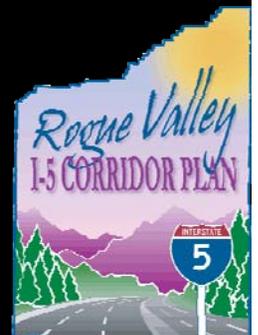


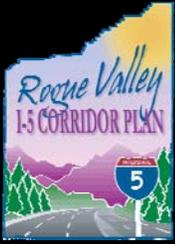


Interstate 5 Rogue Valley Corridor Plan

May 2011

Prepared by:
Oregon Department of Transportation
Region 3





Agency Coordination and Public Process

Project Management Team (PMT)

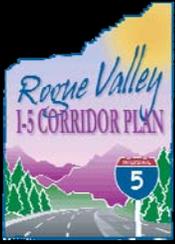
- Provided technical and policy guidance
- Met five times; will meet once more
- Includes staff from various jurisdictions

Public Meeting #1 on April 1, 2009

Local Agency Presentations

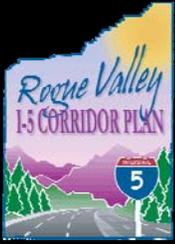
- To inform elected officials about the project



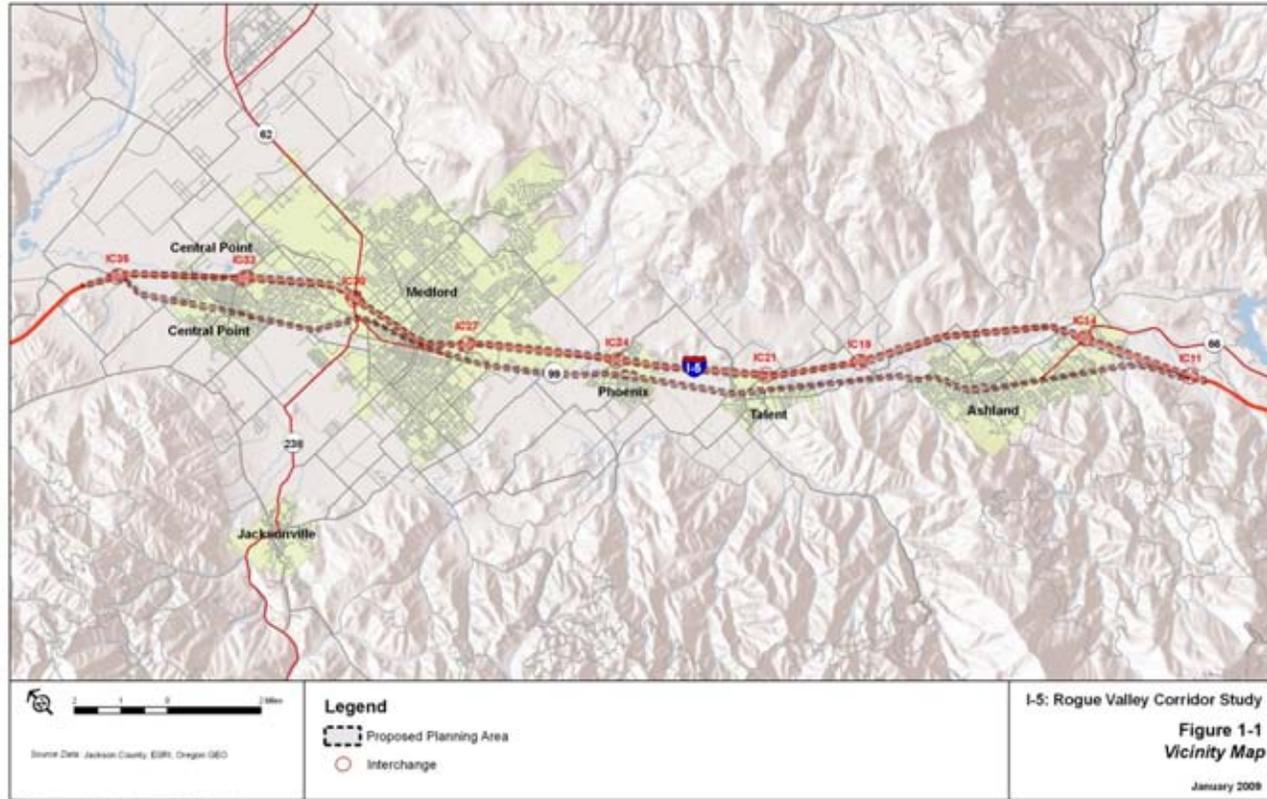


Summary of Work Tasks

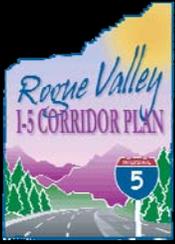
- ✓ 1. Define Problem(s) and Establish Goals and Objectives
 - ✓ 2. Data Collection
 - ✓ 3. Assess Future (2034) and (2050) No-Build Conditions
 - ✓ 4. Identify Potential Projects and Strategies and Conduct Corridor Concept Analysis
 - ✓ 5. Prioritize concepts based on Step 4 analysis
-



I-5 Rogue Valley Corridor Plan Project Overview



- 24 miles of I-5: Mile Post 11 to Mile Post 35
- Includes OR-99
- Contained within the Rogue Valley MPO Boundary

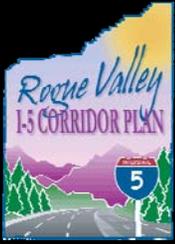


Issues/ Challenges

Siskiyou Pass Closures

- Typically closed 1 – 4 times per season
- Impact I-5 as far north as Grants Pass
- Truck stops and rest areas used as staging areas
- Interchange 14 and Ashland streets most impacted by trucks

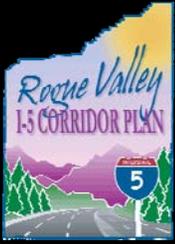




