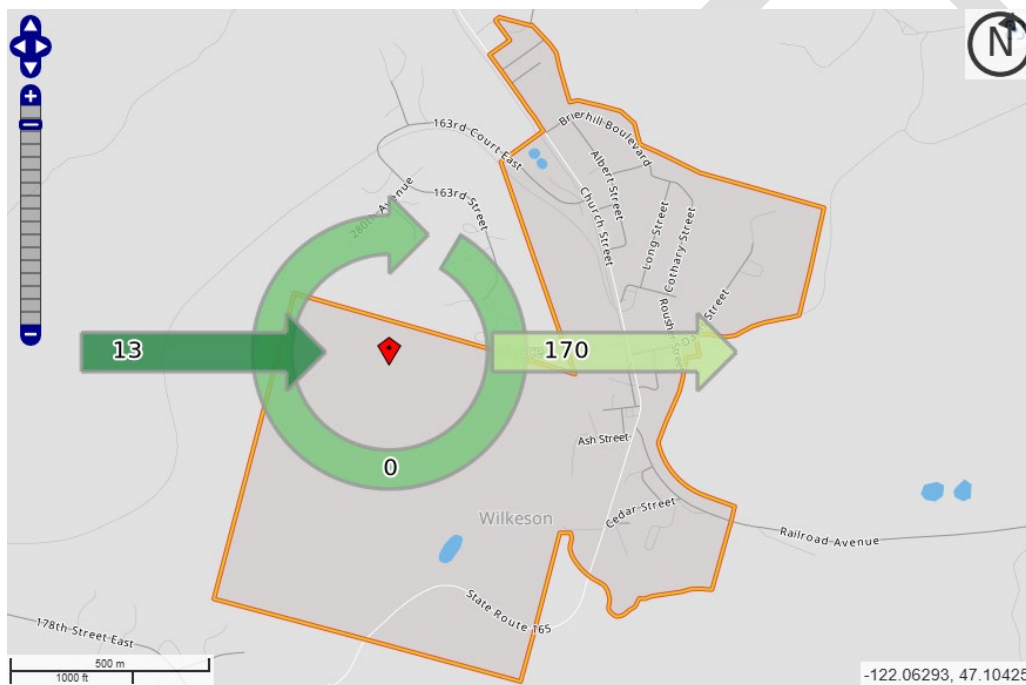
Figure A-3. Wilkeson Future Land Use Map



The Wilkeson town clerk stated there are seven businesses in town. The soda shop is seasonal (May through December) but might not open in 2025 due to the bridge closure. Other businesses include two restaurants open year-round, the Eagle Falls Fraternal Hall, and an auto repair shop (Wilkeson 2025).

Approximately 170 Wilkeson residents are formally employed. U.S. Census Bureau data from 2022 indicate that that likely all of them work outside of town. Approximately 13 people work in town, but they live outside of Wilkeson (Figure A-4¹) (U.S. Census Bureau 2022). The *Comprehensive Plan* describes Wilkeson has adequate land capacity given existing zoning to accommodate employment projections of 11 jobs (Wilkeson 2024).

Figure A-4. Inflow/Outflow Analysis of Workers in Wilkeson



Wilkeson and Carbonado have the same sales tax rate of 0.081 and similar retail sales volumes in 2024. Table A-8 summarizes the sales tax revenues generated by each town and city.

Table A-8. Taxable Retail Sales Revenue by Town/City (2024)

City/Town	Retail Sales	Sales Tax Rate	Retail Sales Tax Revenue
Buckley	\$169,291,352	0.082	\$5,733,103
Carbonado	\$5,138,865	0.081	\$165,056
Orting	\$119,242,659	0.095	\$6,924,021
Wilkeson	\$5,524,749	0.081	\$145,950
Source: Washington Department of Revenue 2025a, 2025b.			

¹ Census data has a larger margin of error for small communities. The purpose of the inflow/outflow diagrams is to demonstrate that many local employment opportunities are not held by residents.

Notes:

Retail sales annualized value from Q1 2024 to Q3 2024.

Sales tax rate Q4 2024.

Q = quarter

The Town of Wilkeson's 2025 operating budget is \$2.92 million.

Carbonado

Carbonado, located south of Wilkeson approximately 10 miles northwest of the Carbon River entrance to MORA, was founded in 1880 and grew to more than 1,000 people by 1900 (Carbonado 2024). Carbonado was incorporated as a town in 1948. The small town has a rich history strongly influenced by coal mining activity but in more recent years has been home to a smaller population of residents who value the natural beauty of its setting, its affordability, and small-town atmosphere (Carbonado 2024).

Described in the 2024 Carbonado *Comprehensive Plan*, residents living in Carbonado appreciate their town for its privacy and location, environment/nature, small-town feel and atmosphere, the school and neighbors.

Demographics

Carbonado's current population is 631 people. Carbonado also has a younger population than found in Pierce County with fewer working age and fewer 65+ people. There is no reported low-income population in Carbonado, and the median household income is higher than Pierce County and Wilkeson. Table A-9 provides a detailed summary of Carbonado demographics.

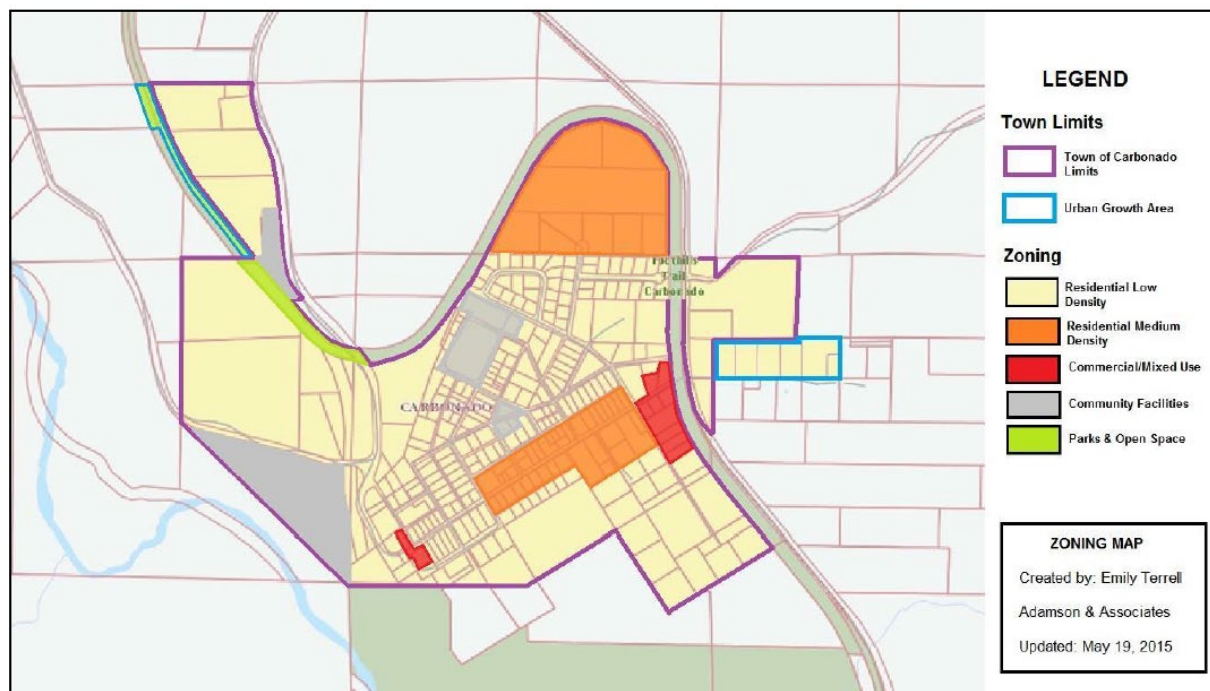
Like Wilkeson, U.S. Census Bureau data indicate nearly all residents work outside of town.

Carbonado population growth since the 1990s is not linear, but it is expected to increase similar to county population projections through 2044 (Table A-9).

Housing and Growth

The *Carbonado Comprehensive Plan 2024 Update* anticipates a 27% population growth forecast between 2023 and 2044. Carbonado has more than adequate land capacity given its existing zoning to accommodate the buildable lands housing and employment projections of 22 new housing units. The Carbonado Future Land Use Map identifies the residential zoned properties planned for their urban growth area (Figure A-5). The city is evaluating property adjacent to the city boundary for future capital public facilities (Carbonado 2024).

Figure A-5. Carbonado Future Land Use Map



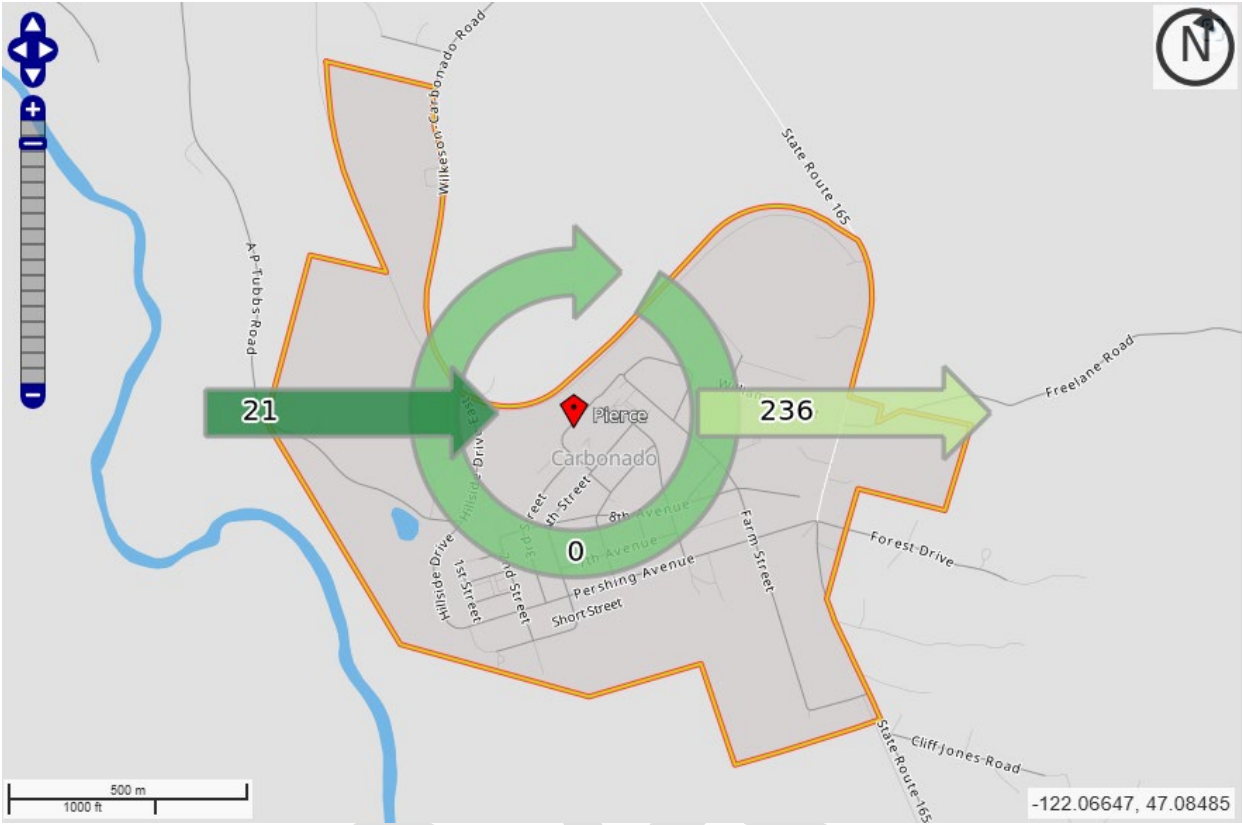
Economy

Average residential property value in Carbonado is \$423,258, the median for Pierce County towns/cities (Pierce County 2022). The property tax rate per \$1,000 assessed value in Carbonado is 7.49 (Pierce County 2025a). The value of total property in Carbonado is \$113,521,335, which is greater than total property value in Wilkeson and therefore more property tax revenue (Table A-8).

Public comments for home-based businesses relying on tourism are mixed. An Airbnb owner commented during a June 2025 public meeting that they are losing about 70% of reservations for the upcoming tourist season. On the other hand, residents commented that they have noticed that diminished visitor traffic is providing less pressure on the environment and improving nature and quality of living for the locals. The Carbonado Saloon is a year-round business close to the SR 165 closure. Its main customers are local. The business reported in a phone call that no planned changes to its summer business hours anticipated in summer 2025.

Approximately 236 Carbonado residents are formally employed. U.S. Census Bureau data from 2022 indicate that likely all of them work outside of town (Figure A-6). The *Comprehensive Plan* describes 54 jobs in town, with an employment target of 60 by 2044 (Carbonado 2024).

Figure A-6. Inflow/Outflow Analysis of Workers in Carbonado



Carbonado generated \$5.14 million in retail sales in 2024. With a sales tax rate of 0.081, the retail sales revenue was approximately \$165,000. Table A-8 summarizes sales tax revenue by town and city. The town of Carbonado’s 2025 operating budget is \$4.88 million (Carbonado 2025).

Comparison Communities

Comparison communities are useful to understand the magnitude and severity of socioeconomic changes to communities.

The populations of Carbonado and Wilkeson are generally growing although there are population fluctuations between decennial Census counts (Table A-9). Pierce County population grew steadily from 1990 to 2020 but is experiencing a slight decline. The Growth Management Act Population targets for Pierce County for the year 2044 show that population is not expected to reach the 2020 population high again in the near future ([Ordinance No. 2022-46s](#)).

Table A-9. Community Population and Population Projection

Total Population	Washington	Pierce County	Carbonado	Wilkeson	Orting	Buckley
Projected (2044)	9,502,530	1,186,146	798	686	9,590	8,235

Current (2023)	7,740,984	924,106	631	555	8,957	5,306
2020	7,617,364	1,196,798	734	499	9,041	5,098
2010	6,561,297	782,681	609	392	6,276	4,362
2000	5,894,121	700,820	784	404	3,776	4,064
1990	4,866,692	586,203	495	366	2,106	3,516
Source: U.S. Census Bureau 2019-2023 American Community Survey 5-Year Estimates. Table B01001 2020 and Projected Population: Pierce County 2022 Comprehensive Plan. 1990 Population: Washington Office of Management						

Buckley

Buckley was founded in 1889. It has a population of 5,306 with a higher median household income and smaller minority population like Carbonado.

The largest source of revenue for the Buckley General Fund comes from taxes. Sales tax is the number one revenue source at 24.6% of total General Fund revenue. Second is property tax at 17.5% followed closely by total utility taxes at 16.2% (City of Buckley 2024a).

Average residential property value in Buckley is \$417,549, less than the median or average in Pierce County (Pierce County 2022). The Buckley *Comprehensive Plan* (2024b) describes that an additional 1,260 housing units and 1,080 jobs need to be accommodated within the city by 2044. The *Buckley Comprehensive Plan* ensures population and employment projections are accommodated on buildable lands. The Buckley Future Land Use Map promotes commercial concentrations around the Highway 101 corridor and Main Street (Figure A-7).

Buckley has a larger employment base than Wilkeson or Orting. According to U.S. Census Bureau data, approximately 10% of jobs are held by residents (Figure A-8).

Figure A-7. Buckley Future Land Use Map

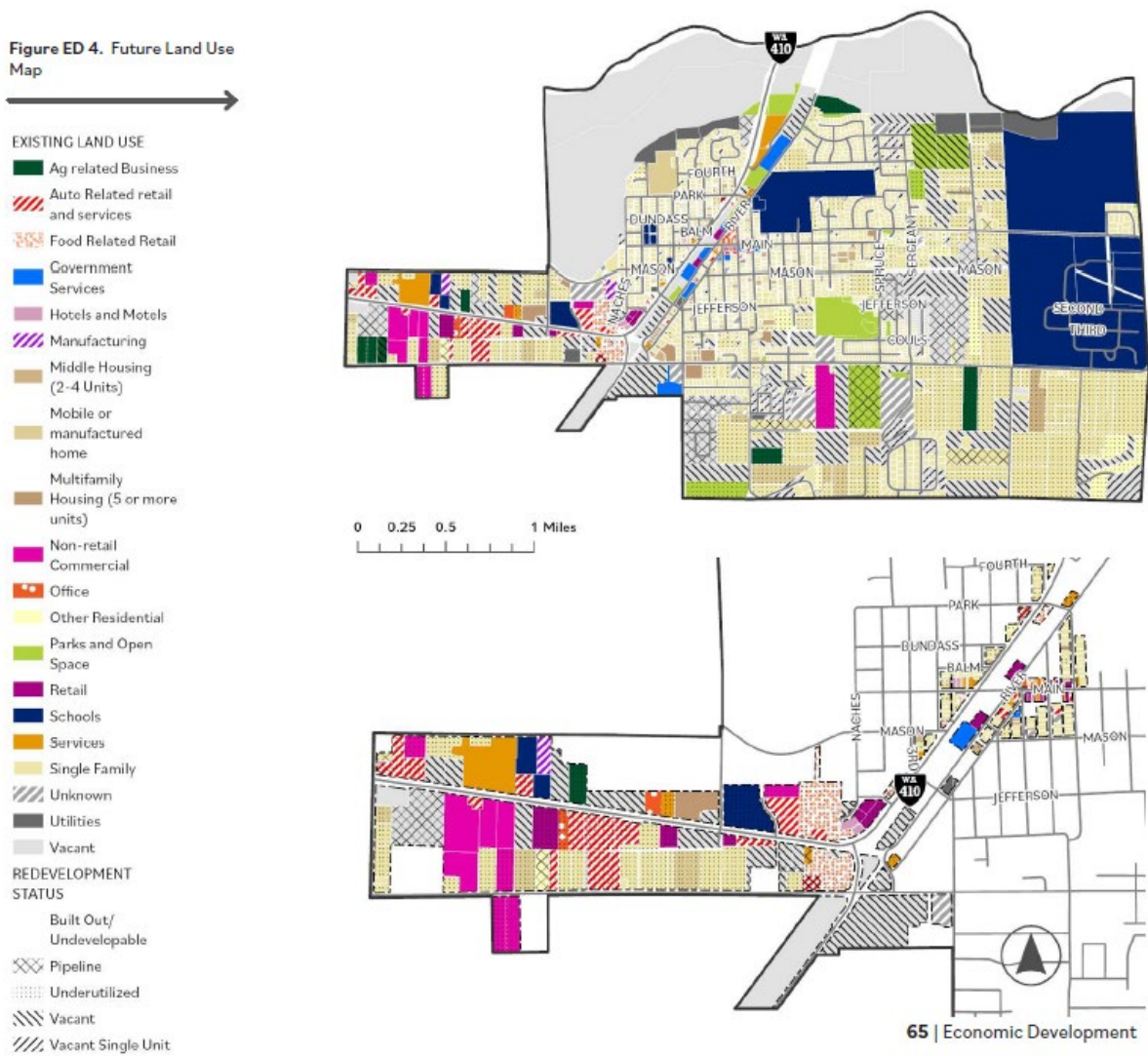
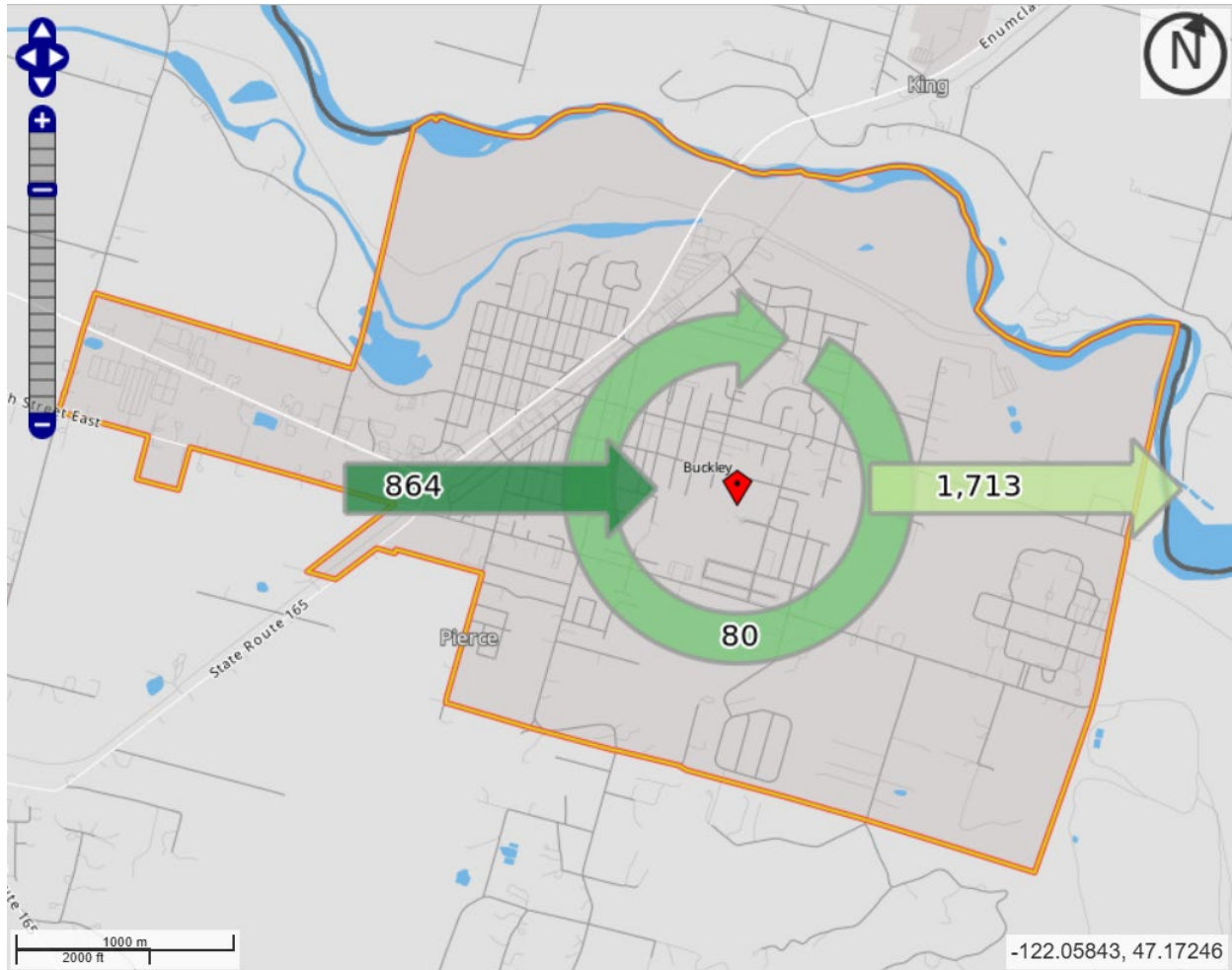


Figure A-8. Inflow/Outflow Analysis of Workers in Buckley (U.S. Census Bureau 2022)



SR 165 starts at the southern end of Buckley. There are plans for a roundabout at SR 165 and 112th Street to facilitate through-traffic. Most of SR 165 near Buckley is adjacent to unincorporated lands.

Orting

Orting is a vibrant and welcoming small city located near the geographic center of Pierce County with the logo “Small Town – Big View” (Orting 2024a). While close to Tacoma’s urban areas, residents appreciate the unique geography and size (Orting 2024). Orting was officially incorporated in 1889, the same year that Washington became a state.

SR 162 runs through Orting’s town center. SR 162 could serve as an alternative route to public lands due to the SR 165 closure at Fairfax Bridge.

Orting is targeted to grow to 9,590 people and 3,167 housing units by 2044 (Table A-3) (Orting 2024). The November 2024 draft of the *Orting Comprehensive Plan* describes there is sufficient land for planned population growth. The Orting Future Land Use Map indicates residential development is intended to surround the commercial areas around

SR 162 while lands along the Carbon River and Puyallup River are planned for open space or low-intensity residential development (Figure A-9). Orting is similar to Buckley in the amount of employment supported (U.S. Census Bureau 2022). Just more than 10% of local jobs are held by residents, whereas most residents work elsewhere (Figure A-10).

Figure A-9. Orting Future Land Use Map

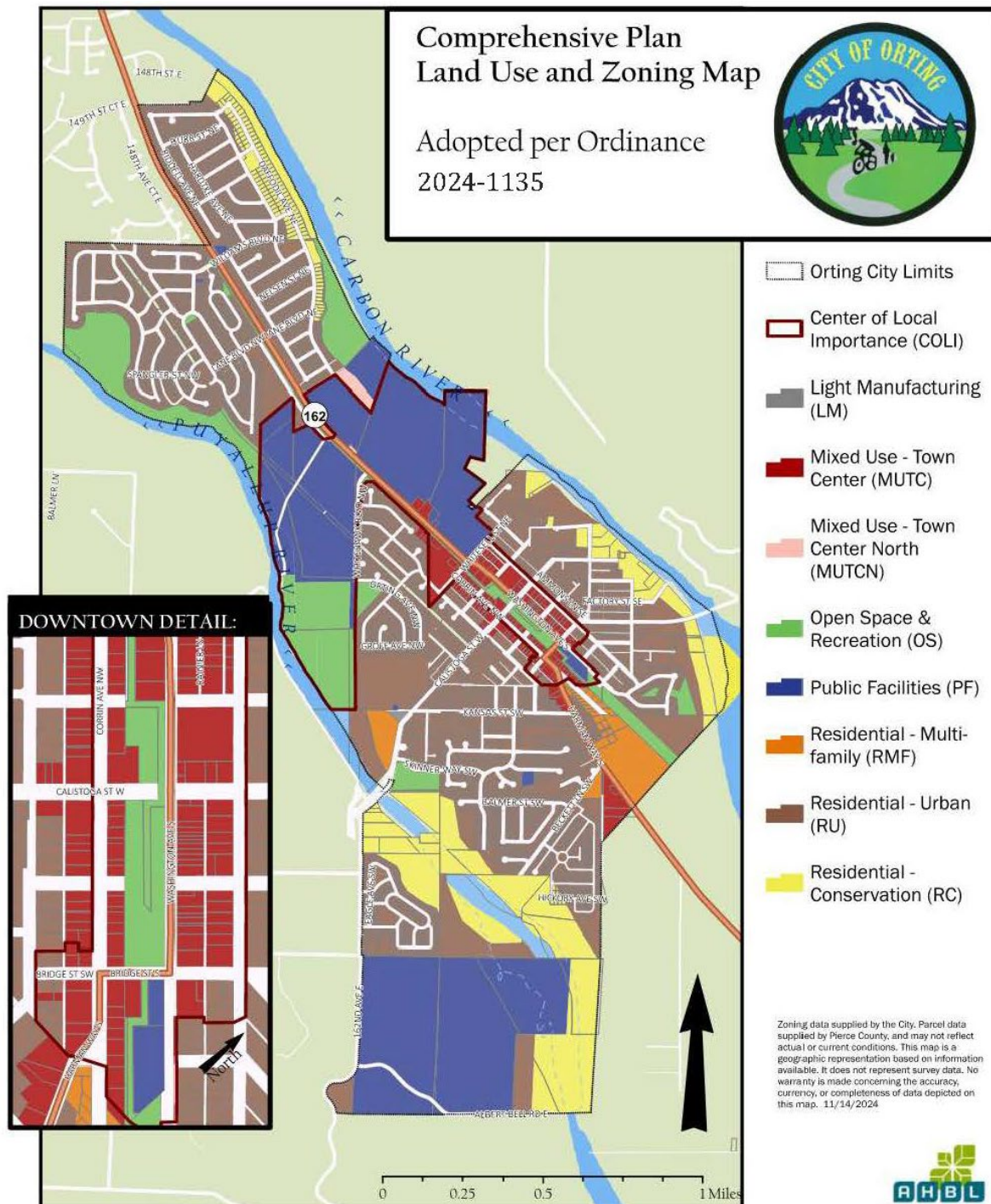
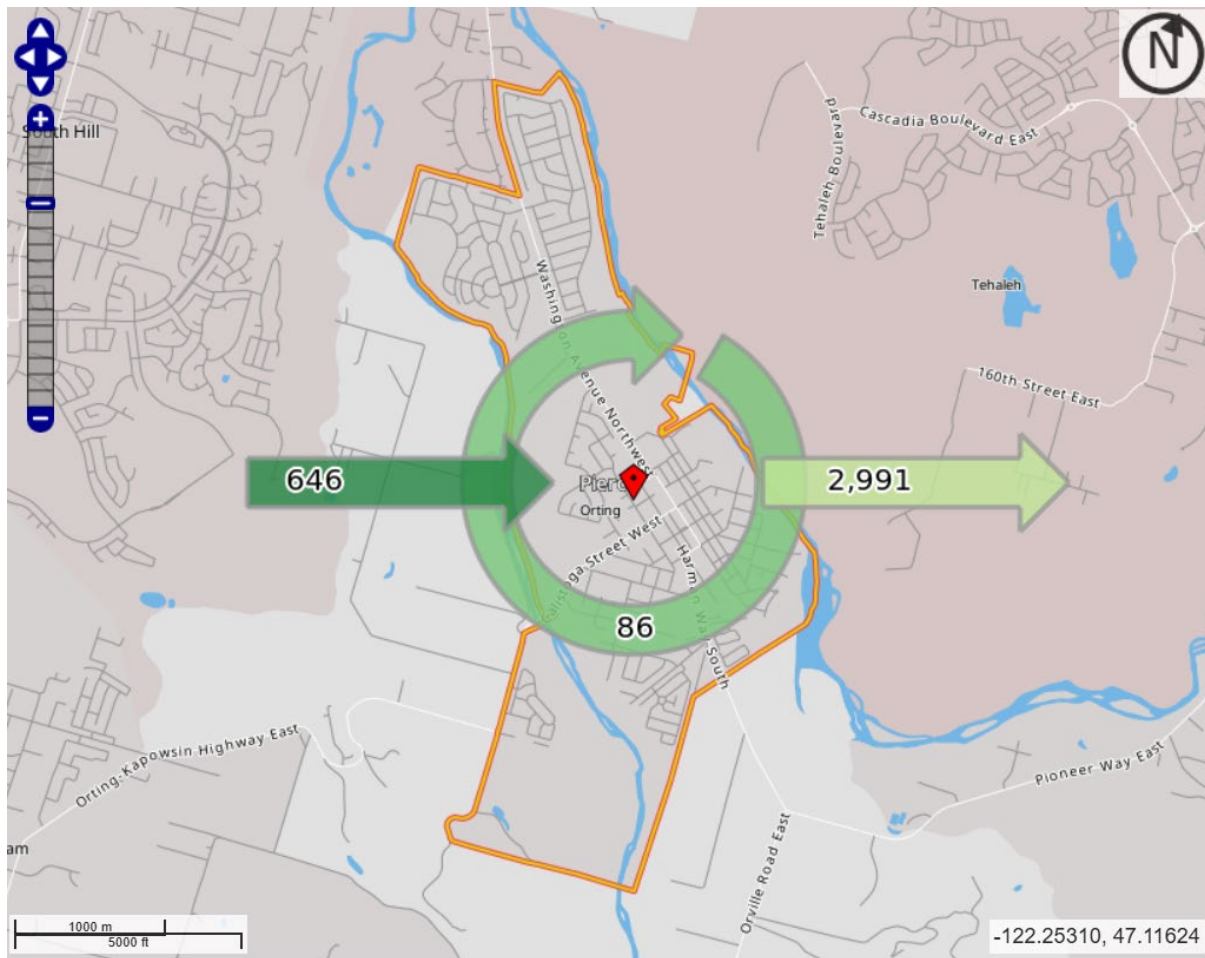


