

Project Name: US97 Bend North Corridor Project

ODOT Key Number: 21229

Federal Aid Number: S004(227)

Re-evaluation of the US97 Bend North Corridor Project, Deschutes County, Oregon, Final Environmental Impact Statement/Record of Decision (September 16, 2014)

Purpose/Introduction:

ODOT is conducting this re-evaluation of the *US97 Bend North Corridor Project FEIS/ROD (2014)* because more than 3 years has passed since the original NEPA decision document. This re-evaluation assesses the effect of environmental statutes, regulations, policies and guidance that have been issued since publication of the 2014 FEIS/ROD and identifies any new impacts from the current design alternative that were not identified in the 2014 FEIS/ROD. The re-evaluation supports the conclusion that there are no new significant impacts and the original NEPA decision document remains valid.

Project History

The *US97 Bend North Corridor Project FEIS (July 2014)* documented all of the alternatives considered during the development and narrowing of alternatives. The Preferred Alternative includes modifications to the East DS2 Alternative, in response to comments received on the Draft EIS. The Draft EIS was published in July 2011 and circulated for public comment, including a public hearing. Based on the Draft EIS and comments received from agencies and the public, the East DS2 Alternative was modified to minimize impacts to neighborhoods east of US 97, and substantially minimize impacts to rural residential properties north of Cooley Road and west of US 97 by containing all improvements within the adopted UGB, except for the extension of Britta Street west of US 20 and the intersection improvements at Cooley Road and O.B. Riley Road. The Final EIS disclosed the beneficial and adverse impacts resulting from the Preferred Alternative, identified the Preferred Alternative, and responded to public and agency comments submitted on the Draft EIS. The *US97 Bend North Corridor Project (2014 FEIS/ROD)* selected the East DS2 Modified Alternative (Preferred Alternative) and FHWA signed a ROD September 16, 2014.

Original Project Description

The Preferred Alternative, the East DS2 Modified Alternative, consists of realigning the existing US97 facility east to a new approximately 2-mile, four lane, limited access bypass that is adjacent to the existing railroad tracks. The new facility will be designated US97 and as an expressway and bypass. A new signalized intersection at US97 and 3rd Street will be constructed at the northern portion of the realigned segment of US97. The current US97 roadway will become a local arterial and will also serve as an extension of 3rd Street. The Selected Alternative will alleviate much of the queuing and associated congestion forecast by 2036. By shifting traffic onto limited access and accessed-controlled facilities (US97 and US20) and off of the local arterial system (3rd Street and others), the overall crash rate is expected to decrease under the Selected Alternative.

Current or Changed Project Description

The proposed project has very small differences compared to the project footprint in the 2014 FEIS/ROD. Changed elements to the original Preferred Alternative include multi-lane roundabouts at the intersections of US20 and Cooley Road and US20 and Robal Road instead of a multi-lane signals, an on-ramp from Robal Road to southbound US97, Cooley Road remaining at-grade with the railroad, and a new northbound US97 on-ramp from Cooley Road. Changes were made because design iterations determined that the proposed design would provide additional traffic calming and better traffic flow. Although some of the lane configurations at the intersections have changed from those described in the 2014 FEIS/ROD, the current project is still within the alignment evaluated in the 2014 FEIS/ROD and would meet current design standards.

The proposed design currently meets all standards and provides I operations and safety benefits. The proposed design will serve as an access-controlled expressway by removing all access of commercial areas that currently existing on US97. Because the new alignment follows along the railroad, it does not provide any additional limitations to access through construction of the new roadway.

The proposed design provides support to the surrounding current and future commercial development by removing through-traffic from the major access points to these properties while still providing good access connections to these areas. The proposed design performs better than the East DS2 Modified Alternative, the FEIS Preferred Alternative, at supporting economic vitality by reducing congestion and improving access throughout the area.

Safety will be improved by allowing through-traffic to travel uninterrupted along the newly realigned US97 and will significantly reduce the exposure to intersection conflicts associated with signalized intersections. In addition, the overall volume of traffic on 3rd Street will be significantly reduced with the majority of through-traffic utilizing the new US97 alignment, thus improving safety at the existing intersections on 3rd Street. Safety will also be improved with the removal of direct driveway and local streets access, with the proposed design providing access only through dedicated on/off ramps. In addition to improved safety for vehicles, this will also result in increased safety for pedestrians and bicyclists.

The original project description is compared to the description of the current proposed project in Table 1. See Appendix A – Figure 1 for the original project alignment. See Appendix A – Figure 2 for the current proposed project alignment.

Table 1. Comparison of Original and Current Project Descriptions

Original Project Description from 2014 FEIS/ROD	Design Changes in Current Project Description
South Section – Butler Market Road to Nels Anderson Place	
<p>The Selected Alternative constructs a new alignment of US 97 which will be a free flow highway facility with access to and from the newly aligned US 97 occurring through the existing Butler Market Road interchange and the existing Empire Avenue interchange. A third travel lane will be added to the existing two travel lanes on northbound US 97 starting at the point where the 3rd Street northbound on-ramp merges, which is just north of the Butler Market Road overcrossing of US 97. The merge distance for the northbound on-ramp at the Butler Market Road interchange will be lengthened. Southbound US 97, between the Butler Market Road and Empire Avenue interchanges, will retain the current two travel lanes. The southbound on-ramp from Empire Avenue will be lengthened to provide additional merging distance. The northbound and southbound travel lanes will be separated by a median that varies between 2 feet and 90 feet in width. Between Butler Market Road and Empire Avenue, US 20 and 3rd Street will be a co-located four-lane facility with two travel lanes in both directions.</p>	<p>Under the current alternative, there will be no changes to the existing configuration of US97 between the existing Butler Market Road interchange and the existing Empire Avenue interchange, with the current two northbound lanes and two southbound lanes being retained. With no proposed changes for this section of US97, the length of the on-ramp for southbound US97 from Empire will not change from existing conditions. Configuration and co-location of US20/3rd Street will remain the same as existing conditions.</p>
<p>Empire Avenue Interchange - The Empire Avenue interchange will retain its configuration as a partial diamond interchange with Empire Avenue crossing over US 97. An off-ramp will allow vehicles on northbound US 97 to exit the highway at Empire Avenue. There will be no off-ramp from southbound US 97 to Empire Avenue. On-ramps will allow eastbound and westbound vehicles on Empire Avenue to enter northbound or southbound US 97.</p> <p>In order to provide access into the industrial area south of Empire Avenue, Mervin Samples Road will be improved east of 3rd Street with a signalized intersection at 3rd Street. The Selected Alternative will retain the existing Empire Avenue bridge over existing US 97 and will enlarge the Empire Avenue/3rd Street intersection from the current three lanes of traffic to seven lanes. The intersection of Empire Avenue and O.B. Riley Road will be expanded and improved, including the installation of a traffic signal.</p>	<p>Under the current alternative, the northbound on-ramp from Empire Avenue will be reconstructed further to the east and will parallel the railroad tracks to connect with the realigned US 97 ~1800 feet north of Empire Avenue Access to the industrial area will remain the same as existing conditions. The industrial area in question is to the south of Empire Avenue (SW quadrant of the Empire/US97 interchange). The proposed change will move the northbound on-ramp located in the NE quadrant of the interchange, so no impact to the access to the industrial area will occur.</p>

US 97, US 20 and 3rd Street between Empire Avenue and Nels Anderson Place

Under the Selected Alternative, northbound US 97 will have three travel lanes on its existing alignment. About halfway between Empire Avenue and the Sisters loop ramp, US 97 veers east from its existing alignment to the new alignment. The three travel lanes on the newly aligned US 97 split with the two right lanes continuing on northbound US 97. The left lane will veer to the northwest and expand to two lanes with one of those lanes connecting to westbound US 20 via the Sisters loop ramp and the other lane connecting to northbound 3rd Street/westbound US 20 on an elevated structure.

Between Empire Avenue and the Sisters loop ramp, the co-located US 20/3rd Street will remain on its existing alignment that is separated by a vegetated and concrete median. The combined westbound US 20/northbound 3rd Street facility will be widened from two lanes to three lanes beginning at Empire Avenue. North of Empire Avenue, a new off-ramp will route the right lane northbound to the newly extended 3rd Street, which uses the existing US 97 facility. The two left lanes continue as westbound US 20, which requires replacing the structure over 3rd Street to accommodate a second lane on US 20 as well as span the newly extended 3rd Street. In this segment, eastbound US 20 is a one-lane roadway that merges with the newly extended two-lane southbound 3rd Street. Once merged, there will be two through travel lanes on southbound 3rd Street and two left turn lanes at the Empire Avenue signal. There will be numerous directional movements available through the US 97/US 20/3rd Street connection.

North of Empire Avenue a new east-west local street will be constructed to connect Industrial Park Boulevard and Nels Anderson Road, improving traffic flow in this area. South of Empire Avenue, improvements will be made to the intersection at Sherman Road and Nels Anderson Road to facilitate truck turning movements, including a widened pavement section for tractor/trailer turning radii differences (off-tracking). The intersection of Sherman Road and Empire Avenue and private accesses slightly west of Sherman Road are shown as closed under the Selected Alternative. As the Selected Alternative moves into final design and construction phases, the timing of implementation of access changes on Empire Avenue will be important. The City of Bend and ODOT will work jointly with stakeholders to develop a strategy for the phasing and criteria that will trigger the implementation of these changes.

An access road for the Swalley Irrigation District to perform maintenance on the Swalley Main Canal Pipeline will be constructed off of the new northbound US 97 on-ramp at the Empire Avenue interchange.

A trail undercrossing of the newly aligned US 97 will be installed to support the City of Bend's future trail plan as shown in Exhibit 2-3 FEIS, Map 3 and Exhibit 3-61D FEIS in Chapter 3 of the Final EIS.

Under the current alternative, northbound US97 will have two travel lanes on its existing alignment. . Traffic will remain the same or improve slightly due to the direct connection of northbound 3rd Street to the mall area. Traffic currently on 3rd Street is anticipated to remain on 3rd for mall access instead of utilizing the Butler Market northbound on-ramp to access via US97 further to the north. Just after the highway crosses under Empire Avenue and before US 97 veers east from its existing alignment to the new alignment, an off-ramp will be constructed for northbound US 97 traffic to access northbound 3rd Street via the old US 97 alignment and westbound US 20 via the existing Sisters loop ramp. The new off-ramp will cross over the new US 97 alignment about halfway between Empire Avenue and the Sisters loop ramp.

