

1. INTRODUCTION

Highway 138 is designated as a regional highway under the state highway classification system that links the Roseburg vicinity and the Interstate 5 (I-5) corridor to central Oregon destinations such as US 97 and Crater Lake National Park. Connections through the City of Roseburg require maneuvering a frequently congested and circuitous course through downtown Roseburg (see Figure 1-1). From I-5/Harvard Avenue Interchange (exit 124), eastbound Highway 138 crosses the South Umpqua River into downtown Roseburg via the Oak/Washington Street couplet, then turns ninety-degrees north onto Stephens Street (southbound traffic utilizes Pine Street), then east onto Diamond Lake Boulevard (Highway 138). The tight turning radii of the alignment can make travel difficult for trucks, which sometimes opt to use the Garden Valley Interchange at exit 125 instead.

Exploration of options that re-route through traffic often evolve from growing congestion and safety problems along roadways that perform both as a regional highway and as a downtown main street. The regional highway role is to serve both efficient freight and through travel, whereas the main street role is to provide access to local businesses and residential areas. Ultimately, the highway serves neither purpose well once traffic volumes increase to a certain threshold. The end result is inefficient travel for through traffic and congested and unsafe access for local businesses and pedestrians.

Typically, roadways that best serve these separate functions have opposing characteristics. Regional through travel is best served by wide limited access facilities that allow higher speeds and require infrequent stops. Downtown areas, on the other hand, require access opportunities and a safe environment for a mix of travel modes – especially pedestrian and bicyclists in addition to vehicle travel. Subsequently, a typical main street that effectively serves a downtown environment is narrower and constrained by on-street parking and pedestrian amenities that culminate in lower vehicle speeds. Hence, proposals to separate regional travel and local access are given serious consideration as congestion increases.

The City of Roseburg is exploring options to improve connections between I-5 and Diamond Lake Boulevard. Hence, a corridor study was the next logical step in order to resolve pertinent planning issues involved that will enable a project to become eligible for funding under the STIP.

Existing Deficiencies

The City of Roseburg TSP examined the existing transportation conditions and identified the following operational and safety deficiencies within the City's transportation system:

Existing Traffic Conditions: The Roseburg TSP identified 47 intersections to analyze – 15 of which are located within the corridor study area. Of the intersections analyzed, four within the study area recorded high variations in traffic flow during the peak hour. Furthermore, three of the five roadways throughout the Roseburg Urban Growth Boundary (UGB) that generate the highest average daily traffic (ADT) volumes are within the study area: Stephens Street (south of Diamond Lake Boulevard), Harvard Avenue, and Washington Avenue. The other two high volume roadways are I-5 and Garden Valley Boulevard.

Railroad Crossings: The railroad bisects the city in a north-south direction, crossing at grade several high volume arterials. This effectively cuts the east portions of the City from the western half. One unimproved grade separated crossing is constructed from the end of Rowe Street to the multi-use path system south of Gaddis Park. The crossing could accommodate ambulance service, but fire trucks are too large for the opening.

High Concentration of Collisions Recorded in Study Area: Collision data from ODOT recorded 1,464 collisions inside the Roseburg UGB between January 2001 and December 2003. Figure 3-3 of the Roseburg TSP pinpoints 21 “High Collision Locations” where 42 percent of total collisions occurred. Among the high collision locations, 5 are within the Highway 138 Study Area, which includes downtown Roseburg and vicinity.

Freight Mobility: Good freight mobility within the Roseburg UGB requires that the arterial and collector street system provide both an adequate level of service and good connectivity to intermodal facilities and inter-regional routes, including I-5 and Highway 138. Because of the current alignment of Highway 138 through downtown Roseburg, some trucks traveling to and from Diamond Lake Boulevard or central Oregon use the Garden Valley Interchange (Exit 125) instead.

Bicycle and Pedestrian Amenities: Many bicycle facility deficiencies are documented on several downtown arterials and collectors as well as along Harvard Avenue and Stephens Street.

Study Process

The study was based on a tiered process of project development that attempted to mirror to the greatest extent possible, the process outlined in NEPA. The study initially screened seventeen design concepts down to six build alternatives that were subsequently evaluated in more detail, cumulating toward a final recommendation of two build alternatives to be carried forward through an environmental assessment process. Two additional design concepts were forwarded for consideration following the final recommendations. The two concepts were similarly screened and evaluated during a subsequent review by the oversight committees and forwarded. As a result, one of the prior selected alternatives was removed from consideration and incorporated into the two more recent alternatives. By developing Purpose and Need statements along with Goals and Objectives for the project and collecting some baseline environmental and land use data, this study was set up to serve as the initial phase of a NEPA study. The study concludes that suitable solutions to the problems identified in the corridor will likely require the completion of an Environmental Assessment (EA) to be eligible for funding through FHWA.

