



# Oregon

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**July 21, 2014**

**US 97 Bend North Corridor Project  
The Dalles-California Highway (US 97)  
Deschutes County, Oregon  
Key No. 14020**

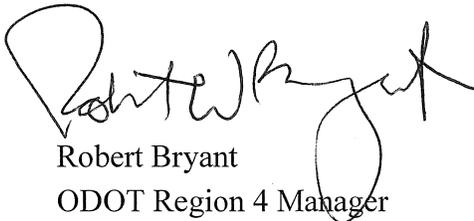
Attached is the Recommendation Document for the US 97 Bend North Corridor project. The Recommendation Document is an internal Oregon Department of Transportation (ODOT) document that formally identifies the East DS2 Modified Alternative as the Preferred Alternative based on the project's Draft Environmental Impact Statement (EIS) and comments from the public and local, state, and Federal agencies.

For this project, the No Build Alternative and two build alternatives, the East DS1 Alternative and the East DS2 Alternative, were considered in the Draft EIS. The Draft EIS was published on July 29, 2011 and was circulated for public review during a 45-day period ending September 12, 2011. On August 24, 2011, ODOT held a public hearing to present information about the project, and to gather public comment on the alternatives and environmental analysis documented in the Draft EIS. ODOT received 166 comment letters on the Draft EIS. These 166 comment letters contained approximately 1,500 individual comments. A short summary of the issues raised in these comments is included in the Recommendation Document.

In order to address the extensive comments received on the Draft EIS, ODOT modified the East DS2 Alternative, and renamed it the East DS2 Modified Alternative. The Final EIS will summarize the analysis of the East DS2 Modified Alternative, and identifies the East DS2 Modified Alternative as the Preferred Alternative.

ODOT is completing the Final EIS and Record of Decision (ROD). Completion of the ROD will formally complete the National Environmental Policy Act (NEPA) compliance process.

Sincerely,

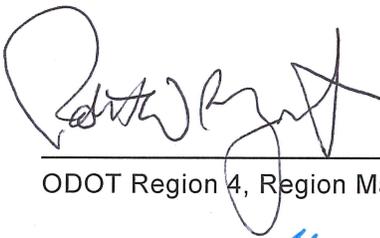


Robert Bryant  
ODOT Region 4 Manager

Attachment: Recommendation Document

**US 97 Bend North Corridor Project  
Environmental Impact Statement**  
The Dalles – California Highway (US 97)  
Deschutes County  
Key No. 14020

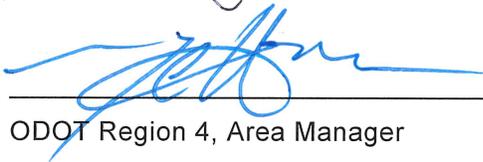
**OREGON DEPARTMENT OF TRANSPORTATION**  
**Recommendation Document for the Preferred Alternative**  
July 2014



ODOT Region 4, Region Manager

July 21, 2014

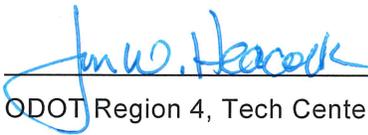
Date



ODOT Region 4, Area Manager

July 21, 2014

Date



ODOT Region 4, Tech Center Manager

July 21, 2014

Date



ODOT Region 4, Planning and Environmental  
Manager

July 21, 2014

Date

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## Project Team

The following individuals participated on the Project Development Team for the US 97 Bend North Corridor project:

Region Manager: Robert Bryant

Area Manager: Gary Farnsworth

Tech Center Manager: Jon Heacock

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Environmental Coordinator: Michael G. Holthoff

Federal Highway Administration: Michelle Eraut, Anthony Boesen

Archaeological Resources: Tobin Bottman

Air Quality and Energy: Marina Orlando

Geology: Curtis Ehlers

Hazardous Materials: Ryan Franklin

Historic Resources: Chris Bell

Land Use/Planning/Parks and Recreation: Jim Bryant and Bonnie Heitsch

Maintenance: Rick Williams

Natural Systems and Communities: Kevin Halesworth

Noise: Carol Newvine

Right of Way: Mary Whitaker

Roadway Design: Ray Thwaites and Della Mosier

Socioeconomics and Environmental Justice: Denise Whitney-Dahlke, Rick Williams, Amy Pfeiffer

Stormwater: Rick Thompson

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Water Quality: William Fletcher

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## Other Team Members

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Archaeological Investigations Northwest, Inc., Consultant

ESA Adolfson, Consultant

JLA Public Involvement, Consultant

Mark J. Greenfield, Consultant

## 1. Project Overview

The Oregon Department of Transportation (ODOT) and Federal Highway Administration (FHWA) propose to improve a segment of US 97 in Deschutes County, Oregon between the Deschutes Market Road/Tumalo Junction interchange and the Empire Avenue interchange.

An approximate six-mile corridor, from the Deschutes Market Road/Tumalo Junction interchange to the Butler Market Road/Bend Parkway interchange, has been identified as an area of potential impact (API) for purposes of environmental impact review. US 97 is a strategic north-south state facility that runs through the central portion of the state. It is classified as a statewide facility and freight route along its entire length, and as an expressway through the project's API. US 97 is a critical facility for moving goods and people through Central Oregon. US 20 is similarly designated as a statewide freight route and expressway within the API.