Under the current alternative, northbound 3rd Street to US 20 westbound traffic will be able to continue on the new 3rd Street (previous US97) via an off-ramp from US 20 westbound that will be constructed on US 20 prior to the existing US 20 westbound overcrossing of southbound 3rd Street.

The access road for the Swalley Irrigation District will not be constructed due to the canal piping by the Swalley Irrigation District since the ROD. The Swalley ROW can be accessed from the local street system to the east. The canal piping was not a result of the current project, but an overall effort by irrigation districts in Central Oregon to pipe open canals, many of which are leaky, in order to allow water to be conserved for the natural environment, delivered more efficiently and reliably to customers, and be utilized more efficiently.

Improvements to local street connections north of Empire Avenue and south of Empire Avenue will not be constructed as part of the current proposed project. Design elements are part of separate projects currently under development, 20391 US20: Empire – Greenwood and 21483 US20: Mervin Sampels – Greenwood.

The trail undercrossing will not be installed. The City of Bend Urban Area Bicycle and Pedestrian Plan does not have a connection from Boyd Acres under the Railroad. Due to the

	<p>intersection safety improvements at Cooley Road and Empire Avenue, pedestrians will be able to connect to existing and future trails via these signalized intersections.</p>
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Central Section—Nels Anderson Place to Cooley Road

US 97 and 3rd Street between Nels Anderson Place and Cooley Road –

Under the Selected Alternative, US 97 will be four lanes, with two northbound and two southbound lanes separated by a median or a median barrier. The realigned segment of the highway will be east of the current alignment and will be located immediately adjacent to the railroad right of way. Third Street will have two northbound and two southbound lanes separated by a center turn lane. The intersections of 3rd Street with Robal Road and Cooley Road will be signalized. Cooley Road will travel under the realigned US 97 and the railroad tracks, which requires lowering Cooley Road approximately 25 feet and lowering 3rd Street 10 feet. There will be no direct connection to US 97 at Cooley Road.

Britta Street will be extended north from its current termination at Hardy Road, as a new two-lane road and will connect to US 20 at Robal Road at a signalized intersection. The portion of existing Jamison Street that parallels US 20 on the west side will be extended north, then west to connect to the extended segment of Britta Street.

The intersection of Cooley Road and O.B. Riley Road will be improved with a one-lane roundabout to improve traffic flow. The Selected Alternative will widen Cooley Road from the current three lanes to five lanes between the new signalized intersection with Hunnell Road and the new crossing under the BNSF Railway. The Selected Alternative minimizes impacts by maintaining access to Hunters Circle from Cooley Road, east of the realigned US 97.

Under the current alternative, Cooley Road will remain at existing grade and the realigned US97 will be constructed over Cooley and a new northbound on-ramp from Cooley Road. A southbound US97 off-ramp to Third Street/Cooley Road will be constructed utilizing the current southbound US97 alignment. The Cooley Road crossing of the railroad tracks will remain at-grade. A southbound on-ramp will be constructed from the Robal Road and Nels Anderson Road intersection to connect to the realigned US97 southbound.

The US20 and Cooley Road and the US20 and Robal Road intersections will change from multi-lane signals to multi-lane roundabouts. The roundabouts will be constructed within the original project footprints that were environmentally cleared at these locations. The US97 Bend North Corridor Transportation Technical Memo, July 2020, supports the addition of the on-ramps and the roundabouts (See Appendix B)

The extensions of Britta Street and Jamison Street will not be constructed as part of the proposed project but will be future expansions constructed by the City of Bend.

North Section—Cooley Road to Fort Thompson Lane

Newly aligned US 97 will have two northbound and two southbound travel lanes separated by a median barrier. Approximately 500 feet south of Cooley Road, 3rd street will be shifted west from the current US 97/3rd Street. Third Street will continue north of Cooley Road with two travel lanes in each direction, separated by a two-way left turn lane. The realigned US 97 will reconnect with the existing US 97 alignment just south of Grandview Drive. A new signalized intersection will connect US 97 with the extended 3rd Street, which is aligned on the existing Clausen Road facility, on the southeast side of the Deschutes Memorial Gardens and Chapel.

The intersection of Loco Road and 3rd Street will have a two-lane roundabout designed to City of Bend standards. Access to US 97 at Grandview Drive and at Loco Road will be closed. In addition, two access driveways to US 97 from rural residential lots on the east side of US 97 will be closed.

South of Cooley Road, 3rd Street will retain its current connections with access northbound, southbound, eastbound and westbound. The northbound through travel lanes on 3rd Street will change at the Cooley Road Signal into a connection onto eastbound Cooley road and a through movement to the northbound US97 on-ramp that will cross under the new US97 alignment before merging with northbound US97 traffic. Southbound US97 traffic wishing to access 3rd Street and/or Cooley Road will exit US97 via the existing US97/3rd Street alignment, which will be designated as a southbound off-ramp to 3rd Street. The southbound off-ramp will occupy the existing 3rd Street left lane while the right lane will serve as a lane extension for traffic accessing southbound 3rd Street from the existing right-in/right-out only intersection of Loco (Clausen) Road with 3rd Street. Access to US97 at Grandview Drive will not change from existing right-in/right-out access. The configuration of southbound 3rd Street at Cooley Road will remain the same as the existing, with a left-turn to eastbound Cooley, and two southbound through lanes with right turn to westbound Cooley.

The extension of 3rd Street north of Cooley Road along the current alignment of Clausen Road will not be included as part of the proposed project due to the new design improvements at the US97/Cooley and 3rd Street/Cooley Road intersections.

Changes to Regulations, Laws, or Policies – Resources impacted by the changes

Although there have been changes to regulations and laws over time, the changes have not resulted in new, significant impacts to the project area. The 2014 FEIS/ROD noted project compliance with regulations in effect at the time under the Federal Endangered Species Act, Clean Air Act, Section 404 of the Clean Water Act, Section 106 of the National Historic Preservation Act, Section 4(f) of the Department of Transportation Act, ODOT Noise Policy, and all other applicable State and Federal regulations.

Federal

Since the publication of the Final EIS/ROD, FHWA updated their *Interim Guidance on Mobile Source Air Toxics Analysis in NEPA* (October 2016). This update was prompted by changes in the emissions model required for conducting emissions analysis. In 2014, the U.S. Environmental Protection Agency (EPA) released MOVES2014, the latest major update of the Motor Vehicle Emissions Simulator (MOVES) vehicle emissions model, and started a 2-year grace period to phase in the requirement of using MOVES2014 for transportation conformity analysis. Beginning October 7, 2016, project sponsors should use MOVES2014 (or minor revisions such as MOVES2014a, which is the most recent version of MOVES released by EPA) to conduct emissions analysis for both transportation conformity determinations and for NEPA purposes.

This Updated Interim Guidance incorporates new analysis conducted using MOVES2014a. Based on FHWA's analysis using MOVES2014a, diesel particulate matter (diesel PM) remains the dominant MSAT of concern for highway projects. This Updated Interim Guidance supersedes the December 2012 Interim Guidance.

This update to the interim guidance does not change the analysis of mobile source air toxics in the Final EIS/ROD.

State

Oregon Highway Plan

Since the Final EIS/ROD was published, the Oregon Transportation Commission amended the Oregon Highway Plan on May 17, 2018. The purpose of this amendment was to demonstrate that the Oregon Department of Transportation is carrying out a comprehensive performance-based statewide transportation planning process in compliance with the Federal Highway Administration legislation. This statewide planning process provides for consideration and implementation of projects, strategies, and services in coordination with local jurisdictions and other stakeholders. The amendment describes how the Oregon Highway Plan complies with the Fixing America's Surface Transportation Act requirements regarding Performance Measure tracking for National Highway Performance, Congestion Mitigation and Air Quality, and National Freight Movement. The federal requirements for a continuing, cooperative, and comprehensive performance-based statewide transportation planning process are addressed in the Oregon Transportation Plan.

The Amended OHP does not change the analysis in the Final EIS/ROD.

Oregon Freight Plan

The Oregon Freight Plan (OFP), originally released in 2011, was amended in 2017 to maintain compliance with federal requirements that came from the FAST Act for state freight plans.

The Amended OFP does not change the analysis in the Final EIS/ROD.

Oregon Transportation Options Plan

The Oregon Transportation Options Plan (OTOP) was adopted April 16, 2015. The Oregon Transportation Options Plan provides policy guidance for state and local partners to enhance and expand transportation access for all Oregonians while ensuring that transportation investments are efficient and support broader community goals such as growing the economy and improving personal and environmental health. Policies, strategies, and programs described in the Oregon Transportation Options Plan promote efficient use of existing transportation system investments, reducing reliance on the single-occupancy vehicle and facilitating use of walking, biking, transit, and rideshare. While transportation infrastructure and operations are critical to the success of a balanced transportation system, this Plan focuses on the programs, strategies, and investments that support the efficient use of transportation infrastructure.

The adoption of the OTOP does not change the analysis in the Final FEIS/ROD.

Oregon Bicycle and Pedestrian Plan

The Oregon Bicycle and Pedestrian Plan (OBPP) was adopted May 19, 2016. The Oregon Bicycle and Pedestrian Plan creates a policy foundation for the state, supporting decision making for walking and biking investments, strategies, and programs. Under the Oregon Transportation Plan (OTP), and parallel to associated mode and topic plans like the Oregon Highway Plan, the walking and biking direction established in this plan helps to bring about an interconnected, robust, efficient, and safe transportation system for Oregon. The policies and strategies in the plan direct the work of ODOT, and regional and local jurisdictions must be consistent with them. As a whole, the plan envisions a well-connected and safe walking and biking system that meets the diverse needs of its users and the state.

The adoption of the OBPP does not change the analysis in the Final FEIS/ROD.

Regional

Metropolitan Transportation Plan

The *2007 - 2030 Metropolitan Transportation Plan* (MTP) was updated in September 2019, with a second phase underway. The US97 Bend North Corridor Project is included in the committed project list of the financially constrained *2040 Metropolitan Transportation Plan*.

The update to the MTP does not change the analysis in the Final FEIS/ROD.

Local

Deschutes County

Deschutes County annually updates its County Code in January; the last amendment was conducted in 2019.

The County Code updates do not change the analysis in the Final EIS/ROD.