Issues/ Challenges

- No bicycle and pedestrian facilities on I-5
- Bear Creek Greenway and trail: Ashland to Central Point



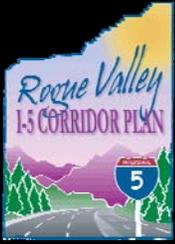


Issues/ Challenges

The three I-5 states allow different types of three Longer Combination Vehicles (LCV)

- California – Allows none of the three types of Longer Combination Vehicles
 - Oregon – Allows Rocky Mountain double (long + short trailer) and triple trailer
 - Washington – Allows Rocky Mountain double only
- Trailer change over sites in the Medford-Central Point area in the vicinity of the Airport
 - Access to I-5 via Interchange 30 and 33





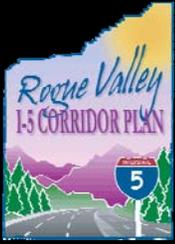
Plan Goals

Goal 1 Improved Traffic Management Operations

Goal 2 Safety in the I-5 Corridor

Goal 3 Enhanced Mainline Operations at Interchanges

Goal 4 Better Freight Operations



Existing Facilities

24 miles of I-5

- Two travel lanes in each direction
- Posted speed of 65 mph

Nine Interchanges

- Interchanges 27 and 35 recently rebuilt

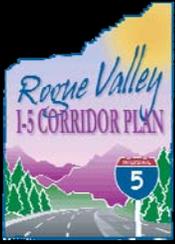
Port of Entry

- Northbound on-ramp very close to Exit 19

Two Rest areas

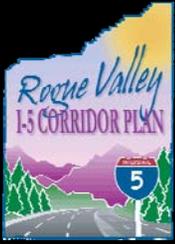
- One existing and one proposed





Existing Facilities

- 12 foot travel lanes
- Rolling terrain
- Median
 - Generally non-barrier separated with 76 foot wide vegetated median
 - Barrier Median
 - On Viaduct (MP 27 to MP 30.6)
 - South end of study area starting at MP 12.99
- Shoulders: paved, 4 – 24 feet wide