US 97 also serves as a route for local residents to commute between home and work, and it is a connection to area shopping, dining, businesses, schools and recreation. Bend and Central Oregon have experienced population growth over the past decade. This has led to an increase in traffic congestion and delay, disruptions in traffic flow, and vehicular crashes in the corridor. The US 97 Bend North Corridor project addresses safety concerns and congestion and traffic flow problems on US 97 at the north end of Bend. Under the build alternatives for the project, these concerns and problems will be resolved by reducing at-grade intersections and signals, and by eliminating some public approaches and private driveways on US 97.

Two build alternatives, the East DS1 Alternative and the East DS2 Alternative, were considered in the Draft EIS for this project. The No Build Alternative was also studied as required by the National Environmental Policy Act (NEPA). In order to address issues raised during the public comment period on the Draft EIS, the East DS2 Alternative was modified and renamed as the East DS2 Modified Alternative.

### 1.1 Purpose Statement

The purpose of the US 97 Bend North Corridor project is to improve safety and mobility for trucks and automobiles on US 97 by implementing a practical design solution that is affordable within the potential 20-year funding opportunities and that meets the following performance objectives for the medium-term (5-10 years) and long-term (over 10 years) planning periods as defined by the Bend Metropolitan Planning Organization's *2007-2030 Metropolitan Transportation Plan* (MTP). Performance objectives for the project include:

- Makes incremental improvements to reduce delay, congestion, and the number and severity of crashes at the US 97/Cooley Road and US 97/Robal Road intersections within the medium-term planning period.
- Reduces delay and congestion, and improves safety and operations on US 97 as an expressway between the Deschutes Market Road/Tumalo Junction interchange and Empire Avenue interchange.
- Supports economic development consistent with local agency plans; minimizes impacts to existing and planned local economic base; and provides for existing and planned local connectivity within the long-term planning period.

## 2. Description of the Preferred Alternative

ODOT and FHWA have identified the East DS2 Modified Alternative as the Preferred Alternative. The Preferred Alternative will shift US 97 approximately 1,000 feet east of its current alignment, placing it adjacent to the west side of the BNSF Railway. The new alignment will extend north from Empire Avenue to just south of the Deschutes Memorial Gardens and Chapel. The current US 97 roadway will function like a city arterial, and will be an extension of 3rd Street within the City of Bend's urban growth boundary (UGB). Exhibit 1 shows the Preferred Alternative, which is described in more detail in the sections below.

### 2.1 South Section: Butler Market Road to Nels Anderson Place

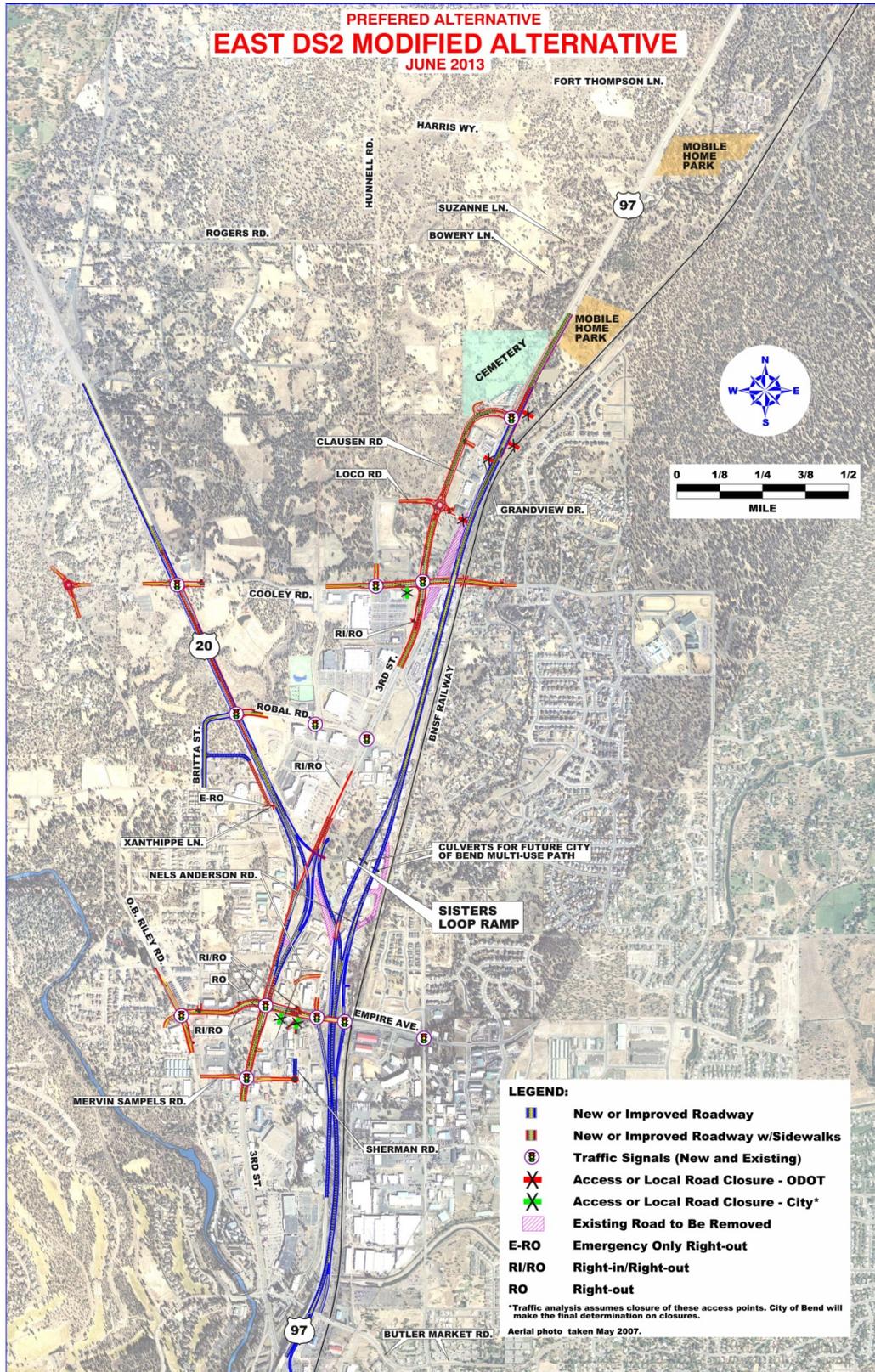
**Butler Market Road to Empire Avenue** - The Preferred Alternative constructs a new alignment of US 97 that will be a free flow highway facility with access to and from the newly aligned US 97 occurring through the Butler Market Road interchange and the Empire Avenue interchange. A third travel lane 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 collocated four-lane facility with two travel lanes in both directions.