City of Bend

The City of Bend began updating its Transportation System Plan (TSP) in January 2018 and adopted the final plan in September 2020. Bend's TSP describes the City's transportation policies and investment priorities to address its needs and fulfill its visions for an economically vital, healthy, and equitable community. To support how people and goods move within and through the City and complement Bend's land use and growth management strategies, the TSP establishes a system of transportation facilities, programs, and policies that will guide transportation infrastructure development over the next 20 years. The TSP is the transportation element of Bend's Comprehensive Plan.

The Bend Comprehensive Plan is the City's long range plan for land uses within the City. The Bend City Council adopted the most recent version of the plan in 2016. The City updated the plan on September 18, 2018

The TSP and Comprehensive Plan updates do not change the analysis in the Final EIS/ROD.

Changes to Environmental Effects – Resources impacted by changes

This section describes why the change in project scope does not impact resources in the project area.

Table 2 provides a summary of changes in Environmental Elements from the FEIS/ROD Preferred Alternative compared to the proposed project design.

Table 2. Changes to Environmental Elements

Resource	Change in Environmental Element? Yes/No	Status/Comments
Transportation	No	The traffic analysis for the Future Build conditions for the proposed project indicate that both the US97 and US20 corridors and all study intersections will experience significantly lower delays and improved travel times for all users. See Appendix B US97 Bend North Corridor Transportation Technical Memo, July 2020
Land Use	No	The proposed project is consistent with state, county, regional, and city land use and transportation plans. No exceptions to the statewide planning goals required.
Right of Way and Utilities	Yes	The proposed project will result in reductions within the original estimates for right of way impacts. Under the East DS2 Modified Alternative, ROW involved the acquisition of an estimated 103 parcels totaling approximately 82 acres of right of way. Under the current project, ROW involves acquisition of an estimated 50 parcels totaling approximately 40 acres of right of way. These 50 parcels are a subset of the original 103 parcels and do not comprise new parcels. The proposed project will retain the original impacts to utilities with long-term relocation of utility facilities expected and temporary short interruptions to utility services.
Environmental Justice	No	<ul style="list-style-type: none"> • The proposed project will not have any disproportionately high and adverse effects on minority or low-income populations. • Environmental justice populations and others will maintain existing access to northbound and southbound US 97. • A multi-use path will connect the mobile home parks to the signalized intersection, allowing safer travel for pedestrians and bicyclists along US 97 and a safer crossing of US 97. • Construction notifications will be provided in English and Spanish, the predominant languages of the API.
Socioeconomic	Yes	<p>The proposed project will remain consistent with the original findings on the following:</p> <ul style="list-style-type: none"> • Air, noise, and visual impacts of new and expanded local roads, primarily located within the Bend UGB, and the realignment of US 97 closer to the Boyd Acres Neighborhood could impact quality of life for residents in the API, but no greater than under the East DS1 and East DS2 Modified Alternatives. • Community cohesion enhanced with improved connectivity for vehicles, pedestrians and bicyclists. Community cohesion adversely affected by property acquisitions and residential displacements; the magnitude of this impact is less than under the East DS1 and East DS2 Alternatives with improved community cohesion.

		<ul style="list-style-type: none"> • Increased efficiency of local and regional freight movement, creating opportunities to enhance local and regional economies. • Emergency service provider response times will decrease when compared to the No Build Alternative. Accessibility for emergency service providers will be improved with the addition of the southbound on-ramp from Robal road to US97 and the northbound on-ramp and southbound off-ramp at Cooley Road and Third Street. • Access to northbound and southbound US 97 will occur at Empire Avenue, the southbound on-ramp at Robal Road, and the northbound on-ramp and southbound off-ramp at Cooley Road. <p>The proposed project will differ from the East DS2 Modified Alternative within the original estimates for displacements as follows:</p> <ul style="list-style-type: none"> • Under the East DS2 Modified Alternative, the project would have resulted in the estimated displacement of 6 residences, 44 businesses, 2 billboards, and 250 rental storage units. • Under the current project, the estimated displacements are 0 residences, 60 businesses, 2 billboards, and 250 storage units. <p>The proposed project will result in 0 residential displacements but an increase in the number of business displacements within the original project footprint. For all relocations and property acquisitions, the policies as listed in the Uniform Act 49 CFR Part 24 will be adhered to, as well as the ODOT Right of Way Manual.</p>
Parks and Recreational Facilities	No	<p>The proposed project remains consistent with original project impacts:</p> <ul style="list-style-type: none"> • No conversion of existing park or recreational facilities or alteration of existing trails • Connectivity and function of planned trails retained • Requires refinement of the conceptual alignment of the Rails with Trails Corridor at crossing with Cooley Road • No impacts to Section 4(f) or Section 6(f) resources.
Historic Resources	No	<p>The proposed project will remain consistent with the original project impacts:</p> <ul style="list-style-type: none"> • Section 106 finding of adverse effect and Section 4(f) individual evaluation for the Nels and Lillian Andersen House impacted by relocation or removal. • Section 4(f) <i>de minimis</i> findings for: Oregon Trunk Railway and Swalley Riley Lateral.
Visual Resources	No	<p>No substantial changes in visual quality will occur as a result of the proposed project because footprint changes are minimal and the project will be designed to blend into the existing roadway network and urban setting.</p>

Water Quality/Stormwater Runoff, and Hydrology	No	The proposed project will result in a smaller area of impact and will remain consistent with the original project with 100% stormwater treatment. Existing drywells and drainwells will be removed and stormwater treatment facilities installed to benefit groundwater by removing a route for contaminants to reach groundwater and drinking water.
Natural Systems and Communities	Yes	The proposed project will remain result in less impacts than the original project: <ul style="list-style-type: none"> • Removal of less than the original 16 acres of western juniper woodlands habitat and sagebrush shrublands/shrub-steppe strategy habitat • No net loss of approximately 70 linear feet of habitat linkage feature through piping of the Swalley Riley Lateral as a result of the proposed project. The Swalley Irrigation District has initiated an overall effort by irrigation districts in Central Oregon to pipe open canals, many of which are leaky, in order to allow water to be conserved for the natural environment, delivered more efficiently and reliably to customers, and be utilized more efficiently.
Wetlands and Other Waters	Yes	The proposed project will remain consistent with the original project impacts: <ul style="list-style-type: none"> • No new piping of lateral lines connecting to Swalley Main Canal Pipeline as this is part of an effort by the Swalley Irrigation District independent of the project impacts. • No impacts to wetlands and other waters because construction of canal crossings would occur during dry conditions.
Threatened and Endangered Species	Yes	The proposed project will result in less removal of marginal habitat for a state threatened plants than the original project.
Non-Threatened and Endangered Species		The proposed project will remain consistent with the original project impacts: <ul style="list-style-type: none"> • Loss of 16 acres of habitat for non-threatened and endangered, strategy species associated with the western juniper woodlands habitat and sagebrush shrublands/shrub-steppe strategy habitat. • Loss of 24 acres of urban habitat.
Invasive Species	No	The proposed project will remain consistent with the original project impacts: <ul style="list-style-type: none"> • Increased roadway activity along Cooley Road and Clausen Drive resulting from roadway improvements, potentially spreading priority invasive species. • Approximately 115 acres of ground disturbed during construction, resulting in the potential spread of invasive species.
Air Quality	No	The proposed project is not located in an air quality nonattainment or maintenance area.
Noise	No	The proposed project will remain consistent with the original project impacts. Noise impacts at 21 sites, including 67 residences and outdoor areas at 8 businesses. Proposed changes will not result in new noise impacts.
Energy	No	The proposed project will not result in a negative change to energy consumption that will be different to the impacts of the original project.

Archaeological Resources	No	The proposed project will not affect archaeological resources as documented in the Section 106 Joint Finding of Effect (September 2013) which determined the project will have a Finding of No Historic Properties Affected (Archaeology).
Geology	No	No appreciable change in ground disturbance with the proposed project when compared to the original project.
Hazardous Materials	No	The proposed project will remain consistent with the original project impacts.

Public Involvement/Agency Coordination

Since the 2014 FEIS/ROD was issued, ODOT has continued the approach with public involvement that was implemented prior to publishing the FEIS/ROD. Adjacent property owners at each project element location are being contacted by both ODOT and the City of Bend for right of way discussions. ODOT and the City of Bend plan additional outreach to provide advance notice of potential project elements and construction activities. ODOT has also continued to consult and coordinate with multiple agencies regarding the current proposed design since the ROD was issued. Table 3 summarizes the ongoing public involvement that has occurred since the issuance of the ROD and during the development of the current proposed design.

Table 3 Public Involvement Summary

Audience/Group	Date	Location/Method
Boyd Acres Neighborhood Association	9/11/2019 2/12/2020	Bend Elks Lodge Bend Elks Lodge
Hunnell Hills Neighborhood Association	7/1/2020	WebEx
Bend North Triangle	10/03/09	Bend City Hall
GTAC	12/10/19 02/05/20	Regular, ad hoc phone and email as needed
Cascade Village	11/20/20	Monthly phone calls with representatives on-going
Powell Development Group	12/05/19 01/04/20 0/28/20 06/04/20	
City of Bend	3rd Monday of Every Month	Monthly (ODOT/City of Bend Coordination Meeting) – in-person and/or virtual
Deschutes County	11/12/19	ODOT Region 4
Deschutes County Bicycle and Pedestrian Advisory Committee (BPAC)	12/05/19	ODOT Region 4
Deschutes Public Library	01/29/20 05/15/20	Bend Parks and Recreation Offices Zoom
Bend Metropolitan Planning Committee (Bend MPO)	02/18/20 06/03/20	Regular updates as needed Zoom
Professional Engineers of Oregon (PEO)	10/28/19	ODOT Region 4
Bend Rotary	02/25/20	
Federal Highway Administration (Oregon Division)	Regularly as needed	Skype/MS Teams
Bend Bulletin	07/23/19	https://www.bendbulletin.com/localstate/north-corridor-project-in-bend-gets-60-4-million-from-the-feds/article_9163b08e-d021-5e79-a81a-59d4fa2f4596.html
KTVZ	07/23/19	https://ktvz.com/news/2019/07/23/feds-grant-odot-60-million-for-bend-hwy-97-reroute/
Central Oregon Daily	10/17/19	https://centraloregondaily.com/state-odot-officials-tour-local-project-sites/
Adjacent Property Owners	Ongoing	In person and phone

The overwhelming majority of public feedback of the current proposed design has been positive when compared to the FEIS East DS2 Modified Alternative. The biggest concerns from the East DS2 Modified Alternative pertained to work on Cooley Road to the east of the BNSF railroad and access/visibility to

and from the Cascade Village shopping area on existing US97/3rd Street. The current concept resolves both of these issues by eliminating grade separation of the BNSF railroad and Cooley Road, leading to minimal work to the east of the railroad. The removal of the Grandview Drive signal and addition of the Robal Road to southbound US97 on-ramp alleviates mall access and visibility concerns.