Figure A-10. Inflow/Outflow Analysis of Workers in Orting



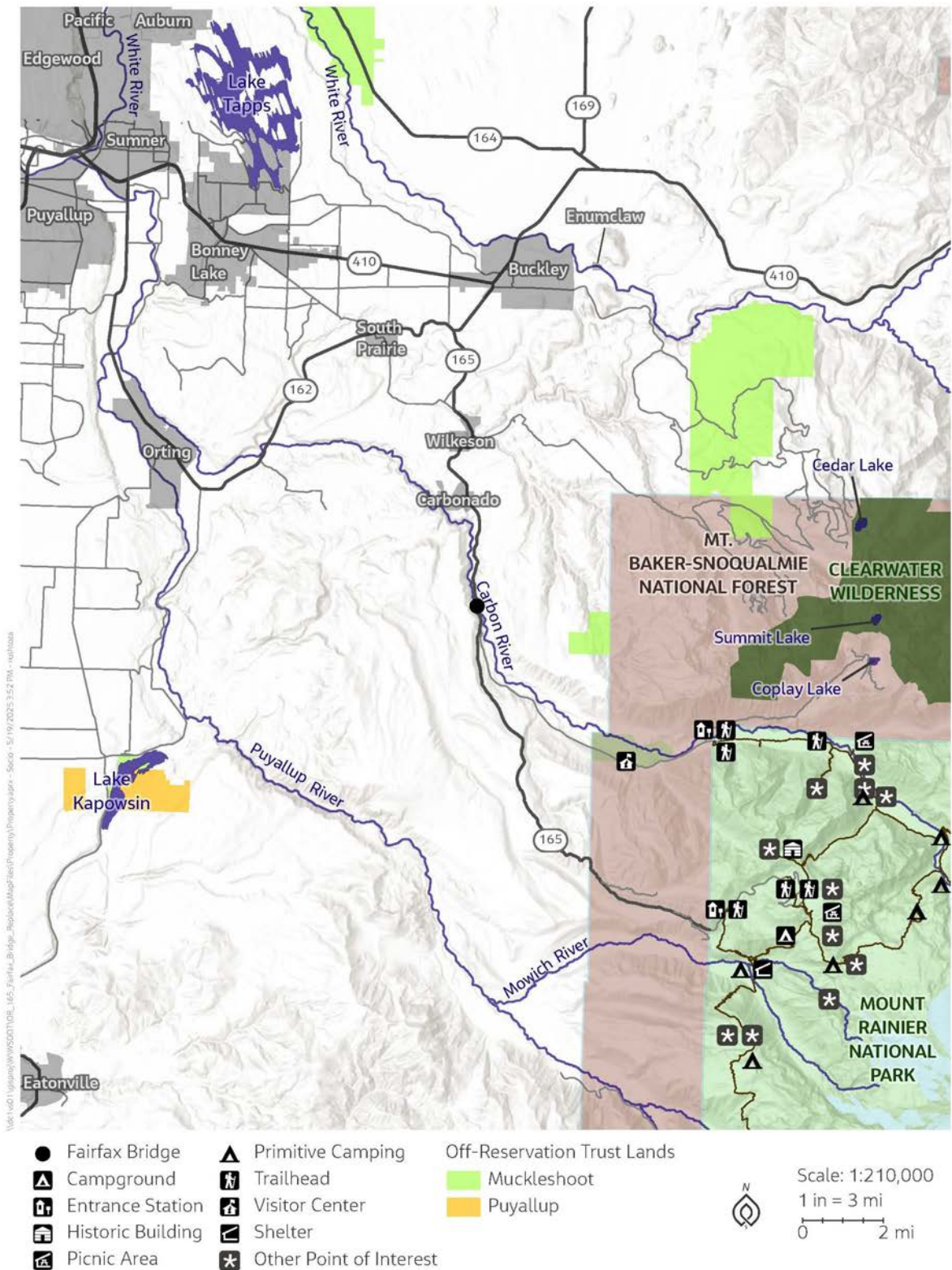
Average residential property value in Orting is \$452,127, which is higher than the average property in Pierce County (Pierce County 2022). The property tax rate per \$1,000 of assessed value in Orting is 8.26 (Table A-7). The value of total property in Orting is \$119 mil, which is less than the total property value in Buckley and a lower property tax rate than Buckley; therefore, Orting has less property tax revenue and a smaller city budget when compared to Buckley (Orting 2024a).

Tribal Communities

The Washington State Department of Transportation (WSDOT) initiated Tribal consultation with Puyallup Tribe of Indians, Nisqually Indian Tribe, Muckleshoot Indian Tribe, Squaxin Island Tribe, Confederated Tribes and Bands of the Yakama Nation in April 2025. Puyallup Tribe of Indians and Muckleshoot Indian Tribe off-reservation trust lands are near the study area, as shown on Figure A-11. There are no reservations within the study area.

Tribal communities use and rely on lands managed by National Park Service and U.S. Forest Service (USFS) in the study area.

Figure A-11. Off-Reservation Trust Lands



Data Sources: Pierce County, National Park Service, United States Forest Service, Washington State Department of Natural Resources, Washington State Department of Transportation.
Basemap Sources: Esri, CGIAR, USGS

Jacobs

Findings From Existing Plans and Decisions

Key issues from planning and environmental studies by local, county, and federal agencies are described as follows.

Foundational Laws and Policies

NPS Mount Rainier National Park Boundary Adjustment Act (2004) Public Law 108-312

Mount Rainier was established as a national park in 1899. Approximately 97% of the park was designated as a wilderness area in 1988. The park was expanded in 2004 by 800 acres to include the area known as the “Carbon River Boundary Adjustment”. The purpose was to develop “camping and other recreational facilities”; and “for a facility to serve visitors to public lands along the Carbon and Mowich Corridors” while “maintaining the area’s natural setting in a manner consistent with” the current management plan.

NPS Mount Rainier Foundation Document (2015)

This document outlines the park’s core mission, significance, fundamental resources and values, and planning needs. It serves as a strategic guide for park management and helps shape decisions about access, conservation, and visitor experience. The Carbon River area is identified as requiring its own management plans for Mowich Lake, the boundary expansion lands, and the corridor from the historic Carbon River entrance to Ipsut Creek Campground.

USFS Mount Baker-Snoqualmie National Forest Northwest Forest Plan (1994)

The Northwest Forest Plan is a comprehensive ecosystem management strategy for 19 National Forests, including Mount Baker-Snoqualmie, and 7 Bureau of Land Management Districts. The amendment is underway (USFS 2025a).

System Unit Resource Protection (54 USC §1007)

This U.S. law empowers NPS to protect system unit resources. It describes compensation required for restoration or lost use value. to the U.S. government for damages or loss of a system unit resource and provides for legal action to recover damages.

Existing Planning Studies

Project stakeholders have existing planning studies and policies that cover the project area.

NPS MORA General Management Plan (2002)

The National Park Service established Mount Rainier National Park (MORA or Park) in 1899. The wilderness areas (most of the Park) were designated in 1988. Most of the structures within the Park were listed on the National Register of Historic Places in 1997.

Mowich Lake is identified as a “primitive area” meaning it has no vehicle access, no potable water, and limited amenities. Facilities accessed via Carbon River Entrance are also designated primitive.

The MORA General Management Plan (GMP) was adopted after the Record of Decision for the Final Environmental Impact Statement (EIS) (USFS 1990). The GMP recognizes the trade-off between preserving wilderness character and providing universal access. The plan prioritizes resource protection and visitor safety over maintaining vehicle access, which limits ADA access.

NPS Carbon River Area Access Management (2010)

The 2002 MORA GMP Environmental Impact Statement stated that the Park would no longer maintain the Carbon River Road after the next major washout. This occurred shortly thereafter in 2006. The 2010 *Carbon River Area Access Management Environmental Assessment* describes how this decision would be implemented. Private vehicle access to the end of Carbon River Road was permanently closed based on the long history of flood damage, rising riverbed elevation, an increase in the frequency and intensity of flood events, and the extent of recent road damage in 1990, 1996 and 2006.

NPS emphasized a shift toward non-motorized recreation in the Carbon River corridor. Resources including Ipsut Creek Campground, Chenuis Falls and Carbon Glacier would require longer hikes or bike rides to access. Access to Mowich Lake remains unchanged, with seasonal access.

USFS Carbon River Landscape Analysis (2025b)

The Carbon River Landscape Analysis (CARLA) Environmental Assessment (EA) was conducted for the Mount Baker-Snoqualmie National Forest to reconcile the 1994 Northwest Forest Plan with other laws, regulations, and trust obligations (USFS 2025b).

The USFS is required to retain access to and restore the quality of resources used by Tribal communities on “open and unclaimed” lands and “usual and accustomed” areas. Geographic information system analysis was conducted to compare how forestry practices of thinning, burning, planting, scarification, and/or pruning treatments and maintenance would enhance treaty resources.

To implement the proposed activities, the USFS roads, unclassified or abandoned roads, and new temporary roads would be used to access the timber stands. About 13 miles of former USFS roads that are classified as motorized trails in the Evans Creek off-highway vehicle (OHV) trail system could be reconstructed for timber haul, but still be used by OHV users. SR 165 branches off to USFS Road 78 approximately 1 mile south of the Fairfax Bridge.

The EA (USFS 2025b) describes that ongoing maintenance of the USFS portion of SR 165 contributes to cumulative impacts to hydrology, aquatic habitats, and spawning areas.

Many proposed elements of the CARLA EA (USFS 2025b) would be halted or modified by a closure on SR 165. Figure A-12 from the CARLA EA shows the general property ownership in the study area, commercial timber stands, and timber haul routes that connect to SR 165.

In July 2025, USFS issued the CARLA EA, accompanied by a draft Decision Notice and Finding of No Significant Impact (DN/FONSI). The draft decision recommends moving forward with the preferred alternative identified in the EA, while deferring the broader travel management decision—except for specific routes within the Evans Creek Off-Highway Vehicle (OHV) area. This deferral likely includes Road 7810, which falls within the project study area. According to the USFS notification of final EA (USFS 2025b), “Because Travel Management regulations and policy are currently under review at the Agency and Departmental levels, the Regional Forester has directed that Travel Management decisions that would decrease public access be deferred at this time (unless deemed necessary to safely implement mission critical work or fulfill requirements in the applicable Forest Plan).”

Pierce County Comprehensive Plan (2025)

City and town community comprehensive plans are discussed in the community profiles. The *Pierce County Comprehensive Plan* (2025c) is the adopted policy document guiding growth and development in unincorporated Pierce County in compliance with the 1990 Growth Management Act (GMA). It was also written to comply with Multicounty Planning Policies; regional objectives that cross jurisdictional boundaries. Details about how services like schools and utilities will meet projected population growth are in associated Capital Facilities Plans.

As described in the community profiles, the cities and towns within the study area are anticipated to grow at approximately the same rate as Pierce County. The Comprehensive Plan’s Land Use Element supports the foundational goal of the GMA by identifying and designating urban, rural, and resource areas and directing higher-intensity growth into the urban areas and lower intensity in rural and resource areas. The community comprehensive plans found there is sufficient land to support population growth.

SR 165 is one of several state-owned highways wholly within Pierce County that contribute to the county transportation network. SR 165 is the only state highway leading to east Pierce County, providing access to local communities and recreation areas. SR 165 is not explicitly named in the Washington Transportation Plan (WSDOT 2018) it falls into the category of “rural highways” that require funding for maintenance and modernization.

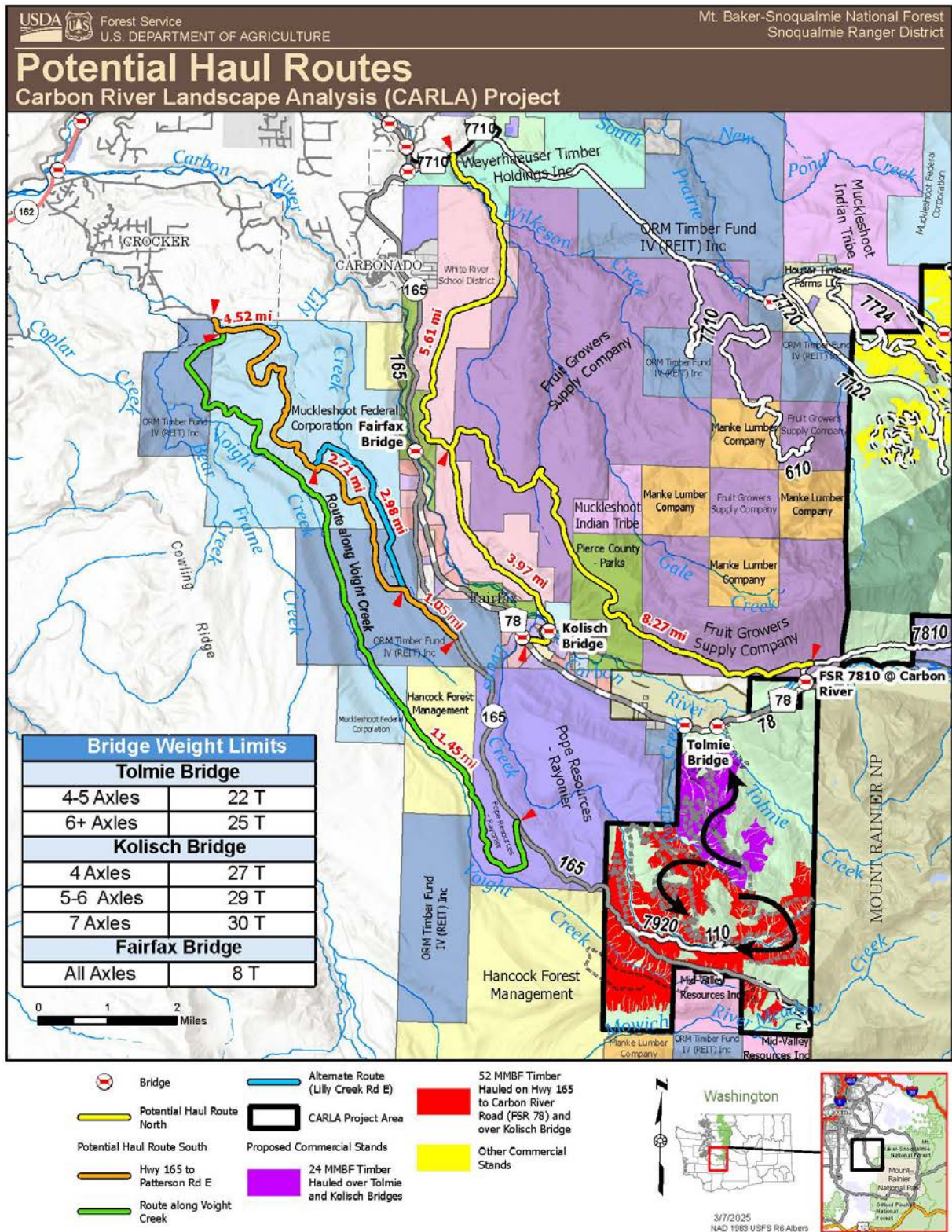
The road meets the anticipated level of service because it was not mentioned specifically as being deficient.

State Game Management Plan

The Washington Department of Fish and Wildlife *Game Management Plan* (2014; adopted in 2022) focuses on the scientific management of game populations, harvest management, and other significant factors affecting game populations, including wildlife conflict management; recruitment and retention of hunters; hunter access to private lands; disease in big game; reintroduction of pronghorn; and wolf management. The overall goals are to protect, sustain, and manage hunted wildlife, provide stable, regulated recreational hunting opportunity to all citizens, protect and enhance wildlife habitat, and minimize adverse impacts to residents, other wildlife, and the environment.

Although there may be proposed changes to population management units, harvest guidelines and population estimates, there are no proposed changes to the hunting boundaries, seasons, or hunting access to game management units 653 and 654, which overlap the study area.

Figure A-12. Potential Haul Routes from USFS 2025 CARLA EA



HEAL Act Considerations

An Environmental Justice Assessment (EJA) is required for “significant agency actions” per RCW 70A.02.010(12) if a WSDOT project is valued at least \$15 million. WSDOT recently established step-by-step EJA guidance to implement the Health Environment for All (HEAL) Act in accordance with RCW 70A.02.060. The purpose of an EJA is to inform and support the WSDOT’S consideration of overburdened communities (OBC²) and vulnerable populations (VP³) when making decisions and to assist the state with the equitable distribution of environmental benefits, the reduction of environmental harms, and the identification and reduction of environmental and health disparities.

Using published data, the communities of Wilkeson and Carbonado would not be considered overburdened communities because the size of the vulnerable populations are significantly smaller compared to Pierce County. The Washington Tracking Network Environmental Health Disparities Ranking indicates lower than average environmental exposure or effects for the Census tract containing the study area⁴ (Figure A-13) (Washington Department of Health 2025). Public engagement with the community may uncover previously unidentified populations impacted by environmental harms or workers experiencing environmental harms that would be disproportionately impacted (and therefore less reliant) to a permanent bridge closure. The analysis and identification of

² RCW 70A.02.010(11) "Overburdened community" means a geographic area where vulnerable populations face combined, multiple environmental harms and health impacts, and includes, but is not limited to, highly impacted communities as defined in RCW [19.405.020\(22\)](#). RCW19.405.020(22) "Highly impacted community" means a community designated by the department of health based on cumulative impact analyses in RCW [19.405.140](#) or a community located in census tracts that are fully or partially on "Indian country" as defined in 18 U.S.C. Sec. 1151. The Washington Department of Health decided to use the Environmental Health Disparities map to designate highly impacted communities.

³ RCW 70A.02.010(14)(a) "Vulnerable populations" means population groups that are more likely to be at higher risk for poor health outcomes in response to environmental harms, due to: (i) Adverse socioeconomic factors, such as unemployment, high housing and transportation costs relative to income, limited access to nutritious food and adequate health care, linguistic isolation, and other factors that negatively affect health outcomes and increase vulnerability to the effects of environmental harms; and (ii) sensitivity factors, such as low birth weight and higher rates of hospitalization.

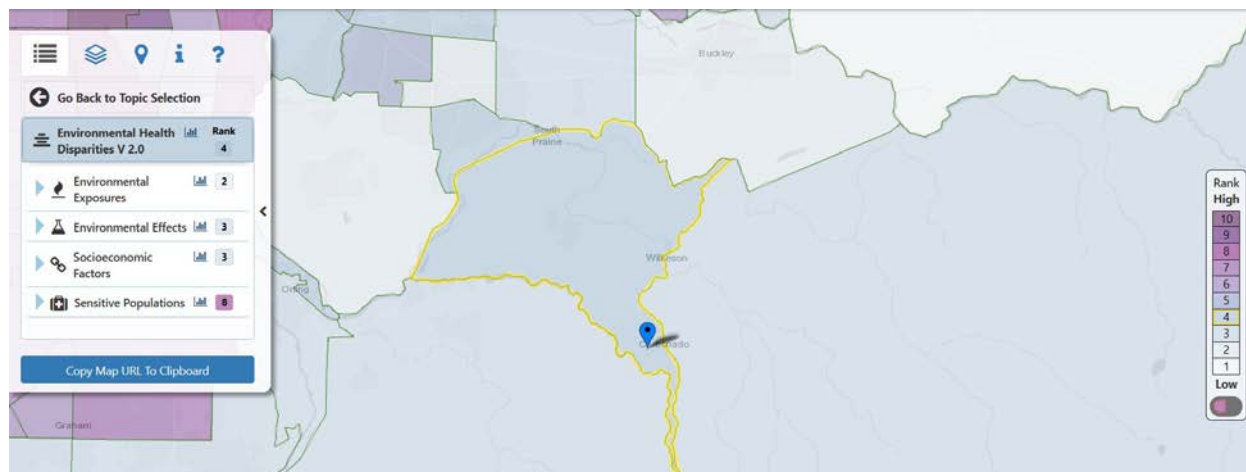
(b) "Vulnerable populations" includes, but is not limited to:

- (i) Racial or ethnic minorities;
- (ii) Low-income populations;
- (iii) Populations disproportionately impacted by environmental harms; and
- (iv) Populations of workers experiencing environmental harms.

⁴ The Census tract containing the cities of Wilkeson and Carbonado has an overall environmental health disparities ranking of 4 out of 10. This means 60% of Census tracts in Washington have higher risks of environmental exposure, environmental effects, socioeconomic factors, and sensitive populations. In other words, 60% of Census tracts would be less resilient to the addition of environmental and health harms to their communities than the study area communities. A ranking of 8 or higher would be a reason for closer investigation.

overburdened communities and vulnerable populations in an EJA is not complete with published data alone.

Figure A-13. Environmental Health Disparities Ranking



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Appendix B. Special Considerations for Alternative 1

DRAFT

No-build Alternative Special Considerations

July 2025



Olympic Region Multimodal Planning
7407 31st Avenue NE
Lacey, WA 98516

Prepared by:

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Introduction

This technical memorandum details socioeconomic conditions in the study area if the SR 165 Carbon River Fairfax Bridge (Fairfax Bridge) remains closed on State Route (SR) 165 Mile 11.5. Figure B-1 shows the study area, which consists of the alternatives under consideration for the Fairfax Bridge closure (Figure B-2) as well as the cities of Wilkeson and Carbonado, which will be directly impacted by the closure. Fairfax Bridge is currently closed because the structure became unsafe for any use. For residents and commercial interests on SR 165 south of Carbonado, the eastern alignment is available for restricted (resident-only) access for areas north of the Fairfax Bridge.

This memo builds on the baseline conditions described in Technical Memo 1 (Jacobs 2025) and suggests special considerations associated with continued permanent bridge closure. This memo discusses:

- Socioeconomic impacts
- Stakeholder access
- Historic resources and Section 4(f) of the U.S. Department of Transportation (USDOT) Act
- Potential benefits

Although individual property ownership public details are provided in Attachment B-1 Parcel Data, this memo does not provide quantitative or qualitative data describing the potential social or economic impacts of potential access loss on individual properties.

Study Area

The study area includes the communities of Wilkeson and Carbonado on SR 165. The larger cities of Buckley and Orting are used as comparisons as well as Pierce County (Figure B-1). Figure B-2 shows the alternatives under consideration as of May 2025. A no-build alternative as required for environmental analysis and permitting (Alternative 1) involves the permanent closure of the Fairfax Bridge.

Transportation

In 2023, the average annual daily traffic over Fairfax Bridge was approximately 270 vehicles (WSDOT 2025). Peak traffic to Mount Rainier National Park (MORA or the Park) via SR 165 is in July. The 10-year monthly average count is 3,185 vehicles or roughly 107 daily vehicles. During the lowest visitor months (November through February), the 10-year average vehicle count is 650 to 810 or roughly 22 to 27 daily vehicles (NPS 2025a). Therefore, most of the traffic crossing Fairfax Bridge comes from residents and people visiting U.S. Forest Service (USFS) lands.

Community Profiles Summary

SR 165 serves as primary access from more heavily developed areas of Pierce County and Puget Sound region to the two remaining historic mining towns of Wilkeson (population 555) and Carbonado (population 631), USFS lands, and the northwest quadrant of MORA.

Larger communities accessible from SR 165 and SR 162 like Buckley and Orting have moderate employment opportunities allowing approximately 12% of the working population to live and work in the same community (U.S. Census Bureau 2022). Neither Wilkeson nor Carbonado are employment hubs. Their population has a smaller low-income population, smaller minority population, and higher median household income when compared to Pierce County. Carbonado and Wilkeson have the same percentage of residents younger than 18 (24%) but Wilkeson has a larger population older than 65 (15%). The percentage of working age residents is slightly larger in Carbonado (57%), which is just less than Pierce County (60%). A handful of Wilkeson and Carbonado businesses provide summer-only tourist services, while the remaining businesses operate year-round.

Pierce County is planning for moderate population growth over the next 20 years (Pierce County 2025). Wilkeson and Carbonado are also planning on modest development growth to provide the public services required by these projections (Town of Wilkeson 2024, Town of Carbonado 2024).

In public comments about Alternative 1, Carbonado and Wilkeson residents describe their appreciation for the private, small-town atmosphere but worry about the social and economic impacts of being cut off from through-traffic.

Figure B-1. Study Area

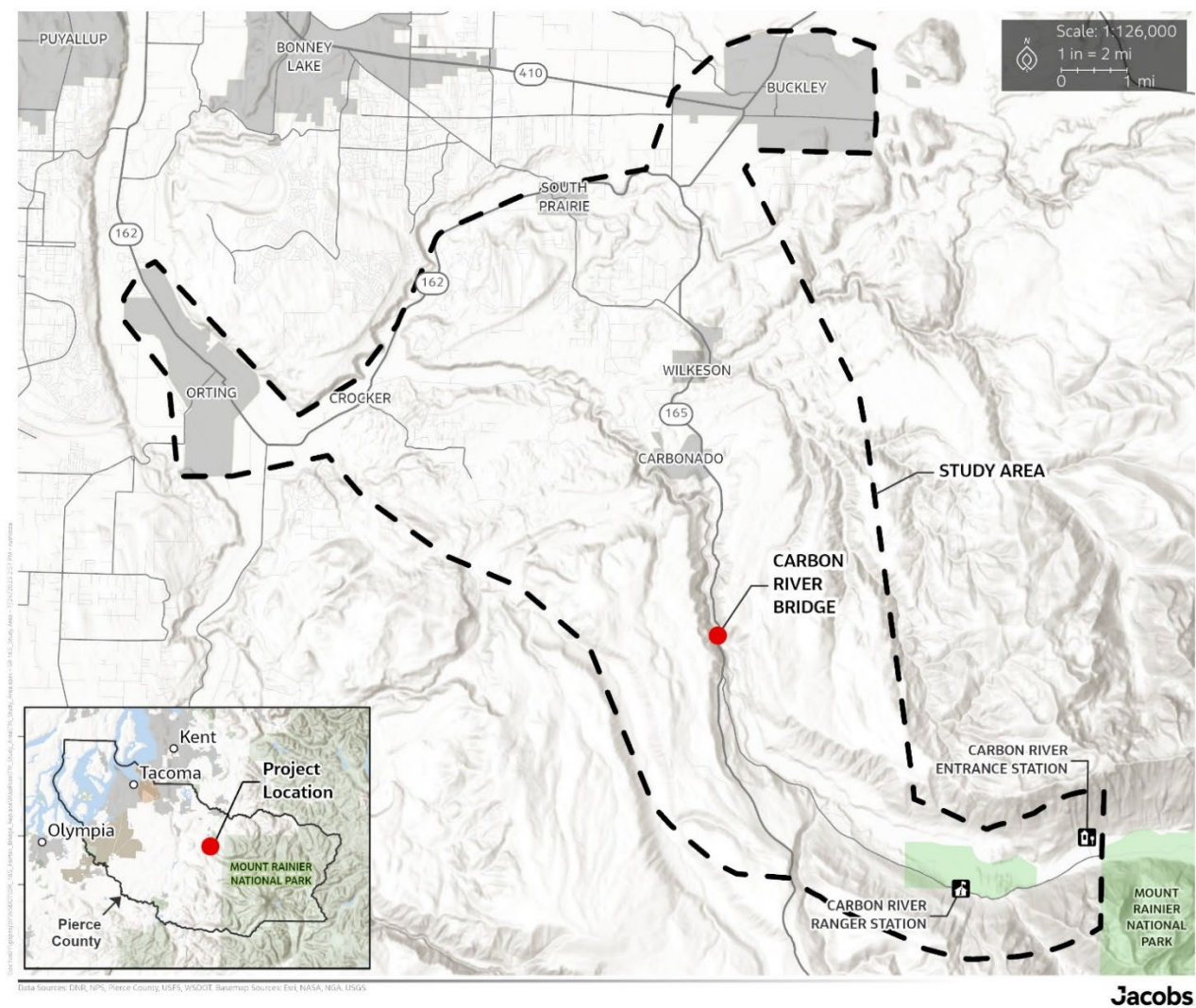
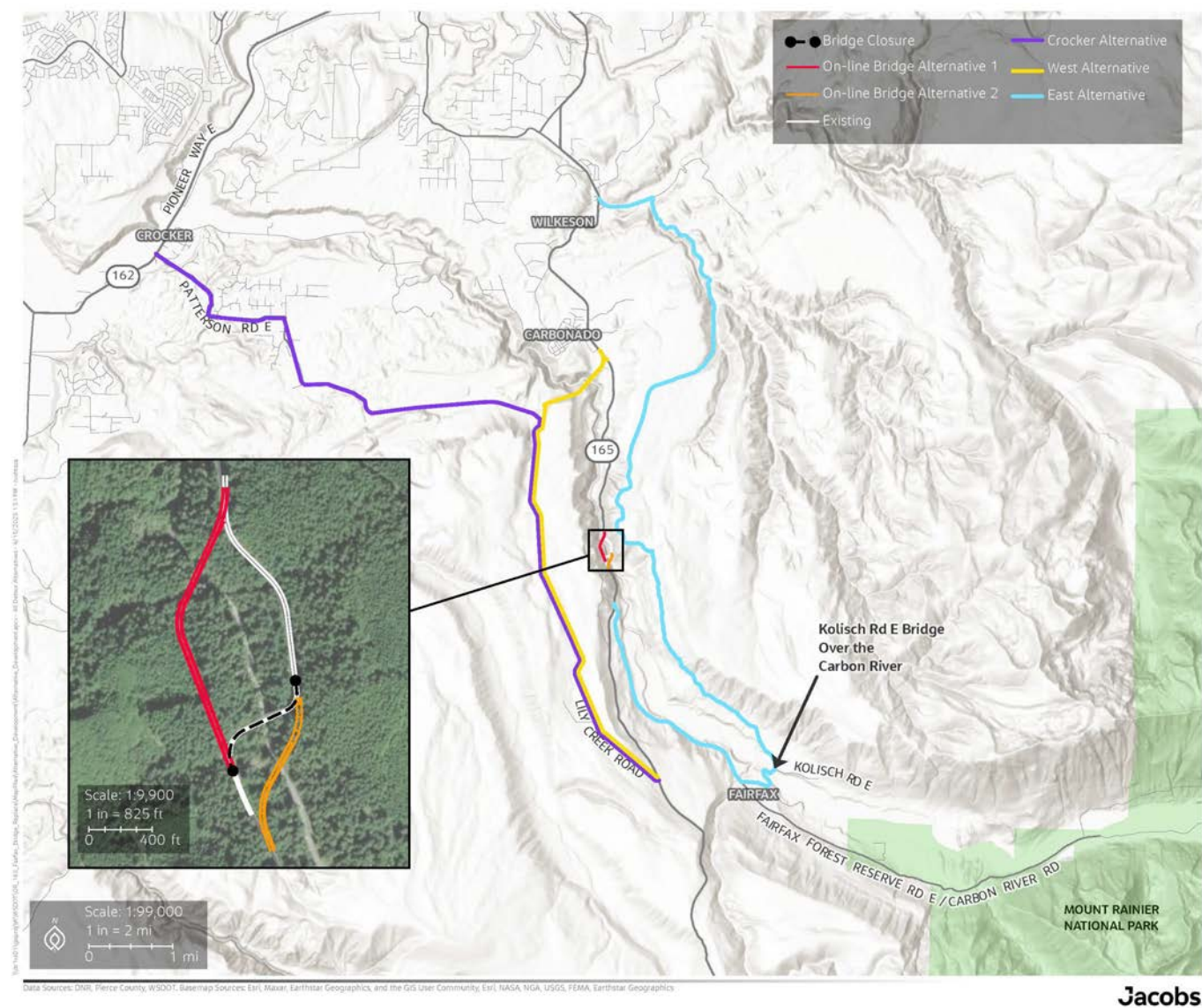


Figure B-2. Alternatives



Socioeconomic Impacts

The socioeconomic impacts resulting from lost access to private or public properties and public lands is described from the perspective of each of the following stakeholders:

- Communities
- Private property owners
- Visitors
- National Park Service
- U.S. Forest Service
- Tribes
- Pierce County

To understand the loss or change of access from SR 165, general property ownership in the study area is shown on hauling route figure from the USFS Carbon River Landscape Analysis (CARLA) Project (Figure B-3) and the figure highlighting non-timber, privately owned parcels south of the bridge closure (Figure B-4).