**Empire Avenue** - 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.

The Preferred 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. In order to provide access into the industrial area south of Empire Avenue, Mervin Sampels Road will be improved east of 3rd Street, with a new signalized intersection at 3rd Street.

**US 97, US 20 and 3rd Street between Empire Avenue and Nels Anderson Place** - Under the Preferred 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 a 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. The newly aligned southbound US 97 will have two travel lanes, and will cross over the left lane exiting from northbound US 97 to northbound 3rd Street/westbound US 20 on an elevated structure.

Exhibit 1. Preferred Alternative - East DS2 Modified Alternative



Between Empire Avenue and the Sisters loop ramp, the collocated 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). For transportation analysis purposes, the intersection of Sherman Road and Empire Avenue and private accesses slightly west of Sherman Road are shown as closed under the Preferred Alternative. As the Preferred 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. In addition, a trail undercrossing of the newly aligned US 97 will be installed to support the City's future trail plan.

### **2.2 Central Section: Nels Anderson Place to Cooley Road**

Under the Preferred Alternative, this segment of 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 Preferred 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 Preferred Alternative minimizes impacts by maintaining access to Hunters Circle from Cooley Road, east of the realigned US 97.

### **2.3 North Section: Cooley Road to Fort Thompson Lane**

Newly aligned US 97 at the north section of the project area 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 median that will also serve as a turn lane. The realigned US 97 will reconnect with its existing 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.

### **2.4 Transportation System Management/Transportation Demand Management**

The traffic analysis for the Preferred Alternative included many transportation system management (TSM) and transportation demand management (TDM) elements, which resulted in revised roadway configurations, additional bike and pedestrian facilities, and transit accommodations.

TSM measures incorporated into the Preferred Alternative include:

- Metering the on-ramps to the US 97/Butler Market Road interchange and US 97/Empire Avenue interchange to control the timing of traffic merging onto US 97.
- Adding one northbound auxiliary lane on the existing US 97 to provide more capacity between Revere Avenue and Empire Avenue where there are a significant number of short trips (470 trips or 17 percent of US 97 northbound traffic).
- Adding turning lanes and making turning lanes longer to reduce congestion and delay at intersections such as at Cooley Road and 3rd Street, US 20/3rd Street and Empire Avenue, and Empire Avenue to US 97 northbound on-ramps.
- Optimizing the timing of signals to better respond to traffic demands.
- Reducing the number of driveways and local street connections to US 97.

TDM measures incorporated into the Preferred Alternative include:

- Continue coordinating with the Central Oregon Intergovernmental Council (COIC) regarding their existing and future planned services and facilities in the area for Cascades East Transit and design the Preferred Alternative so as to not impact existing transit facilities and to not preclude planned local and regional transit facilities within the north Bend area.

- Creating transportation management areas for new businesses that limit parking spaces, encourage staggered work start and end times, and provide incentives to encourage alternate commuting options.
- Continue coordination with COIC and the Bend Metropolitan Planning Organization (MPO) to accommodate intercity and local transit.
- Providing additional pedestrian and bicycle facilities throughout the API.

### 2.5 Bicycle and Pedestrian Facilities

The Preferred Alternative also includes many facilities to accommodate bicycle and pedestrian travel in the project area. The following lists describe the bicycle and pedestrian improvements under the Preferred Alternative.

South of Empire Avenue:

- Bike lanes and standard sidewalks on 3rd Street
- A traffic signal with crosswalks at the Mervin Sampels Road/3rd Street intersection
- Sidewalks on the northwest and southeast quadrants at the Empire Avenue/O.B. Riley Road intersection.