Conclusion

ODOT has concluded that the *US97 Bend North Corridor Project FEIS/ROD (September 2014)* is still valid for the current project and that no additional NEPA documentation outside of this re-evaluation is necessary. With the submission of this document, ODOT requests FHWA approval of this re-evaluation. FHWA signature of this document indicates that a supplemental NEPA document is not necessary and that any additional environmental documentation and consideration is included within and/or is incorporated by reference in this re-evaluation.

Phillip A. Ditzler

Oregon Division Administrator

Federal Highway Administration

Date

Appendix A

Figure 1

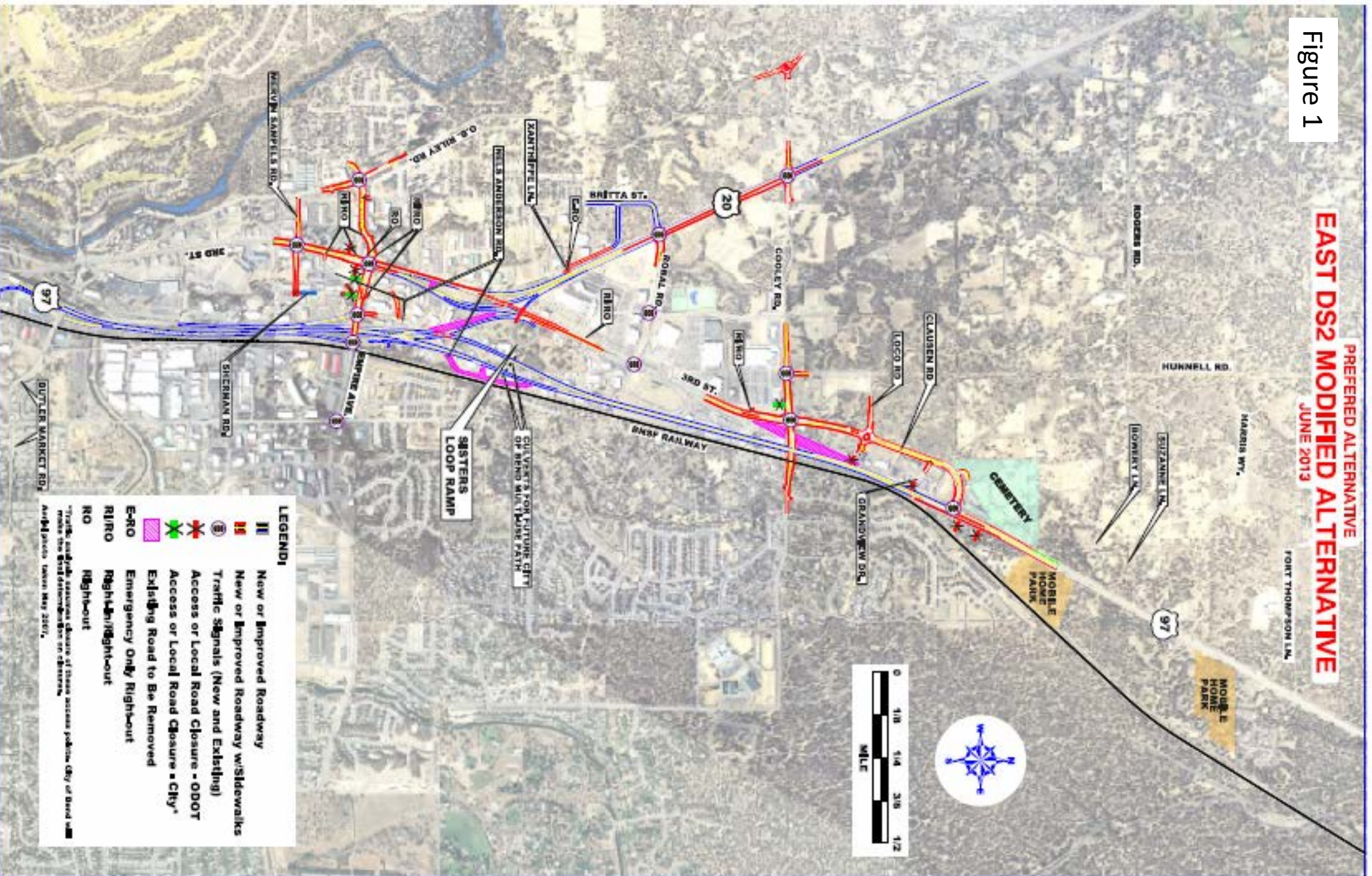
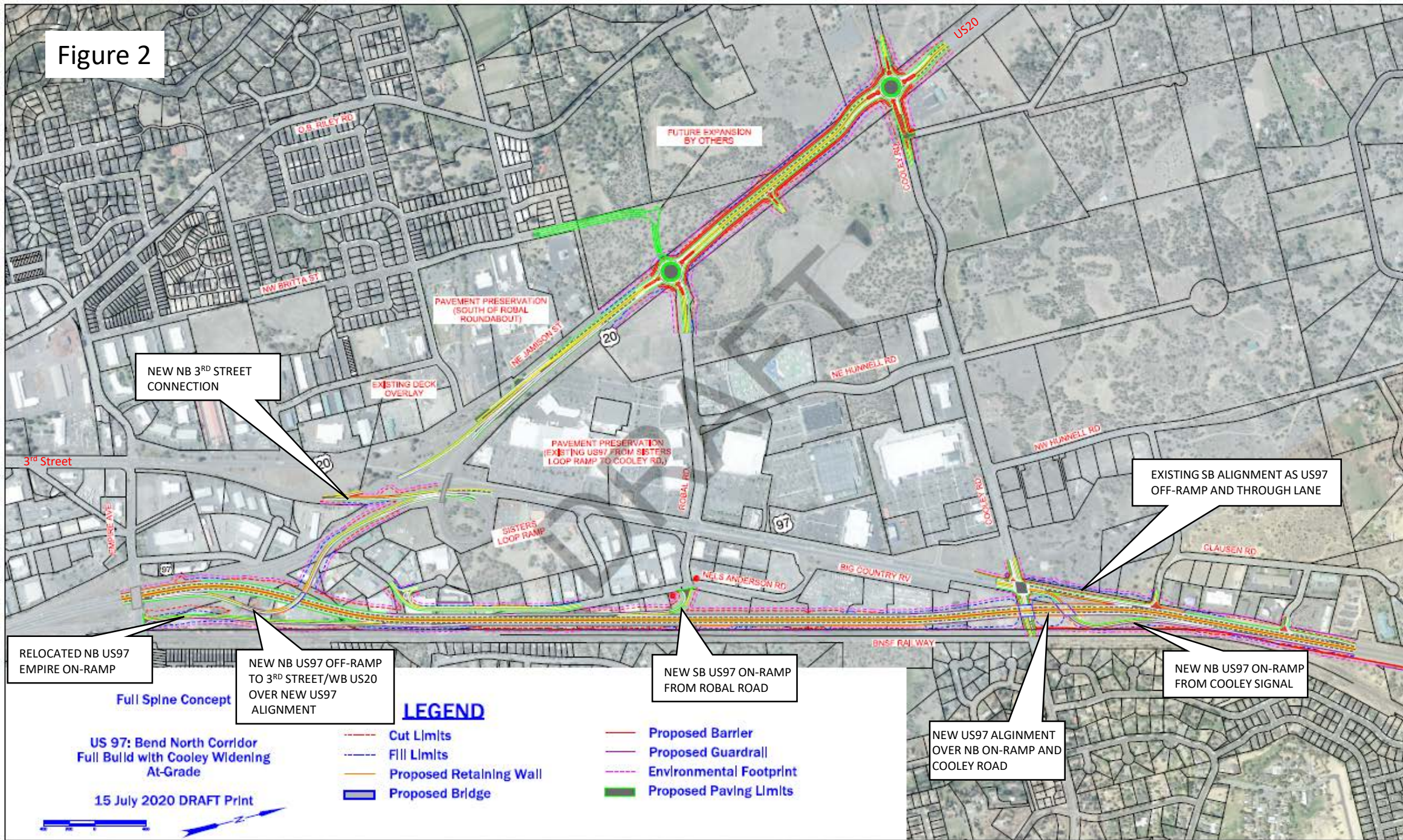


Figure 2



Appendix B



US97 BEND NORTH CORRIDOR TRANSPORTATION TECHNICAL MEMO

July 2020

FINAL





PRODUCTION TEAM

CLIENT

Oregon Department of Transportation

Region 4

63055 N Hwy 97

Bend, OR, 97703

WSP USA

851 SW Sixth Ave

Suite 1600

Portland, OR, 97204



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1 INTRODUCTION

The US97 Bend North Corridor Project will develop and implement improvements along US97 between Bowery Lane and Empire Avenue and on US20 between Cooley Road and Empire Avenue. The Project will consist of intersection improvements, new or modified structures including under/overpasses, realignments of roadway, improvements to pedestrian and bicycle facilities, freight and transit accommodations and other corridor improvements. The Project is identified in the City of Bend's Transportation System Plan (TSP) and the US97 Bend North Corridor Final Environmental Impact Statement (FEIS).

The purpose of this memorandum is to document the safety analysis, operations analysis and multimodal analysis results for existing conditions and future conditions. This memo will be reviewed and finalized for concurrence by the Oregon Department of Transportation (ODOT) Region 4.

1.1 PROJECT DESCRIPTION

The proposed alternative would reroute US97 east of its current alignment, adjacent to the existing railroad tracks. Where US 97 is realigned, the current US 97 roadway would be used as a portion of the extension of 3rd Street. In addition, a new US97 southbound on-ramp from Robal Road and a US97 northbound on-ramp from Cooley Road would be built. Other design elements of the preferred alternative would include enhanced pedestrian and bicycle improvements within the study area. This alternative is consistent with the FEIS for impacts and locations of the impacts along the proposed US97 bypass. Figure 1 below shows the proposed design.