Communities

Residents of Wilkeson and Carbonado would not be cut-off from the rest of Pierce County and Puget Sound region due to the SR 165 closure because they would have access to the restricted-access eastern alignment. However, the reduction in through-traffic could produce an adverse sense of isolation.

Economic Concerns

Some immediate public response to bridge and road closure were economic concerns over loss of growth opportunities, job loss, loss of economic activity, and loss of tax revenue.

Economic data about taxable income indicates there are a small number of jobs in Wilkeson and Carbonado held by residents. Wilkeson and Carbonado residents generally drive elsewhere to work (U.S. Census Bureau 2022).

With road closure, population and economic growth projections in the County and community plans may not be realized. Loss of economic activity includes lost revenue for home-based businesses and lost opportunistic spending by visitors. Ultimately, these losses could lead to property sales and population loss. Developable lands would not turn into housing so the city would not experience an increase to property tax revenue over time.

Figure B-3. Potential Haul Routes from USFS 2025 CARLA Environmental Assessment

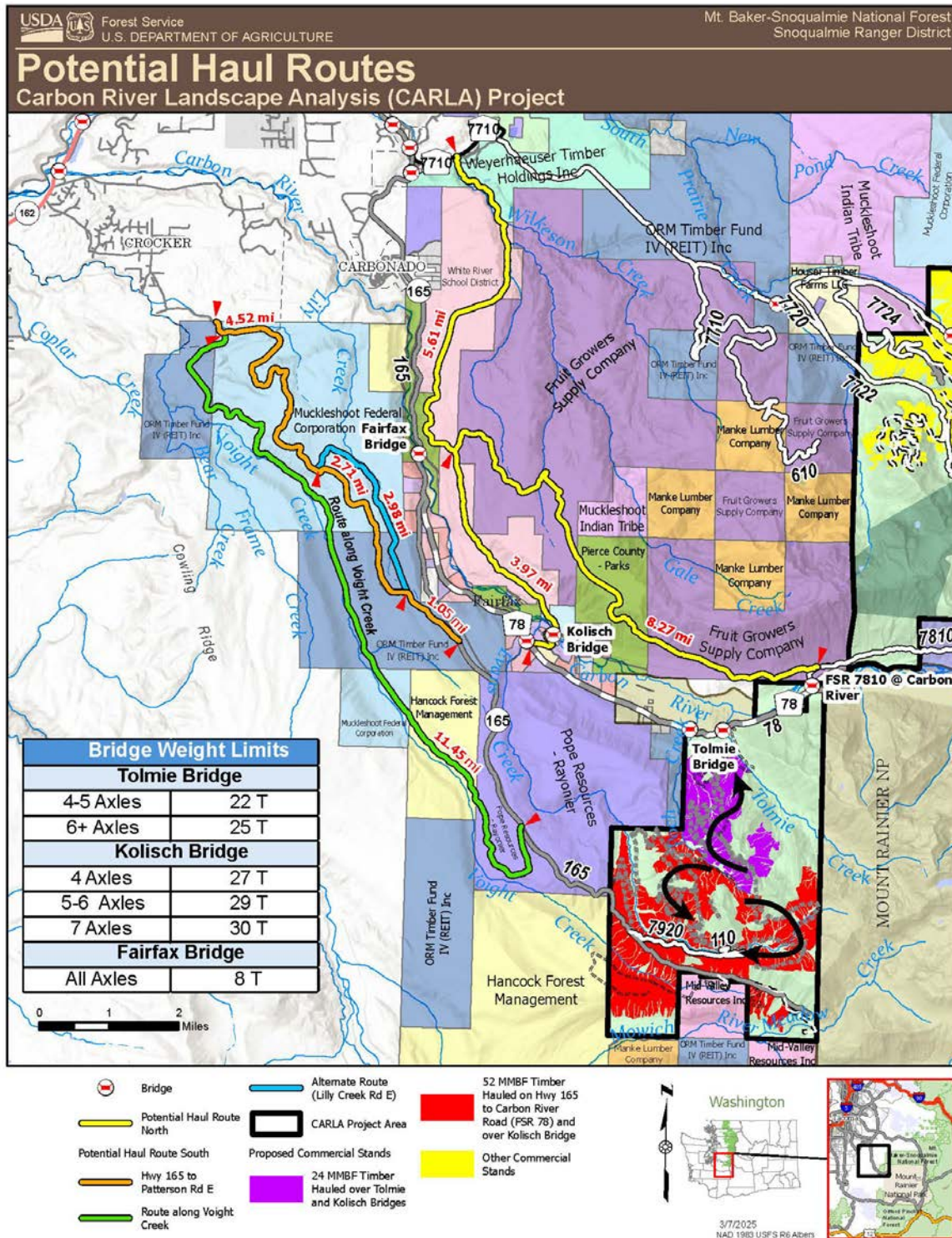
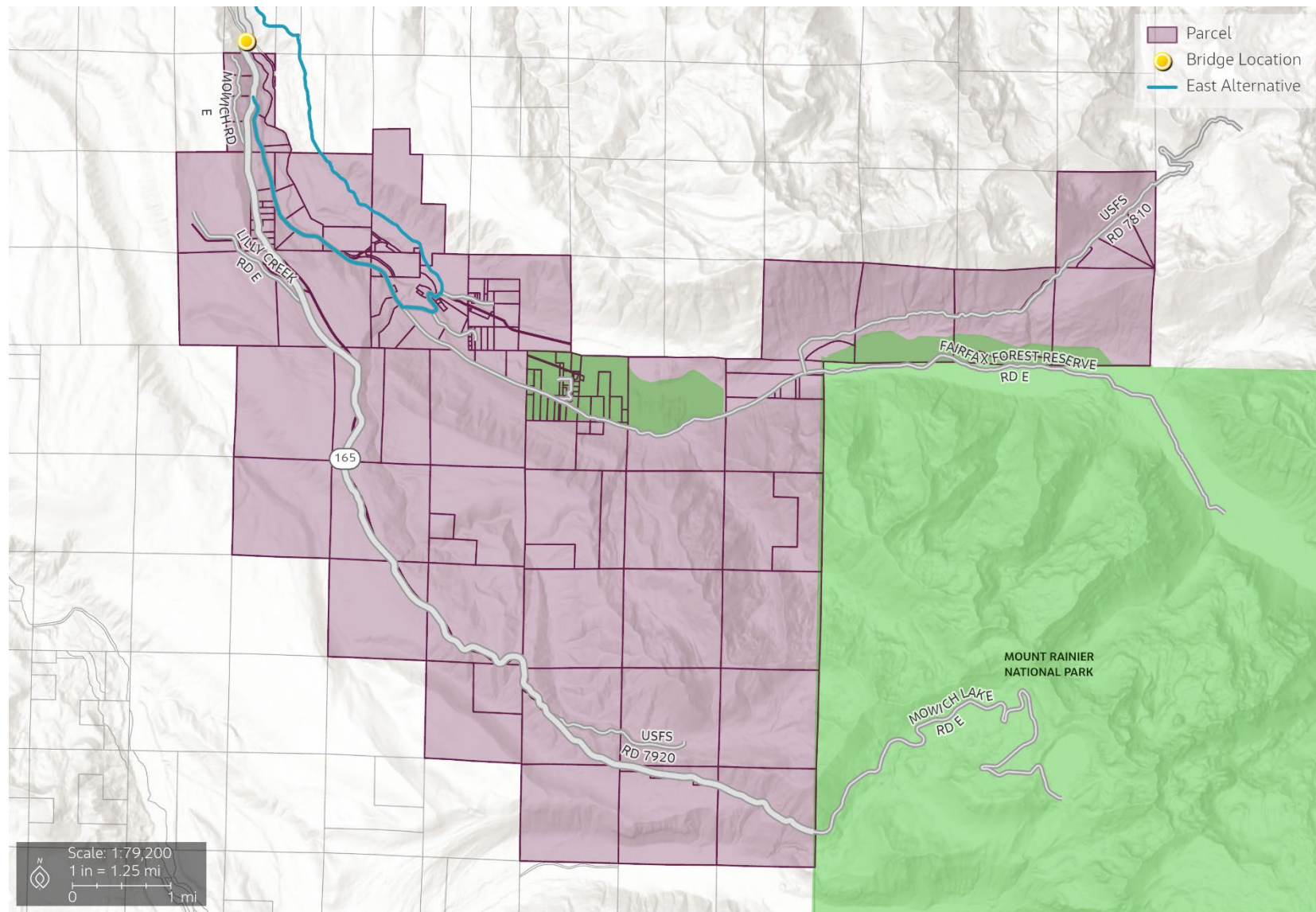


Figure B-4. Properties South of Fairfax Bridge Closure



Data Sources: DNR, Pierce County, WSDOT. Basemap Sources: Esri, NASA, NGA, USGS, FEMA

For local communities' operating budget, property tax revenue, the largest tax revenue, is a significant contributor. Retail sales tax revenue is less significant. Modeling was not conducted to attribute a dollar amount to the estimated number of visitor stops in Wilkeson and Carbonado on the way to public lands.

There are 178 parcels between the Fairfax Bridge closure and Mt Rainier National Park (Figure B-4). Based on Pierce County assessor's data (as of July 2025), the taxable value of these parcels is:

Land Value = \$84,498,500

Improvement Value = \$3,904,300

Tax Value = \$12,709,630

The WSDOT Real Estate Services team identified approximately 77 privately owned parcels that may require compensation under Alternative 1 based on a combination of land use data, ownership type, and visual inspection of aerial imagery. Parcels were included if they were classified by the Pierce County Assessor-Treasurer office as residential uses or were privately owned by noncommercial entities. Parcels owned by timberland entities were excluded because they are accessible by private logging road networks.

The taxable value of this subset of parcels is:

Land value = \$23,357,400

Improvement value = \$3,163,200

Tax value = \$11,120,770

The estimated compensation for potential loss of access to the 77 private properties is projected at \$46,585,000 in 2025. This estimate includes the estimated market value of impacts to real property and includes demolition, relocation, administrative, and additional real estate costs.

No Loss of Timber Access

Timber lands would not lose value under Alternative 1 because the existing logging road network provides access to timber lands south of the bridge.

No Loss of Hunting Access

Hunting is both an economic and social activity important to the region. There would be no change to hunting access to Game Management Units 653 and 654, which overlap the study area.

Private Property Owners

Figure B-4 and Attachment B-1 show private properties affected by SR 165 closure. Private, commercial, and nonprofit landowners would lose motorized access to their

property from SR 165. This memo considers properties south of Fairfax Bridge on SR 165 and does not distinguish between properties that may currently be landlocked. This memo acknowledges that landowners are not losing property access entirely, but they may claim harm to their property value and use.

Although access has become more difficult, property owners on the south side of closed bridge would continue access to jobs, businesses and services via the emergency road. Refer to Attachment B-1 for more details.

Visitors

USFS and National Park Service (NPS) lands are destinations for local, regional, national, and international visitors. Under the baseline conditions and the Alternative 1, no visitors can travel by vehicle south of Carbonado because of the road and bridge closure. Public comments describe the travel south of SR 165 as a “wonderful experience” and visitors would lose the opportunity to visit the Mt. Baker Ranger District of the MORA through the Carbon River/Mowich entrance or to Mount Baker-Snoqualmie National Forest via SR 165, U.S. Forest Service (USFS) Road 78, and Mowich Lake Road.

It is anticipated that these visitors would substitute future trips to NPS and USFS lands to other public lands. One public commenter suggested the Nisqually entrance to MORA would receive some of this diverted interest, crowding the busiest entrance.

National Park Service

USFS and NPS lands are destinations locally, regionally, and nationally. MORA receives 150,000 to 200,000 visitors per year via SR 165 (NPS 2025a). MORA is open all year, 24 hours a day, but peak recreation season is summer. The Carbon River Ranger Station is generally open year-round. NPS employees do not live onsite. Visitation is at its peak in July and August. Vehicle access to MORA in the winter is only available from the Nisqually entrance, in the southwestern corner of the Park. The Carbon River entrance is open but the road within the Park boundary is limited to foot and bicycle traffic. The road is not plowed in the winter. The MORA *General Management Plan* (NPS 2002) describes the history of floods and damage to the Carbon River Road that requires intensive maintenance to keep the road open.

Outside the MORA boundary, NPS owns an additional parcel with the Carbon River Ranger Station, on the Carbon River Road 5.5 miles east of Mowich Lake (SR 165) junction. The station is only accessible via SR 165 and the Carbon River Road and is not physically connected to MORA.

The eastern branch of SR 165, south of Carbonado, leads to the Carbon River Entrance of MORA. The western branch of SR 165 leads to Mowich Lake. There are no vehicle

connections between the Carbon River entrance, Mowich Lake, or any other internal Park roadways, to get to the southern or northeastern areas of the Park (NPS 2002, 2010).

Loss of Vehicle Access

Due to current SR 165 closure, there is no vehicle access to Carbon River entrance or Mowich Lake. WSDOT has no mandate or agreement with NPS to provide access to the Carbon River entrance via SR 165 (NPS 2015).

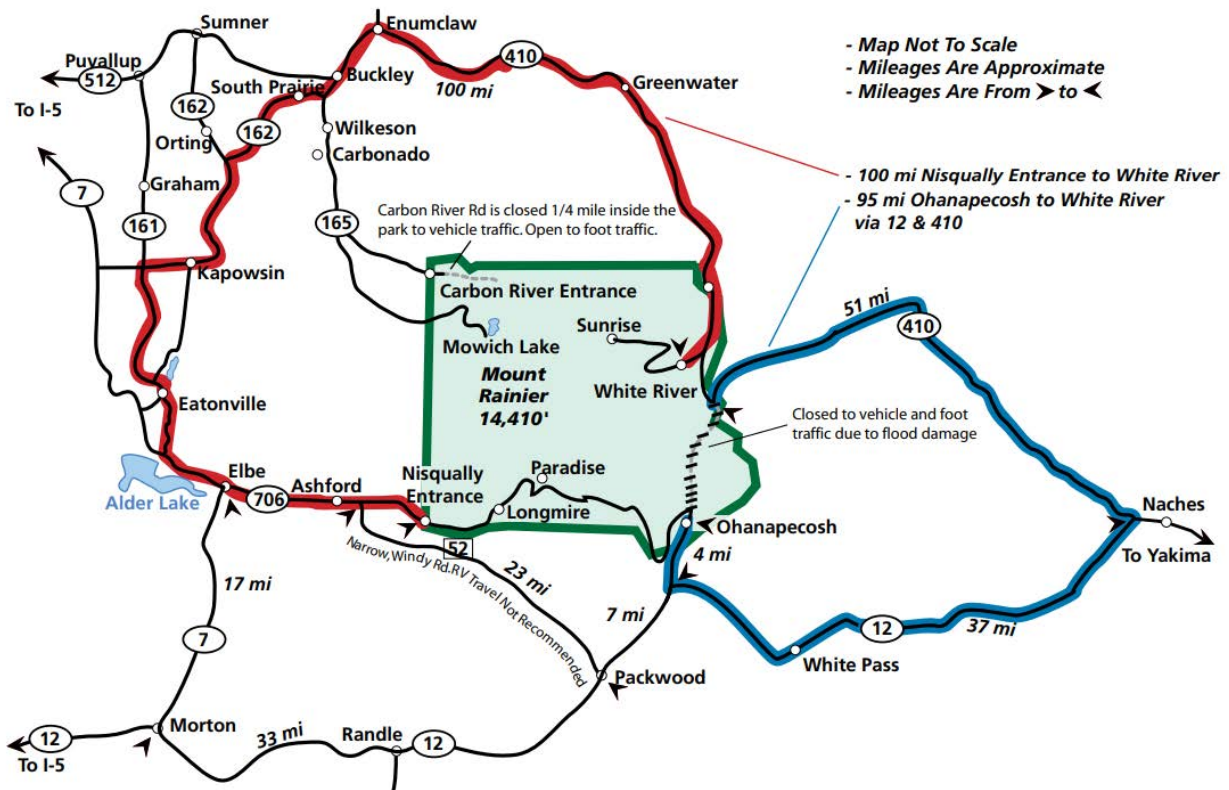
Currently the Park is open for backpackers who can long-distance hike to the areas via the Wonderland Trail (NPS 2024). If SR 165 remains closed permanently, the backcountry access would remain (NPS 2010). The red and blue roadways on Figure B-5 highlight the remaining vehicle entrance points to MORA.

Commercial Service Vendors

There are no commercial service vendors with concessions contracts within this area of the Park, so there would be no direct commercial loss associated with public vehicle access closures (NPS 2025c, NPS 2015). This study does not address the companies with commercial use authorizations that might bring visitors for activities through the Carbon River entrance. It can be assumed there would be economic impacts to these companies. The economic impacts associated with prior road closures is discussed in the Communities section.

Figure B-5. Vehicle Entrance Options to MORA

Driving Around Mount Rainier



U.S. Forest Service Lands

SR 165 is the only motorized access to the Mt. Baker-Snoqualmie National Forest. Closure of SR 165 would remove access to FSR 78 and the 7810 (Carbon River Road) bridge for the public. USFS does not have a visitor count to its dispersed lands via SR 165. There are no commercial vendors within the Park so there would be no direct commercial loss associated with public access closures.

Loss of Access Delays Forest Management Activities

Closure of the Fairfax Bridge on SR 165 delayed forest restoration work in the Coplay Lake and Evans Creek areas. Similar forest management activities would be delayed or cost more due to lengthier (alternate) access routes.

Loss of Access Closes Recreation Activities

Numerous USFS recreational resources including Tolmie Peak Trail, Spray Park Trail, Wonderland Trail, and general recreation on the Carbon River. The trailhead at 7810 is an access point to the Clearwater Wilderness featuring Cedar Lake, Summit Lake, and Coplay Lake. Campsites available from 7920 would be closed.

The only other access to Mt. Baker-Snoqualmie National Forest recreational assets is the Carbon River Bridge on Carbon River Road. There are concerns about Carbon River Bridge resiliency. There is no timeline for long-term solutions for Carbon River Bridge replacement.

There are some mining claims that would be cut off. USFS has no issued special use permits for vendors in this area, so there would be no loss to special commercial interests.

Loss of Access to Off-Road Vehicle Activities

Evans Creek Off-Road Vehicle (ORV) Recreation Area on SR 165 is located at the USFS Evan's Creek Campground, approximately 12 miles south of Wilkeson. The Evans Creek Campground features 41 rustic camp sites and 40 miles of 4×4, motorcycle, and all-terrain vehicle trails from March 15 to November 30, annually. Figure B-6 provides the roads and trails at the Evans Creek ORV area. It is the only motorized recreation area in Mt. Baker-Snoqualmie National Forest (Figure B-7) (Tacoma Motorsports 2025).

Loss of public access to Evans Creek ORV Recreation Area is considered a major loss to this user group. The nearest off-road areas are Pacific Raceways near Kent, WA (45 miles north) or Middle Waddell Campground in Capitol State Forest near Olympia, WA (78 miles west) (Figure B-7) (Tacoma Motorsports 2025, WDNR 2025).

Tribes

SR 165 is a significant Tribal access area for traditional uses for the Puyallup and Muckleshoot Tribes, particularly around the USFS Clearwater Wilderness area lakes. According to USFS and NPS, Summit Lake and Coplay Lake are significant areas for the Puyallup and Muckleshoot Tribes. There might be other properties documented in the vicinity that are traditional uses areas (NPS 2025b). Figure B-8 shows Tribal Trust Lands near the study area.

Socioeconomics impacts would be better understood after additional discussion with the Tribes.

Pierce County

Pierce County Parks and Recreation manages public lands along the Carbon River. FS 78 is a USFS road, maintained by the County. Locals and visitors access County lands in vehicles and wheeled all-terrain vehicles (WATV). WATV are allowed on most public County roads in the southern and eastern sections of unincorporated Pierce County.

Public access to FS 78 would be lost for recreational opportunities along the Carbon River under Alternative 1, but it would not change public access to WATV-allowed roads shown on Figure B-9.

Potential loss of property tax revenue is discussed under Economic Concerns and Private Property Owners.

Figure B-6. Evans Creek Off-Road Vehicle Area

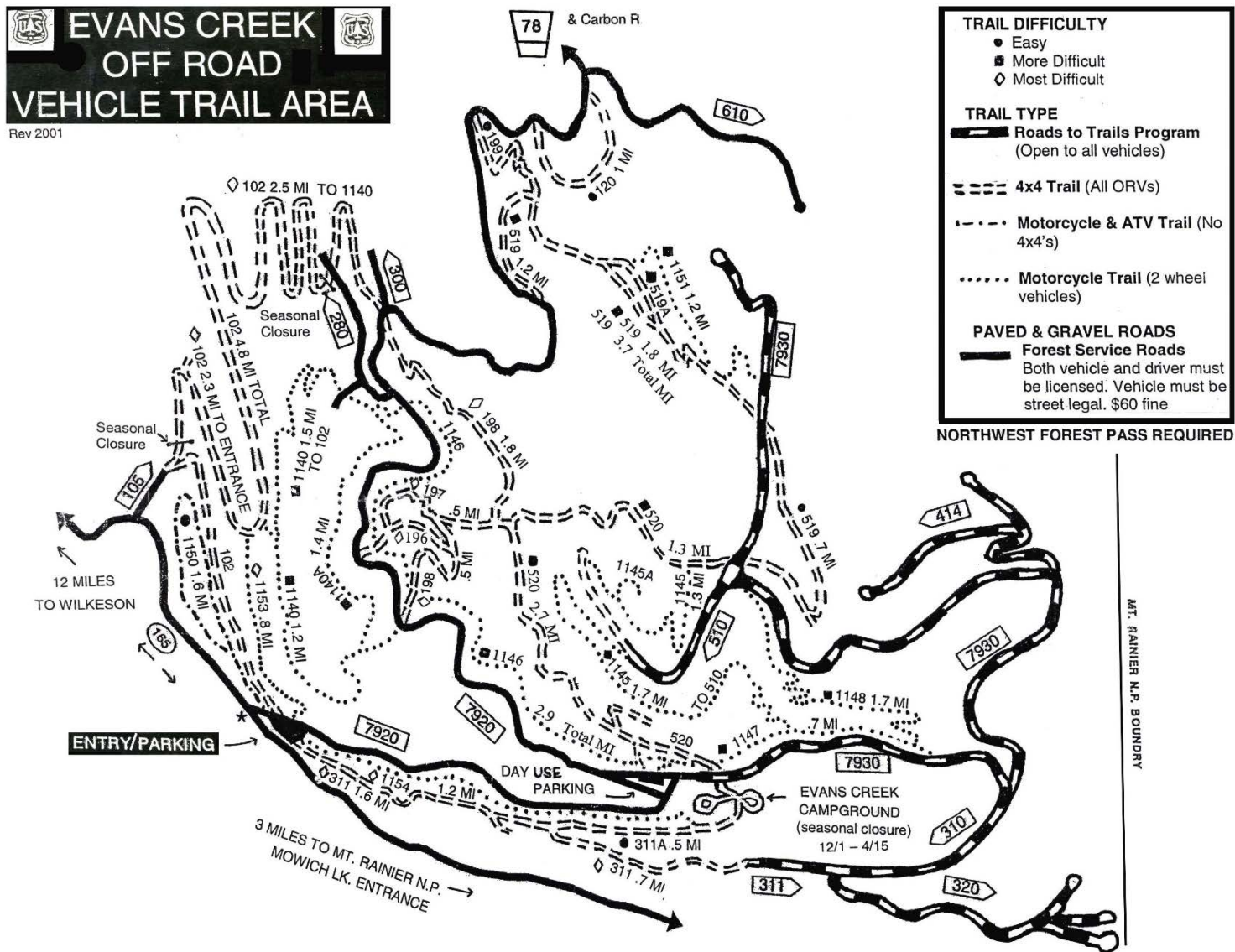
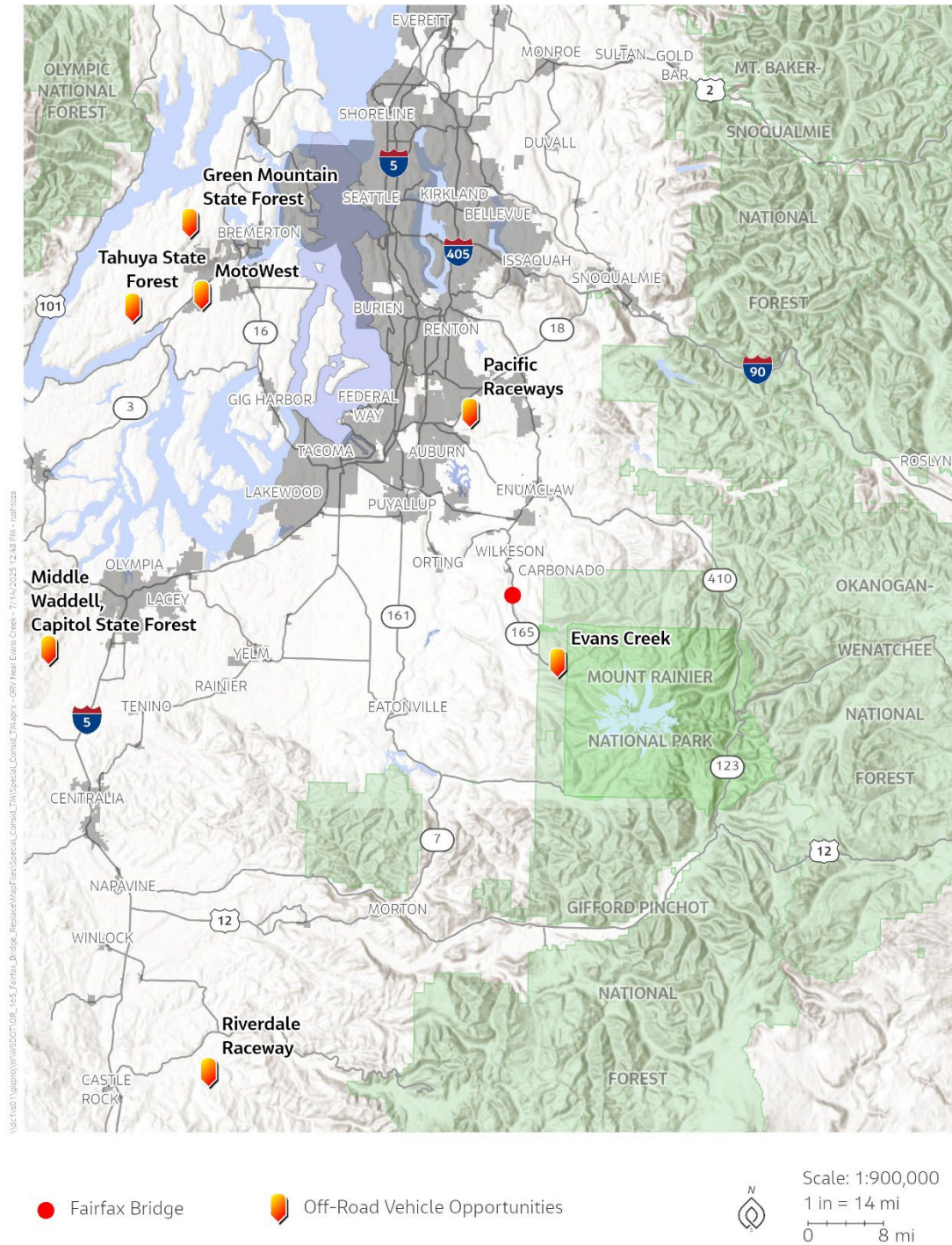