Between Empire Avenue and Cooley Road:

- Bike lanes and standard sidewalks on 3rd Street.
- Bike lanes on the realigned US 97.
- A multi-use path along the BNSF Railway, as shown on the *Bend Urban Area Transportation System Plan* for Pedestrian and Bicycle Systems, will not be precluded. Trail undercrossings of US 97 will be included to support the City's future trail plan.
- Grade-separated (from US 97 and the BNSF Railway) bike lanes and sidewalks along Cooley Road from Hunters Circle to Hunnell Road.
- A multi-use path from Robal Road to Cooley Road on the east side of US 20.
- Wide shoulders for bike lanes and pedestrian travel on the extension of Britta Street to Robal Road.
- Bike lanes and standard sidewalks on Empire Avenue.
- A multi-use path on the west side of US 20/3rd Street from Empire Avenue to the north to connect with Cascade Village Shopping Center.
- Pedestrian islands and crosswalks at the 3rd Street/Empire Avenue intersection.

North of Cooley Road:

- A separate multi-use path adjacent to US 97 northbound lanes connecting the US 97/3rd Street signalized intersection to the Hilltop and Juniper mobile home parks and allowing bicyclists and pedestrians to safely cross US 97.
- Islands and crosswalks at the US 97/3rd Street signalized intersection, connecting to multi-use paths, sidewalks, and bike lanes.
- A separated multi-use path along 3rd Street connecting Grandview Drive to the new US 97/3rd Street signalized intersection.
- Standard bike lanes and sidewalks on 3rd Street south of Grandview Drive.
- Bike lanes on US 97 to the 3rd Street signalized intersection.
- Bike and pedestrian treatments at the 3rd Street/Loco Road roundabout.

The Preferred Alternative will include access control and median barrier north of Empire Avenue on the newly realigned US 97. Northbound bicyclists traveling on this segment of US 97 will need to travel approximately 2 miles to the signalized intersection at US 97/3rd Street to change direction. ODOT anticipates most bicyclists will choose to use 3rd Street instead, which has separate bike facilities for safer travel and avoidance of out-of-direction travel.

### **3. Rationale for Advancing the Preferred Alternative**

A thorough alternatives development and screening process was conducted for the project. The alternatives development phase gathered input from technical staff, project committees, Participating Agencies, and the public to identify alternatives that could address the purpose of and need for the project. This resulted in a preliminary range of 21 build alternatives. These alternatives were then evaluated for whether they met the Purpose and Need for the proposed action. Two build alternatives, the East DS1 and East DS2 Alternatives, passed all screening criteria and were advanced for detailed study into the Draft EIS.

During the public comment period on the Draft EIS, ODOT received approximately 1,500 individual comments. After ODOT had an opportunity to study the public comments and interact with the Participating Agencies and key focus groups, ODOT clearly recognized that neither the East DS1 Alternative nor East DS2 Alternative would be acceptable to local agencies or the public as a long-term solution. Therefore, ODOT modified the East DS2 Alternative to develop a more acceptable alternative that would address public comments and reduce project impacts, especially impacts to neighborhoods and businesses. Because it was apparent that the East DS1 and East DS2 Alternatives were not acceptable to the public or local agencies, and because the East DS2 Modified Alternative generally has fewer impacts, ODOT and FHWA identified the East DS2 Modified Alternative as the Preferred Alternative in December 2012. The Preferred Alternative has broad support from the public, Participating Agencies, and key focus groups.

Overall, the Preferred Alternative performs better and achieves the project Purpose and Need better than the No Build Alternative, and operates similar to the East DS1 and East DS2 Alternatives. In addition, the Preferred Alternative has lower impacts to many natural and built environment resources when compared to the East DS1 and East DS2 Alternatives. Although there are some cases where the Preferred Alternative has greater impacts to specific natural or built environment resources, the difference in those impact levels is not great enough to substantially outweigh the benefits of the Preferred Alternative.

As described in the following sections, in addition to meeting the project's Purpose and Need, the Preferred Alternative achieves the project's goals and objectives, minimizes environmental impacts, and addresses agency and public concerns.

#### **3.1 Meets Project Purpose and Need**

The Preferred Alternative meets the project's Purpose and Need to improve safety and mobility on US 97 by implementing an affordable design solution, as described below.

The Preferred Alternative will connect the US 97 mainline to the local street network with a new signalized intersection at 3rd Street at the north end of the project, thereby providing a better balance of local and regional traffic, and substantially improving safety and overall system

performance over the No Build Alternative. Under the Preferred Alternative, US 97 travel times will be at least 70 percent less than the No Build Alternative because of the elimination of the US 97/Cooley Road and US 97/Robal Road signals and other public approach roads and private driveways. The Preferred Alternative will have peak operating speeds reasonably close to the posted speeds. The Preferred Alternative will improve the access spacing on US 97 to be in compliance with minimum spacing standards north of the US 97/Empire Avenue interchange. South of the US 97/Empire Avenue interchange on US 97, and along US 20, the spacing will not meet minimum spacing standards, as these sections will remain relatively unchanged under the Preferred Alternative.

Based on the Bend MPO travel demand model analysis, the Preferred Alternative will reduce congestion and improve traffic operations on US 97. The segments of the Preferred Alternative that are on US 97 will have the capacity necessary to provide for the projected 20-year traffic demands. Exhibit 2 compares several system performance measures for the various alternatives.

