

Highway 138 Corridor Solutions Study
Roseburg, Oregon

Technical Memorandum #1: Definition and Background

DRAFT

Prepared for
Oregon Department of Transportation, Region 3
3500 NW Stewart Parkway
Roseburg, Oregon 97470

Prepared by
David Evans and Associates, Inc.
2100 SW River Parkway
Portland, Oregon

December 2006

Table of Contents

Introduction.....	1
Existing Deficiencies	3
Study Process.....	3
Citizen Advisory Committee (CAC)	4
Technical Advisory Committee (TAC)	4
Steering Committee (SC).....	5
Public Open House	5
CETAS Presentations.....	5
Purpose and Need Statement	5
Purpose.....	6
Need	6
Goals and Objectives	6
Goal 1.....	6
Goal 2.....	7
Goal 3.....	7
Goal 4.....	7
Goal 5.....	8

List of Figures

Figure 1. Project Vicinity.....	2
---------------------------------	---

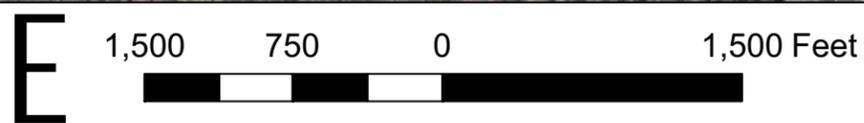
Introduction

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). 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 significant 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 that include a more direct connection between I-5 and Diamond Lake Boulevard. A future project to improve the connection between Harvard and Diamond Lake Boulevard is listed as a 20-year street improvement under the roadway plan element of the City of Roseburg *Transportation System Plan* (TSP). A corridor study is the next logical step in order to resolve pertinent planning issues involved that will enable the proposed project to become eligible for funding under the Statewide Transportation Improvement Program (STIP).



Sources:
Douglas County and City of Roseburg

Legend

----- Study Area Boundary



DAVID EVANS
AND ASSOCIATES INC.

Figure 1

DRAFT Project Vicinity

OR 138 Corridor Solutions Study

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:

1. 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 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.
2. 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.
3. High Concentration of Collisions Recorded in Study Area: Collision data from the Oregon Department of Transportation (ODOT) record 1,464 collisions inside the Roseburg Urban Growth Boundary (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.
4. 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.
5. 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 is based on a tiered process of project development that includes an initial screening of concepts followed by a more detailed evaluation of alternatives and a final recommendation of one or more alternatives to be carried forward through either a project planning process or an environmental assessment process, whichever is the appropriate next step. 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 has been set up to serve as the initial phase of an environmental process should one be needed.

The study includes five major work tasks:

1. 2006 Existing Condition – The evaluation of existing conditions 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 will be collected and other plans reviewed to identify potential impacts and conflicts in the alternatives screening and evaluation process.
2. 2030 No Build Condition – The No Build evaluation will be based on a year 2030 forecast of traffic demand in the study area as 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.
3. Concept Development and Screening – Up to 12 improvement concepts will be developed and screened based on the Goals and Objectives for the project. From this group, up to three alternatives will be identified for more detailed evaluation.
4. Alternatives Evaluation – Up to three alternatives plus the No Build option will be evaluated at a more detailed level which will include 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.
5. Alternative(s) Recommendation – One or more alternatives will be recommended for further refinement based on the outcome of the evaluation.

Public involvement will play an important role throughout the study process. Three committees have been developed to provide varying levels of input and decision-making. Each committee will meet six times during the project. In addition, three public open houses are planned during the process. Lastly, three presentations before Collaborative Environmental and Transportation Agreement for Streamlining (CETAS) committee will occur. The purpose and roles of the various public outreach efforts is described below.

Citizen Advisory Committee (CAC)

The purpose of the CAC will be to provide stakeholder input throughout the Study and to offer comments and recommendations to the TAC (see below). The role of the committee will be to allow interested citizens, property owners, business representatives and other stakeholders to learn about the project and key issues. The CAC is also intended to provide a supplemental, informal avenue for sharing information and receiving input from the community.

Technical Advisory Committee (TAC)

ODOT has designated a TAC to provide technical and policy guidance during the Study whose members include public works officials from the City of Roseburg and Douglas

County, ODOT representatives, and railroad interests. The TAC will serve as the primary body tasked with making recommendations about the project.

Steering Committee (SC)

A Steering Committee has been designated 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. The committee is 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 Federal Highway Administration (FHWA).

Public Open House

Public meetings provide opportunities for the project team and general public to exchange information on the project. Conducted using the “open house” format, the meetings will open with brief presentations followed by substantial time devoted to individual discussions between ODOT, City officials, Contractor staff and citizens who attend.

CETAS Presentations

Formed to improve the decision-making process and develop an integrated land use and transportation planning process, three CETAS presentations are planned during specific phases of the study. The topics for each meeting will respectively be on purpose and need/goals and objectives; range of alternatives and screening criteria; and preferred alternative or range of feasible alternatives and evaluation process. Comprised of environmental regulatory agencies, including the Environmental Protection Agency, Army Corps of Engineers, National Oceanic & Atmospheric Administration, and Department of State Lands, the CETAS Group was formed by the Federal Highway Administration in an effort to streamline the permitting process and improve early agency coordination for major transportation projects.

The final product from the study will be a report that documents both the technical analysis and the public involvement and provides recommendations on the next phase in the project development process.

Purpose and Need Statement

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 is to address mobility, safety, connectivity, and multi-modal needs on Highway 138 between Interstate 5 Exit 124 and Fulton Street.

Need

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

1. Highway 138 experiences significant congestion both downtown and along Stephens Street which also serves as a major north-south commute route paralleling I-5.
2. 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.
3. 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.
4. 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.

- a) Meet design standards for projected travel demand and vehicle types to accommodate current and future traffic volumes through the project area.
- b) Minimize vehicle queues and traffic flow interruptions within the study area.
- c) 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.
- b) 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 Endangered Species Act.
- 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 (OR 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.