The development of the proposed design alternative involved a thorough screening process that serves similar functions or better functions compared to an IAMP. The design currently meets all standards including but not limited to meeting the US97 design speed, ramp terminal to intersection spacing, ramp taper to at-grade intersection spacing and at-grade intersection spacing between new interchanges on US97.

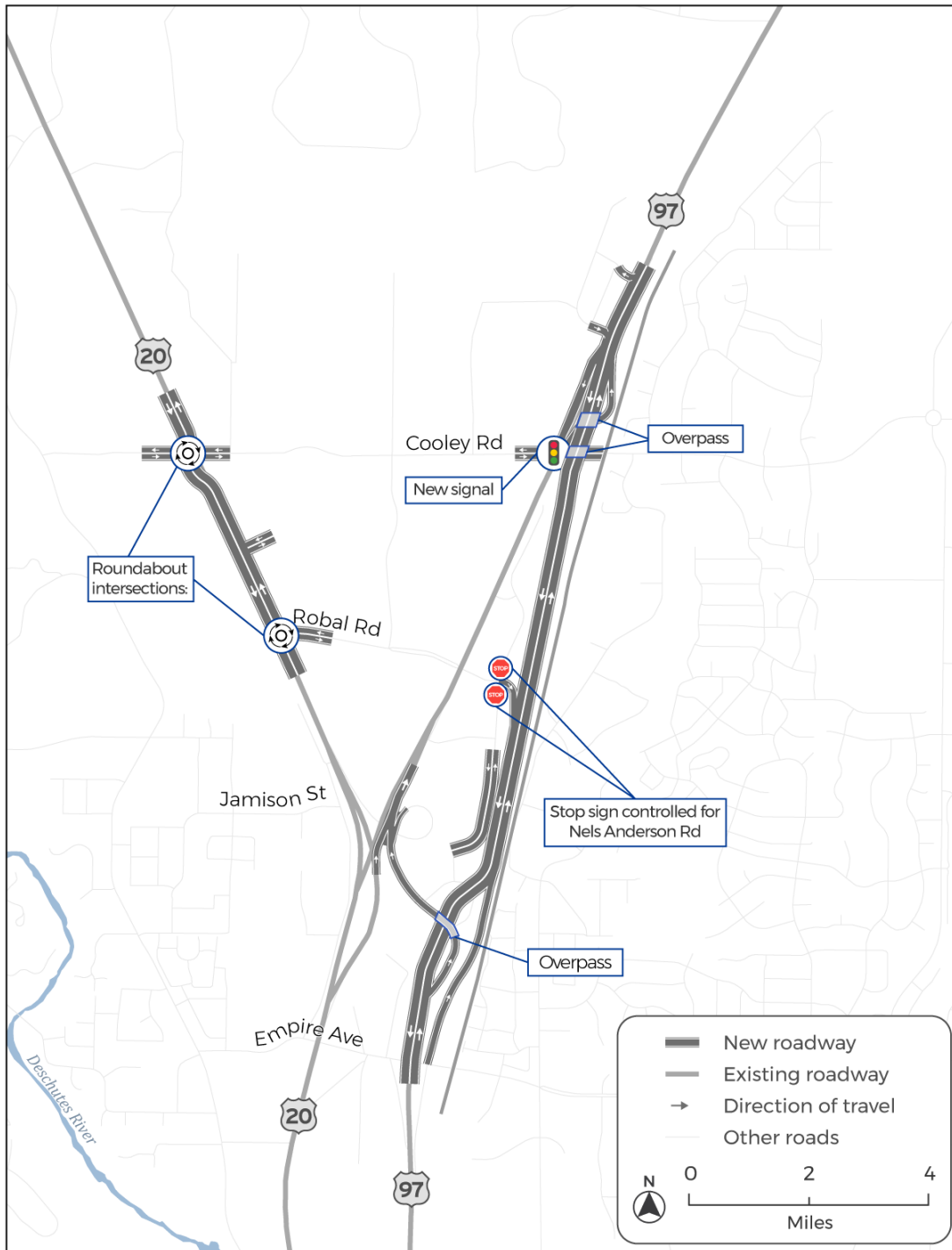
The proposed design allows to potentially have fundable phases that provide incremental operations and safety benefits at US97/Cooley Road and US97/Robal road intersections within the medium-term planning period and would also benefit operations along US97. For example, enhancement of signal operations by installing infrastructure that will better support detection and functionality could be performed prior to the construction of the new US97 bypass route. Additionally, the new infrastructure will support connected and autonomous vehicles which would also improve safety along the corridor. The proposed design would serve as an access-controlled expressway by removing all access of commercial area that currently exist on US97 by providing a bypass. Because the bypass follows along the railroad, it does not provide any additional limitations of access through its construction.

The proposed design provides more support to the surrounding commercial and future commercial developable lots by pulling through traffic out of the major access points, but still providing good connections to these areas. The proposed design performs better than the original FEIS in supporting economic vitality in the surrounding areas by reducing congestion and improving access throughout the area and by enhancing pedestrian and bicycle infrastructure from surrounding neighborhoods to the commercial areas. There would be minimal impacts to a few dead-end local streets. However, these impacts would be mitigated by providing enhanced alternative modes of travel.



Hence, the proposed alternative is recommended for the design-build process. The current estimated project costs are expected to be less than 150million.

Figure 1: Proposed Design

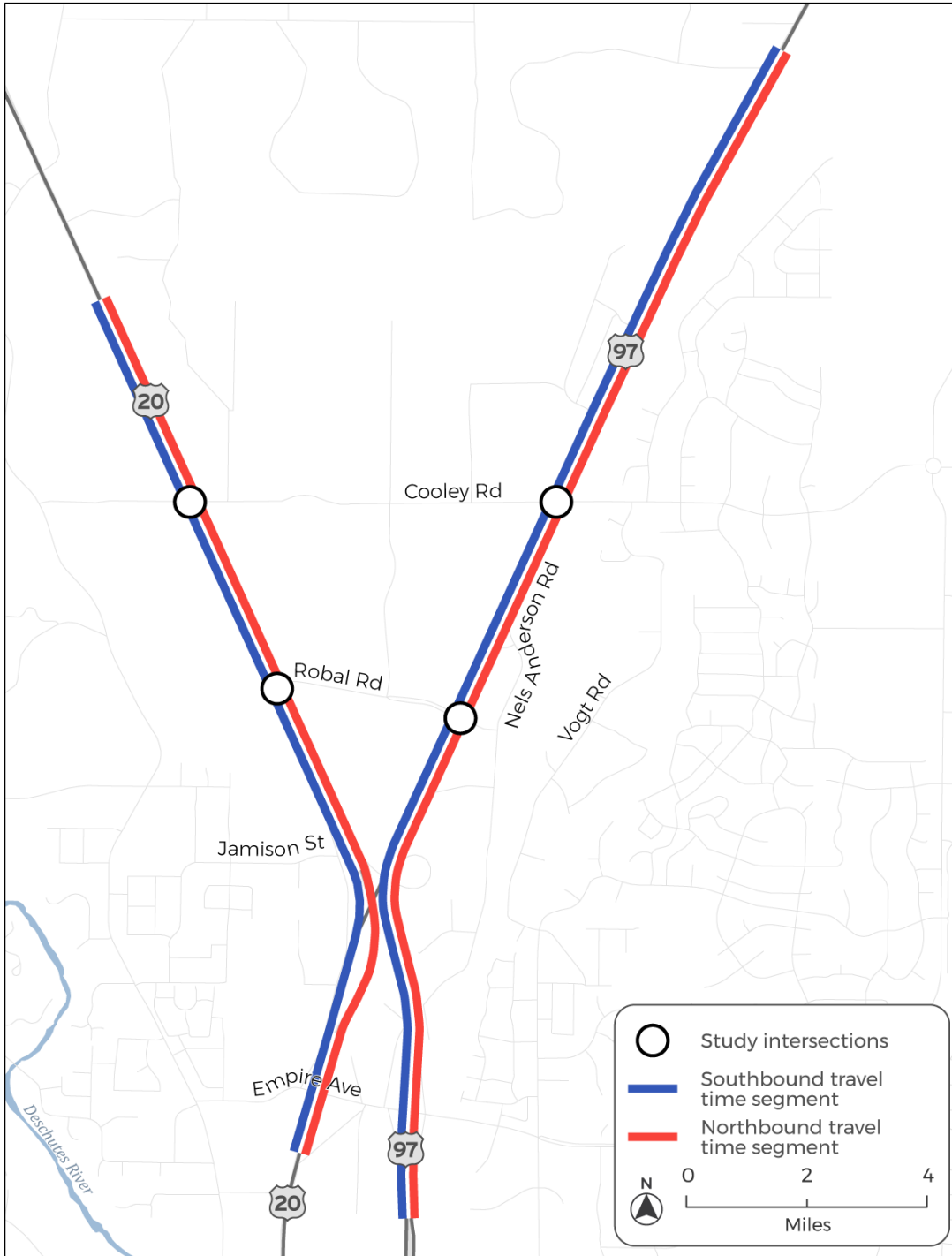


1.2 STUDY AREA

The study area along US97 reflects the targeted segment from Bowery Lane to Empire Avenue and along US 20 from Cooley Road to Empire Avenue. The study area is located within the City of Bend boundaries and Deschutes County.

For the purposes of the transportation report, traffic analysis results for four study intersections and four travel time segments as shown in Figure 2 will be reported.