**Exhibit 2. Select System Performance Measures for the No Build, East DS1 and East DS2 Alternatives, and the Preferred Alternative**

Measure	2036 No Build Alternative	2036 East DS1 Alternative	2036 East DS2 Alternative	2036 Preferred Alternative
Overall average network speed (mph)	5 <sup>1</sup>	25	22	19
Overall network total stops	~66,100 <sup>1</sup>	30,400	45,100	35,500
Overall network delay (hr)	~4,700 <sup>1</sup>	800	1,000	1,100
Overall network travel time (hr)	~5,300 <sup>1</sup>	1,800	2,000	1,900

<sup>1</sup> Note: Data for the No Build Alternative was based on a 40 minute model run; data for the Preferred Alternative was based on 60 minute model runs. Due to severe congestion, the traffic model for the No Build Alternative was not able to run for a full 60 minute simulation. Actual 60 minute simulations would be equivalent or worse than the results shown for the No Build Alternative 40 minute simulation.

By shifting traffic onto limited-access and accessed-controlled facilities (US 97 and US 20) and off of the local arterial system (3rd Street and others), the overall crash rate is expected to decrease under the Preferred Alternative compared to the No Build Alternative. Based on predictive crash analyses, there is expected to be a net reduction of over 14 crashes per year at and around signalized intersections on US 97 under the Preferred Alternative compared to the No Build Alternative.

The Preferred Alternative will also improve motorist and pedestrian safety by grade separating Cooley Road from the BNSF Railway and providing improved pedestrian and bicycle facilities throughout the API. This same grade separation was proposed in the Draft EIS for both build alternatives.

The Preferred Alternative will have a geometric layout that meets interchange policies, interchange function standards, and facility design standards, including meeting the facility design speed for US 97 (minimum design speed – 60 mph which equates to a 45 mph travel speed).

The Preferred Alternative will support local economic development by not bisecting large developable lands or critical large employment lands, keeping them in the City of Bend’s or

Deschutes County's economic base. Large developable lands and critical large employment lands were also protected under the East DS1 and East DS2 Alternatives.

The estimated total project cost range of the Preferred Alternative, \$165 to \$185 million (2016 dollars), will fit within projected long-term funding allocations. The Preferred Alternative has been designed so that it can be constructed incrementally, with phases that provide independent utility and operational benefits. Phases that provide safety and operational benefits at US 97/Cooley Road and US 97/Robal Road could be implemented within the medium-term planning period.

### **3.2 Achieves Project Goals and Objectives**

The project's goals and objectives are desirable outcomes beyond the minimum threshold requirements addressed in the Purpose and Need statement. The following is a summary of how the Preferred Alternative achieves the project's goals and objectives.

#### *Goal 1 - Improve transportation system linkage and operation*

- Minimize impacts and consider improvements to local street operations and connectivity.
- Consider improved connection between US 97 and US 20.
- Maintain or improve the function of US 20 as a regional transportation route.
- Maintain or improve emergency response times.

The existing US 97 facility serves both as a regional highway and as a local route for businesses and residential areas. Growing congestion and safety problems on US 97 can serve neither purpose well, resulting in inefficient travel for through traffic, and congested and unsafe accesses for local businesses and residences. By providing a local street network (an extension of 3rd Street) that works in conjunction with US 97, the Preferred Alternative will provide operational benefits for both the local users as well as statewide and regional through users. Improvements at the Empire Avenue interchange will improve the connection between US 97 and US 20, which will maintain its function as a regional transportation route.

In most cases, the response times for emergency service providers will increase under both the No Build Alternative (2036) and the Preferred Alternative (2036) compared to existing conditions (2011) due to future increases in traffic volumes and congestion. However, in general, preserving the southbound access from the Public Safety Complex onto US 20 as part of the Preferred Alternative will reduce response times compared to the No Build Alternative. Travel times will decrease under the Preferred Alternative compared to the No Build Alternative for routes from the Public Safety Complex to:

- US 97 at Cooley Road
- 3rd Street at Empire Avenue
- 3rd Street at US 97
- Northbound US 97
- Southbound US 97

Travel times to US 20 at Robal Road will have a minor increase of 10 seconds under the Preferred Alternative compared to the No Build Alternative.

### *Goal 2 - Provide local and regional access*

- Provide regional connectivity to US 97 and US 20.
- Maintain access to commercial and industrial areas.

The Preferred Alternative provides for regional connectivity to US 97 and US 20. Local access to southbound and northbound US 97 will occur at Empire Avenue and at the new 3rd Street signal north of Cooley Road. Improvements to the local street network, such as the extension of 3rd Street, and the US 97 northbound left exit to 3rd Street (existing US97) will maintain access to commercial and industrial areas. There will be no out of direction travel from either direction on US 97 to access the commercial and industrial areas near Robal Road. The Preferred Alternative will also include improvements to local roads to provide for truck turning movements in commercial and industrial areas, such as Mervin Sampels Road in the Empire Avenue area, Nels Anderson Road, and the Loco Road/3rd Street roundabout. These truck turning movements were not accommodated in the East DS1 and East DS2 Alternatives.