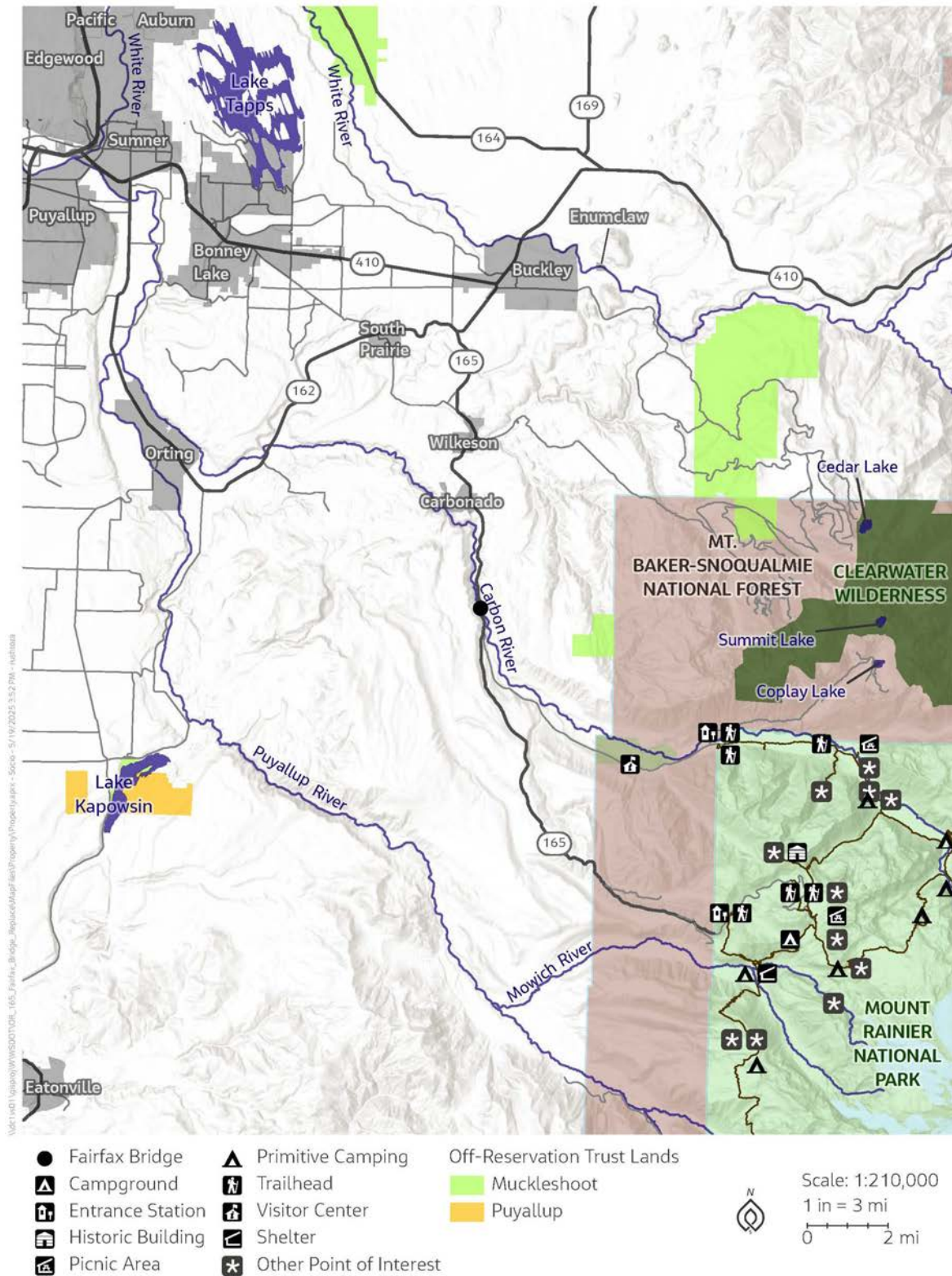
Figure B-7. Off-Road Vehicle Opportunities Near Evans Creek



Data Sources: Pierce County, National Park Service, United States Forest Service, United States Geological Survey, Washington State Department of Natural Resources, Washington State Department of Transportation. Basemap Sources: Esri, USGS

Jacobs

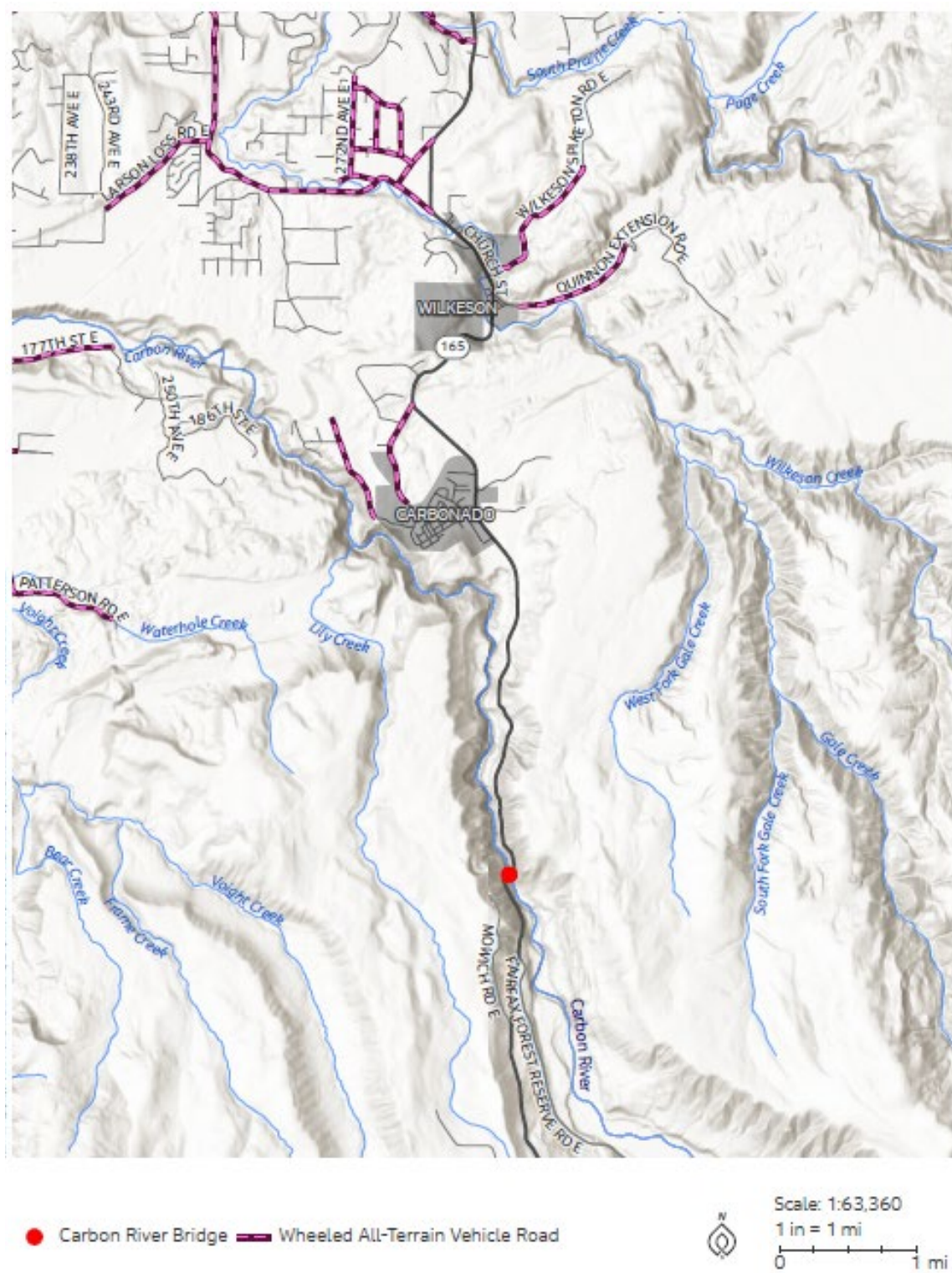
Figure B-8. Tribal Trust Lands



Data Sources: Pierce County, National Park Service, United States Forest Service, Washington State Department of Natural Resources, Washington State Department of Transportation.
 Basemap Sources: Esri, CGIAR, USGS

Jacobs

Figure B-9. Wheeled All-Terrain Vehicle Roads



Data Sources: Pierce County, United States Geological Survey, Washington State Department of Transportation. Basemap Sources: Esri, NASA, NOAA, USGS, FEMA

Potential Benefits

The public report that wildlife is more visible since the bridge closure due to reduced traffic and traffic-related noise. Residents described they anticipate the reduced vehicle trips will increase transportation safety. Residents are already seeing less solid waste and litter.

There is anecdotal evidence that suggests there have been ecological benefits to areas that contain heavily used campsites, trails, and sites of cultural or ecological interest.

Although not quantified, USFS could reduce management costs associated with maintaining public entrance points and public facilities; however, these could be counter-balanced with increased maintenance costs associated with different access.

Case Studies

The following case studies discuss rural communities that were affected by temporary or permanent road or bridge closures and access restrictions. Many are the result of natural disaster, but others are attributed to engineering failure or aging infrastructure. The case studies start with prior closure of Carbon River Road, accessible from SR 165.

Carbon River Road Closure, MORA, WA

A storm in November 2006 caused catastrophic flooding and landslides, impacting 2 miles of Carbon River Road between the Park entrance and Ipsut Creek Campground in MORA (NPS 2007). The entrance remained closed for 6 months. Carbon River Road became permanently closed to vehicles within the Park (but allows hikers and bicyclists) due to an earlier decision in the NPS 2002 *Mount Rainier General Management Plan* stating that the Park would no longer maintain the Carbon River Road after the next major washout (NPS 2010).

The flooding caused extensive damage to communities as well as economic losses to tourism in the towns of Enumclaw, Wilkeson, and Carbonado. Other MORA entrances became more favored.

Pretty Rocks/Polychrome Pass Rockslide, Denali National Park and Preserve, AK

A major rockslide in 2021 forced the indefinite closure of the Polychrome Pass section of Denali Park Road, cutting off vehicle access to Denali National Park's interior. Most Denali National Park visitors take NPS buses on Denali Park Road to see wildlife and view Denali Mountain. This tour accommodates most visitors to the Park. With its multi-year closure, NPS saw reduced visitors. The tourism industry outside the Park experiences a reduction

in the number and duration of visitors to the lodging and businesses outside the Park entrance.

NPS initiated a long-term infrastructure project to stabilize the area (i.e., construction is currently underway), but access remains limited. In contrast to SR 165, there are no communities that were cut off by the closure at Polychrome Pass.

Flooding of North Entrance Road, Yellowstone National Park, Gardiner, MT

In June 2022, historic flooding destroyed the North Entrance Road, severing primary access to Yellowstone National Park through Gardiner, MT, and devastating local businesses reliant on Park tourism. At the time of the flood, more than 10,000 visitors, employees and residents were evacuated (Mountain Journal 2024). A temporary road was constructed between Gardiner and Mammoth Hot Springs restoring limited access. Full restoration of Yellowstone North Entrance Road is still underway (NPS 2024), highlighting rural vulnerability to climate-driven disasters. As for the economic impact, the Park County, Montana, Office of Emergency Management estimated that the flooding caused more than \$1 billion in damages, including infrastructure losses, business disruptions, and tourism revenue decline.

SR 530 Closure from Oso Landslide, Darrington, WA

A landslide buried a section of SR 530, isolating the rural community of Darrington, WA (Darrington Historic Society). The disaster killed 43 people and led to transportation and economic challenges for the region. The closure lasted 4 months, cutting off access to public lands and recreational areas in the Mount Baker-Snoqualmie National Forest, including trailheads, wilderness access points, and Darrington Ranger District facilities. These areas are popular for hiking, camping, and fishing, and the closure significantly impacted both residents and outdoor recreation visitors.

Economic impacts of the Oso landslide included a decline in property values in Snohomish County, millions of dollars in disaster recovery costs, and disruption to tourism, logging, and commuting patterns (Pratt 2018).

Teton Dam Failure, Fremont and Madison Counties, ID

The collapse of the Teton Dam in 1976 caused widespread flooding, destroying roads and bridges and isolating rural communities in eastern Idaho. Fourteen people were killed, and several communities experienced varying degrees of flooding and infrastructure disruption while the towns of Wilford and Sugar City were destroyed (Lewiston Morning Tribune 1976). More than 200 families were left homeless and an estimated \$400 million to \$1 billion dollars in property damage (Solava and Delatte 2003).

Access to public lands like Bureau of Land Management lands along the Teton River and recreational and fishing areas along the Teton and Snake Rivers were closed for months. Agricultural areas were severely disrupted due to the destruction of irrigation infrastructure.

Hoh River Road Washout, Jefferson County, WA

Short-term washouts along the Hoh River Road periodically cut off access to Olympic National Park's Hoh Rain Forest, affecting tourism and local services. The Upper Hoh Road was recently restored in May 2025 after a "bomb cyclone" in December 2024 (Goldstein-Street 2025). Hoh River Road is the only public access point to Hoh Rain Forest.

The closure of Hoh River Road did not cutoff communities, but it impacted businesses in Jefferson County and the Hoh Indian Reservation area that are dependent on visitor traffic.

Cape Meares Landslide, Oceanside and Cape Meares, OR

A large landslide in 2012 and repeated landslides along the Cape Meares Loop Road closed access to scenic coastal areas and Cape Meares National Wildlife Refuge, impacting tourism and emergency response in rural Tillamook County. The communities of Oceanside and Cape Meares had only one emergency exit route when Cape Meares Road was closed.

The Cape Meares Loop Road closure resulted in reduced visitation to the Wildlife Refuge, which represented a major loss to the regional economy (Gruben 2022). There are no published studies about the lost tourism revenue or local business impact.

Going-to-the-Sun Road Winter Storm Closures, Glacier National Park, MT

Heavy snow and avalanches frequently close the iconic Going-to-the-Sun Road, limiting access to Glacier National Park and impacting nearby rural economies. Climate variability has increased the unpredictability of these closures. A closure in June 2025 disrupted the first full weekend of peak summer tourism resulting in millions of dollars of lost revenue for local businesses, tour operators and Park concessionaires. No communities are cut off by closures of Going-to-the-Sun Road.

Interstate 5 Skagit River Bridge Collapse

The Interstate 5 Skagit River Bridge collapsed on May 23, 2013, near Mount Vernon, WA, when a truck carrying an oversized load struck the bridge's overhead trusses, causing the northernmost span of the bridge to collapse into the Skagit River. The bridge carried about 71,000 vehicles daily, making it a vital link between Seattle and Vancouver, BC.

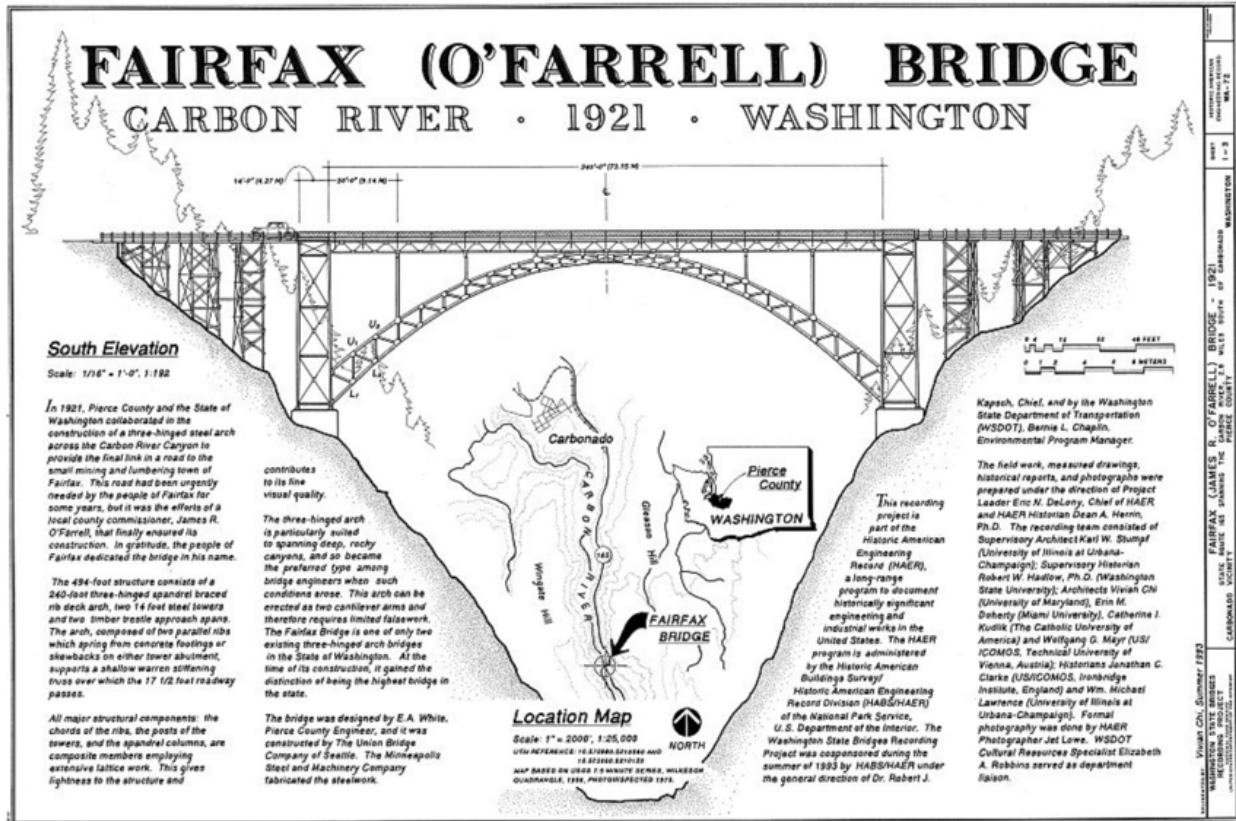
A temporary span was installed within a month, and a permanent replacement was completed within 4 months.

The collapse became a case study leading to changes in how oversize loads are permitted and escorted on United States highways, and the vulnerability of aging infrastructure (NTSB 2014).

Historic Resource Considerations

Fairfax Bridge is a Washington Department of Transportation (WSDOT) asset listed on the National Register of Historic Places (NRHP) because of its association with the historic bridges and tunnels of Washington State. Figure B-10 is a 1921 drawing of the Fairfax Bridge and Figure B-11 is a newspaper article announcing its opening. The procedures of Section 106 of the National Historic Preservation Act would need to be followed if its removal and decommissioning is part of a project that receives federal funding/grants or an approval required by a federal agency.

Figure B-10. Original Location Drawing of the 1921 Fairfax Bridge



If a project involving the Fairfax Bridge did not have a federal nexus, State Environmental Policy Act and Governor Executive Order 21-02 would still apply. In either case, it is likely that photographic documentation and drawings would be made of the structure for submission to the Historic American Buildings Survey and Historic American Engineering Record in the Library of Congress.

Figure B-11. Image of Seattle Daily Times Announcing Completion of Carbon River Road (Seattle Daily Times 1922)



4(f) Considerations

Section 4(f) of the U.S. Department of Transportation Act of 1966 requires consideration of Park and recreation lands, wildlife and waterfowl refuges, and historic sites during transportation project development ([*Code of Federal Regulations Title 23, Part 774 \(23 CFR 774\)*](#)). The Fairfax Bridge is a 4(f) property because it is a publicly-owned historic site listed on the NRHP. MORAs, USFS recreation areas are also 4(f) properties.

Historic Property Status

It is Federal Highway Administration opinion that the Fairfax Bridge closure in April 2025 created the baseline condition of no vehicle access to federal lands via SR 165. There is no trigger of a 4(f) analysis under the alternative of keeping the bridge closed (FHWA 2025).

Recreational Use

If nonmotorized access remains, 4(f) “use” depends on whether the change substantially impairs the recreational function. An initial read of the Management Plan shows that the area is listed as a Development Zone with accessibility by a wide range of visitors, including those with limited mobility. For this reason, restricting access as nonmotorized only may be a constructive use.

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Attachment B-1 – Parcel Data

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Parcel Data

Table 'AttB-1'-1. Properties South of SR 165 Carbon River Fairfax Bridge Closure (178 Properties)¹

Tax Parcel Number	Land (Acres)	Land Value	Improvement Value	Taxable Value	Land Use Description	Owner
0618211003	42.97	\$ 652,200	\$ 628,200	\$ 861,221	DESIG FOREST LND RCW 84.33	Edgemark LLC
0618214001	43.30	\$ 322,000	\$ -	\$ 7,708	DESIG FOREST LND RCW 84.33	Fairfax LLC
0618214002	43.85	\$ 657,700	\$ 809,800	\$ 1,067,359	DESIG FOREST LND RCW 84.33	Carbon Glacier Club LLC
0618273002	41.61	\$ 316,800	\$ -	\$ 5,365	DESIG FOREST LND RCW 84.33	Fairfax LLC
0618273003	45.33	\$ 328,200	\$ -	\$ 5,563	DESIG FOREST LND RCW 84.33	Three Forks LLC
0618284005	9.79	\$ 173,400	\$ -	\$ 173,400	VACANT LAND UNDEVELOPED	Individual
0618284012	3.68	\$ 208,500	\$ 13,900	\$ 222,400	OTHER RESIDENTIAL	Individual
0618284013	5.87	\$ 171,600	\$ -	\$ 34,328	CU OPEN SPACE RCW 84.34 CURRENT USE	Individual
0618284023	10.33	\$ 422,100	\$ 61,600	\$ 394,514	CU OPEN SPACE RCW 84.34 CURRENT USE	Individual
0618284024	4.66	\$ 184,800	\$ -	\$ 184,800	VACANT LAND UNDEVELOPED	Individual
0618284027	2.84	\$ 195,500	\$ 47,500	\$ 243,000	SINGLE FAMILY DWELLING	Individual
0618284028	1.90	\$ 167,600	\$ 38,900	\$ 206,500	SINGLE FAMILY DWELLING	Individual
0618284029	6.50	\$ 177,900	\$ -	\$ 177,900	VACANT LAND UNDEVELOPED	Individual
0618284030	3.50	\$ 172,100	\$ -	\$ 172,100	VACANT LAND UNDEVELOPED	Individual
0618284031	3.30	\$ 202,900	\$ 97,500	\$ 92,240	SINGLE FAMILY DWELLING	Individual
0618284033	5.00	\$ 161,400	\$ 7,900	\$ 66,018	CU OPEN SPACE RCW 84.34 CURRENT USE	Individual
0618284034	4.68	\$ 219,500	\$ 22,300	\$ 241,800	OTHER RESIDENTIAL	Individual
0618351005	8.87	\$ 194,400	\$ -	\$ 194,400	VACANT LAND UNDEVELOPED	Fairfax LLC
0618354003	44.70	\$ 306,700	\$ -	\$ 7,051	DESIG FOREST LND RCW 84.33	Three Forks LLC
0618354004	3.82	\$ 114,900	\$ -	\$ 557	DESIG FOREST LND RCW 84.33	WLC LLC
0618362000	17.97	\$ 544,100	\$ 242,800	\$ 550,224	DESIG FOREST LND RCW 84.33	Individual

¹ Pierce County Tax Parcel layer accessed March 31, 2025, from https://gisdata-piercecowa.opendata.arcgis.com/datasets/81a83fb925654e92a544036d39a1f3f2_0/explore. Information used to determine general ownership category (e.g. individual, organization, agency, etc.)

No-build Alternative Special Considerations
Attachment B-1: Parcel Data

Tax Parcel Number	Land (Acres)	Land Value	Improvement Value	Taxable Value	Land Use Description	Owner
0618362004	1.49	\$ 202,300	\$ -	\$ 202,300	VACANT LAND UNDEVELOPED	Individual
0618362005	1.27	\$ 194,300	\$ -	\$ 194,300	VACANT LAND UNDEVELOPED	Individual
0618362006	3.62	\$ 236,500	\$ -	\$ 236,500	VACANT LAND UNDEVELOPED	Individual
0618362007	2.00	\$ 210,800	\$ -	\$ 210,800	VACANT LAND UNDEVELOPED	Individual
0618362008	3.00	\$ 161,500	\$ -	\$ 161,500	VACANT LAND UNDEVELOPED	Individual
0618362010	5.00	\$ 396,200	\$ 230,000	\$ 626,200	SINGLE FAMILY DWELLING	Individual
0618362703	25.12	\$ 404,100	\$ 210,100	\$ 473,000	DESIG FOREST LND RCW 84.33	Individual
0618363014	18.72	\$ 467,200	\$ 18,900	\$ 486,100	MOBILE/MFG HOME	Individual
0618363022	37.71	\$ 608,100	\$ 324,100	\$ 677,968	DESIG FOREST LND RCW 84.33	Carbon Glacier Club LLC
0717062046	10.15	\$ 261,100	\$ 141,500	\$ 111,688	SINGLE FAMILY DWELLING	Individual
0717062047	8.85	\$ 301,600	\$ 17,100	\$ 318,700	MOBILE/MFG HOME	Individual
0618284026	1.45	\$ 130,000	\$ -	\$ 26,002	CU OPEN SPACE RCW 84.34 CURRENT USE	Individual
0618284032	6.25	\$ 181,800	\$ -	\$ 36,350	CU OPEN SPACE RCW 84.34 CURRENT USE	Individual
0618362702	20.19	\$ 278,000	\$ -	\$ 2,320	DESIG FOREST LND RCW 84.33	SFI Capital LLC
0618211001	43.26	\$ 321,900	\$ -	\$ 7,089	DESIG FOREST LND RCW 84.33	Carbon Glacier Club LLC
0618211004	42.75	\$ 282,600	\$ -	\$ 6,199	DESIG FOREST LND RCW 84.33	WLC LLC
0618211005	44.40	\$ 217,500	\$ -	\$ -	VACANT LAND UNDEVELOPED	Pierce County
0618214003	29.02	\$ 272,800	\$ -	\$ 5,363	DESIG FOREST LND RCW 84.33	Three Forks LLC
0618214004	42.75	\$ 320,300	\$ -	\$ 6,405	DESIG FOREST LND RCW 84.33	Fairfax LLC
0618214005	12.19	\$ 223,700	\$ -	\$ 1,779	DESIG FOREST LND RCW 84.33	Carbon Glacier Club LLC
0618271002	366.10	\$ 1,294,600	\$ -	\$ -	VACANT LAND UNDEVELOPED	White River School District
0618272001	34.95	\$ 234,300	\$ -	\$ 5,102	DESIG FOREST LND RCW 84.33	Carbon Glacier Club LLC
0618272002	43.62	\$ 338,200	\$ -	\$ 6,368	DESIG FOREST LND RCW 84.33	Fairfax LLC
0618273001	43.28	\$ 265,100	\$ -	\$ 6,328	DESIG FOREST LND RCW 84.33	Carbon Glacier Club LLC
0618274001	70.73	\$ 530,700	\$ -	\$ -	VACANT LAND UNDEVELOPED	Pierce County
0618274002	4.13	\$ 167,400	\$ -	\$ 674	DESIG FOREST LND RCW 84.33	ORM Timber Fund III (REIT) Inc
0618281001	478.27	\$ 1,166,000	\$ -	\$ 89,112	DESIG FOREST LND RCW 84.33	ORM Timber Fund III (REIT) Inc
0618281002	16.04	\$ 208,300	\$ -	\$ 2,384	DESIG FOREST LND RCW 84.33	WLC LLC
0618281004	42.49	\$ 287,600	\$ -	\$ 7,903	DESIG FOREST LND RCW 84.33	Fairfax LLC

No-build Alternative Special Considerations
Attachment B-1: Parcel Data

Tax Parcel Number	Land (Acres)	Land Value	Improvement Value	Taxable Value	Land Use Description	Owner
0618284014	5.00	\$ 107,600	\$ -	\$ 859	DESIG FOREST LND RCW 84.33	Individual
0618331000	640.00	\$ 1,315,800	\$ -	\$ 118,001	DESIG FOREST LND RCW 84.33	ORM Timber Fund III (REIT) Inc
0618341001	4.76	\$ 52,000	\$ -	\$ 52,000	VACANT LAND UNDEVELOPED	BNSF
0618341002	12.30	\$ 109,700	\$ -	\$ -	VACANT LAND UNDEVELOPED	Pierce County
0618341003	607.36	\$ 1,369,700	\$ -	\$ 97,664	DESIG FOREST LND RCW 84.33	ORM Timber Fund III (REIT) Inc
0618262001	457.30	\$ 1,121,600	\$ -	\$ -	VACANT LAND UNDEVELOPED	White River School District
0618263001	1.94	\$ 69,400	\$ -	\$ -	VACANT LAND UNDEVELOPED	Pierce County
0618263003	2.30	\$ 72,400	\$ -	\$ -	VACANT LAND UNDEVELOPED	Pierce County
0618263004	8.46	\$ 60,000	\$ -	\$ 60,000	VACANT LAND UNDEVELOPED	BNSF
0618281003	3.74	\$ 154,200	\$ -	\$ 673	DESIG FOREST LND RCW 84.33	WLC LLC
0618351008	1.21	\$ 86,400	\$ -	\$ 217	DESIG FOREST LND RCW 84.33	Three Forks LLC
0618351009	124.82	\$ 667,800	\$ -	\$ 21,272	DESIG FOREST LND RCW 84.33	Skykomish Resources LLC
0618352006	1.66	\$ 148,300	\$ -	\$ 148,300	VACANT LAND UNDEVELOPED	Three Forks LLC
0618352010	42.04	\$ 318,100	\$ -	\$ 7,591	DESIG FOREST LND RCW 84.33	Fairfax LLC
0618352011	74.90	\$ 404,200	\$ -	\$ 7,854	DESIG FOREST LND RCW 84.33	Carbon Glacier Club LLC
0618352012	3.90	\$ 49,500	\$ -	\$ 49,500	VACANT LAND UNDEVELOPED	Foothills Rails to Trails Coalition
0618352013	68.20	\$ 310,400	\$ -	\$ -	VACANT LAND UNDEVELOPED	Pierce County
0618352014	5.50	\$ 199,600	\$ -	\$ 990	DESIG FOREST LND RCW 84.33	ORM Timber Fund III (REIT) Inc
0618352015	0.79	\$ 123,300	\$ -	\$ 123,300	VACANT LAND UNDEVELOPED	ORM Timber Fund III (REIT) Inc
0618353002	42.05	\$ 318,100	\$ -	\$ 7,593	DESIG FOREST LND RCW 84.33	Three Forks LLC
0618353003	60.23	\$ 369,300	\$ -	\$ 10,841	DESIG FOREST LND RCW 84.33	Fairfax LLC
0618353004	44.55	\$ 325,900	\$ -	\$ 8,019	DESIG FOREST LND RCW 84.33	Three Forks LLC
0618354001	44.04	\$ 324,300	\$ -	\$ 3,298	DESIG FOREST LND RCW 84.33	WLC LLC
0618354002	43.27	\$ 289,700	\$ -	\$ 8,091	DESIG FOREST LND RCW 84.33	Carbon Glacier Club LLC
0617011002	43.92	\$ 304,900	\$ -	\$ 8,213	DESIG FOREST LND RCW 84.33	Fairfax LLC
0617011003	45.85	\$ 310,400	\$ -	\$ 8,573	DESIG FOREST LND RCW 84.33	Carbon Glacier Club LLC
0618361000	400.00	\$ 1,061,000	\$ -	\$ -	VACANT LAND UNDEVELOPED	Pierce County
0618363000	21.20	\$ 128,000	\$ -	\$ -	VACANT LAND UNDEVELOPED	Pierce County
0618363001	0.45	\$ 14,700	\$ -	\$ 14,700	VACANT LAND UNDEVELOPED	Individual