Existing Facilities

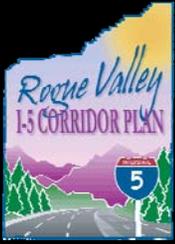
Average Daily Traffic

- Low of 14,700 vpd south of Interchange 14
- High of 48,200 vpd in Medford
 - Between Interchanges 27 and 30

Heavy Truck Volumes

- 35 Percent of ADT south of Interchange 14
- 16 to 13 Percent of ADT north of Interchange 14





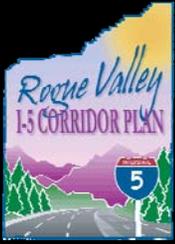
Existing Traffic Operations

Level of Service

- LOS C or Better Northbound
- LOS C or Better Southbound except
 - LOS D between Int. 30 and off-ramp to Int. 27

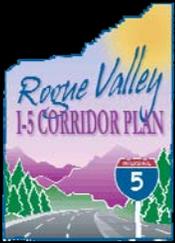
Volume to Capacity

- V/C ratio are within operational standard (0.80)
 - Peak v/c ratio is between Int. 30 and Int. 27
 - Northbound peak v/c ratio is 0.61
 - Southbound peak v/c ratio is 0.65

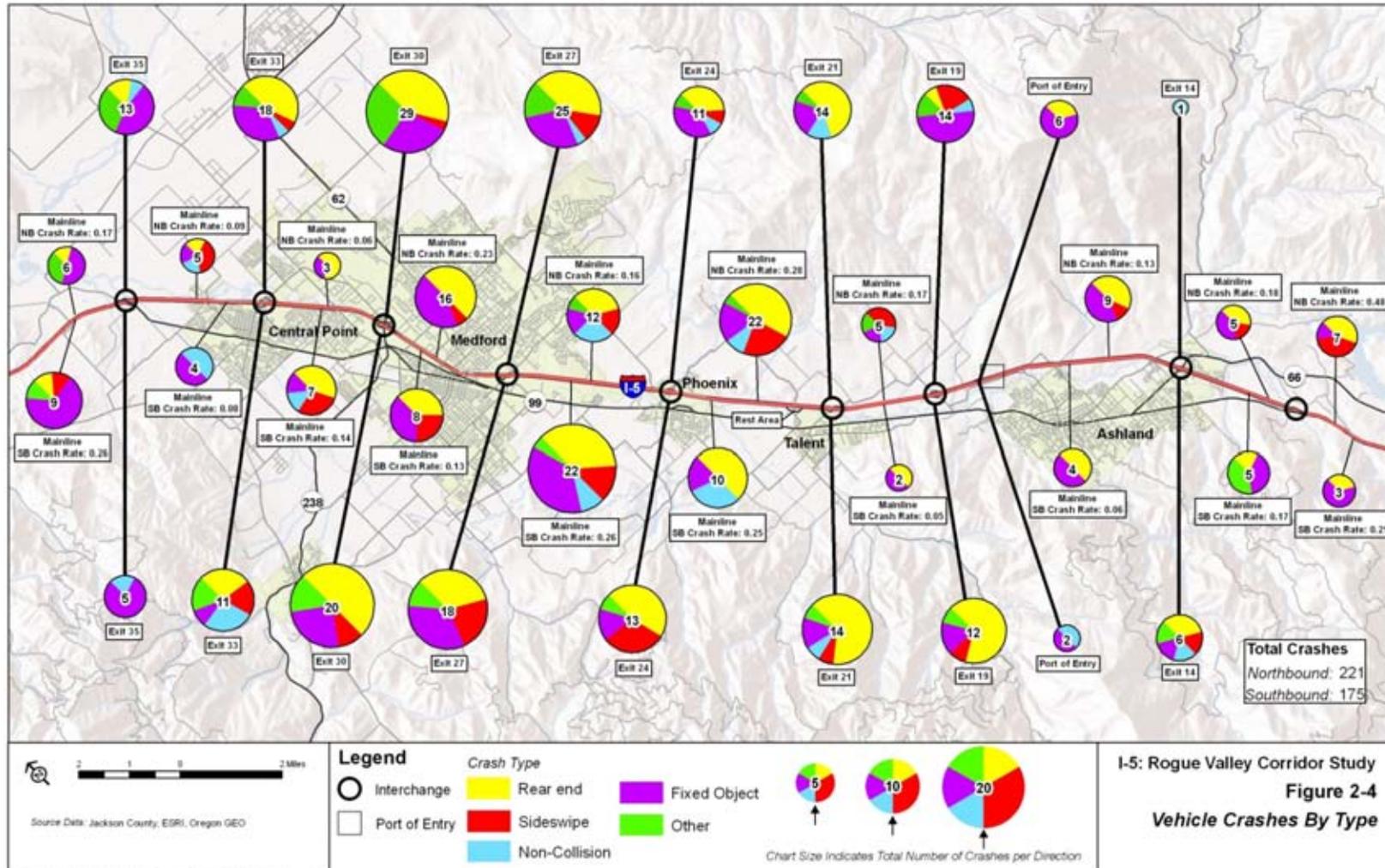


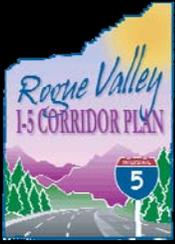
Crash Reports

- 221 Northbound crashes with 4 fatalities
- 175 Southbound crashes with 3 fatalities
- Most common cause
 - Driving improperly or too fast
- Most common Types
 - Rear-end, fixed object, side-swipe and non-collision



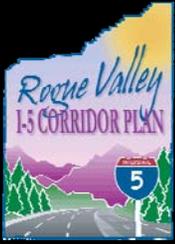
I-5 Rogue Valley Corridor Plan Existing and Future Conditions





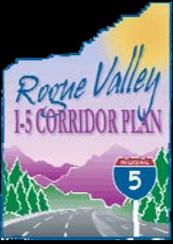
Future 2034 Scenario

- Uses the RVMPO Regional Transportation Plan land use and roadway assumptions
- Includes the completion of the South Medford Interchange
- Includes five projects on I-5 in the RTP. Including the new Fern Valley Interchange (exit 24).