### *Goal 3 - Consider planned economic development opportunities*

- Balance planned land use and zoning as currently identified in the City of Bend's *Bend Area General Plan* and *Bend Urban Area Transportation System Plan*, in Deschutes County's *Deschutes County Comprehensive Plan*, and the Bend MPO's MTP with US 97 transportation system improvements.
- Provide design in transportation system to accommodate planned future land use and economic development.

The Preferred Alternative is consistent with the local land use plans in the project area and with the planned land use currently identified in the City of Bend's *Bend Area General Plan* and Deschutes County's *Deschutes County Comprehensive Plan*. The Preferred Alternative is included in the City of Bend's and Deschutes County's transportation system plans and the MPO's MTP. The portion of the project outside of the City of Bend's UGB, the extension of Britta Street north and east to US 20 at Robal Road, is in the 2011 *Deschutes County Transportation System Plan*. The Bend MPO Policy Board revised the Illustrative Project List section of the MTP in September 2013 to reflect the Preferred Alternative.

US 97 is a critical transportation corridor for Central Oregon and the communities it serves, and supports local economic health. US 97 is designated as a statewide freight route on the National Highway System and it supports regional mobility for tourism and recreation. US 97 also connects several communities and serves residents during their travel to work, shopping, schools, and other local activities. The Preferred Alternative will ensure that US 97 continues to function well in serving these many roles and demands, and ensure travel safety, freight mobility, livability, and economic opportunities well into the future. Further, the design of the Preferred Alternative does not preclude planned future land use and economic development, or future connections to US 97 in the project area.

### *Goal 4 - Develop a cost effective and sustainable project*

- Consider opportunities for public and private cost sharing.
- Consider long-term maintenance feasibility and cost.

Funding for this project will be balanced with other statewide needs. The Preferred Alternative passed the Purpose and Need screening criterion of a project with a total estimated cost of less than \$250 million. The high-level cost estimate for the Preferred Alternative is \$165-185 million (2016 dollars). The Preferred Alternative will be designed so that it can be constructed incrementally, with phases that provide independent utility and operational benefits.

### *Goal 5 – Develop a project that fits into the context of the community*

- Involve stakeholders to deliver a project that fits into the existing human and natural surroundings.
- Consider past system and corridor work when framing solutions.
- Use practical design principles to minimize cost and impacts and deliver focused benefits.

The Preferred Alternative is a scaled down build alternative that will minimize impacts to neighborhoods east of US 97, and will substantially minimize impacts to rural residential properties north of Cooley Road and west of US 97. The Preferred Alternative has been designed to minimize improvements that will occur outside of the City of Bend's adopted UGB. As a result of these modifications, and through coordination with Deschutes County and the Oregon State Department of Land Conservation and Development (DLCDD), exceptions to the Statewide Planning Goals will not be required.

The Preferred Alternative has been designed to minimize impacts in the north end of the project area, including the Hunnell and Rock O' the Range neighborhoods. This alternative avoids impacts to lands zoned MUA10 and contains all improvements, except the extension of Britta Street west of US 20, to lands already within the City of Bend's adopted UGB. As described in the Draft EIS, Interchange Area Management Plans (IAMPs) would have been put in place for the East DS1 and East DS2 Alternatives to limit growth outside of the UGB. Under the Preferred Alternative, IAMPs are not needed.

The Preferred Alternative does not preclude a future and separate interchange project in the northernmost portion of the API or other potential future connections to US 97 in the project area. Any potential future projects will have separate and independent utility from the Preferred Alternative and will be required to obtain their own environmental analyses and clearances.

### *Goal 6 - Improve bicycle and pedestrian safety and connectivity*

- Enhance safety, access, and mobility for pedestrians and bicyclists.

Improvements to bicycle and pedestrian facilities are explained in greater detail in Section 2.5. The Preferred Alternative will greatly increase the number of bicycle and pedestrian facilities in the central and north portions of the project area. New multi-use paths will be added to connect neighborhoods to destinations within the project area and existing facilities will be extended.

## **3.3 Minimizes Environmental Impacts**

In response to comments on the Draft EIS, ODOT explored opportunities to reduce and/or mitigate the project's environmental impacts. As stated in the discussion of Goal 5 above, the Preferred Alternative is a scaled-down build alternative that minimizes impacts to neighborhoods

east of US 97, and substantially minimizes 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.

As a result of these modifications, and through coordination with Deschutes County and DLCD, the Preferred Alternative will not require exceptions to the Oregon Statewide Planning Goals. Both the East DS1 and East DS2 Alternatives would have required two goal exceptions: one for extending Robal Road west of US 20 to O.B. Riley Road and one for the new northern interchange.

The Preferred Alternative has been designed to reduce the overall project footprint, minimize the amount of land that will need to be acquired for right of way, and minimize the number of residential and business displacements. The Preferred Alternative will require the displacement of 6 residences, 44 businesses, 2 billboards, and 250 rental storage units. These acquisitions are a 25 to 35 percent reduction from the East DS1 and East DS2 Alternatives studied in the Draft EIS.