Figure 2: Study Intersections and Study Segments

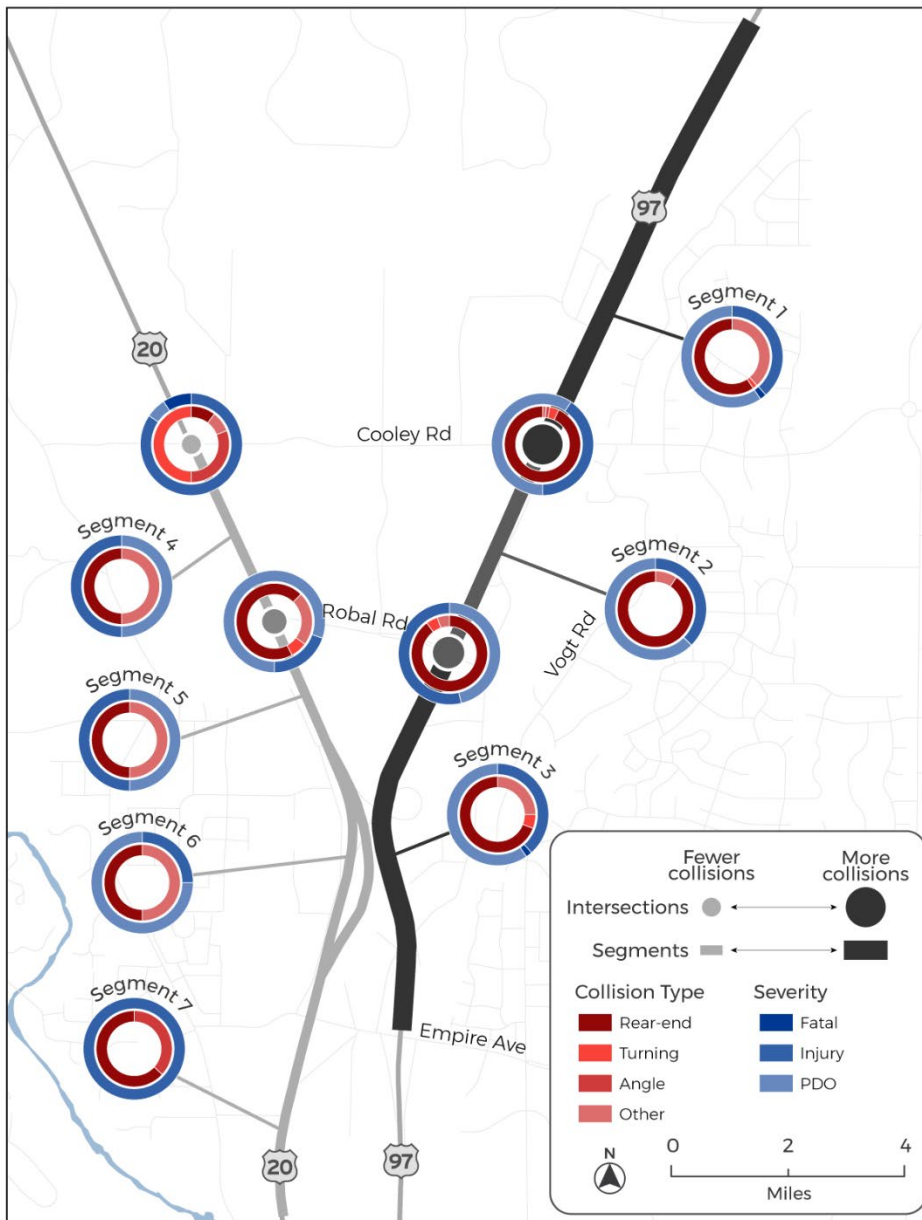


2 SAFETY

2.1 EXISTING CRASH DATA

A summary of crashes occurring between January 1, 2012 and December 31, 2017 within the study area was performed. Figure 3 shows the six-year crash history at the study intersections and study segments.

Figure 3: Study Intersections and Study Segments Existing Crash Data Map

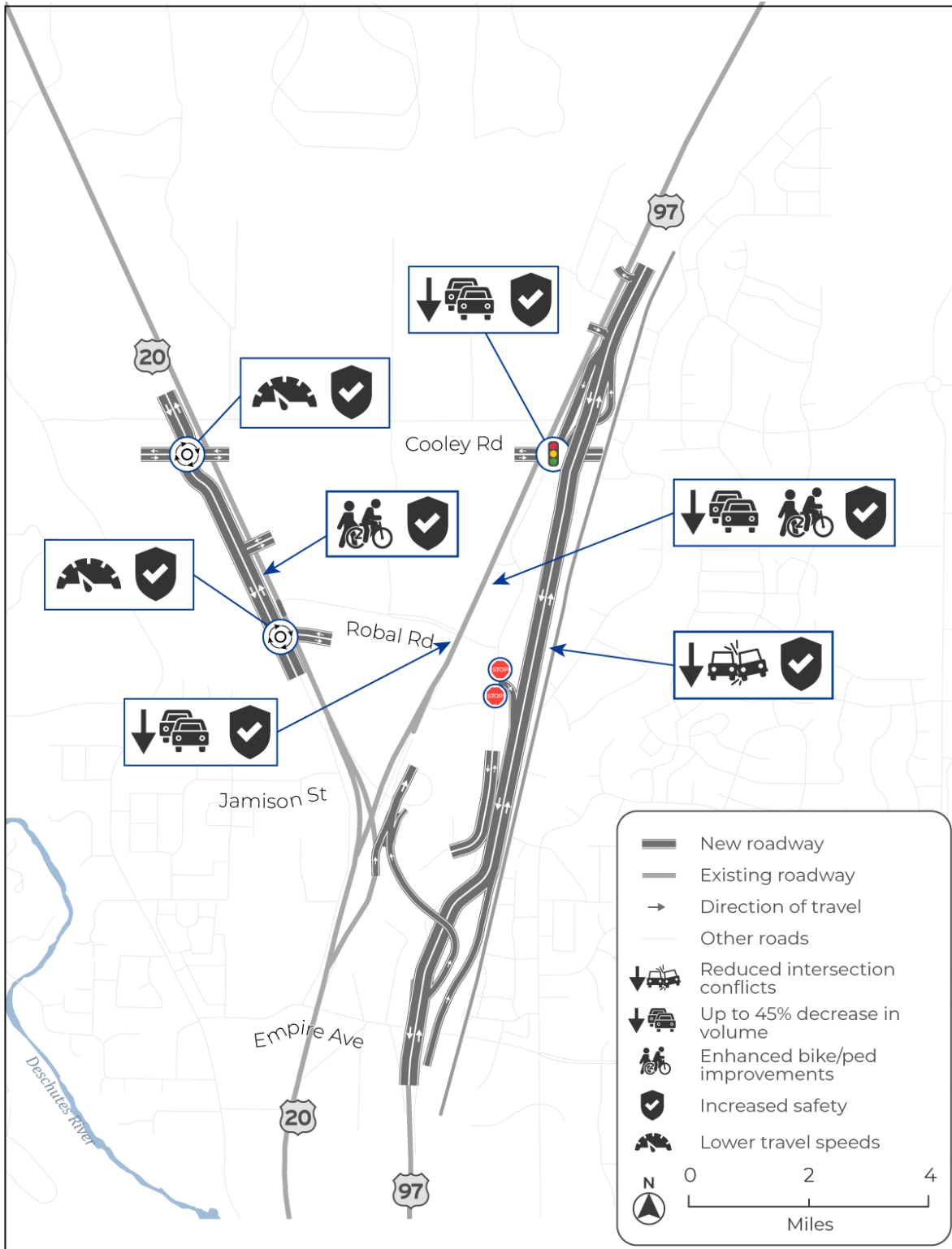


2.2 FUTURE SAFETY IMPROVEMENTS

The proposed design would enable vehicles along the realigned US97 to travel uninterrupted. With the absence of signals, typical intersection conflicts for those vehicles will be significantly reduced along the US97 bypass route. In addition, the proposed design allows to potentially have fundable phases that provide incremental operations and safety benefits at US97/Cooley Road and US97/Robal Road intersections within the medium-term planning period. For example, enhancement of signal operations by installing infrastructure that will better support detection and functionality could be performed prior to the construction of the new US97 bypass route. Additionally, the new infrastructure will support connected and autonomous vehicles which would also allow for improvement in safety along the corridor.

With majority of through US97 vehicles using the bypass, the overall traffic volume along 3rd street would be reduced significantly thereby increasing safety at the existing intersections. Enhanced pedestrian and bicycle improvements along existing US97 would help improve safety for the most vulnerable users along 3rd Street and would remove their conflicts with the highway traffic. The proposed design also provides access control on US97 by providing access only through dedicated on/off ramps. There would be no direct driveway or local street access. Figure 4 below highlights the safety improvements on US97, US20 and on 3rd Street under the proposed alternative.

Figure 4: Proposed Alternative Safety Improvements Map



3 TRAFFIC ANALYSIS

Synchro 10 software and Vissim 11.00-11 was used to perform the 2019 existing year and 2040 Future Year No Build and Build operational analysis. Intersection delays at study intersections and travel times on US97 and US20 study segments were reported from summarizing Vissim travel time results for ten simulation runs.

3.1 EXISTING CONDITIONS (2019)

Based on the existing conditions operations analysis, intersection delays at all study area intersections is less than a minute per vehicle under the existing conditions during PM peak hour. Figure 5 shows the operational analysis results for existing conditions PM Peak hour.

3.2 FUTURE NO BUILD CONDITIONS (2040)

Future No Build conditions operations analysis indicates that all study intersections would operate with delays greater than 90 seconds/vehicle except US97 and Robal Road intersection which would operate with delays greater than a minute per vehicle. Vehicles traveling along US97 and US20 would also experience significant congestion and increased travel times in both directions. Figure 6 shows the operational analysis results for Future No Build conditions PM Peak hour.

3.3 FUTURE BUILD CONDITIONS (2040)

Future Build conditions operations analysis indicates that both US97 and US20 corridors would experience significant travel time benefits under Future Build conditions. With significant number of US97 through vehicles using the new bypass, the overall traffic volume along 3rd street would be reduced significantly thereby improving operations and reducing congestion along 3rd Street. As a result, 3rd Street and Cooley Road intersection would operate with significantly lower intersection delay compared to the No Build conditions. With future improvements to lane geometry and signal modifications, the 3rd street and Robal Road intersection would also operate with significantly lower intersection delay compared to the No Build conditions.

Roundabouts would be constructed at US20 and Cooley Road and US20 and Robal Road intersections in future. Under the Future Build conditions, both intersections would operate with significantly lower delays compared to the No Build conditions. Figure 7 shows the operational analysis results for Future No Build conditions PM Peak hour.