No-build Alternative Special Considerations
Attachment B-1: Parcel Data

Tax Parcel Number	Land (Acres)	Land Value	Improvement Value	Taxable Value	Land Use Description	Owner
0618363002	10.00	\$ 75,800	\$ -	\$ 18,202	CU OPEN SPACE RCW 84.34 CURRENT USE	Individual
0618363003	10.00	\$ 290,100	\$ -	\$ 58,029	CU OPEN SPACE RCW 84.34 CURRENT USE	Individual
0618363004	10.00	\$ 291,700	\$ 121,200	\$ 290,547	CU OPEN SPACE RCW 84.34 CURRENT USE	Individual
0618363005	40.00	\$ 393,300	\$ -	\$ -	VACANT LAND UNDEVELOPED	Pierce County
0618363006	0.86	\$ 79,400	\$ -	\$ 79,400	VACANT LAND UNDEVELOPED	Individual
0618363007	0.86	\$ 79,400	\$ -	\$ 79,400	VACANT LAND UNDEVELOPED	Individual
0618363008	0.95	\$ 90,300	\$ -	\$ 90,300	VACANT LAND UNDEVELOPED	Individual
0618363009	0.95	\$ 109,200	\$ -	\$ 109,200	VACANT LAND UNDEVELOPED	Individual
0618363011	5.00	\$ 282,500	\$ 121,900	\$ 404,400	SINGLE FAMILY DWELLING	Individual
0618363015	0.71	\$ 109,500	\$ -	\$ 109,500	VACANT LAND UNDEVELOPED	Individual
0617011004	652.96	\$ 1,501,500	\$ -	\$ 96,169	DESIG FOREST LND RCW 84.33	POPE RESOURCES
0617021000	370.97	\$ 1,049,300	\$ -	\$ 52,031	DESIG FOREST LND RCW 84.33	POPE RESOURCES
0617022000	369.27	\$ 1,119,400	\$ -	\$ 66,634	DESIG FOREST LND RCW 84.33	POPE RESOURCES
0617111000	640.00	\$ 1,489,100	\$ -	\$ 105,614	DESIG FOREST LND RCW 84.33	POPE RESOURCES
0617121000	520.00	\$ 1,207,200	\$ -	\$ 60,355	DESIG FOREST LND RCW 84.33	POPE RESOURCES
0617123000	80.00	\$ 555,200	\$ -	\$ 10,538	DESIG FOREST LND RCW 84.33	POPE RESOURCES
0617123001	40.00	\$ 329,900	\$ -	\$ 4,484	DESIG FOREST LND RCW 84.33	POPE RESOURCES
0717041000	138.86	\$ 690,200	\$ -	\$ -	VACANT LAND UNDEVELOPED	USFS
0717041004	91.57	\$ 499,200	\$ -	\$ -	VACANT LAND UNDEVELOPED	USFS
0717041005	480.00	\$ 1,321,600	\$ -	\$ -	VACANT LAND UNDEVELOPED	USFS
0717051000	440.00	\$ 1,036,200	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717051001	295.00	\$ 1,079,900	\$ -	\$ -	VACANT LAND UNDEVELOPED	USFS
0717061001	19.47	\$ 259,500	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717061002	1.00	\$ 22,000	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717061003	19.48	\$ 259,500	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717061006	112.10	\$ 652,800	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717061010	20.00	\$ 558,700	\$ 364,600	\$ -	SINGLE FAMILY DWELLING	Mt Rainier National Park
0717061011	5.00	\$ 11,300	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717061012	30.00	\$ 464,800	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717062001	1.55	\$ 9,400	\$ -	\$ -	STREET RIGHT OF WAY	Pierce County

No-build Alternative Special Considerations
Attachment B-1: Parcel Data

Tax Parcel Number	Land (Acres)	Land Value	Improvement Value	Taxable Value	Land Use Description	Owner
0717062004	11.56	\$ 291,500	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717062005	7.60	\$ 309,000	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717062007	9.76	\$ 328,800	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717062009	0.54	\$ 147,600	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717062010	1.65	\$ 148,100	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717062011	10.47	\$ 199,100	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717062013	10.67	\$ 285,700	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717062014	10.62	\$ 285,400	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717062020	7.91	\$ 293,400	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717062021	10.58	\$ 4,500	\$ -	\$ -	WATER AREAS	Mt Rainier National Park
0717062022	14.95	\$ 4,900	\$ -	\$ -	WATER AREAS	Mt Rainier National Park
0717062023	1.89	\$ 264,500	\$ 8,000	\$ 272,500	SINGLE FAMILY DWELLING	Individual
0717062028	2.00	\$ 208,600	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717062030	4.60	\$ 256,500	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717062032	0.50	\$ 147,900	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717062033	2.02	\$ 155,700	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717062036	0.50	\$ 111,900	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717062038	1.50	\$ 206,600	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717062039	6.62	\$ 253,800	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717062040	1.02	\$ 116,200	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717062043	2.03	\$ 209,400	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717062044	2.03	\$ 209,400	\$ -	\$ 209,400	OTHER RESIDENTIAL	Individual
0717062045	2.04	\$ 209,600	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717062049	4.99	\$ 264,500	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717062050	3.67	\$ 344,900	\$ 104,100	\$ -	SINGLE FAMILY DWELLING	Mt Rainier National Park
0717062051	1.79	\$ 186,700	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717062052	7.77	\$ 264,100	\$ 12,500	\$ -	SINGLE FAMILY DWELLING	Mt Rainier National Park
0717062824	65.11	\$ 857,000	\$ 259,900	\$ -	SINGLE FAMILY DWELLING	Mt Rainier National Park
0717063000	165.68	\$ 751,000	\$ -	\$ 26,222	DESIG FOREST LND RCW 84.33	POPE RESOURCES
0717064003	10.00	\$ 145,900	\$ -	\$ 16,221	DESIG FOREST LND RCW 84.33	Individual
0717064004	10.00	\$ 145,900	\$ -	\$ 145,900	VACANT LAND UNDEVELOPED	Individual

No-build Alternative Special Considerations
Attachment B-1: Parcel Data

Tax Parcel Number	Land (Acres)	Land Value	Improvement Value	Taxable Value	Land Use Description	Owner
0717064005	137.40	\$ 786,500	\$ -	\$ 24,771	DESIG FOREST LND RCW 84.33	ORM Timber Fund III (REIT) Inc
0717064006	2.60	\$ 236,800	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717071000	407.18	\$ 1,090,700	\$ -	\$ 45,026	DESIG FOREST LND RCW 84.33	POPE RESOURCES
0717071002	160.00	\$ 740,300	\$ -	\$ 19,708	DESIG FOREST LND RCW 84.33	ORM Timber Fund III (REIT) Inc
0717073001	81.66	\$ 128,800	\$ -	\$ 9,134	DESIG FOREST LND RCW 84.33	POPE RESOURCES
0717081000	640.00	\$ 1,315,800	\$ -	\$ -	VACANT LAND UNDEVELOPED	USFS
0717091000	400.00	\$ 1,082,600	\$ -	\$ -	VACANT LAND UNDEVELOPED	USFS
0717091001	240.00	\$ 693,900	\$ -	\$ -	VACANT LAND UNDEVELOPED	USFS
0617131000	640.00	\$ 1,654,500	\$ -	\$ 74,507	DESIG FOREST LND RCW 84.33	POPE RESOURCES
0617141000	640.00	\$ 1,654,500	\$ -	\$ 110,221	DESIG FOREST LND RCW 84.33	POPE RESOURCES
0617241000	160.00	\$ 740,300	\$ -	\$ 21,755	DESIG FOREST LND RCW 84.33	Hancock Forest Management Inc
0617242000	480.00	\$ 1,167,700	\$ -	\$ 60,031	DESIG FOREST LND RCW 84.33	Hancock Forest Management Inc
0717041001	17.52	\$ 128,900	\$ -	\$ 17,520	CU OPEN SPACE RCW 84.34 CURRENT USE	The Mountaineers
0717041002	2.05	\$ 148,500	\$ -	\$ 2,050	CU OPEN SPACE RCW 84.34 CURRENT USE	The Mountaineers
0717041003	5.33	\$ 118,800	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0717161000	640.00	\$ 1,315,800	\$ -	\$ -	VACANT LAND UNDEVELOPED	USFS
0717171000	640.00	\$ 1,315,800	\$ -	\$ -	VACANT LAND UNDEVELOPED	USFS
0717181000	647.05	\$ 1,321,800	\$ -	\$ -	VACANT LAND UNDEVELOPED	USFS
0717191000	644.18	\$ 1,319,300	\$ -	\$ -	VACANT LAND UNDEVELOPED	USFS
0717201000	640.00	\$ 1,315,800	\$ -	\$ -	VACANT LAND UNDEVELOPED	USFS
0717211000	640.00	\$ 1,315,800	\$ -	\$ -	VACANT LAND UNDEVELOPED	USFS
0717281000	640.00	\$ 1,315,800	\$ -	\$ -	VACANT LAND UNDEVELOPED	USFS
0717291000	562.50	\$ 1,247,100	\$ -	\$ 61,760	DESIG FOREST LND RCW 84.33	Mid-Valley Resources Inc
0717291001	77.50	\$ 548,000	\$ -	\$ -	VACANT LAND UNDEVELOPED	USFS
0718331000	606.46	\$ 1,261,000	\$ -	\$ 44,454	DESIG FOREST LND RCW 84.33	Fruit Growers Timberlands Washington LLC
0718333001	27.00	\$ 119,100	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0718341000	624.82	\$ 1,237,600	\$ -	\$ -	VACANT LAND UNDEVELOPED	USFS

No-build Alternative Special Considerations
Attachment B-1: Parcel Data

Tax Parcel Number	Land (Acres)	Land Value	Improvement Value	Taxable Value	Land Use Description	Owner
0718351000	554.23	\$ 1,177,500	\$ -	\$ 44,177	DESIG FOREST LND RCW 84.33	Cayada Creek Preserve LLC
0718353001	76.00	\$ 161,500	\$ -	\$ -	VACANT LAND UNDEVELOPED	Mt Rainier National Park
0617031000	729.84	\$ 1,389,500	\$ -	\$ 132,943	DESIG FOREST LND RCW 84.33	Hancock Forest Management Inc
0617101000	640.00	\$ 1,315,800	\$ -	\$ 115,555	DESIG FOREST LND RCW 84.33	Hancock Forest Management Inc
0717301000	638.04	\$ 1,314,100	\$ -	\$ -	VACANT LAND UNDEVELOPED	USFS
0718251001	386.89	\$ 1,067,800	\$ -	\$ 18,678	DESIG FOREST LND RCW 84.33	Federal Way Christ Church
0718251002	80.49	\$ 556,700	\$ -	\$ 2,249	DESIG FOREST LND RCW 84.33	Individual
0718251003	80.44	\$ 556,500	\$ -	\$ 3,663	DESIG FOREST LND RCW 84.33	Individual
0718251004	81.63	\$ 559,900	\$ -	\$ 4,748	DESIG FOREST LND RCW 84.33	Individual
0718361000	640.00	\$ 1,289,400	\$ -	\$ -	VACANT LAND UNDEVELOPED	USFS
0618363010	0.28	\$ 17,200	\$ -	\$ 17,200	VACANT LAND UNDEVELOPED	Individual

Table 2. Permitted and Historical Access Along SR 165, South of Road Closure²

Milepost	Permit	Description
0.04	ACP 23825 (historical permit M80-108)	MP 0.4 - ACP 23825 (historical permit M80-108) is for a Type C road approach for a logging road on the north side. No parcel number is recorded for this but it is shown as the NW ¼ of the NE ¼ of Section 28 Township 17N Range 7E. The permit is made out to the US Agriculture Dept. and was executed 5/13/1980.
1.05	ACP 23826 (historical permit M80-109)	MP 1.05 - ACP 23826 (historical permit M80-109) is for a Type C road approach for a logging road. No parcel number is recorded for this. The permit is made out to the US Agriculture Dept. and was executed 5/13/1980.
3.71	ACP 46219	MP 3.71 - ACP 46219 is for a Type B road approach for a logging road on the left side. No parcel number is recorded for this but it is shown as the SE ¼ of the SE ¼ of Section 13 Township 17N Range 6E. The permit is made out to Hancock Forest Management. The application was received 8/1/2006 but was not shown as being executed.
5.14	ACP 42365	MP 5.14 - ACP 42365 is for a temporary road approach for a logging road on the left side. No parcel number is recorded for this but it is shown as the SE ¼ of the NE ¼ of Section 14 Township 17N Range 6E. The permit is made out to Rainer Log Co Inc (but I suspect it should be Rainier). The application was executed 7/31/2002.
7.8	ACP 46616	MP 7.80 - ACP 46616 is for a temporary road approach for a logging road on the right side. No parcel number is recorded for this but it is shown as the NW ¼ of the NW ¼ of Section 2 Township 17N Range 6E. The permit is made out to Hancock Forestry and the application was executed 4/5/2007. The permit has an expiration date of 4/30/2008 and the notes say that the access was to be removed and the ditch and vegetation restored. It also says that they don't have a copy of the executed permit at the time it was scanned.
8.5	ACP 25809 (historical permit M88-202)	MP 8.50 - ACP 25809 (historical permit M88-202) is for a temporary Type D road approach for a logging road on the right side. No parcel number is recorded for this. The permit is made out to Champion International and the application was executed 10/13/1988. The notes say that the access appears to have been removed.
8.94	ACP 25810 (historical permit M88-203)	MP 8.94 - ACP 25810 (historical permit M88-203) is for a temporary Type D road approach for a logging road on the right side. No parcel number is recorded for this but it is shown as the NW ¼ of Section 34 Township 18N Range 6E. The permit is made out to Champion International and the application was executed 10/13/1988. The notes say that the access was removed.

² Roadway Access Management Permit (RAMP) system data provided by WSDOT, May 2025.

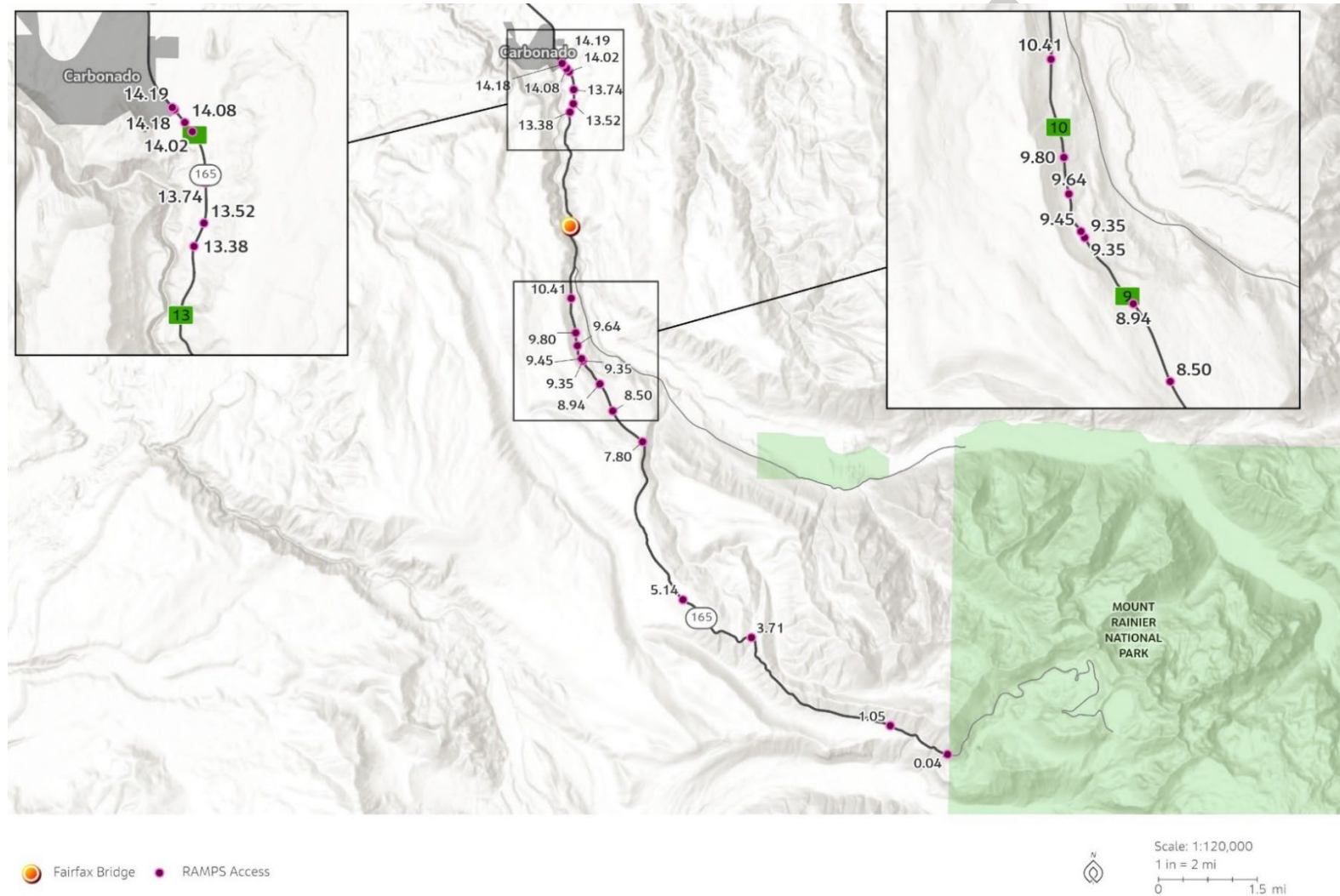
No-build Alternative Special Considerations
Attachment B-1: Parcel Data

Milepost	Permit	Description
9.35	ACP 26535 (historical permit M92-047)	MP 9.35 - ACP 26535 (historical permit M92-047) is for a Type A single-family residential lot on the right side. The parcel number is shown as 6-18-28-4-005 and it is shown as the SE ¼ of the SE ¼ of Section 28 Township 18N Range 6E. The permit is made out to Richard T. Disney and the application was executed 4/28/1992. The notes say that it appears the approach(es) are located at MP 9.41.
9.35	ACP 26534 (historical permit M92-046)	MP 9.35 - ACP 26534 (historical permit M92-046) is for a Type A single-family residential lot on the left side. The parcel number is shown as 6-18-28-4-005 and it is shown as the SE ¼ of the SE ¼ of Section 28 Township 18N Range 6E. The permit is made out to Richard T. Disney and the application was executed 4/28/1992. The notes say that it appears the approach(es) are located at MP 9.41.
9.45	ACP 20092 (historical permit M2000-1005)	MP 9.45 - ACP 20092 (historical permit M2000-1005) is for a non-conforming Type B road approach for agricultural operation access on the left side. No parcel number is recorded for this. The permit is made out to Joe Wilcox and the application was executed 4/12/2000.
9.64	ACP 27065 (historical permit M94-0075)	MP 9.64 - ACP 27065 (historical permit M94-0075) is for a Type A single-family residential lot on the left side. . No parcel number is recorded for this but it is shown as the SE ¼ of the SE ¼ of Section 28 Township 18N Range 6E. The permit is made out to Alfred and Nancy Lacrosse and the application was executed 7/19/1994. The notes say they were unable to locate the approach and it may be for the approach at MP 9.59.
9.80	ACP 22126 (historical permit 7617)	MP 9.80 - ACP 22126 (historical permit 7617) is for a residential approach on the south side. No parcel number is recorded for this but it is shown as the SE ¼ of the NE ¼ of Section 28 Township 18N Range 6E. The permit is made out to Carl Blow and the application was executed 4/12/1974. The notes from 2014 say the approach is on the right side and appears active.
10.41	ACP 23825 (historical permit M81-093)	MP 10.41 - ACP 23825 (historical permit M81-093) is for a Type C road approach for a gated logging road on the left side. No parcel number is recorded for this but it is shown as the SW ¼ of the SE ¼ of Section 21 Township 18N Range 6E. The permit is made out to Burlington Northern Inc and was executed 7/6/1981.
13.38	ACP 25389 (historical permit M86-251)	MP 13.38 - ACP 25389 (historical permit M86-251) application for a Type C road approach for a logging road on the right side was denied due to lack of sight distance to the south, recommended they uses the three other temporary logging approaches in the area (M86-246, 247 and 248). The permit was applied for by Plum Creek Timber Company.
13.52	ACP 25385 (historical permit M86-247)	MP 13.52 - ACP 25385 (historical permit M86-247) is for a Type B road approach for a logging only on the right side. No parcel number is recorded for this but it is shown as the SE ¼ of the SE ¼ of Section 4 Township 18N Range 6E. The permit is made out to Plum

No-build Alternative Special Considerations
Attachment B-1: Parcel Data

Milepost	Permit	Description
		Creek Timber Company and was executed 1/15/1987. Notes from 2012 say the approach appears to have been removed.
13.74	ACP 25384 (historical permit M86-246)	MP 13.74 - ACP 25384 (historical permit M86-246) is for a Type B road approach for a logging only on the right side. No parcel number is recorded for this but it is shown as the SE ¼ of the SE ¼ of Section 4 Township 18N Range 6E. The permit is made out to Plum Creek Timber Company and was executed 1/15/1987. Notes from 2012 say the approach appears to have been removed.
14.02	ACP 25386 (historical permit M86-248)	MP 14.02 - ACP 25386 (historical permit M86-248) is for a Type B road approach for a logging only on the right side. No parcel number is recorded for this but it is shown as the SE ¼ of the SE ¼ of Section 4 Township 18N Range 6E. The permit is made out to Plum Creek Timber Company and was executed 1/15/1987. Notes from 2012 say the approach appears to have been closed off.
14.08	ACP 26149 (historical permit M90-083)	MP 14.08 - ACP 26149 (historical permit M90-083) is an unexecuted application for a Type B single-family residence and logging access on the left side. No parcel number is recorded for this but it is shown as the SW ¼ of the NE ¼ of Section 4 Township 18N Range 6E. The permit is made out to Tony Basselli C/O R & S Lumber. Notes from 1990 say Legal Desc: SWNE041806E; Field Review Date: 3/29/1990; Maintenance Superintendent: WILLIAMS; Maintenance Supervisor: CADDELL; NEVER EXECUTED BY APPLICANT. 2ND REQUEST 7-11-91 - NO RESPONSE.
14.18	ACP 40130	MP 14.18 - ACP 40130 is for a Type A single-family residential access on the right side. The parcel number is shown as 06-18-04-1-026 and it is shown as the SW ¼ of the NE ¼ of Section 4 Township 18N Range 6E. The permit is made out to Michael Cannon and Debra Oquist and the application was executed 10/30/2000.
14.19	ACP 26624	MP 14.19 - ACP 26624 is for a Type A approach for 4 single-family residences on the left side. No parcel number is shown but it is shown as the SW ¼ of the NW ¼ of Section 4 Township 18N Range 6E. The permit is made out to Robert K. Visnaw and the application was executed 2/16/1992. A note from 2012 says My review of SR View 3.1 (2012) shows this approach has been unused since at least 2008.

Figure 'AttB-1'-1. Permitted and Historical Accesses Along SR 165, South of Road Closure



Data Sources: Pierce County, National Park Service, Washington State Department of Transportation, Basemap Sources: Esri, NASA, NOAA, USGS, Esri, NASA, NOAA, USGS, FEMA

Appendix C. Community Engagement Summary Report

DRAFT

DRAFT Community Engagement Summary

OR GEC Task Order BT – SR 165 Fairfax Bridge (Work Order MS9331)

August 2025



Olympic Region Multimodal Planning
7407 31st Avenue NE
Lacey, WA 98516

Prepared by:

Washington State Department of Transportation

In association with:

Jacobs

1100 112th Ave NE Suite 500, Bellevue, WA 98004

Background

The Washington State Department of Transportation Olympic Region closed the State Route 165 Carbon River-Fairfax Bridge on April 22, 2025, due to deterioration and instability of the supporting structure. The bridge provided access across the Carbon River Canyon to Mount Rainier National Park, U.S. Forest Service recreational areas, and residential properties south of the bridge.

The closure of the SR 165 Carbon River-Fairfax Bridge has affected residents and reduced tourism, causing economic losses for some local businesses. People in the area, particularly in the towns of Wilkeson and Carbonado, have a vested interest in the future of the bridge and any construction plans that WSDOT intends to pursue. An example of the news coverage is included in Attachment 1.

From April to July 2025, WSDOT evaluated viable alternatives to address the current bridge condition as part of a planning study. Public engagement was a key part of the planning study due to the importance of the bridge to surrounding communities.

WSDOT researched demographic and socioeconomic characteristics of the community (*Study Area Context Technical Memo*) and met with key stakeholder groups to understand concerns, community interests, and effective ways to reach target audiences. This engagement was achieved largely through a combination of meetings, ongoing communications, and interviews with agencies. Two in-person open houses and one online open house garnered 2,842 total individual responses that will help inform future decisions. This report details the engagement strategies and findings.

Community Engagement Goals

The goal of the engagement program was to seek community input on a range of potential solutions for the SR 165 Carbon River crossing. These included 3 categories of alternatives: 1) keep SR 165 closed south of Carbonado and remove the bridge, 2) replace the bridge in the same vicinity, or 3) reroute SR 165 to bypass parts of the Carbon River Canyon (Bridge rehabilitation was determined to be unfeasible. Each option was assessed for its feasibility, cost, community impact, and alignment with long-term transportation needs.

The techniques used for effective engagement included:

- Clear, accessible language about the study
- Visual elements to enhance understanding wherever appropriate.
- Printed materials in-person and digital versions through the online open house
- Alternative text for visual content, in alignment with WSDOT accessibility standards.

Engagement Activities

The bridge closure expedited the timeline for evaluating alternatives and initiating stakeholder engagement. The study team conducted a public engagement process that identified community issues, concerns, and priorities through three distinct efforts:

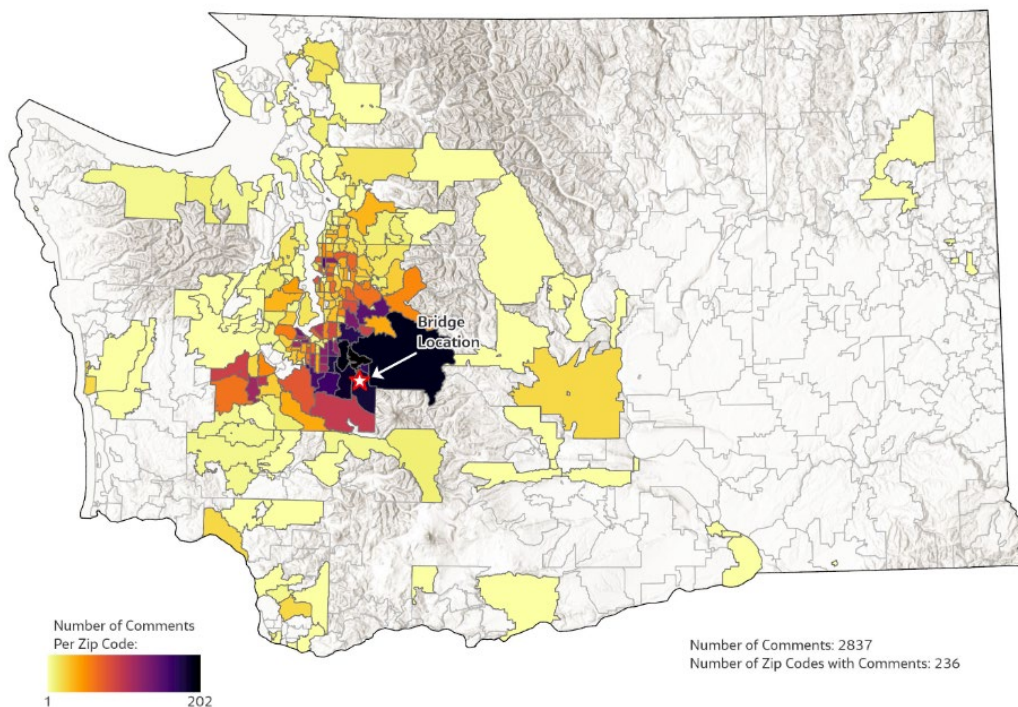
1. Online Open House
2. Presentations and briefings to key partners
3. Public events

A survey was conducted through the Online Open House and handouts distributed at public events.

Online Open House

Between May 28 and June 17, 2025, the Online Open House received 45,523 views and generated 2,752 responses, indicating strong interest and engagement. The contents of the Online Open House are provided in Attachment 3. The top three zip codes the team heard from were 98321, 98391, and 98022 (which encompass the impacted communities of Wilkeson and Carbonado (Figure C-1).

Figure C-1. Heat map of Public Participation in Online Open House



Presentations and Briefings to Key Partners

Throughout May and early June 2025, WSDOT delivered presentations to key partner agencies including the U.S. Federal Highway Administration (FHWA), U.S. Forest Service (USFS), National Park Service (NPS) Mt Rainier National Park (MRNP), and Pierce County.

The presentation is included as Attachment 2. The purpose was to formally introduce the planning study and provide an overview of the alternatives under consideration for discussion. During these presentations, WSDOT shared key dates and milestones and extended invitation for participation in upcoming events. Agency partners provided information about their facilities, land management responsibilities, and ongoing projects and plans within the study area.

Tribal Communities and Tribal Coordination

Tribal communities rely on lands in the study area managed by NPS and USFS, for cultural and recreational purposes. WSDOT initiated Tribal consultation with the following tribes in April 2025:

- Puyallup Tribe of Indians
- Nisqually Indian Tribe
- Muckleshoot Indian Tribe
- Squaxin Island Tribe
- Confederated Tribes and Bands of the Yakama Nation

In follow-up conversations, the Puyallup and Muckleshoot Tribes responded to WSDOT's outreach and provided information about their land interests in the study area and questions about potential environmental impacts. As the preferred alternative is further developed, WSDOT will continue Tribal consultation.

Public Events

WSDOT visited the communities of Carbonado and Wilkeson to foster meaningful engagement. In-person open houses were hosted at the Carbonado School on June 2 and Wilkeson Elementary School on June 11 (Figure C-2). By choosing familiar, accessible local venues, WSDOT made it easier for residents to participate and share their perspectives. Project partners were present at each session to answer questions and engage with attendees through genuine, face-to-face conversations.