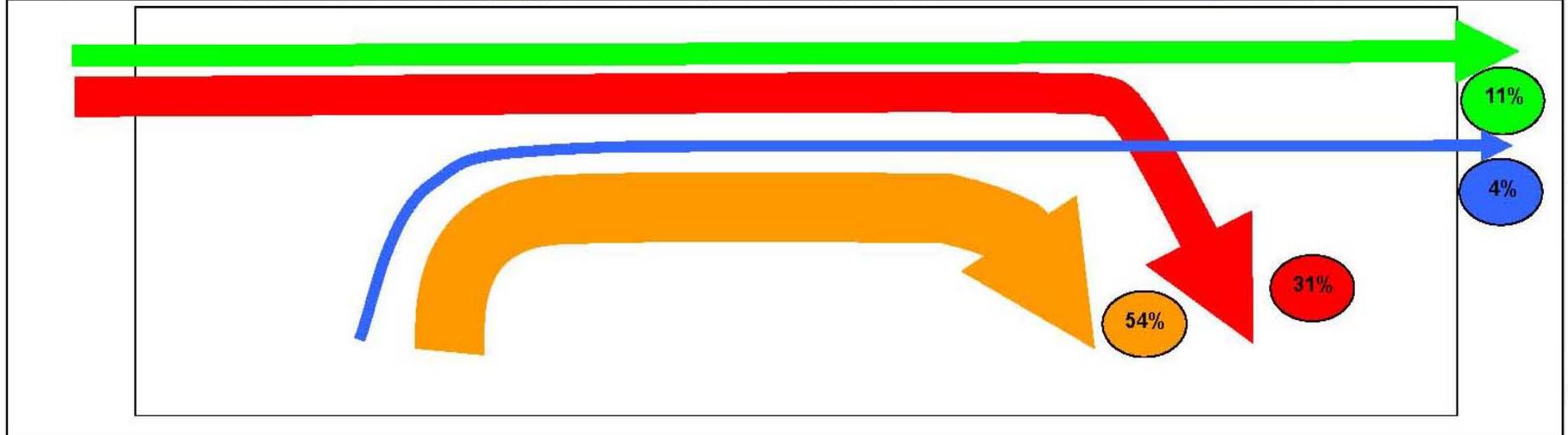


Future 2050 Scenario

- Consistent with Regional Problem Solving (RPS) doubling of the population.
- Otherwise, uses the same assumptions as the 2034 model.
- Adds a limited access OR 62 bypass road from north of Poplar Drive to north of Vilas Road.



I-5 Rogue Valley Corridor Plan Existing and Future Conditions



Source Data: Jackson County, ESRI, Oregon GEO

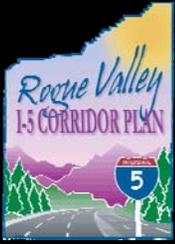
Legend

- Planning Area
- Interchange (IC)
- I-5 Through Trips
- Enter I-5 North of Study Area, Exit I-5 North of Study Area
- Enter I-5 within Study Area, Exit I-5 South of Study Area
- Enter I-5 and Exit I-5 within Study Area

I-5: Rogue Valley Corridor Study

Figure 3-5
2034 Southbound I-5
Trip Distribution

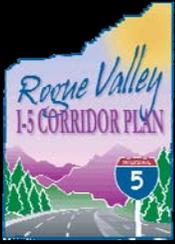
File: P:\ICOR\070000\ICOR0003\MapDocs\SummaryPlanning_Area_Map2.mxd
Date: 5/19/2009 11:40:24



Future Safety Deficiencies

- Crash patterns could be exacerbated by the higher traffic volumes
- Cross weaving traffic for the northbound Port of Entry at Interchange 19 off-ramp would intensify

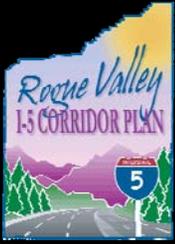




Concept Development

The project team developed concepts using these 4 steps:

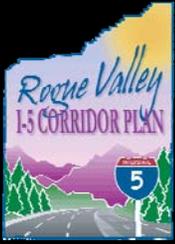
1. Identify concept selection criteria
2. Identify potential improvement concepts
3. Identify concept potential impacts
4. Identify high performing concepts



1. Identify Selection Criteria

Concept selection criteria were identified based on:

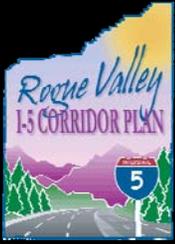
- Project goals and objectives
- Results of the existing conditions
- Results of the future year analysis



2. Identify Concepts

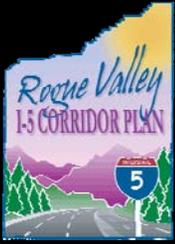
The PMT and government staff identified concepts based on priorities, such as:

- Effects caused by delays at the Siskiyou Pass
- Improvements to the Medford viaduct
- Coordination with the Rogue Valley Metropolitan Planning Organization (RVMPO) efforts to assess the OR 99 corridor



3. Identify Potential Impacts

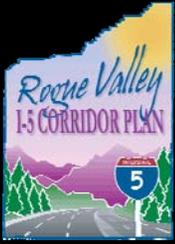
- Quantitative Evaluation using Rogue Valley Travel Demand Model and Highway Capacity Software
- Qualitative Evaluation using similar project experience and professional knowledge
- Cost Opinion using standard unit costs