Figure 5: Existing Conditions (2019) Operational Analysis Results – PM Peak Hour

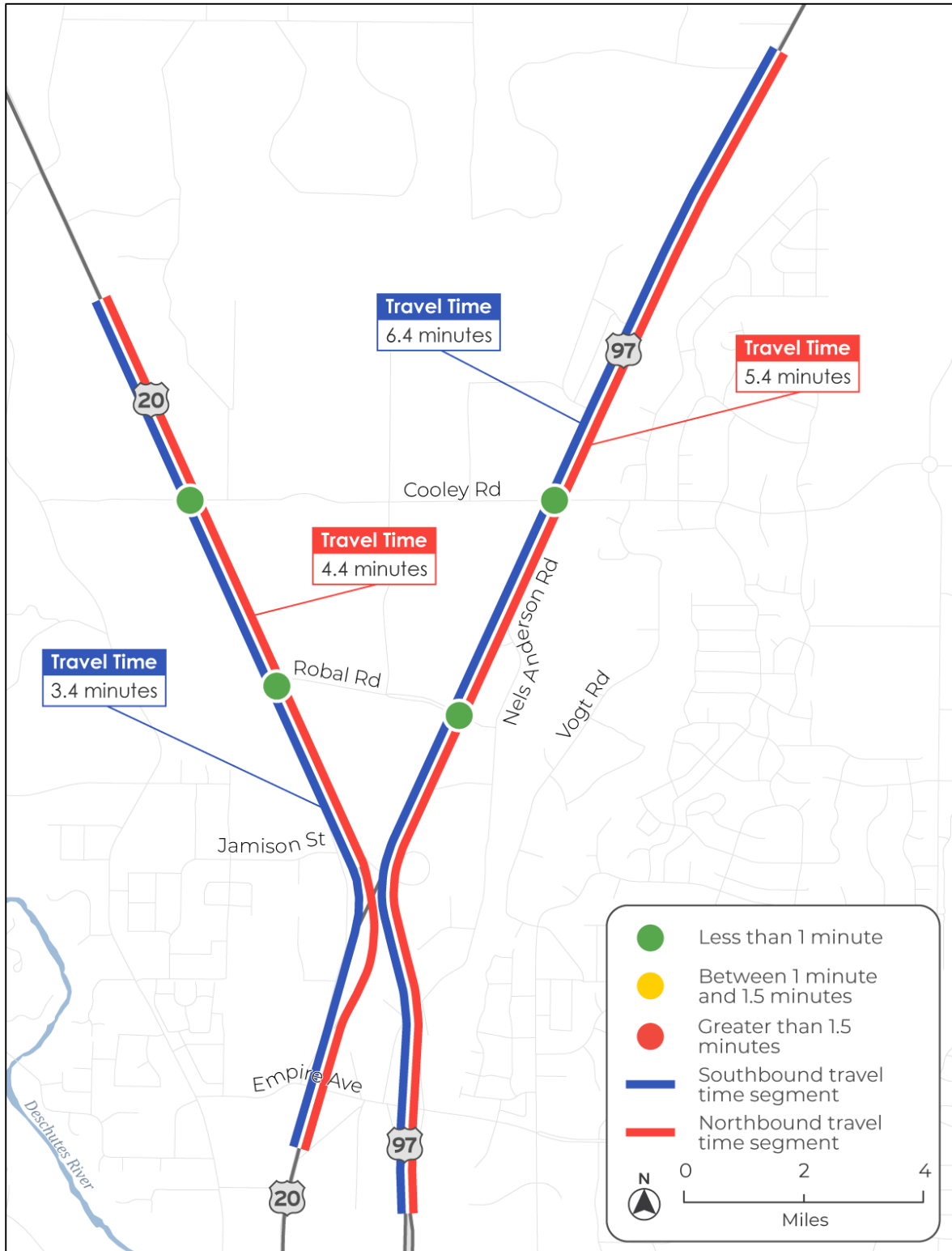


Figure 6: Future No Build Conditions (2040) Operational Analysis Results – PM Peak Hour

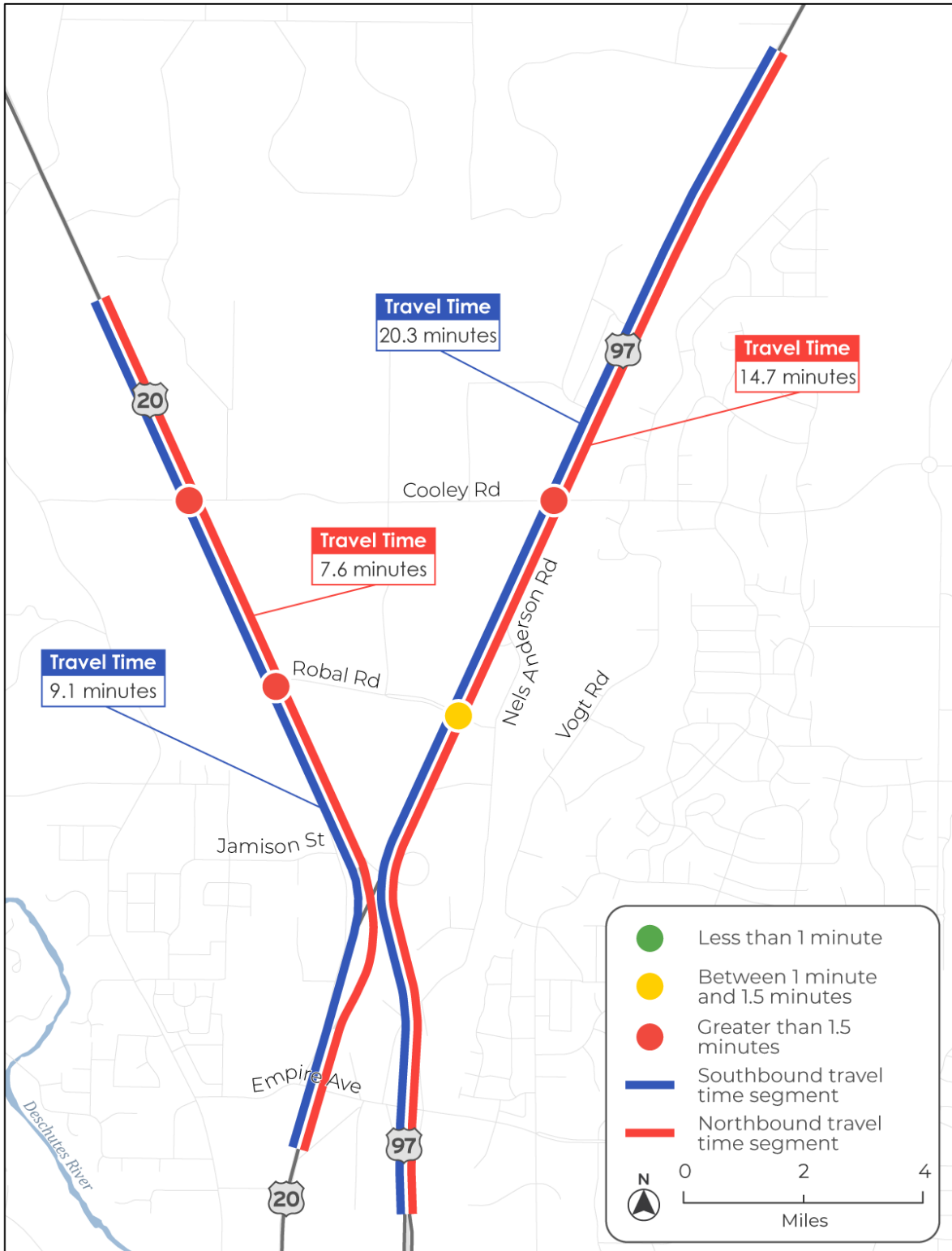
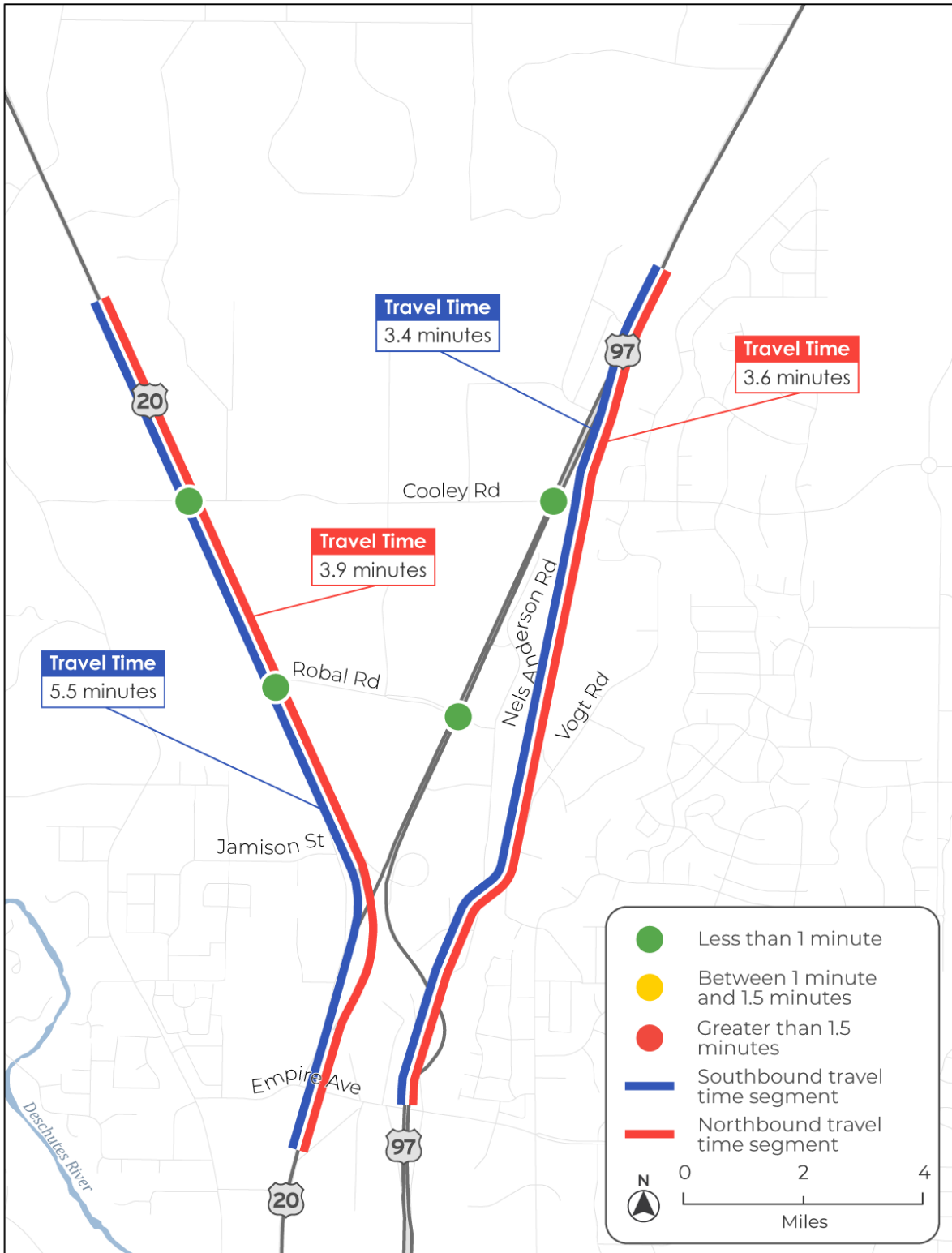