Figure C-2. Carbonado open house event on June 2 (left) and Wilkeson June 11, 2025 (right)



The survey that was provided in the Online Open House was conducted in person using the same questions (Attachment C-4). The results were consolidated with the results from the online survey.

Promotion

Information for the online open house was distributed through various channels to various audiences and communities. An image of the postcard is provided in Figure C-4.

Table C-1. Fairfax Bridge Outreach Channels

Outreach method	Details
Media release	WSDOT sent two media releases via GovDelivery to 7,158 subscribers on May 19 and May 28.
Social media	WSDOT shared the online open house and survey on its social media accounts.
Postcard	A postcard promoting the online open house and in-person community meetings was sent to 14,115 addresses across five zip codes: 98321, 98323, 98360, 98385, and 98396.
Partner meetings	<p>Project partners were engaged through a combination of email communications and regular standing meetings.</p> <p>Follow-up email reminders were sent to ensure continued awareness and participation.</p> <p>Project partners were invited to attend the in-person meetings to help answer questions and foster connections with community members.</p>

Further details on public reactions on social media are in Table C-2. Comments on Facebook were the most vocal and critical reaction to the SR 165 Fairfax Bridge closure. Comments on Reddit expressed sadness while pushing others to take action. Comments on Instagram appeared to be the supportive and empathetic of WSDOT.

Table C-2. Social Media Engagement Sentiment

Site	Engagement Numbers	Sentiment ^[1]
Facebook	2,500 reactions 1,200 comments 1,700 shares	<p>Comments are critical of how WSDOT allocates funds, critical of WSDOT leadership, critical of how WSDOT “let it” get to this point, critical of how the state spends their taxpayer dollars.</p> <p>Numerous comments using the phrase, “Instead of spending money on [speed cameras, SR 16 in Tacoma, e-bike rebates, etc.], we should have spent it on bridge preservation.”</p>

Reddit	27,000 views 27 comments 101 upvotes	Very few comments are critical of WSDOT, many comments express general sadness about bridge closure. A few comments encourage others to take political action.
Instagram	2,900 likes 126 comments 342 shares	Mostly supportive and empathetic of WSDOT situation. Some alleging that the WSDOT/the state does not have the right priorities, but several people defend WSDOT. Several comments in the vein of, “you get what you voted for” – though this appears to be at both a local/state and national level.

^[1] Survey of social media comments on April 16, 2025.

Engagement Materials

This section shows examples of the materials used to share information with the public during the SR 165 Carbon River-Fairfax Bridge Planning Study. It includes visuals from the in-person and virtual presentations, in-person public events, the online open house, and public survey.

These materials were created to help people learn about the project and share their thoughts. They explain what the study is about, the current state of the bridge, and what changes might happen in the future.

By using clear visuals and simple messages, the displays helped start important conversations and collect helpful feedback from the community. Social media examples are shared in Figure C-3.

Figure 3. WSDOT Facebook post (left) and news release promoting Online Open House (right)

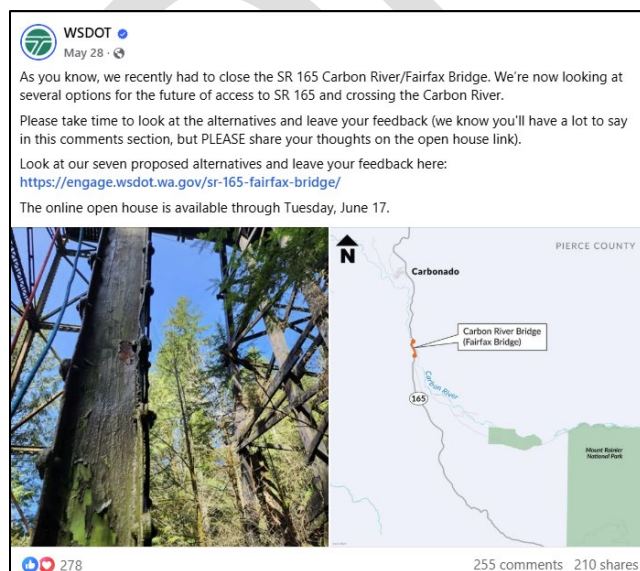
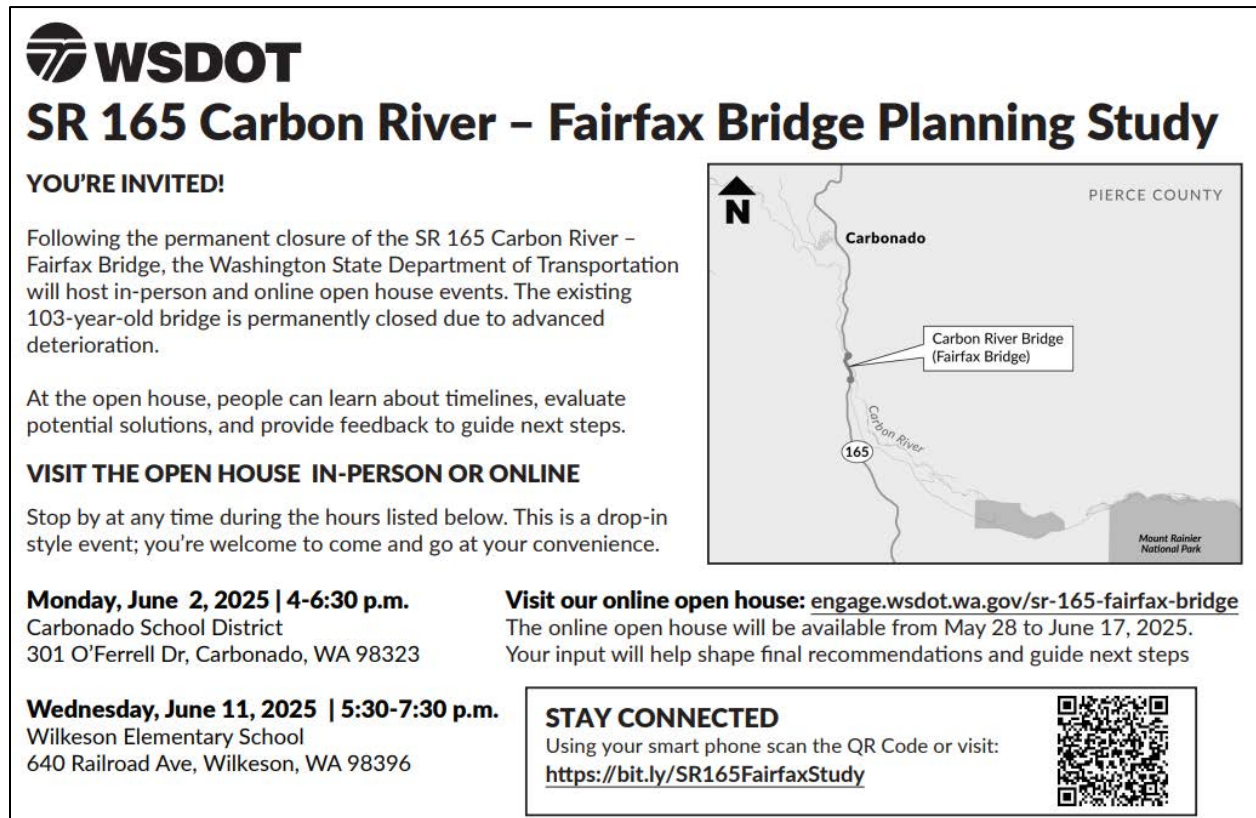


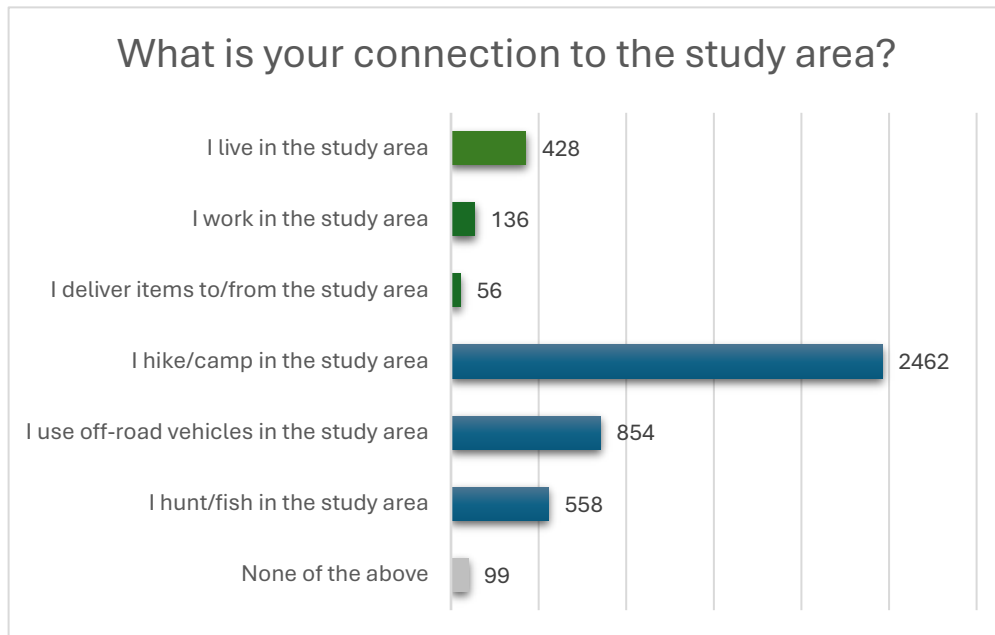
Figure 4. Image of postcard mailed to over 14,000 addresses in 5 zip codes



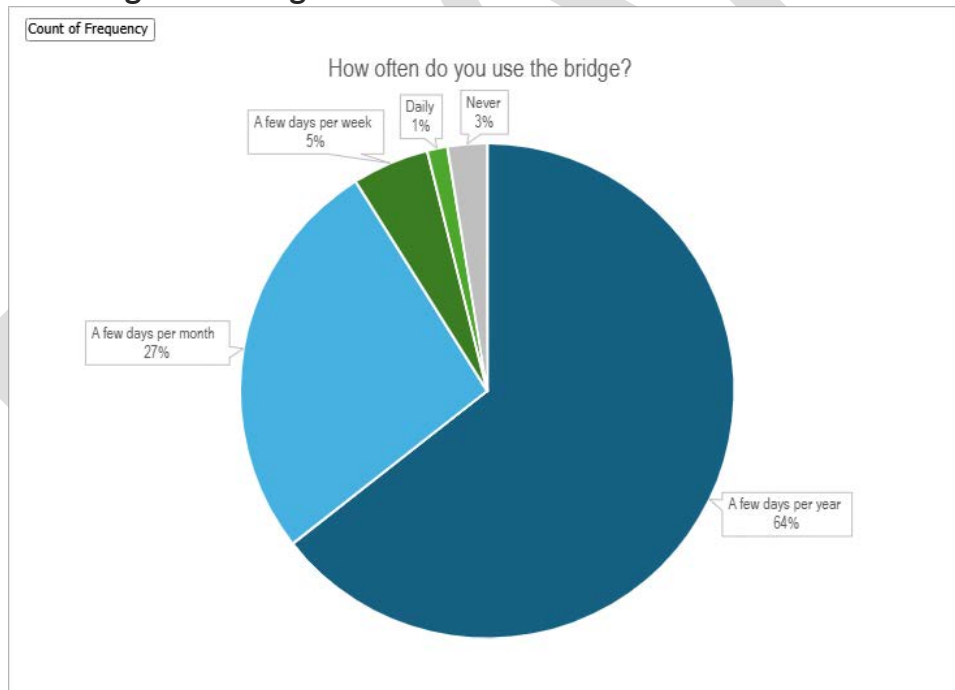
Survey Results

The survey given to in-person and online respondents included ranked choice, multiple choice and open-ended questions. Clear preferences and concerns emerged from the community responses.

1. What is your connection to the study area? Select all that apply.



2. Before the closure, how often were you traveling across the SR 165 Carbon River-Fairfax Bridge on average?



3. Alternative 1 – Maintain permanent bridge closure: This alternative would end SR 165 at Carbonado and provide no alternative route. The existing bridge would remain permanently closed and be removed. This is referred to as a no-build option. Do you have any feedback about this alternative?

The least favored option was Alternative 1, which maintained the permanent closure and included bridge removal without a replacement. Respondents were concerned about the loss of access to MRNP and the associated tourism that supports local businesses.

Community members expressed frustration with the current closure and what they perceived as deferred maintenance that led to the closure. They expressed additional frustration about the project timeline and lack of public access to a detour while the bridge is closed.

4. Bridge replacement in the same vicinity. Do you have any feedback about Alternative 2, 3, and 4?

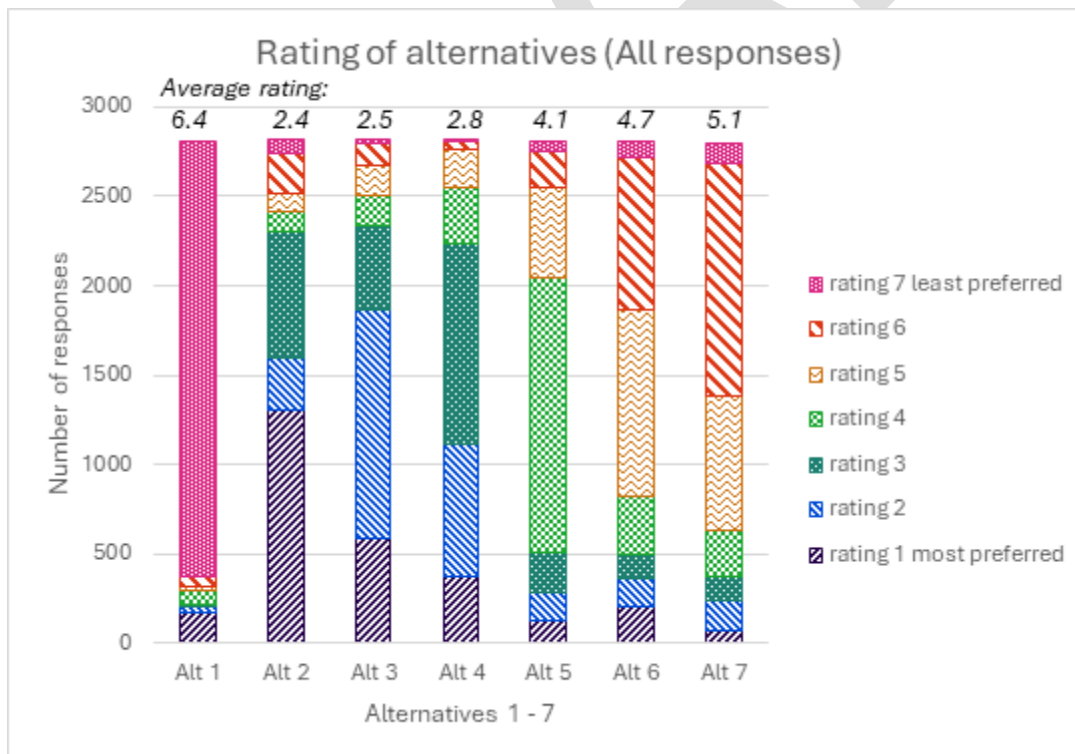
Public comments indicated Alternatives 2, 3, and 4 were favored due to their familiarity (replacing the bridge on or near the current alignment) and relatively low cost (Figure C-5).

5. Bridge replacement west or east of the current alignment. Do you have any feedback about Alternatives 5, 6, and 7?

Alternatives 5, 6, and 7 were favored relatively low because of high cost, lack of benefit to Wilkeson and Carbonado, and large environmental impacts.

6. What alternative do you prefer? Rank from most to least preferred. 1 = most preferred; 7 = least preferred.

Figure C-5. Ratings of All Alternatives



7. Is there anything else you would like to share?

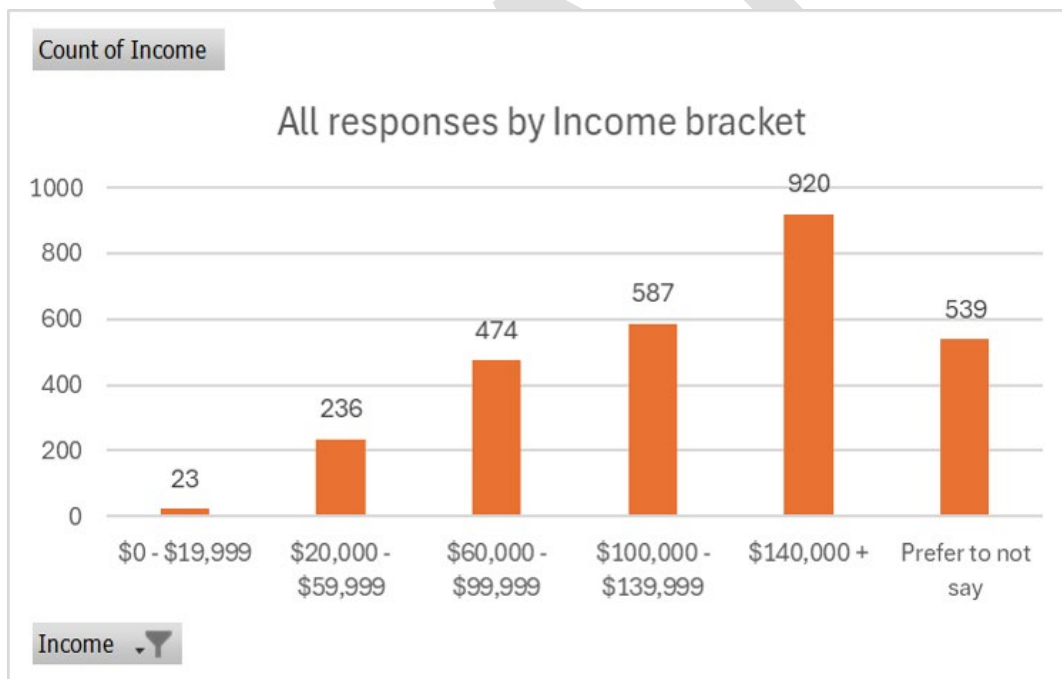
The community's preferences for the different alternatives were based on the following considerations:

- a. Access and connectivity
- b. Community impact
- c. Cost and efficiency
- d. Preservation and personal connections

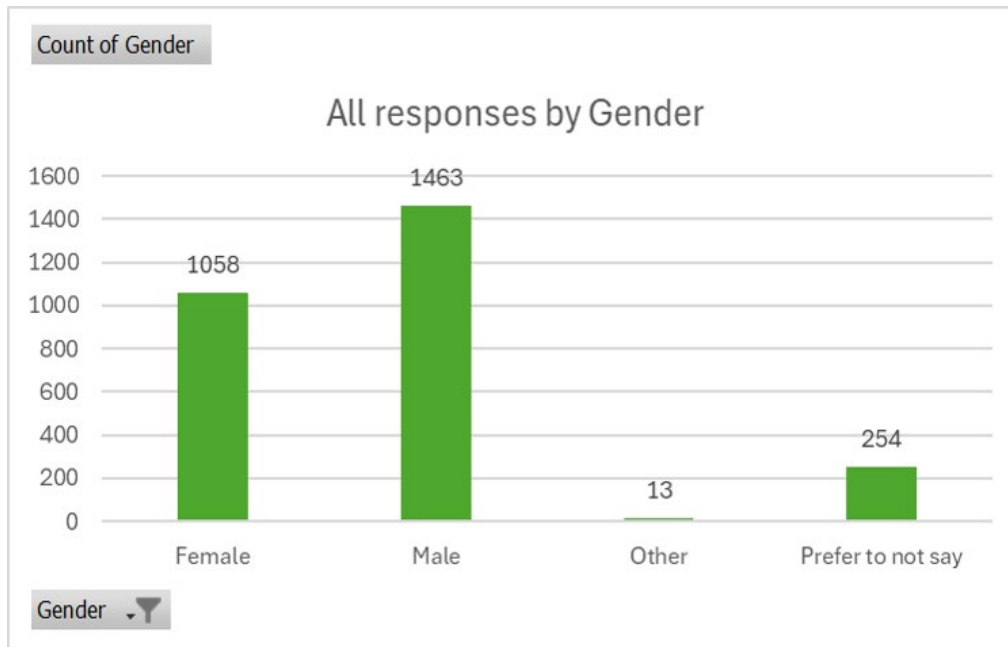
Demographics

The survey results revealed distinct patterns across income, gender, and age demographics.

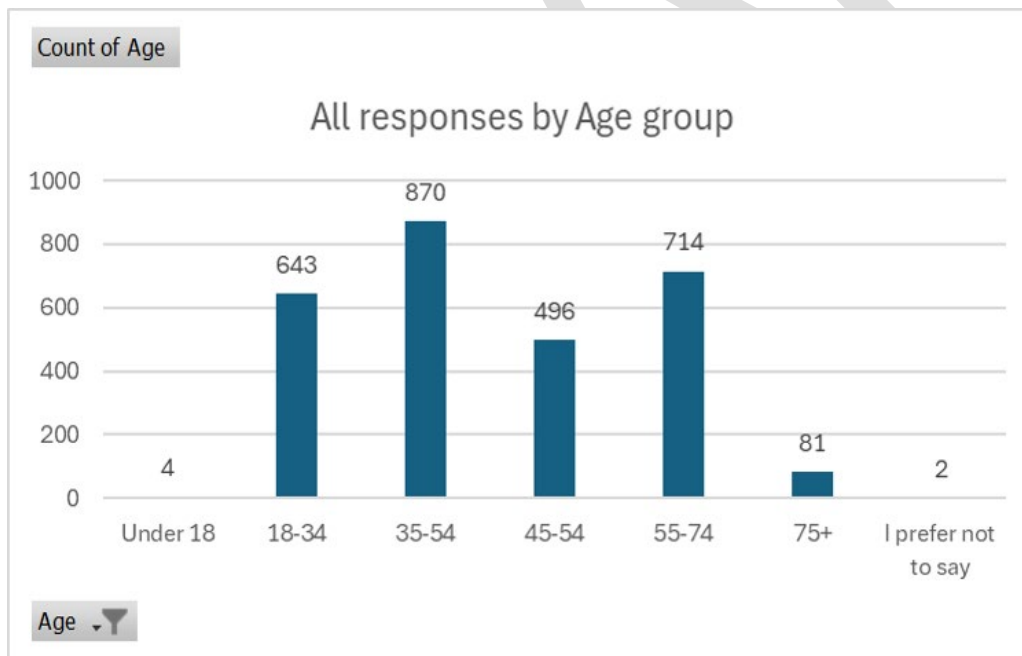
Most respondents fall into higher-income brackets, with the "\$140,000+" category leading at 920 responses, followed by "\$100,000 to \$139,999" with 587, and "Prefer to not say" with 539. Mid-range earners in the "\$60,000 to \$99,999" bracket contributed 474 responses, while lower-income groups such as "\$20,000 to \$59,999" and "\$0 to \$19,999" were less represented, with 236 and 23 responses respectively. This suggests a skew toward higher-income individuals among the survey participants.



Most responses came from male participants (1,463 or 53%), followed by female participants (1,058 39%). 13 respondents identified as "Other" or chose "Prefer to not say" (254), indicating there was representation from non-binary or undisclosed gender identities (10%).



The age distribution shows the highest engagement from the 35–54 age group (870 responses), followed by 55–74 (714) and 18–34 (643). Participation was significantly lower among the 75+ group (81) and Under 18 (4), with only 2 individuals opting not to disclose their age.



Overall, the data reflects a respondent pool that is predominantly middle-aged, male, and higher income. According to Census demographics, the communities of Carbonado and Wilkeson are wealthier compared to Pierce County, but there is not a gender skew or larger percentage of the population that is middle-aged compared to the county (*Study Area Context Technical Memo*).

Conclusion

The robust community response clearly shows that those who participated in the study favor alternatives that replace the Carbon River-Fairfax Bridge on or near the current alignment. This includes Alternatives 2, 3 and 4. Alternative 1, the no-build option, was almost universally dismissed by the public. WSDOT will use these findings, along with cost and constructability analyses, to determine a recommended path forward.

DRAFT

Attachment C-1. Example News Coverage

Rust and cracks close a bridge to Mount Rainier

 seattletimes.com/seattle-news/transportation/rust-and-cracks-close-a-bridge-to-mount-rainier/

April 15, 2025



TRAFFIC LAB

Traffic Lab is a Seattle Times project that digs into the region's transportation issues to explore the policies and politics that determine how we get around and how billions of dollars in public money are spent.

In the state's latest symptom of inadequate road maintenance, growing bridge cracks have caused an emergency shutdown of Highway 165 approaching Mount Rainier National Park.

The closure of the Carbon River Bridge, announced Monday, prevents public access to the park's Mowich Lake entrance, Carbon River Ranger Station, and several trails.

“There is no funding available to replace the bridge at this point. Years of deferred preservation work due to limited preservation funding resulted in the updated weight restrictions and now the indefinite closure,” the WSDOT announcement said.

Advertising

Full closures like this are rare, but 133 state bridges are already load-restricted, or limited to lightweight and emergency vehicles.

Highway 165 bridge closure approaching Mount Rainier

The state ordered an emergency shutdown of a Carbon River bridge, 3 miles south of the Pierce County town of Carbonado, on the way to Mount Rainier National Park.

Sources: Esri, Washington State Department of Transportation (Mark Nowlin / The Seattle Times)

For more than a decade, legislators budgeted only about half the estimated \$1 billion per year needed to keep the state’s highways and 3,385 bridges in good condition, even as Washington kept promises to expand, replace and add freeways led by the \$5.6 billion Highway 520 replacement.

As of June 2023, a total 315 state bridges were 80 years or older, and 47 steel bridges were overdue for painting. WSDOT also reported that as of June 2024, 29 bridges statewide need replacement and 33 others require rehabilitation.

“The longer these bridges are left in need of rehabilitation or replacement, the more likely it is that they will need to be load restricted, load posted, or closed,” state officials warned.

City and county bridges are aging as well: Notably, the Fishing Wars Memorial Bridge in Tacoma closed in 2023 after 96 years, when debris caked onto the bridge’s steel beams cast doubts about whether they are still structurally sound.

The closure of the Carbon River Bridge, announced Monday, prevents public access to the park’s Mowich Lake entrance, Carbon River Ranger Station, and several trails.

The damaged span, also known as the Fairfax Bridge, is 3 miles south of the town of Carbonado, approaching the mountain’s northwest slopes. It was built in 1921 to traverse a 494-foot-wide canyon.

Recent inspections found worsening damage, prompting the shutdown for all drivers and pedestrians indefinitely, according to a Washington State Department of Transportation notice issued Monday. Engineers will study the problem further.

Under far different circumstances, accelerating cracks in March 2020 forced Seattle to close the high-rise West Seattle concrete bridge for more than two years until it was reinforced by steel cables and carbon wrap. King County retired its sinking 79-year-old South Park drawbridge in 2010, until it could build a new bridge in 2014.

Carbon River is the only WSDOT bridge currently blocked because of structural decline, according to Evan Grimm, state bridge and structures engineer. Three others since 2015 have been closed, then repaired or replaced, he said.

The Carbon River Bridge rests upon a steel arch and vertical steel beams for its central span, with predominantly wood columns and crossbeams at either end of the canyon.

WSDOT previously reduced the load limit to 16,000 pounds last summer and changed its own snowplow fleet to comply, said spokesperson Cara Mitchell. The department also recommended replacing the bridge in 2015, 2020, and 2023. It did replace some wooden deck panels in 2024, Mitchell said, and twice suggested a repaint. Wooden timbers below road level are in good condition, she said.

Steel bridges are commonly preserved with new plates, bolts, and additional beams, while they're repainted, Grimm said. Six years ago in Seattle, a broken connection on the Aurora Bridge was restored by inserting a short piece of new I-beam.

It's not clear yet how, or whether, the Carbon River Bridge can be saved.



"The deterioration is more advanced and widespread than most steel rehabilitation situations," Grimm commented by e-mail. "The canyon it spans is particularly deep, and the slopes are steep, making access very difficult. Many of the rusted steel connections were built in a manner that makes them difficult to rebuild without fully disconnecting them, and that process would require the bridge to be supported independently during the reconstruction."

No detour

Local residents south of the bridge, along with loggers, propane delivery truckers, and emergency responders, are detouring through logging roads and a Pierce County bridge, which entails using keys to enter locked gates, Mitchell said.

No detour is available for park visitors, and the National Park Service confirmed that access is unavailable to several rainforest trails and Carbon Glacier, the thickest in the contiguous U.S. at 700 feet.

About 2,300 people visited the Carbon River area in April and May last year, but the road to Mowich typically isn't cleared of snow until July, said Terry Wildy, the park's chief of interpretation, education and volunteers.

As of Tuesday, the Nisqually entrance via Highway 706 to Longmire and Paradise is open, with drivers required to carry tire chains; Highway 123 (Cayuse Pass) and Highway 410 (Chinook Pass) remain closed for winter, along with their connected routes including Sunrise Road and Stevens Canyon Road, the park service's travel map says. Westside Road remains closed for the season.

Mike Lindblom: 206-515-5631 or mlindblom@seattletimes.com. Mike Lindblom covers transportation for The Seattle Times.



Attachment C-2. PowerPoint Presentation

SR 165 Carbon River – Fairfax Bridge Planning Study

Update: May 8, 2025



DRY

Background and overview



APRIL 2025

SR 165 Carbon River (Fairfax) Bridge

BRIDGE CLOSURE

On Monday, April 14, the Washington State Department of Transportation closed the bridge to all vehicle, pedestrian and bicycle traffic. Recent inspections of the bridge revealed new deterioration of steel supports of the more than century-old span.

The bridge provided access to several hiking trails in Mount Rainier National Park including the 93-mile-long Wonderland Trail, campgrounds and ORV parks.

Average daily traffic volumes from 2022 showed less than 300 vehicles a day used the bridge.

The bridge opened to travelers in 1921. The bridge was load rated in 2009, 2013 and 2024.

EMERGENCY ACCESS

From Aug. to Dec. 2024, WSDOT worked with private property owners to create an emergency access detour route for first responders and property owners south of the bridge.

This route is a single lane gravel road, located on private property. The route is gated and not open to general purpose traffic.

Since the April 14 closure, this route is being used



This steel support column on the bridge is bent in two directions and is starting to buckle. This compromises the column's ability to carry weight from above.



The SR 165 Carbon River Fairfax Bridge is a steel truss bridge supported by a lattice work of steel beams and columns. This recent aerial shows the rusting areas on the steel truss portions underneath the bridge deck.

NEXT STEPS

A planning study is underway to evaluate options to address the bridge condition.