4. Identify High Performing Concepts

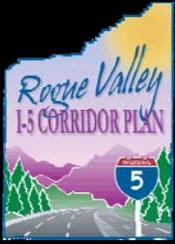
20 concepts were identified under 5 concept categories:

- Safety Enhancement Measures
- Transportation System Management (TSM) Measures
- Capacity Enhancement Measures
- Least Cost Planning Solutions
- Transportation Demand Management (TDM) Measures



Safety Enhancement Alternatives

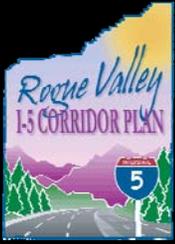
- Port of Entry—Auxiliary Lane Option
- Port of Entry—Modified On-Ramp Option
- Southbound Weigh Station
- Temporary Overnight Truck Facilities
- Emergency Turn-around
- Medford Viaduct Shoulder
- Incident Response Vehicles



Transportation System Management Measures

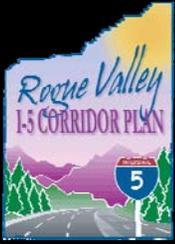
- Designated Alternate Truck Route
- OR 99 Corridor Coordinated Traffic Signal System
- Ramp Metering





Capacity Enhancement Measures

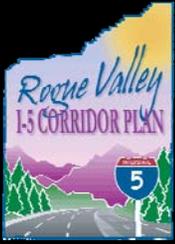
- Additional Mainline Travel Lane
- Auxiliary Travel Lanes
- Enhanced Local Arterial/Collector Connections
- Expanded Medford Viaduct
- Directional High Occupancy Vehicle Lanes



Least Cost Planning Alternatives

- Peak Hour Shoulder Use
- Variable Speed Limits

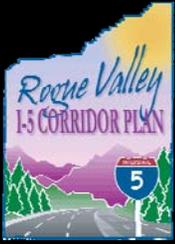




Transportation Demand Management Measures

- Intermodal Freight Hub
- Transit Service Improvements
- Commuter Rail
- Bus Rapid Transit

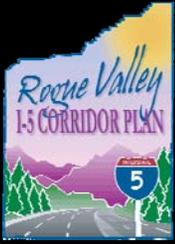




Evaluation Criteria

Two categories of criteria:

- The degree to which the concept maximizes benefits
- The degree to which the concept minimizes impacts



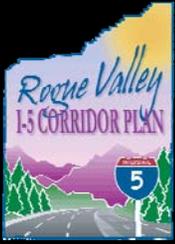
Evaluation Criteria

Freeway Operations: Reduce travel time, congestion, and delays

Safety: Reduce crashes; faster emergency response

Freight Movement: Reduce delay, improve travel time reliability, and provide alternate routes

Vehicle Capacity: Add capacity or maintain traffic flow or improve merging and diverging



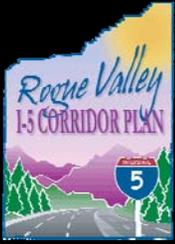
Evaluation Criteria

Person Capacity: Move more people through

Circulation and Access: Improve local roadway system circulation patterns, provide improved access to properties

Local Economy: Reduce travel delays, increase freight movements, or provide additional accessibility to properties

Phasing Potential: Can be built, implemented, and/or funded in stages

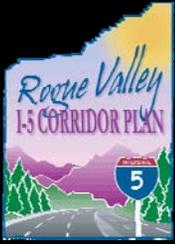


Evaluation Criteria

Environmental/Cultural: Effects on land use, environmental, cultural/historic resources, or environmental justice communities

Properties: Property acquisition

Local Roadway System: Traffic impact to local roadway



Low Priority Concepts

Transportation System Management (TSM)