Figure 7: Future Build Conditions (2040) Operational Analysis Results – PM Peak Hour

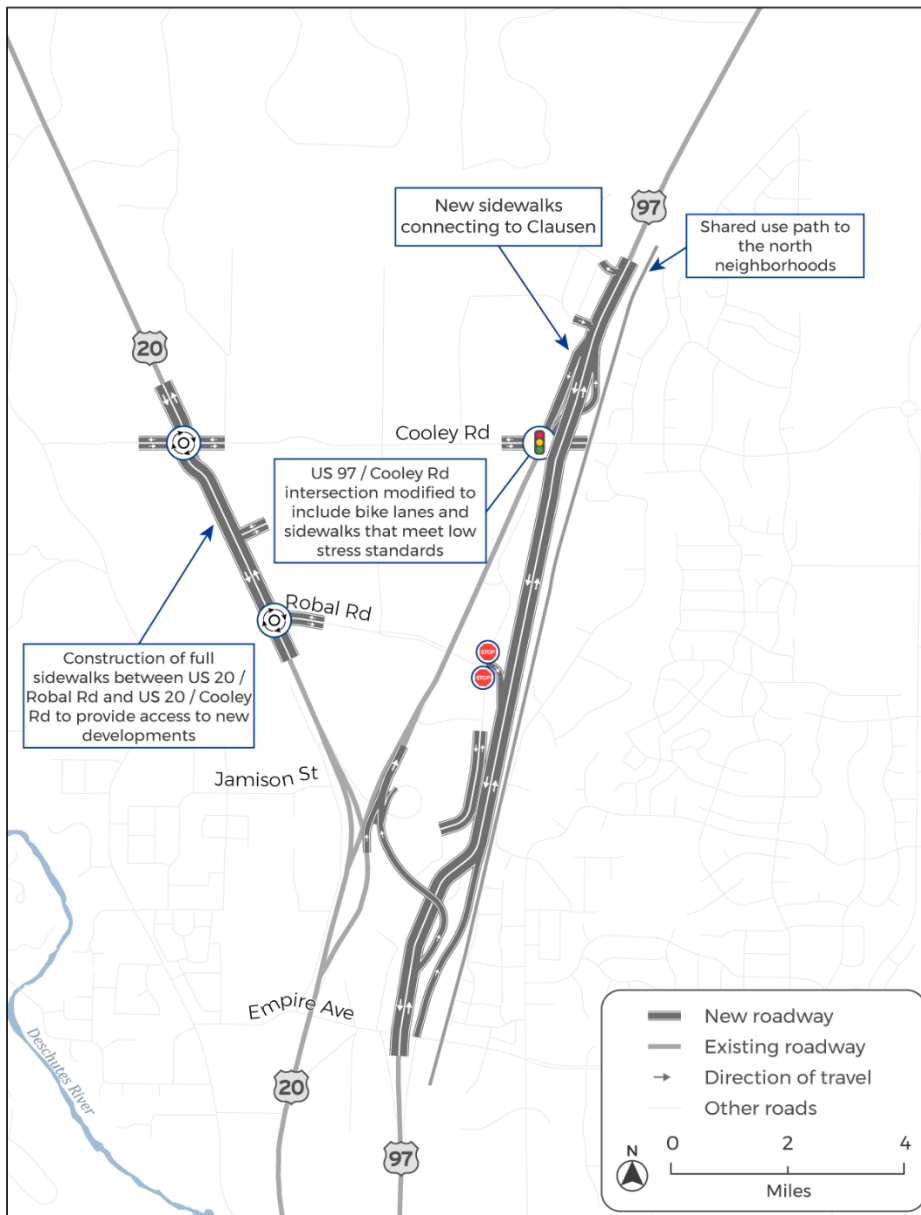


4 MULTIMODAL

4.1 PEDESTRIAN AND BICYCLE

The proposed alternative would provide enhanced bicycle and pedestrian facilities within the project study area as shown in Figure 8 below.

Figure 8: Pedestrian and Bicycle Improvements

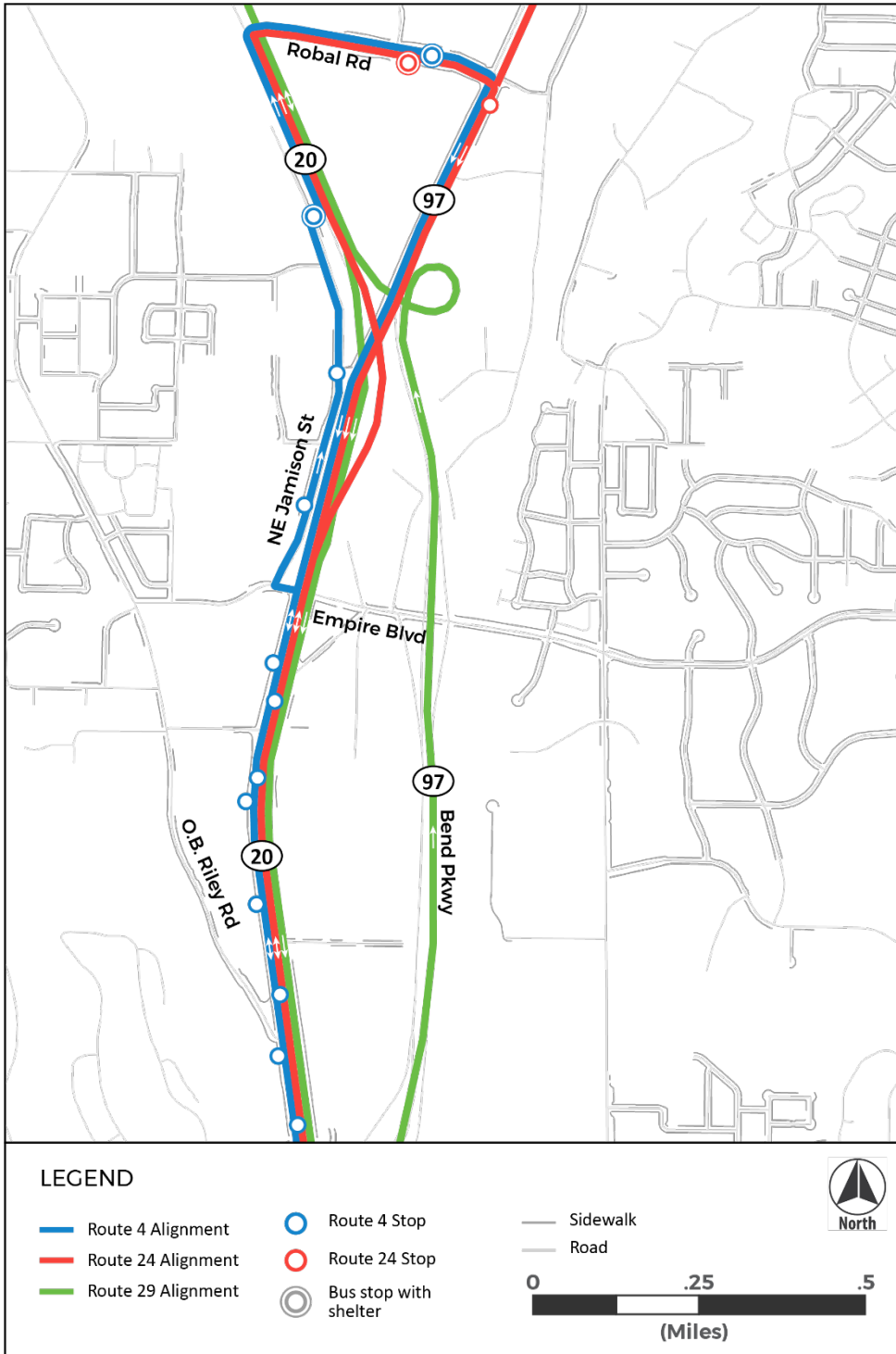


4.2 TRANSIT

Transit currently exists along the US 97 and US 20 corridor in north Bend. Local service Route 4 runs from Hawthorne Station in downtown Bend to Cascade Village in north Bend with 12 bus stops within the project corridor. The bulk of Route 4 exists along U.S. 20 with only a small portion running along US 97, from Robal Road to the US 97/US 20 junction. Route 24 is another transit route along the corridor and serves as a regional connector between Bend and Redmond. The route currently only has four stops total, with only two (northbound and southbound) at Robal Road in the project corridor. Route 29 is a third transit route that connects Sisters, OR and downtown Bend. It utilizes the project corridor but contains no stops within the area.

The proposed alternative would improve transit travel times for all the three bus routes that travel through the project corridor. Figure 9 shows the current transit routes within the project study area.

Figure 9: Current Transit Routes



5 CONCLUSION

The traffic analysis for the Future Build conditions indicate that both US97 and US20 corridors and all study intersections would experience significantly lower delays and improved travel times for all users. The project additionally will provide the following:

- Supports approximately 70,000 annual daily traffic traveling through the study area
- Improves safety by reducing the number of conflicts for motor vehicles in the high-volume areas by reducing accesses
- Provides enhanced infrastructure for vulnerable users such as bikes and pedestrians
- Reduces congestion throughout the study area over the no-build scenario in 2040
- Improves transit travel times for all the three bus routes that travel through the project corridor
- Provides easy and safe access to new developments with improved bike and pedestrian facilities along US20
- Provides further support to the surrounding commercial and future commercial developable lots
- Supports economic vitality in the surrounding areas by reducing congestion and improving access throughout the area

The above-mentioned benefits will be accomplished while still meeting ODOT standards for ramp and interchange spacing and design standards.