- A no-build option (permanent road closure)
- Bridge replacement in the same vicinity
- Re-routing SR 165 on a new alignment to the east or west of the canyon



Background and overview

• Why we're studying the bridge

- On April 22, the Washington State Department of Transportation permanently closed the 103-year-old State Route 165 Carbon River/Fairfax Bridge to all users. Recent inspections of the bridge revealed advanced deterioration of steel supports across the bridge.
- Closing the bridge removed public access from SR 165 to recreational areas including Mount Rainier National Park and U.S. Forest Service land.
- Property owners south of the bridge are now using a gated, one-lane gravel logging road to access their properties.

• What this study will do

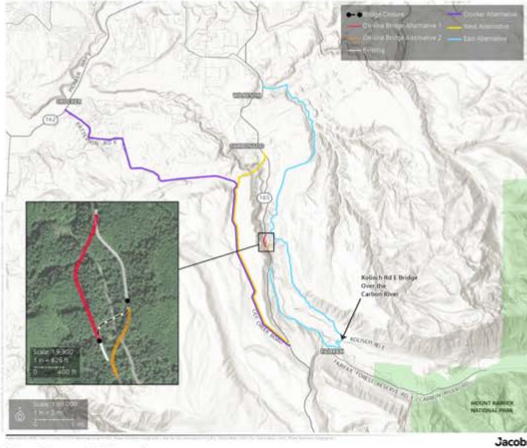
- The study will evaluate and explore potential options that include:
 - Keeping the bridge closed and not replacing it, which is referred to as a no-build option.
 - Bridge replacement in the same vicinity.
 - Re-routing SR 165 on a new alignment to the east or west of Carbon River Canyon.

• Working together

- WSDOT will work closely with local community members, agency partners, state and federal leaders and recreationists to understand their priorities and identify feasible options for the future of the bridge.



SR 165 Carbon River – Fairfax Bridge current alternatives



Map of current alternatives.

Alternatives:

1. **Continue permanent bridge closure (black)**
 - End SR 165 at the existing bridge (MP 11.5)
2. **Replace bridge at existing location**
 - Fairfax bridge over carbon river at MP 11.5
3. **On-line bridge replacement north of existing location (red)**
 - New bridge north of existing
 - Requires rock cuts and retaining walls
4. **On-line bridge replacement south of existing location (orange)**
 - New shorter bridge south of existing
 - Access and soil constraints
5. **West alternative alignment, new bridge location (yellow)**
 - New high bridge near Carbonado
 - Road upgrades through Private Timber
6. **West alternative alignment from SR 162, no bridge (purple)**
 - SR 162 to SR 165 via Crocker
 - Existing roads through Private Timber
 - No new bridge needed over the Carbon River
7. **East alternative alignment, new bridge location (teal)**
 - Existing detour route through Fruit Growers
 - Requires upgraded or new County Road bridge



Community outreach

- **Past community outreach**
 - Bridge closure public meeting – April 22, at the Wilkeson Town Hall
- **Upcoming community outreach**
 - Online open house launch – TBD (likely May 28)
 - In-person open house – TBD (likely June 2)



Steve Roark, Regional Administrator for the Olympic Region, addresses community members at the Wilkeson Town Hall.



Attachment C-3. Online Open House Screenshots



[Online open houses \(/\)](#) SR 165 Carbon River – Fairfax Bridge Planning Study

SR 165 Carbon River – Fairfax Bridge Planning Study

Welcome!

WSDOT has begun a planning study to explore options for addressing the condition of the SR 165 Carbon River-Fairfax Bridge and providing access across the Carbon River. The planning study evaluates tradeoffs of different options. We know this is an important issue, and here's why we're doing this.

On Tuesday, April 22, WSDOT permanently closed (<https://wsdot.wa.gov/about/news/2025/103-year-old-sr-165-carbon-river-fairfax-bridge-permanently-closed>) the SR 165 Carbon River-Fairfax Bridge to all vehicle and pedestrian traffic. Preliminary findings from recent inspections of the bridge revealed new deterioration of steel supports (<https://www.flickr.com/photos/wsdot/albums/72177720325129239/>) of the more than century-old span.





The SR 165 Carbon River-Fairfax Bridge is a steel truss bridge supported by a lattice work of steel beams and columns. In this recent aerial image, rusting areas on the steel truss portions of the bridge are visible underneath the bridge deck.

Feedback opportunities

We want to know what you think of the proposed alternatives presented in this open house. We will accept [feedback \(https://engage.wsdot.wa.gov/sr-165-fairfax-bridge/feedback/\)](https://engage.wsdot.wa.gov/sr-165-fairfax-bridge/feedback/) through Tuesday, June 17, at which point the online open house will close.

For more information about the planning study, visit our webpage: [bit.ly/SR165FairfaxStudy \(https://wsdot.wa.gov/construction-planning/search-studies/sr-165-carbon-river-fairfax-bridge-planning-study\)](https://wsdot.wa.gov/construction-planning/search-studies/sr-165-carbon-river-fairfax-bridge-planning-study).

In-person open houses

If you would like to provide feedback in person, join us at one of our upcoming in-person open houses:

- **Monday, June 2, 2025 | 4-6:30 p.m.**
Carbonado School District
301 O'Ferrell Dr, Carbonado, WA 98323

- **Wednesday, June 11, 2025 | 5:30-7:30 p.m.**
Wilkeson Elementary School
640 Railroad Ave, Wilkeson, WA 98396

These are drop-in style events; you are welcome to come and go at your convenience. The content of the in-person open houses will be the same as this online format, but you will also be able to speak with the project team and ask questions. This study is funded through \$1.5 million in state funding. No funding has been identified for right-of-way, design or construction.


DRAFT



This steel support column on the SR 165 Carbon River-Fairfax Bridge shows signs of advanced deterioration. Specifically, there is visible deformation from compression, which can lead to bridge failure. It's akin to an aluminum pop can. The pop can is strong when the side is not bent or damaged.

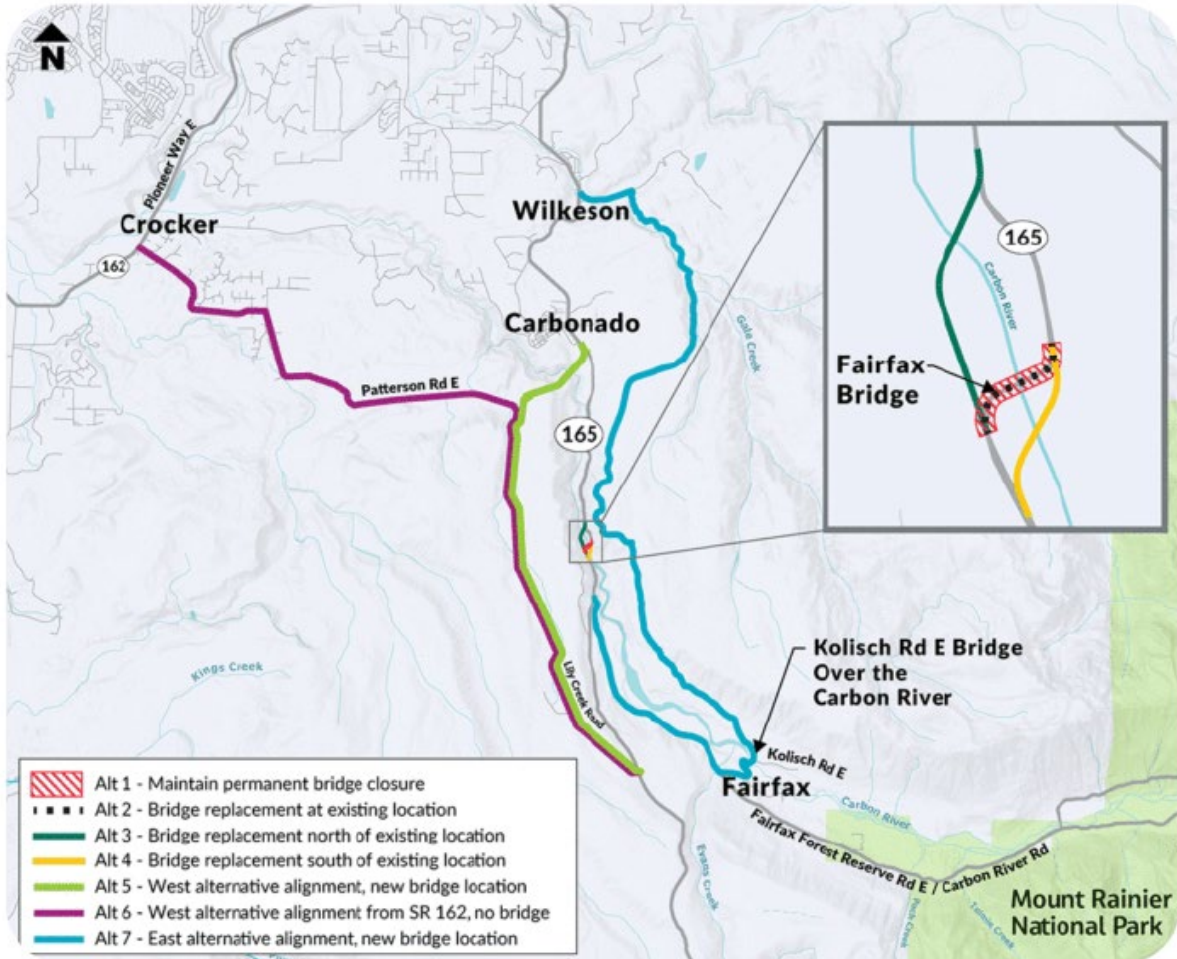
This photo illustrates the waves and curves (right side) which show the damage to the bridge.

Timeline

- 
- The bridge opened to travelers on December 17, 1921.
 - **April 2009**
Loads exceeding 12 feet wide were prohibited.
 - **May 2013**
The bridge had the following truck restriction implemented:
 - Truck-25 Tons.
 - Truck/Semitrailer-36 Tons.
 - Truck/Trailer-40 Tons.
 - Single axle not to exceed 20,000 lbs and Tandem axles not to exceed 34,000 lbs.
 - **July 26, 2024**
The SR 165 Carbon River-Fairfax Bridge weight restriction is updated to 8 tons/16,000 pounds.
 - **April 22, 2025**
SR 165/Fairfax Bridge is permanently closed after advanced deterioration was discovered during an inspection.
 - **June 2, 2025**
In-person open house opportunity in Carbonado.
 - **June 11, 2025**
In-person open house opportunity in Wilkeson.
 - **June 17, 2025**
Online open house closes and WSDOT incorporates public feedback into analysis.



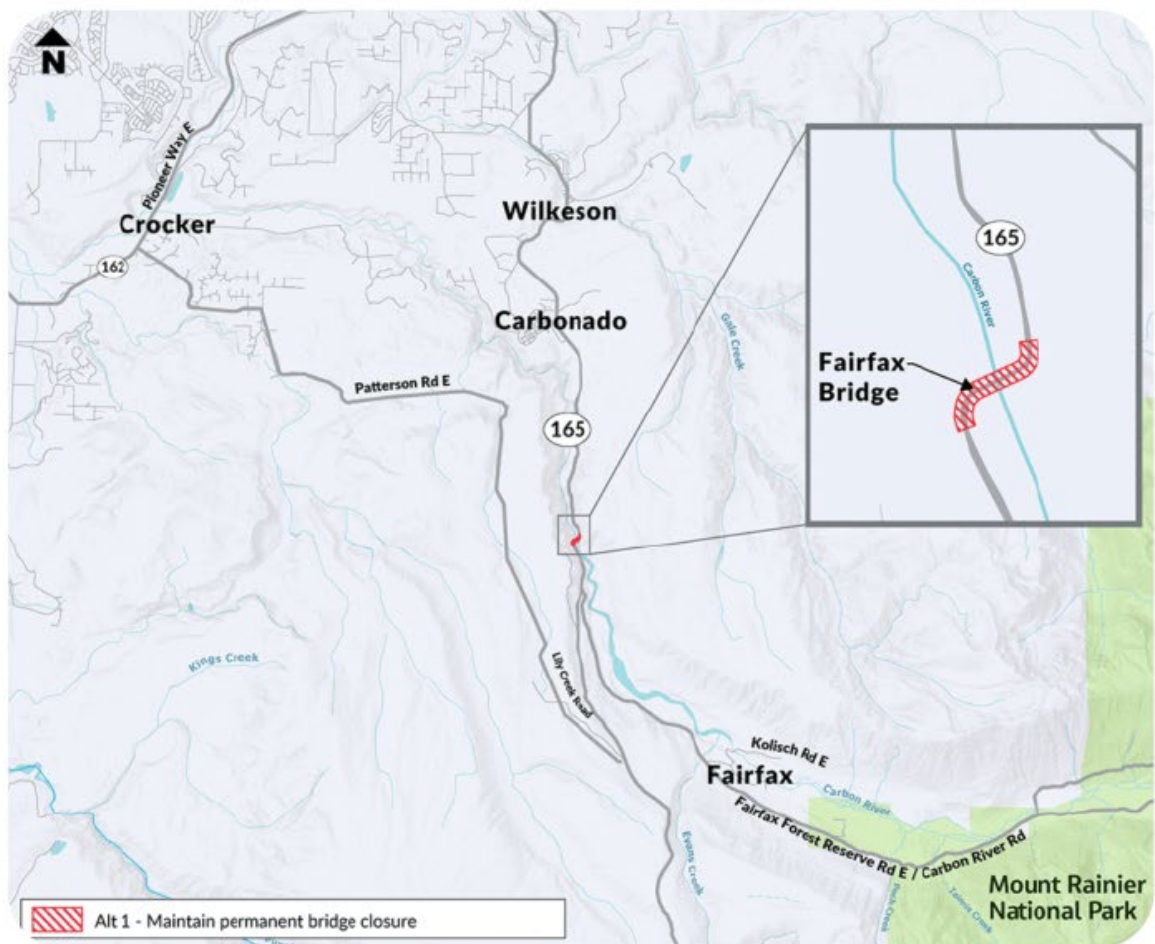
Alternatives



WSDOT is evaluating each of the following alternatives. When reviewing each alternative, please focus on the location and the other listed details. Each alternative will have 2-way traffic on roadways and bridges, with two 12-foot lanes and two 5-foot shoulders. Cost and timeline items marked with an * indicate this is an initial WSDOT estimate and subject to change.

- Alternative 1 – Maintain permanent bridge closure
- Alternative 2 – Bridge replacement at existing location
- Alternative 3 – Bridge replacement north of existing location
- Alternative 4 – Bridge replacement south of existing location
- Alternative 5 – West alternative alignment, new bridge location near Carbonado
- Alternative 6 – West alternative alignment from SR 162, no bridge
- Alternative 7 – East alternative alignment, new bridge location

Maintain permanent bridge closure (Alternative 1)



Alternative 1 – Maintain permanent bridge closure

The existing bridge would remain closed to all users with a dead end in Carbonado. With this no-build option, the bridge would be removed. This work would take about *three years to complete once funding is received.

Approximate cost: *\$35M-50M+

Key considerations:

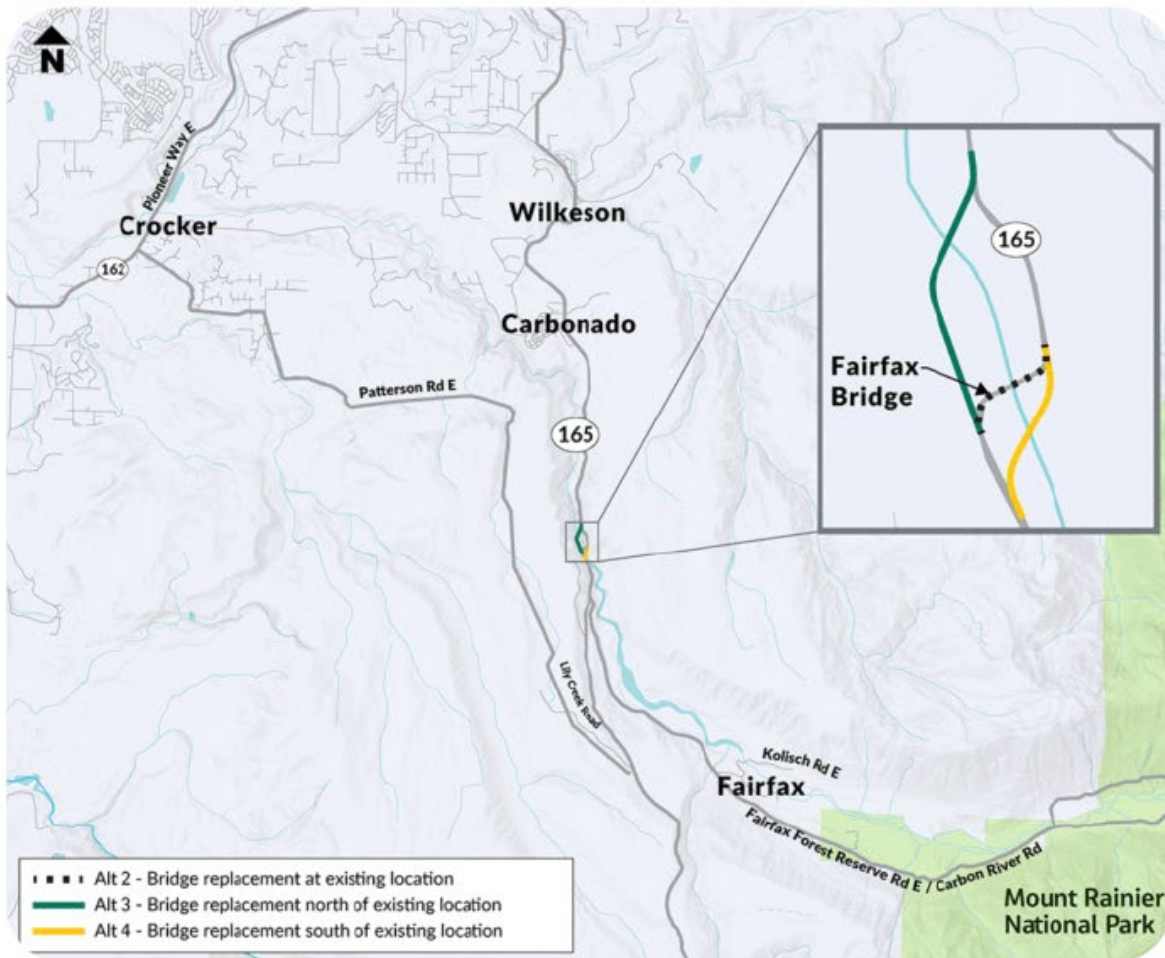
- Closes SR 165 south of Carbonado.
- Removes existing bridge.

Be sure to share your thoughts on this alternative on the [feedback page](https://engage.wsdot.wa.gov/sr-165-fairfax-bridge/feedback) (<https://engage.wsdot.wa.gov/sr-165-fairfax-bridge/feedback>).

**Initial WSDOT estimate, subject to change*

Bridge replacement in the same vicinity (Alternatives 2-4)

OK



Alternative 2 – Bridge replacement at existing location

A new bridge would be built at the existing bridge location. This would first require the existing structure to be removed. This alternative would take *six years from receiving funding and would include removal of the bridge, design, permitting and construction.

Approximate cost: *\$80M-130M

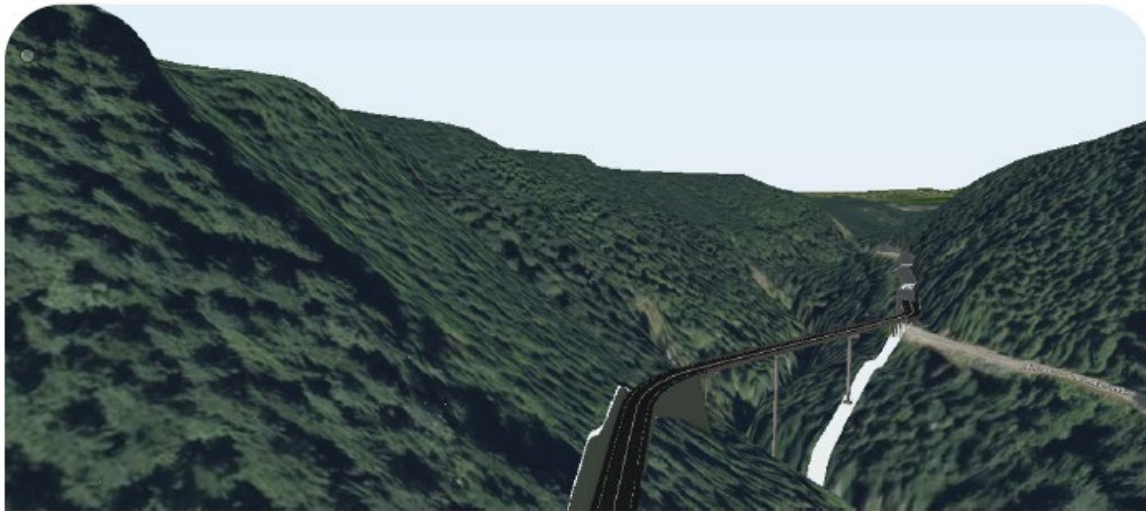
Key considerations:

- Removes the existing bridge first.
- Difficult construction access.

Alternative 3 – Bridge replacement north of existing location

A new bridge would be built north of the existing bridge and would require a realignment of approximately a half mile of SR 165. This alternative would take about *six years from receiving funding and would include removal of the bridge, design, right-of-way, permitting, and construction.

Approximate cost: *\$60M-100M



Preliminary concept of bridge replacement north of the existing bridge, looking north

Key considerations:

- A new 650-foot bridge needed.
- Approximately a half mile of retaining wall and rock cuts needed.
- Difficult construction access.

Alternative 4 – Bridge replacement south of existing location

A new bridge would be built south of the existing bridge and would require a minor realignment of SR 165. This alternative would take *six years from receiving funding and would include removal of the existing bridge, design, right-of-way, permitting, and construction.

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Approximate cost: *\$60M-100M



Preliminary concept of bridge replacement south of the existing bridge, looking north

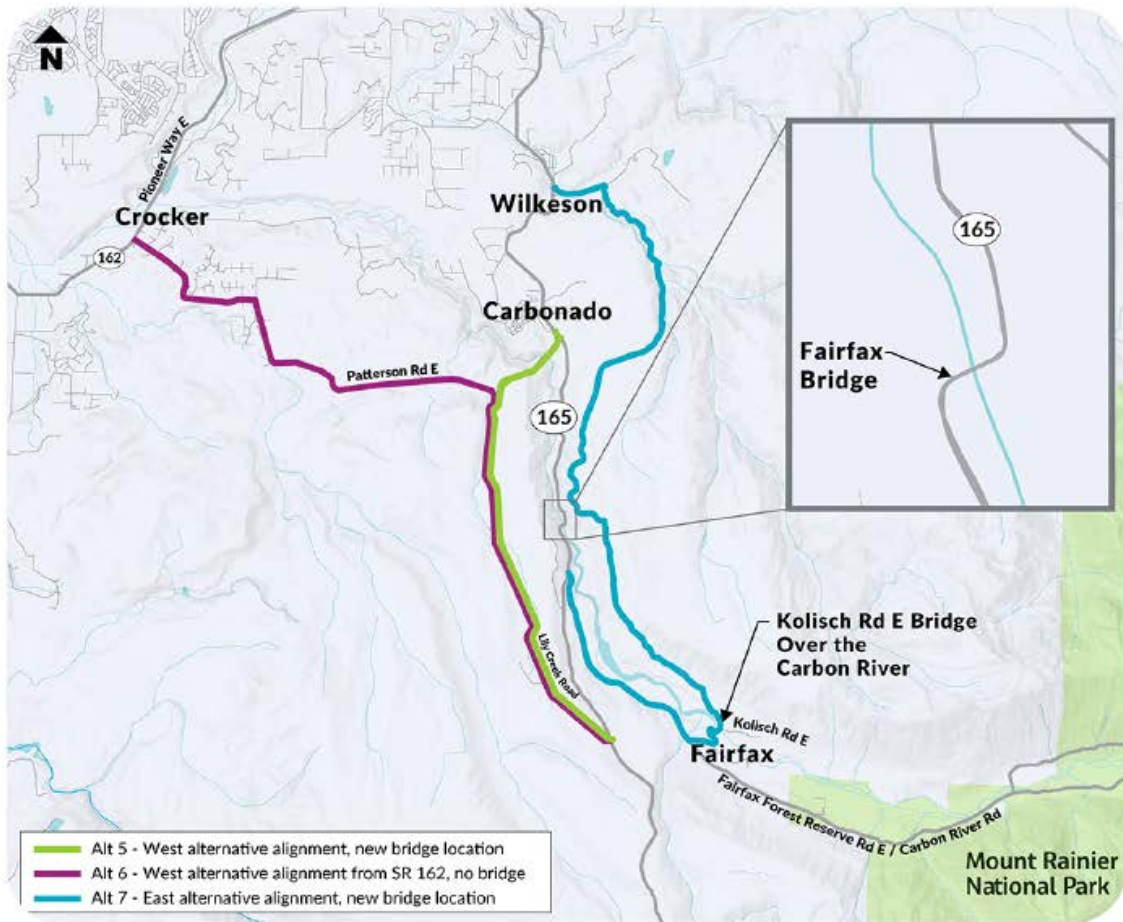
Key considerations:

- A new 650-foot bridge needed.
- Retaining walls and rock cuts needed for bridge approaches.
- Difficult construction access.

Be sure to share your thoughts on these alternatives on the [feedback page](https://engage.wsdot.wa.gov/sr-165-fairfax-bridge/feedback) (<https://engage.wsdot.wa.gov/sr-165-fairfax-bridge/feedback>).

**Initial WSDOT estimate, subject to change.*

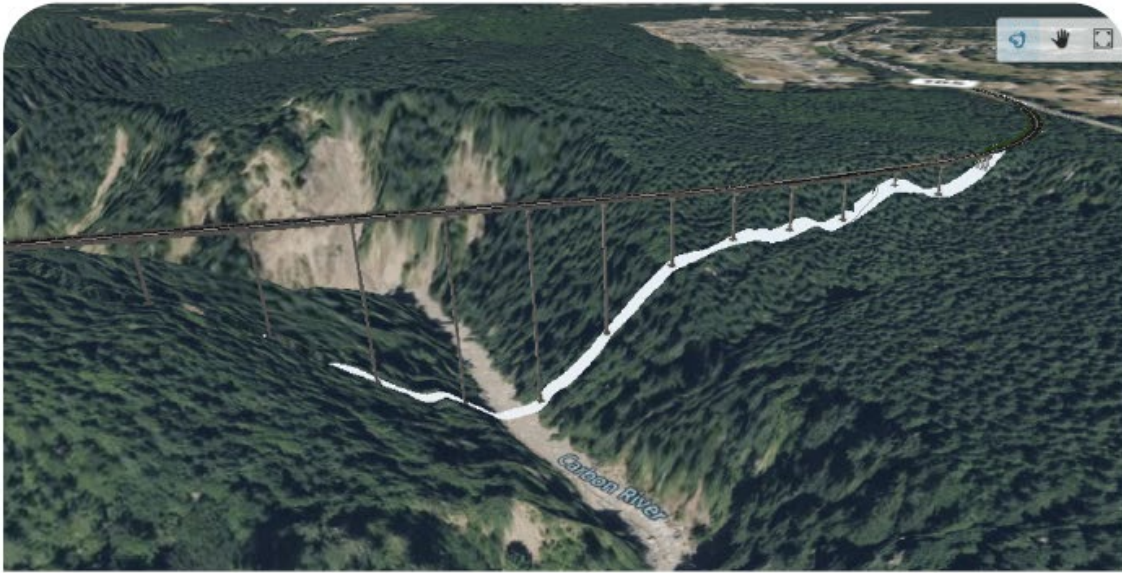
Re-route SR 165 on a new alignment to the east or west of Carbon River Canyon (Alternatives 5-7)



Alternative 5 – West alternative alignment, new bridge location near Carbonado

SR 165 would be realigned to the south of Carbonado beginning near Wilkeson-Carbonado Road. A new bridge would be built spanning the Carbon River south of Carbonado. West of the Carbon River, the new alignment would follow Lilly Creek and reconnect to the existing SR 165 alignment near Lilly Creek Road East. This alternative would take approximately *five years from receiving funding and would include removal of the existing bridge, design, right-of-way, permitting, and construction.

Approximate cost: *\$465M-785M



Preliminary concept of West Bypass alternative bridge, south of Carbonado

Key considerations:

- Approximately 1,400-foot bridge needed to cross the Carbon River.
- Five miles of new roadway construction.
- Steep topography requires large areas of rock cuts, retaining walls, and fill.
- Right-of-way needed.
- Difficult construction access.

Alternative 6 – West alternative alignment from SR 162, no bridge

SR 165 would be realigned to connect with SR 162 near Crocker and would not require a new bridge over the Carbon River. The new alignment would follow Lilly Creek and connect to the existing SR 165 alignment near Lilly Creek Road East. This alternative would take approximately *seven years from receiving funding and would include removal of the existing bridge, design, right-of-way, permitting, and construction.

Approximate cost: *\$440M-735M



Preliminary concept of SR 162 bypass alternative

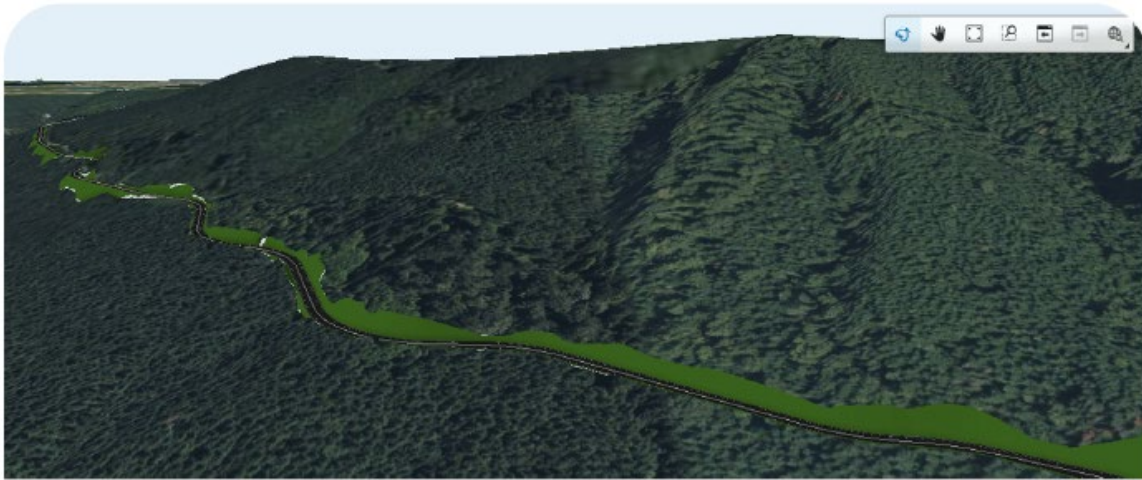
Key considerations:

- Approximately 11 miles of new roadway construction.
- Steep topography requires large areas of rock cuts, retaining walls, and fill.
- Right-of-way needed.
- Difficult construction access.