### **3.4 Compliance with Statewide Planning Goals**

The Preferred Alternative will not require exceptions to the Oregon statewide planning goals. The northern signalized intersection of 3rd Street with US 97 will be located within the City of Bend's UGB. In addition, the Preferred Alternative has been designed to minimize improvements that will occur outside of the City of Bend's UGB; improvements that will occur outside of the UGB will be constructed to Deschutes County (rural transportation facility) standards. The Preferred Alternative will not require an exception to Oregon's Statewide Planning Goal 3 (Agricultural Lands) because it will not convert land zoned for Exclusive Farm Use to right of way. Therefore, as designed, and confirmed through coordination with DLCD, exceptions to the Oregon statewide planning goals will not be required for the Preferred Alternative. The DLCD confirmed that no goal exception is required for the extension of Britta Street outside of the UGB, as identified in the Preferred Alternative, since it will be constructed to rural collector standards (email from Karen Swirsky, DLCD, dated April 2, 2013). The Preferred Alternative will also be consistent with the Oregon Transportation Planning Rule as it will incorporate TDM measures.

### **3.5 Compliance with Local Comprehensive Plans**

The Preferred Alternative is consistent with the local jurisdictions' transportation system plans and comprehensive plans as outlined below.

#### **Bend Metropolitan Planning Organization**

On August 15, 2013, the Bend MPO's Policy Board voted to include the Preferred Alternative on the Illustrative Project List in the MTP. The MTP is a 20-year long-range transportation plan that addresses all modes of transportation, establishes transportation policy and project priorities, and includes a "financially constrained" project list. Part of the long-range planning process is development of a long-range revenue forecast. Only projects that fit within or can be funded with forecasted revenues are included in the MTP.

## US 97 Bend North Corridor

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In September 2013, the MTP was amended in the following ways to include the Preferred Alternative:

- The Illustrative Project List section (both the table and narrative) in Chapter 6 – Motor Vehicles was updated to include the Preferred Alternative.
- The “North Corridor Project (US97-US20 NEPA)” was eliminated as an outstanding issue in Chapter 21 – Outstanding Issues.

Portions of the Preferred Alternative have funding identified and are included as medium- and long-term projects in the Financially Constrained/Preferred Scenario-Project List in Table 6-16 of the Bend MPO’s MTP. These improvements are listed in the excerpted table below (Exhibit 3). A total of \$6.26 million is identified in the financially constrained list for the US 97 Bend North Corridor project.

**Exhibit 3. Excerpt from the Bend MPO’s Metropolitan Transportation Plan, Table 6-16**

MPO MTP Project #	Location (Jurisdiction)	From	To	Improvement	Project Priority	Planning Level Cost (\$1,000s)*
2	Empire Ave (Bend)	3 <sup>rd</sup> Street	Parkway	Add one travel lane in each direction	Medium	\$4,620
24	Empire Avenue (Bend/ODOT)	Parkway SB Ramps		Install traffic signal	Medium	\$250
23	O.B. Riley Road (Bend)	Empire Avenue		Install traffic signal	Medium	\$250
5	US 97 NB off-ramp (ODOT)	Empire Avenue		Add one ramp lane	Long	\$1,140

*\*The project cost estimates do not include right of way costs. Right of way costs vary significantly with each project. Right of way costs will be addressed in the development/engineering phases of each project.*

The remaining improvements associated with the Preferred Alternative are included in the Bend MTP’s Illustrative Project List (Table 6-18). As funding is obtained for additional components of the Preferred Alternative, ODOT will request that the Bend MPO move those funded elements from the illustrative list to the financially constrained list.

### Deschutes County

Subsequent to the publishing of the Draft EIS, as outlined in a June 13, 2013 letter from Deschutes County to ODOT, Deschutes County determined that the elements of the Preferred Alternative that are within the jurisdiction of Deschutes County do not require an amendment to the *Deschutes County Transportation System Plan* or the associated *Comprehensive Plan*. The extension of Britta Street and the modification of the Cooley Road/O.B. Riley Road intersection

to make it a roundabout are already addressed in the *Deschutes County Transportation System Plan*.

### **City of Bend**

The *Bend Urban Area Transportation System Plan*, which is a component of the *Bend Area General Plan*, has been updated to include the Preferred Alternative. City of Bend Ordinance Number NS-2215 (March 5, 2014) amended the following portions of the *Bend Area General Plan* to include the Preferred Alternative:

- Chapter 7 – Transportation Systems.
- Appendix C – Transportation System Plan.
- Transportation System Plan Maps and Appendices.

### **3.6 Addresses Agency and Public Concerns**

In response to comments on the Draft EIS, ODOT explored opportunities to address agency and public concerns regarding the East DS1 and East DS2 Alternatives. This effort included discussions with the City of Bend, the Bend MPO, Deschutes County, FHWA, and other stakeholders to make sure a shared long-term vision and investment strategy for US 97 in relation to this project supports the economic and livability goals of the community and the state. The Preferred Alternative is a scaled down build alternative that:

- Minimizes impacts to neighborhoods east of US 97.
- Substantially minimizes 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.
- Separates the highway and local street functions.
- Allows peak operating speeds to be reasonably close to the posted speeds.
- Improves the access spacing on US 97 to meet spacing standards between Empire Avenue and the north 3rd Street signalized intersection.
- Improves access to the business and commercial areas along 3rd Street by providing a full-movement intersection at US 97 north of Cooley Road.
- Does not require exceptions to the Statewide Planning Goals.

The Preferred Alternative will function much better than the No Build Alternative and will allow free-flow operations on US 97 through the 2036 design year. The Preferred Alternative will allow US 97 to operate consistent with its expressway and freight route designations by maximizing the flow of long distance and regional trips while minimizing access points.