The study included the following major work tasks:

2006 Existing Condition – The evaluation of existing conditions (Section 2) includes an update of traffic counts since the TSP was completed, additional analysis of crash history, collection of data to gain an understanding of the different travel flows through the area, and identification of system operational and safety deficiencies. Some baseline environmental and land use data was collected and other plans reviewed to identify potential impacts and conflicts in the alternatives screening and evaluation process.

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2030 No Build Condition – The No Build evaluation (Section 3) was based on a year 2030 forecast of traffic demand in the study area and compared with a transportation system that includes improvements which are planned and funded throughout the city but no projects which specifically address deficiencies in the Highway 138 corridor.

Concept Development and Screening – A total of seventeen improvement concepts were developed and screened based on the Goals and Objectives for the project (Section 4). From this group, six build alternatives were identified for more detailed evaluation. Two additional concepts were screened later in the process and forwarded for further analysis.

Alternatives Evaluation – The six build alternatives that advanced through the screening process were evaluated at a more detailed level as described in Section 5. The evaluation included traffic volume forecasting, operational analysis, qualitative assessment of environmental and land use impacts, basic geometric design to determine general footprint, and planning-level cost estimates.

Alternative(s) Recommendation – Following the introduction of two additional alternatives, a total of three alternatives were recommended for further refinement based on the outcome of the evaluation described in Section 5.

Public Oversight and Involvement

Public involvement played an important role throughout the study process. Three committees were developed to provide varying levels of input and decision-making. Each committee met seven times during the project (see

Appendix A for agendas and meeting summaries). In addition, four public open houses were held throughout the study process. Lastly, project team leaders presented the study before the CETAS committee. The purpose and roles of the various public outreach efforts is described below.

Citizen Advisory Committee (CAC)

The CAC provided stakeholder input throughout the study and offered comments and recommendations to the Technical Advisory Committee and Steering Committee (see below). The role of the committee allowed interested citizens, property owners, business representatives and other stakeholders to learn about the project and key issues. The CAC also provided a supplemental, informal avenue for sharing information and receiving input from the community.

Technical Advisory Committee (TAC)

ODOT designated a TAC to provide technical and policy guidance during the study whose members included public works officials from the City of Roseburg and Douglas County, ODOT representatives, and railroad interests. The TAC served as the technical body tasked with making recommendations about the project.

Steering Committee (SC)

A Steering Committee was formed to provide policy guidance and to make decisions on land use, transportation facilities, access management, and plan and ordinance amendments based upon recommendations from the TAC and CAC. Composed of members from the Douglas County Board of Commissioners, Roseburg City Council, Cow Creek Band of Umpqua Tribe of Indians, plus staff from ODOT and the FHWA (non-voting member), the SC made final decisions to forward or drop alternatives under consideration.

Public Open Houses

Public meetings held on January 30th, April 11th, and June 13th of 2007 provided opportunities for the project team and general public to exchange information on the project and discuss the screening, analysis, and ultimately the selection of preferred alternatives. A subsequent open house meeting held on February 6, 2008 enabled the public to assess two additional design concepts that were forwarded for review and compared with the remaining alternatives selected from the prior review process. A summary of comments received from the four Open House meetings is provided in Appendix B.

The first meeting, held on January 30, 2007 at Roseburg City Hall and attended by over 60 residents and interested parties (61 signed the attendance sheets), introduced the study to the public and involved a formal presentation followed by an open discussion session. ODOT Region 3 received 9 written comments. Subsequent meetings were held at the Douglas County Library and were conducted using the “open house” format with emphasis placed on providing ample time devoted to individual one-on-one discussions between ODOT, City officials, Contractor staff and citizens who attended. The second meeting held on April 11, 2007 gave the public the first opportunity to view all the concepts and design options under consideration along with those options recommended as alternatives for further study. The forum also enabled approximately 120 participating citizens (67 signed the attendance sheets) to voice their concerns and to seek clarification on various aspects of the study. A total of 34 written comments were submitted to ODOT Region 3. The third meeting held on June 13, 2007 had approximately 100 attendees (52 signed the attendance sheets) with 66 submitted written comments. Information on the build alternatives and no-build alternative were positioned throughout the conference room for visitors to review. The information displayed the imprint that the build alternative would have on the surroundings and projected traffic operations in the year 2030. The build alternatives advanced by the Steering Committee were identified. In addition, a simulation of how the selected alternatives could potentially function in 2030 was presented. The fourth and final open house meeting held on February 6, 2008 resulted from the introduction of two additional build alternatives for consideration. Approximately 200 were in attendance (125 signed the attendance sheets) and 56 written comments were submitted.