Alternative 7 – East alternative alignment, new bridge location

SR 165 would be realigned along the limited access route east of Wilkeson and Carbonado. It would reconnect to the existing SR 165 south of the current Fairfax Bridge. It would upgrade 12 miles of road to highway standards and include a new or upgraded Kolisch Road bridge over the Carbon River. This alternative would take about *six years from receiving funding and would include removal of the existing bridge, design, right-of-way, permitting, and construction

Approximate cost: *\$375M-610M



Preliminary concept of using current detour alignment

Key considerations:

- Approximately 12 miles of new roadway construction.
- Steep topography requires large areas of rock cuts, walls, and fill.
- Two new bridges needed, Kolisch Road and Wilkeson Creek.
- Right-of-way needed.
- Difficult construction access.

Be sure to share your thoughts on these alternatives on the [feedback page](https://engage.wsdot.wa.gov/sr-165-fairfax-bridge/feedback) (<https://engage.wsdot.wa.gov/sr-165-fairfax-bridge/feedback>).

**Initial WSDOT estimate, subject to change*



Share your feedback

Tell us about yourself and how you use SR 165 Carbon River-Fairfax Bridge:

What is your connection to the study area? Select all that apply

- ☐ I live in the study area
- ☐ I work in the study area
- ☐ I use off-road vehicles in the study area
- ☐ I hunt/fish in the study area
- ☐ I hike/camp in the study area
- ☐ I deliver items to/from the study area
- ☐ None of the above

Before the closure, how often were you traveling across the SR 165 Carbon River-Fairfax Bridge on average?

- ☐ Daily
- ☐ A few days per week
- ☐ A few days per month
- ☐ A few days per year
- ☐ Never



Share your feedback

Tell us about yourself and how you use SR 165 Carbon River-Fairfax Bridge:

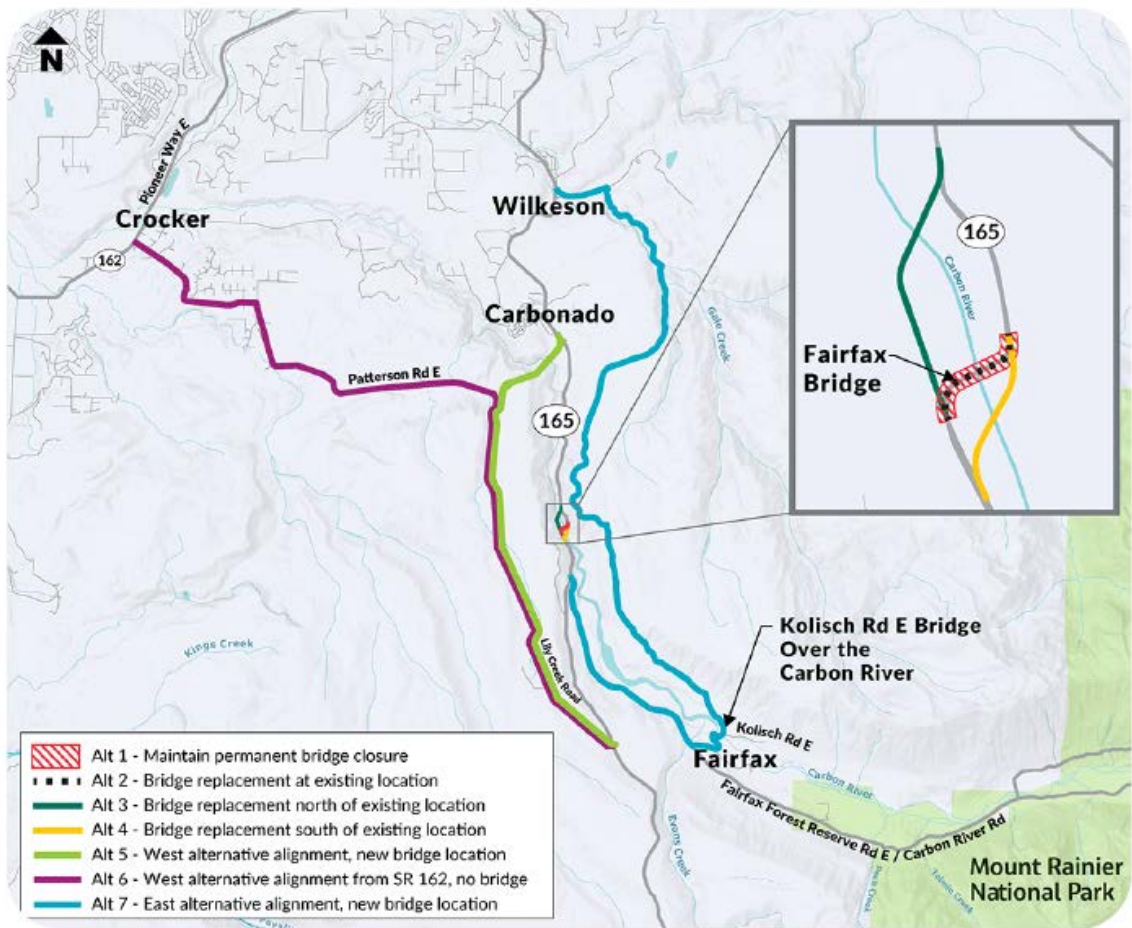
What is your connection to the study area? Select all that apply

- ☐ I live in the study area
- ☐ I work in the study area
- ☐ I use off-road vehicles in the study area
- ☐ I hunt/fish in the study area
- ☐ I hike/camp in the study area
- ☐ I deliver items to/from the study area
- ☐ None of the above

Before the closure, how often were you traveling across the SR 165 Carbon River-Fairfax Bridge on average?

- ☐ Daily
- ☐ A few days per week
- ☐ A few days per month
- ☐ A few days per year
- ☐ Never

WSDOT has developed seven SR 165 Carbon River-Fairfax bridge alternatives. They are illustrated on the map with different colors and described below.



Alternative 1 – Maintain permanent bridge closure: This alternative would end SR 165 at Carbonado and provide no alternative route. The existing bridge would remain permanently closed and be removed. This is referred to as a no-build option.

[Review this option \(https://engage.wsdot.wa.gov/sr-165-fairfax-bridge/alternatives/#accordion-1\)](https://engage.wsdot.wa.gov/sr-165-fairfax-bridge/alternatives/#accordion-1)

Do you have any feedback about this alternative?

Bridge replacement in the same vicinity

Alternative 2 - Bridge replacement at existing location: This alternative is shown as a black dashed line on the map. It will construct a new bridge on SR 165 at the existing bridge location.

Alternative 3 - Bridge replacement north of existing location: This alternative is shown as a dark green line on the map. It will construct a new bridge on SR 165 north of the existing bridge.

Alternative 4 - Bridge replacement south of existing location: This alternative is shown as a yellow line on the map. It will construct a new bridge on SR 165 south of the existing bridge.

[Review this option \(https://engage.wsdot.wa.gov/sr-165-fairfax-bridge/alternatives/#accordion-2\)](https://engage.wsdot.wa.gov/sr-165-fairfax-bridge/alternatives/#accordion-2)

Do you have any feedback about these alternatives?



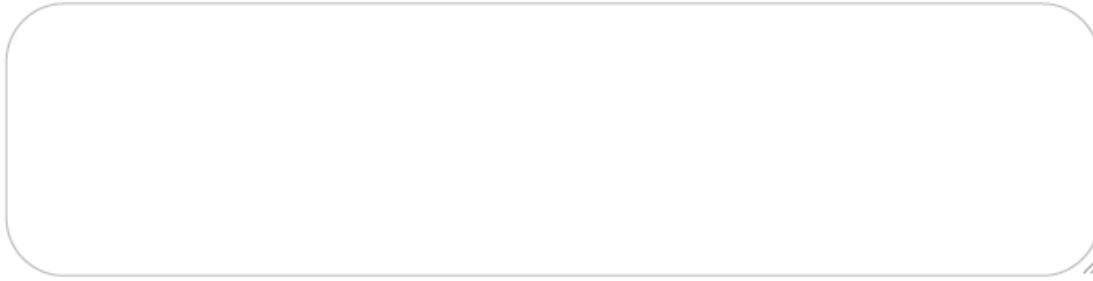
Re-route SR 165 on a new alignment to the east or west of Carbon River Canyon

Alternative 5 - West alternative alignment, new bridge location near Carbonado: This alternative is shown as a light green line on the map. It will realign SR 165 and create a new bridge near Carbonado.

Alternative 6 - West alternative alignment from SR 162, no bridge: This alternative is shown as a purple line on the map above. It will realign SR 165 from SR 162 near Crocker. No new bridge over the Carbon River is needed.

Alternative 7 - East alternative alignment, new bridge location: This alternative will realign SR 165 along the limited access route east of Wilkeson and Carbonado, upgrade it to highway standards, and construct a new Kolisch Road bridge over the Carbon River.

Do you have any feedback about these alternatives?



What alternative do you prefer? Rank from most to least preferred. 1 = most preferred; 7 = least preferred. Please use each value (1 through 7) only once

- | | |
|--------------------------------|--|
| <input type="text" value="0"/> | Alternative 1 – Maintain permanent bridge closure |
| <input type="text" value="0"/> | Alternative 2 – Bridge replacement at existing location |
| <input type="text" value="0"/> | Alternative 3 – Bridge replacement north of existing location |
| <input type="text" value="0"/> | Alternative 4 – Bridge replacement south of existing location |
| <input type="text" value="0"/> | Alternative 5 – West alternative alignment, new bridge location near Carbonado |
| <input type="text" value="0"/> | Alternative 6 – West alternative alignment from SR 162, no bridge |
| <input type="text" value="0"/> | Alternative 7 – East alternative alignment, new bridge location |

Demographics

This data will remain anonymous. It helps WSDOT understand if it reached people that are roughly representative of the study area.

DRAFT

What is your home zip code?

Your ZIP code

What is your age?

- ☐ Under 18
- ☐ 18-34
- ☐ 35-54
- ☐ 45-54
- ☐ 55-74
- ☐ 75+

How do you identify? (select all that apply)

- ☐ White
- ☐ Black or African American
- ☐ Hispanic or Latino/a/x
- ☐ Asian or Asian American
- ☐ American Indian
- ☐ Native Hawaiian or Polynesian
- ☐ Two or more races
- ☐ Other (Please tell us more, not required)
- ☐ I prefer to not say

Gender

- ☐ Male
- ☐ Female
- ☐ Other (Please tell us more, not required)
- ☐ I prefer to not say

What is your total household income for 2024, before taxes?

- ☐ \$0 – \$19,999
- ☐ \$20,000 – \$59,999
- ☐ \$60,000 – \$99,999
- ☐ \$100,000 – \$139,999
- ☐ \$140,000 +
- ☐ I prefer to not say

Is there anything else you would like to share?

Thank you for visiting our open house!

Human verification

+ 2 = 5

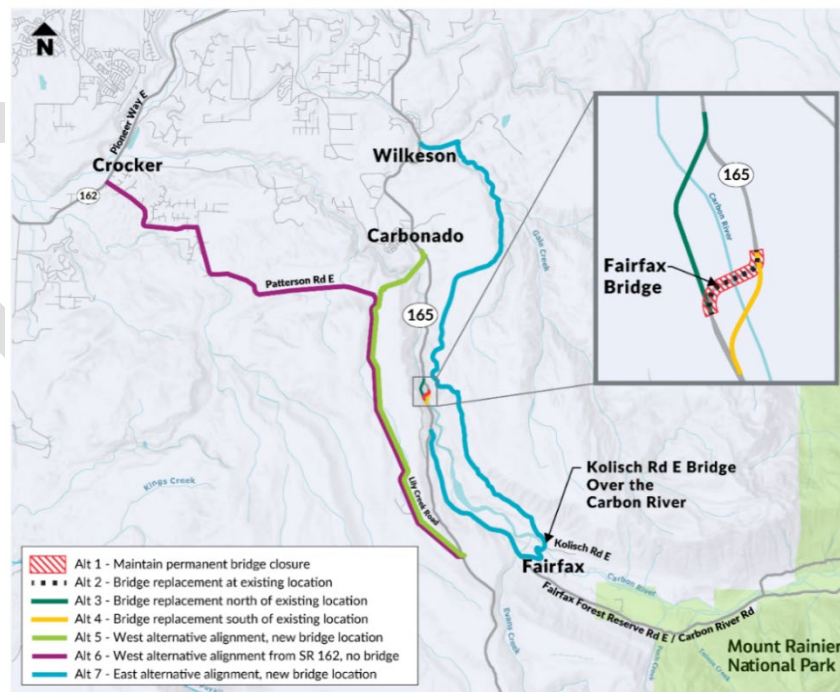
Attachment C-4. Survey Handout

The Washington State Department of Transportation (WSDOT) has begun a planning study to explore options for addressing the condition of the SR 165 Carbon River-Fairfax Bridge and providing access across the Carbon River. The planning study evaluates tradeoffs of different options. We know this is an important issue, and here's why we're doing this. Your input will help us evaluate solutions. This survey should take approximately **7-10 minutes**.

Tell us about yourself and how you use SR 165 Carbon River-Fairfax Bridge:

2. What is your connection to the study area? Select all that apply.
 - a. I live in the study area
 - b. I work in the study area
 - c. I use off-road vehicles in the study area
 - d. I hunt/fish in the study area
 - e. I hike/camp in the study area
 - f. I deliver items to/from the study area
 - g. None of the above
3. Before the closure, how often were you traveling across the SR 165 Carbon River-Fairfax Bridge on average?
 - a. Daily
 - b. A few days per week
 - c. A few days per month
 - d. A few days per year
 - e. Never

WSDOT has developed seven SR 165 Carbon River-Fairfax bridge alternatives. They are illustrated on the map with different colors and described below.



4. **Alternative 1 – Maintain permanent bridge closure:** This alternative would end SR 165 at Carbonado and provide no alternative route. The existing bridge would remain permanently closed and be removed. This is referred to as a no-build option.

Do you have any feedback about this alternative?

Bridge replacement in the same vicinity

5. **Alternative 2 – Bridge replacement at existing location:** This alternative is shown as a black dashed line on the map. It will construct a new bridge on SR 165 at the existing bridge location.

Alternative 3 – Bridge replacement north of existing location: This alternative is shown as a dark green line on the map. It will construct a new bridge on SR 165 north of the existing bridge.

Alternative 4 – Bridge replacement south of existing location: This alternative is shown as a yellow line on the map. It will construct a new bridge on SR 165 south of the existing bridge.

Do you have any feedback about these alternatives?

Re-route SR 165 on a new alignment to the east or west of Carbon River Canyon.

6. **Alternative 5 – West alternative alignment, new bridge location near Carbonado:** This alternative is shown as a light green line on the map. It will realign SR 165 and create a new bridge near Carbonado.

Alternative 6 – West alternative alignment from SR 162, no bridge: This alternative is shown as a purple line on the map above. It will realign SR 165 from SR 162 near Crocker. No new bridge over the Carbon River is needed.

Alternative 7 – East alternative alignment, new bridge location: This alternative is shown as a blue line on the map above. SR 165 would be realigned along the limited access route east of Wilkeson and Carbonado. It would reconnect to the existing SR 165 south of the current Fairfax Bridge. It would upgrade 12 miles of road to highway standards and include a new or upgraded Kolisch Road bridge over the Carbon River.

Do you have any feedback about these alternatives?

7. What alternative do you prefer? Rank from most to least preferred. *1 = most preferred; 7 = least preferred.* Please use each value (1 through 7) only once.

___ Alternative 1 – Maintain permanent bridge closure

___ Alternative 2 – Bridge replacement at existing location

___ Alternative 3 – Bridge replacement north of existing location

___ Alternative 4 – Bridge replacement south of existing location

___ Alternative 5 – West alternative alignment, new bridge location near Carbonado

- ___ Alternative 6 – West alternative alignment from SR 162, no bridge
___ Alternative 7 – East alternative alignment, new bridge location

Demographics – This data will remain anonymous. It helps WSDOT understand if it reached people that are roughly representative of the study area.

1. What is your home zip code? _____
2. What is your age?
 - a. Under 18
 - b. 18-34
 - c. 35-54
 - d. 55-74
 - e. 75+
 - f. I prefer not to say
3. How do you identify? *Select all that apply.*
 - a. White
 - b. Black or African American
 - c. Hispanic or Latino/a/x
 - d. Asian or Asian American
 - e. American Indian
 - f. Native Hawaiian or Polynesian
 - g. Two or more races
 - h. Other
 - i. I prefer not to say
4. How do you identify?
 - a. Female
 - b. Male
 - c. Other
 - d. I prefer not to say
5. What is your total household income for 2024, before taxes?
 - a. \$0 – \$19,999
 - b. \$20,000 – \$59,999
 - c. \$60,00 – \$99,999
 - d. \$100,000 – \$139,999
 - e. \$140,000 +
 - f. I prefer not to say
6. Is there anything else you would like to share?

Attachment C-5. Public Open House Poster Boards

Next Steps

- The project team will finalize the study in late summer 2025.
- Sign up for email updates or [visit our website
bit.ly/SR165FairfaxStudy](https://www.wsdot.wa.gov/165CarbonRiver/FairfaxBridgePlanningStudy)



▲ Scan me

SR 165 Carbon River – Fairfax Bridge Planning Study



Background and Overview

Why we're studying the bridge

- On April 22, the Washington State Department of Transportation permanently closed the 103-year-old State Route 165 Carbon River/Fairfax Bridge to all users. Recent bridge inspections revealed advanced deterioration of steel supports across the bridge.
- Closing the bridge removed public access from SR 165 to recreational areas including Mount Rainier National Park and U.S. Forest Service land.
- Property owners south of the bridge are now using a gated, one-lane gravel logging road to access [their](#) properties.

What this study will do

The study will evaluate and explore potential options that include:

- Keep the bridge closed and not replace it, which is referred to as a no-build option.
- Bridge replacement in the same vicinity.
- Re-route SR 165 on a new alignment to the east or west of Carbon River Canyon.

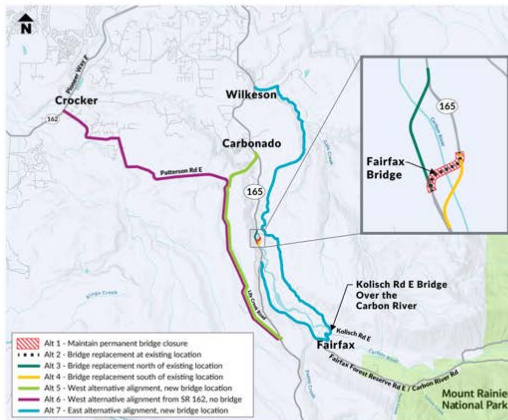
Working together

- WSDOT will work closely with local community members, agency partners, state and federal leaders and recreationists to understand their priorities and identify feasible options for the future of the bridge.

SR 165 Carbon River – Fairfax Bridge Planning Study



SR 165 Carbon River – Fairfax Bridge Current Alternatives



- 1. Maintain permanent bridge closure**
End SR 165 south of Carbonado.
- 2. Bridge replacement at existing location**
Replace bridge on SR 165 at the existing location.
- 3. Bridge replacement north of existing location**
New bridge on SR 165 north of existing bridge.
- 4. Bridge replacement south of existing location**
New bridge on SR 165 south of existing bridge.
- 5. West alternative alignment, new bridge location**
New bridge, new alignment of SR 165 west of the Carbon River, and right-of-way needed.
- 6. West alternative alignment from SR 162, no bridge**
New alignment for SR 165 starting at SR 162 near Crocker, no Carbon River bridge needed, and right-of-way needed.
- 7. East alternative alignment, new bridge location**
New alignment of SR 165, new bridge over Carbon River needed, and right-of-way needed.

SR 165 Carbon River – Fairfax Bridge Planning Study



ALTERNATIVE

1

Maintain Permanent Bridge Closure

What does this alternative include?

- End SR 165 south of Carbonado.
- Provides no alternative route.
- Removing existing bridge.

How much would this alternative cost?

*\$35M – \$50M

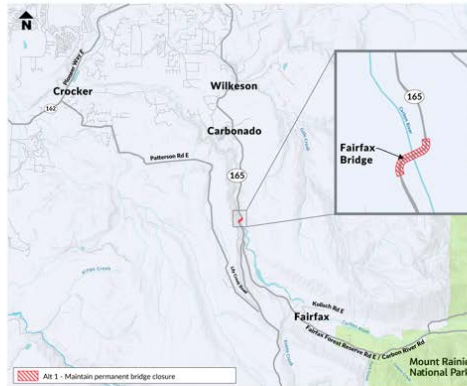
How long would this alternative take to complete?

Approximately *three years from receiving funding.
This includes removal of the bridge.

**Initial WSDOT estimate, subject to change*

Key considerations

- Closes SR 165 south of Carbonado.
- Removes existing bridge.



SR 165 Carbon River – Fairfax Bridge Planning Study



ALTERNATIVE

2

Bridge Replacement at Existing Location

What does this alternative include?

- Removing existing bridge.
- Constructing replacement bridge with upgraded widths at the same location on SR 165.

How much would this alternative cost?

*\$80M – 130M

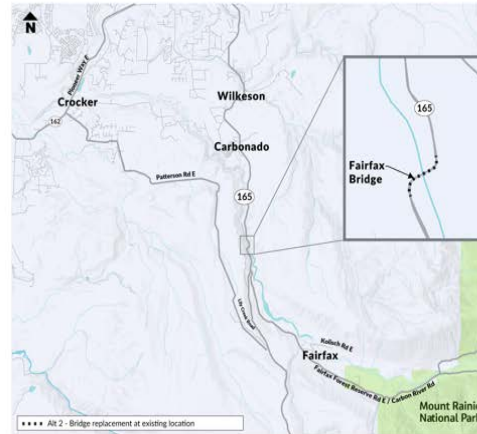
How long would this alternative take to complete?

Approximately *six years from receiving funding.
This includes removal of the existing bridge, design, right-of-way, permitting, and construction.

**Initial WSDOT estimate, subject to change*

Key considerations

- Existing bridge must be removed first.
- Difficult construction access.



SR 165 Carbon River – Fairfax Bridge Planning Study



ALTERNATIVE 3

Bridge Replacement North of Existing Location

What does this alternative include?

- Removing the existing bridge.
- Constructing a new bridge north of the existing bridge.
- Minor realignment of SR 165.

How much would this alternative cost?

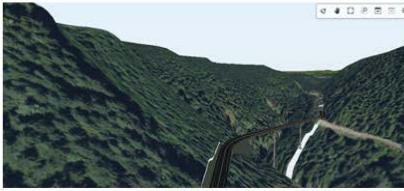
*\$60M – \$100M

How long would this alternative take to complete?

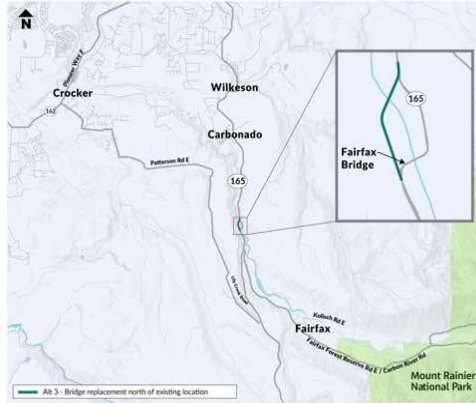
Approximately *six years from receiving funding.

This includes removal of the existing bridge, design, right-of-way, permitting, and construction.

**Initial WSDOT estimate, subject to change*



Preliminary concept of bridge replacement north of the existing bridge, looking north.



Key considerations

- A new 650-foot bridge.
- About a half mile of retaining wall and rock cuts needed.
- Difficult construction access.

SR 165 Carbon River – Fairfax Bridge Planning Study



ALTERNATIVE 4

Bridge Replacement South of Existing Location

What does this alternative include?

- Removing existing bridge.
- Constructing a new bridge south of the existing bridge.
- Minor realignment of SR 165.

How much would this alternative cost?

*\$60M – \$100M

How long would this alternative take to complete?

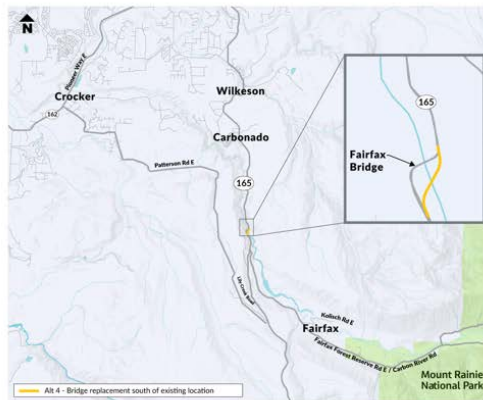
Approximately *six years from receiving funding.

This includes removal of the existing bridge, design, right-of-way, permitting, and construction.

**Initial WSDOT estimate, subject to change*



Preliminary concept of bridge replacement south of the existing bridge, looking north.



Key considerations

- A new 650-foot bridge.
- Retaining walls and rock cuts needed for bridge approaches.
- Difficult construction access.

SR 165 Carbon River – Fairfax Bridge Planning Study



ALTERNATIVE

5

West Alternative Alignment – New Bridge Location


What does this alternative include?

- Removing existing bridge.
- A new bridge near Carbonado.
- New alignment of SR 165 along west side of Carbon River.
- The new alignment would follow Lilly Creek and reconnect to SR 165 near Lilly Creek Road East.

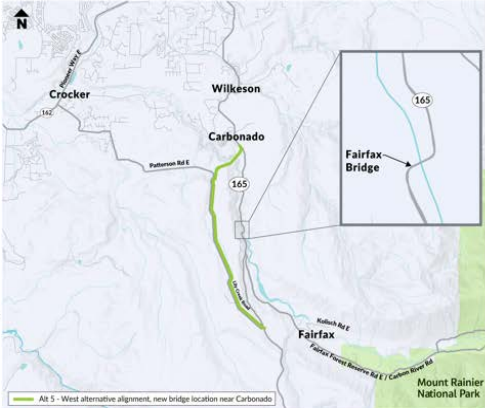
How much would this alternative cost?
*\$465M – \$785M

How long would this alternative take to complete?
Approximately *five years from receiving funding. This includes removal of the existing bridge, design, right-of-way, permitting, and construction.

**Initial WSDOT estimate, subject to change*




Preliminary concept of west bypass alternative bridge, south of Carbonado.



Key considerations

- A new 1,400-foot bridge needed.
- Five miles of new roadway construction.
- Steep topography requires large areas of rock cuts, retaining walls, and fill.
- Right-of-way.
- Difficult construction access.

SR 165 Carbon River – Fairfax Bridge Planning Study


ALTERNATIVE

6

West Alternative Alignment From SR 162 – No Bridge

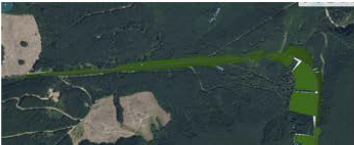
What does this alternative include?

- Removing existing bridge.
- No new bridge over the Carbon River.
- New alignment of SR 165 to connect with SR 162 near Crocker.
- The new alignment would follow Lilly Creek and reconnect to SR 165 near Lilly Creek Road East.
- No new bridge over the Carbon River.

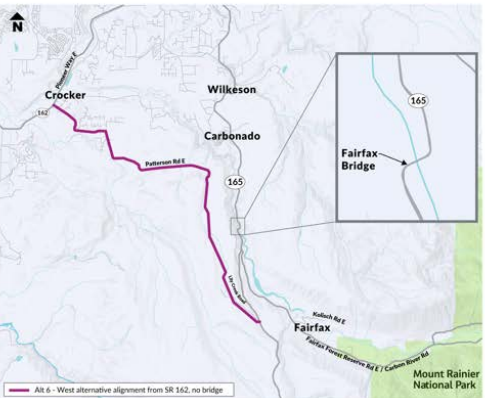
How much would this alternative cost?
*\$440M – \$735M

How long would this alternative take to complete?
Approximately *seven years from receiving funding. This includes removal of the existing bridge, design, right-of-way, permitting, and construction.

**Initial WSDOT estimate, subject to change*




Preliminary concept of SR 162 bypass alternative.



Key considerations

- Eleven miles of new roadway construction.
- Steep topography requires large areas of rock cuts, retaining walls, and fill.
- Right-of-way.
- Difficult construction access.

SR 165 Carbon River – Fairfax Bridge Planning Study


ALTERNATIVE
7

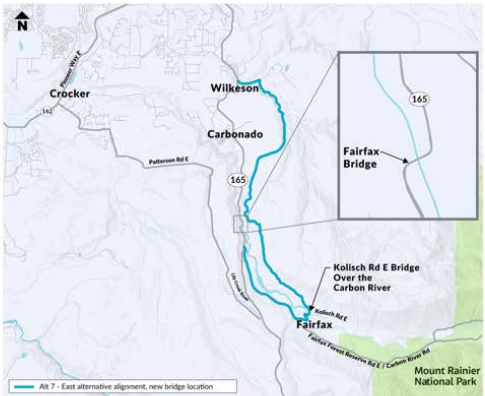
East Alternative Alignment –
New Bridge Location

What does this alternative include?

- Removing existing bridge.
- A new bridge near the existing Kolisch Road bridge.
- New alignment of SR 165 and upgrades to current limited gated access route to full highway standards. This includes two lanes, guard rails, rock walls, and additional signage.
- Requires a new Kolisch Road bridge.

How much would this alternative cost?
*\$375M – \$610M


How long would this alternative take to complete?
Approximately *six years from receiving funding. This includes removal of the existing bridge, design, right-of-way, permitting, and construction.
**Initial WSDOT estimate, subject to change*



Alt 7 - East alternative alignment, new bridge location

Key considerations

- New 400-foot bridges needed over the Carbon River and Wilkeson Creek.
- Twelve miles of new/upgraded roadway construction.
- Steep topography requires large areas of rock cuts, retaining walls, and fill.
- Right-of-way.
- Difficult construction access.



Preliminary concept of using current detour alignment.

SR 165 Carbon River – Fairfax Bridge Planning Study

WSDOT

How Are My Comments Used in the Study?

Community feedback will help inform our process for inclusive and meaningful engagement throughout the life of the study. Comments are typically transcribed, categorized, and analyzed by the team. Public input is incorporated to design concepts based on feasibility as budget, future development, and requirements allow.

SR 165 Carbon River – Fairfax Bridge Planning Study

C-51