## **4. Public and Agency Involvement**

### **4.1 Public and Agency Outreach Activities and Tools**

Early and continual coordination with the general public and appropriate public agencies was an essential part of the environmental process to determine the scope of environmental documentation, the level of analysis, potential impacts, proposed mitigation measures, and related environmental requirements. Agency consultation and public participation for the proposed action have been accomplished through a variety of formal and informal methods,

including: public and agency scoping meetings, public open houses, a project website, online surveys, newsletters, media releases, field-based surveys, and focus group meetings. Also, ODOT-sponsored committees, including the Agency Coordination Committee, Citizen Advisory Committee, and the Steering Team were formed to provide opportunities for involvement at all stakeholder levels. Additional efforts were made to engage environmental justice populations. Newsletters were regularly maintained and updated and posted on the project website. Seven newsletters have been developed and posted for the project.

Agency coordination for this project began in October 2007 with a project initiation letter to FHWA identifying FHWA and ODOT as co-lead agencies for the proposed action. The City of Bend, Deschutes County, and the DLCD accepted the invitation to be Participating Agencies for this project. Twenty-four agency coordination committee meetings were held between November 2007 and February 2011, up until the release of the Draft EIS.

In addition to coordination with FHWA and the Participating Agencies, ODOT has consulted and coordinated with other public agencies as needed. These agencies included:

- Bend Landmarks Commission
- Central Oregon Irrigation District
- Collaborative Environmental and Transportation Agreement for Streamlining (CETAS) signatory federal and state agencies
- Deschutes County Environmental Health
- Deschutes County Historical Landmarks Commission
- National Resources Conservation Service
- North Unit Irrigation District
- Oregon Department of Human Services, Public Health Division, Drinking Water Program
- Oregon Water Resources Department
- State Historic Preservation Office
- Swalley Irrigation District
- US Army Corps of Engineers

### **4.2 Public and Agency Comments on the Draft EIS**

On July 29, 2011, ODOT released the Draft EIS for the US 97 Bend North Corridor project. The availability of the Draft EIS, and the beginning of a 45-day public comment period ending September 12, 2011, were announced in the Federal Register and through a variety of media outlets and communications. ODOT held an open house and public hearing on August 24, 2011, offering the public a chance to provide formal testimony about the project. In addition to individual testimony given at the public hearing, ODOT received 166 comment letters on the Draft EIS. These 166 comment letters contained approximately 1,500 individual comments.

The general topics that were raised during the public hearing and public comment period included:

- Purpose and Need for the project.
- Noise, traffic and pollution associated with routing the highway closer to established neighborhoods.
- Visual impacts to residents.
- Quality of life impacts to established neighborhoods.
- Non-endangered and non-threatened wildlife impacts, especially in the Hunnell Neighborhood.
- Cut-through traffic in neighborhoods associated with local street improvements, especially in the Hunnell Neighborhood.
- Residential and commercial displacements.
- Local street improvements and jurisdictional transfer.
- Timing, phasing and impacts of project construction.
- Traffic data and traffic analysis.
- Public safety.
- Support for both build alternatives and the No Build Alternative, with no single alternative receiving overwhelming support.
- Lack of improved connection between US 97 and US 20.
- Access for residential and commercial properties.
- Impacts to existing utilities.
- Altered travel routes, especially north of Cooley Road.
- Concern about the design and public involvement process used for the Bend Parkway project, and a desire for an open and comprehensive process for the US 97 Bend North Corridor project.
- Land use, zoning, statewide planning goals and growth management.
- Historic resources, particularly the Nels Anderson House.
- Transportation Planning Rule update.
- Property value and ability to sell property during project planning phase.
- Juniper Ridge assumptions and impacts.
- Comment period extension.
- Cost.

### 4.3 Public and Agency Coordination after the Draft EIS

Since the close of the public comment period, ODOT has been working with local agencies and the public to address concerns and feedback. Between October 2012 and August 2013, ODOT held 11 meetings with the following agencies and groups, some of them agencies listed in Section 4.1:

- City of Bend
- Deschutes County
- Bend MPO
- The Oregon Transportation Commission
- Bend Landmarks Commission
- Deschutes County Historical Landmarks Commission
- Emergency Services

In addition, ODOT held two focus group meetings with past focus group participants consisting of area businesses, emergency service providers, landowners, and neighborhood groups and associations on December 12, 2013 and January 31, 2013. These were primarily to provide a project update and introduce the Preferred Alternative.

ODOT held a Citizen Advisory Committee meeting on December 12, 2013, and held two meetings with the Deschutes County Bicycle and Pedestrian Advisory Sub-Committee, one on February 7, 2013 and another on March 19, 2013.

ODOT held an open house on June 13, 2013 to share the Preferred Alternative with the community. The goals of the open house were for the public to understand the rationale for identifying the East DS2 Modified Alternative as the Preferred Alternative, to review maps for the Preferred Alternative, and review the anticipated impacts and benefits to the community and the environment. Sixty-six people attended the Open House.

The project newsletter was updated for summer 2013 and posted on the project website. A Spanish version of the newsletter was also sent to residents of the environmental justice communities (mobile home parks), and a Spanish translator was available at the open house.