CETAS Presentations

Formed to improve the decision-making process and develop an integrated land use and transportation planning process, project team leaders gave a presentation before a panel of CETAS members on May 15, 2007. Comprised of environmental regulatory agencies, including

the Environmental Protection Agency, Army Corps of Engineers, NOAA, and Department of State Lands, the CETAS Group was formed by the FHWA in an effort to streamline the permitting process and improve early agency coordination for major transportation projects.

Project Purpose and Need

The Purpose and Need Statement provides the fundamental rationale for a project and the basis for evaluating design alternatives. The Purpose defines the problem to be solved. The Need provides data to support the Problem statement. An alternative must address the Purpose and Need for the project. Included in the Purpose and Need Statement are the Goals and Objectives for the project. These describe other attributes to be evaluated as part of developing a successful solution. The Purpose and Need (including Goals and Objectives) provides the foundation for evaluating the alternatives against each other and in selecting a preferred alternative.

Purpose

The purpose of the *Highway 138 Corridor Solutions Study* was to address mobility, safety, connectivity, and multi-modal needs on Highway 138 between Interstate 5 Exit 124 and Fulton Street.

Need

Four needs statements were developed in support of the project purpose. These statements summarize the major concerns in the corridor:

- Highway 138 experiences congestion both downtown and along Stephens Street which also serves as a major north-south commute route paralleling I-5.
- East-west travel across the railroad tracks is effectively shut down when trains pass through the at-grade railroad crossings which impacts vehicular, freight, transit, and other non-auto modes causing congestion as well as giving rise to safety issues and potential delay for emergency vehicles. Four to six trains pass through the city during a typical 24-hour period.
- Freight movement within the study area is impacted by some of the tight turning curb radii in downtown Roseburg causing some trucks to choose other roads, such as the congested Garden Valley Road corridor, as an alternative to access Highway 138.
- Existing gaps in the bicycle and pedestrian transportation system result in a dysfunctional network that makes travel difficult and unsafe.

Goals and Objectives

Issues to be addressed by the study that go beyond those described in the Purpose statement are discussed under Goals and Objectives. Goals are high-level statements of the issues and concerns to be addressed. Objectives, on the other hand, are specific and measurable statements that describe how the project would meet the goals. They further provide a basis for evaluating and comparing alternatives in terms of their ability to meet the stated goals. The following goals

and objectives were developed through input provided by the community stakeholder groups representing local residents, businesses, elected officials, and government staff.

Goal 1

Address deficiencies in the existing transportation system to improve circulation and more efficiently move traffic between I-5 and Diamond Lake Boulevard.

Meet design standards for projected travel demand and vehicle types to accommodate current and future traffic volumes through the project area.

- a) Minimize vehicle queues and traffic flow interruptions within the study area.
- b) Improve spacing between access points along Highway 138.

Goal 2

Mitigate conflicts between rail and vehicular traffic and improve freight travel routes.

- a) Resolve traffic blockages due to passing trains by enabling a safe crossing that maintains linkages between east and west Roseburg.

Provide safe and efficient movement of freight traffic between Diamond Lake Boulevard corridor and I-5.

Goal 3

Provide transportation improvements that avoid where possible then minimize and effectively mitigate adverse impacts to natural and cultural resources.

- a) Avoid or minimize impacts to the South Umpqua River, Deer Creek, and associated floodplains.
- b) Avoid or minimize impacts to unstable sloped areas that increase the potential for slides.
- c) Avoid or minimize impacts to native species and their habitats including those listed or proposed for listing under the ESA.
- d) Avoid or minimize impacts to area aquatic resources which include freshwater wetlands, streams, and estuarine habitats.
- e) Provide storm water treatment and control.
- f) Avoid impacts to archaeological, historic, and cultural resources.
- g) Avoid impacts to Section 4(f) and 6(f) resources.

Goal 4

Develop a solution that at least preserves local efforts to expand economic development.

- a) Serve projected regional growth and expansion, particularly along the Diamond Lake Boulevard corridor.
- b) Maintain and enhance access to downtown Roseburg and the South Umpqua riverfront.
- c) Improve long distance travel, enabling the Roseburg area to utilize its geographic location as the gateway to the scenic North Umpqua Highway (Hwy. 138) and the Crater Lake region.

Goal 5

Minimize community impacts and maintain livability of surrounding neighborhoods.

- a) Preserve Roseburg's historic neighborhoods such as Laurelwood.
- b) Avoid disproportionate impacts to low-income populations.
- c) Avoid disproportionate impacts to minority populations.
- d) Minimize adverse impacts to existing residences and businesses.

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