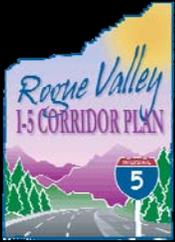
- Designated Alternate Truck Route

Capacity Enhancement Measures

- Additional Mainline Travel Lanes
- Enhanced Local Arterial/Collector Connections - Area 3 (Phoenix to Ashland)
- Vertically Stacked Viaduct
- Directional HOV Lane

Transportation Demand Management (TDM)

- Commuter Rail
- Bus Rapid Transit



Medium Priority Concepts

Safety Enhancement Measures

- Port of Entry—Modified On-Ramp
- Temporary Overnight Truck Facilities
- Medford Viaduct Shoulder

Capacity Enhancement Measures

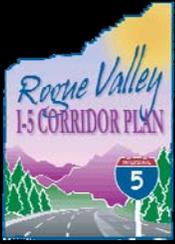
- Auxiliary Travel Lanes
- Enhanced Local Arterial / Collector Connections – Area 1 (Central Point to North Medford)
- 3-Lanes Min. Shoulders
- 3-Lanes Std. Shoulders

Least Cost Planning Solutions

- Peak Hour Shoulder Use
- Variable Speed Limits

Transportation Demand Management (TDM)

- Intermodal Freight Hub
- Transit Service Improvements



High Priority Concept

Safety Enhancement Measures

Port of Entry - Auxiliary Lane Option

*Between the
on-ramp of the NB
weigh station and
the NB off-ramp at
Interchange 19*



Southbound Weigh Station

*On-ramp at
Interchange 19,
Mile point 18*



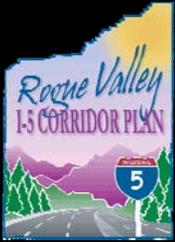
Emergency Turn-around

*Near the North Mountain Avenue overpass
Mile point 16.7*

Incident Response Vehicles

*Throughout the corridor;
point of dispatch likely
at the Traffic Operations
Center in Central Point
(shared with Oregon
Police Dispatch)*



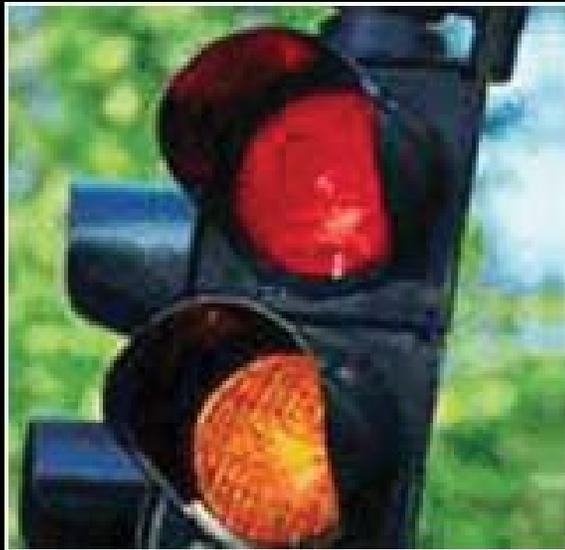


High Priority Concept

Transportation System Management Measures

OR 99 Corridor Coordinated Traffic Signal System

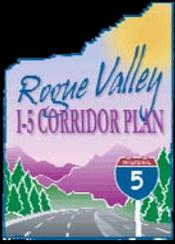
OR 99 between Interchanges 11 and 35



Ramp Metering

NB travel, on-ramps at Interchanges 19, 21, 24, and 27; and SB travel, on-ramps at Interchanges 33, 30 (WB to SB EB to SB), 27, and 24





High Priority Concept

Capacity Enhancement Measures

**Enhanced Local Arterial/Collector Connections - Area 2:
Medford to Phoenix Interchanges 24 - 30**

N. Phoenix Road/N. Foothills Road

Crater Lake Avenue

Highland Drive/Sunrise Avenue/Springbrook Road





Questions?

Thank you
for
coming!

